

4449

UNIVERSITY OF HAWAI'I LIBRARY

IMAGERY AND SYMBOL OF THE AIRPLANE IN AMERICAN FILM

1950-2004

A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF THE
UNIVERSITY OF HAWAI'I IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

IN

AMERICAN STUDIES

MAY 2004

By

Patrick Gerald O'Brien

Dissertation Committee:

Floyd Matson, Chairperson

Paul Hooper

Dennis Ogawa

William Chapman

David Swift

4449

© Patrick Gerald O'Brien 2004

ABSTRACT

Hollywood has shown an unending affection for the airplane for nearly one hundred years. From fantasy, to war, to salvation, to heroism, to romance, to adventure, airplanes have been and continue to be a powerful symbol in American film. Two intertwined themes based on flight are menace and hope, and the tension between them has successfully driven many flying films. This may explain why film has featured the airplane as the archetypal machine of the twentieth century, just as, according to Leo Marx in *The Machine in the Garden*, the locomotive served as the archetypal machine in American literature of the nineteenth century. Specifically, this dissertation will focus on how cargo planes, bomber aircraft, commercial airliners, and all those aboard have been portrayed in film from 1950-2004.

Table of Contents

Abstract	iv
Chapter 1: Introduction	1
Chapter 2: Myth and Symbol in Flying Films	25
Chapter 3: The Menace of Flight	47
Chapter 4: Heroic Men and Flying Machines	75
Chapter 5: "Passin' Gas": Aerial Refueling Scenes	110
Chapter 6: Atomic and Chemical Threats in the Sky	141
Chapter 7: Disturbed and Disturbing Passengers	169
Chapter 8: <i>Cast Away</i> : The Machine in the Sky	198
Chapter 9: Race and Gender in Flying Films	218
Chapter 10: Conclusion	248
Appendix: Filmography	261
Notes	266
Bibliography	284

CHAPTER 1 INTRODUCTION

The flight of the birds, so effortless and graceful, has led man since the dawn of time to turn his gaze with longing to the skies. But his dream of soaring above the clouds was not to be realised without weary centuries of experiment and failure . . . Man, because he was himself denied the power of flight, revered it as a supernatural quality and could give no higher honour to his gods and goddesses than the endowment of wings in acknowledgment of their superior being.

Opening narration of the 1935 classic
*Conquests of the Air*¹

Books about film have been written and often overwritten, but it seems to me that a book about aviation films will fill a gap and is long overdue.

Actor Glenn Ford²

There is a special affinity between the machine and the new Republic. In the first place, the raw landscape is an ideal setting for technological progress.

Leo Marx, *The Machine in the Garden*³

But Icarus became so exhilarated by his ability to fly that he forgot the warning and followed his own course instead. He flew too high, the wax melted, and he fell into the sea and drowned.

The Myth of Icarus

Flying on Man-made Wings: Menace or Miracle for Mankind?

On December 17, 1903, Wilbur and Orville Wright accomplished a great feat: they succeeded in piloting humanity's first heavier-than-air machine through the sky under its own power. Coincidentally, perhaps, a few months prior to that, Edwin Porter produced what is considered the first great "story" film, *The Great Train Robbery*.⁴ Joined at

birth, these two modern accomplishments grew rapidly and rarely lost sight of each other. Thus it is no surprise that from the beginning, Hollywood has shown an unending affection for the airplane. From fantasy, to war, to salvation, to heroism, to romance, to adventure, airplanes have been and continue to be a powerful symbol in American film.

The idea that great powers come from the sky is an old one and can be traced back to both the Old and New Testaments. These great powers often represent good or evil. When looking at the sky we may have premonitions of evil, a fear perhaps that an avenging angel will soon appear to show us that our time on earth is over, or maybe we imagine that a streaking meteor will destroy the earth. Thoughts of machines from the heavens infuse us with both fear and hope; there may be the earth-destroying flying saucer or the spaceship that will whisk us off to salvation--all is possible. The optimistic half of this equation was so strong in the early days of flight in America that one author dubbed it "The Winged Gospel," which was the idea that "air transportation would bring about a golden age of progress, that flying was the ultimate technological achievement, and portrayed the airman as a romantic and chivalric figure."⁵ That Hollywood has repeatedly turned to the sky for its storylines is therefore only natural.

This tension between menace and hope successfully drives many flying films and suggests the basic thesis of this dissertation, which is that the aura of peril and menace has consistently been the most pronounced aspect of the airplane's appearance in cinema, whether there is hope and heroism mixed in or not. This may explain why film has featured the airplane as the archetypal machine of the twentieth century, just as, according to Leo Marx in *The Machine in the Garden*, the locomotive served as the archetypal machine of the nineteenth century.

Images of the Sky: Menace and Hope

Legend tells us how Daedalus and his son Icarus were imprisoned on a Greek island. Yearning to be free, the father made wings of feathers held together by wax and taught his son to fly. Icarus, being young, ignored his father's words and soared too high. Having tempted the fates, he met his punishment: the wax in his wings melted, and he lost the power of flight. Only death awaited him in the sea far below.

Abundant evidence exists in mythology of the human yearning to fly. The ancient Egyptians believed that after death, the souls of their Pharaohs rose from their bodies and migrated into the afterlife. In Greek mythology, Pegasus is a winged horse. The Maya embellished serpents with feathers on their stone pyramids, making Quetzalcoatl a god; North American native Indians venerated the Thunderbird, the beating of whose wings represented thunder. In the Koran, Muhammad is said to have risen from the site of the Temple of the Mount on a winged horse.

Whether the dual image of the sky as both menacing and promising is an archetype or not,⁶ the fact remains that it is firmly embedded in the Western psyche, as evidenced by its vivid appearances in both the Old and New Testaments. For example, in Ezekiel 1:4-7, the narrative about the sky begins:

As I looked, behold, a stormy wind came out of the north, and a great cloud, with brightness round about it, and fire flashing forth continually, and in the midst of the fire, as it were gleaming bronze. And from the midst of it came the likeness of four living creatures. And this was their appearance: they had the form of men, but each had four faces, and each of them had four wings. Their legs were straight, and the soles of their feet were like the sole of a calf's foot; and they sparkled like burnished bronze.

This threatening image was repeated and amplified in Revelations (the Apocalypse) at the end of the New Testament, as these excerpts show: "After this I looked, and lo, in heaven

an open door! And the first voice, which I had heard speaking to me like a trumpet, said, 'Come up hither, and I will show you what must take place after this'" (4: 1). What took place was a series of tribulations, some of which were loosed from the sky above:

When he opened the sixth seal, I looked, and behold, there was a great earthquake; and the sun became black as sackcloth, the full moon became like blood, and the stars of the sky fell to the earth as the fig tree sheds its winter fruit when shaken by a gale; . . . (6:12-13).

When the Lamb opened the seventh seal, there was silence in heaven for about half an hour. Then I saw seven angels who stand before God . . . Then the angel took the censer and filled it with fire from the altar and threw it on the earth; and there were peals of thunder, voices, flashes of lightning, and an earthquake.

Now the seven angels who had the seven trumpets made ready to blow them.

The first angel blew his trumpet, and there followed hail and fire, mixed with blood, which fell on the earth; and a third of the earth was burnt up, and a third of the trees were burnt up, and all green grass was burnt up (8:1-7). . . .

Then God's temple in heaven was opened, and the ark of his covenant was seen within his temple; and there were flashes of lightning, voices, peals of thunder, an earthquake, and heavy hail (11:19).

Such horrific images were balanced by hopeful and benevolent ones as well, best represented, perhaps, by the image of Jesus' ascension into heaven forty days after his resurrection. After Jesus led his disciples to the Mount of Olives, he blessed them, then ascended into heaven, as told in Acts of the Apostles 1:3-11. Luke also described this moment in 24:50-53. The moment of the Ascension is told in one sentence: "He was lifted up before their eyes in a cloud which took Him from their sight" (Acts 1:9); Mark added that Jesus sat at the right hand of the Father (Mark 16:19). Disturbed by this development, the disciples were given a comforting message from two angels who appeared to them and said, "This same Jesus, which is taken up from you into heaven, shall so come in like manner as you have seen Him going into heaven" (Acts 1:11), thus

completing the reinforcement of a positive and glorious association of the sky with Jesus.

Finally, the New Testament ends with this return of Heaven on earth:

Then I saw a new heaven and a new earth; for the first heaven and the first earth had passed away, and the sea was no more. And I saw the holy city, new Jerusalem, coming down out of heaven from God, prepared as a bride adorned for her husband; and I heard a loud voice from the throne saying, "Behold, the dwelling of God is with men. He will dwell with them, and they shall be his people, and God himself will be with them; he will wipe away every tear from their eyes, and death shall be no more, neither shall there be mourning nor crying nor pain any more, for the former things have passed away" (Revelations 21:1-4).

This longing for salvation from the sky can be found in modern American artifacts as diverse (and mundane) as the original Superman comics, the Spielberg movie *E.T.* with its spaceship, and Arnold Schwarzenegger's protective Terminator character in *Terminator 2: Judgment Day*.

Likewise, the modern representation of evil issuing forth from the sky can be found in examples ranging from *The War of the Worlds* and *The Blob* to Hitchcock's *North By Northwest*, where the graphic image of the airplane appears in only one scene but is one of the most compelling and dramatic in the picture. There stands Roger Thornhill (Cary Grant), isolated and exposed on a Minnesota prairie road. Suddenly, without warning, a crop-dusting biplane dives straight at him, guns ablaze. Thornhill can only lie flat on the bare earth or run, neither a very survivable option. He is reduced to the role of a rabbit in the sights of a ravenous hawk. This graphic sequence explicitly shows the airplane as an agent of death, a weapon aimed at the hero, an instrument of pure evil. This comes close to a perfect dramatization of the irrational fear so many humans have shown toward the sky.⁷ A more recent example comes in *Independence Day*, where the

incoming alien aircraft completely covers the sky and then “betrays” the prayers and hopes of the civilians beneath as it blasts them to Kingdom Come.

In a work dealing with American society and culture during almost the same period as this dissertation, one cultural historian has written at length about dualistic American attitudes toward “the sky.” For example, she ties sources as disparate as Truman Capote and John Lennon together, highlighting their symbolic uses of the sky:

In their contrasting visions of terror and peace, both Truman Capote and John Lennon had made references to the sky, from the “big, annihilating sky” of *In Cold Blood* to the “above us only sky” of “Imagine.” This attention to the sky, the open spaces about the earth, became a popular theme in the cultural imagination of these years, particularly as a means for envisioning America’s future.⁸

From there she goes on to explore further popular culture representations of the sky, beginning with John Glenn’s manned orbital flight all the way up to the sequel to the 1968 classic *Planet of the Apes*. Her aim is to show that “in the culture of the sixties and early seventies space also became the imagined locale for the working out of two radically different futures from America, two futures that nonetheless spoke to the ultimate compatibility of the dissenting culture’s nightmares and dreams.”

Many flying films have focused on military aviation, and most of them seem to fit my thesis as well. Nearly all war films, even as they may celebrate the valor and virtue of our pilots, our (former) Strategic Air Command, our mechanics and air traffic controllers, etc., seem to have a subtext dark with menace for all mankind. This subtext whispers--when it is not shouting--that taking to the air in a man-made device is tempting the fates; to do so in pursuit of war is to risk not only the lives of pilots and foe, but those below, those in the path of falling bombs or rapidly spreading radiation. So, flying films have taken generalized hopes and fears associated with the sky and used them in updated versions.

Because menace in particular gets and holds man's attention, that aspect of the skies has been a Hollywood favorite from the beginning.

Menace

As one who would know, the author of three books on civil aviation crashes begins his first book with an apt fusion of fliers' ethereal fears of flight and nineteen concrete cases of planes going down. His introduction is worth quoting:

Nearly everyone who has flown has experienced the fear of flying. Whether in clear skies or turbulent, during a routine flight or in an emergency, we have shared a common experience of moistened palms, white knuckles, and a wildly racing heart. What lies behind our fear is the essential loss of control, the utter blind faith with which we entrust our lives to two or three complete strangers who sit behind a closed door in the airplane's cockpit. Against those faceless men are arrayed the mysterious, violent, unpredictable forces of nature, the millions of components in the aircraft (without the proper manufacture or repair of which and we fall out of the sky) and, of course, the scores of electronic and human eyes on the ground that should be watching our progress.⁹

We have, then, a situation in which modern Americans continue to play out their long-running and still unresolved conflict with the notion of the machine: is it a help or hindrance in the unfolding of the American Dream; do we use it to good purpose, or does it threaten to consume us? When the machine in question happens to be the flying machine, the answer to these questions can come with terrifying speed.

The Machine in the Sky

This dissertation will centrally employ the myth and symbol method of American Studies, particularly as it derives from Leo Marx's *The Machine and the Garden*. As he writes,

“The sudden appearance of the machine in the garden is an arresting, endlessly evocative image.” Continuing, he notes:

It causes the instantaneous clash of opposed states of mind: a strong urge to believe in the rural myth along with an awareness of industrialization as counterforce to the myth. Since 1844, this motif has served again and again to order literary experience. It appears everywhere in American writing. In some cases, to be sure, the “little event” [the shriek of a locomotive whistle] is a fictive episode with only vague, incidental symbolic overtones. But in others it is a cardinal metaphor of contradiction, exfoliating, through associated images and ideas, into a design governing the meaning of entire works.¹⁰

This mechanical interruption occurred often in writing and it continues to occur in film. Now the machine has become the airplane, in particular the jet with its shrieking engines. Again and again this device is employed in flying films, just as it had earlier been employed in American literature. It occurs in the opening of a film where James Stewart, innocently engaged in that all-American pastoral game of baseball, is disturbed by the sudden overflight of a ten-engined behemoth in *Strategic Air Command*. It occurs again in the opening scene of *Always*, as two men sit quietly fishing on a lake, their repose about to be torn asunder by the roar of an airplane. It even occurs, as Marx noted about American literature, as “a design governing the meaning of entire works.” In this case, it is Tom Hanks’s saga in *Cast Away*, in which the motif is so strong that I will deal with it in its own chapter.

Furthermore, it is fortuitous that many of the works of pre-1850 American literature cited by Marx for their allusions to technological progress centrally employ metaphors of flight. For example, Emerson, who had “adapted the rhetoric of the technological sublime to his own purposes,” wrote that modern (American) man “paves the road with iron bars, and, mounting a coach with a ship-load of men, animals, and

merchandise behind him, he darts through the country, from town to town, like an eagle or a swallow through the air.” Later, in the same work (*Nature*, 1836) Emerson again uses metaphors of the sky: “Man is never weary of working it up. He forges the subtle and delicate air into wise and melodious words, and gives them wing as angels of persuasion and command.”¹¹

Of interest here is the qualifier Marx has identified in Emerson’s work. Though an enthusiastic admirer of Bacon and Franklin, Emerson is not a blind supporter of technological progress. Instead, “he *qualifies* but never repudiates the progressive idea of history (my emphasis).”¹² This observation about Emerson fits perfectly with the stance taken by most Hollywood flying films: manned flight indeed represents great progress, despite the obvious risks involved. Most films handle this by portraying various dangers to one degree or another, but in the end, the act of flying is vindicated. Rarely has a flying movie ended where all hope or opportunities for redemption have been lost. In this sense, most such films *qualify* a positive embrace of flying.

An idea I will pursue further in the following chapter is the idea that a lot had happened with technology--and with Americans’ perceptions of technology--between the original publication of *The Machine in the Garden* (1964) and the appearance of a new Afterword in the thirty-fifth anniversary edition (2000) in which Marx is much more explicit about the downside of the entry of the machine into the American garden.

Literature and Film

The literary tradition is firmly entrenched within the field of American Studies, and I intend to employ that approach, as it now applies to film rather than literature. The field of film studies is now adequately developed and well enough respected to incorporate it into an American Studies dissertation without apology. In the research that has gone into

writing this dissertation, I have come across rather little such writing about the intersection of film and aviation as approached from such a filmic/literary standpoint. The few works in this area have concentrated more on cataloguing American aviation films rather than trying to integrate them into the kind of critical studies so familiar to other areas of film, not to mention popular culture and art more broadly.

The Structure of the Dissertation

Rather than being purely chronological, this dissertation will adopt both chronology and theme in examining American flying films. The bulk of the films explored come after the advent of the jet age, though some propeller-era films will be used to provide background or to serve as outstanding examples of a genre. The earliest aviation films I will use come just as World War II was about to break out in Europe, when great leaps in technology were about to be made. Perhaps no area benefited to the degree that aviation and its associated weaponry did, resulting in a long-range bomber, the B-29 Superfortress, that was capable of delivering nuclear weapons over vast distances.

Further, though I am concerned with flying films from roughly World War II-2004, there will be a bias in this dissertation toward more recent aviation films, i.e., those made from about 1970, if only because aviation film books such as those mentioned below have covered earlier films to some degree. In addition, changing social realities of the present demand a newer interpretation of the myths and symbols involved in each film of the past, or even in an entire genre. Put most succinctly, this dissertation will be most intimately concerned with how Hollywood has portrayed and employed aviation in its films from 1950-2004.

Aviation Film Books

Despite the hundreds of films that employ imagery of the airplane in both major and minor roles, critical treatment of this pairing has been somewhat thin. Five books that explicitly explore the subject have been written in the past quarter decade. They are *Wings on the Screen: A Pictorial History of Air Movies*, by Bertil Skogsberg (1981); *When Hollywood Ruled the Skies: The Aviation Film Classics of World War II*, by Bruce W. Orriss (1984); *Celluloid Wings: The Impact of Movies on Aviation*, by James Farmer (1984); *Aviation in the Cinema*, by Stephen Pendo (1985); and *From the Wright Brothers to Top Gun: Aviation, Nationalism, and Popular Cinema*, by Michael Paris (1995).¹³

All five books are treasure troves of information on American films involving airplanes, and four of them offer a wide range of stills from the movies themselves. Because none of these books goes beyond a short listing and description of the hundreds of films featuring airplanes, though, I hesitate to label any of them as scholarly in an Americanist sense (Paris, for example, writes from Britain). For that reason, I see my own work as filling a void in that respect, particularly as it applies to the discipline of American Studies. Additionally, the most recent of these books was published in 1995 (Paris), yet it is clear from his text that his primary interest is not in the post-war era. Witness the fact that the first 172 pages of his book cover through the end of World War II, while the span of time from then until the publication of his book is covered in a meager thirty-three pages, and even then British films such as *Damn Busters* and *The Sound Barrier* get generous attention, this despite the fact that American flying films after the war outdid British films in most respects, including the number of “blockbuster” specials for which Hollywood is so famous.

Stephen Pendo, the other author to range systematically beyond 1945, devotes only thirty-six of 306 pages to post-war airplane films, including fighter films. In any case, his

book is a factual look at aviation films and their content rather than any kind of critical analysis. Finally, Skogsberg's *Wings on the Screen*, as enjoyable as it may be, is more an idiosyncratic examination of his own favorite flying films than a comprehensive treatment of all such films. In addition, his work faithfully adheres to the book's subtitle, "A Pictorial History of Air Movies," and his book contains more movie stills than text (Orriss's book on WWII films comes close to achieving this as well). Given the passage of time and the wide gaps left in the analysis of modern aviation films, the kind of exploration this dissertation will undertake may uncover some interesting readings of American flying films.

The Airplane as Stage and Actor

A primary reason for Hollywood's use of the airplane is the fact that it provides a reliable stage for its theater. The cast can be assembled in a compact area and presented naturally and with efficiency, and the drama can be played out on this one stage. In addition, there is a set sequence of events familiar to all viewers: preparing for flight, takeoff, the flight itself, and, God willing, a landing. Finally, the inherent risk of flying can always be used to add tension to the story, ranging from minor, even comic, background anxiety in a film like *It's a Mad, Mad, Mad, Mad World* (1963) to the primary source of danger and terror in a movie like *Airport '75*. This stage, then, demonstrates the thesis of this dissertation, that danger, menace, and impending doom are the leading factors in flying films.

As we will see below, others who have written on aviation and film have found that they must apply some limits to the scope of their projects because of the sheer number of films extant. For example, Bertil Skogsberg begins his treatise on flying films in 1927, ignoring the scores, if not hundreds, of films that came before. His reason for this was that 1927 was the year that sound was introduced to film. His love of the film *Wings*

(ironically, a silent film) from that year, “a film that was literally praised to the skies” because it “portrayed flying as a drama and was said to have exhibited a realism never before seen on screen,” was another reason for his choice.¹⁴

My limits to the scope of this dissertation are somewhat different. I will not describe films whose major focus is on fighter planes. There are two reasons for this. First, the category of fighter plane film is so large that it warrants a monograph or more of its own. From the earliest airplane films such as *Wings*, through the great World War II sagas and on into the era of the jet fighter, the thrill of individual aerial combat has been depicted in rich and various ways, from *Flying Tigers* (1942), to *Flying Leathernecks* (1951), to *The Bridges at Toko-Ri* (1954), to the mischievous top guns in *Top Gun* (1986).

Second, it seems that the character of a fighter plane differs from other planes in that it focuses more on an individual or two, rather than a group of people restricted to the “stage” of an airplane in flight. Further, a fighter pilot has limited mobility within the plane, which results in a far narrower array of shots for the camera. This in turn makes the facial shot always primary, but that becomes problematic too once fighter pilots have begun to wear head protection such as leather helmets, scarves, etc. Once high altitude flying and oxygen masks became the norm, it forced filmmakers to either take license by having the pilot remove his mask in flight or give the audience more of a depersonalized visual character if the mask was worn. Insofar as audience members wish to identify with the main character--or at least be able to identify that character--a pilot covered by helmet and oxygen mask becomes too anonymous. Similar arguments can be made for my decision to exclude images of the helicopter.

Larger airplanes, on the other hand, either do not share these limitations or share them to such a lesser degree that the nature of the action filmed becomes qualitatively

different. In essence, a bomber aircraft, cargo plane, or commercial airliner is a larger stage than the cockpit of a fighter plane and features more characters. Further, it allows these characters to interact face to face, making it a more social encounter than the solo encounter of individual and his fighter plane. Because (newer) bombers, cargo planes and commercial airliners are pressurized to ground-level pressure, characters generally do not need to wear oxygen masks for the duration of their flights. This allows more varied plots and possibilities, something filmmakers have been ingenious in developing. Even on a military cargo plane, the pilots are free to leave their seats (or be removed from them, adding yet further plot developments). Without question, a comparable stage setting can be found in space travel films, but as with fighter plane movies, this would lead to an overly broad view of aviation in the cinema, so it must be left undone here.

In addition to serving as a stage for human actors, the airplane itself has at times served as a central actor in a film. While airplane films have rarely personified aircraft in the way so many other films have brought to life machines such as the automobile (Stephen Carpenter's *Christine*, for instance, or Spielberg's *Duel*), there are a few instances worth exploring. For example, *Cast Away* (2000) features an airplane that seems to come alive--and in a very menacing way. For these reasons, this dissertation will focus on how cargo planes, bomber aircraft, commercial airliners, and all those aboard have been used and portrayed in film.

Finally, I hope to do more than merely situate and unpack these aviation films as they relate to American culture as a whole. Because the vast majority of these films employ concrete, identifiable aircraft whose characteristics are more or less known to the general public (a specific commercial airliner or military bomber, for example), I intend to treat these artifacts as central to my discussion, rather than relegating technical details to the footnotes. The engineering background, developmental histories, historical uses, and

unexpected stories associated with particular models of aircraft are as essential to most aircraft dramas as are the human details.

“If It Doesn’t Say Boeing, I’m Not Going”¹⁵

In the course of researching this project it became clear that of the small number of companies throughout the Western world that have manufactured bombers, cargo planes and commercial airliners, one company has had its products featured in Hollywood films far out of proportion to its market share. From the B-17s featured in *Memphis Bell* to the aluminum stars of the *Airport* series to the action-filled Harrison Ford thriller *Air Force One*, the planes predominantly used have been those of the Boeing Company. Boeing’s long-term American rivals such as Douglas, its successor McDonnell Douglas, and Lockheed have only sporadically had their products featured in American film. How many times, for example, has a film featured a DC-10 or Lockheed TriStar? Such images exist, to be sure, but they are far rarer than images of B-17s, B-52s, 707s or 747s. In addition, an Airbus plane, built by the European consortium, has had only one of its products appear in an American movie that I have seen. So, in a real sense, this dissertation will feature American movie images of Boeing planes.¹⁶

A History of Flight and Film Eras: WWII, etc.

The combat films of World War II, whether factual or fictitious, have proven themselves to be one of the most enduring and prodigious genres in the history of American motion pictures. Aside from the Western, no subject has been given as much attention by American filmmakers or been so well received by American filmgoers.

Bruce W. Orriss, author of *When Hollywood Ruled the Skies*¹⁷

Even before the entry of the United States into World War II, Hollywood offered a variety of war movies, including many flying films. A short list would include *Test Pilot* (1938),

Wings of the Navy (1939), *Flight Command* (1940), *I Wanted Wings* (1941), *Dive Bomber* (1941), *A Yank in the R.A.F.* (1941), *International Squadron* (1941), *Keep 'Em Flying* (1941), and *Captains of the Clouds* (1941). As war clouds first gathered on the European horizon, then unleashed their fury in September of 1939, Hollywood increased its output of patriotic dramas, causing some isolationists to label them “warmongering propaganda.” Despite such protestations, Hollywood acted in line with the prevailing mood of the President and major segments of the military. Thus, its warplane movies could be seen as “cinematic recruiting posters” that “extolled the virtues of military service and informed the public of the armed forces’ role in defending the nation against possible attack.”¹⁸

Once the possible became the accomplished, i.e., America being drawn into the war by the attack on Pearl Harbor--Hollywood was well primed to do its part. “Studio officials were now openly encouraged to create cinematic icons to lift the morale of the nation and stimulate the total war effort.”¹⁹ The list of movies that followed in the next four years is much too long to note here, but some of the more outstanding examples are worth mentioning. *Eagle Squadron* was a tentative start in addressing wartime issues, while *Desperate Journey* saw Errol Flynn and Ronald Reagan star as pilots flying over Germany. Meanwhile, John Wayne was clearing the skies of Japanese Zeroes in *Flying Tigers*. Early “flag wavers” that tried to introduce more factual accounts of aerial warfare were *Wake Island*, *Air Force*, *Thunderbirds*, and *Aerial Gunner*. Two actual documentaries that became hits were the original *Memphis Belle* and *The Fighting Lady*, an account of routine and drama aboard the aircraft carrier *USS Yorktown*. The cinematic realism and box office success of these two documentaries inspired filmmakers to be more realistic themselves, resulting in such films as *Wing and a Prayer*, *God Is My Co-Pilot*, and the superb *Thirty Seconds Over Tokyo*.

Interestingly, one film critic sees in World War II films a change from the historian's focus on leaders to a focus on common people. "The war movies and their audiences . . . are a part of the social development of 1940s America in that they represent a restructuring of its history from the standpoint of the lives and aspirations of the people 'at the bottom.'"²⁰ This is certainly true as it applies to wartime aviation films, as any perusal of the genre will show. Of course, this focus may not have been merely organic, arising from natural inclinations of the artists involved. Instead, American leadership likely played a role in influencing the content of these movies, as Jones and McClure note. First, they find that of 1700 movies produced between 1942 and 1945, approximately 500 of them would qualify as "war movies," many of which dealt with flying. Important goals for such movies were to quench "the tremendous public thirst for information about war" and to "improve the morale of home front audiences by depicting their husbands and sons in action." Behind this effort, the authors find cooperative government agencies such as the War Department and Navy Department. In fact, the United States government was so convinced of the propaganda power of Hollywood film that it created "The Media Division, Bureau of Intelligence, Office of War Information," which "began issuing weekly summaries and analyses of feature films in October 1942." This office had explicit criteria to follow concerning "favorable portrayals of life in the United States, its ideals and institutions; . . . the treatment of the war, the issues, the enemy, our allies, the prospects for victory, and the character of our armed forces."²¹

Not until the end of the war--and victory for the Allies--did Hollywood enter what Bruce Orriss calls "Post War Reflections," featuring films that "take a closer, more intelligent look at the conflict and its effects on the individuals caught up in it." This short period in film history started promisingly, staggered slightly, and resulted finally in some of the most enduring Hollywood films yet produced.

Samuel Goldwyn's *The Best Years of Our Lives* came but a year after the end of the war and featured three believable combat veterans and the memories they held. *The Beginning or the End* and *High Barbaree* continued with postwar explorations of aerial combat, but such films were not well received by the American public until *Fighter Squadron*, *Command Decision*, *Task Force*, and most especially *Twelve O'Clock High* made their appearances. "Free of all wartime restrictions," these films offered their audiences "an intense, realistic vision of men in combat, without the mock heroics that had become so much a part of this genre."²²

This period could have become another golden age for Hollywood as it took more sophisticated and intelligent approaches toward rendering the war years, but the opportunity was cut short by another instance of national interest: the beginning of the Cold War and the hot war in Korea. This meant that war films returned to their earlier role of bolstering patriotism, a role not without its merits, but one that nonetheless stifled artistic achievement.

Korean War, SAC, commercial aviation, etc.

The outbreak of the Korean War contributed to a tripartite division of Hollywood flying movies that began in the 1950s: WWII reflections, contemporary military stories, and civil aviation films. Given the sheer size of the aerial effort made during WWII, it is hardly surprising that this war continued to provide rich fodder for film work. The air war in Korea was a source for yet further films in the 1950s, though the emphasis was on fighter aircraft due to the nature of that conflict. Linking that war to the next hot war--Vietnam--was the unfolding Cold War and its strategic bombing missions against the USSR. Three of these Cold War films, known collectively as "the SAC Trilogy" because of the Air Force's Strategic Air Command's cooperation in making these educational, patriotic films,

constitute the definitive official position with respect to flying films. Two much less official perspectives on strategic bombing came in 1964 with *Failsafe* and *Dr. Strangelove, Or How I Learned to Stop Worrying and Love the Bomb*, a brutal satire of everyone involved in Cold War hostilities and the use of the atomic bomb. In the same vein, one could certainly mention the 1970 flop, *Catch 22*, a film which failed to adequately capture the humor and wit of the Joseph Heller novel from which it was adopted.

The long and unpopular war in Vietnam was waged extensively on the ground, and for air support it relied heavily upon the helicopter and close air support from small planes. Because both helicopters and fighter aircraft are not part of this dissertation, the many Vietnam-era films featuring helicopters and fighter movies such as *Flight of the Intruder* (1990) must be ignored. Reference to one bomber, however, can be found in Francis Ford Coppola's 1979 epic *Apocalypse Now*, where unseen B-52s in the distant sky drop their devastating loads on the jungle, but to date, a film on strategic bombing in Vietnam and environs has yet to be made in the United States.²³

When Ronald Reagan ascended to the Presidency in 1981, there was a sea change in Hollywood treatment of the military, as witnessed in the heroic treatment of fighter jocks in *Top Gun* (1986), starring Tom Cruise.²⁴ Perennial conflict in the Middle East provided substance for flying films as well, but they too tended to be based on fighter aircraft, as in the *Iron Eagle* series. After the 1960s, it seemed that the advanced technology of space flight and computers overshadowed the presence of the military bomber as leading symbols of the air, giving us films such as *Wargames* and *The Right Stuff* (both 1983), not to mention any number of space-based dramas, so an emphasis on civilian aircraft became obvious.

The growth of civil aviation film was consistent with the post-war rise in civilian air travel brought about by wartime production of large four-engine aircraft capable of carrying upwards of one hundred passengers to most points on the globe. The advent of the jet age accelerated this trend and was duly reflected in films of the time. Popular movies that fell into this civilian genre were *No Highway in the Sky* (1951) with James Stewart; *Island in the Sky* (1952) and *The High and the Mighty* (1954), both starring John Wayne; and *The Crowded Sky* (1960), a story about an impending in-flight collision. Following these films came the period considered the peak decades for airline disaster features, including classics such as *Fate is the Hunter* (1964), *Flight of the Phoenix* (1966), and *Airport* (1970) and its lesser successors.²⁵ These civilian airliner dramas have filled the void left by the departure of the Air Force bomber as a suitable setting for a flying film.

Race & Gender Aloft

The rise of the civil rights movement of the 1950s and 1960s, plus the advent of feminism soon after, translated at varying rates into more active participation by women and blacks (and later other minorities) in roles traditionally associated with white men. As perhaps the premier bastion of white male power and authority, flying remained stubbornly closed to minorities and women and statistically remains so today. Still, Hollywood has not been immune to the trends of empowerment for these excluded members of society, and films beginning in the 1970s show steady progress in the roles assigned these aerial outsiders. In chapter nine I will explore thirty years of this process by examining the casting of pilots and the roles assigned men, women, and minorities in flying films.

September 11, 2001

I have outlined a long list of issues to examine with respect to how Hollywood has produced flying films from 1950-2000. Whatever we as viewers might have thought about such films, however, was undoubtedly affected by the events on the morning of September 11, 2001, a day more shocking to the American collective psyche than perhaps any other. In many cases, it is likely that views of flying films watched prior to 9/11 will change in light of the events of that day; when 9/11 films are now viewed, audiences will bring with them much different expectations and interpretations than they did before.

Surely no one could have predicted that four real American airliners with hundreds of real Americans aboard would play such a dramatic and tragic role in confirming Hollywood's oft-repeated message that flying has its risks. To be sure, the images of the two Boeing 767 twin-aisle jumbo jets slamming into the sides of the Twin Towers are every bit in line with the graphic images of crashing planes given to us by Hollywood's special effects geniuses, but it would be wrong to posit some teleological connection between nearly one hundred years of movies about flight and the four crashes that occurred on 9/11; filmmakers had no more knowledge of what would happen that day than did any other American.

While they may not be logically connected, a case could be made that in the national imagination, in the mythmaking of the American people, celluloid images real and fictional will inevitably merge in as yet unpredictable ways. At the time of this writing it is too early to find substantial Hollywood responses to 9/11, but in the conclusion to this dissertation I will put forth some suggestive connections. Before attempting any of that, however, I offer the outline of this dissertation.

The Chapters

The chapters of this dissertation will be as follows:

- Chapter One: Introduction
- Chapter Two: Myth and Symbol in Flying Films
- Chapter Three: The Menace of Flight
- Chapter Four: Heroic Men and Flying Machines
- Chapter Five: “Passin’ Gas”: Aerial Refueling Scenes
- Chapter Six: Atomic and Chemical Threats in the Sky
- Chapter Seven: Disturbed and Disturbing Passengers
- Chapter Eight: *Cast Away*: The Machine in the Sky
- Chapter Nine: Race and Gender in Flying Films
- Chapter Ten: Conclusion

Following this introduction, the second chapter introduces film theory, the place of the airplane in film, and Leo Marx’s concept of the “machine in the garden” as applied to the airplane. Chapter three will begin the examination of the sub-genre of “mayday” flying films, focusing on some of the older classics such as *No Highway in the Sky* (1951), then moving on to more modern thrillers such as *Airport* (1970) and its heirs, *Die Hard 2* (1990), and the *Turbulence* series (1997-2001).

Chapter four will show how man and machine have been successfully pitted against the menaces of flight to create heroic flying films. Such films feature heroic pilots (and/or passengers), heroic planes (their strength, capabilities, etc.), or both. Classics of the genre include *Twelve O’Clock High* (1949), the “SAC trilogy” (*Strategic Air*

Command [1955], *Bombers B-52* [1957], and *A Gathering of Eagles* (1963]), *Memphis Belle* (1990), and *Air Force One* (1997).

Chapter five will be unique in that it deals with scenes of aerial refueling, a topic rarely visited in film studies. Scenes from the following films will be examined: The SAC trilogy from above, *Dr. Strangelove* (1964), *Executive Decision* (1995), *Final Descent* (1997), *Air Force One*, and *The Perfect Storm* (2000). This will lead to two of the most common menaces portrayed in aviation films: atomic and chemical threats from above. Here, *Dr. Strangelove* will be joined by another movie from the same year, *Failsafe*. I will also analyze scenes from *Outbreak* (1995), *Pandora's Clock* (1996), *Executive Decision*, *Medusa's Child* (1997), and *Killing Moon* (2000). This will constitute chapter six.

In chapter seven I will explore scenes where disturbed passengers or crew threaten the safety of those in the air. Because so many modern flying films feature mentally stable but corrupt individuals aboard (hijackers, blackmailers, Satanists), half of this chapter will focus on *disturbing* passengers. This disturbed and disturbing passenger sub-genre will encompass films such as *No Highway in the Sky*, *Airport*, *Die Hard 2*, *Passenger 57* (1992), *Executive Decision*, and *Air Force One*. Chapter eight will focus on one film, *Cast Away*, because of its strong literary aspects, particularly those mirroring major themes from American literature. From Emerson, Twain and others, I will show, using Marx's "machine in the garden" trope, how this film has translated iconic ideas from the American mind into screen product.

Finally, chapter nine will address issues of race and gender as they appear over time in flying films. From the all-white-male casts of nearly all the major war and commercial aviation films from WWI through the 1960s, I will show how Hollywood has kept in step with changing times from the 1970s onward. Leo Marx's own *mea culpa* issued in 2000 for ignoring "history from below" in *The Machine in the Garden* will set

the tone for this chapter. In the conclusion I will speculate on the meaning of September 11, 2001, a day in which four U.S. airliners with passengers aboard were lost within the space of a few hours. Of primary concern will be how our developing understanding of that infamous day will affect our readings of flying films made both before and after the terror.

CHAPTER 2 MYTH AND SYMBOL IN FLYING FILMS

Film studies and cultural studies share an interest in the analysis of popular culture, but film studies retains “a fundamental acknowledgement of aesthetic value.” In contrast, cultural studies “disavowed the notion of aesthetic value from the beginning.”¹ In this sense, my dissertation adheres much more strongly to the latter form of analysis, as I am, with few exceptions, unconcerned with the aesthetics of a film or particular shot, instead paying much closer attention to the larger cultural context in which the film was made and received, just as Leo Marx was not writing strictly about literature, but rather “the region of culture where literature, general ideas, and certain products of the collective imagination --we may call them ‘cultural symbols’--meet.” As a result, as Marx admits, some of the examples he used had “little or no intrinsic literary value.”² Similarly, of the flying movies I examine, whether big-budget Hollywood films or cheaper made-for-TV movies, some are no doubt considered by critics to be of little artistic value. But that is beside the point; like Marx, I hope to explore the region where “certain products of the collective imagination . . . ‘cultural symbols’ . . . meet.” To do this, I begin with a brief discussion of film theory and the power of film.

Richard Dyer, professor of film, notes the power of film over its audiences, even to the extent that it has been used to “manipulate people to acquiesce in totalitarian regimes.” This cultural studies perspective is concerned with the politics of film, and its central proposition is that “culture of all kinds and brows produces, reproduces, and/or legitimizes forms of thought and feeling in society and that the well-being of people in society is crucially affected and shaped by this.”³ Far from positing a monolithic or homogeneous message in film, cultural studies stresses the contested nature of these cultural products, where disputes rage within sections or between them. As we will see,

Leo Marx also believed in the contested nature of cultural products and he uses this belief in a belated defense of his earlier work. Before turning to Marx, however, a brief treatment of film and its relationship to the culture at large will help establish a basis on which to argue this dissertation on flying films.

Film Theory and the Power of Imagery

“Anything that exists can be studied . . .” Thus begins Richard Dyer’s introduction to film studies in the compilation *Film Studies: Critical Approaches*. Arguing that recent years have seen the emergence of a “cultural studies perspective” with respect to the politics of film, Dyer goes on to make a bold but perhaps valid claim for the power of “culture of all kinds and brows.” Specifically, he writes:

Who we think we are, how we feel about this, who we believe others to be, how we think society works, all of this is seen to be shaped, decisively, perhaps exclusively, by culture and to have the most profound societal, physical, and individual consequences. Importantly, cultural studies has a differentiated model of society. Rather than treating cultural products as part of a mass, uniform, and homogeneously modern society, it has focused on the particularities of cultures founded on social divisions of class, gender, race, nation, sexuality, and so on.

Furthermore, culture studies stresses “the importance of power, the different statuses of different kinds of social group and cultural product, [and] the significance of control over the means of cultural production.”⁴

As an important example relevant to this dissertation, turn to the coordinated efforts during WWII to steer popular culture in a direction supportive of official policy during the war. There is broad agreement that Hollywood war films of the 1940s played an explicit propaganda role in rallying troops and those at home to the war effort. However imperfect, these films “did convey some sense of the complexities of global war

to civilians even if it was done in such an uneven manner. No other literary or cultural form was as able to provide the immediate communication of these realities of war as well as the movies.”⁵ Later scholars would support a more general claim for the power of film. For instance, Stanley Rothman, as director of a large study on leadership and social change in America, has been associated with a number of books that examine the impact media has had on American culture. In *Hollywood's America: Social and Political Themes in Motion Pictures*, Stanley Rothman is joined by Stephen Powers and David J. Rothman in a work that stresses that “Hollywood’s creative leadership impacts the larger society even as it is influenced by that society.” The authors, in noting that “films are made by a relatively small number of people, who . . . tend to share a common outlook,” argue that “over time, motion pictures have had an undeniable impact on the beliefs, lifestyles, and action of Americans.” By way of explanation, they write:

There is little reason to believe that a single film or even group of films significantly influences audiences’ views over the long haul. However, if large numbers of motion pictures portray businessmen or Jews as thieves, blacks as violent or stupid, women as weak or clinging, and the military as corrupt, as a matter of course, it is reasonable to believe that such presentations will affect audiences to a significant extent . . .⁶

Margaret Miles, author of *Seeing and Believing: Religion and Values in the Movies*, expands on the theme that the power of movies comes from the consistent presentation of an image:

No one film has iconic power, but the recurrence of similar images *across* films weaves those images into the fabric of the common life of American society, influencing everything from clothing styles to accepted and expected behavior. Filmic conventions, of which most spectators are never consciously aware, cumulatively affect Americans’ self-esteem, expectations, attitudes, and behavior in relationships. . . . The answer to my question concerning the power of film, then, is that, to a greater or lesser extent, “we [as a society] are what we look upon and what we delight in,” or, in less elegant language, what you see is what you get. But we “get”

(the cultural message, as Roland Barthes said), or *are*, what we see not once but repeatedly. We get, at a subliminal and hence utterly effective level, not the narrative but the conventions of Hollywood film.⁷

Film scholar Robert Sklar has explored the history of the rise of cinema in America and has examined the growing power of movies to influence society. In *Movie-Made America: A Cultural History of American Movies*, he notes that by the late 1930s, Hollywood's ascendancy in this regard was already widely recognized. Many academics and literary types regarded moviemakers with "respect, awe and even envy, as the possessors of the power to create the nation's myths and dreams." Scholars and writers of the day acknowledged that "movies had taken over cultural functions they themselves had exercised, or aspired to, in the past," a theme upon which Sklar expands:

In traditional American society the task of describing the world and communicating that vision to its members had belonged, with different emphasis at different times, to the clergy, political statesmen, educators, businessmen, essayists, poets and novelists. There had never been a totally uniform cultural expression in the United States, there had always been schisms and struggles, alternatives and counterviews, but in general the combatants had come from similar ethnic and class backgrounds and had utilized the same means--the written and spoken word. Now for the first time power to influence the culture had been grasped by a group of men whose origins and whose means were different.⁸

This has been an important achievement because of the great impact film in general has had on modern American culture. Writing in 1975, Sklar laments the lack of cultural studies concerning the effects of film. Setting out to effect a remedy, he composed "a single volume covering the cultural history of American movies from the 1890s to the present, to provide a broad framework for understanding their significance." Sklar stresses the impact film has had: "It is important to begin with a recognition that movies have historically been and still remain vital components in the network of cultural

communication, and the nature of their content and control helps to shape the character and direction of American culture as a whole.”⁹

Later film critics share Sklar’s desire to elevate the status of film to the same level of cultural importance as literature. For example, Desser and Friedman make the case that film deserves recognition and respect as a social construct: “Like a generation of literary critics, we also seek to situate a group of texts within a stream of social, cultural, historical and ethnic factors. Our subject, however, is film instead of literature, and our focus is filmmakers instead of writers.”¹⁰

Some film historians believe that World War II provided the opportunity for film in America to rise to a higher artistic and social level, becoming a major contributor to how Americans saw themselves, a trend that arguably continues to the present. Because the era of World War II movies was such a turning point, then, it may be worth quoting at length the same words Jones and McClure have chosen to end their pioneering work, *Hollywood at War*:

Energized by the demands of war, the motion picture during these war years gained point, purpose and direction. They provided entertainment to those hammering out the weapons of war as well as to those fighting the battles. They furthered the military effort by conveying information about war and increased the public’s awareness of what was going on. Their real opportunity came in emotionalizing the war situation. This led to an exposure of the nature of the enemy and his assaulting ideology, a more realistic treatment of Allied efforts, and a more dignified portrayal of the fighting men. In dramatizing the stories of conquered countries and attempting to tell what Americans and their allies were fighting for, the screen psychologically and materially met the crisis persuasively and with an urgent sense of its obligations.¹¹

As important as these film experts consider film to be, there may be a yet more influential visual medium today: television. Two television scholars, for example, have written about the power of this medium that supplanted film after World War II:

[T]elevision's penetration was to be all-encompassing, its influence enormous. The new medium was unprecedented in its "sheer mass, in its rapid infiltration of everyday American life, and in the fact that its images . . . have been transmitted, year after year into the consciousness of hundreds of millions of viewers." . . . Unlike feature films with their one-time exposure, television series have the unique characteristic of continuity, offering viewers a sense of familiarity and comfort through the ongoing characters whom they welcome, week after week, into their homes, their lives, and their thoughts. . . .

Even the made-for-TV movie, which like the cinematic feature is initially a one-time viewing event, has far greater exposure than the theatrical release; television movies immediately reach a much larger audience, and continue to do so for many years afterward through repeat broadcasts and syndication. Thus they have greater short-term and long-term opportunity to affect audiences.¹²

Myth and Symbol

The "myth and symbol" school of American Studies is generally associated with scholars such as Leo Marx and Henry Nash Smith.¹³ While it enjoyed a flowering in the early days of American Studies, it met with harsh criticism later.¹⁴ Fortunately, the pendulum began to swing back in the other direction, and at least one important defense of the method was made by Brian Attebery in his *American Quarterly* essay "American Studies: A Not So Unscientific Method"(1996), which was an explicit response to Bruce Kuklick's 1972 attack. Indeed, Marx himself managed a defense in the Introduction to his 1988 *The Pilot and the Passenger*, a wide-ranging and eclectic collection of his own essays.

Kuklick's Critique; Attebery's Response

Perhaps the chief target of the myth and symbol school of American Studies is the assumption by Marx, Smith et al. about the "collective imagination." Writing at a time of growing racial and gender pluralism, it is not a surprise that Kuklick emphasized that "images and symbols are not uniquely occurring entities. They have the capacity to

appear in many minds . . .”¹⁵ We can now recognize this critique as an “attack on the canon,” a canon that writers like Smith and Marx took for granted. This view that “great books [are] keys to the study of the cultures of which they are a part,” that “historical truths” about a period can be inferred from these great books (or other art) was a “shortcut around masses of historical data,” struck Kuklik as rather false. “What we have instead,” Kuklick wrote, “are a series of ruminations with little empirical content.”¹⁶

This “lack of theoretical rigor”¹⁷ was not so apparent to Attebery, particularly after he had gone through the archives of the forty-year-correspondence between Henry Nash Smith and Leo Marx. In going over this voluminous correspondence, Attebery discovered “methodological hints” Marx had used in his construction of the myth and symbol method. These were:

1. Isolate the use of industrial-technological themes, metaphors, images in the work of the writer under consideration.
2. Examine the way in which these fit into the novel, story or poem,—the way they are imaginatively assimilated, contribute to the total effect, etc. . . .
3. See how the attitudes toward the emerging machine age are related to the major preoccupations, themes, concepts of the writer; this involves both his personal experience, his explicit statements on the subject as well as what happens in his work.
4. Returning to the works of art and reading into them all that is implicit, how does our information illuminate the writer’s work, and his relation to his society?

This method could be seen as “circular,” or better, “an open spiral,” starting with Marx’s exposure to key passages, “broadening out to entire texts, further expanding the field of inquiry to include the writers’ extratextual experiences as participants in the age of the machine, and finally returning to the passages for another go at interpretation.”

Attebery saw in this method an incipient attempt at what was later known as “the hermeneutic circle”¹⁸

This approach may not have been as neatly packaged as critics contended, as Attebery makes clear after his extensive research:

Yet both Marx and Smith remain convinced that the nearly impossible task is eminently worth doing. It is important to remember that books like *The Machine in the Garden*, *Mark Twain*, and *Virgin Land* were attempts to find order in evidence that their authors knew to be vast, complicated, and often contradictory. What some readers today find overly neat and unified in their work was the result of considerable effort to remain intelligible, to find some pattern that could serve as a starting point for further investigation. In the published studies, the patterns they came to call myths and symbols often seem to be substantive embodiments of national consensus. Yet the letters reveal that Marx and Smith saw symbol and myth rather as interpretive tools to aid them in identifying the structures of thought used by nineteenth-century writers to sort out their own complex and contradictory environment and in explaining the interaction of individual and society in the formation of those thought patterns.¹⁹

Attebery has sifted their attempts at using “interpretive tools” down into five basic premises that both Marx and Smith seem to have agreed upon throughout the four decades of their correspondence:

1. The subject matter of American studies is the American mind or consciousness; this consciousness is variously experienced and expressed by individual Americans but is also somehow collective.
2. The method for studying this subject involves interpreting artifacts, especially verbal texts, in cultural context: this context, however, is not a given but is itself constructed by the researcher through other interpretive acts.
3. The interpreter is himself a product of history: his perceptions are both enabled and limited by the structures of thought given by his culture.
4. Although interpretation starts from the researcher’s own culturally acquired values and worldview, a reading of the past can be tested and validated by interdisciplinarity: using psychological insights to probe political positions, reading historical documents with the literary critic’s sensitivity, letting artists’ images illuminate writers’ words, and so on.

5. Literature has a special place in American studies because the literary text articulates its own theory about itself and its time and place; it may not be a reliable guide to what most people were thinking, but it is the best entry into how they were thinking.²⁰

This last rule in particular offers a means of interpreting the flying films examined here, replacing the literary text with the film, of course. In *Virgin Land*, Smith spelled out his idea about the value of popular texts where “The individual writer abandons his own personality and identifies himself with the reveries of his readers. It is the presumably close fidelity of the . . . stories to the dream life of a vast inarticulate public that renders them valuable to the social historian and the historian of ideas.”²¹ While this may have been less true of some of Hollywood’s more major flying films because of their semi-overt propaganda missions (the SAC trilogy stands as an obvious example), the made-for-TV movies fit this bill perfectly, which is yet another reason to take them seriously in this dissertation. In any case, now is the time to make the explicit case for reading flying films along the lines employed by Leo Marx in his classic *The Machine in the Garden*.

The Machine in the Sky

The pastoral ideal has been used to define the meaning of America ever since the age of discovery, and it has not yet lost its hold upon the native imagination.

Leo Marx, *The Machine in the Garden*²²

In *The Machine in the Garden*, Marx argues that the theme of mechanical disturbance in the American “pastoral” is a theme repeated again and again in American literature. His introductory chapter employs the trope of Nathaniel Hawthorne’s summer of 1844 project to repose in the woods of Massachusetts to await, in Hawthorne’s words, “such little

events as may happen.” Marx shows how Hawthorne’s observations of distant human activity set the stage for his crucial contrast of pastoral versus the machine:

But, hark! there is the whistle of the locomotive--the long shriek, harsh, above all other harshness, for the space of a mile cannot mollify it into harmony. It tells a story of busy men, citizens, from the hot street, who have come to spend a day in a country village, men of business; in short of all unquietness; and no wonder that it gives such a startling shriek, since it brings the noisy world into the midst of our slumbrous peace. As our thoughts repose again, after this interruption, we find ourselves gazing up at the leaves, and comparing their different aspect, the beautiful diversity of green. . . .²³

As the key to his discovery about the soul of America, Marx explains that since 1844, “this motif has served again and again to order literary experience. It appears everywhere in American writing.” While it may only be a “fictive episode” in some cases, the “little event” is a “cardinal metaphor of contradiction, exfoliating, through associated images and ideas, into a design governing the meaning of entire works.”²⁴

Marx finds no shortage of literary examples. “We recall the scene in *Walden* where Thoreau is sitting rapt in a reverie and then, penetrating his woods like the scream of a hawk, the whistle of the locomotive is heard.” There is the “eerie passage in *Moby-Dick* where Ishmael is exploring the innermost recesses of a beached whale and suddenly the image shifts and the leviathan’s skeleton is a New England textile mill.” Finally comes “the dramatic moment” in *Huckleberry Finn* when Huck and Jim are spending the night peacefully floating down the river when “a monstrous steamboat suddenly bulges out of the night and smashes straight through their raft.” What gives these “little events” much of their literary power, and perhaps even more of their cinematic power, is the fact that in a majority of these cases “the machine is made to appear with startling suddenness.”²⁵ This suddenness becomes all the more pronounced once aircraft have entered the scene, but that discussion must wait for a few more pages.

After having expounded upon Hawthorne's use of the sound generated by the locomotive, Marx turns to an example from two years earlier, this time from Emerson: "I hear the whistle of the locomotive in the woods. Wherever that music comes it has its sequel. It is the voice of the civility of the Nineteenth Century saying, 'Here I am.' It is interrogative: it is prophetic: and this Cassandra is believed: 'Whew! Whew! Whew!'"²⁶

What Marx Missed

What is quite remarkable here is the fact that Marx never once extends his vision of "the machine" to the airplane, despite his own and Smith's insistence on the value of popular culture texts. Marx's work on the concept began in 1949; he published an essay, "The Machine in the Garden," in 1956, and then his path-breaking book of the same name in 1964. Finally, he had thirty-five years to reflect on ideas, to engage critics in reevaluations of his arguments, etc., after which he wrote his Afterword in 2000. Still, the airplane and its image in movies are ignored. This becomes all the more difficult to understand given that Marx had collected a group of his more substantive essays and published them in a book titled *The Pilot and the Passenger*. While he used these words to refer to the Twainian riverboat pilot and his passengers, the more common current use of the words should have been manifest. Yet they were not. This is auspicious for this dissertation because it offers the opportunity to apply an important method from American Studies to an unmined field of American popular culture.

The Airplane as Successor to the Locomotive

The locomotive is crucial to Marx's argument about the machine in the garden because it is the preeminent example of the machine in the nineteenth century. As Marx notes:

By 1844 the machine had captured the public imagination. The invention of the steamboat had been exciting, but it was nothing compared to the railroad. In the 1830's the locomotive, an iron horse or fire-Titan, is becoming a kind of national obsession. It is the embodiment of the age, an instrument of power, speed, noise, fire, iron, smoke--at once a testament to the will of man rising over natural obstacles, and, yet, confined by its iron rails to a predetermined path, it suggests a new sort of fate. The "industrial revolution incarnate" . . .

Marx buttresses these claims by noting the sheer volume of paeans to the locomotive, the endless number of stories about "railroad projects, railroad accidents, railroad profits, railroad speed" all filling the press. The "fascinating subject is taken up in songs, political speeches, and magazines articles." Leading magazines elaborated upon it.²⁷ Clearly, the railroad was a potent symbol in its day.

Marx's point is well taken, then. First the steamboat, then the railroad was "the voice" of the nineteenth century. The reign of the railroad may well have continued into the twentieth century, but on the whole, I would argue, it cannot claim the title of "voice" of the twentieth century. It seems to me that that honor would have to go to a faster, more efficient means of mass transportation; just as the steamboat had been exciting but was replaced by the train, in the twentieth century the train was supplanted by the airplane, particularly the jet, which outclassed in size, speed, and capacity the abilities of the propeller airliner. This succession opens up many possibilities for a new reading of airplane films, so a bit more exposition on the link between the locomotive and airplane--and especially their images--is in order.

As we saw in the previous chapter, ancient civilizations had their myths about the sky. Here we can link another myth with one cited earlier. Emerson, for one, saw in the locomotive--this "fire-stealer"--"the story of Prometheus!" "The fable of Prometheus," Marx notes here, "is invoked on all sides."²⁸ For the airplane, however, perhaps the more appropriate fable is that of Daedalus and his son Icarus. Or perhaps not,

for the airplane too has harnessed the power of fire, though less visibly than the steaming locomotive. Symbolically, it has offered both the possibilities and liabilities (recall the nineteenth-century fascination with railroad crashes) of fire and the locomotive.

A further link between locomotive and airplane comes in the symbolic power they hold for their age: "A locomotive is a perfect symbol because its meaning need not be attached to it by a poet; it is inherent in its physical attributes. To see a powerful, efficient machine in the landscape is to know the superiority of the present to the past."²⁹ If that is true of the locomotive, is it not more so with respect to the airplane, particularly as it takes flight? One would be hard pressed to argue that a fully loaded 747 on takeoff, for example, does not prove the superiority of the present to the past, if the past is represented by any version of the train. In addition to the technology itself comes the artistic imagery of the machine in question: "Much the same feeling surrounds the symbol of the machine when it is put into words."³⁰ The same, I would argue, is true--perhaps more true--when the machine is put into film . . . and projected upon a large screen.

As a further sign of the airplane's rise to symbolic prominence, witness reference to it in popular song. Perhaps the most well known instance is the pop tune sung by Peter, Paul and Mary, "Leavin' on a Jet Plane," where they sing:

So kiss me and smile for me
Tell me that you'll wait for me
Hold me like you'll never let me go

'Cause I'm leaving on a jet plane
I don't know when I'll be back again
Oh, babe, I hate to go

Ironically, this song was written and sung by John Denver, who died while flying his own experimental plane off the coast of California in 1997.

In 1977, the Steve Miller Band released their song “Jet Airliner,” which contained these lyrics:

Goodbye to all my friends at home
Goodbye to people I've trusted
I've got to go out and make my way
I might get rich you know I might get busted
But my heart keeps calling me backwards
As I get on the 707
Ridin' high I got tears in my eyes
You know you got to go through hell
Before you get to heaven

Big ol' jet airliner
Don't carry me too far away
Oh, Oh big ol' jet airliner
Cause it's here that I've got to stay

Machine as Menace

After a canvas of the strengths and promises of railroads in chapter IV, “The Machine,” Marx begins a shift by referring to John Stuart Mill’s critique that such exuberance bypasses ideas. The approving rhetoric just covered about America’s embrace of progress through technology “rises like froth on a tide of exuberant self-regard, sweeping over all misgivings, problems, and contradictions.”³¹ Marx now sets his sights on exposing these oversights to the light of day.

Disturbing the Peace

As seen above, the intrusion of the machine into the American garden was Marx’s central thesis, followed closely by his observation that “*More often than not in these episodes, the machine is made to appear with startling suddenness* [emphasis added].”³² In both respects, the same remains true for many flying films; in fact, given the medium of big screen film and its accompanying sound, the effect is all the more dramatic.³³ For

example, the sudden disturbance of the pastoral can be found in flying films as disparate as *Strategic Air Command* and *Always*, as mentioned in the previous chapter. Attention to how the airplane as machine is treated in these and other films will demonstrate the degree to which uses of Marx's reading of literature can be applied to film as well.

The setting of *Strategic Air Command* is the early 1950s, a time of a return to normalcy after the traumatic war years of the early 1940s, the upheavals caused by Communist advances world wide, and the unpleasant war that had just taken place in far-away Korea. Further, the scene is set in that most pastoral of American pastimes, the baseball field. James Stewart is cast as WWII flying veteran Robert "Dutch" Holland, who has happily returned to his chosen profession of baseball. Out with the younger men, he indulges in the innocent pursuit that had been denied him while in the service. Now, however, the present and the future look pleasant and bright, as he has just signed a \$70,000-a-year contract with the St. Louis Cardinals. That he has also just married a young woman further establishes the domestic (national and personal) tranquility that is featured in the opening of the film.

Holland's wife has just arrived with her parson father to take in a practice session on a beautiful day. Dutch comes over to make small talk, then begs their leave as the players are about to begin an intersquad game where he is the captain of the Blue Team. He then jogs out toward third base, where the camera shows only him and the expanse of the outfield and area beyond. Suddenly, his idyll is interrupted by a distant whine, one that grows in volume too fast for Dutch to identify. Mystified, he turns his eyes skyward, where he sees a monstrous ten-engine B-36 bomber. No mention of airplanes had yet been made and no explanation is offered for this sudden intrusion. The plane flies over and Dutch is jolted out of his sporting mood, but the plane is gone before anyone can say anything. Quickly, the scene returns to the pastoral and the game gets underway. Without

the forthcoming unraveling of this scene's meaning, the viewer is left disconcerted by the curious juxtaposition of baseball game and bomber.

This disturbance of tranquility is repeated twenty-six minutes into the film when Dutch and his wife are locked in a romantic embrace in their new on-base house. Suddenly, a B-36 roars low overhead, causing the windows and blinds to vibrate. As soon as it comes, however, the disturbance passes, and the newlyweds resume their private pursuits. This time, though, we know why the B-36 plays a central role--after patriotic service in the Pacific during WWII, Dutch has been drafted again to bolster America's bomber-based nuclear deterrent. In addition to the generic interruption of the idyll, the bomber's intrusion also marks the intrusion of pressing defense needs into the personal lives of Dutch and his wife and, by extension, into the lives of countless servicemen and their families, which is the explicit message of the film.

Three decades later, we see an equally well rendered portrayal of the machine in the garden disturbance in the 1989 film *Always*, a remake of the 1943 *A Guy Named Joe*, in which Spencer Tracy starred as the ghostly flier who returns to earth to instruct a young airman about to go off to war. The premise surrounding *Always* is quite different, though. The action now revolves around firefighters who fly airplanes full of water to drop onto raging flames, and rather than two military aviators, this film pairs a cocky man (Richard Dreyfuss) with his insecure girlfriend (Holly Hunter).

The film opens with two fishermen sitting quietly in their small boat on a placid lake. There is no sound or music, and in fact, one of the fishermen is dozing, all in all the ideal image of "slumbrous peace." Then, far behind the men, in the background, we see but do not yet hear a great plane swooping down on the men, like a hawk silently stalking its prey. As it is still at a distance, the men neither see nor hear it, but we in the audience are gripped by the peril. A two-engined amphibious plane, it finally contacts the water, all

the while charging at the two unaware men. Groggily, one man senses something; when he turns to look behind him, he sees the shape of the hulking plane heading straight for them. Then the roar of the engines and displacement of water reaches him, and the dozing man awakes with alacrity. Fearing for their lives, they dive into the water. The plane, never intending to land, lifts off just over the boat. This drama has only taken seconds, yet it succeeds in bringing “the noisy world into the midst of our slumbrous peace.” As soon as it has intruded, it is gone and quiet returns, just as in Hawthorne’s case: “As our thoughts repose again, after this interruption, we find ourselves gazing up at the leaves, and comparing their different aspect, the beautiful diversity of green. . . .”³⁴

The theme is repeated in *Memphis Belle*, a 1990 remake of the 1944 short documentary directed by William Wyler while in uniform.³⁵ Here, the opening scene shows American boys engaged in an impromptu game of football in an English field. They are there to fly the B-17 on bombing missions over Germany. That American bomber bases were carved out of English pastureland made the machine in the garden motif literal, and this movie is sure to capture it. In addition to the opening juxtaposition of youth engaged in a football game in a field beside their high-tech bombers, we later see their bombers parked at the edge of a field ready for harvest. In contrast to the power of the four-engined B-17 comes a horse-drawn mower gently cutting down the hay. One of the bomber crew stops to help the farmer, reinforcing for us the notion that this American farmboy’s service is being interrupted by his tour of duty on a flying machine.

In the same year that *Memphis Belle* came out, a made-for-TV movie employed a related image of the machine in the garden. In *Miracle Landing* two tropes are intermingled: the machine in the garden and the garden as paradise. The setting: Hawaii. *Miracle Landing* is a “docudrama” based on a real incident. On April 28, 1988, an Aloha Airlines 737 with a particularly high number of takeoff and landings to its credit

experienced catastrophic airframe failure while flying over the Pacific. Remarkably, the aircraft remained intact, and the two pilots were able to land it successfully. This aspect of the movie will be treated later; here the point of interest is the positioning of the plane in paradise.

Not surprisingly, stock cliches about Hawaii are used to establish a general sense of place, as occurs when the opening credits roll. An aerial shot of Waikiki centers on the beach, hotels, and sailboats, while a crewmember jogs along Kalakaua Ave., allowing the camera to take a wide sweep of the famous stretch of land. The music, of course, is suitably upbeat. This image of paradise is reinforced in the next scene, when we see a cabin crewmember in her bathing suit painting a portrait on the beach of her young daughter. The surrounding mountains and isolation of the ocean establish the tropical magic of setting, as does the traditional Hawaiian dress and lei that the daughter is wearing.

Such imagery is repeated four more times before the movie has reached the thirty-minute mark: once more as the pilot sails his boat in the serene waters off Diamond Head, ending with a golden sunset shot, and again when two female crewmembers have dinner on the beach in Waikiki. The message becomes heavy handed, however, when we learn that the fictional airline portraying Aloha Airlines is called "Paradise Airlines." Since the Paradise Boeing 737 is a central focus of this movie, ample time is given to introduce it. As the plane sits parked on the tarmac, the camera slowly begins a pan of the tail, where we see a lone green palm tree painted as the airline's emblem. The camera continues its slow pan the length of the plane, past the unmistakable Pratt and Whitney JT8D engines that powered so many Boeing airliners,³⁶ up to and around the nose of the plane. Upon takeoff, the background behind the plane is of typical tropical scenes. Finally, a later shot in flight shows the Paradise 737 encircled by a rainbow.

A more macabre portrayal of the interrupted idyll comes in the 1993 film *Fearless*, directed by Peter Weir and starring Jeff Bridges as an everyman passenger. The movie opens with a pastoral--a cornfield filled with corn much taller than a man. Mist--or smoke--envelops the corn, and ambiguous music plays in the background. Immediately, we see Bridges walking toward us through the corn. In his arms is a baby, and he is holding a small boy by the hand as they navigate their way. Behind them comes a line of children. Though disheveled, no one is injured, nor is anyone crying, so the nature of the scene remains a mystery. Now the mist/smoke has cleared and seconds later they emerge from the field, where the reason for their presence in the cornfield is made all too clear: they have survived a plane crash. On the dirt road adjacent to the corn lies the shattered tail of a plane. Meanwhile Mexican field hands kneel in prayer for the dead and for the miracle of the survival of these passengers. An aerial shot of the crash scene shows a green cornfield diagonally cut by the blackened path of the doomed airliner.

These filmic examples are rather straightforward renditions of the unexpected entrance of the machine into the garden, but they merely add to the drama of the film rather than play a central role in the script. In contrast, a recent film employs the image in a way that is central to the very narrative of the film. In addition, this film, *Cast Away*, has so many ties to literary renderings of the machine in the garden that I will devote an entire chapter to its discussion later in this dissertation. Marx's concept of the machine in the garden can be applied to this 2000 film as profitably as to early 19th-century American literature.

Marx's Change of Heart

There was once a town in the heart of America, where all life seemed to live in harmony with its surroundings. Then a strange blight crept over the area and everything began to change.

Rachel Carson in *Silent Spring*³⁷

Marx catalogs the embrace of technology that writers such as Emerson, Hawthorne and many others of their generation displayed, but being a 20th-century man, he cannot escape the growing conviction that many aspects of technological advance have come at costs not worth bearing. Of special note is the drastic change in mood toward technology that can be found between the original publication of *The Machine in the Garden* (1964) and its thirty-fifth anniversary edition. In this new Afterword, Marx is much more explicit about the downside of the entry of the machine into the American garden. To any modern reader, the perils of the machine are legion, yet in 1964 Marx was reluctant to stress this. About all we read of the postwar world (and Marx had served in the Navy during The Second World War, so he could hardly have been unaware of the growing menace of modern machines) is a mild reference to a “not wholly fanciful premonition of mankind’s improving capacity for self-destruction.”³⁸ In his Afterword thirty-five years later, however, he takes a starkly stronger line when referring to the first dropping of the atomic bomb: “Quite apart from its tragic human consequences, no other event in my lifetime so effectively dramatized the nexus between science-based technological progress and the cumulative, long-term degradation of the environment.”³⁹

Perhaps this change in perspective can be of use. Writing as he was just before America’s entry into the Vietnam War, a time before the American masses had begun to question their leadership’s use of the military, Marx was, like so many other Americans, no doubt still enamored of the view that America had fought a “good war” during the 1940s and continued to take the moral high ground during the Cold War. A quick look at the three Strategic Air Command movies (the “SAC trilogy”) will confirm that even at the time of the release of the final film, *A Gathering of Eagles* (1963), the view of the American military was still highly favorable. In particular, the machines featured were held in the highest esteem.

What changed between then and the year 2000 is much too vast to discuss here, but any competent reader in American Studies will have some clear grasp of the history. The point here is this: Just as events subsequent to the appearance of *The Machine in the Garden* had a dramatic effect on Marx, those same events also influenced the way flying films were made after about 1964, and neither Marx nor Hollywood filmmakers were immune to these changes. As the perception of the machine became more negative, so too did the degree of menace represented by flying. It was no longer only the failure of flight crew or aircraft that could bring an airliner crashing to earth; now there were hijackers, madmen, chemical threats, terrorists, and a host of other dangers with which to contend. (The events of September 11, 2001, which obviously came after Marx had written his Afterword, only underline the fears that film after film had portrayed. I discuss these issues in the conclusion to this dissertation.)

In his Afterword, Marx now says that as “an enthusiastic wilderness camper and amateur ornithologist,” he had “already become sensitive to our society’s increasingly reckless assault on the integrity of the natural environment.”⁴⁰ It is impossible to think of this comment now without recalling Rachel Carson’s *Silent Spring*, published just three years before Marx’s own book. Marx does refer to it in 2000, but it is doubtful he had read it prior to 1964. Otherwise, how could he have refrained from using the gem available to him from Carson’s opening, which he does use in 2000, in the *opening sentence*, no less: “There was once a town in the heart of America where all life seemed to live in harmony with its surroundings.” Marx notes descriptions of a “serene seasonal”-i.e. pastoral--setting, followed by a theme identical to his own. And then, Marx writes, “with a sharp change of mood” comes “the abrupt intrusion of an external force”:

Then a strange blight crept over the area and everything began to change. Some evil spell had settled on the community; mysterious maladies. . . . Everywhere was a shadow of death. . . . There was a strange stillness. The

birds, for example,—where had they gone? . . . It was a spring without voices.

Perhaps Marx's failure to be more pessimistic about industrialization in his interpretations of American writers' views on the machine is due to what one critic of myth and symbol has charged Marx with. Writing in *American Quarterly* in 1996, Brian Attebery charges that Marx, along with his teacher Henry Nash Smith, does not "attest to the writers' personal involvement in the materials they studied and the impingement of present concerns on perceptions of the past."⁴¹ Marx should have known better. After all, as we saw above, Marx as long ago as 1948 wrote "See how the attitudes toward the emerging machine age are related to the major preoccupations, themes, concepts of the writer; this involves both his personal experience, his explicit statements on the subject as well as what happens in his work."

Since this dissertation's subject is not Leo Marx, there is no need to further explore why Marx wrote what he wrote. Still, mentioning the shift in Marx's perspective from 1964 to 2000 is fortuitous for two reasons: First, it allows an update of the "machine-in-the-garden trope" from the first half of the nineteenth century to well into the second half of the twentieth, a period in which some of the best Hollywood flying films have been made. Second, it allows a shift in the focus of this dissertation back to where it belongs: up above. After all, upon noting "the spring without voices" in the opening of Carson's seminal book, Marx mentions that Carson's "initial surrogate for the machine is 'a white granular powder' falling from the sky, a substance Carson associates . . . with Strontium 90, a by-product of nuclear explosions."⁴² How fitting that so many of the menaces in the sky to be discussed in this dissertation will deal with nuclear explosions and deadly substances in the sky.

CHAPTER 3 THE MENACE OF FLIGHT

For the 271 people aboard a regular afternoon service to Los Angeles, their departure from Chicago on the eve of a holiday weekend seemed normal and full of promise. Little could they know their gleaming widebodied jet concealed a fatal flaw--and that, only half a minute after liftoff, everyone of them would be dead.

Macarthur Job describing crash of FL191¹

Crisis in flight has long been the focus on Hollywood film. Prior to World War II, there were such dramas as *The Green Goddess* (1923), *Sinners in Heaven* (1924), *The Broken Wing* (1932), *Central Airport* (1933), *Thirteen Hours by Air and Ceiling Zero* (both 1936), *Lost Horizon*, and *Non-Stop New York* (both 1937). The years during and surrounding World War II, of course, were preoccupied with wartime stories, but in the 1950s mid-air crisis dramas resumed. Michael Paris argues in *From The Wright Brothers to Top Gun* that there was a qualitative difference between pre- and post-war aviation crisis films. Prior to the war “the disaster or the danger averted constituted only one element in a film where the main focus was the growth of an airline, a record-breaking flight or the development of a new machine. The engine failure, crash or whatever, was an incidental, an element of added tension for the audience; a device by which the final achievement of the aviator could be heightened.” After the war, however, “the air disaster took on a life of its own.” Concurrent with the growth of civilian air travel, Hollywood’s tendency to exploit the common fear of flying grew as well. In this era, Paris argues, “The danger is no longer just one exciting incident in the story, it is the whole *raison d’être* for the film.”²

Interestingly, Paris credits a pre-war “crisis in mid-air” film with establishing the template for the modern sub-genre. *Five Came Back* (1939) was a low-budget RKO

thriller that told the story of a crash of a passenger plane in the South American jungle on a routine flight from Mexico City to Panama. Prior to the crash, an anthropologist on board describes the headhunters who live in the jungle below, thus establishing the basic tension once the crew and passengers become stranded. The pilot manages to land the plane without seriously damaging it, but it takes twenty-three days to repair the engine and build a runway through the jungle. The problem is, there is only enough fuel to take five people to safety, meaning those who remain will become the captives of the headhunters who have been slowly closing in.

What makes this film a model for subsequent aviation crisis movies is its use of cast. Lucille Ball and Chester Morris star as secretary and pilot, while other passengers include Ball's boss, a detective and his political prisoner, and two elderly anthropologists, plus assorted other passengers. One reviewer hailed this film as "A rousing salute to melodrama, as suspenseful as a slow-burning fuse, exciting as a pin-wheel, [and] explosive as a bomb." Not only was this basic framework imitated, it was remade only fifteen years later as *Back From Eternity*, where characters as colorful as a prisoner being sent home for execution (Rod Steiger), a "bullying coward," and a hooker are featured. This use of widely varying characters is now a staple of such films.³ Early examples of the postwar genre include *Seven Were Saved* (1947), *Miraculous Journey* (1948) and *Daughter of the Jungle* (1949). From these sprang some of the true classics of aviation films.

Classics of the Genre

No Highway in the Sky (1951), adapted from Nevil Shute's novel of the same name (Shute himself was an aircraft designer), became a gripping drama featuring James Stewart as a Canadian aeronautical engineer named Theodore Honey who is deeply concerned with the problem of metal fatigue. While working in England at the Royal Aircraft Establishment at

Farnborough, he calculates that after 1,400 hours of flying the (fictitious) Reindeer airliner will succumb to this physical malady and crash in flight. In fact, one of the airline's Reindeers does crash in Labrador, and Honey is sent to investigate. As fate would have it, he flies aboard a Reindeer and while in flight he determines that this plane too has reached its limits. Metal fatigue, he believes, will cause the tail to fail and they will crash into the Atlantic with no hope of survival.

At first he calmly tries to alert the cockpit crew, who take him somewhat seriously at first. Alarmed, they take due precautions, but when the time for metal failure has come and gone, they begin to consider Honey mentally unstable. After landing safely in Canada, no one will listen to his further pleas. To prevent the plane from taking off again, he deliberately retracts the landing gear while it is parked on the apron of Gander Airport in Newfoundland.⁴ Only the sympathetic intervention of a stewardess and movie star (Marlene Dietrich) allows Honey a chance to prove himself, and in the end he is vindicated when a test results in metal fatigue failure within the limits he has predicted.

Metal fatigue, of course, is a very real problem in the aviation world, coming to public attention with the multiple failures in flight of the first passenger jet, Britain's de Havilland Comet. As the first commercial jetliner in production, the Comet had no rivals, so it stood an excellent chance of becoming a dominant force in post-war aviation. Unfortunately, just the opposite occurred. While suffering some "teething problems" during its first year in flight,⁵ the Comet's real flaw was revealed in January of 1954 when a Comet broke up in flight at an altitude of 26,000 feet. This was quickly followed by a second in-flight breakup, resulting in the grounding of the Comet.⁶ The storyline in *No Highway in the Sky* had been eerily prescient.

Island in the Sky (1953) was a worthy dry run for the director-actor team of William Wellman and John Wayne. Here Wayne plays veteran pilot Captain Dooley and

is flying an Air Transport DC-3 when it crashes in Labrador. Dooley rallies his men as they fight the fierce elements while awaiting rescue. This film is a classic in its own right, with Pendo calling it “one of the best of the plane-crash films.”⁷ A year later, this team created one of the true classics of mayday films. *The High and the Mighty* (1954) is sometimes considered the best film of the in-flight emergency genre. The “grandfather of all airline disaster films,” *The High and the Mighty* owes its authenticity to scriptwriter Ernest Gann, a former American Airlines pilot, and the seasoned directing of Wellman.⁸ Starring Wayne as Dan Roman and Robert Stack as the captain, the story revolves around an in-flight crisis over the Pacific as the Douglas DC-6 flies from Honolulu to San Francisco. A propeller mishap on one of the four engines results in a ruptured fuel tank and subsequent loss of range. Additional problems include navigation miscalculations as well as the cowardice of the pilot in charge.

As with other crisis in flight films, this one presents a dynamic mixture of characters and personalities. Though more experienced than the captain, Roman is relegated to right-hand seat in the cockpit because he was technically responsible for an earlier crash, one that took the life of his wife and child. The tension between him and the cowardly captain provides much of the drama, though the presence of passengers such as a maniac out to kill another passenger, a couple on their way home to get a divorce, a handicapped rich boy, and a disillusioned nuclear scientist add their share.⁹

In *Fate is the Hunter* (1964) Glenn Ford plays Sam C. McBane, Consolidated Airlines Director of Engineering and Maintenance, and he is intent on clearing the name of his close friend, the pilot of a plane that has crashed, taking fifty-three lives. A government investigation determines that the pilot’s drinking had caused the crash. McBane finds the cause of the crash by interviewing the lone survivor. Rather than pilot error, the cause was coffee spilled over an instrument box. It is interesting to note here that the plane in this

film was deliberately not based on any existing plane, as airlines were reluctant to have one of their models portrayed in crash scenes (more on this phenomenon below). Twentieth Century Fox solved this by converting a DC-6 to a swept-winged jet with engines added to the horizontal stabilizers. No real plane remotely resembled it. (The set, however, was so real that a commercial plane overflying the Culver City lot thought the shot was a real plane wreck and duly reported it.¹⁰)

The Flight of the Phoenix (1966) features James Stewart, former bomber pilot, again starring in a successful flying film. Playing Frank Towns, an aging transport pilot, Stewart is ferrying a group of oil workers over the desert in a C-82 Skytruck. His plane is forced down during a sandstorm and he and his assorted passengers must use their wits to survive. According to type, the film supplies a colorful group of personalities, beginning with the “fly-by-the-seat-of-the-pants” Towns, who mistrusts newfangled machinery, to the crisp and proper British officer Harris, to the simpleton played by Ernest Borgnine, to the coldly calculating German aircraft designer who helps save them. As Pendo notes, the film represents a coming to terms between the old (represented by working with one’s hands) and the new (represented by working with one’s head). Towns is the former, while the German is the latter, but they still need each other if they are going to get out of their predicament alive.¹¹

Airport

To be sure, the preceding pictures all featured the menace of flight, and most of them were staged on commercial airline flights. Still, something changed between the time they were filmed and released, and the advent of one of the true blockbusters of flying films: *Airport*. What that change is, is hard to identify, possibly because it is probably a *collection* of changes that result in this perception. Take, for example, technological advances in flying

between 1966 (*The Flight of the Phoenix*) and 1970 (*Airport*). After a series of manned space flights, America succeeded in putting a man on the moon, a feat that outshone earlier advances such as breaking the sound barrier and building jet airliners.

Another technology factor could be the advent of the jumbo jet, where passenger loads in one airplane would change from the low hundreds to between four and five hundred. Though *Airport* featured Boeing's venerable 707, its first jumbo, the 747, had already made its maiden flight by the time *Airport* opened and had been publicized heavily enough to believe that viewers were aware of its presence. Thus it is possible that at least subconsciously viewers feared for the safety of many hundreds of passengers. Adapted from Arthur Haley's novel of the same title, *Airport* not only refined the plots and techniques of earlier mayday films, it packaged them in such a way as to itself become a seminal portrayal of airliner in peril. After *Airport*, many other films owed their vernacular, as it were, to the drama in the original, including, of course, the sequels spawned by *Airport*.

Airport contains basic elements that allow its use in three chapters of this dissertation. First, it is certainly a "menace in flight" film in that a large hole has been blown in the fuselage while flying at altitude, putting the lives of all passengers and crew in serious danger. Second, a deranged passenger was responsible for blowing the hole in the aircraft, having detonated a briefcase bomb in a rear lavatory. Third, the film reified traditional gender and race roles, ironically just at a time when these roles were fast changing.

Because *Airport* is considered a classic, I will here give it attention with respect to its mayday features and leave the other two categories to their appropriate chapters. After dealing at some length with its portrayals of the perils of flight, I will discuss actual airline accidents that have taken place since the dawn of the jet age. I will do this to provide

background and mood for the wide range of mayday films that came after *Airport* and to show that the inherent risk of flight is never wholly conquered.

Airport begins at “Lincoln International Airport” (most likely modeled after O’Hare in Chicago) on a snowy Christmas Eve, just as airport manager Mel Bakersfeld (Burt Lancaster) is about to leave. Unfortunately, an incoming Trans World Airlines 707 has turned improperly on a taxiway and become stuck in the accumulating snow, thereby shutting down the main runway. Meanwhile, a sister ship to the stuck airliner, also a 707, has taken off for its flight to Rome. Among the passengers is a former Army demolitions expert who has had psychiatric problems in the past and now intends to bring the aircraft down over the Atlantic so that his wife may receive his insurance benefits.

Character relationships—one of the hallmarks of films staged aboard passenger airliners, cargo planes, and military bombers—are both interesting and plausible in this film. First, relations between the sexes are both strained and romantic, often with respect to the same character. Bakersfeld, for example, is on the verge of divorce, yet his relationship with fellow airport employee Tanya Livingston is decidedly close. Meanwhile, his brother-in-law, Captain Vernon Demerest (Dean Martin) is romantically involved with a stewardess (Jaqueline Bisset) who has recently found herself pregnant by the captain.

Once airline authorities have become aware of the danger to the plane, they assemble a team of experts to deal with it. Here George Kennedy creates his classic role as cigar-chomping mechanic Joe Patroni, a no-nonsense man of the old school. By relating his own military experiences with the perils of depressurization at high altitude, he is able to graphically create in the viewers’ minds the impending threat. Seated next to a cut-away scale model of the 707, he explains to Bakersfeld and the others what might happen should the bomb explode. Because the bomber is seated next to the window, the

blast will be directed against the side of the fuselage, sparing the vital control cables below. Because of this, the plane *might* get back.

The assorted listeners then act as uninitiated viewers--they ask questions so Patroni can educate us viewers about the likely scenario to follow:

Okay, so we know the kook is sitting in 23A, right here. My opinion is that they should get the hell back here as fast as they can. . . . The sudden decompression at 30,000 feet is something you've gotta see to believe. . . . Until that pressure equalizes, everything within twenty feet of him that's not nailed down or strapped in is gonna get sucked right out that hole. . . . When I was a mechanic in the Air Force, I was being transferred on a MAT's plane at 20,000 feet--one of the windows shattered. The guy sitting next to me was about 170 lbs. He went through that little space like a hunk of hamburger going down a disposal. And right after him coats, pillows, blankets, cups, saucers. . . . [After that] everything fogs up just like that. And *THEN* watch out. At that altitude you can't breath, so unless they get on oxygen in 45 seconds, it's *goooooood-bye*.

In the event, this is basically what transpires, although the blast takes place in a rear right lavatory rather than next to the man's seat on the left side of the plane.¹² The important point is that the blast has ripped open only the skin on the fuselage and has not critically damaged control cables, just as Patroni has hypothesized. And just as he said, the sudden decompression was a spectacle: Gwen, the stewardess-lover, is nearly sucked out the hole, other passengers are left gasping for breath, and the tail section of the plane may not stand the strain of a sudden dive to a safe altitude. Added to these immediate dangers is a raging snowstorm in the American Midwest, one that has closed an airport in Detroit, their closet, and hampered efforts to clear the runway back at Lincoln.

The dual drama of in-flight and airport crises consumes the remainder of the film. On the ground, airport manager Mel Bakersfeld would prefer to open the runway by destroying the stuck multi-million dollar 707 by pushing it with snowplows. Patroni, on the other hand, is determined to save it by manhandling it out of the way. He has his men

place planks in front of the wheels of the buried jetliner, then brings all four engines up to power to try to move it forward. When that fails, Mel calls in the massive snowplows. Directly disobeying orders, Patroni refuses to abandon the airship and makes one last desperate effort by bringing all engines to maximum power. Slowly, the wheels rock forward and finally the whole plane moves away. The runway is now clear for landing, though blinding snow still makes a landing risky.

Tension builds as the 707 nears Lincoln. Once at a lower altitude, passengers can take off their oxygen masks and assume the crash position with their heads between their legs. Fearing death, some passengers cry out, providing the opportunity for one unforgettable comic relief scene. For whatever reasons, Catholic priests or nuns have become a staple in this crisis in flight films, and in this one the kindly old priest manages to smack one of the cowardly passengers in between cycles of saying the rosary; the bracing jab shuts up the coward.

As they near the airport, the pilots finally have the lights in sight. Whether their craft will remain intact upon touchdown is in question, but it does in fact hold together. The pilots apply maximum thrust reverse and the plane comes to a full halt, much to the relief of all aboard. With the exception of the bomber himself, no one has died despite the grave threats posed by their crisis.

Compared to some of the other plots dreamed up for mayday films (*Airport '77* being among the least plausible), the original *Airport* is well within the range of the possible. In order to give the reader a sense of what emergencies and tragedies can in fact happen in flight, the next section describes a wide variety of real emergencies in the air.

The Real Perils of Flight

The genius of Hollywood alone is not the only reason that a sense of danger in the air resonates with such a broad audience. This has more to do with the primordial feelings about the dangers of flight and the well-publicized accounts of aircraft emergencies and crashes in America and elsewhere. As one who has catalogued such commercial airline crashes, Malcolm MacPherson aptly describes the generalized fear many people display upon entering the cabin of an aircraft and leaving the safety of earth. He notes that the pilot may soothingly reassure nervous passengers that all dangers are being kept at bay, even when he is faced with crisis in the air; the reality may be far different, and the gut-level instincts of so many passengers may have been right:

At such times as these we may feel serene, while behind the forward-bulkhead door there is another reality we do not ever see. Usually when things go wrong in the air, they go wrong all at once, as one crippled and failed system collapses on another. Suddenly, horns sound in the cockpit to warn of an equipment failure, while recorded voices shout . . . in the pilot's ear and lights flash in front of his eyes. Often, confusion results; automatic responses are triggered. And in a truly amazing number of incidents, the crews bring their aircraft safely home, without the passengers knowing that their lives had been in such jeopardy.¹³

Hollywood, then, plays on existing fear to sell tickets, though in doing so, the usual elements of the filmmaker's craft are in evidence, often to stunning effect.

Though the public is repeatedly assured that flying is the safest form of travel, accidents do in fact occur. Even when there are no fatalities, the time between the start of an emergency and getting back safely on the ground can be a traumatic one. Take, for example, the 1993 case of a Japan Airlines cargo 747 that had just departed Anchorage International Airport en route to Chicago's O'Hare. Then imagine hearing the following message from departure control just after takeoff: "Japan Air Four six Echo heavy, ah, Elmendorf Tower said that something large just fell off your airplane."

Not only had something large fallen off the plane, something large and *important* had fallen off: one of the four engines. In doing so, it critically damaged control surfaces on the left wing, putting the flight in serious jeopardy. Professional responses from those involved, along with the structural integrity of the Boeing 747 itself, allowed the plane to make an emergency landing. No deaths or injuries were sustained.¹⁴ In many other instances, however, hundreds of lives have been lost in a single crash. Literature on the subject is abundant and can be found in the many books referenced in these pages.

As jumbo passenger jets began to take to the air in increasing numbers in the early 1970s, the risk of high casualties in the event of a crash also increased. Sadly, there have been many crashes in which loss of life was great, involved all three American-built jumbo jets--the Lockheed L-1011 Tristar, the McDonnell Douglas DC-10, and most prominently, the Boeing 747. One of the first major crashes of the new generation of jumbo jets came on March 3, 1974, when a new DC-10 belonging to Turkish Airlines lost control after a cargo door opened in flight, damaging hydraulic cables as the cabin floor collapsed. Three hundred and forty-six people lost their lives in what was to become a string of high-number fatalities. Two years later the worst aviation disaster occurred when a KLM 747 hit a taxiing Pan Am plane of the same model while trying to take off on a fog-shrouded runway in Tenerife, Spain. A total of 583 people died in the tragedy.

Later that decade, on November 11, 1979, an Air New Zealand DC-10 was on a sightseeing trip over Antarctica when it slammed into Mount Erebus, killing all 257 aboard. This crash attests to the dizzying array of causes involved in the fatal crashes of even the most sophisticated flying machinery. A political cause for a crash can be found with the Soviet downing of Korean Air Flight 007 the night of September 1, 1983. Mistaken for an American spy plane, this 747 was shot out of the air by a Soviet fighter. Death was not instantaneous for crew and passengers flying at 35,000 feet, however.

Rather, the pilots struggled for some time to understand the nature of their crisis and to cope with it. Ultimately, though, they were unsuccessful, and their aircraft spiraled down to the sea below, killing all aboard.

On the other side of the globe, Air India Flight 182 crashed off the Irish coast on June 23, 1985, sending 329 people to their deaths. The cause of the crash was determined to be a bomb, one of an unnerving number of such crashes. Later that year came the largest loss of life in a single-plane crash, that of Japan Airlines Flight 123, which cost the lives of 520 of the 524 people aboard the ill-fated flight. Because Japan has many short but dense routes, Boeing designed a 747 that allowed for increased frequency of takeoffs and landings, calling it the 747SR for “short range.” Lacking the extensive galleys of the normal long-range version of the plane, Japan Airlines was able to squeeze up to 528 passengers on the 747-100 model. Sadly, when the pressure bulkhead ruptured at the rear of the plane, a significant portion of the vertical stabilizer was blown off, and eventually all hydraulic control was lost, resulting in the crash of the plane.¹⁵ This chain of events was almost impossible to predict.

One of the greatest fears of those in the air is fire, for it can spread in minutes and release toxic fumes which overcome passengers and crew trapped in the closed environment of a modern airplane. Such an end met crew and passengers aboard South African Airways Flight 295, a Boeing 747 “Combi,” or combination passenger/freighter jet. In this model, passengers ride in the forward area of the main deck, while cargo is stored in the rear (and, of course, below). On November 28, 1987, on a long flight from Taiwan to South Africa, smoke was detected emanating from the cargo hold. The cockpit crew prepared for an emergency landing in Mauritius, but before they could land, fire either disabled the crew or the controls (or both), and the craft was lost.¹⁶ A similar situation caused the crash of SwissAir Flight 111 on September 2, 1998.

In some cases, it may be the “culture” at an airline, which is sometimes shorthand for lack of familiarity with Cockpit Resource Management (CRM), that contributes to crashes. Korean Air, for example, has had a particularly poor record in modern aviation. In addition to losing the 747 mentioned above, on July 27, 1989, they lost a DC-10 on approach to Tripoli. The area was covered by fog, and eighty-two people were killed in the crash. Back in Asia, a Korean Air Flight 801, a Boeing 747 on approach to Guam, crashed just before 2:00 AM during a heavy storm. In this night crash of August 5, 1997, the glide slope transmitter on the island had been disconnected for maintenance reasons. At the time, it was raining heavily with broken clouds at 1,900 feet and overcast skies at 3,500 feet, resulting in possible pilot disorientation. The jumbo jet went down in dense jungle three miles from the airport, and of 254 passengers and crew, 228 died, while 26 survived.¹⁷

While the worst air disaster is still the ground collision that occurred on Tenerife, mid-air collisions are also a serious concern. On November 12, 1996, for example, a Saudi 747 and Kazakhstan Airlines IL-76 collided over Dadri, India, resulting in 349 dead. The Saudi plane had just taken off from Indira Gandhi International Airport when it hit an Ilyushin IL-76 of Kazakh Airlines that was making its landing approach. Given the increasingly crowded skies of the world’s airways, such disasters may become more prevalent.

Close Calls

In the movies, filmmakers are free to create all manner of effects for their airplane crash scenes. As we will see below, there is no shortage of vivid crash simulations in modern American film. In the case of a real crash, however, there are often no survivors, so the flow of events must be deduced by objective crash investigators, leaving out so much of

the human drama and suffering involved. In the case of near crashes, however, most crew and passengers survive, and their harrowing accounts of their brushes with death provide a glimpse into the chaos and sheer terror of a mid-air crisis.

Hawaii has been the setting for two airline near-disasters, one of which was made into the TV movie discussed in the previous chapter. The second close call occurred on February 24, 1989, when an aging United Airlines Boeing 747 suffered a decompressive explosion when a cargo door blew out. Sixteen minutes after takeoff, the aircraft carrying 337 passengers to Auckland and Sydney was just passing through 22,000 feet. Suddenly, a loud thump was felt in the fuselage, and this was followed by “an enormous, mind-shattering explosion. The aircraft lurched violently to port, the wind noise instantly intensified, to a deafening level, there was an immediate and fierce decompression, with powerful suction, accompanied by a sudden misting of the flight deck and cabin interior, and the lights went out.”¹⁸ Fortunately, the jet remained flying, though a safe landing was far from guaranteed.

The damage was witnessed by the flight engineer, who had gone back to the upper cabin to assess the damage. He was “aghast to see a gaping hole in the starboard side fuselage skin. The major section missing extended up to the level of the cabin windows, leaving only the fuselage formers and stringers between the cabin and the outside air.” Even worse was the damage down below in the business section. There, three meters of the starboard side of the fuselage had been torn away, and a block of ten seats was gone, along with a large section of the cabin floor. Nine passengers, never to be seen again, had occupied those seats.

Despite being able to fly, the condition of the 747 was still desperate as debris continued to shower over passengers and hurricane-like winds whipped through the open fuselage. In addition, both engines on the right wing seemed to be engulfed in flame after

the explosion, forcing the pilots to shut down the third (inboard) engine. Though functioning, the fourth engine would still sometimes spit long tongues of fire backwards, at times reaching as far as the jumbo's tail. Passengers viewing this against the night sky were terrified.

As the crisis worsened, the pilots were forced to shut down the flame-throwing number four engine, creating drastic asymmetrical forces now that all the thrust was coming from the left side. Under these conditions, the crew began dumping fuel in preparation for an emergency landing back in Honolulu. "After another 20 minutes of extreme anxiety . . . the welcoming lights of Honolulu hove in sight through misty rain in the distance." Professionally, the pilot "retained accurate control, finally touching down very fast but smoothly . . . relying on heavy wheel braking to bring the 747 to a stop in a little over 2000m."

What should be kept in mind in this instance is the knowledge that flight crew and many of the passengers must have had still fresh in their minds: just ten weeks prior, on December 21, 1988, a Pan American 747 leaving London for the United States had been blown out of the sky by a terrible explosion as it was passing over the tranquil town of Lockerbie, Scotland. Pan Am's Flight 103 was carrying 259 people, all of whom died, and an additional eleven were killed on the ground. Later determined to have been caused by a bomb planted by Libyan agents, this tragedy underscores the seemingly irrational danger that can so unpredictably come from the sky. At just after 7:00 PM that evening, the Pan Am 747 slammed into a gasoline station and a row of houses in a village just north of the English border, sending a 200-foot fireball into the sky. The photograph of half of the nose section of the white and blue plane lying in a pasture remains an icon of aviation disasters.¹⁹

Disaster in the Air

Given the bewildering array of things that can go wrong in flight, it is no surprise Hollywood has concocted so many stories to explain their flying emergencies. While some of them are plausible or clearly mirror real-life incidents, others are so far-fetched as to invite ridicule. One that is chillingly plausible enough--simply recall the account of the Saudi Airlines 747 in-flight collision in India--comes in the immediate successor to *Airport*, *Airport '75*, where the Boeing 747 makes a dazzling debut. Preparing to land, the aircraft collides with a private plane, and a large hole is ripped into the right side of the cockpit. Two years later, however, *Airport '77* abandoned any pretense of realism when it portrayed a hijacked 747 making an unscheduled water landing in the ocean, whereupon it sank with survivors aboard. (This storyline was recycled in the TV-movie *Submerged*, starring Dennis Weaver.) *Airport '79: The Concorde* brought us a far-fetched tale of a missile downing a Concorde, which survives a crash landing on a snow-covered peak in Europe. Despite the presence of these unrealistic plots, other movies attempt a modicum of realism.

Crash of Flight 401 (1978)

The first comment to make about this 1978 made-for-TV movie is that it is one of only three examples of a movie that has used a Lockheed L-1011 Tristar as the setting.²⁰ The genre here is a straightforward menace in the sky scenario in which a planeload of innocent and unknowing passengers is dashed into the ground because some of the thousands of risks of flying had come together to bring about a fatal crash. A more detailed categorization of this airplane disaster movie is one where the complexity of the machine itself overwhelms the ability of humans to control it. Human malevolence is not a

feature of this movie. Rather, it is risk posed by technologies too advanced for mankind to safely harness.

This tele drama was based on the crash of Eastern Airlines Flight 401, which left New York City on the night of Dec. 29, 1972, for Miami. Appropriately, darkness is a key feature in *Crash of Flight 401*. The opening scene shows an L-1011 cruising at altitude in a night sky. The narrator is William Shatner, who plays the lead investigator into the crash. His voiceover notes that the TriStar is one of the safest, most advanced airplanes in history, but there is a clear sense of foreboding in Shatner's narrative. This becomes explicit when he contrasts the relaxed mood of crew and passengers with the declaration that many aboard "only have two hours and twenty minutes to live."

After completing character introductions, the movie moves back to the airplane, showing a night view of Eastern's terminal. The mood is again foreboding as the music changes to a sharper-edged sound, and the camera pans to the plane on the ramp (erroneously, it shows an Eastern Boeing 727, which has all three engines at the rear, unlike the L-1011's wing--rear fin--wing arrangement). To drive home the point that the plane is doomed, the camera zooms in on the gate information as the music reaches a crescendo.

The concept of advanced technology beyond human control is introduced in a cockpit scene where a very senior captain (Eddie Albert as Captain Dunn) rebukes a younger colleague for an inadequate check procedure. Clearly tired and bothered by the panels of switches he must deal with, Captain Dunn then meets the personification of this advanced technology: the technical supervisor of the L-1011 happens to join them in the cockpit. Because he is a clear advocate of advanced technology, Captain Dunn vents his frustration on him, charging that he is the man responsible for taking the fun out of flying.

Next, the plane is shown taking off at night, headed for its destination in Miami. Darkness rules: the cockpit is dark, as is the control tower, where air traffic controllers are busy handling a possible emergency involving another plane. In one of the best pairings of darkness and danger, the movie makes multiple visits to the Florida Everglades, where two men on a small craft are hunting for frogs and snakes, all the while trying to avoid the jaws of nearby alligators.

Finally, darkness conspires to take the plane. After routinely lowering the landing gear, the co-pilot notices that the light for forward gear remains unilluminated. This problem with a thirty-cent bulb involves all four members of the cockpit crew in drama that will cost three of them and many passengers their lives. Convinced that the gear is in fact down, the captain still finds it prudent to solve the problem. Together with the co-pilot, he fiddles with the bulb and sends the navigator into the “hell hole” to see if he can visually confirm that the gear is locked in place. In this task, the navigator fails because it is too dark to verify anything. The technical supervisor then joins him in the hole, while the captain leaves his seat to work more closely on the still-dark bulb.

Such inattention to basic flying results in a crash into the everglades. According to the movie, the crash was caused by the pilot inadvertently bumping his yoke, which turned off the autopilot. Because of a very minor technical difference in sensitivities between the captain’s and co-pilot’s yokes, the auto-pilot off sign is not illuminated on the co-pilot’s side, so neither pilot realizes what has happened. As it drifts lower, it screams over the men hunting below and crashes in a fireball. Lights in the cabin flicker off and nearly two hundred people are thrown into the fury of a jumbo jet’s disintegration. Whole rows of strapped in passengers are flung into the swamp, while others are torn apart by jagged metal and wire cables. Ironically, a technically advanced aircraft flown by a highly trained

crew crashed due to the malfunction of a lowly thirty-cent bulb. Such are the stakes when taking on manned flight.

Reel Crashes

The crash of Flight 401 portrayed in the movie above was perhaps an understated portrayal of what the real crash must have looked like. In the movie, for example, bodies were not shown being torn apart by the violent forces that accompany the majority of airplane disasters. Still, Hollywood is capable of creating fictional images of airplanes crashing to the ground and has done so in a chilling manner in at least four recent examples. In two major motion pictures, one starring Jeff Bridges and the other Tom Hanks, the view from inside a disintegrating plane is presented, while two made-for-TV movies provide their own graphic scenes.

Fearless (1993) was one of the films mentioned earlier because its opening scene qualified as a “machine in the garden” sequence. Though the film ends on a message of hope and survival, the theme throughout the movie concerns the great dangers in commercial flight. Time is manipulated in *Fearless* through the flashbacks survivor Max Klein experiences, which serves to gradually tell us what happened on that fateful Intercity flight. Max is on a business flight with his partner and he is very nervous about flying, jumping at every little sound. He also has a sense that something is amiss, a sentiment his partner dismisses. Suddenly, the plane is jerked away from level flight and a noisy commotion ensues in the cabin. A loss of hydraulic pressure has made the plane unstable and hard to control. Panic increases among the passengers.

In a final flashback at the end of the film, we see one of the most graphic depictions of an airliner crash. First, there is a blinding white light as Max looks out the plane’s window and though he realizes they are going to die, he is not afraid. He leaves

his seat to reassure terrified passengers, then sits next to a young boy who is all alone. Through the open cockpit door, we see the pilots struggling frantically to bring the nose of the plane up. Instrument lights are flashing red, but it is the looming ground filling the windshield that captures our attention. Impact is imminent.

In contrast to some crash scenes, this one features soothing classical music as the crash unfolds and the plane disintegrates. First, one side of the plane rips away and we see open sky, then overhead racks begin to fall. Next, an orange fireball roars from front to back of the cabin. The fuselage breaks into sections as seats are torn from the floor, the passengers still strapped to them, and debris flies everywhere. An intact part of the fuselage rolls many times, subjecting passengers still seated inside to deathly forces. The result is what we had seen in the movie's opening: the plane and its contents strewn through a cornfield, with only a handful of people surviving.

Based on Rafael Yglesias's novel of the same name, this story is almost certainly inspired by the real crash of a DC-10 into a cornfield at the Sioux City, Iowa, airport.²¹ The novel also features a DC-10, though here it is flying from New York to Los Angeles (in the movie they are flying from San Francisco to Houston, and the plane is not a DC-10, as it has only a single aisle, versus the two in the wide-bodied DC-10). The loss of hydraulics in the film mirrors the cause of the Sioux City crash, which was initially caused by the explosion of the tail engine. This explosion severed the hydraulic lines and all normal steering controls were lost. Through brilliant teamwork, the pilots managed to use engine thrust to direct the United DC-10 from a height of 33,000 feet to an approach with the runway in Sioux City, but ultimately this technique was too blunt and the aircraft broke up upon impact with the runway and large sections of it tumbled or slid into the cornfields surrounding the runway. Remarkably, one hundred and eighty-five people survived this crash.

Freefall: Flight 174 (1995) opens with two men in the cockpit of a modern jetliner. Suddenly, warning lights go on, the engines stop, and the plane enters a vertical dive from which it will not recover. Fortunately, it turns out to be only a flight simulation, though, as the credits tell us, this scenario was “based on an actual event that occurred on July 23, 1983.” This event was the fuel starvation of a new Air Canada Boeing 767 jet caused by errors in the calculations regarding metric and English units of liquid measure. The plane departed Dorval Airport in Montreal without sufficient fuel to reach its intended destination, Edmonton, Alberta. In fact, it turned out that the plane lacked enough fuel to reach even Winnipeg Airport, its chosen emergency landing site. Both engines flamed out at cruising altitude, and the pilots were faced with the task of flying and landing a powerless jetliner weighing one hundred and fifty tons. That this was a real incident makes the docudrama all the more fascinating, as it drives home the point that no matter how sophisticated the technology, errors can still occur for the simplest of reasons. Or maybe it is just a confirmation of Murphy’s Law.

Airspeed (1997), a made-for-TV movie, uses a Boeing product that is not commonly seen, the commercially successful three-engine 727. Although a total of 1,832 were built between 1962 and 1984, this workhorse has been overshadowed by its long-range sister, the 707, and its much bigger brother, the 747. In *Airspeed*, a wealthy man’s spoiled daughter is aboard his private 727, trying to be as obnoxious as she can to get and keep the attention of the two adults charged with caring for her. When a lightning strike incapacitates the cockpit crew and blows a hole in the side of the plane, only she will be able to fly the plane. Given the fact that the 727 is caught in a fierce storm and its autopilot will not respond to commands, the chances for a safe outcome in this instance are slim.

The crisis aboard this 727 does recall another use of the plane in a film, though it was an incidental role rather than a central one. A year prior to the release of *Airspeed*, Arnold Schwarzenegger and James Caan starred in *Eraser*, a tense thriller about the work of U.S. Marshals and the Witness Protection Program. In *Eraser*, Schwarzenegger (U.S. Marshal John “The Eraser” Kruger) and Caan (U.S. Marshal Robert Deguerin) are aboard a government Boeing 727, when suddenly Deguerin executes one of the young marshals aboard and plans to kill Kruger as well. To escape this fate, Kruger jumps out of the plane. Debris gets sucked into one of the three engines, which explodes and begins to burn, forcing the pilot to initiate emergency procedures. Determined not to let his colleague live to tell what had happened, Deguerin demands that the pilot turn around and ram Kruger as he floats slowly to earth under his parachute.

The scene of the 727 turning back in the sky is impressive, smoke trailing from its damaged engine, and its size growing quickly as it nears the viewpoint the audience shares with the threatened Kruger, who is able to aim a shot to the head of the pilot, thereby diverting the plane enough to survive.

In *Free Fall* (1999), another made-for-TV movie, we see a chilling computer-generated image of a fatal jetliner crash. Initially, all is normal aboard Trans Regional Flight 662. Attractive blonde flight attendants go about their business, while children run up and down the aisles. Then, without warning, a rudder malfunction sends the aircraft hurtling downward, as terrified passengers and crew grip their armrests in fear.²² The two pilots try to bring their ship out of its dive, but it is too late. The earth rushes up at the pilots, and as they almost restore the plane to level flight, it begins to smash into the tops of trees in the Rocky Mountains. The side of the cabin rips away, then the belly is torn open by the trees. As the entire fuselage begins to break into separate pieces, seats are wrenched away and debris whips through the air.

The camera then cuts to the outside of the plane and shows it coming at us in slow motion. The plane's momentum keeps the major parts more or less moving together, but it is clear they no longer compose an intact aircraft. As the ensemble grazes the ground, the wings erupt as their tanks burst and we see the white nose section continue its journey toward us. It then bounces slightly and upon the second impact--which takes place in the forefront of the screen--it crumples and breaks up. This is how we are introduced to the first of three crashes in the movie.

Final Destination (2000), a horror flick aimed at youthful viewers, is not an airplane movie per se, but the crash sequence at the beginning of the film more than merits a mention. A group of high school French students are on their way to Paris, gathering at the airport to await boarding. As adolescents, they are full of mischief and energy, though one student, Alex, senses something wrong. For example, when the flight status displays turn over, he focuses on the word "terminal." Soon after, when he hears a John Denver song in the background, he realizes that Denver had met his fate in a plane crash.

Nervous, Alex nonetheless boards Flight 180, a Boeing 747, with the other students. As he boards, however, he sees omens. First, a mother is holding up a screaming infant, but the baby's face has the strange appearance of an adult. Turning the corner, he sees a woman struggling with her severely handicapped son, tubes running down his nose and his limbs bent rigidly at odd angles. Next, trading his own seat for a classmate's, he notes that the clip holding his seat tray has come off, a minor but inauspicious symbol for their flight.

The plane takes off as planned but quickly meets some turbulence, which disturbs the youthful first-time fliers. Flight attendants pooh-pooh the students' worries, though, and smooth flight resumes. Suddenly, the plane begins shaking much more violently and oxygen masks fall from the ceiling. This time even the flight attendants are afraid. As the

panic spreads, the plane begins to come apart as an explosion rips open the side of the fuselage, sucking students and their seats to their deaths below. A fireball then erupts in the front of the cabin, roaring the length of the plane and incinerating the screaming passengers.

Alex then awakes in a sweat and realizes it was all a dream. He is still seated next to his friend, but the plane has yet to take off. Taking his dream as a realistic premonition, he screams for everyone to get off. "This plane is going to crash," he yells. With no reason to believe him, flight attendants remove him and some of the students who have begun to fight with him. They are all rudely deposited back in the terminal, where they can only watch as their friends depart for France. Just as the 747 has lifted off, however, it erupts in a great fireball, killing all 287 people aboard, including forty students and four teachers.²³ Naturally, authorities are anxious to know what Alex knew about this flight beforehand, and their investigation--seen post 9/11--takes on a much grimmer demeanor a year after the film has been released. This is discussed further in the conclusion of this dissertation.

Die Hard 2

Bruce Willis has been one of the most successful Hollywood actors of the last two decades. In 1988 he starred in *Die Hard*, a fast-paced action drama set in the new Los Angeles high-rise headquarters of the fictitious "Nakatomi" corporation. In that movie he played street cop John McClane and battled a squad of suave Euro-terrorists. In *Die Hard 2* (1990) he reprises his role, and this time the action takes place at Dulles Airport outside Washington, D.C. This film relies upon a focus on the standard dangers involved in flying: bad weather, poor communications with ground control, low fuel, etc.

The film begins with McClane's illegally parked car being towed from in front of the airport, a clear harbinger of the other troubles he will face with machines before the day is over. Further, a large band of renegade American soldiers have plans to free a notorious South American leader who is being flown to Washington to face prison time. To secure his release, they will electronically castrate the entire Dulles system, leaving ground controllers and pilots unable to contact each other. Given the worsening snowstorm that has struck, such a lack of communication means death for those unfortunate enough to be stranded in airliners stacked about Washington. As fate would have it, McClane's wife is aboard one of the planes, a Lockheed L-1011 Tristar that had taken off from Los Angeles earlier that day.

Early in the film, we see an allusion to the skies. The renegade soldiers have elected to set up their command post in a series of church buildings located on the perimeter of Dulles Airport. All of these buildings--the church in particular--have steeples or sharply pitched roofs, like hands reaching out to the skies, and a white covering of snow suggests an image of angels.

In order to show their seriousness and their power, the renegade commander recalibrates the coordinates of the airport and lures a fuel-starved jetliner into landing. Given the lack of visibility and the false altitude readings, the packed Boeing 707 slams into the runway, breaks apart, and burns. This is but a prelude to the explosion in the climax of the movie. The surviving renegade soldiers and the freed general have demanded and received a fully fueled 747. As they taxi out for takeoff, McClane climbs aboard the wing. One commando then engages him in hand-to-hand combat, and when he loses, McClane pushes him into one of the working engines. Finally, McClane opens one of the fuel valves on the wing, causing jet fuel to rush out, leaving a trail of volatile fuel in the plane's wake. Knocked off the wing onto the ground, McClane nonchalantly lights up

a cigarette, then tosses the lighter onto the beginning of the fuel trail. The flame races back to the source of the fuel, and the airborne 747 erupts in a ball of flame, killing all aboard. Luckily, the burning fuel trail allows the waiting passenger jets to see the runway, and they all make safe landings.

Six Days Seven Nights

This Hollywood film stars Harrison Ford and Anne Heche as an ill-matched pair stranded on a remote South Pacific island. Ford plays Quinn Harris, an independent, hard-drinking pilot whose social skills are not quite fit for the cosmopolitan Manhattan fashion magazine editor Robin Monroe (Heche). When she needs to connect to a flight on another island, though, only Harris is available. Taking off into the evening sky, the forecast is good and it should be a smooth flight. Into their flight, however, a tropical thunderstorm erupts, putting the lives of pilot and passenger in jeopardy. With his radio knocked out, Harris is forced to land his plane on a stretch of beach on a deserted island. Only sporadic lightning illuminates his way.

Though the plane remains their best hope for escape, it still represents a menace. One strut of the landing gear is broken, and the pontoons they rig for a water takeoff look suspect. Add to this mixture a scene in which they are attacked by modern pirates and all the dangers of flight stand out. The suspense builds as Harris is wounded by a shell fired from the pirate ship, and his chances of successfully taking off in his patched-up plane dwindle rapidly. Bloodied and in pain, he has no choice but to attempt a takeoff and to do that he must head to sea--right at the attacking pirate ship. The shots from the pirate ship are now closing in on the accelerating plane, and there is a real danger that the next salvo will sink the plane. Fortunately, the gun jams, buying Harrison crucial seconds. He uses this time to gain enough speed to leave the water, flying directly over the ship. Following

the plane in his sights, the leader of the pirates shoots straight up, missing the plane and bringing the shell back down onto the ship. For now, Queenie and Monroe have escaped.

Airborne, Queenie soon lapses into unconsciousness from loss of blood. It is up to city girl Monroe to take over. Recalling the few instructions Harris was able to give her, she makes a successful, though none-too-beautiful, landing in the lagoon in front of her resort hotel. This sub-genre where the male pilot loses control or dies and a woman takes over to land the plane has become a staple of modern flying films and will be discussed in depth later.

Complaints of Airline Officials

One is hardly surprised that some of the more dramatic airline disaster films have upset airline officials. In 1936, for example, the release of *Ceiling Zero* was greeted by complaints from the airline industry. In this Warner Brothers film, James Cagney teamed up with Pat O'Brien to produce a suspense film about commercial flying. In a love triangle, one pilot gets lost in fog and dies in a spectacular crash when his plane hits high-tension wires when trying to land. His rival (Cagney) meets a similar fate when bad weather causes his wings to ice up, sending him and his passengers to their doom. Here is an account of airline executives' reaction to the movie:

[B]efore the movie's release, commercial airline officials nervously remembering that many potential air travelers were scared out of their wits during the plays' run on Broadway, sent emissaries to plead with the studio. They wanted the production company to withdraw the film.

It was an exercise in futility: the film couldn't be scrapped, there was . . . money at stake. However, studio chiefs did allow the airlines to inscribe a foreword. . . . "This picture depicts pioneer days in air travel," the caption read. "As a result of these heroic events, we have arrived at today's safety." . . . Needless to say, the airline disclaimer didn't help much.²⁴

Three years later, a film *was* scrapped because of pressure, this time coming from the government rather than the airline industry. *Thirteen Go Flying* was to be based on the crash of a flying boat. Studio mogul Samuel Goldwyn cancelled the film, saying “I certainly do not want to place any hindrance in the path of American aviation’s fine progress.” Some objected to *The High and the Mighty* as well.²⁵

The film that caused the most consternation among American government and airline officials was the 1966 made-for-TV movie *The Doomsday Flight*, starring Jack Lord and Edmond O’Brien. In this Rod Serling script, a man blackmails an airline by planting an altitude-triggered bomb aboard an airliner. The passengers and crew are saved, however, by the decision to land the plane in Denver. This movie triggered a spate of hoaxes along the same lines. For example, Quantas Airlines paid half a million dollars to two extortionists who made such threats (they were later apprehended), and a B.O.A.C. 747 was diverted to Denver because of one such threat. Finally, the FAA requested that 500 TV stations refrain from showing this movie, showing the power of suggestion they believed television had.²⁶

Perhaps this sums up the fascinating intersection between the real menace of flying and the way it is portrayed on the screen or on television. The relationship is clearly dynamic, with one always informing and affecting the other. At the heart of it may be a real concern among flyers and film audiences of the peril of flight.

CHAPTER 4

HEROIC MEN AND FLYING MACHINES

The thesis of this dissertation is that the act of flying is portrayed in a menacing light in most American flying films. While the thesis still holds in each of the following films to be examined, in these cases the menace is ultimately overcome, in part due to the heroic efforts of the pilots or others, in part due to the favorable mechanical qualities of the airplane itself, or a combination of both. Since Hollywood loves a hero, it is only natural that countless films have placed him (until the 1980s, this was overwhelmingly the case) in a setting as fraught with peril as the airplane in flight. The combination of speed, extreme temperatures, roaring engines, and the constant pull of gravity combines with the closed confines of cockpit and cabin to offer a dizzying array of dangerous possibilities. In the face of all this, pilots, crew, passengers, and aircraft come through safely in many films. Even in those instances where the plane crashes, heroic efforts by man and machine are still respected, and we the viewers honor them as fallen heroes.

In the film discussions that follow, a wide range of human heroes will appear, characters both factual and fictional, often acted by the leading stars of the day. On the inanimate side, Hollywood has feted a staggering number of heroic airplanes, and the aircraft themselves consistently play a starring role, from the nimble cloth and wire fighters of the First World War to the squads of fighters and bombers of the Second World War, to the diverse kinds of aircraft produced and flown in the post-war era. In this procession of celluloid flying machines, certain names and models have stood out, with some becoming icons of their age. The Sopwith Camel biplane fighter of World War I, the ubiquitous transport, the DC-3 and its military version, the C-47, the agile P-51 Mustang fighter or B-17 heavy bomber of World War II, the F-86 Sabre Jet fighter of the Korean War, the swept-winged B-52 bomber and America's first jet airliner, the 707 of the late

1950s, or the stealthy SR-71 spy plane of the Cold War are some of the more prominent examples. My focus, however, remains on the three types of aircraft mentioned before: bombers, cargo aircraft, and particularly large passenger airliners.

If It Doesn't Say Boeing, I'm Not Going

Of these planes, a surprising proportion of them have been products of the Boeing Aircraft Company, as mentioned in the opening chapter. A short list of commonly recognized Boeing planes would include the B-17, the B-29, the B-52, the KC-135 tanker and its close kin the commercial 707. The question as to why these particular aircraft became so recognizable is an interesting one: Did the performance of each model draw our attention? Was it the appearance of the plane alone that made us remember it? Was most of the impact a result of the sheer numbers of each model built? Or were there more deliberate elements involved, such as marketing efforts, or a desire of the United States government to parade these planes as symbols of the might of American democracy and industry?

Also, we might consider the symbiotic roles played by Hollywood and Boeing: Why did Boeing products seem to outnumber--and outshine--their combined competitors when it came to appearance in film? Take the Douglas Company DC-8, for example, a perfectly sound aircraft and a commercial success. Can the viewer think of even one film in which this jetliner appeared? Unfortunately, I cannot. To varying degrees, the same can be said of any number of non-Boeing airplanes. Of course the purpose of this dissertation is not to determine why Boeing products have been so commonly used in film, but it is an observation worth noting.

The Boeing 747: Queen of the Skies¹

If the Boeing products mentioned above were the only airplanes in films featuring Boeing machines, that alone would establish Boeing as the leading manufacturer of filmed airplanes in the last six decades. There is, however, one additional example that stands out so prominently that it comprises literally its own category. That airplane is the Boeing 747, the world's first "jumbo jet," a behemoth that took to the air at 11:34 a.m. on the morning of February 9, 1969, lifting off from Everett's Paine Field near Seattle. Such has been the achievement of the 747 that it won the prestigious Francois-Xavier Bagnoud Aerospace Prize in 1997, with the chair of the board stating that the 747 "had brought striking reductions in air travel costs through its still unsurpassed combination of speed, range, and capacity . . . Truly, the world knows itself better now because of the reliable, capable Boeing 747 and its visionary developers." Such accolades are well deserved, considering that

the 747--the largest commercial airplane in the world with 6 million parts--has changed the face of aviation, relying on 1,101 domestic and international suppliers, with 79 percent of its sales outside the United States--nearly \$98.3 billion in today's dollars. But perhaps its most poignant legacy is that the Boeing 747 has brought great quantities of people together for commerce, peace and relief, carrying enough passengers to equal one-fourth of the world's population.²

The era of mass transportation had begun and an icon was born.

The 747 is a clear descendant of other swept-winged Boeing jets, from the B-47, through the B-52 and the KC-135/707, all of which had four pylons below the wings with jet engines mounted to them.³ What made this aircraft stand out, however, was more than just size. Its 211-foot wingspan was not appreciably more than that of the B-52 at 185 feet. Lengthwise, the 747 was much longer at 213 feet versus 156 feet for the B-52, but it was still smaller in some respects than the 1950's-era Convair B-36, whose ten engines

hung on wings measuring 230 feet. True, the size of the fuselage dwarfed other Boeing products, but it was still a shape of conventional design. What really allowed the 747 to stand out, however, was the raised upper deck containing the cockpit that gave the airplane its so familiar “hump” appearance. Ironically, this initially had nothing to do with Boeing’s desire to build and sell a passenger aircraft. From the beginning, the 747 was intended as a cargo plane for the United States Air Force, but it lost that competition to Lockheed’s C-5A, so it was Boeing’s bad luck that gave the world the passenger 747.⁴

The 747’s design resulted from a push-pull situation. As mentioned, Boeing had designed a large cargo plane for the Air Force. Though they lost that competition, the momentum of the project was still very much with Boeing engineers. Added to this was the fact that Boeing’s previous long-range jetliner, the 707, though popular with airlines and passengers alike, had by the 1960s become too small, as airlines were clamoring for something larger. To their dismay, Boeing engineers found that its plane could not be “stretched” appreciably, meaning greatly increased capacity was not possible. The rival Douglas DC-8, however, was ideally suited for stretching, resulting in the 250-passenger Super 60 series. Boeing was at a loss.

On the “pull” side was the conventional wisdom in the 1960s that the so-called supersonic transport, or SST, was the wave of the future. Boeing shared this belief and began development of an American version using government funds. On the other side of the Atlantic, the Anglo-French Concorde program had begun, and a leading aviation group predicted a market for 1,250 SST during the mid-1970s, so any new large airliner Boeing built would obviously be a stopgap measure. This view was so common that people working on the Boeing SST would approach the director of engineering for the 747 and say things like “Keep working on the 747, and when you get done, there might be a place for you on the SST.” As it turned out, the joke was on the SST teams.

Given the unexamined assumption that the 747 would be a short-term program with respect to passenger flying, the decision was made to configure it from the start as a cargo carrier, which dictated a hinged nose section for unhampered loading of freight containers. Once SSTs became dominant on long-range passenger routes, the passenger 747 would be discontinued and only cargo versions built. “Thus was born the distinctive ‘hump,’ a classic hallmark of the 747 design.”⁵ The loss of the Air Force cargo contract and the belief that SSTs were just around the corner gave airlines a radically new product. These factors also provided Hollywood with a platform that was almost too good to be true.

To its credit, Hollywood took full advantage of this distinctively shaped, spacious passenger plane and turned it into what is undoubtedly the most recognizable airplane not only in film but perhaps in the world. In fact, it may be fair to say that the Boeing 747 is the most recognizable *machine* in all of American history, though lovers of the Ford Model T might beg to differ. Therefore it will come as no surprise that the movie discussions below often revolve around Boeing’s Queen of the Skies, the 747.

Her first movie appearance was actually in *Airport*, though the 747 appeared only as a model on the desk of airport manager Mel Bakersfeld (Burt Lancaster). The 747 appeared in its own right in the disaster thriller *Airport ‘75*, again in *Airport ‘77*, in the hijack drama, *Executive Decision* (1996), and as the President’s plane Air Force One in both *In the Line of Fire* (Clint Eastwood, 1993) and *Air Force One* (Harrison Ford, 1997). In *Independence Day* (1996), a 747 outruns a fireball shot by aliens, escaping the inferno that engulfs Washington, D.C. It serves as platform for the action in three *Turbulence* films (1997-2001) and appears in countless made-for-TV movies, many of which are discussed below. Thus, it is safe to say that the 747 has starred as the definitive passenger aircraft in Hollywood’s imagination.⁶

The 747 as Stage

What gives the 747 its appeal as a setting for drama is the sheer size of its interior and the variety of locations that makes available. Seating nearly 400 passengers on two decks, the 747 is a veritable cavern stretching far out of voice range from front to back. With fanciful employment of cockpits, upper decks, lower decks, cargo holds, and avionics bays--and any number of secret connections among them--the 747 becomes a versatile stage indeed. How, then, is this stage employed in actual movies?

Since the advent of the "glass cockpit" 747-400 model, only two flight crew have been needed, a fact Hollywood has been happy to use. Unfortunately, many movies use this new cockpit layout while showing external shots from older 100 or 200 series models, identifiable by their normal upper deck and lack of winglets, whereas each of these older models must have a three-man cockpit consisting of captain, first officer, and second officer (flight engineer).⁷ Prior to the introduction of the stretched upper deck 300 model (which contained limited modifications), films such as *Airport '75* and *Airport '77* were faithful in rendering the interior layout consistent with the exterior. But given the age of many of these planes by the 1990s and their availability on the used aircraft market, it is understandable that production companies would secure their services, rather than an in-service 400 model.

To understand why recent filmmakers so consistently misrepresent the 747s in their films, I posit four main advantages to the conceit of using the newer 400 model, beginning with the interior. In the greatly modified 400 series, the upper deck has been extended back twenty-three feet, four inches, allowing many more seats and much more room for filming dramatic action. The upper deck, in essence, becomes a second stage. Second, the staircase has been moved to the back of the upper deck and now has a flight of straight stairs, as opposed to the tricky though majestic spiral staircase of the 100 and

early 200 models.⁸ Third, by portraying their plane as a 400, filmmakers are better able to capture the contemporary feel with which so many fliers are familiar, as all major airlines have switched heavily to the more economical and efficient 400 model.

The primary advantage of using the newer 400 model, however, comes with the cockpit layout. The original cockpit, because of its vast array of “steam gauges,” needed a third crewmember to monitor the complex systems of the four-engined 747. This crewmember, typically a male, sat behind the co-pilot facing the starboard fuselage, an awkward position for filmmakers. By assuming the two-man crew of the advanced 400 model, filmmakers are able to employ direct front-rear action, a useful device when so many plot lines call for the sudden intrusion of an unwanted or unexpected guest. A third member in the cockpit facing an entirely different direction upsets the symmetry of the action, and makes more stringent demands on any scriptwriter who would like to have his pilots incapacitated for purposes of furthering the plot. For these reasons, it has been common in recent years to see this interior/exterior mismatch.

747SP and Combi

Given Hollywood’s need for maximum drama, it is surprising that two 747 models have rarely been used in the movies, despite the fact that each model offers intriguing variations on interior layout and flight characteristics. The first is the so-called 747SP (Special Performance), a shortened model of the normal 747 that gained tremendous range in exchange for decreased seating and cargo capacity. Back in 1971, the DC-10 and L-1011 trijets still did not have extended range, so Boeing saw an opportunity to manufacture a derivative that could serve the “long and thin” markets for roughly 280 passengers. In the end, only 45 of these rare planes were built, but their characteristics could have been used to good effect in the movies.

The 747SP was shortened by forty-eight feet, four inches, and the empty operating weight was 45,000 pounds lighter than the equivalent 747-200, resulting in some amazing performance figures for such a large airliner. In-service operating altitude was 45,500 feet, much higher than ordinary airliners, and the range was well over 7,000 miles, as Boeing demonstrated in late 1975 when they flew non-stop from New York to Tokyo, deleting the time-consuming fuel stop that other planes, including the regular 747, had to make in Anchorage, Alaska.⁹ Later, two around-the-world flights set records for any aircraft, culminating in the flight of Clipper Liberty Bell's flight over both poles, which set six aviation records. In addition, with special fuel tanks in the belly, the 747SP completed a delivery flight from Seattle to Cape Town, South Africa in seventeen hours, twenty-two minutes, covering 10,290 miles non-stop in the process.¹⁰

The possibilities for film here seem obvious, making it hard to understand why it rarely happened. If, for example, explosive decompression could be such a dramatic event at the normal 31,000 feet, what might it be like at 14,000 feet higher? Or, given the SP's much shorter landing requirements, films with this jumbo jet landing at smaller airports could be dramatic. Other options might involve stories with tremendous distances involved, say flights of over 10,000 miles, a rather dramatic prospect for a commercial airliner carrying nearly 300 passengers. Finally, the sheer visual appeal of the SP should have resulted in its use in the movies. As it retains the same "hump," nose section, and massive wings of the regular 747, the SP appears as a stubby, but muscular, speedster. Its distinctive appearance could have been used to foster audience identification in much the same way the 747 in general did. To date, I know of only one movie that portrays the SP model (the 2003 *Code 11-14*), but that fact is more incidental and none of the aircraft's special features are employed. Since many 747SPs remain flying, though, the day may yet come when we see its potential realized in film.

The second 747 variant that would seem to be a natural candidate for film is the 747 Combi, a 747 combining both passenger seating and cargo capacity on the main deck. As Boeing had always conceived of the 747 as a freighter, it was no surprise that from the beginning it offered freighter options, including the Combi. Due to underpowered engines, however, no 100 series freighter was ever sold, though later many passenger versions were returned to Boeing for conversion. Combis allowed carriers to insert a movable bulkhead between the forward passenger section and rear cargo section, allowing for varying mixes of seats and cargo. Sabena, for example, was known to put all seats in the rear area on a Friday night to service weekend tourists, then remove them for cargo capacity during the week. The Combi brought airlines the best of both worlds all in one plane: the passenger capacity of an L-1011 or DC-10 and the cargo capacity of a 707 or DC-8. It is no wonder that Boeing sold so many variants of this model.¹¹

What the Combi offers film is the opportunity to heighten the action by using the cargo section as the staging area for terrorist attacks, hijacker incursions, dangerous cargo threats (wild animals, burning boxes, etc.), and even mid-air flight transfers of personnel or equipment, possibly by using the main deck cargo door found in the fuselage just behind the port wing. As so many flying films use the lower deck for these purposes, it would seem access from the same deck would be even more flexible--and plausible. As it is, extant flying films use access points such as hatches or service elevators to move people and things, but with the Combi, a simple door would suffice.

Finally, we might consider some of the more outstanding 747 variants used by various governments as either executive aircraft or military/science platforms, beginning with the plane commonly known as Air Force One. This presidential 747, given the number VC-25A by the Air Force, is one of two 747-200s delivered by Boeing in 1990. As was seen in the film *Air Force One*, these two planes are unusual in that they have

refueling capabilities, as well as other sophisticated gear.¹² As impressive as this aircraft may be, it is still an older model than that used by the government of Japan. For such VIP services, the Japanese government acquired two 747-400s in September of 1991, and keeps them parked at Chitose Airport on the northern island of Hokkaido because of the high parking fees at Japan's other major airports. These planes are flown and maintained by the Japan Air Self-Defense Force, specifically its newly formed Special Transport Squadron, the 701st Tokubetsu Yuso Kokutai.¹³

In the Middle East, the 747 has been a preferred aircraft for heads of state and other high-ranking dignitaries, with the 747SP being particularly popular. For example, the last SP built went to the United Arab Emirates, creating something of a trend for that part of the world. Other owners include the Governments of Saudi Arabia, Dubai, Brunei, Qatar, and Oman. The Iraqi government's 747SP has been in storage since the start of the first Gulf War.¹⁴ Given the continued fighting and intrigue in that part of the world, it seems a plausible story could be spun using one of their SPs.

Two other film options could be the use of China Airline's breath-stopping incident where their SP fell out of control on a flight from Taipei to Los Angeles. Preoccupied with restarting one of the four engines, the pilots failed to properly monitor the aircraft's flight instruments and lost control of the plane, entering "an uncontrolled descent of nearly six miles. The crew was unable to restore the airplane to normal flight until it had descended to 9,500 feet." Severe damage was done to the plane, but miraculously none of the passengers or crew died.¹⁵ Given the taste TV movies have for reality-based airline emergencies, this one seems ripe for a review.

A completely unconnected theme could be based on NASA's purchase of an SP for use as an airborne observatory. Called the Stratospheric Observatory For Infrared Astronomy, or SOFIA for short, this high-flying plane will carry a 98-inch telescope

almost anywhere in the world. A former United Airlines 747SP was acquired on February 17, 1997, for this purpose.¹⁶ A clever film writer could turn this platform into a very interesting story. Similarly, NASA employs two converted 747-100s as ferry platforms for the Space Shuttle orbiters. This visually dramatic configuration should allow for a number of worthy storylines.

The United States Government operates four other 747s with aerial refueling similar to the VC-25As. These are impressive aircraft with an impressive mission. This 200 series was acquired as an airborne command post for use in time of nuclear war, where they would provide a critical link between the National Command Authority and nuclear forces in the field such as bombers, missile silos, and submarines. Their thirteen external communications systems operate through an array of 46 different antennas, including dual very-low frequency systems attached to a five-mile-long wire trailed from the rear of the plane.¹⁷

Boeing's official website describes the mission:

The E-4B Advanced Airborne Command Post is designed to be used by the National Command Authority as a survivable command post for control of U.S. forces in all levels of conflict including nuclear war. In addition to its primary mission, secondary missions assigned to the E-4B include VIP travel support and Federal Emergency Management Agency support, which provides communications to relief efforts following natural disasters such as hurricanes and earthquakes."¹⁸

An Air Force description of some of the special properties of these four planes states:

The E-4B has electromagnetic pulse protection, an electrical system designed to support advanced electronics and a wide variety of new communications equipment. Other improvements include nuclear and thermal effects shielding, acoustic control, an improved technical control facility and an upgraded air-conditioning system for cooling electrical components. An advanced satellite communications system improves

worldwide communications among strategic and tactical satellite systems and the airborne operations center.

To staff each of these complex planes, total crew may number as many as 114 on any given mission.¹⁹

Another unorthodox government use of the 747 is the Air Force's ambitious--and expensive--program to acquire a fleet of seven 400 series jumbos to use as an airborne anti-missile system. Dubbed the YAL-1A, this will be a laser attack plane capable of shooting down ballistic missiles during their early boost phase. A chemical oxygen-iodine laser (COIL) will emit a 5-second burst aimed through an articulating turret in the custom nose of the plane. Enough oxygen and iodine should be aboard to fire 30 such bursts, each costing an estimated \$1,000. There are suggestions that the YAL-1A will have other uses, including defense of critical flying assets such as AWAC planes, attacks on both surface-to-air and air-to-air missiles, and possibly attacks on low-flying cruise missiles as well.²⁰ Finally, should it acquire the capability to disable or down manned aircraft, the filmic possibilities will be legion.

The 747, as we have seen, has been a popular platform for flying films, and we can expect to see its continuing appearance well into the new millennium, including in some of the newer formulations I have mentioned. And now that even some of the latest 747-400s are being stored because of drastic decreases in passenger travel following 9/11 and the SARS outbreak, film companies may be able to use them in creating new aviation movies, and this time exterior and interior consistencies will be honored.

Heroes in Flying Films

As seen in the introduction, Hollywood film and American aviation were born together and have remained close ever since. The tremendous boost given to flying technology by

World War I resulted in large numbers of aircraft being built, many of which were available after the war for filming purposes. These films are discussed at length in books such as Skogsberg's *Wings on the Screen*, Pendo's *Aviation in the Cinema*, and Paris's *From the Wright Brothers to Top Gun*. Demand for new aircraft, technology, and tactics during World War II produced a quantum leap in the field of aviation, with end products such as the jet fighter and long-range nuclear bomber. Given the near unanimous support for American involvement in World War II once America had declared war, it was only natural that Hollywood worked closely with the U.S. government and armed forces and produced a plethora of films that patriotically supported the war effort. These films are discussed in the books already mentioned, as well as in others such as *When Hollywood Ruled the Skies: The Aviation Film Classics of World War II* by Bruce W. Orriss, and *Hollywood at War: The American Motion Picture and World War II* by Ken D. Jones and Arthur F. McClure.²¹

While it would be undesirable to simply reproduce what many of these works have to say about flying films, I will still discuss some of the same films when necessary. In general, however, I will maintain a focus on flying films from approximately 1950 onward and will emphasize those made after 1970 because that is where the books begin to thin out. In addition, I will include newer important flying films that have yet to be discussed in flying books, such as *Air Force One* and *Cast Away*.

Where this dissertation will diverge most from previous books on flying films, however, will be in its "myth-symbol-image" interpretation of the film texts involved. Though this once venerable approach in American Studies has been severely criticized over the last quarter century, the fact is that it still functions in important works, such as those by Alan Trachtenberg (*Brooklyn Bridge: Fact and Symbol*) and Richard Slotkin (*Gunfighter Nation: The Myth of the Frontier in Twentieth-Century America*). If

anything, the trend to study other than elites (political, diplomatic, economic, etc.) has increased the focus on popular culture, and obviously this would include flying films.

The first three films I discuss take place during WWII, but their production ranges from 1949-1990. Two of the films are based in England and portray American crews' involvement with the B-17 Flying Fortress, while the third movie is set in the Pacific as the United States drops its first atomic bomb on its foe.

Twelve O'Clock High

Darryl Zanuck's 1949 *Twelve O'Clock High* must rank as one of the most realistic Hollywood aviation films of all time, thanks in part to its liberal use of actual combat footage. Starring Gregory Peck as no-nonsense Brigadier General Savage, a pilot in the Army Air Force based in England during World War II, the film dramatizes the act of carrying out risky daylight bombing runs over Germany before Allied troops had reconquered any of the continent. Realism is established early in the film. A squadron of B-17s is shown returning over the English Channel from a painful mission. Five planes and their crews have been lost, and another has been shot up so badly that it has barely made it back to the English base. It approaches wheels up, then sets down on the grass beside the runway, taking out a canvas tent in the process.²² The first airman out is clearly shaken up, and he immediately turns away from the camera to throw up. We next learn that what remains inside the plane is the cause. Though this black and white film does not show the actual damage to the human body in the way that a later color film such as *Saving Private Ryan* does, the dialogue is explicit enough to evoke similar reactions.

First, the men bring out the pilot and as they do, one crewman yells at the ambulance litter carriers to watch the man's leg, as it has been broken. Then, as they load the pilot into the ambulance, one man notes that he can see the brains sticking out through

the back of the pilot's head. We learn later that a shell had taken the back of the pilot's head off, mentally incapacitating him but leaving him physically strong. In his disoriented state, he tries to fly the plane, but in fact he manages only to put the crew in grave danger. With his right leg locked against one of the rudder pedals, the plane is sent out of control, forcing the young co-pilot to counteract this pressure for two long hours. When fellow crewmembers finally come to relieve him, they have to break the captain's leg in order to remove him from his position. That is why the pilot's leg was broken, not directly because of enemy attack.

In addition to the captain's injuries, a crewman in the fuselage has been hit by German fighter shells and his arm so badly damaged that others on the plane amputate it and leave it in the plane. To save the man's life, they bundle him out of the plane over France, gambling that this will increase his chances of survival. Back at the airbase, the commander who greets the damaged plane enters it with a blanket to retrieve the severed arm. When he exits the plane gingerly carrying his wrapped package, we in the audience cannot help but shrink from the suggestion. This opening scene succeeds in portraying the pressures of real combat put on these men and makes it painfully obvious why the mental demands on the aircrew become the central theme of the movie.

The first man to crack is the commander of the 918th Bomber Group, Col. Davenport. Because he identifies too closely with his men, he becomes less and less capable of sending them on the deadly missions they must undertake to defeat the Germans. Gen. Savage, whose personality fits his name, relieves Davenport of command and takes it himself. His firm, aloof manner alienates the men under him, but mission successes increase as aircraft losses decrease. Despite this improvement, Gen. Savage begins to slide down the same slope as his predecessor, finally experiencing a psychosomatic reaction that causes his arms to freeze. Having experienced repeated

combat himself, Savage seems even more traumatized by the losses experienced by his men--men who die because of his direct, though necessary, orders.

One cinematographic device used in this film is the repeated pairing of two similar structures: the round shape of the fuselage of a B-17 and the round shape of the Quonset huts that house the men at the airbase. Both are made of thin metal wrapped around a prefabricated lattice structure, and both become the principal dwellings of these men at war. In fact, more of the action in *Twelve O'Clock High* takes place in the Quonset huts than it does inside the airplanes themselves. Still, most such scenes clearly feature the ribbed arches of the huts, reinforcing our sense that the men are somehow caged. Certainly when they are in the narrow confines of the B-17, be it cockpit, navigator/bomber's compartment, or especially gun turrets, the men have little room for maneuver. As will be explored in depth in the *Cast Away* chapter, this caged setting reminds one of the stories of *Moby-Dick* and *Jonah and the Whale*, as the metal ribs and sheet metal of both the Quonset hut and the B-17 resemble the skeletal structure of a large whale.

Planes with Atomic Bombs

There seems to be a certain formula for portrayals of warfare in the nuclear age that says the positive imagery of an airplane and its weapons must increase in direct proportion to the increased destructive capability of each weapon. Thus, the entire weapons system is sanitized, including the airplane designed to deliver the weapons and the lives of the men who fly the planes. This tendency is particularly pronounced in the three "Strategic Air Command" films examined below.

The SAC Trilogy

The military and Hollywood have been on decidedly mixed terms for much of the post-Vietnam era. On the whole, the media has been considered to be more against the war in Vietnam than for it and has been implicated in the American defeat. This could explain why U.S. military characters in Vietnam-related films have not always fared well.²³ This is in contrast to the close way Hollywood and the armed services had worked together in previous eras, particularly during World War II and the early and middle stages of the Cold War, when the United States Air Force in particular seemed to embrace the blockbuster movie as a national educational tool. From 1955 to 1963 a trilogy of highly pro-Air Force films was produced and widely distributed, and they all share the honor of promoting the American cause during the Cold War through the policies of the former Strategic Air Command (SAC), the military's primary holder of atomic retaliatory power.

First, one must note the rhetorical stance adopted by all three of these films with respect to military aircraft and how this mirrored attitudes toward the machine in America over one hundred years ago. As one writer in 1840 claimed, for example, the new machines of the time in America were "the triumphs of our own age, the laurels of mechanical philosophy, of untrammelled mind, and a liberal commerce!" Referring explicitly to the burgeoning railroads, he confidently noted that "all patriotic and right-minded men have concurred in the propriety of their construction."²⁴ This is the same rhetorical device adopted by the American Air Force, speaking through a compliant Hollywood, just over one hundred years hence.

Second is the degree of Air Force participation evident in all three films. During the early and middle years of the Cold War (ca. 1950-1965), Hollywood and the Armed Forces continued the relationship forged during WWII. Just as it had in the effort to defeat the Axis powers in World War II, the U.S. government actively used Hollywood to

spread its Cold War message, and Hollywood complied. Keeping in mind that television was just gaining a foothold during the 1950s, it is not surprising that the military enlisted the aid of Hollywood and the feature film. Since “popular cinema was the most effective means of mass communication” before television became almost universal in the United States, the SAC trilogy’s scripted and consistent messages are understandable. Of course, the government was determined to continuously point out the dangers of Communism, but a further role played by these films was “to calm public fears about the danger of aerial attack by demonstrating SAC’s massive retaliatory capabilities.”²⁵ In watching this trilogy, the consistency of the message *and* the image of airplane and flying men is obvious, beginning with the first of the series, *Strategic Air Command*.

Strategic Air Command (1955)

As mentioned in chapter two, James Stewart starred as ballplayer “Dutch” Holland in this drama about the responsibilities of the Strategic Air Command to protect the free world. Stewart was eminently fit to star as a bomber pilot, having flown twenty-five missions over Germany as captain of a B-24 Liberator. This, in addition to his fine acting skills, resulted in his appearance in a number of aviation films. One of his best performances comes in *Strategic Air Command*, a story about the Air Force’s transition from traditional propeller-powered bombers to a new fleet of all-jet B-47s. Much is made of the “heroic” efforts made by numberless crews to keep their bombers ready for any eventuality. This message about the sacrifices needed during the Cold War is boldly displayed right after the credits have stopped rolling. In suitable heroic prose, the following appears upon the screen, pasted above us in the sky as if an edict from on high, accompanied by appropriate music:

America today is watching her skies with grave concern. For in these skies of peace, the nation is building its defense. To the officers and men of The United States Air Force, to the Strategic Air Command, whose cooperation is gratifyingly acknowledged, and to the young men of America who will one day take their places besides them, this motion picture is dedicated.

This sacrifice is made personal primarily through the character of Dutch Holland, who has already “done his share” as a commander of a B-29 flying over Tokyo (Stewart was, in fact, a commander of a B-24 Liberator and flew 25 missions over Germany during the Second World War).²⁶ Despite having done his share, Cold War exigencies demand that he (and others) do more; he is called back to duty to complete a further twenty-one months. Gradually, however, his appreciation for his mission grows and he decides to serve out his career in the Air Force, in spite of the effect that decision has on his hopes for a professional baseball career and on his domestic tranquility with a spunky little wife (a literal description--the lanky Stewart towers over his wife, played by June Allyson, and the shots of them together even exaggerate this contrast).

It was a busy year for actress June Allyson, who also starred over at Warner Bros. in *The McConnell Story*, a parallel Air Force saga about the jet fighter corps, including its missions in Korea. Once again she plays the understanding but worried wife of a military flier, reinforcing the cult of domesticity that was so much a part of 1950s America. It is interesting to note how both *The McConnell Story* and Paramount's *Strategic Air Command* tell essentially the same tale, adjustments having been made for the character of a fighter pilot vs. that of a long-range bomber pilot. Alan Ladd hands in a fine performance as the high-strung Mitch McConnell, as opposed to James Stewart's calm and rational character in *Strategic Air Command*. In any case, both films strive to calm public fears about domestic safety and to justify the personal sacrifices made by military men and their families (McConnell is killed in a crash of an experimental F-86). As a

long-suffering wife, June Allyson's characters nicely tie these two Air Force films together.

Some historians have argued that during the 1950s there was an artificial, if not surrealistic, divide between the domestic bliss allegedly enjoyed by (white middle-class) Americans and the dangerous world beyond American borders. For example, Elaine Tyler May writes:

The context of the cold war points to previously unrecognized connections between political and familial values. Diplomatic historians paint one portrait of a world torn by strife and a standoff between two superpowers who seemed to hold the fate of the globe in their hands. Sociologists and demographers provide a different picture of a private world of affluence, suburban sprawl, and the baby boom. These visions rarely connect, and one is left with a peculiar notion of domestic tranquility in the midst of the cold war that has been neither fully explained nor challenged.²⁷

Cognitive dissonance or not, many critics considered *Strategic Air Command* to be "one of the most visually exciting aviation features ever made." There is much to be said for this opinion. After all, the visual ranges of both ground and aerial shots is breathtaking. For example, when Dutch takes his first ride aboard the B-36, the camera lavishes many long minutes on capturing its overwhelming silver form, and director Anthony Mann certainly emphasizes the sheer dimensions of this latest SAC weapon. This long "cigar," as the flight engineer affectionately refers to it, is graced with massive straight wings running perpendicular out the top of the forward fuselage. Attached to each wing is a trio of rear-facing pusher propeller radial engines, augmented by twin pods of jets mounted outboard on either wing, making for an impressive total of six radial and four jet engines (which led to the popular phrase used by aircrew, "six turning and four burning.")²⁸

Again, the size of this bomber is worth stressing. The largest ever built, its wingspan measured 230 feet, dwarfing even that of the B-52. It could carry the Mark 17 atomic bomb, which weighed in at twenty-one tons. Further, the range of the plane, originally designed to bomb targets in Europe from bases in the United States, was nearly nine thousand miles. The wing tanks could hold so much high-octane aviation fuel that unrefuelled missions of over twenty-four hours were common. The longest such mission on record was fifty-one hours and twenty minutes.

Mann's directing creates an almost lyrical display of this flying military machine, a display that is a direct descendent of descriptions used by commentators on early nineteenth-century America. If John Stuart Mill thought the locomotive was the perfect symbol because no poet was necessary to attach meaning to it, then this opening scene and those that quickly follow fit the bill all the more for the airplane, in this instance the B-36. To begin to understand why, note that Marx agrees with Mill's insights with respect to the locomotive: "To see a powerful, efficient machine in the landscape is to know the superiority of the present to the past."²⁹ Indeed, not a word is said about the B-36's initial overflight; it speaks for itself in this scene. No wonder *Strategic Air Command* opens with the unannounced arrival of the B-36 over Al Lang Field in St. Louis.

Marx's use of Tocqueville could not be more appropriate here than when he writes, "To understand the American consciousness in this period the key image, as Tocqueville noted, is the 'march' of the nation across the wilds, 'draining swamps, turning the course of rivers, peopling solitudes, and subduing nature.'" The SAC trilogy adopts the same mission. When *Strategic Air Command* and its two successors portray the flight of their respective SAC bombers, it is precisely a "march" across the wilds, domestic and foreign, far beneath. Rivers have turned to oceans, and still the American spirit is translated into machinery to subdue the untamed land. Thus, Dutch's first flight is

portrayed as a leisurely afternoon drive, a domestication of nature--despite being a non-refueled, round-trip flight from Texas to Alaska.

Again, the text quoted by Marx in this respect could not be more perfect:

The wide air and deep waters, the tall mountains, the outstretched plains and the earth's deep caverns, are become parcel of his [man's] domain and yield freely of their treasures to his researches and toils. The terrible ocean . . . conveys . . . [him] submissively. . . . He has almost annihilated space and time. He yokes to his car fire and water, those unappeasable foes, and flying from place to place with the speed of thought carries with him, in one mass, commodities for supplying a province.³⁰

What is this excerpt taken from an American writing in 1847 but an apt literal description of what was to come in America just over one hundred years in the future? It is breathtaking to think how prescient many of these early American writers were!

In noting the beauty of the VistaVision process used for this film, Paris believes that "In propagandistic terms, *Strategic Air Command* must rank as among the most effective films extolling the virtues of the USAF and a revealing example of the corporate-liberal style of 1950s film-making."³¹ SAC and the film's creators have used this technique to great effect. In fact, some of the flying scenes seem to embody the prose of Whitman in praise of America's burgeoning industrial society. Recall Whitman's "Passage to India" and its calls for America to expand across the globe. Marx cites many such passages and juxtaposes them against what other great American writers--Emerson et al. (along with the more prosaic "writers for popular magazines")--have celebrated as evidence of America's spiritual power as exemplified by its machines:

I see over my own continent the Pacific railroad
surmounting every barrier,
I see continual trains of cars winding along the
Platte carrying freight and passengers,
I hear the locomotives rushing and roaring, and the
shrill steam-whistle,

I hear the echoes reverberate through the grandest
scenery in the world. . . .³²

In *Strategic Air Command* the flying scenes of the B-36 evoke these very images. Flying the twilight skies on its return from Alaska, the B-36's six radial engines trail plumes of white mist that gently script themselves across a pink and purple horizon. Whitman would be proud:

After the seas are all cross'd, (as they seem already
cross'd,)
After the great captains and engineers have accomplish'd
their work,
After the noble inventors, after the scientists,
the chemist, the geologist, ethnologist,
Finally shall come the poet worthy that name,
The true son of God shall come singing his songs.³³

Whitman himself, of course, was that poet, but he would no doubt be proud to see such imagery in cinematic form, VistaVision and all.

If Marx is right to believe that in "Passage to India" "the machine is a precursor of a higher, spiritual power"³⁴ (and I think he is), then these flying scenes in *Strategic Air Command* capture perfectly that sense of America as an expanding power that has been part of the Republic since its founding days. That SAC and the filmmakers here (and in *Bombers B-52* and *A Gathering of Eagles*) have so successfully tapped into this *weltanschauung* must have had incalculable effects on Americans of the time, from men in the service, to boys contemplating their futures, to wives and daughters who endured the absence of their fighting men, and perhaps even to the older generation who remembered a childhood in which the West of the American continent was still not fully tamed.

Bombers B-52 (1957)

The second in the SAC trilogy, *Bombers B-52*, is of a piece with its predecessor, *Strategic Air Command*. After a short opening set in Korea during the Korean War, the film quickly moves to its primary setting, Castle AFB near Merced, California. (Ironically, in *Strategic Air Command*, Dutch's friend who coaxed him back to the Air Force was Gen. Rusty Castle). While in *Strategic Air Command* Dutch Holland and his wife filled the starring roles and an enlisted man served as supporting actor, in *Bombers B-52* Chuck Brennan (Carl Malden), an enlisted man and crack mechanic for the fleet of high-speed Boeing B-47 Stratojets, is the protagonist. Brennan's dedication is legion and his love for his fleet of Stratojets obvious. From this individual respect for this particular machine, the film builds to a more generalized respect for the Air Force and its mission, as, for example, in the scene in which a formation of B-47s overflies the base, showing their grace and veiled power.

Even this heroic image of the B-47 is overshadowed by the arrival of the new B-52 Stratofortress.³⁵ The device used in this movie to show the B-52's power to awe is a personal one: Sgt. Brennan, who has made up his mind to leave the Air Force, elects to re-enlist because of the respect he has for the B-52. The first shot of the B-52 is on the ground, a slow deliberate lead-up to where the craft is parked on the apron. From the right of the screen we first see the beginning of a long pan of the shadow cast by the massive wing of the bomber, dwarfing personnel and vehicles parked nearby. The camera continues its pan from the tip of the right wing toward the fuselage, clearly emphasizing the two pods of two engines each on that wing. Finally, a slow expanding zoom centers the entire B-52 on the screen for our first view of the subject of this film. The next shot is from the runway in front of and below the Superfortress. This shot highlights the four

gear-trucks under the fuselage, each of which has two beefy wheels. The wheels' ability to articulate shows the agility of this great plane even while still on the ground.

Takeoff produces four plumes of black smoke, but the B-52 itself is graceful and fast, a sleek eagle heading skyward. This is where the message of America's manifest destiny begins, just as it did in *Strategic Air Command* when Dutch took his first flight in the B-36. Again, what Marx notes about railroads and their effects upon the American mind in the antebellum period when so many of these commentators were using flying metaphors to describe man's conquest of nature, now has become literal:

Objects of exalted power and grandeur elevate the mind that seriously dwells on them, and impart to it greater compass and strength. alpine scenery and an embattled ocean deepen contemplation, and give their own sublimity to the conceptions of beholders. The same will be true of our system of Rail-roads. *Its vastness and magnificence will prove communicable . . .* (my emphasis).³⁶

Indeed it is communicable, particularly in this SAC film released in 1957, where one of the most beautiful scenes of the bomber comes in a shot of the B-52 slowly flying over the Golden Gate Bridge, the ocean having been twice tamed--once by the marvel of the bridge itself, then by the marvel of the jet plane flying above it.³⁷ This shot is followed by lingering shots of the bomber in flight at high altitude. Nature has been conquered.

Better shots are to come. On a non-stop mission from America to Africa, the bomber flies low over the Pyramids, which we see from the vantage point of the pilot. Next is a shot of Algiers, its ancient stone buildings tan in the Mediterranean sunlight. Such imagery calls to mind the spirit of Whitman's progressive ode to travel and the American ability to move beyond its borders:

Singing my days,
Singing the great achievements of the present,
Singing the strong light works of engineers,
Our modern wonders, (the antique ponderous Seven
outvied,)

In the Old World the east the Suez Canal,
The New by its mighty railroad spann'd,
The seas inlaid with eloquent gentle wires . . .³⁸

Yes, this lone bomber flies from the heartland of America to Egypt and back without landing. Thanks to aerial refueling, the range of the B-52 is almost limitless; Whitman's dreams of a "passage to India" are realized (never mind that when this eagle of war eventually flies over the East, it is not the "gardens of Asia" below but the "jungles of Vietnam"--a fact Francis Ford Coppola captures perfectly in his less-than-elegiac *Apocalypse Now*). The "antique ponderous Seven are indeed "outvied" as they remain stationary and impotent below, while the B-52 flies freely over them.

This flying machine, this "modern wonder," may have outvied the artifacts of old, but it is not flawless. On the return home, a malfunction in new communications gear results in an intense fire inside the plane. Brennan fights the fire but fails, so Captain H commands the crew to bail out, giving the viewer the opportunity to see the downward ejection seats for two of the crew and the pilots' upward ejection seats.³⁹ In the event, Captain H. remains aboard and lands the burning plane successfully, demonstrating its safety even in the face of disaster.

If it is not belaboring the comparison to the structure of Marx's *The Machine in the Garden*, it might be worth noting that after discussing Emerson's view of the pastoral at length, he finally gets to Emerson's disciple, Henry Thoreau, and his classic *Walden*. This book, Marx writes, "begins with the hero's withdrawal from society in the direction of nature."⁴⁰ This is true and well known. If we take some license and stretch "nature" to also include "domesticity," we could find this desire-to-withdraw theme in both *Strategic Air Command* and *Bombers B-52*. In both films, the main characters had been intimately involved in the world of the machine, one having flown B-29s over Japan, the

other having been a mechanic for Air Force planes. Having “done their share,” both men now want to leave the service and spend uninterrupted time with their wives. The complexity of bombers and the regimented organization of the military can be compared to life in the city, so the desire of these two servicemen to return to domesticity roughly parallels Thoreau’s desire to return to the pastoral. Though Thoreau’s stay in the wild may have been a success, Cold War demands simply do not afford such luxury, so the higher calling of service to country prevails in these two films.

A Gathering of Eagles (1963)

Rock Hudson here stars as Jim Cadwell, a no-nonsense SAC Wing Commander of B-52s based at Carmody Air Force Base in California. Because the wing had previously failed an Operational Readiness Inspection, Cadwell proceeds to clean house, including the forced resignations of two close friends. In contrast to the previous two SAC films, this one focuses more on the personal costs of maintaining constant readiness for nuclear war, rather than extolling the virtues of America’s Cold War flying machines. There are a handful of good shots of B-52s taking off, but much of the drama takes place on the ground, both on and off base, as Caldwell, his wife, and his close friends try to reconcile a hard way of life with dreams of domesticity.

This film is also notable for its pro-Air Force bearing, which it shares with its two predecessors. In fact, General Curtis LeMay, chief of staff for the Air Force, supported the making of this film.⁴¹ At a time of nuclear tension between the Soviets and Americans, tension that grew to fever pitch during the Cuban missile crisis, American audiences were no doubt happy for the reassurances this film gave them.

Airport

The heroism in *Airport* (1970) is the dominant theme of the movie, though it is paired with its antagonist, menace. Both men and machine are strong and reliable here, from the pilots to the mechanics to the majestic Boeing 707. What weaknesses they may have are not fatal; in fact, they provide the opportunity for transcendence. For example, the first Trans Global 707 to appear in the movie lands routinely but then taxis off the runway into deep snow and gets stuck. In the human sphere, Captain Demerest has a fondness for female company that extends beyond his wife, but he is able to make that a moral challenge to be surmounted.

The scene that establishes the heroic qualities of pilots and machine comes early. After most characters have been introduced, our two pilots are highlighted under the bright lights of a cavernous hangar. Their uniforms are immaculate, and the camera angle is to the front and below them, giving them both an air of power. Behind them is their 707, its silver skin glistening in the artificial light. Trust and competence are projected, and we are never disappointed in this respect, no matter how bad the danger may get.

As mentioned, an unstable passenger detonates a bomb in the rear of the plane, yet the 707 barely shudders at the affront. The passengers may suffer from the effects of this hole in the fuselage at 30,000 feet, but the plane can keep on flying in a straight line. Its control cables are safely positioned under the cabin floor, so a rupture of the fuselage skin is not fatal. To be sure, there is the risk that the damage could spread, causing catastrophic failure, but this does not happen; the Boeing soldiers on.

The same can be said of the three men in the cockpit, as well as the women enlisted to help in the cabin: all perform flawlessly, and tragedy is averted. A stewardess has drafted an elderly female stowaway (Helen Hayes) in a ruse to get the bomb away from the disturbed passenger. Toward that end, they are successful. When confronted by the

mock anger of the stewardess, the old woman verges on the point of hysteria, causing the stewardess to slap her smartly across the face. This diversion allows the captain to grab the briefcase holding the bomb, but it is inadvertently returned to the bomber by another passenger.

When the bomb is detonated, the stewardess is rendered unconscious, but only because she had bravely tried to open the door to the lavatory in which the bomber sought refuge. Back in the cockpit, both pilots have remained calm and professional and have set a strategy for getting their plane and passengers back safely on the ground. With the help of competent air traffic controllers--and the stubborn mechanic Patroni in the first 707--the heroes are able to effect a landing back at Lincoln International Airport. The Boeing 707 remains intact upon touchdown, and no more lives have been lost. Men and machine are heroes to the end.

As for the sequels to *Airport*, the heroism there is simply the flip-side of the menace discussed in the previous chapter. For instance, in *Airport '75*, Charlton Heston's character dangles from a cable attached to a military helicopter and successfully boards the airborne 747 through the hole in the side of the cockpit. From there he makes a safe landing. *Airport '77*, unfortunately, has little in the way of heroism, first because the pilot who crash-lands the plane is the one who hijacked it, and second, the underwater rescue is simply much too slow. *Airport '79: The Concorde*, also fails to deliver great heroics, meaning the entire series steadily went downhill as flying films. Fortunately, made-for-TV dramas sometimes compensated for this.

Miracle Landing (1990)

Miracle Landing, the TV docudrama mentioned earlier, is a superb example of a heroic rendition of both pilots and machine. As the opening credits inform us, a long section of

upper fuselage ripped away from the plane at 20,000 feet, resulting in immediate decompression and the death of one flight attendant, the only fatality in the incident. Remarkably, the Aloha Airlines Boeing 737 remained intact and the two pilots were able to land it successfully.

The crisis begins when a little boy spots an expanding crack in the ceiling above him. As soon as the crack has spread, the slipstream peels back a portion of the roof, taking with it sections on both sides of the fuselage down to the floor of the cabin. Since the controls and flying surfaces were not irreparably damaged, the 737 and the remaining ninety-four souls aboard remain flying. The scene, however, is horrific. As the upper fuselage disintegrates and the cabin depressurizes, debris and structural parts are blown over the exposed passengers, resulting in serious injuries to passengers in the forward section, including one man with a long metal strip riveted to his skull. While the passengers were strapped in, the flight attendants were not, and two more of them are nearly sucked out of the plane (or *off* the plane, since the cabin is now an exposed flat surface). One writer wrote that it was as if “they were in a convertible car.”⁴²

Here the heroics of the pilots kick in. Captain Bob Schornsteimer (played by Wayne Rogers of M.A.S.H fame) is a highly trained pilot, having been a fighter instructor during the Vietnam War. His first officer is a woman making her last flight in the right seat, as she has been awarded her captain’s wings beginning on her next flight. Though unable to verbally communicate due to the roar of the rushing wind, together they manage to keep the plane flying, despite the loss of one of the two engines. Because of changed flight characteristics, however, they are forced to adopt a landing approach speed much higher than normal, a possibly fatal situation because a cockpit instrument indicates that the nose gear is not down and locked. Fortunately, the indication is wrong, and a successful landing is completed, testimony to the integrity of the Boeing 737’s design and

construction and the unusual talent of the flight crew. Investigators later determined that the plane, built in 1969, had undergone too many cycles of pressurization (89,680 takeoff-landing cycles) in the corrosive air above the saltwater oceans. This close call was to be a harbinger of explosive decompressions to come.

Freefall: Flight 174 (1995)

This TV movie is closely modeled on a true story. As mentioned in the previous chapter, a brand new Boeing 767 twin-jet had absurdly run out of fuel while flying from Montreal to Edmonton. Despite the latest in advanced avionics, it appeared that the jet was going to go down with all aboard. Facing such an unusual emergency, the two pilots and a talented mechanic who happens to be aboard that day wrack their brains for a solution. The extent of the crisis becomes clear as the plane glides toward Winnipeg's main airport. Based on hand calculations, the co-pilot determines that they cannot reach the safety of the long runways there. Remembering an old military field between the airport in Winnipeg and their present position, the co-pilot suggests seeking that out as an alternative landing spot. With no other choice, the pilot takes his suggestion. As they pass over Lake Winnipeg, they search feverishly for sight of the airfield. Failing to find it, they consider a highly dangerous water landing, rather than risk coming down somewhere within the city limits of Winnipeg.

At the last moment, the co-pilot sees the abandoned airfield. Fortuitously, the captain has extensive sailplane skills, and these skills become even more crucial here as he applies a sailplane technique known as "side slipping" to bring his massive jet in line with the runway; they obviously will have only one chance at a landing attempt. Dropping much faster than the optimum rate, the captain manages to line up with the runway but just as he is about to touch down, he sees people and cars on the abandoned runway. They in

turn see (but do not hear) the powerless plane and scramble to clear the way. Touching down hard, the plane just misses two boys on bicycles. Because the front landing gear never locked properly, the nose of the plane slams heavily on the runway, throwing a massive shower of sparks from the sliding nose. At high speed, the plane rockets down the runway, no power available for reverse thrust to slow the plane. The pilots frantically apply the brakes, but now the end of the runway looms large.

With little distance to spare, the pilots manage to halt the plane, but a fire has erupted under the cockpit. While a competent cabin crew evacuates the back of the plane, the two pilots attempt to extinguish the fire. Failing to halt the flames, they too escape to the rear of the plane. In the end, there are no fatalities; the pilots have achieved a near miracle, as is evidenced by the fact that simulator crews are not able to land a plane under identical circumstances.

Air Force One (1997)

This intense action movie offers a variety of images of the 747, ranging from the dignity afforded any Air Force One to the impressive high tech equipment aboard, to the tense aerial dance with a refueling tanker, and finally, to a watery crash in the movie's finale. In this movie, film star Harrison Ford appears as the President of the United States. Having just cemented a ground-breaking agreement for peace in the former Soviet Union, he heads back home aboard the presidential plane, Air Force One. In real life, these planes, designated VC-25As by the Air Force, are two Boeing 747-200Bs (tail numbers 28000 and 29000) and serve as Air Force One when the President is aboard. Operated by the 89th Military Airlift Wing at Andrews Air Force Base, they feature an interior modified to include an executive suite (presidential office, stateroom, and washroom), advanced electronic and communications equipment, self-contained baggage loader, fore and aft

stairs, an emergency medical room, and two galleys capable of feeding 50 people, all contained in 4000 square feet of floor space.⁴³ In addition, it has inflight refueling capabilities, though I have come across no evidence that these aircraft have escape pods as featured in the movie.

Once airborne, the jet is hijacked by supporters of a renegade leader from one of the former countries of the Soviet Union. What makes this a premier flying film is the fact that most of the action takes place aboard the plane. The President leads the heroics, accomplishing everything from disabling armed hijackers, to allowing most of his staff to escape via parachute, to piloting the plane himself when no one is left to fly the planes (the original crew of three Air Force officers die while heroically trying to land the plane against the orders of the hijackers). Finally, in a scene that easily trumps the cable acrobatics in *Airport '75*, a C-130 comes alongside the crippled Air Force One, boards a specialist by dangling him by cable from the open cargo area of the C-130, and retrieves the President and his family.

Final Descent

In this 1997 made-for-TV movie, Robert Urich plays Captain “Lucky” Singer, a traditional hands-on pilot, an anomaly in the modern world of fly-by-wire “glass cockpits” full of computer screens and self-regulating instruments. An abrasive misfit who has rankled co-workers throughout his career, Captain Singer finally has a chance to put his penchant for idiosyncratic thinking to good use, as we will see. This film clearly owes debts to both *Airport* and *Airport '75*. From the former it borrows the idea of a jet whose tail section has been heavily damaged--perhaps fatally. While in *Airport* it was a passenger’s bomb that blew a hole in the side of the plane, in *Final Descent* a collision with a small plane brings about the structural problems that drive this movie.

The debt to *Airport '75*, however, is greater. First, the cause of the airplane's problem in *Final Descent* is the same as in *Airport '75*: a mid-air collision between a loaded jumbo jet and a twin-engine propeller plane piloted by a lone and impatient male pilot. While *Airport '75*'s collision took place high in the sky as the Boeing 747 was preparing to descend, in *Final Descent* the collision occurs on takeoff. Due to maintenance, one runway is closed, but the impatient pilot of the small plane ignores that fact and takes off from it. This fatally disorients him, so that when air traffic controllers give him commands that will prevent a collision, his response is delayed and his plane smashes into the tail of the jumbo, fatally destroying their ability to control the pitch of the passenger jet.

The second and more important debt to *Airport '75* is the device used to rescue the crew and passengers: a mid-air connection to a U.S. military aircraft (albeit one without the presence of George Kennedy). In *Airport '75*, of course, an Army Jolly Green Giant C54 helicopter races into place above and in front of the damaged 747, while in *Final Descent* an Air Force KC-135 tanker arrives for the rescue attempt. The tanker's presence has nothing to do with refueling, however, as will become apparent as the disaster unfolds.

To counter the drag and downward force on the jammed elevators, the unorthodox Singer commands a Marine helicopter to shoot 50-caliber bullets through one of the elevators. Though this causes a serious fire in the rear galley, Singer's logic proves correct and their rate of ascent is checked, thereby saving the craft from imminent doom. Long-term prospects remain bleak, however, forcing Singer to reach for a new idea. An earlier idea to move passengers and equipment forward in order to affect the plane's center of gravity is computer tested and found to be ineffective, but Singer has another idea: rather than using people to tip the center of gravity toward the front, why not use water? The source: an aerial refueling tanker. That the civilian 747 has no refueling capability, let

alone the ability to accumulate water in any specific region of the plane, does not hinder Singer.

Singer's idea is to open the escape hatch in the top of the plane, insert a hose, and fill the front wheel well with water. As a fascinating use of the aerial refueling theme, I will save details for the next chapter, but suffice it to say that in the end, his plan succeeds, the nose comes down, and Singer lands the plane safely. Both Captain Singer and the rugged Boeing 747 are feted as heroes in this movie.

CHAPTER 5

“PASSIN’ GAS”: AERIAL REFUELING SCENES

Initially, a chapter devoted to the image of aerial refueling in cinema may seem odd, but it is a common flying film scene and fulfills any number of roles. First, it introduces yet another element of suspense in the air: the leading characters’ plane is low on fuel; will the tanker arrive? Will the receiver plane be given a second chance, or will it be consigned to a hasty return to earth? Second, it allows creative filmmakers the chance to insert a fanciful device for advancing the storyline, which generally means using the refueling boom in ways never intended by the U.S. Air Force. Finally, we might consider the sheer visual appeal offered by these two heavy pieces of machinery speeding through the skies as they perform their aerial ballet.

Before delving into the movies that use aerial refueling scenes, I will first briefly sketch the history of aerial refueling and some of the technical details associated with it in order to help the reader and viewer better appreciate what is taking place on the screen. Next, I will consider whether aerial refueling scenes evoke one or another subconscious sexual image, that of sexual copulation or that of a mother nurturing offspring via an umbilical cord or through breast feeding. After laying out a case for both, I will argue why it is one, rather than the other, that is the chief image embedded in scenes of aerial refueling. Finally, I will present a textual reading of the most prominent aerial refueling scenes in American film.

Aerial Refueling: The Need, the Equipment, and The Symbols

War and defense have been the driving forces behind the development and deployment of the aerial refueling tanker.¹ As far back as 1929, the Douglas Aircraft Company used two Douglas C-1s to refuel an Army Fokker C-2 tri-motor, keeping it in the air for a

remarkable seven straight days, but no refueling system was thereafter implemented. Further experiments were carried out during World War II, but given the forward bases in Europe and the Pacific, aerial refueling was not considered a strategic necessity. This changed with the end of World War II and the birth of the Cold War. Soviet intransigence in Berlin, their detonation of an atomic bomb in 1949, and the fall of China to Communists convinced American leaders that a strong projection of force worldwide was necessary. As overseas bases were increasingly threatened, the U.S. responded by building strategic bomber aircraft, among them the B-36, B-47, and B-52. The first of the three, the massive propeller-driven B-36, had favorable range and payload capabilities, but it was thought much too slow to avoid enemy defenses. In contrast, the jet-powered B-47 and B-52 flew high and fast, but range was their Achilles' heel. Therefore it was decided to refine the technique of in-flight refueling in order to give the fast bombers the global range needed to project American power to critical parts of the world.

Before discussing the aircraft that have been used as American aerial refueling tankers, however, a visit to the mechanics of the fuel conveyance system is in order. Today, we generally see images of jet-to-jet aerial refueling in film, but this advanced procedure necessarily developed in steps, the first of which were initiated on existing propeller-driven airplanes. With a surplus of WWII B-29s, the Air Force elected to convert some of them into tankers and others into bombers capable of aerial refueling, with the former designated KB-29s.² By 1948, these aerial refueling units were activated. Unfortunately, the method used by these early pairs, the "looped hose system," was so demanding of flight crews that only a few of the very best crews were considered qualified, a deficiency that led to the development of the two forms of aerial refueling that continue to be used to this day.

Probe and Drogue vs. Boom and Receptacle

The two forms of subsequent aerial refueling for post-WWII aircraft were, first, the probe and drogue method in which a probe extending forward from the craft to be refueled is mated with a drogue, or “basket,” that is trailed at the end of the refueling hose. The receiver maneuvers his plane so that his probe will engage the basket with enough force to engage the coupling device. Once engaged, fuel transfer begins. This method remains most suitable for small fighter aircraft and helicopters, two types of aircraft that fall outside the scope of this dissertation.³ This, plus the relative lack of film scenes employing this method, dictates that its image on the screen will not be discussed in depth, an exception being the scene from *The Perfect Storm*, which was based on a true story.

Movies generally show the second method of refueling, known as the boom and receptacle system. Here, a rigid telescoping boom is trailed from the tanker, while the receiver craft maneuvers into place. The boom is then mated to a receptacle on the front or top of the receiving craft. Boeing succeeded in perfecting what came to be known as the “Boeing Flying Boom.” Here a rigid boom was lowered from beneath the tail of the tanker, while small aerodynamic surfaces known as “ruddevators” were used to “fly” the rigid boom into place. This system was quickly put into place aboard B-29s and B-50s (an updated version of the B-29), and became operational in 1951. One of its chief strengths was its ability to download greater quantities of fuel in a short time. Most moviegoers should be familiar with this operation, as it has appeared in countless films, ranging from military stories such as *Bombers B-52* to the action thriller *Air Force One*.

Propeller Tankers and Bombers

Though America appeared to have a powerful nuclear deterrent at the end of World War II, this was “largely illusory” insofar as few B-29s were equipped to delivery a nuclear

payload, few crews were trained to man these rare ships, and it was compounded by the fact that the U.S. inventory of atomic bombs at times dropped to as few as six. It fell to SAC, or the Strategic Air Command, to remedy this.⁴ The driving force behind SAC's decision was Major General Curtis E. LeMay, Chief of Staff of the U.S. Army Strategic Air Forces in the Pacific. Upon assuming command of SAC in late 1948, LeMay was instrumental in increasing the number of atomic capable bombers from a few dozen to over 250 by 1950.

The Air Force's vision for delivering nuclear bombs was of a sleek and fast jet-powered bomber, but that vision was bound to take time to realize. In the meantime, two more practical options were exercised, the first being the transformation of B-29 variants into tankers and bombers capable of aerial refueling. This interim measure proved effective, as demonstrated by an around-the-world flight by *Lucky Lady II* in early 1949. Requiring four in-flight refuelings, this plane covered 23,452 miles without landing, prompting General LeMay to utter his famous phrase, "We can now deliver an atomic bomb to any place in the world that requires an atomic bomb."⁵

The B-36

The second solution was to improve existing propeller technology to build a plane that would hold internally enough fuel to carry the tremendous load of a nuclear weapon thousands of miles to its target--and then return to base within American borders. This idea had its roots in the early days of the war in Europe when it was conceivable that Hitler's troops could take Britain along with continental Europe. If such were the case, American bombers would have to begin and end their missions from American soil. As aerial refueling was not an option then, designers considered their options. After stiff competition from rivals--as well as heated opposition from detractors (not least in the U.S.

Navy)--the newly formed Consolidated Vultee Aircraft Corporation, or Convair, was awarded contracts in August 1944 for 100 of its mammoth bomber, the B-36.⁶

The size and power of this bomber--its "giganticism"--needs to be again stressed. As Convair noted in a press release, the wingspan of the B-36 was longer than the 1903 Kitty Hawk Flyer. Its ten engines (six radial and four jet) delivered the equivalent power of nine locomotives. Its bombload of 84,000 pounds exceeded the weight of a fully-loaded B-24 bomber. The anti-icing equipment on the B-36 could heat either a 600-room hotel or 120 five-room houses. Finally, this bomber could fly 10,000 miles non-stop (without refueling) and deliver a payload of 10,000 pounds halfway,⁷ which makes the point that this plane simply did not require aerial refueling. Thus, no one has ever witnessed a movie scene in which this bomber is refueled, ending our discussion of this fascinating aircraft.

From Prop to Jet Power

The B-36 is credited with maintaining an effective nuclear deterrent against the Soviet Union for a number of postwar years, but the Air Force continued to work with Boeing on the creation of a jet bomber fleet. Boeing's work on a jet-powered bomber came to fruition in 1951 when its B-47 was delivered to the Air Force. This radical new plane featured sweptback wings and six jet engines mounted on pylons beneath the wings. This fast, high-flying bomber met many of the Air Force's demands, but it lost some of these advantages because of the limited capabilities of the current tankers.⁸ To meet these demands, the Air Force eventually began using a distant version of the B-29 for its tanker needs. First, a cargo version (the C-97) of the B-29 was built using a "double bubble" method of fuselage construction based on the civilian Boeing 377 Stratocruiser, though the

wing, tail, and engines still came from the B-29. Properly modified, this became the workhorse KC-97 tanker, with 816 aircraft produced.⁹

Because the straight-winged KC-97s had a low maximum speed and the swept-winged B-47 (and later the B-52) a high minimum speed, a mismatch was created. As one expert explains: “Because of its slow cruising speed and low cruising altitude, the KC-97 had difficulty being an efficient refueler to high-speed jet aircraft. To refuel a faster, jet aircraft, it performed a maneuver called ‘tobogganing.’ The refueling connection would be made high up and then the tanker and jet flew ‘downhill’ together enabling the tanker to pick up more speed.”¹⁰ The penalty for this mismatch was substantial; flying at an operational altitude of 35,000 feet, a jet bomber would have to descend to half that altitude to meet the tanker, which was flying at its *maximum* altitude. Given the delicacy of this midair hook-up, plus the bomber’s return to altitude with a heavy load of fuel, this propeller tanker/jet bomber refueling sequence “effectively halved the net gain of a full load of fuel pumped through the tanker’s boom.”¹¹ Clearly, something new was needed.

The Birth of the KC-135 Stratotanker

To match the speed of the jet bombers, Strategic Air Command opted to award Boeing Aircraft the contract for a jet-powered tanker. This became the KC-135 Stratotanker, which to most observers appears to be a Boeing 707, although this is not technically true.¹² The prototype of these two planes, the Dash 80, gave birth to over 1600 copies, most of which were built under the parallel C-135/707 programs. Remarkably, this aircraft continues to serve U.S. forces. Boeing had gained valuable knowledge about high-speed jets from its B-47 program and employed what it knew in developing a new jet tanker. The prototype first flew on July 15, 1954, and the first operational tanker arrived in 1957. Thus, there was a four-year gap between the deployment of the B-47 and the

KC-135, a story told in part in the first two films of the SAC Trilogy, *Strategic Air Command* and the 1957 *Bombers B-52*.

A total of 749 Stratotankers were built for SAC between 1957 and 1966. As of 1998, 75 have been lost in crashes and accidents, about 100 have been retired, and 7 are on museum display.¹³ Such heavy losses are not surprising when considering that aerial refueling with jets is no mean feat; the danger must always be stressed. Over its operational life, the KC-135 tanker (and much more rarely, its receiver craft) has been involved in any number of crashes, many of which were fatal. Serial number 57-1424 was a typical example of a loss of this model tanker. On May 17, 1966, this Amarillo-based KC-135A was lost in the following manner: "During landing the aircraft contacted the left wing, then the boom, then the right wing. The aircraft rolled left and right, departed the right side of the runway, exploded and burned." Five people died.¹⁴

Similarly, a takeoff failure from U-Tapao Air Base in Thailand on October 2, 1968, took the lives of four crewmembers:

This KC-135A was TDYU to the 4258th SW. The No.4 engine failed after the airplane was committed to take-off. Asymmetric thrust and the plane's heavy weight caused one nose gear tire to fail followed by the other. The airplane finally became airborne just prior to the end of the runway, but struck reinforced concrete and steel light stanchions 1,800ft beyond the end of the runway and crashed, killing the crew of four. The airplane was written off on 16th November 1968.¹⁵

Though much safer than takeoffs (especially while fully loaded) and landings, in-flight refueling also had its risks, including two collisions between KC-135s and B-52s in flight, causing the release of nuclear warheads. First, a B-52 carrying unarmed nuclear weapons collided with a KC-135 over Kentucky on October 15, 1959, and crashed, though no radiation was released. By far the most well-known in-flight collision between a KC-135 and nuclear bomber took place just over six years later, on January 17, 1966, when a

B-52 collided with the extended boom of a KC-135 tanker and both exploded and crashed, as described here:

On January 17, 1966, a B-52G bomber, returning to its North Carolina base following a routine airborne alert mission, collided with the fueling boom of a KC-135 tanker 30,000 feet above the coast of Spain while attempting to refuel. Both aircraft broke up and the 40,000 gallons of jet fuel in the KC-135 exploded, killing its four man crew. Four members of the B-52s seven man crew were able to parachute to safety. Of the four unarmed B28 hydrogen bombs carried by the B-52 (a weapon with yields between 70 kilotons to 1.45 megatons), three crashed on the ground in the vicinity of Palomares, a poor farming community 1 mile off the coastal highway. The fourth sank off the coast and was missing for nearly three months, before being located by the submersible Alvin 5 miles offshore in 2,850 feet of water. The high explosives in two of the bombs which fell on Palomares detonated, digging craters 6 to 10 feet deep and scattering plutonium and other debris from 100 to 500 yards away from the impact area (the third bomb was recovered relatively intact from a dry riverbed).¹⁶

The best account of this second, more serious crash is Tad Szulc's *Bombs of Palomares*, where, in addition to the crash itself, he discusses the Air Force's attempts to silence reporting on this incident, the breaking of the story, and the lengthy search for the lost hydrogen bomb.¹⁷

The point of discussing these crashes of airborne KC-135 tankers is to stress for viewers the inherent risks of aerial refueling, though for dramatic purposes the relatively rare instances of accidents while engaged in in-flight refueling are those that are featured in film. Meanwhile, the much more numerous "mundane" (from Hollywood's point of view) instances of takeoff, approach, or landing crashes are left for the Air Force and the family and friends of those involved, to mourn.

KC-10 Extender

Though the jet-powered KC-135 tanker proved to be a rugged and reliable tool for the U.S. military (including its extensive deployment in Southeast Asia 1964-1975, where it deployed 1.4 billion gallons of fuel to 813,878 receivers¹⁸), certain deficiencies became apparent as aviation technology progressed. The 1973 Yom Kippur War in particular revealed the need for greater refueling capacity, so the U.S. Air Force commissioned the McDonnell Douglas Company to build a variant of its civilian DC-10 for use as a freighter and aerial refueler. Nearly sixty of these tankers, given the designation KC-10 Extender, remain on active duty, and scenes with this tanker aircraft are among the most dramatic refueling scenes created by Hollywood.

McDonnell Douglas beat Boeing in the competition to augment the aerial refueling fleet after it became apparent that the workhorse of military airlifting, the C-141A Starlifter, would have to be upgraded by adding refueling capabilities. Though a variation of Boeing's 747 was an early favorite, the Air Force chose the KC-10A because it was capable of taking off with a full load from airfields with shorter runways than the 747 could manage. In all, 60 tankers were built and accepted by the Air Force, though one tanker (fuselage number 382) was lost to fire at Barksdale AFB on September 17, 1987. The performance of the KC-10 has been impressive, including during the 1991 Gulf War, where together with the KC-135, the aerial refuelers conducted roughly 51,700 separate refueling operations without missing a single rendezvous. Fuel load delivered was 125 million gallons.¹⁹

Together, the KC-135 and KC-10 have provided movie lovers with any number of dramatic flying scenes, many of which will be discussed below. As older tankers age and are retired, however, we can expect a new generation of Air Force tankers to enter the scene.²⁰ These too should eventually make their way to the screen. It is time now for a

discussion of these aerial refueling scenes themselves, beginning with their possible subliminal impressions.

Film, Psychoanalysis, and the Aerial Refueling Scene

As with other areas of life in America, psychoanalysis found its way into film analysis. As one film studies expert notes: “In the 1970s psychoanalysis became the key discipline called upon to explain a series of diverse concepts, from the way the cinema functioned as an apparatus to the nature of the screen-spectator relationship.” Though a backlash followed, its influence on film theory and criticism has remained.²¹ Admittedly, the complexity behind the history of film and psychoanalysis is staggering (and contentious). Therefore, this short section in no way attempts to survey or summarize the field. Rather, it is meant as an adjunct to understanding what is being portrayed in one of the most psychoanalytically suggestive scenes in flying film, that of aerial refueling.

These scenes, I argue, evoke one of two universal concepts, concepts familiar to every human being because every human being has been part of the process at one stage or another. The conscious and unconscious thoughts and feelings related to them, therefore, must be deep, so it would be surprising if filmmakers neglected to address their portrayal. The starkly visual symbolic imagery that aerial refueling produces can elicit anything from crude, adolescent interpretations to the most tortured abstractions available to psychoanalysis. The first interpretation of a refueling scene is, of course, that of sexual intercourse; the second is the maternal nurturing of her offspring, either through the umbilical cord or through breast-feeding. The visual simplicity of these two concepts no doubt explains part of their enduring power in flying films.

Intercourse

In film studies drawing on psychoanalysis, the theories of Sigmund Freud remain among those most often employed, and Freud's theories of the unconscious, the return of the repressed, the Oedipal complex, narcissism, castration and hysteria all relate in one way or another to sexuality. In addition to psychoanalytical interpretations of aerial refueling, there are the feminist and gender-related perspectives to consider.

Following accepted theory, particularly that of film studies' "apparatus theory" of the 1970s, the proper gender roles are activity for males and passivity for females.²² Applying this rule to refueling tanker and receiver craft, there are arguments to be made for both sides as to which is male and which is female, the tanker or the receiver. I will start with the generally accepted proposition that the refueling tanker is male, "mounting" the receiver craft, and transferring its vital fluid from itself to its passive (read female) partner. Henriksen, for one, accepts this proposition with no reflection whatsoever, stating "the one act of 'sex' that does take place" in *Dr. Strangelove* "involves airplanes, not humans. The opening credits roll over footage of an in-air refueling of a bomber, the injection accompanied by soft and lyrical music that provides the romantic highpoint of the film."²³

Perhaps this obvious--almost reflexive--interpretation is warranted. After all, with respect to the issue of physical similarities between aerial refueling equipment and human genitalia, it should be a foregone conclusion as to which is male, which female. In essence, the tanker extends some form of probe or hose to be inserted into the fuel nozzle of the receiving craft, an obvious intimation of sexual intercourse; the tanker is an active male. Fluid is then passed from tanker to receiving craft, just as semen is passed from male--through the erect penis--to the female.

But is this gendering so obvious after all? I believe it is not. As we have seen, there are two kinds of refueling techniques generally employed: the boom and receptacle

version, and the probe and drogue configuration. To review, in the boom and receptacle version, the boom of the tanker consists of a rigid structure containing a pipe or hose which conveys the fuel to the receiving craft through a receptacle found usually at the front of the airplane. As mentioned above, this would seem to constitute male on female copulation. The second configuration is that of the probe and drogue, but unfortunately for the tanker-as-male argument, the active male here is clearly the receiving craft, not the tanker. A probe, either one that is fixed or one that rigidly protrudes forward *from* the receiving craft, is engaged with a hose and basket system that trails behind a waiting tanker. The pilot of the receiving ship moves forward relative to the tanker and actively thrusts its probe into the open, waiting basket from which the fuel will be received, thus reversing the active/passive roles.

Two larger problems exist with the tanker as male schema. First, in a timeframe larger than just the period of tanker-receiver copulation and transfer of fuel, the tanker is the passive participant (this is particularly true of filmic portrayals). It is just “there” in the sky for the active receiving craft to find. As the focus is on the “active” mission of the bomber or fighter, the tanker exists only insofar as it serves the receiving plane. In film scenes in particular, the receiving craft seeks out the tanker and makes an active approach--initiates a courtship, if you will--from behind the waiting tanker. In film, which so often shows the male protagonist “making things happen,” the aircraft making things happen in every refueling scene I can think of is the receiving plane. Sticking with conventional wisdom then, the receiving craft would be the male protagonist . . . receptacle and all.

Second comes the issue of the substance being transferred between planes. In accepting a male role for the tanker and its rigid boom, the analogy would have to posit, as mentioned, the transfer of semen or sperm. But what are the qualities of seminal fluid that

would parallel the qualities of jet fuel? More problematically, what are the *quantities* of seminal fluid that would parallel the quantities of jet fuel? It is perhaps here that the argument for a “male” tanker breaks down most irrevocably. For example, the newest Air Force tanker, the KC-10 Extender (featured in *Air Force One*) can transfer 1,200 gallons per minute, a quantity far out of proportion to a man’s ability to ejaculate.²⁴ Regarding quality, sperm’s mission is to seek out and penetrate the egg in order to engender new life. In no way does fuel fulfill a similar role vis-à-vis the bomber or fighter. In fact, the opposite is true; mission-enhancing fuel allows greater destruction of life, either in the air or on the ground. The (re)generative power of fuel simply does not suggest itself.

The time element is also different: ejaculation is relatively quick, whereas fuel transfer takes longer as greater quantities are off-loaded. This is why visual imagery of male tanker injecting semen/sperm into a female receiver is not compelling. What the coupling of tanker and plane, along with its fuel transfer, does suggest, is advanced below.

Reading the Tanker as Passive and Female

I posit in this chapter that the receiver aircraft is male and the tanker is female because the tanker’s role is to provide sustenance, fuel, “food” for flight. This is a universally recognized maternal role. The active fighter or bomber, the “hunter,” needs fuel to realize its mission. The tanker, then, nurtures the hunter. At its most basic level, this suggests the original connection between mother and dependent offspring through the umbilical cord. Beyond that, it certainly suggests breast-feeding as well.

The Umbilical Cord

I have just made the argument that fuel does not satisfactorily approximate the qualities of semen and sperm for it to support a tanker as male analogy. In fact, there is another bodily fluid that comes closer to fulfilling the functions of fuel, and that bodily fluid is blood. Taking it one step further, the image of two planes in flight, cruising in relative non-motion, connected by a hose or boom, one transferring sustenance to a needy other, is most closely suggestive of mother and child connected by an umbilical cord. I believe it is this image that most often occurs in the minds of viewers when they see a scene of aerial refueling in a movie. To my mind, this is the ruling paradigm for aerial refueling scenes, not the one of sexual intercourse.

The parallels fall in place one by one. First is the question of need: the tanker needs nothing from the other plane. In fact, the tanker gives of itself the very substance it too needs to remain in flight; the act is selfless, much as the acts of a mother are idealized to be. Second, both the quality and relative quantity of fuel and blood are comparable. While blood itself may not be the precise fluid that fuels the body, it is so often popularly conceived to be that the analogy flows easily. Think of the common terms “the blood of life” or “one’s lifeblood.”

The relative quantities of blood in the body and fuel aboard both tanker and in the tanks of the receiving craft are also close. While it is true that blood is not pooled or stored in the body in a way that fuel is in an airplane, both systems are buried beneath a cover, leaving it to our imaginations to picture the functions they play. It does not seem too farfetched to me to imagine that fuel courses through the plane’s body and wings, delivering power to engines in the way that blood courses through arteries and capillaries to deliver power to the body’s muscles. When this general image is narrowed down to the particular case of a mother feeding her baby through the umbilical cord, the analogy seems

all the more appropriate. The baby is entirely dependent on the mother's supply of nourishing blood to sustain life. Similarly, the receiving aircraft is dependent on the tanker to stay in the air long enough to fulfill its mission and return safely to base, or, in extreme cases, to stay in the air at all.²⁵

A further analogy could be made. Just after birth, when the mother and infant are still connected by the umbilical chord, while the baby is still dependent upon the supply of mother's blood for life, a great tension wells up: will the baby take its first breaths? Will the baby breathe on its own? Will the baby survive and go on to attempt and experience and accomplish all the things that human beings do? I believe it is this tension that adds so much drama to scenes of aerial filming on the silver screen, for these scenes are not just humdrum accounts of flying as usual. On the contrary, they are meant to have us ask ourselves, "Will this aircraft and its crew survive? Will they, after having received their last injections of life-sustaining fuel, sever the bond to the mother/provider ship and continue a life of their own? Whether the receiving ship is on its way to a target or returning to base is irrelevant. The point is that the aircraft is in need of fuel to stay aloft, and the bonding with the tanker is all that will allow it.

The breast-feeding imagery works in a similar fashion. Once positioned at the breast, the infant waits patiently to take on its "fuel." Replacing blood with milk still conveys a sense of providing sustenance, and the elemental connection between mother and child is nearly as strong. Finally, though the imagery fits four-legged animals more closely, the positioning of the ambulatory offspring and mother with extended teats approximates that of a receiver aircraft and its tanker. Is it not true that the receiver "suckles" from the tanker?

With respect to this mother-child imagery, I would add one further suggestion: Since the umbilical cord/breast feeding thesis implies a mother-infant relationship, to what

extent does this “infantilize” the bomber (or fighter) aircraft and, by extension, the largely male cast who create, maintain, and fly these aircraft? Certainly Kubrick’s *Dr. Strangelove*, for example, which opens with a farcical scene of aerial refueling, has infantilizes the entire cast of men in the movie, from B-52 pilot to generals in the war room to Russian diplomat/spies to leaders of the Soviet Union and United States. In most other flying films, however, whatever passive and “infantile” temporary states the receiving aircraft might have, it instantly reverts to the active and aggressive ship it is generally perceived to be as soon as it has obtained needed fuel.

Queering Aerial Refueling

Finally, one more possible sexual connotation of aerial refueling must be mentioned in passing, though it would seem to depend more on the image desired by the viewer than on that created by any of the aerial refueling scenes I have studied. The “queering” of the coupling of tanker and receiver is at least as plausible as that of more traditional heterosexual intercourse, insofar as some models of the same plane are able to refuel fellow ships (the KB-29B and similar B-50D fit this bill²⁶), while other aircraft could both download fuel and take it on. As of 1998, nine KC-135s have had the “androgynous” ability to either fuel or be fueled in flight.²⁷ The newer KC-10s also have this ability,²⁸ as will the KC-767 when it becomes available.²⁹ I have never, however, seen this coupling portrayed in film, so I will not introduce the theme into the text.

Films with Booms

Strategic Air Command (1955)

In the first film of the SAC trilogy, the Air Force worked directly with Hollywood to educate the public about the demands made on the men who comprise the nuclear bomber

force and to expose the audience to the latest equipment available for protecting the United States. As we saw in the last chapter, all three of these films reinforce the sense that America is well protected but only at the personal expense of servicemen like Dutch Holland and their families.

In keeping with the heroic stance evident in the trilogy, the aerial refueling scene in *Strategic Air Command* is impressive. As a peacetime exercise, Dutch's entire wing will be physically transferred to Yokota, Japan, necessitating in-flight refueling for the forty-five B-47s involved. A large wall map at headquarters shows the scope of the mission, starting in the mid-United States, flying over the Aleutian Islands of Alaska, then on to Japan. The refueling will take place over Alaska, which is clear from the many aircraft markers placed on the map in that position.

To the accompaniment of soothing music, Dutch and his men fly high above the snow-capped mountains of the Aleutian Island chain, in stark contrast to the earlier night scene over Iceland where his men had to bail out in minus forty-two degree weather to escape an engine fire on the B-36, while Dutch crash-landed among the rocks and snow. The transition to the six-engine, jet-powered B-47 keeps them high above such dangers, and the rendezvous with a KC-97 tanker will merely cement that security. The scene itself is the antithesis of danger, as the music continues and the two planes begin their waltz together. Banter is exchanged ("Do you want ethyl or regular?") and the coupling is done professionally and safely. The bright blue sky and the white mountains in the background provide an uninterrupted sense of triumph over nature, extending the American drive for "a passage to India" and the "gardens of Asia."

Bombers B-52

As *Bombers B-52* was released in 1957, the KC-135 Stratotanker was not yet available for filming, which is why the in-flight refueling scene uses the older prop-driven Boeing KC-97. The first attempt at in-flight refueling in *Bombers B-52* fails because of a malfunction in the B-52. Later, however, on the way to Africa, the bomber needs to refuel over Bermuda. The shots of the KC-97 tanker and bomber engaged in the delicate dance of aerial coupling are excellent, again reinforcing the Air Force's technical prowess. As always, the tanker flies ahead and above the receiver, and both craft close until the fuel pipe is safely inserted, after which refueling begins. Just as in *Strategic Air Command*, the pilot banters with the boom operator, asking him to wipe the windshield and give him "some of those green stamps." The refueling goes off without a hitch. The viewer should recall, however, that the actual refueling of a jet-powered B-52 by the prop-powered KC-97 was fraught with danger, as explained above, but the Air Force's intentions are not to share all the risks of flying. Rather, they seek to communicate a sense of professionalism that will engender confidence among the troops and the public at home viewing this "educational" film.

A Gathering of Eagles (1963)

Despite being a drama about maintaining readiness for nuclear war using B-52s and ballistic missiles, *A Gathering of Eagles* has relatively few flying scenes. Fortunately, the ones they do have show a fair amount of aerial refueling activity, beginning with the opening credits. Here, a B-52 takes off on a mission, followed by a KC-135 tanker. Behind the credits, we see the two planes mate above the clouds in a standard depiction of this procedure.

A quarter of the way into the film, we see the main flying and refueling sequence of the movie as Col. Caldwell (Rock Hudson) pilots his B-52 on a low-level bomb run. Once the simulated run is completed, he gains altitude to meet his refueling tanker, whence begin some of the most colorful and clear refueling shots on film. First, the viewer watches from the vantage point of the refueling pod on the bottom rear portion of the tanker as the silver B-52 rises to meet it. The KC-135 is sporting a high-visibility orange stripe around the rear of the fuselage, while the bomber has a bright white section above the cockpit in the area of the refueling receptacle. The director alternates shots from behind the head of the refueling operator on the tanker and the heads of the two pilots in the B-52, giving a you-are-there sensation to the sequence. After the connection is made, the operator informs the pilots, "You have fuel flow," and the camera then zooms out to a side shot of the two multi-engine jets flying in tandem.

Aboard the bomber, the flight engineer investigates a gas leak, when suddenly the fuel line bursts and sprays hundreds of gallons of aviation fuel on the deck of the B-52, whereupon Col. Caldwell cries out, "Breakaway! Breakaway," and the two aircraft make an emergency disengagement. With volatile fuel sloshing on the floor of his bomber, Caldwell nervously prepares to land, gingerly lowering his gear but refraining from lowering the landing flaps, lest a spark ignite the fuel. Without flaps, a high-speed landing is necessary, and as they touch down the braking chute is deployed. Still, only heavy wheel braking can stop the ship, though this causes dangerous overheating. Once stopped, the men evacuate, while the well-trained ground crew prevents a fire.

Near the end of the film, during the second Operational Readiness Inspection, there is a short scene of a B-52 that is having difficulty connecting with its tanker because of heavy turbulence. After two airborne break-offs, the pilot finally gets his load of fuel, allowing Caldwell's team to pass this punishing test.

Dr. Strangelove (1964)

In this satire, the movie opens with an aerial refueling scene straight from the SAC trilogy, which is but a beginning example of director Kubrick's intention to skewer everything about the military, for there is nothing heroic or charming intended in this portrayal of a nuclear bomber. The shot is of the B-52 itself, gently floating high above earth and clouds, seemingly motionless. Then, looking down the extended boom of an aerial refueling tanker, we see the top and front of the eight-engine bomber, wings spread wide like a hawk's. The soft music makes us think of a choreographed dance between two infatuated lovers, the exact opposite of what these warbirds really are. Kubrick succeeds in making them look decidedly benign as his shots cut from side views to top views of the two embraced planes. With their gentle movements caused by air currents, the tanker and B-52 are hard to imagine as potent weapons. Finally, as the last credits roll by, the B-52 disengages from the fuel boom and gently fades back from the vantage point of the tanker's pod, never once imparting a sense of threat. This imagery of utopia above the clouds never leaves us throughout the film, not even in the apocalyptic ending, which, of course, makes the satire all the more potent.

Interceptor (1992)

After *Dr. Strangelove*, there was a long drought of images of the aerial tanker, extending, as far as I can discern, until the early 1990s, when *Interceptor* was released. This gap of over two decades saw the augmentation of the tanker force with the first jumbo tanker, the McDonnell Douglas DC-10-derived KC-10 Extender.

In *Interceptor*, a U.S. military fighter pilot is being disciplined for ejecting from his experimental F-117 fighter. From Turkey he is sent back to the U.S. aboard the Air Force's largest cargo plane, the C-5 Starlifter. In this movie, the use of an aerial refueling

boom is crucial to the plot development. Evil men plan to board this cargo plane and steal the two F-117 fighters aboard by flying them out of the rear-loading door of the C-5 while in flight. To gain aerial access to the cargo plane, they have an unorthodox plan to come down the mock refueling boom of a KC-10 Extender and enter through the top of the cargo jet. To do this takes some creative planning and audacious flying.

The C-5 is scheduled to rendezvous with an Air Force KC-10, and the villains take this opportunity to substitute their own special DC-10 for the KC-10, moving into position in front of and above the C-5. On cue, they extend their boom toward the cargo plane flown by the unsuspecting crew. The technician in the group then deftly slides down the boom until he reaches the outer skin of the C-5, into which he cuts a circle big enough for men to go through. Having secured the boom to the C-5 with metal screws, he then helps the other villains slide into the passenger area of the cargo plane, which is just behind the cockpit but above the spacious cargo hold. Typical good guy-bad guy action follows. The point here is that the refueling boom has been employed in a dramatically novel way, a device repeated at least four more times soon after. All four movies rely upon fanciful deployments of the tanker and boom scheme to advance their plots, beginning with *Executive Decision* (1996), followed by its cheap imitator *Strategic Command* (1997), then the clever *Final Descent* (1997), and finally *Airspeed* (1999).

Executive Decision (1996)

Of the four boom scenes during the period 1996-97, by far the most important was from the big-budget *Executive Decision* (1996). Here, Kurt Russell stars as Dr. David Grant, top government foreign policy analyst, while Steven Seagal appears as a macho military man. Hijackers from the Middle East have commandeered an Oceanic Airlines 747 bound for Washington, D.C. and have positioned deadly nerve gas canisters in the cargo hold.³⁰

In order to board the plane in flight, a group of commandos led by Seagal fly aboard a stealth F-117 Aurora fighter, sitting behind the lone pilot in an area in which one might expect to find jet engines. Once they catch up to the jetliner, a flexible telescoping boom is extended from the top of the fighter to the bottom of the jumbo jet, allowing an engineer from the fighter to climb the ladder inside the boom, open the fictional outer hatch on the bottom of the 747's hull, then turn the latch on the inner hull, completing the passage from fighter to avionics bay of the passenger jumbo without breaking the pressure seal.

The men then begin to sneak aboard the 747, but sudden wind sheer causes both planes to dive wildly, making the airlock increasingly tenuous. The 747 pilot compensates by pulling up on the yoke, putting further stress on the boom. Lacking sufficient time, only part of the crew can get aboard, and the commander, played by Seagal, is swept away in the slipstream where he is caught mid-way between the F-117 and 747, though he was generous enough to lock the external hatch on the jumbo before dying. After its boom has disintegrated, the F-117 tumbles wildly out of control, and the pilot safely ejects at the last minute. It would be an understatement to call this use of a boom inventive.

Strategic Command (1997)

This made-for-TV movie is a direct rip-off of *Executive Decision*, coming only a year after the original (a fact attested to by the Japanese title of the movie: *Executive Command*³¹). The use of a telescoping boom is identical to the concept from *Executive Decision*, though the plane to which it is attached is different, though no less glamorous. In *Executive Decision*, a Stealth F-117 fighter had been gutted to carry a bevy of armed commandos and the machinery comprising the telescoping boom. In *Strategic Command*, the plane used is the supersonic spy plane, the futuristic SR-71, which has no trouble catching up to the lumbering 747. Many other elements, such as the chemical attack threat against the

United States, are shared with *Executive Decision*, but they are discussed elsewhere in this dissertation.

Final Descent (1997)

In the same year as *Strategic Command*, television viewers also had the opportunity to watch a fantasy role for the KC-135 tanker. In *Final Descent*, as we saw in the previous chapter, Captain “Lucky” Singer (Robert Urich) does not give up on the idea of weighting down the nose to level. Down in the front hold, he realizes that the bay for the nose gear is sealed, so if they can fill it with water, it will not only bring the attitude of the plane into descent, it will add the benefit of allowing a normal nose-up flair upon landing because the water will simply spill out when the wheel well opens. The task, then, is to get a refueling hose from the tanker into the front wheel well. Here the movie repeats *Airport ‘75*’s solution: make a hole near the cockpit so that needed people or equipment can be taken aboard.

In the case of *Final Descent*, the captain jettisons the cockpit crew’s overhead escape hatch while in flight to open the cockpit up to help. Captain Singer’s close military buddy then maneuvers the KC-135 aerial tanker into position, first delivering needed arctic suits for the crew (the temperature at their altitude of 31,000 feet is minus 33 degrees). Next, the tanker crew maneuvers a water hose through the opening in the top of the fuselage, and three Canadian oil well riggers who happen to be aboard pull it inside, where Captain George Bouchard pulls it down into the lower hold, positioning it in the wheel well. More water than anticipated is needed, but in the end the added weight indeed brings the plane’s nose down and an approach to the airport is executed. Just prior to touchdown, Singer opens the doors to the wheel well, the water rushes out, allowing the plane to “flare” as it comes in, and a tense but successful landing is made.

Airspeed (1999)

In this rather original plot, Nicole, a 13-year-old spoiled rich girl, flies aboard her father's private 727 along with two employees charged with caring for her. Starved for attention but too obnoxious to properly convey her needs, she ends up annoying any adult she meets. In the cockpit, the tension comes from a storm through which the two pilots try to fly, when a bolt of lightning knocks them both out and blows a hole in the left side of the fuselage, resulting in catastrophic decompression.³² The two employees back in the cabin are unable to reach their oxygen masks and soon pass out, but fortunately for Nicole, she had been killing time by doing an imitation of *Star Wars* antagonist, Darth Vader. She uses her father's precious Roberto Clemente baseball bat as Vader's laser sword and takes the emergency oxygen mask from the first aid kit to reproduce his strangely mechanical voice. Thus, when the lightning strikes, all she has to do is turn on the valve supplying the oxygen.

Though one employee briefly recovers, she soon passes out again, forcing Nicole to take charge. For now, all she can do is communicate with the control tower, but that at least allows them to communicate their rescue plans. Since a 13-year-old girl would never be able to land a 727 by herself, experts on the ground conceive of a plan to use a KC-135 tanker to put a pilot aboard the crippled 727 and remove Nicole and the injured parties on board. Unfortunately, the cinematic execution of this scheme is flawed and destroys an otherwise just barely plausible story.

First, the KC-135 tracks down the 727 and pulls up behind and above the tri-jet. In the cockpit, we see a lone pilot sitting in what appears to be a plywood mock-up of a cockpit. The only sign of equipment onboard is a heavy fire extinguisher attached to the wall behind. For his part, the pilot spends all his time telling controllers that he cannot

hold the pattern, all the while extending his arms to their maximum to reach the wheel, which he liberally pumps forward and back for the duration of his appearance.

The setting in the back of the tanker is not much better, nor is the plot: the boomer pilot will extend the boom laterally to the 727 and insert it into the hole in the fuselage caused by the lightning, allowing some sort of cable to be rigged for the transfers. Whether it is intentional or not is hard to say, but the boomer scene does provide an obvious Freudian interpretation based on these circumstances: Presumably, the 13-year-old girl is a virgin, though she may well have inklings--and perhaps fears--about sex. The long boom being inserted into the hole "torn" in the fuselage could reasonably be seen as the deflowering of a virgin.. In fact, Nicole's encounter with the boom seems just that.

Seated in the pilot's seat, Nicole is told about the plan to use the boom for a transfer. To be successful, however, she must approach the tip of the boom and hit it hard so that a grappling device will deploy and keep it latched firmly inside the hole. She takes the baseball bat to do the job, but when she enters the cabin, she is threatened by the violent, snake-like action of the boom, which lurches and retreats as turbulence outside rocks the two planes. Nicole is horrified by the encounter, screaming and moving away from the aggressive boom. In addition, the vivid colors of the interior, plus the pulses of lightning outside serve to create a dreamlike state, which could be Nicole's subconscious fear of the penis.

In any case, the boomer plan fails, and the planes separate, leaving one last desperate try. Impossibly, the rear of the KC-135 tanker, which is normally tapered as the fuselage meets the tail, now has a loading ramp big enough to hold a group of soldiers. No doubt this contrived design was meant to mimic the in-flight rescue action of a movie like *Airport '75*, in which men were winched down from the open cargo ramp of a large helicopter. To get the rescuers from the ramp to the 727, the pilot pulls to within feet of

the 727's extended nose gear, and a man *jumps* from the ramp onto a tire of the nose gear, from which he climbs aboard the plane.

Some of the unconscious adults are rescued via the cable system, but Nicole does not have the strength to move her beloved--but obese--friend, Frank. Growing turbulence threatens the whole procedure, which then ends as the rescuer falls out of the plane. Exasperated, Nicole, instructed that she will never be able to overpower the plane's autopilot, takes the bat into the cockpit and says, "Yeah, well the autopilot's not as pissed off as I am." She then proceeds to smash the autopilot with the bat and assumes control of the plane, which she safely lands with instructions from the ground.

Air Force One (1997)

In what may be the most spectacular computer-generated image of an airplane crash, the creators of *Air Force One* script that the hijacked presidential jet be refueled mid-flight because the President (Harrison Ford) has used a butter knife to cut wires in the avionics compartment, initiating a spontaneous full dump. The hijackers who have control of the plane threaten to kill one passenger per minute until the Vice President agrees to send an aerial refueling tanker. To accomplish this, an Air Force KC-10 Extender is ordered into place, arriving in time to off-load much-needed fuel.

The choreography throughout this sequence is superb, as time has been slowed in this computer-generated scene to emphasize the mass of both aircraft and the boldness of their maneuver. As the KC-10 assumes the familiar in-front-and-above aerial refueling position, the viewer can see the guiding lights under the forward fuselage. The next scene shows the flying boom, followed by the light-blue nose of Air Force One as it inches toward the boom. Once the probe from the boom is secured in the nozzle on the nose of Air Force One, refueling commences. The transfer is not routine, however, as the

President leads dozens of passengers to safety in the lower rear cargo hold of the presidential 747, where they affix parachutes and proceed to jump.

A hijacker's attempt to thwart this escape attempt results in the depressurization of the jet, which in the movie forces the nose of Air Force One down, putting stress on the link to the fuel hose and creating a massive leak where the boom meets the rear fuselage of the tanker. "I can't hold her," the hijacker flying the plane cries. "Air Force One, break away, break away," comes the response from the tanker. Seconds later, the fuel probe pulls out of the nose of Air Force One, sending a cascade of jet fuel across her windows. Friction between boom and 747 creates a spark, which ignites the still streaming fuel, resulting in a serious conflagration. To escape the flames, the pilot of Air Force One dives steeply to the right.

The tanker is not so lucky. Flames follow the boom back to the source of the fuel, the KC-10 itself, and immediately enter the fuel tanks. The results are predictable and are executed spectacularly in the slow-motion effects of computer generation. First, a fireball erupts in the rear half of the tanker, bending its tail section upward. The next shot is taken from below the 747, again to emphasize its mass, and as the plane dives hard to the right, the stricken KC-10 floats by above it, wings and forward fuselage intact, rear fuselage a ball of fire. Comparisons to the burning Hindenberg are inescapable.

Finally comes the last sight of the doomed tanker. The camera has moved back to the rear of Air Force One, where the President dangles precariously from the extended ramp of the cargo bay. As he flails about, the massive fireball that is the tanker falls behind him, orange flame filling the screen. Visible in the middle of the flames is the nose of the dark-gray KC-10 as it plunges to earth in slow motion. This failed refueling effort points up the dangers of mating two mammoth pieces of flying machinery and transferring volatile fuel between them.

The Sum of All Fears (2002)

In this Tom Clancy-derived, big-budget film, we again meet Clancy's alter ego, Jack Ryan, agent and analyst *extraordinaire* (played here by Ben Affleck). As with a few other movies mentioned in this dissertation, *Air Force One* plays a role, in this case an escape scene requiring aerial refueling. After neo-Nazi renegades from Europe have planted and detonated a low-yield nuclear device under the football stadium in Baltimore, the President, who was attending the game, is caught in the blast, though not killed. Marines arrive in helicopters and ferry him directly to the waiting *Air Force One*, which lifts off immediately. The refueling scene here is short and straightforward. First, we see a twilight shot of an Air Force KC-10 Extender waiting with its boom extended as *Air Force One* flies toward it. Later, we see them connected, and this ends the refueling scene.

Note that in this film the familiar Presidential VC-25A was clearly not depicted. Though other films such as *Air Force One*, *Independence Day*, and *In the Line of Fire* had portrayed this modified 747-200, in *The Sum of all Fears* one of the Air Force's E-4Bs was obviously used, as is evident by the large radome above the hump of the normal 747. As Air Force spokesman Bruce Gillman notes, "The characters are using the National Airborne Operations Center due to the fact that a bomb detonated in the Capital Region."³³

The Perfect Storm: Salvation Denied

The refueling scene in *The Perfect Storm* (2000) is a small exception in this dissertation for two reasons. First, the receiver is a helicopter, not an airplane, and second, the tanker is not one of the more commonly portrayed tankers. Instead, it is a four-engine, propeller-driven tanker known as the KC-130, the tanker version of the versatile military cargo plane,

the C-130. This straight-wing refueler is used primarily by Marine Air Ground Task Forces, and the scene in which it appears in *The Perfect Storm* is the only example of its kind I have seen.³⁴

Wolfgang Peterson (*Das Boot, Air Force One*) is the director of *The Perfect Storm*, the saga of an epic battle with the sea. Caught in the convergence of two massive North Atlantic storms, a number of small boats are in peril. The Coast Guard is called upon to rescue first the crew of a yacht that is disabled by the storm. A rescue helicopter with a crack crew responds and picks up the crew of the yacht from the sea, despite the ferocity of the storm. Returning to shore with the survivors, another distress signal comes in, this one from the crew of the *Andrea Gail*, the focus of this film.

The helicopter crew elects to deposit its passengers on a freighter at sea in order to continue on to rescue the crew of the *Andrea Gail*. To do so, however, they will have to execute aerial refueling under adverse conditions. This scene mirrors the main scene taking place below on the surface of the sea: the ancient contest of man vs. the power of the sea. In both surface and aerial cases, man loses, as nature once again proves her remorseless domination over man.

As always, the aerial refueling represents the ability to provide the lifeblood of flight: fuel. In this case, however, it is a story of salvation denied, as the weather prevents the pilot of the helicopter from successfully coupling with the tanker. This four-engine propeller workhorse of many militaries throughout the world does duty here as a slow-moving aerial refueling tanker for the rotary wing Sikorsky S-70 (U.S. Coast Guard HH-60 Jay Hawk) helicopter.

Fitted with two hose and drogue units, the refueling tanker flies into position above the fuel-starved helicopter above high seas. The co-pilot of the Jay Hawk uses his night-vision goggles to attempt an insertion of the helicopter's probe into the refueling basket in

front of him, but gale-force winds blow the refueling drogue about wildly, making a coupling impossible. After repeated attempts, the helicopter crew is faced with a stark choice: continue to attempt refueling at the risk of running out of fuel and crashing uncontrollably into night seas, or break off now and execute a controlled descent into the sea. Because the latter choice offers the opportunity for the crew to jump from the hovering helicopter, timing their jumps to hit the crest of the waves, the crew in *The Perfect Storm* elect to do the latter. Most crewmembers survive.³⁵

As discussed above in the section on sexual imagery, the rarely shown system of probe and drogue refueling could be seen as a metaphor for sexual intercourse, with the receiving ship playing the role of active male. With its stiff probe protruding from the front of the helicopter, one could argue that it is a penis symbol. A psychoanalytical reading of the scene might go like this: As the male element, the helicopter, approaching from behind, attempts to insert its “penis” into the “basket” of the female tanker ahead of it. Successful consummation of this intercourse would result in both release of tension and possibly the creation of further life. Unfortunately, consummation of the act is not achieved, leaving both parties frustrated. Symbolically, the helicopter has been rendered impotent--if not castrated--and its issued wasted. This is portrayed in the film when the crewmembers of the helicopter eject themselves from the helicopter into the roiling waves below. Because of the symbolic castration, two men are left trapped into the helicopter, unable to “eject.” Though one eventually frees himself, the other drowns. In its totality, this scene might act out a Freudian drama of catharsis denied, but on the whole I would consider this a weak interpretation insofar as the scene was based on a real incident.

On the whole, most aerial refueling scenes are faithful to their American military counterparts, showing more realism than fantasy. In every case, the tankers are incidental to the real drama, which is regrettable given the opportunities for action and suspense of a

tanker-based film. Still, the scenes we have reviewed of aerial refueling range from the majestic and beautiful to the horrific, and many flying films have benefited from their inclusion.

CHAPTER 6 ATOMIC AND CHEMICAL THREATS IN THE SKY

I bring you a warning. Everyone of you listening to my voice. Tell the world. Tell this to everybody, wherever they are. Watch the skies. Everywhere. Keep looking. Keep watching the skies.

Reporter Scotty in *The Day the Earth Stood Still*¹

Holocaust from Above

As is well known, the United States was the first nation on earth to build and employ a nuclear weapon. Two atomic bombs were carried aboard U.S. Army Air Force planes and dropped separately on Japanese cities. Subsequently, America built a wide-ranging system of strategic air bases to allow for projection of American nuclear power. Once the Soviet Union had developed its own nuclear capability, however, the stakes during the Cold War became much higher to civilians on both sides. The fear that a nuclear war would erupt between the Soviet Union and the United States, raining destruction from above, was palpable during the 1950s and into the 1960s and beyond.² An additional fear was that advanced technology itself might trigger an unwanted nuclear exchange.

This theme was developed in film in a variety of ways. For example, 1964 saw two very different takes on the same theme. *Fail-Safe*, starring Henry Fonda, was a sober, understated treatment of the prospect of accidental nuclear war, while Stanley Kubrick's *Dr. Strangelove* was pure satire. One of the most developed explorations of the intersection of such films and the fear of aerial nuclear war is to be found in Margot A. Henriksen's discussion of nuclear war films in her 1997 book, *Dr. Strangelove's America*, where she claims that such films "delivered an overriding message of atomic insecurity: from 'here at the top of the world,' as reporter Scotty noted, Americans now

needed to ‘watch the skies’ incessantly.”³ In these cases, the image of the airplane and theme of death from above were prominent and will be discussed at length below.

While the common menace portrayed in such aviation films is linked to nuclear war, we can also find the competing fear of chemical or biological attack from the sky, attacks that can threaten those innocents below on the ground, or those that threaten the crew and passengers aboard the plane itself. An interesting observation is that fear of atomic attack was undeniably strong among the American public during the Cold War, but that threat, which was once a monopoly held by the long-range bomber, gradually became divided among three weapons systems: the bomber, the land-based ICBM, and the ballistic missile-equipped submarine. This three-way division served to lessen the focus on the bomber, a focus that was further diminished as the Cold War began to wind down and the threat of bomber attack from the Soviet Union faded. By the time of the fall of the Berlin Wall in 1989, fears of mass destruction associated with the atomic bomber had switched to other scenarios involving aircraft: the threat of chemical or biological destruction. How rational this fear was remains debatable, but in film the theme was worked in many creative and revealing ways.

For example, a disturbing similarity between the filmic theme of chemical contamination aboard a flight and real life comes with the sudden emergence of severe acute respiratory syndrome, or SARS. Witness this actual account of the airborne spread of the ailment:

On 23 February 2003, a Continental Airlines flight from Hong Kong landed in Toronto carrying a 78-year-old grandmother and her husband. . . . The aircraft that touched down on the runway brought with it a lethal organism that, two months later, would in effect shut down Canada’s commercial capital. . . . In Hong Kong she and her husband had stayed on the ninth floor of the Metropole Hotel at the same time as Liu Jian Lun, a Chinese professor of respiratory medicine who is now known to be the case that triggered the global epidemic. . . . A single sneeze in the

Metropole's lift lobby may have been enough to infect seven other people who subsequently spread the illness round the world.⁴

Few who have lived through 1990s America will have difficulty associating such contagion with the AIDS epidemic that has plagued much of the world, or with other threatening diseases such as the Ebola virus, West Nile virus or Mad Cow Disease (BSE).⁵ It is perhaps not coincidental, then, that the theme of chemical attack or contamination aboard a plane can be found in a number of recent movies, including *Executive Decision* (1995), which features an impending chemical attack on Washington, D.C., by a group of Arab terrorists who have secreted nerve gas aboard their flight. Then there are the made-for-TV movies *Pandora's Clock* (1996) and *Power Elite* (2002), both of which feature chemical weapons scenarios.

One of the more intriguing flying films that deal with chemical threats is *Killing Moon* (2000), a movie in which a stolen virus has spread among passengers and crew aboard a Boeing 737 on an inter-island flight in Hawaii. Once infected, victims can die within minutes, and of course no one can escape. Fearing a further spread of the contagion, the plane is ordered to fly to California, where a malevolent U.S. government official intends to force it to crash into the mountains to preserve his secret biological warfare research. These and other movie examples serve perhaps to visually embody the particular fears Americans displayed and continue to display in the post-Cold War world, a world in which the threats have changed dramatically as the threat of nuclear war between the Soviets and Americans has faded, while globalization has hastened not only the spread of commerce and travel, but also the spread of chemical or biological threats. First, however, attention to the two major nuclear Cold War films and their successors is in order.

Dr. Strangelove (1964)

Stanley Kubrick's *Dr. Strangelove* sets the bar for ironic looks at the Cold War. In this well-known film, an American nuclear bomber mistakenly drops a nuclear bomb on Russian territory, sparking a nuclear holocaust. As the vehicle carrying the weapon, the B-52 is integral to the film, so a careful consideration of how it is used is needed. This film falls squarely in the category of Red Scare movies that were common in the 1950s, wedding the fear of nuclear attack from the sky with the fear of alien invasions. Such films as *Invaders from Mars* (1953) and *Invasion of the Body Snatchers* (1956) are two classic examples of this. Coming just as it did after the Cuban Missile Crisis of October 1962, *Dr. Strangelove* was part of a "diverse rebellion" that "grew in response to the menace of American power and to the menace of an American system that had absorbed the debased values associated with the bomb and the cold war."⁶

Though the threat of nuclear war pushed the United States and the Soviets to sign the Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space, and Under Water (Britain also signed), fear of atomic war was hardly gone from the minds of the public. Thus, Kubrick's masterpiece was exquisitely timed to both reflect prevailing moods and to channel those moods in a particular direction. This direction, according to Henriksen, "offered the ultimate denigration and devaluation of the system." Ultimately, this destruction "left only one option in a culture poised at judgment day: a revolutionary commitment to a new system and a new set of human and moral values."⁷

Both the beginning and end of the movie establish and reinforce the black humor that plays front and center throughout the film. Beautiful, soothing, romantic music is paired first with a variety of in-flight shots of a B-52 refueling from a KC-135 tanker and then with multiple clips of nuclear bombs exploding. To introduce the drama, Kubrick first shows a soothing top-down expanse of clouds broken only by black mountaintops

(the film is black and white), recalling perhaps a Zen rock garden. A voice-over explains that the Russians are rumored to be working on a “doomsday device” capable of destroying the world. As the opening credits roll by, with soft music in the background, the B-52 is shown gently dancing with a refueling tanker, introducing the pivotal aircraft in the film.

The first scene after the credits shows us the Strategic Air Command base from which the bombers are launched. We see a parked B-52 illuminated under the glare of lights, followed by the take-off of one of the other bombers. Though starker than the previous images, these realistic views of the bombers still do not imply menace. Even when an insane Gen. Jack D. Ripper seals his base and sends the attack code to his bombers, we still cannot escape the feeling that the entire enterprise is a farce, which is reinforced by such things as a prominently posted sign on base, “Peace is Our Profession.”

Words do not match impressions in this movie. For example, as we watch a procession of in-flight shots of the B-52 flying over a range of locations--mountains, seas, beaches--we are more in mind of a travel pitch than a message of war. Even when the narrator intones that these planes are on duty “twenty-four hours a day,” each with fifty megatons of explosive power, which is more than sixteen times the combined explosive power of all armies and their bombs in shells in World War II, the impression is more of a pitchman extolling the virtues of the latest General Motors car or a new electric drill, not of a world destroyer. In this satire, this lethal bomber is a warm friend.

Kubrick’s use of the confines of the plane’s interior shows again why the big bomber, cargo plane, or commercial airliner is preferable to the fighter cockpit with its cramped quarters. On the B-52, the two pilots have freedom of motion and can talk and gesture directly to each other, plus they can walk about the plane, as can the others. Thus,

for instance, Kubrick adroitly uses the layout of the plane to develop the character of the bomber commander, one Major T.J. “King” Kong. At first dozing in front of his instruments, he goes down to the electronics bay to double check the “Go” code that his flight has just received, which instructs his squadron to attack their designated bases within Russia.

Confirming the authenticity of the message, Major Kong assumes his real persona: that of an unreconstructed cowboy. Back on the flight deck, he kneels before a beefy safe and extracts a necessary tool for nuclear war: his well-worn cowboy hat. This is accompanied by the patriotic Civil War tune “When Johnny Comes Marching Home Again” and a wry comment by Major Kong: “Well boys, I reckon this is it. Nuclear combat toe-to-toe with the Rooskies.” His immature thinking contrasts starkly with the highly advanced technology under his control, a point that Kubrick makes with respect to all the American men throughout the film. Later, for example, when Major Kong opens his survival kit and explains its contents to his men, he says, “. . . one hundred dollars in rubles, one hundred dollars in gold, nine packs of chewing gum, one issue of prophylactics, three lipsticks, three pair of nylon stockings. Shoot, a feller could have a pretty good weekend in Vegas with all that stuff.”

The final third of the movie is devoted almost entirely to the drama aboard the B-52 as it faces Russian defenses and races toward a target. While Kubrick had earlier used stock Air Force footage to portray the bomber, giving it at least a realistic image, in this sequence he uses an obvious overlay of a B-52 on backgrounds portraying the wilds of Russian Siberia, making the plane look silly as it jerks about the sky. Despite the gravity of their mission and the seriousness of their own predicament, Major Kong never rises above his adolescent self. With his plane damaged by a missile, he is forced to fly at near

ground level between mountains to stay below radar, which prompts him to remark, "If we were flying any lower, why, we'd need sleigh bells on this thing."

It is Major Kong's final scene, however, that sums up Kubrick's vision of the American strategic bomber. With radios and other crucial equipment disabled by the missile, Major Kong instructs his men to arm the atomic bombs they are carrying. They are successful but find that the bomb bay doors will not open, so Major Kong himself goes into the bomb bay for a look. As viewers, we watch the scene from the rear of the bomb bay, looking up and ahead to see two long, cylindrical thermonuclear bombs. On the cap of the left-side bomb someone has handwritten "HI THERE" and on the other "DEAR JOHN." Kong mounts the former, extending his cowboy persona from thought process and hat to riding a semblance of a maverick horse. When the bomb bay doors open, he becomes a cowboy riding a bucking bronco out of the chute. Appropriately, he grips the bomb securely with one hand as it kicks out from under him, falling toward its intended target. The cowboy astride it dutifully waves his hat above him, giving the extended whoops of a man at a rodeo.⁸ As mentioned, this black comedy ends with nuclear destruction, as neither the Americans nor the Russian can stop the doomsday device triggered by the explosion of the B-52's bomb.

Fail-Safe (1964)

This black and white film stars Peter Fonda as the President of the United States, a man now faced with the crushing task of limiting a nuclear exchange that has been caused by a computer malfunction. In this film, rather than the bomber heading toward Russia being the usual B-52, here it is the supersonic B-58 Hustler and it does get through to obliterate Moscow. Only passing shots of this bomber are shown, so it is more of a peripheral flying film.

By Dawn's Early Light (1990)

When a rogue missile of unknown origin delivers a nuclear warhead to the Soviet Union and the Soviet Union assumes it is an American attack and retaliates, the President of the United States is put in a desperate situation, just as in *Fail-Safe*. Worse, elements of his military see this as an opportunity to ambush a wounded enemy. The flying scenes here are extensive, as two of the main characters are pilots of a B-52 instructed to carry out nuclear attacks on their targets inside Russia. In addition to the B-52, there is an EC-135 Airborne Command Post (ABNCP) and an E-4 (747-200) Airborne Command Post (see chapter three for a description).

Sitting in the White House, the President is vulnerable to a nuclear missile that has been launched toward Andrews Air Force Base. Rather than run, he hunkers down in the situation room in a sub-basement and survives the off-target blast. Soon after, however, he is involved in a helicopter crash and assumed killed, so the E-4 is sent to Baton Rouge to take aboard the new President, the Secretary of the Interior. Meanwhile, B-52s have been scrambled and assigned their targets. Leaving its base in Spokane, Washington, the B-52 feels the effects of the Soviet missile that vaporizes their base. Soon after, three Soviet fighters attack the bomber, launching missiles that are deflected by counter-measures. One fighter is destroyed by fire from the rear-mounted canons on the B-52, but it takes a nuclear detonation of one of the bombs aboard the B-52 to eliminate the other two fighters.

Reactions from crewmembers aboard the B-52 to news of a nuclear warrange from professional and stoic to disbelief and denial. The pilot does not question his orders and sees this as a job to be done, but the co-pilot is reluctant to be part of any nuclear escalation. Below deck, one of the radar men barely holds on to his senses, drifting in and out of sanity as he thinks about his family back on base. When the pilot aborts the

bombing mission, this radar man cracks and tries to kill the pilot. This failing, he straps himself into an ejection seat and pulls the handle, jettisoning himself up through the roof. The decompression sucks two remaining crewmembers out the hole, leaving only the two pilots.

Most of the action continues in the air as the warmongering new President aboard the E-4 747 seeks to launch an all-out assault on the Soviets, while the commander of the EC-135 refuses to carry out such orders. When it is discovered that the real President is still alive and has given orders to stop the nuclear attack, the only option is to down the E-4. With no offensive weapons on board, the sole option is for the EC-135 to ram the larger 747. Given their similar speeds, this is a longshot, but the pilots aboard the 747 realize the fate of the world is in their hands, so they allow the pursuing jet to catch them. Banking lazily across a sun reddened by nuclear fallout, the 747 is an easy target for the EC-135, which hits broadside, right on the “C” of THE UNITED STATES OF AMERICA. The nuclear exchange comes to an end. To signal this new hope for normal life, the final scene shows the B-52 flowing low over the ocean into a beautiful sunrise, whence the pilot states, “Welcome to tomorrow.”

Fail Safe (2000)

This gripping remake of the 1964 *Fail-Safe* marks the return to a live feature-length show by CBS television, something it has not done in thirty-nine years. Shot in black and white, it begins with a routine visit by congressmen to a military command center six stories below the plains of Omaha, Nebraska. This setting is familiar to viewers from the myriad portrayals of NORAD, the Air Force center buried within the Cheyenne Mountains. Set in a cavernous underground arena, the room is dominated by a screen that fills the front wall. This screen monitors real-time deployments of American and Soviet equipment.

On the day of this visit, all is routine, including the appearance of an unidentified flying object over Canada. Such events are common and are handled according to protocol. As the United States has bombers on patrol around the clock, there is no fear of being caught off guard. In Washington, a scene parallel to the Omaha action is developing, one that provides background to the strategies of waging nuclear war versus maintaining peace based on the concept of “mutually assured destruction.” Official American policy is that neither the Soviet Union nor the United States can contemplate launching a nuclear war since it would mean the destruction of their own civilization along with the enemy’s. At the East Coast meeting, however, opposing viewpoints are heard.

The nuclear fate mankind faces is foreshadowed in an early scene in *Fail Safe*. George Clooney, as bomber commander Grady, takes a call from his son in New York. Having just lost his mother to cancer, the son is vulnerable but coping. When he informs his father that the chameleon he has been keeping as a pet has died, the father asks how. Because the son had forgotten to close the shade in his bedroom, the captive chameleon was cooked to death by the sun. The analogy to the position of captive citizens of America and the Soviet Union is obvious. With no way to flee a surprise nuclear attack, civilians would just as surely cook from the rays emitted by thermonuclear weapons as the chameleon had cooked from the rays from the sun. This theme is reinforced in a later scene when General Black (Harvey Kietel), an opponent of nuclear war, cries out in frustration, “This world is no longer man’s theater. Man’s been made into a spectator.” Taking this analogy one step further, this family of father, son, and late mother could be a metaphor for the state of post-World War II Western civilization. Having suffered during the war (the mother represents the sacrifice), father and son struggle to resume life, with the son returning to “normal” activities, which is represented by baseball.

Actual footage of aircraft in this movie, like its predecessor, amounts to only seconds, although some of the drama does take place in the cockpit of the bomber. When Grady's flight is cleared for take-off, there is a dark, grainy shot of a B-58 Hustler taking off. Later, when American fighters attempt to shoot down errant bombers, a fighter that has run out of fuel is briefly shown diving into the Arctic Sea. Finally, there is one shot of a fighter releasing a load of air-to-air missiles. Cockpit-based scenes, however, are ample, as Grady and his crew face the task ahead of them.

Given the role of nuclear weapons during the long Cold War, it hardly comes as a surprise that they have played a central role in so many flying films. They were, however, not the only weapons of mass destruction during the last fifty years. While clothed in much more secrecy, chemical and biological weapons were also part of the arsenals maintained by parties to the Cold War. Add to that the growing threat of deliberate or inadvertent use of such weapons and a new menace confronts humanity. Thus, the discussion moves to airborne threats that are chemical or biological.

Chemical and Biological Threats

In the long history of Hollywood's infatuation with the flying film, we can trace the rise and fall of threats facing fliers and those below, beginning with war films that were inspired by the various wars America was involved in at the time. In addition to these were non-war related films. Not surprisingly, when aviation--and later civil aviation--was in its infancy, the threats posed by the elements acting on primitive machines and men with little knowledge of their surroundings beyond what they could see with their own eyes were the focus of many films. As technology improved, these themes gave way to more urgent fears, including the threat of aerial atomic war just discussed.

Gradually, however, we see the emergence of flying films that posit a sound flying machine equipped with all the instruments needed to cope with unpredictable weather but now threatened by something wholly different: a poisonous substance aboard that may infect and kill all confined to the airborne craft or even tens of thousands of people down below. Whether this threat is chemical or biological in nature makes little difference; the point is that as long as the aircraft is in flight, those aboard are prisoners of the agents seeking their destruction.

Two incipient examples of this threat can be found in *Zero Hour* (1957), a film developed from an Arthur Hailey novel. When the crew becomes incapacitated by food poisoning, the call goes out to the passengers, “Is there anyone aboard who can fly this plane?” A pilot traumatized in the Battle of Britain must take over, saving the airplane and defeating his own demons in the process.⁹ Later, in *Terror in the Sky* (1971), the plot is re-enacted, although this time the traumatized hero is a former Vietnam helicopter pilot suffering post-traumatic stress syndrome. In any case, both films introduce the device of physical incapacitation brought on by a poisonous substance. The closed setting of an airliner makes this an ideal stage for such a drama.¹⁰

Outbreak (1995)

The spate of “mayday” films seen in the 1970s did not rely upon the threat of chemical or biological threats aboard an aircraft. For whatever reason, this theme came into its own two decades later, in the middle of the 1990s, beginning, perhaps, with *Outbreak*, the fast-paced action drama starring Dustin Hoffman as a military scientist who must save the western portion of the United States from biological infection, and followed closely by a surprisingly accomplished made-for-TV movie, *Pandora’s Clock*. *Outbreak* does not fit perfectly in the category of flying film because the viral threat at the center of the movie

spreads on the surface of the earth, but aircraft do play prominent roles, and the concept of a globally spreading outbreak acts to prepare a wide audience for aircraft-based thrillers to follow.

Rather than posit a direct connection between viral infection and the airplane, *Outbreak* yokes the two together in a different way. Infection spreads on the ground, from person to person, or monkey to person, as it originally did in Africa. The aerial fear factor in this film, however, comes from the effort to stop the virus dead in its tracks: the United States military covertly obliterates infected areas and the people living there by dropping a conventional but powerful bomb from a cargo plane. The virus on the ground just as surely, then, brings death from above in this flick, as we see in the opening scene. Somewhere in the African jungle, soldiers are in various stages of illness and no remedy seems to be in sight. Then, however, the African doctor's eyes light up when he sees the approach of a Western military plane, a sight he mistakes for salvation. He soon realizes his mistake when the plane releases an enormous cask, greatly slowed in its descent by a parachute. Seconds before his own demise, it dawns on him that this plane has brought total destruction, which we in fact see as the bomb incinerates ground zero.

In *Outbreak*, Dustin Hoffman plays Colonel Sam Daniels, an eccentric but elite scientist who agrees to save society from Army General McClintock (Donald Sutherland), a ruthless military man bent on controlling America through biological warfare. McClintock has concocted a secret biological warfare scheme and is behind a plan to blow up a small American town to prevent this outbreak from spreading, and it is Daniels' mission to prevent the imminent destruction of the town at the hands of the corrupt general. How he accomplishes this is tied directly to flight, by flying a helicopter straight at the airplane preparing to drop the bomb. At the last moment, the bomber veers off course, and the bomb is dropped harmlessly into the sea.

“We’re In This Together, Folks”: *Pandora’s Clock* (1996)

This TV movie was adapted from John Nance’s novel of the same name and features a viral threat similar to that seen in real life with respect to SARS. In *Pandora’s Clock*, the German government has been experimenting with deadly biological agents, one of which has escaped the bounds of the laboratory when a researcher working there goes mad and flees the institute at which he was working. Authorities then have reason to believe that an American visitor to Germany has been infected and has taken the contagious virus with him onboard a fully loaded 747. When this passenger collapses after showing symptoms of having contracted the virus, governments around the world are alerted, and first Britain, then Germany, deny permission for Quantum Flight 66 to land, for reasons such as the top German minister explains to his boss: “Sir, jetliners re-circulate their cabin air, and despite sophisticated filters, can spread any virus throughout the aircraft in a matter of minutes. We have to assume that everyone onboard has been exposed.”

As with real-life viral infections such as AIDS or SARS, there is a mixture of rational and irrational reaction to the threat of it spreading. Onboard, Captain Holland always represents the rational side of the argument, never losing his ability to think calmly and clearly. Among his passengers, however, it is a different story, and their lack of information makes some of them suspect the worst. An even more dire development is that American authorities on the ground seem to share the more pessimistic view of the situation. As one top agent informs CIA Director Roth, “John, this thing might make Ebola Zaire seem like the common cold.” As a result, the plane and passengers are quarantined upon landing at a desolate base in Kevlavik, Iceland, where they are met by American troops in full chemical weapons protection gear and given orders to absolutely not deplane, upon pain of death.

As the hours go by and the plane remains sealed on the tarmac, an ongoing battle between factions in Washington ensues, leaving the captain with very few of the facts. Back in the cabin, a tall man who had been complaining bitterly for some time decides to take action. When the petite flight attendant tries to stop him, he brusquely assaults her and then turns his anger on the captain, whereupon the captain knocks him to the floor and gives him a warning. In the post-9/11 world, such behavior would no doubt elicit more than a warning. In any case, immediately after this, one distraught woman cannot bear the wait and the unknown any longer, so she bolts off the plane and heads for the perimeter guarded by armed soldiers. No longer fully in control of her senses, she runs through the barrier, whereupon she is cut down in a hail of bullets, a stern warning to the crew and other passengers that the powers that be are taking this viral threat very seriously.

Just how serious this is becomes apparent when CIA Director Roth counsels the President about the risks involved. "I fully expect everyone on that airplane to be dead within 48 hours. And if that happens, we must burn the plane with all the bodies. If we mishandle this and the virus enters the general population, it could kill half the humans on Earth. . . . This is the biological equivalent of thermonuclear war." His next recommendation is even more shocking. To completely incinerate the plane, the United States should use "a low yield nuclear warhead to ensure that no biological component could survive." Chillingly, the President assents.

In a plot twist that bears an eerie resemblance to the war President Bush launched on Afghanistan in response to their harboring of Al Quida, the group thought responsible for the September 11 attacks, John Roth, Director of the CIA in *Pandora's Clock*, puts in motion a plan to have what appears to be an Arab jet deliberately and ruthlessly shoot down an unarmed American airliner over the sea, thereby earning the wrath of the American people and allowing war to be unleashed against the terrorists. This jet

approaches the lumbering 747 and unleashes an air-to-air missile, which rips the number four engine from the right wing. “Mayday, mayday, mayday,” Captain Holland calmly but urgently reports. “Quantum 66 has been hit by a missile, right wing badly damaged. Aircraft uncontrollable. We ARE going down.”

Drawing on his military experience in Iraq, he takes evasive action, hoping to make his attacker think they have crashed. Diving toward the sea at a frightening speed, he only pulls out of the dive to fly level over the ocean at 100 feet.¹¹ The ruse works and he safely lands at Tenerife, Canary Islands, in the middle of the Atlantic. Refueled, they again take off again, this time headed for the relative safety of Barbados or the Virgin Islands, which, because of their proximity to Miami and instant mass media, will save them. Meanwhile, the “Arab” attacker moves in for another shot, this time taking the number three engine, leaving only two engines on the left wing. Heroically, Captain Holland manages to land on Ascension Island, having recalled the presence there of a long emergency runway for the Space Shuttle.¹²

In a final showdown, he must fend off the last efforts of the “Arab” to kill them. When his third and final missile just misses the plane, the CIA assassin must land to finish off his prey. Captain Holland, however, will not allow this and boldly positions his jumbo jet in the middle of the runway, refusing to give way to the oncoming corporate jet. Realizing Holland is not bluffing, the assassin pulls up at the last minute, but it is too late and he crashes and burns off the side of the runway. Captain Holland orders an evacuation, and all passengers and crew safely exit the plane by going down the yellow emergency chutes.

The drama, however, is not quite finished. Back in Washington, the President is understandably angry when he realizes how he has been manipulated by his CIA director into almost killing over 250 innocent Americans. Roth, though, is a fighter, and he bluntly

blackmails the President by telling him that he is prepared to reveal the President's intention to use a nuclear weapon against his own citizens. In a final twist, we see Captain Holland and Rachel, a passenger from the flight, together on a beautiful island near Seattle. They are engaged, and CIA employee Dr. Sanders has come to congratulate them. As the two women speak, Holland takes a phone call; one of the flight attendants has just died 48 hours after displaying symptoms of the virus. The movie ends.

Executive Decision (1996)

Executive Decision, which features an in-flight transfer of rescuers to a hijacked 747, has as part of its plot an impending chemical attack on Washington, D.C., and the entire Eastern Seaboard. A group of Arab terrorists has secreted DZ-5, a nerve agent, aboard their flight, and the leader of the group plans to release this deadly cargo whether his demands are met or not. *Executive Decision* takes the same license with different 747 models as many films do. To wit, they have possibly employed a 200 series model, identifiable by its normal upper deck and lack of winglets, yet the cockpit crew consists of only two pilots, which is found only on the 747-400.

The DZ-5 is attached to a bomb in the cargo hold of the plane, and the lead hijacker holds a trigger that can detonate the bomb upon his command. It is up to the commandos to defuse the bomb and disarm the hijackers. They do so in suitably dramatic ways, and the Eastern Seaboard is saved. With both pilots dead, a scientist from the rescue team lands the 747 "safely" after crashing into rows of small airplanes at an airport hardly equipped to accommodate a jumbo jet.

Strategic Command (1997)

A direct imitation of *Executive Decision* is the TV-movie *Strategic Command*, which also features the specter of deadly nerve agents dispersed from a 747, killing hundreds of thousands, if not millions, of Americans below. The threat is underscored in the opening scene of the movie as a band of Euro-terrorists invades a high-security government research facility. In short order, they have gained access to a chamber containing highly toxic “Bromex 365,” a nerve agent that can kill in seconds. This deadly ability is demonstrated when two of the terrorists mishandle a packet containing the Bromex. As soon as it breaks open on the floor, the men near it go into spasm and vomit up white mucus seconds before they succumb. Despite this setback, the gang manages to steal a large quantity of the chemical and gets away.

Soon, they are aboard a 747 ferrying the Vice President of the United States from Los Angeles to Washington, D.C. From the first glance, it is obvious that the 747 used in this movie is the first jumbo flown by Boeing back on February 9, 1969, meaning the filmmakers simply used stock Boeing footage for shots of the 747-100 model (identifiable by its three windows per side on the upper deck).¹³ In fact, the claimed LAX landing scene is actually Boeing’s 747 production site in Everett, Washington, built in the late 1960s adjacent to Paine Field. Planes waiting for customer delivery can be seen lined up near the paint facility.

As with *Executive Decision*, *Strategic Command* follows a scenario in which the terrorists have rigged a device capable of disbursing the lethal chemical agent over a heavily populated area, and the only counter to this is to smuggle commandos aboard to neutralize the threat. As with *Executive Decision*, only a portion of the commandos make it aboard, making their mission all the harder. Ultimately, the bomb disposal expert is able

to defuse the chemical device, and the other two men kill the terrorists and safely land the plane.

Nowhere to Land (2000)

This thriller is set aboard the Oceanic Air 747 used to film the blockbuster *Executive Decision* in 1996, though here the circumstances are quite different. No doubt for the same reasons as with *Executive Decision*, the plane viewed from the exterior is clearly a 200 series model, with its normal upper deck, yet the interior is configured as a newer 400 series, including an inaccurate 2-man flight deck. The storyline here involves a bitter ex-husband stalking his former wife, who is now happily remarried. The ex-husband is a chemical engineer and “he can build anything,” in this case a potent chemical bomb containing the agent SX-19, which he has smuggled aboard his wife’s flight from Sydney to Los Angeles. A bomb expert in L.A. says of the chemical, “A tiny, tiny amount, a drop smaller than a pinhead, will kill you. If you breathe it, it’ll kill you. If you get it on your skin, it’ll kill you.” Such is the risk they are facing.

The authorities manage to connect the ex-husband by phone with his airborne wife, giving the police time to trace the call. Though they track him down to a bar in Sydney, he escapes and leads them on a chase on the rooftops of buildings. Unfortunately, he falls from one of the roofs without revealing the location of the chemical bomb. Back onboard Flight 762, the crew finds the package containing the bomb, and the captain goes back to see if he can disarm it. He appears to succeed, but the presence of a second trigger automatically arms the bomb, and it is only the selfless action of another pilot aboard that saves the crew and passengers. *Nowhere to Land*’s use of the confined spaces of an airliner in flight high above the ocean again shows how the airplane can serve as a dramatic setting for action and suspense. The following movie is no different.

Killing Moon (2000)

Fear of chemicals, germs, and viruses is familiar to all societies, since humans are noticeably susceptible to them. Thus, it is no mystery why these threats to human well-being have been incorporated into modern film. A major threat that began to emerge in the late 1980s was the HIV virus that caused AIDS, so it is not surprising that the AIDS virus was symbolically featured in at least one movie.

Killing Moon begins at the airport in Molokai, Hawaii, where two men are preparing to board an inter-island flight. One of them feels weak, begins to bleed from his nose and eyes, and collapses. Within minutes he has lost consciousness and dies. His partner conceals the body and boards the plane. Once aloft, however, this passenger begins to show the same symptoms that had so recently killed his accomplice. Fortunately, there is a doctor aboard, Dr. Yamada, a coroner. Unfortunately, the doctor cannot save the dying passenger, whose unusual death naturally arouses the concerns of crew and fellow passengers. Among the assortment of typical passengers is one Lieutenant Dave Thatcher, a naval intelligence officer. Lt. Thatcher, along with Dr. Yamada, assumes control of the crisis, which is just as well, since the captain has become sick in the same way as the expired passenger. The threat here, of course, is biological. Both Dr. Yamada and Lt. Thatcher agree that some virus is attacking the internal organs of the body, and the closed setting of the plane makes all passengers and crew potentially susceptible.

Lt. Thatcher, for as yet unexplained reasons, knows a lot about viruses and death. In addition, he is evasive about his background, leading Dr. Yamada and viewers to suspect him of playing a part in the contagion. Given the common theme in Hollywood film of rogue military men,¹⁴ it is not hard to draw the conclusion that Lt. Thatcher has either deliberately or inadvertently introduced the virus.

Because the consensus is that the death of the passenger was caused by a contagious virus, the plane is diverted from its Honolulu destination and vectored toward Glen Ord Air Force Base north of Los Angeles (that an inter-island 737 would carry such extra fuel is a long stretch). The Center for Disease Control (CDC) and the (fictional) National Security Commission (NSC) are alerted and set up a quarantine center at a secret base in California. Frank Conroy (Daniel Baldwin), who is running the operation for the NSC, is from the start portrayed as sinister, overbearing, and rude. For example, when he finds out that the virus aboard the plane may be a rare chemical weapon, he relishes the opportunity to acquire it for his project and this is his only interest in landing the plane safely. Back on the plane, the situation deteriorates. The captain has taken ill and soon dies. The co-pilot also shows signs of weakening, so Dr. Yamada asks the passengers if any of them has ever flown an airplane. A young woman offers that she has, but only a single-engine Cessna. Still, that is more than other passengers can say, so she is given a crash course in flying a Boeing 737 by the dying co-pilot and assumes her position in the captain's seat.

Back in the cabin, tensions rise as a hemophiliac has died from the mysterious disease. Dr. Yamada and Lt. Thatcher surmise that the medicine intended for a hemophiliac, Taxinol, would protect a healthy person from the virus, so they retrieve extra vials of it from the dead man's bag in the cargo hold. Because there are not enough vials for all the passengers, only the sick will automatically receive treatment; the rest must draw straws.

The subtext to this segment of the drama may be a commentary on American society's homophobia, particularly in relation to AIDS viewed as a gay man's disease. The text shows how a male boss distances himself from a female employee who now shows signs of having caught the virus, but the underlying message may be otherwise.

The boss is an obnoxious businessman whose tirades against other passengers and a flight attendant are ongoing. He represents a conventional American whose fear of AIDS--and of gays--is revealed when the vials of antidote become available. He has a chance to draw a long straw and get a vial for himself, but unfortunately he draws a short straw. Not willing to leave his life in the hands of fate, he crassly badgers a passenger who has a vial to sell it. The bidding price soon rises to \$100,000, then \$250,000. In the end, however, the passenger donates the medicine to someone else, making the point that showing compassion in the face of the AIDS virus is the proper course to take.

Lt. Thatcher--Dave--remains a mystery character. His military bearing and knowledge of germ warfare suggest some degree of complicity in this biological crisis, leading Dr. Yamada to directly challenge him to reveal why he knows so much. The naval intelligence officer is elusive and escapes to one of the galleys, where a conversation ensues that clears up the matter of his background. That discussion, however, will have to wait until chapter nine.

Mad Max: Aviation and Dystopia

One final pairing of nuclear holocaust and film can be found in the second and third films of the *Mad Max* series of the 1980s, but that story is more allegorical than straightforward, so I will discuss it here in the final section of this chapter. In some ways, it speaks best for our age's fear of airborne nuclear war, thereby offering a fitting conclusion to this chapter. By way of introduction, another pair of films from a series a decade earlier will inform the discussion.

The nightmare of a post-nuclear-holocaust America is depicted in *Planet of the Apes* (1968), where human stupidity has resulted in the nuclear destruction of humanity as we know it and replaced it with a world ruled by apes. Thus the apes' dictum against man:

“Beware the beast-man. Alone among God’s primates, he will murder for sport. . . . He will make a desert of your lands.” This movie’s sequel, *Beneath the Planet of the Apes* (1970), paints an even bleaker picture of humanity’s prospects in the nuclear age. Here, a human remnant maintains a “doomsday bomb,” giving them the option of destroying the apes’ world--which they do.¹⁵

In comparison, *Mad Max* offers a narrative of guarded hope, almost desperate hope, for Max himself, ostensibly a warrior, is in fact a savior, and his travails hold out the possibility of redemption for a race that has destroyed itself with nuclear weapons.

Mad Max (1979)

In 1979 an Australian film caught the attention of world viewers, particularly in the United States. A story about a post-nuclear-holocaust world and the breakdown of civilization, this movie introduced a young Mel Gibson to moviegoers. The title of this movie, *Mad Max*, played on the two meanings of “mad”: crazy (as his world had become) and angry (as he looked for revenge for the savage murder of his wife and young son). Though this first film of the *Mad Max* trilogy was a thoroughly Australian affair, the second, *Mad Max: The Road Warrior* (1981) had many more generically Euro-American elements. For example, the characters inhabiting the isolated fort wear vaguely Roman tunics and resemble Scandinavians.

By the third film in the trilogy, Gibson was already becoming a cross-over Hollywood actor, having starred with Anthony Hopkins in the American production *The Bounty* (1984). Another factor tying Gibson to America is the fact that he was born in America and lived there until he was about twelve, at which time his father took their large family to Australia. Since Gibson’s arrival in Hollywood, he has again become American, a fact that may help audiences conceive of him and his movies as American sagas.¹⁶ In

addition, by the time of the last *Mad Max* movie in 1985, Gibson co-starred with American pop diva, Tina Turner.

Mad Max 2: The Road Warrior (1981)

The story and scenes in this film are worth exploring, for they inform and give birth to the more epic *Beyond Thunderdome*. Set in a post-apocalyptic world, a dystopia in the wild, it is fitting that the aircraft here is ridiculous and almost powerless, the image of the “anti-plane.” Actually, it is a gyrocopter rather than an airplane, but what else is to be expected in a world where all normal things have either vanished or been grotesquely transformed? Though his role is subordinate to the Road Warrior’s, the Gyro Captain’s stature grows, from that of a roadside bandit to that of an ally in the fight against the mutants outside the gates of the compound protecting the remnants of civilization.

Twice the Gyro Captain saves Max, first when Max opts to continue his lone sojourn and his car is ambushed and crashes, and again at the end, when Max is used as a decoy and his truck crashes on the side of the highway, allowing the members of the fort to escape in the other direction carrying their precious fuel. With his knowledge of technology, the Gyro Captain is in the best position to lead the remnant back to industrial civilization, as the closing narrative of the film notes. The youngest member of the tribe, speaking from decades in the future, intones their saga:

And so began the journey north to safety, to our place in the sun. Among us we found a new leader, the man who came from the sky, the Gyro Captain. And just as Pappagallo had planned, we traveled far beyond the reach of men or machines. The juice, the precious juice, was hidden in the vehicles.

As for me, I grew to manhood. In the fullness of time I became the leader, the chief of the great Northern Tribe. And the Road Warrior? That was the last we ever saw of him. He lives now only in my memories.

Mad Max Beyond Thunderdome (1985)

In the third episode of the *Mad Max* series, the gyrocopter is replaced by an airplane (Bruce Spence, the Gyro Captain, is now known as Jedediah the Pilot), and salvation from the sky is even more pronounced. The film opens with Max riding his camel-drawn wagon across the desert, when suddenly the airplane swoops down on the unsuspecting Max to knock him off his perch and steal his goods. The view from the attacking plane looks as it would to a higher power from space zooming in on the Earth, with features of the land growing each moment until we see a trail of dust kicked up by the camels and wagon. In search of what is his, Max marches into the unsavory gathering place known as Bartertown. The film takes this opportunity to introduce us to this third vision of Max's post-apocalyptic world, when, for example, he is accosted by a water peddler whose liquid ware consists of highly radioactive H₂O. Surrounded by a motley crew of nuclear holocaust survivors, Max stands out as the sole example of normalcy from the now-vanished world.

Later, banished to the "gulag," in this case the barren desert, Max succumbs to the incessant winds and lack of water, only to be found by the mother-figure of a tribe of feral children (recalling the likable feral child from MM2) who have managed to survive in a hidden oasis tucked into a great crevice in the desert. The lives of these children are intimately linked to the airplane, which the film beautifully develops at its own pace.

The young mother-figure drags Max across the dunes to her oasis, where Max makes his slow recovery. Once awake, he is confronted by a swarm of children clad in animal furs, Caucasian faces obscured with mud and other forms of primitive make-up. Very soon we learn the reason for their existence in such an improbable place: fleeing their crumbling world, their plane has crash-landed, stranding them in the desert. To tell this tale, distant memories of a Christian liturgy are replaced by a tale more fitting and

immediate for this new tribe. Melded with the lost world of the silver screen, television, and video, this new litany describes the plight of this band of survivors.

These people believe Max is Captain Walker, the pilot of the plane in their religion. When he challenges them, Max is given a simple hand-held slide viewer that features a Boeing 747 flying over Sydney Harbor. The next slide is of a pilot that does bear a marked resemblance to Max, which explains the belief of the children. Then, prompted by a fortuitous gust of wind, the entire band decamps from the oasis and leads Max to what they believe will be their return ship to "Never Never Land." The music here is a co-conspirator to our belief that Max and the airplane will be their deliverance, and indeed the camera shots support this heroic crescendo, which climaxes in the children standing along the horizontal stabilizer of the jumbo jet to which they have returned. The modern viewer, however, knows more of the mechanics of modern flight than these benighted children, so when we finally see the full scene, it is with a great sigh of disappointment that we see, yes, the jumbo jet, but only a carcass of what had once been a mighty bird of the air, reduced now to a sandy grave in the desert. There is no hope at all that this plane will deliver the children or anyone else to hoped-for sanctuary. Taken as a whole, this long segment serves to amplify both the sense of loss after the nuclear holocaust and the impossible distance back to revisiting, let alone rebuilding, that lost industrial world.

This segment serves the film's narrative in another way; though this behemoth in the desert will never fly again, the children maintain their dreams of flight. Toward that end, they accompany Max back to Bartertown and eventually gain access to a working airplane, though hardly the airliner of their distant memories. Instead, they discover Jedediah the Pilot's quirky little single-engine plane, a contraption as laughable as the Captain's original gyrocopter. What is shown here again, of course, is the airplane as

anti-plane, which is fitting for a world in which values and settings have been turned upside down.

Echoing the earlier hope that a plane would deliver them from exile, director Miller crafts a heroic scene where good will triumph over evil. Here, Tina Turner leads her wild band of barbarians after Max and the children, roaring across the desert floor in the *Mad Max* trade-mark post-civilizational roadsters, some powered by petrol, others by steam. To escape them, Max has loaded all the children into the small plane and commands Jedediah the Pilot to take off. He tries, but the plane is overloaded, so Max dumps from nets on the wings all the relics of "civilization"--pots, pans, suitcases, etc. Still heavy, the plane makes headway, leading us to believe that they will escape the coming onslaught. Suddenly, however, the Pilot brings the plane to an abrupt halt and wheels it about, for they had been about to go over a cliff. With too little room to take off toward the attackers, all appears lost.

For Max this is unacceptable, and he makes a sacrifice to save the children. As a professional police driver in his past life, he again assumes the role, this time taking control of a machine captured from Turner's forces. As the plane now accelerates toward the attackers, Max comes out in front to clear a path, jumping clear of his vehicle at the last moment as it plows into an oncoming car. Thus clear, the plane and its band of children ascend above the chaos, though hardly toward a better fate. In keeping with the relentlessly downbeat message of what a post-apocalyptic world is like, the film takes the small craft back to the great harbor that once graced a teeming Sydney metropolis. Now it is reduced to shards of steel and broken buildings, nearly blocked from sight by the relentless sandstorms that threaten to erase any memory that a civilization had once existed on the edge of the desert continent of Australia.

Buried in this movie, though overshadowed by the text of a world destroyed by nuclear war, is a narrative of rebirth of the human race. Despite the desolation of the city, they land and take up residence there, and new children are born and acculturated into the odd tribe Max has saved. Buried in this ruined city is hope, hope that can only spring from the human spirit, as the mother-figure narrates at the film's close:

This you knows, the years travel fast. And time after time I done the tell. But this ain't one body's tell, it's the tell of us all. And you've gotta listen and member because what you hears today, you gotta tell the newborn tomorrow. I'se looking behind us now, into history back. I sees those of us that's got the luck and started the road for home. And I members how it led us here and how we was half pooked as we seen what there once was. One look and we knewed we'd got it straight. Those what had gone before had the knowin' and the doin' of things beyond our reckoning, even beyond our dreaming. Time counts and keeps counting, and we knows now finding the trick of what's been and lost ain't no easy ride. But that's our track and we've gotta travel it. And there ain't nobody knows where it's gonna lead. Still and all, every night we does the tell so that we members who we was and where we came from. But most of all we members the man who finded us, him that came to salvage. And we lights the city, not just for him but for all of them that are still out there. Cause we knows there'll come a night when they sees the distance light and they'll be comin' home.

CHAPTER 7 DISTURBED AND DISTURBING PASSENGERS

On the evening of October 11, 1963, American television viewers who tuned in to a certain channel were greeted with this opening monologue, spoken in a flat and subdued manner, with a clipped inflection familiar to many:

Portrait of a frightened man: Mr. Robert Wilson, thirty-seven, husband, father, and salesman on sick leave. Mr. Wilson has just been discharged from a sanitarium where he has spent the last six months recovering from a nervous breakdown, the onset of which took place on an evening not dissimilar to this one--on an airliner very much like the one in which Mr. Wilson is about to be flown home. The difference being that, on that evening half a year ago, Mr. Wilson's flight was terminated by the onslaught of his mental breakdown. Tonight he is traveling all the way to his appointed destination-- which, contrary to Mr. Wilson's plan, happens to be the darkest corner of . . . the Twilight Zone.

Perhaps *the* cinematic prototype for the disturbed flying passenger can be found in this episode of Rod Serling's *Twilight Zone* called "Nightmare at 20,000 Feet," starring a youthful William Shatner as Robert "Bob" Wilson, a man returning home with his wife from a long stay in a mental hospital. Their opening dialogue begins on a note mixing hope and despair. After attempting to light a cigarette, his wife asks him to put it out, which he nervously does. "I'm not acting much like a cured man, am I?" To which she replies, "Honey, you *are* cured." Events during the ensuing flight will determine whether or not this is true.

Bob Wilson's dementia is a solitary one. Though his wife and many others passengers share the same risks, they are totally outside of his experiences. This sense of isolation runs through the drama, from the opening references to a six-month stay at a sanitarium--where we can imagine him in a straight jacket or in solitary confinement--to how he experiences ordinary occurrences aboard this flight. For instance, when the co-

pilot latches the cabin door shut with a resounding thud, Wilson experiences it as evidence that he has been locked in a personal prison. Trying to rationalize his fear, he reflects on the last six months, reassuring himself: "I had a teensy-weensy breakdown, but now I'm cured."

Next they take off in the DC-7 propeller plane but quickly enter a roaring thunderstorm with heavy rain. Having taken a sleeping pill, Mrs. Wilson is oblivious to the world outside the craft, but Mr. Wilson is hyper-attentive: looking out the length of the left wing, he spots a figure at the dark end of the metal. This begins a sequence where only he sees this "gremlin," a furry, man-like creature walking on the wing. Whenever he calls the stewardess or wakes his wife, however, the gremlin flies off. Slowly, Wilson, though "cured," sinks back into the solitary hell that is invisible to those around him. Both realizing what they think of his behavior and at the same time believing what he sees with his own eyes, he is mentally torn, a sure sign that his illness has not been cured. Pleading with others to look out the window with their own eyes, he impulsively supports his position by shouting, "Do I look insane?" As soon as he has said this, however, he realizes that in his case it is not merely a rhetorical question.

As mentioned, this is the prototypical case of the disturbed passenger, someone who, though surrounded by any number of other passengers in the same boat (so to speak), intensely experiences a unique and personal crisis brought on by flight. Until such individuals get out of the plane and back on the ground, there can be no relief, for it is some aspect of flight itself that sets off such a person, and trying to explain it to others only exacerbates the problem. Sometimes this fear can be too much, and irrational thought spills over into irrational--and possibly dangerous--behavior. This is certainly the case with Robert Wilson, who, determined to protect himself and others from the gremlin out on the wing, craftily borrows a loaded revolver from a sleeping officer of the law, conceals

it in his jacket and takes it back to his seat. When the time is right, he opens the emergency exit in flight to get a clear shot at the gremlin. This, of course, depressurizes the aircraft, and Wilson is half-sucked out of the plane. Nonetheless, he fights the passing slipstream, raises the gun and squeezes off all six shots, successfully driving off the gremlin and, in his mind, saving the plane.

Safely back on the tarmac, passengers and crew walk away from the plane, while Mr. Wilson lies on a stretcher, restrained by belts and blankets around him. Accepting that what he has done is right, he smiles and relaxes, after which the camera pulls back to include the wing of the airplane, where we see that the engine cowling has in fact been violently clawed open. Finally, the scene cuts to Serling's closing remarks:

The flight of Mr. Robert Wilson has ended now - a flight not only from point A to point B but, also, from the fear of recurring mental breakdown. Mr. Wilson has that fear no longer--though, for the moment, he is, as he has said, alone in this assurance. Happily, his conviction will not remain isolated too much longer. For, happily, tangible manifestation is, very often, left as evidence of trespass--even from so intangible a quarter--as the Twilight Zone.

A remake of this classic episode was done as part of 1983's *The Twilight Zone--the Movie*. In this instance John Lithgow plays the role of deranged passenger in Richard Matheson's original script. Lithgow understood that it was something in flight itself that put paralyzing fear in some people, stating to an interviewer that "This is a man who loses any semblance of rationality at 20,000 feet up in the air but who, when down on the ground, is completely *normal*. It could be any one of us."¹ This individual transition while at altitude will be evident in all instances where the disturbed passenger makes an appearance in flying films. Before reviewing these films, however, I would like to situate the airplane in its myth and symbol setting and tie that to the presence of either disturbed or disturbing passengers.

In using Leo Marx's *The Machine in the Garden*, I do not mean to imply that aviation films somehow posit a binary "machine" and "garden" encounter. After all, what would the "garden" be? Even "the wild blue yonder" is too distant from the image of the pastoral ideal, too ephemeral, to make the parallel work. What I borrow from Marx is his emphasis on the machine, particularly how the machine intrudes on our normal, daily lives. For the purposes of this chapter, I focus on a detail in Marx's critique of the garden: the intrusion of *violence*, coupled with the machine.

One of Marx's interests in the machine's representation in literature was how the machine made its appearance in the pastoral setting. For example, in the fourth section of his first chapter, "Sleepy Hollow," he introduces the concept of *counterforce*, in which a world that is more "real" is brought into juxtaposition with "an idyllic vision." To illustrate his point, he notes that seventeenth-century landscape painters "introduced the image of a speaking death's-head into the most delicate pictorial idylls. To make the meaning of this *memento mori* inescapable they sometimes inserted the printed motto, *Et in Arcadia Ego*," meaning "I [Death] also am in Arcadia."²

Again, the point here is not to argue that aviation films display a similar juxtaposition; the point is to absorb what Marx says next. He begins by saying that *counterforce* "is applicable to a good deal of modern American writing," but then makes the observation that "The anti-pastoral forces at work in our literature seem indeed to become increasingly violent as we approach our own time. *For it is industrialization, represented by images of machine technology, that provides the counterforce in the American archetype of the pastoral design*" [emphasis added].³

This represents a progression in portrayals in two ways. First, there are the media. Marx begins with landscape painting and extends the analysis to American literature; I move one step further in time and extend it to film. Second, the industrialization that Marx

looks at is still in its infancy, locomotives and such. With the advent of the motion picture--itself a fascinating form of advanced industrial production--came myriad other industrial advances: complex telecommunications, advances in materials science, the harnessing of the power of the atom, space exploration, and so on. Just as the image of the machine seemed to Marx to become "increasingly violent" as he approached his own time in the early 1960s, aviation films seem to have done so as we approach *our* own time (the late twentieth century and beyond).

While nature, mechanical failure, pilot failure, or war were the main menacing factors in flying films from the beginning until about 1970, after that point we begin to see the increasing appearance of violent people on board the plane, whether they be hijackers, madmen, or dangerous prisoners. This tendency has become so pronounced that the "disturbed and disturbing passenger" syndrome has become its own sub-genre, as will be discussed below. Furthermore, we now have one iconic example of reality imitating aviation film with which we--and literature, art, and film--must deal: the image of two Boeing 767 jumbo jets, fully fuelled for flights from the East Coast to the West Coast, slamming squarely into first one tower of the World Trade Center, then the other, resulting in a cataclysmic fire which ultimately brought down both towers and rudely jetted us from one era in American history to the next, just one year, nine months, and eleven days after the more or less arbitrary numerical date that so many of us thought represented such a major transition.

Many of the movies with these themes had seemed far-fetched, but events of the past few years have made them seem less so. For example, had a writer conceived of a film in which a Muslim terrorist concealed a miniature bomb in his shoe, then attempted to light it with a match or lighter while flying high over the Atlantic Ocean, audiences would have been skeptical, to say the least. But this in fact came to pass when on December 22,

2001, Briton Richard Reid boarded American Airlines Flight 63 from Paris to Miami and proceeded to attempt what has just been described. Quick and decisive action by crew and passengers may have been the only thing that prevented a disaster.⁴

By most accounts, the golden era of the “mayday” type of flying film began with the 1970 blockbuster, *Airport*, which dutifully features a very disturbed passenger. Of course, this was not the first flying film to portray a problem passenger, as the concept goes back to at least 1936, with *Flying Hostess*, where the pilot is shot and the stewardess has to land the plane, and *Fugitives in the Sky* (1937), which features a group of convicts who take over the plane. Fastforward a dozen years and one can find two films dealing with the killing of a passenger in the air and the crew’s attempt at subduing the killer. These were *Sky Dragon* and *Sky Liner*. The following year saw *The Great Plane Robbery* (the temptation to use this word-play must have been too great to resist), a film that continued the killer-on-board theme. Nineteen fifty-six saw the release of *Julie*, in which Doris Day plays a woman fleeing her deranged and murderous husband. Once in the air there is nowhere for her to flee, and the tension builds as her husband stalks her. When he kills both pilots, it is she who must land the plane. *Mayday at 40,000 Feet* (1959) also featured a murderer loose on board,⁵ but it was *Airport* that ushered in the mayday age for commercial jetliner travel.

Airport

In chapter four, I discussed the heroic portrayal of the pilots aboard a Trans Global Airlines flight to Rome, a Boeing 707 passenger aircraft. In this section I will discuss the portrayal of the disturbed passenger, one D.O. Guerrero, a troubled WWII veteran. We become aware of the risk factor associated with Guerrero when his wife goes to the airport looking for him. When she learns that he is aboard the plane, her worst fears are

confirmed, fears she reluctantly shares with airport manager Mel Bakersfeld. Highly distraught, she explains in bits and pieces that since the war her husband has been unable to hold a steady job because of his temper. She then recounts how her husband spent time in an Army hospital because of his war experiences, a hospital Bakersfeld deduces to be for those with mental conditions. Ominously, Guerrero's field of expertise during the war was demolitions, a talent he tried to use in his postwar career in the construction business using dynamite for excavation. This link to demolitions explains why he has access to explosives and makes it plausible that he is the one behind some missing dynamite at his last job.

Nearly broke, Guerrero has pawned his wife's ring to buy a ticket to Rome, as well as an excess of flight insurance. Once aloft, the action begins. Guerrero, Army demolitions veteran, is now confirmed as a mentally disturbed passenger. Seated aboard the plane, he nervously clutches his briefcase, refusing to relinquish it even during mealtime. Such behavior becomes understandable once the authorities have pieced together the situation: passenger Guerrero intends to explode his bomb over the Atlantic, leaving no trace of the cause of the explosion. His wife will receive the insurance money, and for once he will have succeeded in properly supporting her. The challenge, then, is to get the bomb and briefcase away from him. As we have seen, the pilot and stewardess momentarily succeed in this, but inadvertently, the briefcase ends back up in Guerrero's possession.

The scene in which Guerrero explodes the bomb is an aviation film classic, so a small bit of repetition can be forgiven. The drama unfolds when Captain Demerest (Dean Martin) devises a plan in which he and his girlfriend Gwen will work in tandem with elderly stowaway Ada Quonsett to get the briefcase bomb away from Guerrero. Because she is aboard without a ticket, Quonsett (Helen Hayes) will be accosted by the stewardess,

thus creating a diversion that will allow Demerest to grab the briefcase. At first, the plan goes well. Gwen sternly demands that Quonsett accompany her to the cockpit. When Quonsett breaks down in (fake) tears, Gwen slaps her, creating just the diversion she needs to get the briefcase. Unfortunately, a principled passenger sees this as a minor injustice and returns the briefcase to Guerrero. The jig, as they say, is up.

Now we have the disturbed Guerrero in possession of the briefcase again, but he knows that the plane is not yet far enough over the Atlantic for his plan to work. Furthermore, Demerest has informed him that the insurance plan has been exposed, so it would do no use to destroy the plane now. Demerest's pleas to surrender the bomb seem to be working, and Guerrero seriously considers giving up the briefcase. Fate again intervenes, however, when a passenger suddenly exits the lavatory just behind the nervous Guerrero. Someone shouts for him to grab Guerrero's briefcase, but Guerrero is too fast and ducks into the lavatory, his intentions unknown. Then, despite Gwen's pleas, Guerrero, clearly tormented by his demons, explodes the bomb in the rear of the plane, ripping a hole in the fuselage and releasing the air from the cabin in a horrible storm of wind and debris. Guerrero is immediately sucked out of the plane, so the disturbed passenger aspect of *Airport* has ended, and the heroism, which was addressed in chapter four, begins in earnest. All in all, the presence of this troubled man adds further realism to a fine movie.

Skyjacked (1972)

In this drama, James Brolin plays a young soldier, Jerome K. Weber, tormented by inner demons, which he tries to drive away with drugs and alcohol. Part of his delusion is that if he hijacks a 707 and flies it to the Soviet Union, he will be honored by the Soviets. Initially, he is quite smooth, convincing the pilot (Charlton Heston) to authorize his

boarding of the plane despite the lack of a reservation. Given the year of the film, the 747 used is a 100 model complete with spiral staircase.

Once in the air, Global Airways heads toward Minneapolis, but Weber alerts the crew to the presence of a bomb aboard. He then demands to be flown to Anchorage, Alaska. To reduce the likelihood of the frame of the airplane failing, the pilot flies at a lower altitude where the pressure difference between the inside and outside of the plane is not as great. This means that they will have to fly through a thunderstorm and will consume more fuel, but in the end they manage to land in Anchorage.

The plane is then refueled and flown to Russia, where all of the passengers are released. Outside the 707, Russian troops wait with guns trained on the hijacker. Preparing himself for a hero's welcome, Weber confidently shaves in the cockpit. Suddenly, though, his demons return and great fear of the Soviets replaces his earlier euphoria. Nearly insane, he shoots the captain in the shoulder, then holds him hostage as he exits the plane carrying a band of hand grenades. Once on the ground, the soldiers shoot Weber, who falls on his own grenade just as it explodes. Coming at the height of real hijackings, this film no doubt unsettled some uneasy fliers.

The Evolution of the "Disturbed Passenger" Film

Perhaps it was the improvement in the safety record of commercial airliners that forced a decline in movies portraying the disturbed passenger. Or possibly it was the fact that as jet planes got bigger and flying became available to the general public, the entire process became routine and was no longer a primary setting in which to examine conscious and subconscious fears. While the disturbed passenger theme continued to appear sporadically in flying films, such characters were eventually outnumbered by a different kind of menace; instead of passengers who were mentally unbalanced, we began to see

problem passengers who were cold, calm, calculating, and often even charming. Despite exquisite self-control, this character remained very much a menace to all aboard. For this reason, I dub this kind of passenger the “disturbing passenger,” the better to show the anguish such a character causes not to himself but to other passengers and, by extension, to the viewing audience.

The spate of hijackings that plagued airlines during the late sixties and early seventies resulted in movies with parallel storylines. Certainly, a hijacker aboard is a disturbing development, as could be seen in *Wild in the Sky* (1972), a remake of the 1937 *Fugitive in the Sky*, and *Skyjacked*, mentioned above. In the middle of the decade came *Murder on Flight 501*, which involved terrorists aboard a 747; this was quickly followed by two American films based on the actual hijacking of an Israeli civilian airliner to Entebbe, the first being *Victory at Entebbe* (1976), followed a year later by *Raid on Entebbe*. *Mayday: 40,000 Feet* was a 1977 flick that saw David Janssen as the pilot of a 747 trying to deal with a killer aboard. One might also mention *The Pursuit of J.D. Cooper* (1981), which addressed the story of the folk hero who took his ransom money, strapped on a parachute, and jumped out the door of a Boeing 727, never to be found or heard from again.⁶

The Evil Genius in the Air

An interesting development in the genre of the disturbing passenger is the emergence of a hijacker or even madman who is suave, charming, handsome, and highly educated. For example, Bruce Payne plays an escaped prisoner in *Passenger 57* (1992) and uses his British accent, considerable intellect, and flashing blue eyes to great effect, as does the blue-eyed Ray Liotta in *Turbulence* (1997). Of course, the charming villain is hardly an invention of flying films, but he appears with such regularity that it is now a stock

character. Later, this type even includes women, almost always blonde, though they act as accomplices to their men, not as main antagonists.

This character is often European, though later we occasionally see an Australian in the role. Possibly it grew out of the “evil Aryan” image seen so regularly in Hollywood films from the 1970s onward. Who can forget the sadistic Nazi dentist Christian Szell drilling into the teeth of graduate student Babe Levy (Dustin Hoffman) in *Marathon Man* (1976)? Played by Laurence Olivier, this German is composed and fully self-controlled, but his inner spirit is animated only by darkness. The same can be said for the character played by Gregory Peck in *The Boys from Brazil*, a 1978 film that imagines rich ex-Nazis alive and well in South America making clones of Adolf Hitler.⁷ Additionally, of course, one can recall the Amon Goeth character (played by Ralph Fiennes) who is the cruel concentration camp commander in Steven Spielberg’s 1993 *Schindler’s List*.

The consummate non-Nazi German terrorist might be Alan Rickman playing Hans Gruber against (police)man-in-the-street John McClane (Bruce Willis) in the original *Die Hard* (1988). This film highlights an interesting melding (in the American mind anyway) of the cold, calculating German genius and an upper-class British accent. Having taken control of the Nakatomi Plaza high-rise office building in Los Angeles, Gruber and his Teutonic gang proceed to shoot and blow up nearly everything in their path. Perhaps to the consternation of the British, this trend toward casting an Englishman as the antagonist in American films continued. One need only witness the chilling but erudite figure of Dr. Hannibal Lecter (Anthony Hopkins) in the 1991 *The Silence of the Lambs* to support this. Perhaps this device is merely a playing out of the simple and pure-of-heart American self-conception versus that of the worldly, sophisticated, and corrupt European. Whatever it is, it is not restricted to films based on the ground, as flying films have time and again availed themselves of similar casting.

Passenger 57 (1992)

In this film, Bruce Payne is British killer Charles Rane. This 1992 movie features Wesley Snipes as John Cutter, an off-duty safety consultant for Atlantic International Airways. As fate would have it, the day he is traveling on his company's flight to Los Angeles, ruthless killer Rane is being transported aboard the plane, though he is shackled and heavily guarded.

Unfortunately, Rane has accomplices: a stunning brunette flight attendant, a beady-eyed male flight attendant, and a burly passenger. When it is time for a meal, the flight attendant wheels her cart to the row with Rane and the marshals, then lifts the cover off the tray to reveal a gun, which she immediately uses to dispatch both marshals. The bad guys now have control of the aircraft, a Lockheed TriStar L-1011 making its most noticeable appearance since *The Crash of Flight 401*. When Cutter initiates a fuel dump, the TriStar is forced to land at a short runway in the American South. The action then moves outside the plane, though there is an additional scene of refueling the plane and taking off again after the hijackers have escaped out the cargo door.

Hijacked: Flight 285 (1996)

In this TV movie, James Brolin pays his dues for playing a mad hijacker in the 1972 thriller *Skyjacked* (opposite Charlton Heston as captain). In the new movie, Brolin, now appearing as a pilot himself, plays second fiddle to former lover, Captain Kim Mitchell, a beautiful and assertive woman in the left-side seat. The casting and character development in this movie are worth mentioning, for they are superior to that of many Hollywood flying films. In addition to the pilots, Kim Miyori plays flight attendant Barbara, there is a realistic strong-willed husband and his frustrated wife and pretty daughter, two Vietnam

vets, one a cowardly alcoholic, the other a saintly paraplegic, and an elderly black couple with a fine sense of humor.

The action starts when Anthony Michael Hall (*The Breakfast Club*--1985), starring as hijacker Peter Cronin, makes his appearance as the now-familiar prisoner in shackles. With him are two accomplices: a former IRA bomb expert, and Cronin's beautiful girlfriend, Shayna Loring. Shayna is a cool cucumber, smuggling a ceramic pistol in her bra and threatening to kill the pilots should they not obey commands. Cronin quickly asserts himself as the man in control, threatening not only to shoot passengers but to explode a bomb. Referring to the IRA member's laptop computer, he yells, "Now my friend's computer here is filled with plastic explosives. Quite enough to reduce all of us--and this plane--to tiny pieces." With over two hundred hostages, it is likely Cronin and his friends will get the \$20 million in bearer bonds they have demanded. That is, if they do not crash first.

It seems Captain Mitchell resents the hijacking of her plane and deliberately sends it into a dive, telling the hijackers that turbulence caused it and has seriously damaged the plane. After a tense landing, they are now on the ground, but Cronin wants to take off again, either in this plane or in an airworthy 747. As one gesture of good faith, he allows an ailing woman to be removed from the plane, but the cowardly Vietnam vet tries to flee with her. Hauled back aboard the plane, he is shot in cold blood by Cronin, who is determined to make his point about who is in control.

There is also a side drama between Cronin and the two hostage negotiators who had earlier been responsible for his capture. This Freudian twist adds a bit of novelty to what is otherwise a standard "disturbing hijacker" character. The dénouement is also mildly original, as the woman hijacker kills the IRA bomber when his nerve wavers, then the SWAT team boards and kills Cronin. One point that needs mention, however, is the

portrayal of the airplane. While some flying films flit between pictures of various different models of planes (from two-engine 737 to three engine DC-10, for example), *Hijacker* is egregious in this respect, showing an Airbus A-300 on takeoff, a Boeing 767 in flight, then the tiny undercarriage of a single-aisle 737 at landing, and finally a Lockheed TriStar on the ground for the SWAT scenes. That this last aircraft has an enormous duct above the rear passenger section seems not to have bothered the moviemakers at all.

Medusa's Child (1997)

As mentioned in the previous chapter, this TV movie involves a nuclear device inadvertently shipped aboard a cargo plane headed for the nation's capital. The creator of the bomb is a scientific genius who had been working on the "Medusa Project," a doomsday device for the Pentagon that would knock out all instruments relying upon computer chips, meaning it would cripple all advanced economies. Though the bomb is nuclear and could have been discussed more in the previous chapter, the deranged scientist's role is more prominent than that of the bomb, so I relegate it to this chapter, even though he is not aboard the plane. The twist here is that he is dying of cancer and is determined to get revenge on both his ex-wife (who has a new fiancé) and the Pentagon, which had ultimately cut the funding for his project.

To exact his revenge, Dr. Henry has created a "mock" bomb that should prove the viability of his vision. As his dying wish, he begs his former wife Vivian to personally take it to the Pentagon. To show his sincerity, he has willed her all the royalties for the device's cutting-edge technologies. Moved more by compassion than greed, she assents and rides together with the bomb on its flight from Florida to Washington's National Airport. Midway through the flight, however, the device arms itself, and we quickly learn

that this mock-up is in fact the real thing. The vengeful scientist has boarded the flight in spirit by incorporating a computer screen with his face and voice into the bomb, making it seem as though he were talking to Vivian directly. An oncoming hurricane only makes everyone more tense.

Back on the ground, SWAT teams have tracked down the dying doctor, hoping to get him to reveal how to shut off the bomb, but just as they surround his remote cabin, he kills himself, forever ending any chance of deactivating the nuclear device. It looks as if millions of Americans will pay with their lives. Meanwhile, it is certain that Vivian will pay with her life, for her ex-husband has linked her pacemaker to a detonator in the bomb that will explode should she venture more than fifteen feet from it. This seemingly rules out dumping the bomb into the Atlantic.

Now dead, Dr. Henry still controls the fate of those aboard the plane--not to mention millions of Americans below--as he makes successive appearances on the computer screen. His dementia is mixed with cunning coolness, as he pretends to arm the bomb, then laughs maniacally as Vivian resigns herself to death. With blazing eyes, Dr. Henry comes across as a mad prophet from the Old Testament. In the end, however, the Eastern Seaboard and all aboard the plane are saved when the pacemaker is removed from Vivian's chest, attached to the bomb, and pushed overboard far out to sea.

While this movie easily could have used that stalwart of flying films, the Boeing 747, it instead employs the commercially ubiquitous Boeing 737, in this case a 200 series configured as a cargo carrier.⁸ The cargo cabin is open to the flight deck, so movement between cockpit and the rest of the plane is fluid and unobstructed, creating a workable stage for the cast of characters. The three cockpit members and two passengers work the inside of the plane like the stage that it is, highlighting the value of using an airliner for dramatic purposes. Back on *terra firma*, Martin Sheen appears in this movie as the

United States President, long before he became president on the hit NBC TV series “West Wing.”⁹ Though some of the flying scenes push the level of believability, the movie succeeds in combining a rich cast with a plausible threat, all encased in an aluminum tube 30,000 feet above the earth.

Free Fall

This 1998 made-for-TV drama stars former Charlie’s Angel Jaclyn Smith as National Transit Safety Board member Renee Brennan. The movie opens with a stunning sequence of an airliner crash. Children are playing in the aisles of the plane, two young flight attendants cheerfully go about their business, and two handsome males pilot the plane. Suddenly, there is a rudder malfunction warning and soon the plane is out of control. The pilots struggle to bring the plane out of its dive but fail. Computer-generated graphics blended with scenes from inside the plane provide a chilling enactment of a plane disintegrating as it cuts through a forest and plows into the ground. No one survives.

Brennan is called in to investigate the crash, one that is eerily reminiscent of one she investigated one year earlier. That Seattle crash involved the same airline: Trans Regional Airlines. Brennan is contacted by the saboteur responsible for this latest crash, and soon he causes another Trans Regional plane to crash into San Francisco Bay, then another as it heads for Washington, D.C. Her new boyfriend was on that plane, but he was helpless to do anything as they plummeted to the ground.

Finally, Brennan figures out the saboteur’s motives and predicts the next means of bringing down a loaded jetliner. When Trans Regional takes to the skies again, a plane is quickly stricken with an electrical failure, and the pilots lose control. Anticipating the problem, Brennan reaches them by radio from the air traffic control tower and tells them what to do. Paralyzed by fear, the two seasoned pilots do nothing. Without Brennan’s

firm prodding and instructions, they surely would have crashed, but now Brennan is in control.

In the climactic final segment, Brennan and her FBI counterparts believe the saboteur has died, so they let down their guard and board a flight back to D.C. It is not hard to guess which airline: Trans Regional. This time the saboteur has killed a pilot in the parking lot and used his uniform to sneak aboard the soon-to-depart airliner. Once in the cockpit, he kills both pilots and begins his unapproved takeoff roll, while Brennan and the other passengers hurriedly close the door of the plane. Thinking quickly, Brennan grabs a penknife and begins to remove various circuit breakers from the plane's electronics bay. Knowing just which circuits to remove, she deprives the pilot of control of the plane, whereupon the two FBI agents break into the cockpit and kill the saboteur pilot.

Turbulence: There's Something in the Air

A blended kind of suave antagonist can be found in a number of recent flying films, beginning with *Turbulence* (1997), starring Ray Liotta. Possessing the charms of his Euro-terrorist counterparts, this American character is also deranged, though unlike "disturbed" passengers who fear flying, this type of character has been unstable from childhood. It is as though Hollywood has taken a creepy insane man like Alan Bates from *Psycho* and given him all the charm and poise in the world, making him irresistible to women. In this respect, Liotta's performance is classic.

Liotta appears as psychopathic serial killer Ryan Weaver, whom we first see leaving a store with a teddy bear, wishing strangers a Merry Christmas. Shots then abruptly alternate between him happily walking the December streets and the decorated interiors of two attractive women's separate homes. Tellingly, both women are blonde,

which we have learned is Weaver's favored hair color for his victims. Weaver rings the bell of one home and is warmly welcomed, whereupon he utters a string of compliments that are well received; he is the consummate charmer. Unfortunately for him, he is arrested by a SWAT team at this latest girlfriend's house. The other woman's home that appears in this sequence belongs to flight attendant Teri Halloran, who has lavishly decorated her apartment with Christmas ornaments in anticipation of the arrival of her boyfriend. Sadly, she receives a call and learns that her boyfriend has other plans. Deeply hurt by this abandonment, she confronts the holiday in a vulnerable state, a condition not conducive to surviving a chance meeting with charmer Weaver.

Once captured, Weaver is taken in handcuffs aboard a 747 bound for Los Angeles. One flight attendant is Teri, who assumes it will be a relaxing holiday flight, given the paucity of Christmas Eve travelers aboard. She and Maggie, another blonde, are among the few flight attendants for this flight, and they both try to forget that it is Christmas. Among the passengers are Weaver, his fellow prisoner Stubbs, and four Federal marshals sent to guard them. As their journey begins, the flight crew is warned of severe weather ahead, with the first tremors of this storm foreshadowing more dangerous tremors to come. A direct risk on board comes from Stubbs, a crude and vocal prisoner who makes obscene comments to the flight attendants. Weaver, in contrast, is a gentleman very much concerned with the feelings of both women. Consistently, he makes soothing remarks to them, being sure to make solid and extended eye contact each time.

As the turbulence gets worse, the captain puts on the seatbelt sign, but Stubbs is still in the lavatory. To speed him along, one of the marshals enters the stall. Stubbs, in an effort to gain freedom, pulls the metal plunger from the soap dispenser and uses it to stab and kill his guard. He then takes the other marshal prisoner, and a murderous gun battle ensues in which the other marshals and the pilot are killed. Because the unpredictable

Stubbs is a threat to himself and to Weaver, however, Weaver simply kills him. Weaver is now on the loose, there is no one there to stop him, and from this point forward the horror genre aspect of hunter and hunted between Weaver and Teri takes over.

During the gun battle, a hole is shot in the fuselage, and air rushes out through the hole. Teri deftly places a briefcase in front of the hole, thereby conserving their air and oxygen, but the emergency unnerves the first officer, who leaves his seat in search of the captain. Just as he stands up, severe turbulence rocks the plane and the co-pilot is rendered unconscious. Later, when Weaver stumbles upon him in this unconscious state, he takes the opportunity to kill him, too. In addition, Weaver has succeeded in getting flight attendant Maggie to lower her guard; she too becomes a lifeless victim and is unceremoniously stuffed into one of the overhead bins.

Because Weaver continues to charm Teri, she is not convinced that he is actually guilty of the serial murders of women with which he has been charged. As his psychopathic behavior inevitably returns, however, she learns the horrifying truth and does all she can to save herself and the plane, beginning with going to the empty cockpit and contacting authorities on the ground. From here on out, it is a cat and mouse game as Weaver attempts to get her to open the cockpit door so he can kill her. Because she resists, he elects to crash the plane into downtown Los Angeles by randomly ripping computer boards out of the equipment on the shelves in the avionics bay, knocking out the autopilot that is the only hope for Teri to successfully land. With his madness burning brightly, Weaver asks the computer boards if any of them will “volunteer” to come out, and when one of the boards gives Weaver a mighty shock, he does a little dance and mumbles, “Okay, okay, you can stay.” Believing he has successfully disabled the autopilot, he lies back with a bottle of champagne, intent on enjoying the spectacle of a fiery crash into the city.

The use of the 747 in this film and the subsequent two sequels is of a piece. An old Japan Airlines 747 was used to make these three airliner-based movies from 1997-2001. All three movies depict the dangers inherent in flight and amplify the fears associated with it by introducing other factors such as prisoners aboard the plane, concealed biological weapons, and a devil-worshipping co-pilot. The inaccurate portrayals of the jumbo jet are similar to other movies using this plane: though it is an older generation plane, the cockpit is the two-man set-up available only on the newer 400 series; the avionics bay is spacious and allows an individual to move about freely. Because the dénouement of this movie crosses over into issues of gender and power, the discussion will continue in chapter nine.

Turbulence 2: Fear of Flying (2000)

Like its prequel, this film combines the inherent risks of flight with the presence of disturbing passengers, with a bevy of passengers afraid of flying thrown in for good measure. First we have two hostile elements wielded by nature: turbulence and lightning. Next comes a twist on the evolving nature of America's therapeutic culture. Whereas in the *Twilight Zone* episode "Nightmare at 20,000 Feet," Mr. Robert Wilson was a solitary figure sent to a sanitarium to "cure" his fear of flying, nearly forty years later, once the therapeutic culture had gained hold in America, a film featuring fear of flying had gathered all those so afflicted and put them in a therapy group.

The title of this movie gives it away: *Turbulence: Fear of Flying*, and in this film the familiar TAC Airlines 747 is again the setting. The movie begins with a motherly flight attendant trying to calm a group of terrified fliers. As turbulence outside makes the flight increasingly rough, this group of fearful flyers begins to panic, and one man finally leaves his seat and heads for a locked door. Grabbing the lever of the door, he opens it as

the others plead for him to stop. This tense introduction sets the pace, though it turns out to be only a flight simulator used by this group of adults trying to overcome their fear of flying.

Turbulence 2 is adept at playing off the audience's preconceptions with regard to disturbed passengers (those who fear flying) and the disturbing passenger who often turns out to be a terrorist or hijacker. Among those who fear flying are an aircraft designer and a couple who are resolved to combat their fear of flying together. The woman in this relationship is played by Jennifer Beals of *Flashdance* fame, and she demurely clings to the arm of her lover, a handsome and kind man with a British accent. Our seemingly disturbing passengers are a group of Slavic-speaking Europeans who have arrived late from an Aeroflot flight, and in this movie we are led to believe that this group of non-English speakers has access to a biological bomb in the cargo hold, so the suspense revolves around securing a triggering device held by one of these foreigners.

In fact, we have been misled, and these Slavs are actually the hunted, having nothing to do with a hijacking or planting a bomb. Instead, the villain turns out to be the British boyfriend who has only feigned a fear of flying, when actually he is quite in control of his wits. He hopes to steal the biological weapon the Czech passengers possess and sell it for a large sum of money. In common with the other *Turbulence* movies, the pilots are killed, leaving no one qualified to fly the plane. In addition, there is the matter of the nerve agent in the cargo hold.

The movie's heroes move to the spacious avionics bay to contact air traffic control, then they go to the cargo hold to try to identify the package that holds the chemical agent. Finding it, they succeed in pushing it out the plane. Had they failed, a U.S. military fighter jet was prepared to shoot them down. Despite the B-movie quality of *Turbulence 2*, it did manage to attract Jennifer Beals to a leading role, while Tom Berenger gives his usual

gruff-man performance, this time as a no-nonsense air traffic controller. Roughly the same strengths and weaknesses are found in the final movie in the *Turbulence* series, *Turbulence 3: Heavy Metal*.

Turbulence 3: Heavy Metal (2001)

One thing that can be said of the *Turbulence* series is that it has had the uncanny ability to attract big-name stars despite being so uneven in the quality of its scripts and acting. While the original *Turbulence* was of film quality and Roy Liotta turned in a fine performance as a homicidal maniac, *Turbulence 2* and *3* are through and through TV movies; that is, they are mediocre. Still, as we just saw, Tom Berenger was willing to lend his skills to the second in the series, while the third one attracted Rutger Hauer as a devil-worshipping co-pilot and Joe Mantegna as an air traffic controller.

The subtitle of this movie, *Heavy Metal*, can perhaps be considered word play on the band's favored form of music, and also on the fact that the craft in which the passengers are riding is capable of returning to earth in a thoroughly destructive way because it is, after all, composed of heavy metal. This interpretation is bolstered by a major scene in which the flight's featured performers, Slade Craven and his heavy metal band, perform live for a worldwide Internet audience. The stage constructed aboard the 747 has been stripped down to the plane's bare metal, and one of the band's most outrageous stunts is to "electrocute" a member of the audience in a metal electric chair in front of the stage. Sparks fly when the metal of the switch contacts its opposite pole, and the Internet audience votes its approval by greatly increasing the number of "hits" at the site.

Here again, in the beginning of the movie, the 747 jumbo jet appears as a solid and reliable piece of machinery as the camera begins a shot of the two front tires, then slowly

pans up the enormous flank of the white Boeing. This sense of strength and security is reinforced by the presence of two seasoned pilots, one of whom survived a tour of duty in Vietnam as a helicopter pilot. Once airborne, however, the familiar turbulence greets the plane, which becomes the site for all manner of mayhem and death. Among the disturbing passengers are Slade Craven himself, made up in demonic white facial make-up to look like death itself; an imposter who imitates Craven but is really a devil-worshiper who wants the plane to crash; and the first officer, also a devil worshiper, who, after the pilot has been killed, blows his own brains out in the cockpit so that no one will be able to fly the plane. No one can say that the plots of the three movies that compose the *Turbulence* series are unoriginal.

Sonic Impact (1999)

Following the release of the original *Turbulence*, we see a similar opening setting in *Sonic Impact*, a film in which a suave prisoner is taken by authorities aboard a civilian airliner. In a clear act of homage to *Turbulence*, prisoner-turned-hijacker Jeremy Barrett asks to be taken to the men's room to relieve himself. Reluctantly, the marshal escorting him removes the handcuffs, leaving Barrett free to rummage about the lavatory, just as prisoner Ryan Weaver was in *Turbulence*. Recall that in *Turbulence*, the prisoner removes the metal soap dispenser pipe and uses it to stab one of the guards. In *Sonic Impact*, Barrett attempts the same move, but this time the soap dispenser will not come out, prompting Barrett to wryly (and in a perfectly self-conscious postmodern way) remark, "How come that shit always works in the movies?"

Fortuitously, the weaponless Barrett is given a chance when a fire breaks out in the number four engine. In a ridiculous sequence, the pilot is heard calling for a shutdown of the number one engine, followed by a command to commence "feathering" it, an odd

command for an all-jet airliner like the 747. As both pilots place their hands on the throttles, the throttles “lock,” causing the jumbo to dive, at which point Barrett makes his move and kills one marshal.

Dressed in black trousers, black sweater, and black leather jacket, Barrett is another incarnation of the suave disturbing passenger. And this time there is nothing deranged about him. On the contrary, his motives are purely material: he wants money--lots of it. Barrett’s superior breeding is contrasted with that of two fellow prisoners, the Strauss brothers, one of whom is enough of a low-IQ yokel to be cast as a member of the *Deliverance* clan. Barrett rarely raises his voice, relying instead on a disinterested air of contempt for his hostages. He even shows a streak of humor, like when he gets to the cockpit and takes control of the mike, announcing: “News flash! Jeremy Barrett here.”

The real action now is simply stolen from *Airport ‘75*, as are the external scenes of the plane. When a shootout results in an explosion that takes out the co-pilot’s window and much of the surrounding fuselage, we are primed for another call-in-the-rescue-helicopter-and-drop-in-a-hero scenario, which is exactly what we get. The 747 is the same silver Columbia Airlines ship that Charlton Heston entered via the hole in the cockpit, though in *Sonic Impact* it has been configured incorrectly into a two-member cockpit. In addition, scenes in the front of the plane show the spiral staircase of the early 747-100 that wound up to the middle of the upper deck, while *Sonic Impact* features an upper deck with a rear entrance and straight stairs.

Cabin Pressure (2001)

This timely TV movie weaves a plot of computer intrigue that has the “disturbing passenger” firmly on the ground, albeit in total control of the aircraft in question. As with *Medusa’s Child*, this movie uses advances in technology to spin a story about virtual

control over the lives of those in the air. In *Cabin Pressure*, B-actor Craig Sheffer stars again in his third flying movie in two years, the others being the latter two *Turbulence* movies discussed above. Sheffer's roles have been imaginatively shuffled, making it hard to peg him in one role. In *Turbulence 2*, he is an aircraft designer with a genius for computer software, a skill he displays again in *Turbulence 3* as a crack computer hacker on the ground. In *Cabin Pressure*, however, he becomes a top military pilot turned alcoholic, and his complete lack of computer skills causes him to rely on old-fashioned muscle to subdue the villain.

In this case the villain--the disturbing passenger--is an eccentric computer programmer who is blamed for the crash of the world's first all-computer controlled airplane. His brilliant software was to have allowed a flight to take off, fly to its destination and land all without any input from the pilots aboard. Something goes wrong, however, and the pilots are flown to their deaths, all in real time. Immediately, the programmer is fired from his job, and this is the impetus for his revenge: he will sabotage the software of the next plane slated to make a computer-controlled flight. As in *Medusa's Child*, this disturbing passenger is virtually aboard the flight as he has cameras installed aboard the plane and appears in person on the aircraft's flight panel displays. This kind of interactive terror--seen also in *Turbulence 3: Heavy Metal*--is very much in tune with the growing influence of computer networks and the Internet in the daily lives of tens of millions of Americans, which is no doubt why it has begun to appear in plots of flying films.

Air Panic (2001)

Cabin Pressure had a companion movie that aired the same year and featured the same conceit of a malevolent soul virtually controlling a civilian airliner by hacking from

computers on the ground. Called *Air Panic*, this movie presents Cain, a mad genius who was horribly scarred in a fire at his place of employment, a manufacturer of flight control systems. Embittered, he sets out to create increasingly horrific crashes, beginning with the collision of a loaded Airbus 320 into the tallest building in Denver. By programming a crucial computer chip at the heart of the airplane's control system, this hacker is able to take over complete control of the plane.

For his grand finale, the culprit plans to dive another A-320 into a nuclear power plant near Baltimore, Maryland, on the Fourth of July. When SWAT troops assault his house, he blows them up by remote control from his location far from home. Relentlessly, the aircraft under his control heads toward Baltimore. The U.S. government knows about this risk, so they scramble a flight of F-16s to bring the plane down. Aboard the plane, an FAA troubleshooter works to restore control to the pilot and succeeds just as the airliner misses the cooling towers of the nuclear power station. As a just dessert, Cain is killed when the ambulance he has hijacked has a collision on the runway with a third A-320 he has programmed to take off.

Air Rage (2001)

Like *Sonic Impact*, this TV movie features rapper Ice-T as an officer of the law going up against a formidable hijacker. The hijacker is one Colonel Sykes, a recently convicted war criminal who feels he was betrayed by the general presiding at his court-martial. After escaping from a prison van with the aid of some Marine accomplices, Sykes and his band individually board a flight carrying the general to an important meeting. Once in the air, they take over the plane, and Sykes begins to exact his revenge.

The flying film takes here are by now familiar, as they simply use the original footage of Boeing's test plane for the 747-100 program, just as *Strategic Command* did

two years earlier. As with *Strategic Command*, the basic plot is taken directly from *Executive Decision* and includes the airborne transfer of commandos onto the 747 through stealth means. While *Executive Decision* used the F-117, *Strategic Command* and *Air Rage* use the SR-11, a spy plane. When it comes time to land in “Atlanta,” the 747 in *Air Rage* quite clearly lands at Paine Field in Everett, Washington, which is not surprising given the source of the flying clips.

Code 11-14 (2003)

This recent TV movie rises above many other made-for-TV movies in that the plot is sound, the acting good, and the aircraft setting creative. In addition, it is the only movie to date that I know of that uses the 747SP. The use of the SP is probably related to the fact that it was filmed on location in Queensland, Australia. Here is why. In the early days of jumbo jets, extended range aircraft were still rare, causing a problem for any airline in desperate need of them. Such an airline was Qantas, the Australian carrier, whose flights across the Pacific were among the longest in the world. When the long-range SP became available, it was only natural that Qantas was interested, acquiring two in 1981. From 1994-1996 their two planes were transferred to subsidiary Australia Asia when it became politically difficult to fly to Taipei.¹⁰ A craft in that livery, with the Australia Asia logo painted over with the now familiar Oceanic Air name, appears in *Code 11-14*.

The plot of *Code 11-14* owes clear debts to both *Turbulence* and *A Silence of the Lambs*. A serial killer in Los Angeles attacks blondes and takes photographs of them near the time of death, leaving one print in the dead woman’s hands, and hiding the other within the room. In the hidden picture, one body part is always carefully cut out, very much recalling the mutilation featured in *A Silence of the Lambs*. In addition, the taking of a “trophy” from the corpse is the same, as is the presence of an FBI profiler. The

obsession with murdering blondes is straight from *Turbulence*, where a charming Weaver seduces his prey; the m.o. in *Code 11-14* is the same.

When the FBI receives a report of a similar murder in Sydney, Australia, it sends Kurt Novak, a young agent, down to investigate, and he takes the opportunity to bring his beautiful wife and young son along for a vacation. Once in Australia, the killer begins to stalk Novak and his family, ratcheting up the effort once the Novaks are aboard the Oceanic 747SP for the fourteen-hour flight back to Los Angeles. Seated in first class, the Novaks are given superb service by an attentive flight attendant and they settle in for a comfortable return home. Soon, however, the threats begin. First, Mrs. Novak receives a gift of earrings that clearly only the killer could give. Then, the killer calls Novak in flight, raising the specter that he might be aboard as well. When another blonde is found murdered in a galley in the same way, we are then certain that the murderer is stalking the Novaks aboard this very plane.

The use of the limited space aboard the airliner is the primary device driving the suspense. It appears the killer is able to slip in and out of the lavatories from above, go down to the cargo hold, and move from the front to the back of the plane undetected. Suspects include a sleazy young man seated in economy class and the male flight attendant who has reported on that passenger. When Novak's son goes missing, Novak aggressively questions both men, but finds they both have alibis. A report from agents back in America, however, reveals that the serial killer is the male flight attendant who has served them so professionally in first class.

The action now descends to the cargo hold, and here it must be said that such drastic liberties are taken with respect to free space available that other movies using the cargo hold look claustrophobic. Characters are able to move at will among the cargo containers, long, open walkways extend far in either direction, and the "avionics" panel is

as big and open as a game in a video arcade. This is simply not tenable, but it does make for high drama, especially when the plane has descended to just above the water because the killer has disabled the flight controls. Hoping to viciously murder the boy, he opens a hatch in the floor and attempts to push the boy through it to the passing waves below, giving a new twist to the well-known aviation term “hell hole.”

This film brings us nearly up to the present and is a fitting way to end the chapter, for it offers a level of psychological complexity that has been missing from too many purely fast-action flying films. As noted in the introduction above, the increasing safety of airplanes and flying has forced moviemakers to focus more on threatening passengers than on threatening technology. Toward that end, they have imagined a wide array of disturbing scenarios.

CHAPTER 8
CAST AWAY: THE MACHINE IN THE SKY

Ye Gods! annihilate but space and time . . .

Alexander Pope¹

Marx tells us that “No stock phrase in the entire lexicon of progress appears more often than the ‘annihilation of space and time . . . ,’” a sentiment that perfectly fits the *Weltanschauung* inspiring the most literary of recent films, *Cast Away* (2000). For in this film the main character devotes his life to seeing that neither space nor time hamper the myriad parcels from going from one point on the globe to another. As a senior manager of FedEx, one of the world’s leading delivery companies, it is his job to see to it that man’s sophisticated use of computerized sorting equipment, elaborate timetables, and most of all high-speed cargo jets will—for a fee—nearly “annihilate” space and time. At least that is the hope.

Just as “grand and terrific [sic]” machines of the nineteenth century left people “dumbfounded at the strange and unusual spectacle,” the modern jumbo jet does so today. The technology has progressed but the surprise and awe are familiar:

Steam is annihilating space. . . . Travelling is changed from an isolated pilgrimage to a kind of triumphal procession. . . . Caravans of voyagers are now winding as it were, on the wings of the wind, round the habitable globe. Here they glide over cultivated acres on rods of iron, and there they rise and fall on the bosom of the deep, leaving behind them a foaming wheel-track like the chariot-path of a sea-god. . . .²

Today the “caravans” consist of miles of computerized conveyer belts sorting thousands upon thousands of packages per hour in cavernous buildings, linked by

individual aircraft that are literally “wings of the wind.” While something as tangible as “rods of iron” that guided and supported the trains of their day are no longer our focus, nor is sea travel a marvel to behold, the link among railroads, ships, and airplanes is still strong, with each newer form of conveyance further “annihilating space and time.” *Cast Away* whittles away the time devoted to travel from days or weeks to mere hours and minutes, and the manner in which it does so is well worth our attention.

Cast Away

Cast Away features Hanks playing Chuck Noland, a hard-charging career man at Federal Express (FedEx). In this film he is stranded on a deserted Pacific island for some four years, the mirror opposite of his hectic life prior to that. The movie chronicles the changes in Noland’s character, ending with his return to civilization and normal life. Director Robert Zemeckis uses the airplane to great effect in this film, employing it as the machine *par excellence* of a complex, high-tech world that has seemingly overcome time, distance, and nature itself. Such hubris, of course, invites a fall, and that comes in a most dramatic way.

In *Cast Away* the plane is initially the antithesis of the garden; it is the hyper-machine requiring much more discipline to use than previous machines, which highlights Marx’s references to Freud on the matter. In *The Machine in the Garden*, Marx references *Civilization and Its Discontents*, where Freud has observed (ca. 1930) an “amazing” tendency of humans to simplistically idealize more primitive states of being. “How has it come about that so many people have adopted this strange attitude of hostility to civilization?”³ In *Cast Away*, this sentiment is decidedly not the case, for Noland is not only a non-critical participant in modern (indeed global) society, he enthusiastically embraces its most advanced, most technologically sophisticated elements, signified by the

ability to transport objects from one part of the globe to another in mere hours--and this at a moment's notice.

Noland is not party to the "puerile fantasies" Freud identified in so many moderns, signified by their desire to escape civilization. On the contrary, Noland is firmly rooted in his present circumstances and is highly motivated to perform to the highest standards of the time. The thought of him being consigned to a remote and primitive setting, freed of the constant demands of modern civilization, is absurd, which is exactly what drives the story in the first third of *Cast Away*. When Marx asks whether "our institutions and cultural standards are enforcing an increasingly painful, almost unbearable degree of privation of instinct," our answer during the opening twenty minutes of *Cast Away* would be "No." In fact, we are led to embrace progress and this "brave new world" (in its non-ironic, non-threatening sense) as the advanced American Noland teaches the backward--indeed primitive--Russians the value and meaning of time, immediately in the service of his and their employer FedEx, but more abstractly in the act of living in any highly advanced technological society. For not only is time money, it a fungible element that can be viewed and used efficiently, or it can be squandered.

As viewers, then, we see Noland's abrupt transfer from the bosom of technological civilization to primitive and solitary confinement on a Pacific island as banishment, an estrangement from the comfort, safety, and meaning of modern civilization. This is how the film treats Noland's ordeal and it sets the stage for a major transformation in both Noland himself but more generally in how the film accepts or critiques modern society. Though it is not clear what will become of Noland after the crash of his plane, in hindsight we can see that in fact the FedEx cargo DC-10 is the embodiment of the "inhuman" demands of modern life, an image enhanced on the screen when the sinking jet literally attempts to devour him just as an animal in the jungle would devour its prey. Though

Noland's transformation into a more complex, feeling human being takes years of privation on the remote island, we can say upon later reflection that *Cast Away* is a superb example of regeneration through primitive ordeal, and Noland finds his "garden" precisely when he escapes from the airplane. Thus, this tale ultimately fits in nicely with a long line of "classic American fables," as Marx called them.⁴

To take this argument further, it is worth returning to Marx's introductory chapter of *The Machine in the Garden*, in which he employs the trope of Nathaniel Hawthorne's summer of 1844 project to repose in the woods of Massachusetts to await, in Hawthorne's words, "such little events as may happen." As he fills his eight notebook pages with observations of the activities of nature, he begins to notice mild human interventions--the village clock, a cowbell, even "mowers whetting their scythes." Marx finds this subtle change in emphasis important, despite Hawthorne's own protestations that "these sounds of labor" do not "disturb the repose of the scene," nor do they "break our sabbath" (for this pastoral idyll is a sabbath itself).

Though many of these quotes from Marx are repeated from earlier chapters, they bear repetition because of the way we can now reinterpret them in an updated context. Marx shows how Hawthorne's observations of distant human activity set the stage for his crucial contrast of pastoral versus the machine:

But, hark! there is the whistle of the locomotive--the long shriek, harsh, above all other harshness, for the space of a mile cannot mollify it into harmony. It tells a story of busy men, citizens, from the hot street, who have come to spend a day in a country village, men of business; in short of all unquietness; and no wonder that it gives such a startling shriek, since it brings the noisy world into the midst of our slumbrous peace. As our thoughts repose again, after this interruption, we find ourselves gazing up at the leaves, and comparing their different aspect, the beautiful diversity of green. . . .

The shriek of the whistle. This is no reference to a harmonious and pleasing sound; it is a “startling shriek” that wrenches us (modern humans) out of our “slumbrous peace.” This is the exact experience and sentiment that is attached to Noland’s own ordeal in *Cast Away*.

Recall that Noland has returned from a hectic business trip to Russia and is reunited with his girlfriend (Helen Hunt in a wonderfully understated role) in slow-paced Memphis, Tennessee, world headquarters of FedEx. He finds her in her quiet office, though ironically she is now the one pressed for time as she waits for the office copier to methodically reproduce the pages of her dissertation. This scene quickly segues to the counterpart of Hawthorne’s “Sleepy Hollow.” It is Christmas and Noland is at home, surrounded by extended family and his long-term girlfriend. The setting is “pastoral” insofar as it represents a harkening back to the past and to tradition, and to an emphasis on a primary need of man: food. The banter is lighthearted and nothing interrupts or threatens this “repose,” nor is the “sabbath” broken.

Hawthorne claimed that aural evidence of human activity was not enough to disturb his visit to the woods, so, perhaps, the buzzing of Noland’s work beeper is not enough to disturb his mood either. As viewers initiated into the symbolism of modern society, however, we recognize the sounding of the beeper as an omen, just as Marx was able to recognize Hawthorne’s subtle shift toward the world of man-made sounds as an important turning point. As expected, the message on Noland’s beeper has in fact disturbed his repose, and he must immediately leave kith and kin in order to fly to the other side of the globe to deliver cargo.

“And Make Two Lovers Happy”

The change in setting here is abrupt. From the quiet of his family’s kitchen, where he is able to explain and to apologize to his girlfriend, the two of them are thrown into the darkness of their Jeep as it approaches the gate to FedEx’s headquarters. Here, “the long shriek, harsh, above all other harshness,” is no longer that of the locomotive, it is the spooling engines of a modern jetliner. The roar in this scene is deafening and thus it succeeds in informing us that this site is that of “busy men, citizens, from the hot street, . . . men of business; in short of all unquietness.” How the image of the airplane is manipulated is central to this entire turning point, as, of course, it is central to the film as a whole. A detailed examination of that imagery follows.

Initially, the airplane plays only a minor role in the film. After trying to impress his Russian employees with the importance of on-time delivery, Noland sits exhausted in a jumpseat on a FedEx flight returning from Moscow to its world headquarters in Memphis, Tennessee. Here is our first introduction to the setting of a FedEx cargo plane, with the pilots in the cockpit doing the flying, and any deadheading passengers in the seats just behind the cockpit door. As a dedicated cargo plane, it has no passenger windows, creating a cavernous interior space only dimly lit. With the various bulkheads, beams and strands of netting in place, it bears a resemblance--fittingly, as we shall see--to the belly of a whale. This introduction to the layout of the plane serves as a harbinger of things to come.

A further omen comes in the next scene with an airplane. Noland, who had been enjoying Christmas dinner with his family and girlfriend, is paged by his company and must leave immediately on a long Pacific flight. At the gates to the FedEx loading area, the nighttime scenes is unusually dark as he says his good-byes to his girlfriend. In the parting shot of them, he has given her a box that may well contain an engagement ring, but

he does not stay long enough for her to find out. Instead, he turns toward his plane and says “I’ll be right back.” But he will not. Thus, the poignancy of the second part of Pope’s apt phrase: “Ye Gods! annihilate but space and time/ And make two lovers happy.”⁵ In *Cast Away*, the power to annihilate these elements is taken away, and space and time become the insurmountable barriers that keep the two lovers apart.

In addition to the dark, a further ominous sign is the foreground roar of the jet engines, especially Noland’s flight, which spools up as he leaves his girlfriend. Darkness and the roar of engines are to play a central role in the coming pivotal scene with the cargo jet. At approximately twenty minutes into the film, we find Noland dozing in the now-familiar jumpseat position just behind the cockpit bulkhead, facing rearward toward the belly of the beast. In contrast to his normally hectic schedule, he now has all the time in the world as the plane continues its long flight across the Pacific. To further emphasize the issue of time, he idly fingers the present his girlfriend has just given him—an old wind-up pocket watch that her grandfather had used during his days working on the railroad. The contrast between time and technology then and now is of course marked (and also serves nicely to tie together Marx’s use of Hawthorne and the train with this analysis of the airplane).

Light turbulence wakes Noland from his fitful sleep and he engages in a little banter with one of the pilots who has come back to check on things. Noland then gets up and wanders to the cockpit door, asking “Hey, is all this turbulence from Santa and his eight tiny reindeer?” He barely notices that the crew is not listening because they are consumed with navigation and communication problems in the cockpit. The urgency of their voices, however, soon snaps Noland into an alert state. Meanwhile, lightning flashes outside the windshield and thunder splits the air.

In the right-hand seat, the co-pilot tries to raise Tahiti control on his radio, while the other three men in the cockpit try to plot their location over the Pacific. Being of no help to them, Noland casually goes back to the cargo area and brings his toiletry into the washroom to freshen up. The subdued tension that we as viewers feel is in contrast to Noland's naive sense of security. This contrast is heightened by Noland's gentle splashing of warm water on his face, but gradually his state of mind is made to converge with the viewer's own anxious state; Noland looks at his bandaged thumb with mild concern, then painfully pulls off the bandage. His grimace sets the stage for a much greater tragedy.

At the exact moment Noland has pulled away his bandage, the sealed fuselage of the DC-10 is breached and instant decompression follows. Noland is sucked out the door of the lavatory and hangs suspended horizontally in its doorway. One pilot rushes back to give him an emergency oxygen mask and yells "We may have to ditch!" then gives him a yellow inflatable raft. Confusion reigns as next we overhear a pilot say that a fire has broken out in one of the three engines. Meanwhile, multiple alarms sound in the cockpit, adding to the already loud roar of the engines and the incessant cracks of thunder.

Now safely strapped in to his seat, Noland spots his girlfriend's watch just out of reach near the cargo net. Torn between prudence and a need to stay linked to his girlfriend, he unbuckles his seatbelt and moves toward the watch. Just as he picks it up and holds onto the net separating him from the aluminum cargo pallets, conditions worsen. Entranced, Noland watches and listens as time is both speeded up by the cascade of problems at hand and slowed down by Noland's impotent status as an observer. Then, to his rear, the beast begins to roar. The darkened cargo hold of the jumbo jet becomes the unknown jungle and from it the strains on metal give off a beastly groan.

A pilot sees Noland standing there, so he comes back to assist him. Suddenly, the plane is caught in a fierce downward motion and the pilot is slammed into the ceiling, opening a frightful cut that sends blood cascading down his face and body. He falls whimpering to the deck. Through the windscreen we again see intense lightning, which lights up the oncoming waves below. Though this cargo jet should be at 35,000 feet, it is now within range of the water below.

Seconds later the craft hits the water as the first torrents rush in. Clashing forces rip the skin of the plane, which we can hear again as beastly groans. In this crash, the plane is certainly alive and it is intent on taking all down with it in its fury. Noland briefly escapes the roar when he is pushed under the water's surface, but such an escape is merely a temporary respite; Noland must have air, so he kicks to the surface where the monster continues its rampage. Just as the hold is about to completely fill with water, a seam breaks in the ceiling above, giving Noland the chance to escape by inflating his life raft. But the beast is persistent. It reaches out and grabs the line hanging from the raft, keeping Noland submerged. Time goes by in micro-seconds as Noland's air runs out. The beast, it appears, will have its last victim.

Noland's luck, however, has not run out. He and his raft break free and they bob to the surface, where a hellish scene awaits him. Surrounded by a ring of fire from burning jet fuel, Noland finds himself disoriented by a deafening roar and the waves and the lightning. It sounds as though the very engines will engulf Noland, which turns out to be literally true: the tail-mounted number two turbine is spinning madly behind him and seems intent on digesting him after all. Just as he swims away from the engine, its massive compressor blades contact the water and the whole engine explodes in a fireball. Noland again finds temporary sanctuary under water. When he resurfaces, the engine has

gone, and the tail, the last vestige of the plane, slowly sinks beneath the surface just as Noland falls into his life raft. Now he has become the castaway.

These three short scenes are perfect: from comfort and happiness amidst his family and their Christmas dinner, to the abrupt transition to a dark airfield filled with the high-pitched shrieks of jet engines, and finally to the harrowing enactment of a crash at sea. This filmic rendition of the machine fits in perfectly with Marx's sequence of literary examples of the machine intruding with a roar into many gardens:

Our sense of its evocative power is borne out by the fact that variants of the Sleepy Hollow episode have appeared everywhere in American writing since the 1840's. We recall the scene in *Walden* where Thoreau is sitting rapt in a reverie and then, penetrating his woods like the scream of a hawk, the whistle of the locomotive is heard; or the eerie passage in *Moby-Dick* where Ishmael is exploring the innermost recesses of a beached whale and suddenly the image shifts and the leviathan's skeleton is a New England textile mill; or the dramatic moment in *Huckleberry Finn* when Huck and Jim are floating along peacefully and a monstrous steamboat suddenly bulges out of the night and smashes straight through their raft. *More often than not in these episodes, the machine is made to appear with startling suddenness* [emphasis added].⁶

The reference to the *Moby-Dick* juxtaposition of a beached whale's skeleton and a New England textile mill is apt, for the whale motif plays two roles in *Cast Away*, one visual and literary, the other literal/real. As mentioned, the windowless cargo hold of the aircraft resembles the internal structure of a whale, recalling first Jonah's biblical encounter with a whale. For current purposes, however, it is the whale in *Moby-Dick* that serves as a direct referent, given its human ability to hate and to attack. In the same way, the FedEx DC-10 on which Noland is a passenger becomes the enraged whale.

Later in the film, a whale returns when Nolan has committed himself to launching his homemade raft upon the vast Pacific waters in a rescue attempt. The whale now--like the airplanes that henceforth appear--has become an agent of deliverance. If it is not

taking the analogy too far, I might add that there is one more scene tied to the whale motif: after most of Noland's physical and mental energy has been depleted in a seemingly hopeless attempt to secure rescue, an enormous cargo ship bursts onto the scene like a lumbering whale. It nearly capsizes Noland's raft, but at last he has been rescued.

Returning to the image of the aircraft, we had two aircraft scenes, one minor and one major, pieced together nicely to introduce, then to play out, the internal drama. Significantly, each scene takes place at night, highlighting the danger of flight, real or potential. This is in contrast to scenes that come after Noland has undergone his ordeal of living alone on an island for years and is rescued. Then light becomes the focus, and the image of the plane shares in this. After a long segment showing Noland on a handmade raft, mere seconds go by from the time he is spotted by a passing container ship, to the call to his former girlfriend, to his flight back to civilization aboard--fittingly--a FedEx executive jet.

This time it is daylight, and Noland takes in the scene of the pastures and fields below. Noland is now in good hands, surrounded by co-workers and company paraphernalia emblazoned with the familiar purple and red-orange FedEx logo. Dramatic symmetry is in evidence in that Noland's close friend from four years ago is now with him on the business jet. This friend, Stan, lost his wife to cancer while Noland was undergoing his own ordeal, and there is a parallel between the two trials.

First, when Noland was returning from Russia in the beginning of the movie, he shared a ride with friend Stan, and we know about his wife's condition because a female pilot had come back to inquire about the wife's condition and to offer consolation. In his pre-exile state, Noland is paralyzed by the futility of battling this cancer (after all, he is a hands-on problem solver) and he is unable to articulate his feelings, opting instead to sit uncomfortably in silence. Later, after they have deplaned in Memphis, he takes a stab at

helping Stan in the only way he knows how: frame Stan's wife's cancer as a solvable problem, then look for remedies. Of course, from a human standpoint, this is awkward at best, and the scene in which Noland offers to introduce a crack cancer specialist comes out as highly insensitive and hurtful. Apparently, Noland has yet to suffer enough himself to overcome his own mild self-centeredness or to realize how much human beings need each other.

The only way Noland's character is going to mature is by experiencing trial by fire, or, more accurately, trial by water: he is fated to endure exile on a deserted island. *Cast Away* does a fine job of constructing Noland's banishment and a believable job of transforming Noland into a man with a much richer interior life. Ironically, it is the four years of isolation that enable Noland to finally make meaningful contact with those closest to him. This is shown immediately upon return to civilization when, riding aboard the FedEx business jet, he offers sincere condolences to Stan and apologizes for missing Stan's wife's funeral. Stan was adrift when his wife was dying four years ago, and now Noland can certainly appreciate what it means to be alone and adrift.

This theme of light continues as Noland is taken back to FedEx headquarters and is feted by CEO Frederick W. Smith (who makes a cameo appearance). The prize of the FedEx fleet, a DC-10F, is centered in the screen from nose almost to tail, the FedEx insignia clear to see. Since it is midday, the white fuselage gleams in the sun, reflecting its rays into a company building from which Noland looks out at his former girlfriend. Too distraught for a reunion, she has nearly collapsed outside, while her now-husband takes her home.

The image of the FedEx planes here is almost one of overkill, so there must be some significance to it. As seen above, there is a long center shot of a DC-10, then, when Noland peeks through the blinds, he sees two rows of purple and white DC-10s extending

as far as the eye can see. Immediately, another DC-10 taxis slowly by, and upon leaving screen right is replaced by yet another DC-10 taxiing straight toward us. Clearly, the director felt the image of this cargo plane was important.

One question stands out: Why did FedEx allow its aircraft to play so visible a role in a movie in which one of its most modern freighters crashes in one of the most terrifying crash scenes ever filmed? Since the crash scene in *Cast Away* features one of their workhorse DC-10s, this would seem to create a negative image in the minds of viewers, both for this model and its newer derivative, the MD-11. Both FedEx and the DC-10/MD-11 have had a checkered safety history. After reviewing this history, it might become clearer why the crash scene in *Cast Away* becomes more problematic--but also why it might make sense.

FedEx and Its Freighters: the DC-10

Of the three jumbo jets that debuted at the beginning of the 1970s, McDonnell Douglas's DC-10 has garnered the most public criticism regarding its safety record. Well-publicized problems and crashes have been traced to design flaws, and this may have significantly hurt sales of the passenger airliner. Though both the DC-10 and its derivative, the MD-11, have been sought after as freighters--with FedEx being a primary customer--its history of problems is worth reviewing insofar as it may inform the background to the *Cast Away* crash.⁷

One of the first design problems with the DC-10 was the failure of a rear cargo hatch to remain tightly secure while in flight. This issue first surfaced on June 12, 1972, as an American Airlines DC-10 was leaving Detroit for Buffalo, NY. Shortly after takeoff there was an explosion at the rear of the plane, followed by decompression and the collapse of the floor at the rear of the cabin into the cargo hold. All three throttles

slammed shut, and the pilots had trouble controlling the plane. Fortunately, they were able to make a safe landing back in Detroit. The problem was the cargo door. Its linking mechanism was faulty, so when pressure began to build up on the inside of the door, it finally popped open and was torn loose by the fierce slipstream. The unequal rate of decompression between cabin and cargo hold caused the floor to collapse, stretching or severing many critical control cables. Despite a series of service bulletins from the FAA, an almost identical failure of the cargo latch occurred two years later.

Just after noon on March 3, 1974, a heavily loaded Turkish Airlines DC-10 took off from Paris's Orly Airport. Passing through 9,800 feet, there were signs of a serious problem:

Air traffic control received half a minute of garbled transmission in Turkish with a great deal of noise in the background. This included the cabin depressurization warning, and later the overspeed alarm. At the same moment the label on the DC-10's radar echo disappeared from the controllers' radar display, and the echo itself split into two. The larger one curved to the left . . . [while t]he smaller part remained almost stationary on the radar screen, before it too vanished. There were two more radio transmissions, each shorter than the previous one and completely unintelligible. Nothing more was heard from the aircraft.

Three hundred and forty-six people lost their lives in this crash.

Five years later, a DC-10 would be involved in a major air crash which resulted in the grounding of the model. American Airlines Flight 191 left Chicago's O'Hare International Airport with 258 passengers and a crew of thirteen aboard. Just before leaving the runway, it began shedding parts from under its port wing, and startled witnesses reported that "the entire port engine with its supporting pylon, still delivering take-off power, reared upwards and pivoted about the leading edge of the wing, wrenching itself free of the aircraft." For ten more seconds it continued what seemed to be a normal

takeoff, then banked to port, rolled until its wings were vertical, and plowed into the ground, killing all aboard.

Investigators learned that improper maintenance procedures were to blame for the engine separation, but this alone should not have brought the plane down. What had happened was that hydraulic fluid had poured out of the left wing when the engine tore away, allowing the lift-producing slats to retract. This meant that the outer section of that wing now provided less lift than normal. That alone could have been dealt with, but unfortunately, sensors to that part of the wing were also lost, so the pilots had no idea what they were facing. In the event, the port wing stalled, and the plane crashed. What was determined to be a fatal design flaw resulted in the FAA grounding the fleet for five weeks.

Another major DC-10 crash was caused by damage related to the ones just reviewed. On July 19, 1989, flying high over Iowa on a sunny afternoon, a United Airlines DC-10 with 296 souls aboard experienced an explosion in the number two engine, the one mounted in the tail (this is the same engine that appears to want to consume Noland as he bobbed helplessly in the waves after his airplane has crashed). Flying debris severed hydraulic lines, and most of the hydraulic fluid drained away, resulting in a plane that could not be flown by conventional controls. The pilots used engine thrust control to reach Sioux City Airport, but their high approach speed and crude method of control resulted in a fiery crash on the runway and into an adjacent cornfield (a scene discussed in chapter two). Though 111 people died, an amazing 185 survived.

Given this spotty safety record, it is mildly surprising that FedEx allowed the use of the same model for the harrowing crash scene in *Cast Away*. In other ways, too, the DC-10 and FedEx are linked in scenes of terror. As mentioned above, when the DC-10 carrying Noland gets in trouble and experiences control problems, one of the cockpit crew sustains a serious wound to the head, resulting in heavy bleeding. One wonders if this

scene is an homage to three real FedEx pilots who were bloodily attacked on April 7, 1994. This inflight incident should give pause to those who think some of the plots of flying films are too contrived.

The story begins when Auburn Calloway, a disgruntled employee, hatched a plan to kill the three-man crew of a DC-10, then crash the heavily-loaded plane, FedEx Flight 705, into FedEx's headquarters building at the hub in Memphis, Tennessee. Revenge was not the only thing on the mind of the attacker. Because he wanted to provide for his family, he purchased excessive insurance and sought to make the crash look like an accident. Toward this end, he brought aboard hammers, a knife, and a spear gun secreted in his guitar case, then took his place in the employee seat behind the cockpit. Thirty minutes into the flight, he launched his frenzied attack on pilots Sanders and Tucker, and flight engineer Peterson:

None of the three men heard Calloway enter the cockpit. Sanders suddenly became aware of a struggle, and heard the awful sound of hammer blows raining down upon his crewmates. He turned to see both men slumped in their chairs, injured terribly, and a blood-soaked Auburn Calloway moving toward him.

Calloway swung wildly at Sanders. Some of the blows landed, some were deflected. The plane lurched as Sanders desperately tried to defend himself. Then something happened that Calloway had not counted upon. Tucker and Peterson recovered and began fighting back. Calloway was surrounded; he flailed about with the hammer, still inflicting gruesome injuries. The men would not give up, though . . .⁸

The suddenness of the attack is evident in this cockpit voice recorder transcript as the pilots chat:

DS = pilot Sanders
JT = co-pilot Tucker
P = flight engineer Peterson
AC = attacker Calloway
AW = autowarning

JT: Do you, uh, live over in Arkansas, Dave, or . . . ?
 DS: Naw, I live in Fisherville.
 JT: Aw, Fisherville, great spot.
 (Sounds of hammer blows striking pilots.)
 AP: Ow!
 JT: God! Oh, ah, shit.
 DS: God almighty!
 AP: Ow!
 JT: What the fuck are you doing?
 DS: God, (groan), (groan), God almighty! God, God, God. . . .
 JT: Get him, get him, get him
 DS: He's going to kill us.
 JT: Get him!
 DS: Get up, get him!
 AP: I can't, God!
 UV: STOP! (unintelligible) Hold his goddamn . . .
 AC: Sit down, sit down, get back in your seat, this is a real gun,
 I'll kill ya.
 JT: Get him, get him, get him, get him, get him, get him!
 AW: bank angle, bank angle...
 JT: Get him, get him, get him!
 AC: I'm gonna kill you! Hey, hey! I'll kill ya!
 AW: bank angle, bank angle
 DS: Get him, get him, get him!
 AW: bank angle, bank angle
 DS: Yeah, get him!
 AW: bank angle, bank angle
 JT: Get him, get him, get him, Andy, I got the airplane!
 AW: bank angle, bank angle
 JT: Get him, Andy, get him!
 AW: bank angle, bank angle

As Sanders and Peterson fought their attacker in the cabin, copilot Tucker “swung the aircraft into dangerous flight maneuvers in an attempt to literally knock the man off his feet.” At nearly 400 miles per hour, the copilot executed a barrel-roll, “as the three struggling men were tossed about the galley area, alternately weightless and pressed upon by three times their weight in G forces. By now, the aircraft was inverted at 19,700 feet, and the alarmed air traffic controllers in Memphis were desperately calling for Flight 705.” Incredibly, after struggling with his attacker in the cabin, Sanders was able to return to his captain’s seat and land the plane, despite his near-fatal injuries and despite the fact

that the DC-10 was grossly overweight for a landing.⁹ This incredible drama, I believe, is mirrored in the storyline of *Cast Away*. How this is done will be discussed after the list of DC-10/MD-11 crashes is completed.

Three years after this incident, another crew of a FedEx freighter experienced their own terrifying ride.¹⁰ On July 31, 1997 a FedEx cargo plane arriving from Anchorage International Airport in Alaska was destroyed in a non-fatal accident at Newark International Airport. With a crew of two, plus two passengers, this updated version of the DC-10 touched down at an excessive sinkrate, bounced, then rolled right, causing the right engine to drag along the ground. “The MD-11 skidded off the right side of the runway and ended up on its back 4800ft from the threshold and just short of Terminal B.” The probable cause was determined as follows: “The captain’s overcontrol of the airplane during the landing and his failure to execute a go-around from a destabilized flare. Contributing to the accident was the captain’s concern with touching down early to ensure adequate stopping distance.”

This 1997 MD-11 crash began a cycle of serious mishaps for the plane, though not only for FedEx. In all, three other carriers experienced fatal crashes, beginning with one the next year, the crash of Swissair Flight 111 on September 2, 1998. After leaving John F. Kennedy Airport in New York, this passenger plane experienced smoke in the cockpit. Though they attempted an emergency landing in Halifax, Nova Scotia, the fire burned too quickly, and the plane and its 229 passengers and crew perished at sea.¹¹

Taken alone, the Swissair crash would seem to have no bearing on either FedEx or the DC-10/MD-11 fleet as a whole. Thus, the choice to situate this plane from this company in a role which could backfire was probably not a big worry to movie makers or company executives at the time. If, however, they had known that the MD-11 would have three total-write-off crashes the year prior to the film’s release, they might have changed

their minds. The year 1999 was not a good one for the MD-11. First, on April 15, a Korea Air freighter went down immediately after taking off from the airport in Shanghai. All three crewmen were killed, as well as four on the ground. Investigators determined that the crash was due to the pilot's misunderstanding of a controller's command.¹²

Then, on August 22, a China Airlines landing in heavy weather at Hong Kong's new Lap Tok Airport, flipped on its back after hitting the runway hard, recalling the FedEx crash in Newark two years before. Only three lives were lost in this crash, due to the prompt response from airport emergency personnel.¹³ Finally, on October 17, a FedEx plane was again involved in a non-fatal cargo crash, this one at Subic Bay in the Philippines when it made an approach at a high rate of speed and overran the runway, ending up in the bay just beyond the threshold.¹⁴

A Tribute to Fallen Warriors: Heroic FedEx Employees

A family atmosphere prevailed during the early days of Federal Express, in part due to the wishes of its founder, Fred Smith, whose "People-Service-Profit" philosophy created an unusually harmonious environment for employees. Smith was also given to holding pep rallies for the company and typically he would give a rousing speech.¹⁵ Unfortunately, he was unable to do this after the near-tragedy of Flight 705 because his company was involved in an acrimonious struggle with the Air Line Pilots Association, which hoped to unionize FedEx's pilots. A company-sponsored event to fete the injured pilots at such a time might have been seen as cynically manipulative, so nothing came of the impulse.¹⁶ In that sense, by appearing in *Cast Away*, Smith may have been able to vicariously honor the real hero pilots in his company .

Finally, there is the matter of wings in *Cast Away*, specifically a set of stylized wings on a FedEx package that serves to open and close the film. Out on the expanses of

a Texas prairie, an artist works in a converted barn, welding some new piece of art. A FedEx courier has pulled up and receives a package on which the artist has stenciled a pair of golden wings. The courier accepts the package and sends it on its journey to open the movie.

Later, the package washes ashore on Noland's deserted island, yet another refugee from the wreck. Because of the wings on the box, however, Noland refrains from opening it, keeping it perhaps because of its talismanic properties to spirit him away from his isolation. Though he opens many other packages in search of food and tools, he leaves this one package unopened for the four years of his exile. Once he has been rescued, he is determined to return the box to the artist, and sets out to do so. Unfortunately, no one is home when he returns the package, so he leaves it on the porch with a note. Leaving the property, however, he asks directions from an attractive woman driving a pick-up truck, and when she pulls away, he sees that stylized wings are painting on the truck's tailgate. And there the movie ends, ambiguously leaving the audience wondering if a chance for new romance had been missed, the chance to bring closure to the saga surrounding the winged box squandered.

Mixed with sense of missed opportunity is the hope held by a future now full of possibilities, possibilities as endless as the expanse of Texas territory around Noland. The look in Noland's eye at this point recalls his defeat of despair back on the island, as he recounts to a friend once he is rescued:

And I know what I have to do now
I gotta keep breathing
Because tomorrow the sun will rise
Who knows what the tide could bring?

CHAPTER 9 RACE AND GENDER IN FLYING FILMS

In 1975 film theorist Laura Mulvey introduced a new way of viewing film by combining psychoanalysis and feminism. Her essay “Visual Pleasure and Narrative Cinema” argued that prior film theories had assumed that the spectator was male. Mulvey sought to correct this oversight by putting female spectatorship on the agenda, thus constructing a feminist theory of spectatorship. As one scholar writes of Mulvey’s work:

In her essay, Mulvey argued that in a world ordered by sexual imbalance the role of making things happen usually fell to the male protagonist, while the female star occupied a more passive position, functioning as an erotic object for the desiring look of the male. Woman signified image, a figure to be looked at, while man controlled the look. In other words, cinematic spectatorship is divided along gender lines. The cinema addressed itself to an ideal male spectator, and pleasure in looking was split in terms of an active male gaze and a passive female figure.¹

Of course, feminism was not the only growing force in film studies during the 1970s and beyond. Joining it were ethnic studies, gay and lesbian criticism (joined by queer theory in the 1990s), and an assortment of post-structuralism, deconstructionism, and postmodernism. Broadly, these movements become conceptualized in the popular mind as multiculturalism, and one of the chief aims of these movements was not only to increase the appearances of women and non-whites in films (think back, for example, to Hitchcock’s *The Wrong Man*, where New York City streets are devoid of people of color, thus offering “a racial discourse keyed to white visual pleasure”²), but to exercise direct control over the representations of each group in question. “From genre to spectator, from directorship to narration, in the ideological as well as the material realm, race and

ethnicity have a foundational effect on the study of Hollywood film industry, representational practices, and spectatorial cultures.”³

The key point here is that aviation films were not immune to these changes. In fact, they provide a fascinating study of the progression of *images* of women, and ethnic and racial minorities, often in ways that are more progressive than statistics would warrant. While, for example, previous white male preserves such as medicine and law have drastically become more egalitarian as far as race and gender are concerned, the cockpits of American commercial airliners and military planes remain heavily white and male, with statistics, as will be discussed later, showing the percentage of female American airline pilots at about three percent and African Americans at about two percent over the last few decades.

Because the image of race and gender is the focus of this chapter, there must also be a discussion about power relations among the races and genders, as Wiegman makes clear. For that reason, I will spend time justifying my extensive use of made-for-TV flying films (as opposed to only Hollywood films) in this dissertation. While such movies are almost always inferior to Hollywood flying films with respect to budget, status of cast, level of screenplay writing, etc., they may claim a comparable status to film insofar as they affect the minds of the viewers, primarily because TV images are seen by many more viewers than are film images. The power of film to influence the masses has been demonstrated by Robert Sklar et al., as discussed in chapter two,⁴ but in the decades since television became present in essentially every American household, its power to mold images has grown dramatically. Recall, for instance, what two television scholars wrote about the power of the medium, that it was “all-encompassing, its influence enormous.”

For such reasons, I will pay special attention to the patterns associated with portrayals of white males in flying films and compare and contrast them with portrayals of

women and blacks (and to the extent they appear at all, Asians and Hispanics). In order to establish the contrast between the images of white males when white male privilege was unchallenged in Hollywood, I will begin with traditional images in flying films that support the power and privileged position of those white males. While doctors, lawyers, policeman, politicians and soldiers have long functioned as real and symbolic categories of American leaders, I will focus here on the image of the pilot, constructing a metaphor for America where the airplane (bomber, cargo plane, and especially the passenger airliner) functions as American society, the pilot as its leader, flight attendants playing intermediary roles, and passengers as somewhat powerless and passive citizens. The changes over time associated with these images, then, will give us clues as to where the creators of flying films and movies wish to situate each group.

White Men at the Yoke: Traditional Images

The images of white males and flying machines have been intertwined ever since Wilbur and Orville Wright successfully flew their plane from the sand dunes of Kittyhawk, North Carolina, on December 17, 1903. Two world wars brought tens of thousands more white men into the cockpit, and these real-life events were duly portrayed in filmic renditions. From John Wayne as a fighter pilot in first *Flying Tigers* (1942), then *Flying Leathernecks* (1951), to Gregory Peck as a World War II bomber pilot in *Twelve O'Clock High* (1949), to the hero test pilots in *The Right Stuff* (1983), to the mischievous tops guns in *Top Gun* (1986), to the men who went to the stars in *Apollo 13* (1995), Hollywood films have accurately cast white men in the roles they have in fact performed. The exceptions, such as the flying career of Amelia Earhart,⁵ were most notable because they were exceptions. Fictional filmic exceptions--and there have been many--are more

difficult to explain for a variety of reasons, which is why I spend so much time discussing them below.

Because of the essentially monolithic role played by white males in flying, there is less need to examine the many films that reinforce this reality; a few outstanding examples will succeed in establishing the genre. The real interest, it seems, is flying films that teeter on the cusp of change from one era to the next, when in other areas of American life blacks, women, and other previously excluded groups have already made marked progress. In actual flying, this progress has simply not materialized, yet filmic images have progressively sought out this change, again and again exchanging the power and status of the white male pilots in the beginning of the film with the power of others. Surely, this deserves exploration. Before that, however, a visit to a few of the traditional flying films reifying white male power are in order. No better example can be found, perhaps, than the 1970 blockbuster *Airport*, for it occupies a place in time where cultural changes in America were bursting out at the seams, yet this film stood as an icon of white male hegemony in Hollywood's construction of America.

Airport

This classic flying film has a first-rate cast: Burt Lancaster, Dean Martin, Jean Seberg, Jacqueline Bisset, George Kennedy, Helen Hayes and others, and is replete with traditional stereotypes, from the playboy pilot with his stewardess lover to the gruff cigar-smoking mechanic who drives a modern jetliner the way his grandfather would have driven a team of horses. With the possible exception of the pro-choice conversation between the pilot and his pregnant lover, this film everywhere reifies roles that had been traditional in America for decades and more; it reinforces rather than challenges the status quo with respect to race and gender.

As we saw earlier, the drama in *Airport* is established when a Trans Global 707 lands at Chicago's Lincoln Airport and promptly gets stuck in the snow on a taxiway, thus blocking the runway. Lancaster stars as the harried airport manager Mel Bakersfeld, whose job it is to keep the runways in operation. Conveniently, Bakersfeld has contact with (and a sympathetic ear from) beautiful and available Tanya Livingston, a representative from Trans Global Airlines. After doing some initial office work, Miss Livingston's role for the rest of the film is to sit quietly next to this forceful manager, quite in line with the passive roles played by most women in *Airport*.

Bakersfeld's brother-in-law is Captain Vernon Demerest (Dean Martin), a rakish pilot in the prime of his life. In keeping with the spirit of the times, the married Demerest has two romantic scenes with a young stewardess whom he has gotten pregnant. (Demerest's wife is good natured about her husband's philandering; when Demerest offers to buy her white gloves in Rome but gets the size wrong, she teases, "No *I'm* the one that wears seven-and-a-half.") This sexual license given airline pilots is one not normally afforded most respectable members of society at the time.⁶

For the flight to Rome, Captain Anson Harris will be flying in the left seat, and Demerest will ride as check pilot in the right seat. The appearance and status of these two captains are underlined by the introductory scene in which they are shown in a brightly lit hangar, the camera focusing exclusively on them while they exchange manly banter and compliment each other on their stylish captain's uniforms. In the background is the gleaming 707 that will take them on their journey to Rome. The power and status of the modern jetliner nicely parallel those same qualities in the two pilots.

In the cockpit, Captains Harris and Demerest are two handsome and reliable white men, joined by a third white male, the young flight engineer. Preparations for takeoff are completed, and once aloft, the action begins. Mentally disturbed passenger Guerrero

explodes his bomb in the rear lavatory, ripping a hole in the fuselage and threatening the plane and passengers. From here on, the pilots are at their finest, calmly appraising the situation and charting a safe course back to base. While the male pilots maintain their control and power, stewardess Gwen has lost hers as she is rendered unconscious by the force of the blast at the rear of the plane, and for the remainder of the movie she will serve as the passive recipient of the help proffered by the males around her.

Here we might recall the scene back on the ground where two more men compete for control of the situation. Bakersfeld wants to clear the runway for the approaching crippled 707, but to do so he would have to direct his men to use their massive snowplows to push the stuck airliner out of the way, ruining a multi-million dollar piece of flying machinery. In contrast, chief mechanic Patroni wants to taxi the four-engine jet out of its snowy rut, and does so in a suitably masculine way. In the end, with the help of a uniformly white male cast of air traffic controllers, the pilots safely land the crippled plane, and Captain Demerest rushes back to comfort Gwen, who remains prone on the cabin floor, her eyes swathed in bandages. Over her, the male doctor tends to her needs, while Demerest squeezes her hand, emphasizing the stereotype that women are weak and helpless, while men are strong and protective, an image reinforced consistently in this film.

Airport '75

Five years later, in time for Mulvey's discussion of putting female spectatorship on the agenda, we find the 1975 sequel to *Airport* in which a stewardess is given a modicum of agency when the male cockpit crew is rendered impotent due to an inflight collision. On the whole, however, this *Airport* sequel continues to reinforce the dominant race and gender relationships that obtained for the original *Airport*. Our pilots are white males, George Kennedy reprises his role as mechanic Joe Patroni, and most significantly, hero

Alan Murdock is played by Charlton Heston. Having said this, I will note a few deviations from pure adulation of the skills of white males in the sky. First, flight engineer Julio (Erik Estrada) speaks Spanish, though it is only to flirt with a young blonde stewardess who has visited the cockpit.

The small bit of agency afforded a female character comes when a small twin-engine airplane collides with the 747 and kills or otherwise incapacitates the three-man crew on the flight deck, leaving it to stewardess Nancy Prior (Karen Black) to keep the jumbo in the air. Though suitably hysterical, as sensibilities of the time dictated, she does manage to fly the Boeing 747 until *her* lover (Charlton Heston) can be lowered from a helicopter into the cockpit to take control and safely land the plane. The subsequent two *Airport* films (1977 and 1979) reverted back completely to male-dominated action, meaning that the four films in this series overwhelmingly reinforced traditional gender roles.

By Dawn's Early Light (1990)

Ten years later, gender roles in flying films have changed considerably, as in the nuclear war story called *By Dawn's Early Light*. Here, two of the leading characters are lovers who also happen to be the pilots of a B-52 that is headed for a nuclear exchange. The male pilot, Major Cassidy, is the commander and acts accordingly, but the female pilot, Captain Moreau, acts as the moral center for the crew and gradually assumes power aboard the bomber. Elsewhere, James Earl Jones, an African American, stars as the commander of an airborne command plane known as "Looking Glass," while Martin Landau is the peace-loving President. In addition, the three men pushing for all-out nuclear war against the Soviets are older white males, one of whom prays to his Christian God to receive the message to prosecute the war.

The contrast between Cassidy and Moreau provides the starkest statement about gender or race in this film. From the beginning, when the two are shown having a tryst in a rural motel, Cassidy never rises above a sophomoric interpretation of the affair, whereas Moreau clearly desires more substance to the relationship. This differing level of maturity is carried onto the flight deck of the B-52 as they prepare to carry out orders to bomb a command center within Russia. Cassidy is determined to do his job, but Moreau refuses to unthinkingly carry out orders that will result in the destruction of much of the world. "Turn the plane back, Major!" she demands, and he does, whereupon she assumes both the moral high ground and effective control of this potent bomber.

Freefall: Flight 174 (1995)

This mid-1990s TV is worthy of note both because it is based on a true story and because it takes no liberties with the racial or gender identities of the leading actors. As we saw earlier, this movie opens with a flight simulation scene in which the two pilots lose control of their jet and crash. Just after this, we are told that this scenario was "based on an actual event that occurred on July 23, 1983," in which fuel starvation on a new Boeing 767 jet caused both engines to flame out. Miraculously, the pilots glided the jetliner to a safe landing.

In *Freefall*, the white male pilots are portrayed as highly competent professionals, which in fact they were. Captain Bob Pearson (William Devane), in addition, has special skills as a sailplane pilot, a fortuitous fact when it comes to gliding a powerless jetliner to a safe landing. The co-pilot, though preoccupied with his wife's serious medical condition, remains cool, figuring fuel loads, course settings, etc. Finally, the airline's top mechanic, another white male, happens to be aboard, and he is shown as a man very knowledgeable about his trade. This threesome represents the best of white male talent, and they

employed this talent successfully in making their miraculous landing at Gimli Field outside the Canadian city of Winnipeg; movie and reality overlap perfectly.

Air Force One (1997)

In addition to *Airport* and *Freefall*, we can still find positive (and statistically accurate) images of white male pilots in other recent films. For example, in *Air Force One*, as we have seen, Harrison Ford appears as President Jack Ryan, returning from a successful summit with the leaders of the former Soviet Union. Despite the fact that Glen Close is cast as the active and forceful Vice President of the United States, *Air Force One* clearly privileges the position of white male power. In fact, the film is almost a throwback to action thrillers of an earlier era in which (mostly) white men filled all the major roles, good and bad. The females who appear in this film (with the exception of Close) act as supporting members for their men, usually by fulfilling the “women in jeopardy” roles so common to Hollywood films. Thus, for example, Ryan’s wife and daughter rely completely on him for survival. When the hijackers threaten their lives, it is the President who saves them. Later, in the cockpit, the President flies the damaged 747 while his wife and daughter look on passively from behind him. Finally, as a traditional gentleman, it is strictly “women and children first” when it comes time to transfer from the falling presidential plane to the rescue aircraft next to it.

Submerged (2000)

In this TV movie Dennis Weaver stars as Texan “Buck” Stevens, owner of a major weapons manufacturing company that has launched its powerful “Thunderstrike” laser gun into space. While these details differ from *Airport ‘77*, the flying drama is the same:

a controlled landing at sea of a Boeing 747-100, followed by the sinking of the plane. The drama: How will the stranded passengers be rescued?

As far as representations of race and gender are concerned, this film belongs firmly in the camp of those maintaining white male power, as the captain, Buck Stevens, the various CIA and FBI agents, and the leader of the antagonists are all white males. In contrast, the women on board include Buck's lover as a flight attendant, Buck's spoiled adult daughter, and a very pregnant passenger--all three of whom are blonde. At the height of the crisis, the pregnant woman goes into labor, further accenting her helpless and passive role (in contrast to the wounded male agent who for a while was a mirror image of her helplessness--in the final crisis, however, he manages to stand up and walk away). Three slight deviations from this pattern of power representation can be found in the silent co-pilot, who is a very light-skinned black; the leader of the relatively impotent ATF (Bureau of Alcohol, Tobacco, and Firearms), who is a woman; and the femme fatale who assassinates the original pilot. A bigger deviation comes in the form of Captain Masters (Fred Williamson), an African American who commands the U.S. Navy aircraft carrier's search for the submerged 747.

These deviations, however, are minor and do little to overshadow the real power exhibited by white males in this film, making this low-grade TV movie no different than big films like *Airport* and *Air Force One* that showcase the role of white males as pilots and those who "make things happen." Other films beginning about 1990, however, offer an alternative rendering: here, white males are either joined by a multicultural crew in sharing power, or they are completely replaced by previously powerless groups. Given its long tradition, the mixed multicultural crew genre will be discussed first.

“Hollywood’s Conscious Efforts” to Democratize Flying Films

In a discussion of characters in typical World War II films, movie expert Lester Friedman writes about the “multi-ethnic platoons dedicated to preserving the American way of life and mirroring American racial harmony within their ranks.” He notes that “a simple roll call demonstrates Hollywood’s conscious efforts to democratize celluloid warfare.” For example, the names that appear in *Winged Victory* are “Davis, Miller, Ross, Scarlano, and O’Brien,” while the Marines in *Sands of Iwo Jima* are Stryker, Thomas, Ragazzi, Hellenpolis, Flynn, Choynski, McHugh, Hayes, and Stein.”⁷ Given the segregation of the time, it is no surprise that these war films dealt with ethnic integration rather than the racial integration that would begin in earnest a decade later.

Fast forward now to two modern treatments of flying in World War II. *Memphis Belle* (1990) famously dealt with the crew of a B-17 Flying Fortress that completed 25 dangerous missions over Germany and returned home. In the case of this film, writers and the director opted not to tinker with the racial composition of the crews that actually flew these flights; all were white, though composed of the various ethnicities mentioned by Friedman. This movie obviously has no desire to portray a multicultural cast.

The same cannot be said of the 2001 *Pearl Harbor*, in which a decidedly multicultural touch is added by elevating the exceptional presence of an Negro sailor into one of the main roles. In *Pearl Harbor*, Cuba Gooding, Jr. stars as Petty Officer Doris ‘Dorie’ Miller, who heroically comes up from below deck to grab a place behind a mounted machine gun and begins firing at attacking Japanese warplanes. Such “conscious efforts” by Hollywood filmmakers can be found in a wide variety of recent flying film scenes.

Take, for example, the blockbuster *Executive Decision*. In this film, the commando team consists of a racially mixed group of men. John Leguizamo plays one of the US

commandos who bravely boards the hijacked 747 in an attempt to stop these violent men. Joe Morton joins him as Sergeant Cappy, the African American bomb expert injured by sudden turbulence, and B.D. Wong is Sergeant Louie, another of the commandos. Women get in on the action in the form of Halle Berry as flight attendant Jean who risks her life to assist the rescue team. Taken as a whole, this cast neatly mirrors the consciously ethnically diverse cast of many World War II films, though in a more modern racial sense.

The TV movie *Strategic Command*, clearly modeled on *Executive Decision*, also displays a mixed range of gender and racial images, in some ways reinforcing stereotypes, in other ways challenging them. For example, the action hero scientist Dr. Rick Harding is a white male with blue eyes and his wife is a beautiful blonde reporter. The Vice President is played by a dignified older white male, and all three of the cockpit crew are white males. Admittedly, their appearance is brief and only serves to show their impotence with respect to the power of the terrorists, but all of the terrorists are white as well, including the muscular male leader with the strong Australian accent. With exceptions that I will discuss in a moment, this 1997 movie remains largely a discourse about white-on-white interaction, right down to the dénouement in which Dr. Harding successfully lands the plane.

Three areas in which white hegemony are challenged, however, are the casting of the F.B.I boss, played by a bloated Paul Winfield; the press secretary to the Vice President, played by an Asian American woman; and the commando team in which non-whites outnumber whites three to two, though all five are male. Winfield's character as a law enforcement agent only marginally challenges power stereotypes in that both cop movies and television dramas have featured black (generally male) characters in countless instances.⁸

The casting of an Asian American woman as Vice Presidential press secretary is problematic in that it offers a position of prestige to a minority actor but does so in a way that is itself somewhat stereotypical. From the real-life broadcaster Connie Chung to the fictional Chinese American reporter Tracy Tzu in *Year of the Dragon* (1985), female Asian American newscasters have been ubiquitous, in stark contrast to the invisibility of their male counterparts. The same is true of film more generally.⁹

As for the commando team assembled to fight the terrorists, there are four members, plus Dr. Harding, who joins them later. The leader is Hispanic American Jsu Garcia as Captain Rattner, two others are African American, and the fourth is either white or Hispanic.¹⁰ This ratio of non-whites to whites increases when only three of the men successfully board the 747: Dr. Harding, Rattner, and the African American bomb expert. In what the authors of *The Bell Curve*,¹¹ would have to consider an ironic twist, this African American outwits the white master terrorist and defuses the chemical bomb before it can be detonated. Such racial portrayals, of course, are not limited to commando teams aboard airplanes in trouble. They can be found in the cockpit of any number of flying films as well.

Race Matters: Blacks in the Cockpit

In “Race, ethnicity, and film,” Robyn Wiegman traces the development of film studies with respect to race and ethnicity and finds that “the critique of identity that is now nearly synonymous with post-structural analysis owes a great deal to the conversations about realism in the early 1980s.” This discourse argued that one “reads” a film “according to one’s social identity, which is itself produced by one’s positioning in hierarchies of power . . . ,” though, for reasons too complex to address here, race and ethnicity were sometimes marginalized in favor of other categories. Efforts were then made to bring race and

ethnicity “from margin to centre by foregrounding the politics of both critical discourse and cinematic practises.” In this next section on African Americans and flying films, I will, along with authors cited by Wiegman, attempt to address “the relationship between the representative blackness and the proliferate whiteness of US image industries.”¹²

Hollywood for decades remained faithful to the statistics in portraying American pilots as white males. Though a handful of black pilots fought in Europe, “as far as World War II was concerned, the American air fighter was drawn exclusively from a white elite.” In fact, the first portrayal of a black pilot was the 1954 Korean War film *Battle Hymn*.¹³ The paucity of filmic images of black pilots continued for decades, though there was the occasional black crewmember aboard a military plane. For example, in *A Gathering of Eagles* (1963) one crewmember aboard a B-52 is black, and in *Dr. Strangelove* (1964) James Earl Jones has a minor role as a crewmember aboard the B-52 sent to attack Russia.

What are viewers to make of the fact that in the real world, the vast majority of airline pilots have been and continue to be white males? Does this qualify as “proliferate whiteness”? As one of the “US image industries,” should Hollywood tinker with “real” images when portraying the race, ethnicity, or gender of its cockpit characters? In this section, it would seem that Hollywood does just that. Despite the fact that only “2 percent of the nation’s pilots . . . are African American . . . [and o]nly 3 percent are women,” we can find a significantly higher representation of blacks (and women) as pilots.¹⁴ Be that as it may, the issue of representation remains problematic insofar as Hollywood peoples its celluloid cockpits with more African Americans than is warranted yet gives them little agency in their movies, as a perusal of such scenes will show.

Pandora's Clock (1996)

This TV movie is another adaptation of a John Nance novel. Here, we see a white captain and black first officer in the cockpit, and their roles highlight the tendency just mentioned of not giving the black crewmember agency. In fact, the presence of the black is almost incidental, as the white captain is by far the most important--and positively portrayed--character in the movie. In addition, a clear contrast in talent between the white and black pilots is shown during a crisis. When American F-15 Eagles divert this virus-infected flight from Germany to America to a base in England, the English commander on the ground gives the command to prevent any such landing, and snowplows are parked the length of the runway. For the black male co-pilot, this is too much, and he freezes. Captain Holland, in contrast, remains cool, as he does throughout the crisis. Perhaps to balance this portrayal of black impotence, casting in the cabin is reversed: an African American is an important ambassador and he galvanizes the mass of passengers into facing their plight with fortitude.

By this time in the late 90s, the multiracial cockpit is becoming almost *de rigueur*. In *Airspeed* (1998), for example, the pilot is black, while the co-pilot is white. *Submerged* (2000) features a light-skinned black co-pilot, and in *Failsafe* (2000), a black and white remake of the 1964 classic, George Clooney pilots a B-58 Hustler which is carrying a thermonuclear warhead toward Moscow. In the co-pilot's seat, Don Cheadle, an African American, plays the other pilot, and the two of them discuss issues of racial equality as they are flying. In another Clooney film, *The Perfect Storm* (2000), the co-pilot of the KC-130 Jay Hawk tanker is black. In *Turbulence 3: Heavy Metal* (2001) the pilot who instructs a passenger on landing a 747 is also black.

Cast Away (2000) also presents a mixed race and gender cast in its cockpit scenes. First, when Noland is returning from Russia aboard a company FedEx jet, one of the

pilots that comes back to talk to him is a woman. More to the point, when Noland is called out to make an important flight to the Far East, the first officer is African American, as we see when he urgently tries to make radio contact with Tahiti control. Since I made the argument in the previous chapter that this scene was likely tied to a real crisis encountered by a FedEx crew in the air, I feel it necessary to continue that discussion now.

As we saw, FedEx pilot Auburn Calloway, riding now as a passenger, succeeded in carrying hammers, a speargun, and a knife onto the DC-10 on which he was travelling as a company passenger. He then attacked all three men flying the plane, hoping to down the jumbo cargo jet in accordance with his complicated plan of revenge and profit. As the facts show, this attacker was African American, and his race played a critical role in the entire drama, beginning with a strong sense that he had long been a victim of white racism. For instance, during his Navy flying career, he had accused whites around him of racism, keeping a journal full of such incidents--"from an enlisted man whistling 'Dixie' while mopping a corridor to an officer selecting the movie *Song of the South* for entertainment."

This sense of grievance intensified as he passed through jobs in the civilian sector, losing flying positions first at Flying Tigers, then Gulf Air. When he secured a position with the fast-growing FedEx, however, his prospects improved dramatically. Unfortunately, here too he fell into trouble and was scheduled for a disciplinary meeting soon after he took the flight to California. The belief that racist managers were behind what he saw as an attempt to ruin his career sparked his murderous plans for revenge.¹⁵ That all three of his victims were white males only amplified the appearance of a black/white conflict.

What is fascinating from an American Studies perspective is the fact that this brutal and dramatic black-on-white attack elicited almost no notice as a racial issue, while a somewhat comparable attack just months later defined a decade of race relations in

American history. In the latter incident, former football superstar O.J. Simpson was accused of murdering his ex-wife and her young male companion. To further the parallel, both trials began in early 1995, and despite the fact that race played every bit the role in the Calloway trial, national media essentially ignored it yet made the O.J. Simpson trial into a signal moment of cultural history.¹⁶

In Auburn Calloway's trial, both the defense lawyer and the prosecutor were African American. Charles Ogletree, a famed Harvard professor, had been Calloway's friend since they were both students at Stanford University in the early 1970s and defended his old friend during the preliminary hearings, while A.C. Wharton took on these duties during the trial. As with the Simpson trial, blacks composed the vast majority of the jury, in this case ten members. Even a critical witness for the prosecution, psychiatrist Raymond Frederick Patterson, was African American, and his testimony with respect to Calloway's insanity defense was that Calloway's claims were false: "I don't believe Mr. Calloway hears voices. It's malingering, plain and simple." On August 11, 1995, Calloway was sentenced to life in federal prison, with no chance of parole. As he was being led away, he turned and shouted at reporters, "Too many black men are being sent to prison! Does anyone care about that?"¹⁷

Of course *Cast Away* never begins to portray this aspect of the attacks on the FedEx crew that April day, but to the extent the crash scene in that film might be a tribute to the three victims of this attack, it warrants background discussion. It also brings up the question of why this dramatic event, where race, murderous violence, and the specter of a fully-loaded jumbo jet crashing into downtown Memphis, has never become the subject of a movie, not even a cheap and unprofessional made-for-TV one. Ironically, what is portrayed in onboard attack films is the reverse of this real FedEx incident: white villains attacking black authority figures in flight, as we will now see.

Passenger 57 (1992)

Recall that in this film African American actor Wesley Snipes plays John Cutter, an employee of Atlantic International Airways charged with instituting cabin safety measures in dangerous skies. On a flight to Los Angeles, he is confronted by a hijacking by prisoner Charles Rane, a calculating, sadistic killer. Race as an issue is consciously employed in this film, most prominently in the contest for control between Snipes and his former girlfriend (a black flight attendant), and blue-eyed Rane. In addition, when the TriStar is forced to land in Nashville, good-ol' boy sheriffs greet the plane and simply make the assumption that Cutter, as an African American, is the bad guy. The ongoing challenges Snipes meets in the South play out throughout the film. Later, in a fight scene aboard the plane between Cutter and Rane, the European confidentially assumes he will prevail, but Cutter begs to differ, telling him to "always bet on black." And in fact, Cutter defeats Rane.

Sonic Impact (1999) and Air Rage (2001)

As we saw in chapter seven with respect to *Sonic Impact*, prisoner Jeremy Barrett makes his appearance as a suave hijacker, and two of his accomplices are hillbilly types. In any case, all three are white. In addition, both pilots are white, though the co-pilot is female. Finally, the action hero of the movie, Nick Halton (James Russo) is also white. The racial conflict here comes in the person of Taja, a police officer played by rapper Ice-T. His one appearance here as an officer of the law brings irony enough, but when he reprises the role in 2001 in *Air Rage*, students of popular culture must pay close attention. What makes this ironic is the fact that Ice-T is the rapper who performed the infamous lyrics in "Cop Killer, from which the offending lyrics are:

Cop killer, better you than me.
I'm a Cop killer, fuck police brutality!
Cop killer, I know your family's grievin'
(fuck 'em)
Cop killer, but tonight we get even.¹⁸

In *Sonic Impact*, Taja is a wholly sympathetic figure, in stark contrast to the white Barrett. Taja eventually earns maximum sympathy when he is brutally shot and killed by Barrett. To drive home the point of how offensive Barrett is, he is also shown accosting a lesbian couple, replete with insulting comments. He then nonchalantly executes one of the lesbians to make a point with the flight crew about the locked cockpit door. To complete the picture of depravity, he later sits back in a seat and ostentatiously smokes a cigarette.

We have seen that airborne portrayals of blacks send mixed messages with respect to power and privilege: in the cockpit they are represented beyond their numbers but are given no discernable power; in the cabin, they are cast as heroes battling villains who are white, but in this respect such movies belong every bit as much to the ubiquitous multiracial cop television shows and movies proffered from the 1980s onward as to flying films. Thus, it becomes difficult to say with certainty that Hollywood is crafting a message about race when they create their most recent aviation fare. When it comes to one other historically marginalized group, however, Hollywood movies are surprisingly on key when it comes to portraying powerful women in flight.

“Can Girls Be Heroes?”: Gender in the Air

One wonders how Laura Mulvey would react to the change in images of women in flying films since her 1975 essay appeared. There seems to have been a sea-change in portrayals of control of airplanes, just as we might expect from the rise of feminism and multiculturalism. Of great interest here is what happens symbolically: Many flying films begin with the traditional white male cockpit crew (and generally a female cabin crew) but

as the story progresses, the white males are removed from power through death or illness and control is assumed by a previously powerless character, generally a white woman. This can be portrayed in a far-fetched manner, as it was in the 1997 *Turbulence*, it can be done comically, as in the 1998 hit film *Six Days, Seven Nights*, or it can be done in a serious manner, as it is in *Free Fall*, a 1998 movie featuring Jaclyn Smith as National Transit Safety Board member Renee Brennan. The fact that so many flying films since 1990 have exhibited this subtext demands our attention.

The History

One cannot truthfully say women at the yoke have been perfectly absent from Hollywood flying films. In 1936, for example, a woman in *Flying Hostess* must fly the plane when the pilot is shot. Two decades later, *Julie*, starring Doris Day as a woman fleeing her husband, features the murder of the pilots, and it is then up to Julie to land the passenger-filled airplane.¹⁹ In this thriller, dubbed a “jep” in trade speak (meaning a “woman-in-jeopardy drama”) Day stars as former stewardess Julie Benton. Her insanely jealous husband stalks her and manages to board her flight from Carmel to San Francisco. In short order, he shoots both pilot and co-pilot, leaving no one to fly the plane except for former stewardess Benton. Not quite convincingly, Julie takes control of the four-engined Douglas DC-4 and bounces it to a more or less successful landing.²⁰ Though this film focuses more on the woman in danger, there is still a subtle comment that women can replace men, even in the most demanding of jobs. This is a theme that will lie dormant for about thirty years, then gain currency with the growth of feminism, as I will show below.

Miracle Landing (1990)

In this TV movie, Connie Sellecca stars as pilot Mimi Tompkins, co-pilot aboard the endangered Paradise Airlines Flight 243. That a female co-pilot happened to be aboard the actual crippled 737 in danger that day was fortuitous for movie makers who wanted to accent the technical abilities of women. Accordingly, this is a major subtext of the show, beginning with an opening scene where she is informed by her ecstatic husband that she has received her captain's wings.

It is a scene soon after this, however, that establishes the feminist perspective of the movie. A flight attendant is working on her painting hobby on her day off, while her young daughter poses for her on one of Hawaii's beautiful beaches. In her hands the daughter has an old photograph of her great-grandfather, a flying hero from the old days. This scene allows the director to establish a then-and-now comparison, for the daughter, contemplating the acclaim achieved by her great-grandfather, wistfully asks her mother, "Can girls be heroes?" The mother answers in the affirmative, raising the hurdle for the real-life woman pilot flying Paradise Flight 243. As discussed in chapter two, Second Officer Mimi Tompkins performs superbly, and her participation is crucial to the safe landing of the plane.

A much more minor example of women in traditional men's roles comes just after the plane has depressurized and Tompkins has radioed in their emergency. The two air traffic controllers are women and they carry out their duties stoically and efficiently. Despite bucking statistics, this scene is also at variance with even later movies such as *Ground Control* (1998) and *Pushing Tin* (1999). In *Pushing Tin* the vast majority of ground controllers are (white) men, and the atmosphere in their workplace is decidedly male (in fact, the director uses the concept of an overly masculine ambiance to create humor at the macho men's expense). Suffice it to say, the two female air traffic

controllers in the 1990 *Miracle Landing* never would have been considered for a film such as the 1970 *Airport*, a film in which not only air traffic controllers and pilots, but nearly everyone associated with flying and handling airplanes is decidedly male. In this sense, *Miracle Landing* is making a statement.

Hijacked: Flight 258 (1996)

The cockpit crew of this TV movie has to be among the most handsome pair ever to command a passenger airliner. The bearded James Brolin performs an understated role as co-pilot Ron Showman to Susan Batten's Captain Kim Mitchell, a stunning brunette as newly appointed captain. From the early dialogue, we know that Captain Mitchell and Showman have had some romantic attachment in the past but by now it has decidedly cooled. The fact that the captain is a woman does not go unnoticed in this movie. For example, upon seeing the female captain, a boorish and drunk Vietnam vet sneers, "Great, there's a broad flying the plane. Now I really need a drink."

The hijacker Cronin also attempts to assert male prerogative over the female captain when he sarcastically utters, "Wait a minute . . . Our Lady of the Airways. Poster girl for affirmative action. You know, I was just being guarded by a female marshal. I hope you're better at your job than she is at hers." Captain Mitchell, however, is not passive; she assumes "the role of making things happen" by violently maneuvering the plane about the sky, throwing the hijackers off balance. Thinking quickly, she then concocts a story about damage to the aircraft that will result in either an immediate landing or a crash, thereby forcing the hijacker to make the obvious choice. The female captain's ability to take control and get the plane on the ground accounts for the satisfactory end of the hijack drama.

Turbulence

By the time of this 1997 film, the emergence of a multicultural allegory in flying films is in full swing. Though the actual percentage of women flyers had hardly changed, the images coming from Hollywood had. In calling this an allegory, I mean to suggest that the common film text of beginning a movie with traditional white males as pilots, then removing them and replacing them with women can be read as a larger desire by multiculturalists to tear down existing power relations in America and recast them with women in positions of power.

For example, In *Turbulence*, we begin the movie with two white males in the cockpit of the 747 being served coffee by flight attendant Teri Halloran. When shooting breaks out, the captain is killed, then the co-pilot is first knocked unconscious by turbulence, then killed by Weaver, the psychopathic serial killer aboard. Teri, though stalked by this killer, locks herself in the cockpit and learns how to fly the jumbo jet. Admittedly, there is a comic element to these sequence (when Weaver sabotages the first landing attempt, for example, her landing gear smashes through the top of a hotel where Japanese men are singing karaoke; the gear then picks up a Ford pickup from a rooftop parking lot she hits, and throughout it all, Teri screams hysterically). Finally, when she has had enough, Teri shows her power over the only other male left to challenge her own power and kills him with one bullet through the forehead. She then succeeds in landing the plane, symbolically replacing the dead white male pilots.

While *Turbulence 2* had little that would challenge traditional racial and gender hierarchies, the third film of this series, *Turbulence: Heavy Metal*, reverts to the pattern in question. Standard-issue white males appear as the pilots but both perish. Onboard, control is taken by a heavy metal rock musician, helped by instructions from a Hispanic computer hacker and female FBI agent on the ground. Meanwhile, airport authorities have

found a 747 pilot who can offer landing instructions; this pilot is a black male. Together, they bring the plane in for its by now well-known night landing at LAX.

The Symbolic Replacement of White Male Power

One year after the original *Turbulence*, a made-for-TV drama starring former Charlie's Angel Jaclyn Smith as National Transit Safety Board member Renee Brennan follows a similar plot. In this movie, the white male pilots consistently lose their ability to lead, leaving a woman to step in. In this movie, *Free Fall* (1998), Brennan is first portrayed as a career woman in a man's world, then as the only person with the ability to fly a crippled airliner. Her technical abilities are superb. For example, when a saboteur takes control of the plane, she grabs a penknife and begins to remove various circuit breakers from the plane's electronics bay. Knowing just which circuits to remove, she deprives the villain of control. The two white male FBI agents with her take this opportunity to break into the cockpit, whence a gun battle ensues. The saboteur pilot is mortally wounded, while the only FBI agent to have flying skills is rendered helpless, and the other agent cannot fly. Only Brennan can land the plane, which she does with aplomb. Continuing, we find the presence of female pilots in abundance.

First comes *Interceptor* (1992). In this military action fantasy, the pilot of a giant C5-A Starlifter is a white female, while the first officer is named Martinez. The engineer and navigator, however, are white males. Next is *Final Descent* (1997), where Robert Ulrich stars as the stubborn pilot, while the co-pilot is a young blonde female. *Strategic Command* (1997) also offers an interesting counter to the standard beautiful blonde reporter character. First, this reporter is an active agent who intelligently takes responsibility for her own safety. This is in stark contrast to her male colleague's brainless cowardice. Second, both the Secret Service contingent and the terrorist squad

feature powerful women. Added to this is the odd twist that the Euro female terrorist sadistically enjoys murdering innocent passengers and she must be constrained more than once by her macho male boss from doing so. When the opportunity to dispatch the female Secret Service agent finally comes, the female terrorist does so with undisguised gusto, first kicking her victim to the floor, then gleefully pouncing on her back and putting a bullet in the back of her neck.

The next four movies (including made-for-TV movies) all share one theme: they begin with the traditional image of the white male pilot, then dispatch that pilot in one way or another. How they do this, what it may represent, and who assumes the vacant leadership role constitutes the next section of this chapter.

In *Airspeed* (1998), a spoiled young rich girl is the only one left conscious on her father's 727 after lightning has struck the aircraft. Though a number of men try to help her get off the plane, in the end she takes matters into her own hands and manages to safely land this three-engine Boeing jet. *Storm Tracker* (1999) features a renegade government experiment to create hurricanes to devastate targeted enemies. Here the pilot of a C-123 cargo plane used to carry the equipment and staff for the project is a white female and she ably carries out her duties. In addition, *Nowhere to Land* (2000), a TV movie which may rival *Hijacked* for the most attractive couple ever to fly an airplane, features Jack Wagner as Captain John Prescott, while blonde Christine Elise plays First Officer Kim McGee.

Air Rage (2001) deserves discussion on a number of accounts. As with the movies noted above, in this movie the original white male pilots are replaced by a white female (yet another blonde stewardess). Not only is she a fast learner when it comes to flying a jumbo jet, she is a fast study when it comes to killing highly trained commandos. When her 747 is hijacked by a group of five former Marines, she saves the day by

individually killing most of them, two with her weapon of choice--a coffee pot. This stewardess is paired with an African American member of the rescue team, played by rapper Ice-T, who, though somewhat misogynistic, still earns the respect and affection of the stewardess.

If the repetition of certain images influences perceptions of race, gender and power, then one film stands out because it has so perfectly challenged all categories of power aboard a civilian airliner. In essence, this movie serves as the crowning example of what that entity known collectively as "Hollywood" is trying to say about an ideal America.

Killing Moon: The Quintessential Race and Gender Movie

This TV movie is based in the United States. The first scene shows the Molokai, Hawaii, airport, where two white men are preparing to board an inter-island flight. One of them feels weak, then begins to bleed from his nose and eyes. Within minutes he has lost consciousness and dies. His partner conceals the body and boards the plane. Once aloft, however, this passenger begins to show the same symptoms that had so recently killed his accomplice. Fortunately, there is a doctor aboard, Japanese-American Dr. Yamada. Unfortunately, the doctor cannot save the dying passenger, whose unusual death naturally arouses the concerns of crew and fellow passengers.

In the cockpit are the two stock pilots: competent white males. The flight attendant is an Asian American woman. There is an obnoxious white businessman, his female employees, a young white girl, two young white men, and a smattering of other passengers. And there is Lt. Dave Thatcher, a naval intelligence officer. His identity is not so easily established as he is clearly not Northern European, but rather a bit more on the side formerly known as "swarthy."

Lt. Thatcher, along with Dr. Yamada, assumes control of the crisis back in the cabin. Dr. Yamada's authority, however, is compromised by the fact that he is a coroner, while Lt. Thatcher--for as yet unexplained reasons--knows a lot about viruses and death. Because of the consensus that the death of the passenger was caused by a contagious virus, the plane is diverted from its Honolulu destination and is vectored toward Glen Ord Air Force Base north of Los Angeles. The Center for Disease Control (CDC) and the (fictional) National Security Commission (NSC) are alerted and have set up a quarantine center at a secret base. Scientist for the CDC is a beautiful young blonde, Dr. Laura Chadwick. Frank Conroy (Daniel Baldwin) is running the operation for the NSC. Chadwick is quickly set up as a positive figure, while Conroy is from the start portrayed as sinister, overbearing, and rude. For example, when he finds out that the virus aboard the plane may be a rare chemical weapon, he relishes the opportunity to acquire it for his own project. His only interest in landing the plane safely is this. Chadwick, meanwhile, was summoned by mistake and she cannot understand the activity taking place.

Back on the plane, the situation deteriorates. The captain has taken ill and soon dies. The co-pilot also shows signs of weakening, so Dr. Yamada asks the passengers if any of them have ever flown an airplane. A young blonde admits she has, but only a single-engine Cessna. Still, that is more than other passengers can say, so she is given a crash course in flying a Boeing 737 by the dying co-pilot and assumes her position in the captain's seat. In the cabin, tensions rise. One more white male--a hemophiliac--has died from the mysterious disease. Dr. Yamada and Lt. Thatcher surmise that the medicine intended for a hemophiliac, Taxinol, would protect a healthy person from the virus, so they retrieve extra vials of it from the dead man's bag in the cargo hold. Because there are not enough vials for all the passengers, only the sick will automatically receive treatment; the rest must draw straws.

Here, the character of the obnoxious businessman is shown most clearly. Earlier, he had erupted when he heard of the plan to divert to California and he abandoned one of his employees because she showed signs of catching the virus. His tirades against other passengers and the flight attendant were ongoing. Now that the vials of antidote are available, he has a chance to draw a long straw and get a vial for himself. Unfortunately, he draws a short straw. Not willing to leave his life in the hands of fate, he crassly badgers a passenger who has a vial to sell it to him. The bidding price soon rises to \$100,000, then \$250,000. In the end, however, the passenger donates the medicine to an older man.

Lt. Thatcher remains a mystery character. His military bearing and knowledge of germ warfare suggest some degree of complicity in this biological crisis, leading Dr. Yamada to challenge him to reveal why he knows so much. The naval intelligence officer is elusive and escapes to one of the galleys. Dr. Yamada follows because he is suspicious. The ensuing dialogue cements this movie's multicultural bearings. When asked if this is some kind of biological military experiment gone wrong, the lieutenant replies:

I know all about Taxinol because my lover used it to stop his bleeding when his lungs were covered with Kaposi's lesions. I'm probably not getting sick because I'm on so many protease inhibitors the bubonic plague couldn't survive my system. I know all about viruses because I've got one inside me, slowly killing me.

Thus is Lt. Thatcher revealed as one of the positive characters. Meanwhile, another white male passenger dies, as does a white female, the only woman to die from the virus. Another small multicultural touch comes with the only reference to prayer throughout the whole ordeal. Though Americans are overwhelmingly Christian, the prayer a young passenger recites is a Native American one.

Back at the NSC facility, Conroy has changed plans. Now, rather than seeking to obtain a sample of the virus, he will cover up his earlier efforts to secretly obtain samples. Upon hearing his superior's suggestion, he asks, "Plane crash?" to which the boss coolly replies, "It's extreme. Bring 'em down in the ocean. Do what you have to do. This was your baby--put it to bed." To carry out this order, he gives false coordinates to the woman flying the plane. Now clear of the coast and nearing mountains on the West Coast, the warning proximity alarm blares in the cockpit, and the plane nears the mountains. The air traffic control screen back at the NSC base shows the plane entering the mountains, then disappearing from the screen. Horrified, Dr. Chadwick realizes that the NSC men never intended for the plane to land safely; it has been deliberately crashed. Suddenly, a blip reappears on the screen, and Dr. Chadwick and the air traffic controller realize the plane has not crashed after all. Taking advantage of Conroy's absence, Dr. Chadwick convinces the air traffic controller to help save the plane.

Recruited to the cause, the air traffic controller joins blonde Dr. Chadwick in helping the blonde woman bring the plane in for a safe landing, yet another woman in these movies to do so. Once the plane has landed, the passengers are understandably elated, save for one: the businessman. Fidgeting about, he discovers a dollop of blood in his ear. Within seconds he is in his death throes. The camera slowly zooms in on his demise. Another white male has died.

Why These Images of Women and Minorities Matter

As Powers et al. noted, "Hollywood's creative leadership impacts the larger society even as it is influenced by that society." Miles concurs with the argument that the source of this impact is the repetition of a common image, or "the recurrence of similar images *across* films," as we saw in chapter two.

Is the replacement of white male pilots with blacks or women ubiquitous, however? The record clearly shows that it is not. The fact that the solidly traditional *Air Force One* alone was such a blockbuster makes it problematic to say whether the more common multicultural images of power relations in flying films possess greater power to mold images in the popular imagination than do the traditional films. Were we, for example, to add to this equation the impact of three blockbuster flying films that lay outside the range of this dissertation, the argument could be made that racial and gender images in recent flying films tend to still mirror the reality of the white male presence in the cockpit (and, by extension, their authority). *Top Gun* (1986), starring Tom Cruise, was a romantic tribute to white male naval fighter pilots, *Apollo 13* (1995) valorized the role played by American astronauts (all of whom happened to be white males), and *Black Hawk Down* (2001) presented a similar image with respect to elite Army helicopter pilots and crew--overwhelmingly white and male.²¹

In surveying these recent flying films, I am not arguing that there are no longer any such positive and accurate portrayals of white men as pilots, for as I have shown, there are. Rather, I am seeking to interrogate those movies that do the opposite, that show a negative and largely fictional view of the white male pilot. That I have identified a pattern suggests that popular culture--in this case flying films--is an avenue proponents of multiculturalism have chosen as a means to imagine their desired new world. In such a world, the status of the white male will not be what it has been in the past. It is this idea of "Hollywood's conscious efforts" that intrigues the careful viewer of flying films ca. 1990 to the present.

CHAPTER 10 CONCLUSION

Since September 11, 2001, air travel has become a source of . . . anxiety and discomfort. Whatever else the terrorists accomplished that fateful morning, they managed to associate civilian airliners, long symbols of global community and technological progress, with murder and unspeakable horror.

Joseph Corn, author of *The Winged Gospel*¹

One hundred years have passed since the Wright brothers invented their flying machine, yet already we are forced to contemplate the incorporation of the airplane *itself* as an instrument of civilizational destruction, as opposed to its indirect role earlier as a *vehicle* of destruction in carrying and delivering conventional and atomic bombs to intended war targets. While the promises of flight captivated the American public for the first half of the twentieth century, we now face a nearly opposite situation in the beginning of the twenty first; the thesis of this dissertation, that a sense of menace is an integral part of modern flying films, has been borne out. We observe that Marx was correct when he posited representations of machine technology as increasingly violent.² This raises two crucial points: First, how will the multiple attacks of September 11, 2001, be rendered on the screen, directly and indirectly? As of this writing, there have been no films which have incorporated imagery comparable to the destruction visited on the United States on that date. Perhaps, just as there had been a long pause after the end of the Vietnam War and the beginning of Hollywood films which dealt with it, there will be a similar pause between the collapse of the Twin Towers and filmic renditions of that day.

More pointedly, it forces us to problematize our past and future viewings of flying films produced prior to September 11. Inevitably, plots and scenes from many of those movies will elicit different reactions now that we have been collectively exposed to the

trauma of what took place that mild and sunny September day. What was in those films then that we missed the first time? What will we see the next time we watch those films? How could so many screenwriters have been so prescient about the dangers posed by the presence of disturbing passengers?

In asking such questions, however, it is wise to keep in mind the dangers of presentism, as Bruce Kuklick warns in "Myth and Symbol in American Studies":

Presentism is notorious among the errors that historians can make--interpreting the past in concepts applicable only to the present. Historians are liable to read their interest back into the past, and misconstrue an individual's thought so that it is relevant for the present; the result will be that historians extract from an author what is significant for us, but lose the author's intentions. Whatever the final justifiability of a platonic view of ideas, it is not difficult to see that such a view could reinforce a presentist position. For platonists there is a set of eternal ideas existing independently of the individuals thinking about them, and intellectual history, in particular, becomes the history of enduring but competing concepts, of the posing of timeless questions and answers. It is, therefore, easy for a platonist historian to formalize his present concerns . . . in a series of conflicting options; and then read these conceptions into the past. The worth of each past writer is measured by what he had to say on each preordained topic.³

As correct as Kuklick may be, there are sufficient differences in what he warns about and what I am suggesting. Most obvious is the material being discussed: his critique of Smith and Marx revolves around the use of prose, with a particular emphasis on literature, while my concerns are with celluloid products. Certainly, there is a dialectical interaction between written text and reader, but it may be more constrained than that between movie and viewer; "the meanings 'spoken' by films--and the various 'readings' which audiences make of them--may be seen to connect to larger patterns of social and cultural meanings and identities."⁴ Naturally, this is the nub of a contentious issue about "unified *national* culture" between the myth/symbolists and critics like Kuklick that has been raging in the academy for decades. Despite such criticism, however, Marx appears to

be on solid ground when he argues in favor of “the distinctive, ever-changing character of the context,” which forces us to heed the “dialogue” between meanings, to recognize context over particular text (i.e., to disavow “all claims for the autonomy of texts”), and to admit that there exists a “‘dialogical’ character of culture as a totality.”⁵ With respect to flying films, the context post-September 11 has indeed changed drastically, as must our reading of flying films. To establish this changed context, a brief recounting of events on that day and the images that ensued is required.

An early print account of the terror attacks on America reads as follows:

A horrified nation witnessed the shocking carnage as the World Trade Center’s “North Tower” burned and exploded after it was struck just before 9 a.m. by Los Angeles-bound American Airlines Flight 11, which departed Boston’s Logan Airport at 7:59 a.m. with 81 passengers, two pilots and nine flight attendants. A second jet - United Airlines Flight 175, that left Logan for L.A. at 8:14 a.m. carrying 56 passengers, seven attendants and two pilots - was captured on video as it sliced through the “South Tower” and unleashed a massive fireball just after 9 a.m.⁶

Of the four planes hijacked and crashed that day, the two that created the devastation in New York were more visually dramatic than the latter two, which was further amplified by the abundance of live photographic and video images of the attacks. American Airlines Flight 77’s crash into the Pentagon and United Flight 93’s crash into a field in Pennsylvania where both less recorded and less destructive, and therefore will probably affect our viewing of flying films less than events in Manhattan.

While this is not the place to offer a movie-by-movie re-reading of flying films in the context of the events of September 11, an accounting of a handful of appropriate examples will help make the point about meanings changing over time. Keeping in mind that the context includes not only images from September 11, but also the ongoing daily creation of new images of flight--as mundane as they often may be--we begin to get an

impression that the fantasy episodes created in the (mostly) fictional flying films available to us eerily overlap with reality and may even feed the myriad conspiracy theories that inevitably arise after a era-defining event.

Air Force Shoot-Down Theme

An example that should immediately spring to mind is the 1997 *Turbulence*, in which crazed felon Ryan Weaver attempts to crash a Boeing 747 into downtown Los Angeles. Though semi-comical, it might appear less humorous to an audience watching post-September 11. In *Turbulence*, flight attendant Teri Halloran is attempting to land a 747 at LAX International Airport in the middle of a night-time thunderstorm, but Weaver has disabled the autopilot. Belatedly, Teri is able to re-engage the system, but still, her jumbo jet scrapes a rooftop parking garage and a Ford truck becomes appended to one of the wheels on the landing gear. Behind her, a military jet has been in position to shoot the plane down should it appear imminent that the plane will crash into the city. It is this stock theme of the omnipresent Air Force fighter protecting the skies of America from errant passenger jets that dovetails with events of September 11.

Perhaps dovetails is the wrong word, for on that day fighter jets did not protect the skies over New York, Washington, and rural Pennsylvania; the hijackers succeeded in hitting their targets in three of the four cases, and in the last one, courageous passengers overpowered the hijackers and opted to crash the plane rather than let it proceed to Washington, its likely target. This tale is recounted in *Let's Roll: Ordinary People, Extraordinary Courage*, a book by the widow of one of the heroes aboard that ill-fated flight.⁷ This book recounts how her husband, Todd, led a charge against terrorists on United Flight 93. His last known words were "Let's roll!," a phrase that captured the renewed fighting spirit so many Americans found in response to the terror attacks.

Still, viewers of any number of flying films knew that Air Force fighters could respond in minutes to any airborne threat over domestic territory, so it is not surprising that conspiracy theories about such jets abound. One particularly persistent theory is that it was not the courageous passengers of United Flight 93 that brought the Boeing 757 down but, rather, an Air Force fighter. For example, a Google search using “United Flight 93” brings up the site <http://www.flight93crash.com/>, the very first site listed, in which we read claims typical of such sites:

Eight miles away in New Baltimore, Melanie Hankinson said she found singed papers and other light debris from the crash, including pages from Hemispheres Magazine, United’s in-flight magazine. Stoe said authorities initially insisted crash debris could not have traveled over a mountain ridge more than eight miles from the crash. . . .

A one ton engine part survives a near vertical impact and is found far from the crash. Burning debris falling from the sky, clothing, books and human remains found miles away. An air traffic controller reports an F-16 “must have seen the whole thing.” You can verify it by reading the original stories yourself. 95% of the accounts I’ve linked to have full witness names and reporters [sic] names.

Looking at all the details so far - nothing really adds up neatly for me, except that Flight 93 had a midair crisis that caused debris to fall before it crashed. I remain skeptical of all the theories... except one. We are not being told what happened - and the Government knows exactly what happened. . . .

The FBI finally allowed family members to hear the Cockpit Voice Recorder. Unfortunately, no conclusive evidence was heard by anyone. There simply is no evidence at this time that heros [sic] ever got in the cockpit.

Again, it is to be expected that some people would turn to a shoot-down scenario for United Flight 93 given the fact that it is such a common theme in flying films. One year prior to *Turbulence* we find, for example, the blockbuster *Executive Decision*, which features not only fighters sent up to shoot down a hijacked civilian 747, but also a cast of Arab hijackers as well. The TV imitation of this film, *Strategic Command*, also faithfully

adheres to the theme of fighter jets sent to down a threatening passenger jet. In *Medusa's Child* (1997), two F-14s stalk the small 737 carrying a doomsday device. In *Sonic Impact* (1999), government agents send F-16s to intercept the hijacked 747, and one pilot actually looses a missile at the jet. At the last moment, however, the fighter pilot realizes the 747 is now under friendly control and deactivates the missile at the last moment, sparing the plane and passengers from certain destruction. Just prior to the real crash of United Flight 93, *Air Panic* (2001) featured F-16s sent to shoot down a remotely controlled passenger-filled airliner. Even when a SAC B-52 disobeys orders to drop bombs on the Russian leadership, F-14s are sent from an aircraft carrier to down them, as happened in the 1990 *By Dawn's Early Light*. Thus, one might reasonably expect reality to follow imagery.

Pushing Tin

Another excellent example of changing context can be seen with respect to the 1999 romantic comedy *Pushing Tin*, in which John Cusack and Billy Bob Thornton play Nick Falzone and Russell Bell, respectively, two competitive air traffic controllers who fight over bragging rights at work and over their wives after hours. What passed as comedy in 1999, however, would horrify officials post-9/11; when Nick and his wife are aboard a plane about to land in New York, the controller is none other than Nick's rival Russell. Nick's intense sense of competitiveness leads him to believe that Russell is deliberately steering them into choppy weather, so he decides to inform the pilots of this conclusion in person. Under cover of an excuse to get a glass of water, Nick tries to enter the cockpit against the protestations of the flight attendants. His ineffectual banging on the locked door is meant to generate laughs among the audience, as is his charade to wrap himself in a galley curtain to get past the cabin crew to the cockpit door. Given the violent cockpit take-overs of

September 11 and the subsequent shoe-bomber incident, however, such onboard hijinks look decidedly less humorous now.

Executive Decision and Pandora's Clock

Nineteen ninety-six provided two movies that in retrospect speak directly to the events of September 11, 2001. The first one, *Pandora's Clock*, adheres to the belief in a conspiracy at the highest levels of the American government to destroy a 747 loaded with American citizens. We have already seen how the fear of a highly contagious virus had forced the United States government to send a passenger 747 from quarantine in Iceland to an even stricter zone of isolation, an abandoned airfield in the middles of the desert in Mauritania, Northwest Africa. What makes this John Nance-inspired plot so prescient, however, is the action of the CIA and its subterfuge in manipulating the President in a plan to down Quantum Flight 66 over the Atlantic Ocean, thereby killing all aboard, as well as stopping the spread of the deadly virus they believe to be aboard. The President grudgingly assents to trading 250 lives to save the lives of 260 million Americans, but the CIA director upon whom he has been dependent for honest assessments has his own agenda: having long believed the Arab terrorist outfit "Al Aquaba" to be one of the world's great threats, the director has decided to use this aerial crisis to precipitate an American-led war on these Arab renegades.

To effect this operation, the director activates one of his sleeper agents in Ukraine, who then commandeers a rich Arab's missile-tipped corporate jet. Flying under the guise of an Arab terrorist, this blond agent will shoot down the American airliner, bringing forth a retaliatory response from the much stronger Americans. Director Roth will then be in a position to use the considerable resources of the United States to attack and defeat Al Aquaba. Needless to say, there is some superficial resemblance to the unfolding of

America's attack on terror that followed the airline crashes of September 11. Even the name of the supporters of the September 11 terrorists, Al Qaeda, bears a resemblance to Al Aquaba, and more than a few conspiracy theorists have questioned whether the attacks on the Twin Towers--but especially on the Pentagon--were part of a United States government plot to foment a war on Al Qaeda.⁸

The Arab terrorist trope also found expression in *Executive Decision*. Film critic Roger Ebert, for one, bemoaned the fact that the leader of the Arab terrorists in control of the flight, Hassan, "comes across as a fanatic bent on destroying millions of lives. His fellow hijackers think the mission is to force the release of one of their leaders, but after the leader is released, Hassan reveals that his original demands were only a cover for his real plans." When a less fanatical follower questions his leader's motives and shouts "This has nothing to do with Islam!", he is summarily shot.⁹ Hassan's real campaign is a civilizational war against the West, a broad indictment that found some plausibility in the attacks of September 11 and U.S. responses to it in Afghanistan and Iraq.

The Lone Gunmen

In a case of reality imitating art, at least in the minds of some conspiracy theorists, an episode of a show related to *The X-Files* depicts a scenario eerily similar to what actually transpired on September 11, 2001, when two Boeing airliners crashed directly into both Twin Towers at the World Trade Center. In the television show "The Lone Gunmen," the lead characters have reason to believe a passenger aircraft is destined to crash due to terrorist intent. Two characters go to the airport in search of what they believe are explosives aboard the aircraft, but they fail to find them after a thorough search.

Soon, however, they realize that the airplane will be controlled from a remote site. Further investigation reveals that the plane is programmed to crash into the World Trade

Center. Relaying this information to their partners back in the office, they work together to regain control of the plane. When they inform the cockpit crew of the impending crash, the pilots are understandably dubious until one of them deliberately deactivates the autopilot. When that fails to alter the course of the plane, the crew realizes they have no control over their own plane. With only twenty-two minutes to disengage the remote control, all work feverishly to break the encryption on the aircraft control system. Unfortunately, the computer they are using on the ground lacks the power to decode it in time, but then a mysterious agent uses her powerful laptop computer to break the remote code control and return control to the pilots, who then execute an emergency ascent and barely miss hitting one of the Twin Towers.

Ironically, a similar scenario was presented the same year in the opening scene of *Air Panic*, when a remotely controlled A-320 narrow-body jetliner is vectored straight toward the lights of downtown Denver. We watch as a tired businessman sits at his desk high in the tallest building in the city when suddenly his office is filled with increasingly bright light. Looking behind him out the window he sees the aircraft heading straight for him. It strikes the glass-curtain covering of the building and explodes, raining debris on the streets below, a miniature version of the collisions into the Twin Towers.

Final Call: New York City

Stepping back from the package of events that constitute September 11, it is of interest to consider the wider context of flying tragedies associated with John F. Kennedy Airport in New York City. For a decade, it seems, this airport has been unusually unlucky in dispatching civilian airliners to their tragic demises. In conjunction with the attacks on and collapse of both Twin Towers, New York emerges as the focal point of the most shocking

and menacing images of modern civilian flight, a fact which has not gone unnoticed by observers.

Elaine Scarry, for instance, a professor in the English Department at Harvard University, published in the *New York Review of Books* a series of articles that asked whether electronic interference played a role in the downing of three jumbo jets flying out of JFK. She summarizes her work here:

On July 17, 1996, TWA 800 took off from JFK International Airport; twelve and a half minutes later, it fell into the ocean south of Long Island. On September 2, 1998, Swissair 111 took off from JFK Airport; fourteen minutes later it lost radio contact with air controllers; it continued flying north, eventually regained radio power, reported smoke in the cockpit as it neared Nova Scotia, then fell into the Atlantic Ocean. On October 31, 1999, EgyptAir 990 took off from JFK Airport; it flew east for thirty-one minutes, then suddenly dove into the ocean east of Long Island, south of Nantucket. The 676 people on board the three planes perished. No other large passenger plane taking off in the United States crashed during this three years and three months period.¹⁰

With respect to TWA 800, Jim Sanders, an investigative reporter, argued that a missile had brought it down (see his 1997 book on the subject). After September 11, Jack Cashill joined Sanders to revise the argument: An Arab terrorist had packed a private plane full of explosives and had attempted to blow himself up next to the TWA 747. The Navy had been tracking him and, in a vain attempt to shoot him down, had sent one missile through the 747 and another that blew up the terrorist's plane just beneath the doomed jetliner. Though not a very plausible thesis, it represents a plausible intersection between real events and those so commonly featured in flying films.

Finally, another strange crash took place a mere month after September 11. This was American Airlines Fl. 587, which crashed just after takeoff from--again--Kennedy. In that crash, the tail fin of the A-300-600 broke off soon after rotation and fell into Jamaica Bay (it was quickly recovered), while the body of the plane crashed into the neighborhood

of Belle Harbor. An initial speculation was that vortices created by a departing Japan Air Lines 747 had broken the tail off the American Airlines jet, resulting in total loss of control. To date, this remains the reigning assumption.¹¹

Not surprisingly, there are many dissenting theories about this crash, any number of which can be quickly accessed via the Internet. Take, for example, the views of a former member of the Society of Licenced Aeronautical Engineers and Technologists based in London. He finds the U.S. government's version of the crash to be preposterous and suggests instead deliberate sabotage of the joint holding the fin to the fuselage.¹²

In keeping with the theory that it was an accident, on August 13, 2003, the National Transportation Safety Board conducted a "lug sub-component structural test at the Airbus test facility in Hamburg, Germany. Engineers from the NTSB, Airbus, American Airlines, BEA, and the NASA Langley Research Center supported the testing and analysis. The test component was a rear main attachment lug from an A310-300 Carbon Fiber Reinforced Plastics (CFRP) fin box skin panel." Their official website notes that the Safety Board "currently expects to deliberate over a final accident report in a public meeting in Washington, D.C. during the Spring of 2004."¹³ In any case, there is no avoiding the observation that it is rare for the tail fin of a modern airliner to separate so cleanly in flight.

Not surprisingly, there is a film that eerily depicts an accumulation of images stemming from crashes out of JFK. Released in 2000, *Final Destination* has ominous parallels with some of the horrific events uniting New York City and passenger aircraft from 1996-November 2001. In *Final Destination*, as we saw in chapter two, teenage passenger Alex had a sense that something was seriously amiss with Flight 180 to Paris and he even saw the plane's demise in a vivid dream. In the movie, once Alex and some

friends have been removed from the flight, it takes off from JFK, then explodes in a ball of flame killing all aboard. Too many real jumbo jets leaving JFK shared similar fates.

Conclusion

Now that the events and victims of 9-11 are slowly acquiring sacred/iconic proportions, Americans seem to be in no mood to have these fresh images profaned. Thus, for example, despite showing a steady appetite for the often violent and racist lyrics of rap music, the American music industry will still not allow an established rap artist to grace the cover of his new CD with a picture of a Boeing 747 headed straight for the White House. By calling the album "Sonic Jihad," rapper Paris has crossed the boundaries of permitted and prohibited transgressions.¹⁴ Ten years earlier, a literary image of the same scene was accepted without great alarm. In his thriller *Debt of Honor*, author Tom Clancy created a fictional war between the United States and modern Japan, culminating with the deliberate crash of a Japan Air Lines 747 jumbo jet directly into the Capitol. After the events of September 11, the American reader's interpretation of Clancy's fiction may be quite different now, the words much more ominous and real:

Though there were numerous fighter aircraft . . . all within a hundred miles of Washington, it had never occurred to anyone to have fighter aircraft aloft over the capital . . . [Captain] Sato brought his aircraft around . . . Directly over the field, the 747 banked left, clearly under precise control . . . Sato had been to Washington often . . . including the Capitol Building . . . he adjusted his flight path so that he was now roaring right up Pennsylvania Avenue . . . He selected his point of impact just as finely as any routine landing, and his last voluntary act was to select the point of impact, two thirds of the way up the stone steps . . . Nearly three hundred tons of aircraft and fuel struck the east face of the building at a speed of three hundred knots. The aircraft disintegrated on impact. . . . Next came the building itself. . . . one hundred tons of jet fuel erupted from the shredded fuel tanks . . . A second later it ignited from some spark or other, and an immense fireball engulfed everything inside and outside of the building."¹⁵

Though it was the Pentagon that was the target of a rogue airplane that September day, not the Capitol, the parallels are manifest, and this description may well be apt for what occurred on the other side of the Potomac River. Whether and how Hollywood will depict this real attack, as well as the attacks on New York City, remains to be seen. “Whatever else the terrorists accomplished that fateful morning,” Joseph Corn notes, “they managed to associate civilian airliners, long symbols of global community and technological progress, with murder and unspeakable horror.” But perhaps not all blame lies with these dead terrorists, for Hollywood had for decades been creating images antithetical to the earlier “winged gospel,” replacing it more often with a version we might call the “winged nightmare.” Menace, it seems, has won out in the competition for imagery in modern flying films.

FILMOGRAPHY

Air Force One - 1997

Air Panic - 2001

Air Rage - 2001

Airport - 1970

Airport '75 - 1975

Airport '77 - 1977

Airport '79 - 1979

Airspeed - 1998

Alive - 1993

Always - 1989

Angel Flight Down - 1996

Blackout Effect - 1997

Bombers B-52 - 1957

Bridges at Toko-Ri, The - 1955

Broken Journey - 1948

By Dawn's Early Light - 1990

Cabin Pressure - 2001, aka *Hijack'd*

Cast Away - 2000

Code 11-14 - 2001

Concorde Affair, The - 1980

Crash Landing - 1958

Crash Landing: The Rescue of Flight 232 - 1992, aka *A Thousand Heroes*

Crash of Flight 401 - 1978

Crash: Mystery of Flight 1501 - 1990

Crisis in Mid-Air - 1979

Crowded Sky, The - 1960

Danger in the Skies -1979, aka *The Pilot*

Die Hard 2: Die Harder - 1990

Doomsday Flight, The - 1966

Dr. Strangelove, Or How I Learned to Stop Worrying and Love the Bomb - 1964

Emergency: Survival on Charter #220 - 1978

Enola Gay: The Men, The Mission, The Atomic Bomb - 1980

Executive Decision - 1996

Fail Safe - 2000

Fail-Safe -1964

Falling from the Sky: Flight 174 - 1995, aka *Freefall*

Family Flight - 1972

Fate is the Hunter - 1964

Fearless - 1993

Final Descent - 1997

Final Destination -2000

Fire and Rain - 1989

Flight 90:Disaster on the Potomac - 1984

Flight into Danger - 1960

Flight of the Phoenix - 1965

Flight to Holocaust - 1976

Flying Hostess - 1936

Flying Virus - 2001

Free Fall - 1999

Gathering of Eagles - 1963

Ghost of Flight 401, The - 1978

Ground Control - 1998

High and the Mighty, The - 1954

Hijacked: Flight 285 -1996

Horror at 3,7000 Feet - 1972

Hunters, The - 1958

Impact -2002

Interceptor - 1992

International Airport - 1985

Jet Over the Atlantic - 1959

Jet Storm - 1959

Killing Moon - 2000

Lost Flight - 1969

Mad Max 2: The Road Warrior - 1981

Mad Max 3: Beyond Thunderdome - 1985

Mayday: 40,000 Ft! - 1977

McConnell Story, The - 1955

Medusa's Child - 1997

Memphis Belle - 1990

Mercy Mission: The Rescue of Flight771 - 1993

Miracle Landing - 1990

Mountain Fury - 2000, aka *Miracle on the Mountain*

Murder on Flight 502 - 1975

No Highway in the Sky - 1951
North By Northwest - 1959
Nowhere to Land - 2000
Ordeal in the Arctic - 1995
Pandora's Clock - 1996
Panic in the Skies - 1996
Passenger 57 - 1992
Perfect Storm, The - 2000
Power Elite - 2002
Pursuit of D.B. Cooper - 1981
Pushing Tin - 1999
Rough Air: Danger on Flight 534 - 2001
Seven in Darkness - 1969
Shootdown - 1988
Skyjacked - 1972
Sonic Impact - 1998
SST: Death Flight - 1977
Starflight: The Plane that Couldn't Land - 1983
Storm Tracker - 1999
Story, The - 1990
Strategic Air Command - 1955
Strategic Command - 1997
Submerged - 2000
Sum of All Fear, The --2002
Survive - 1976

Tailspin: Behind the Korean Airliner Tragedy - 1989

Terminal Velocity - 1994

Terror in the Sky - 1971

Thousand Heroes, A - 1992

Tragedy of Flight 103: The Inside Story, The - 1990

Turbulence - 1997

Turbulence 2: Fear of Flying - 2000

Turbulence 3: Heavy Metal - 2001

Twelve O'Clock High - 1949

Twilight Zone: Nightmare at 20,000 Feet, The - 1963

Twilight Zone: The Movie - 1983

Wild in the Sky - 1972, aka, *Black Jack*

Wing and a Prayer, A - 1998

Wings - 1927

Zero Hour - 1957

NOTES

Chapter 1

1. Michael Paris himself uses this opening quote for his own opening quote in *From the Wright Brothers to Top Gun: Aviation, Nationalism and Popular Cinema* (Manchester and New York: Manchester University Press, 1995).
2. Quoted in Bertil Skogsberg, *Wings on the Screen: A Pictorial History of Air Movies*, (London: Tantivy Press, 1981), foreword.
3. Leo Marx, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (Oxford and New York: Oxford University Press, 1964, 2000), 203.
4. Stephen Pendo, *Aviation in the Cinema* (Metuchen, New Jersey and London, The Scarecrow Press, 1985), 1.
5. This quote comes from Paris, *From the Wright Brothers* (8), but owes a debt to the originator of the term, Joseph Corn, *The Winged Gospel: America's Romance With Aviation 1900-195* (New York: 1983).
6. Arguably, this twin fascination with the sky may be a Jungian archetype common to all peoples, along with such staples as "the shadow or the underside of consciousness; the anima, that is the feminine aspect in men; and the animus, or the masculine aspect in women." See Barbara Creed, "Film and Psychoanalysis," in (ed.) John Hill and Pamela Church Gibson, *Film Studies: Critical Approaches*, (Oxford and New York: Oxford University Press, 2000), 76. Hollywood has worked fears and aspirations related to the sky into a bewildering array of films. Here I intend to explore how this vision has employed the feat of flying and the men, women, and machines that accomplish this feat.
7. An extended discussion of this film from a psychoanalytical point of view can be found in Ayako Saito, "Hitchcock's Trilogy: A Logic of Mise en Scene, in Janet Bergstrom (ed), *Endless Night: Cinema and Psychoanalysis, Parallel Histories* (Berkeley and Los Angeles: University of California Press, 1999), 200-248.
8. Margot Henriksen, *Dr. Strangelove's America: Society and Culture in the Atomic Age* (Berkeley and Los Angeles: University of California Press, 1997), 374.
9. Malcolm MacPherson (ed.), *The Black Box: Cockpit Voice Recorder Accounts of Nineteen In-Flight Accidents* (New York: William Morrow and Company, 1984), 9.
10. Marx, *Machine in the Garden*, 229.
11. In Marx, *Machine in the Garden*, 230-231.
12. In Marx, *Machine in the Garden*, 230-231. It is interesting to note that in the latter passage, Marx, emphasizing how active man has been in transforming matter into machines, has highlighted in Emerson's words such phrases as "working it up" and "forges." In my reading, a focus on the transformation of new materials and techniques into flying machines leads to a new point of view on the matter.
13. See Bruce W. Orriss, *When Hollywood Ruled the Skies: The Aviation Film Classics of World War II*, (Hawthorne, CA: Aero Associates, Inc., 1984); Jamers Farmer, *Celluloid Wings: The Impact of Movies on Aviation*, (Blue Ridge Summit, PA, 1984). Two related works that will be cited in this dissertation are Ken D. Jones and Arthur F. McClure, *Hollywood at War: The American Motion Picture and World War II* (Cranbury, NJ: A.S. Barnes and Co., Inc., 1973) and James H. Farmer's other aviation film book, *Broken Wings: Hollywood's Air Crashes* (Missoula, Montana: Pictorial Histories Publishing Company, 1984).

-
14. Skogsberg, *Wings on the Screen*, x.
 15. Motto on patch worn by one crewmember of a Boeing KC-135R tanker. See photo caption in Robert S. Hopkins, III, *Boeing KC-135 Stratoganker: More than just a Tanker* (Leicester, England: Midland Publishing Limited, 1997), 72.
 16. Some exceptions to this Boeing rule are the Convair B-36, which appeared in the first half of *Strategic Air Command*, as well as very occasional appearances by the Lockheed L-1011 TriStar.
 17. Orriss, *When Hollywood Ruled the Skies*, viii.
 18. Orriss, *When Hollywood Ruled the Skies*, 2.
 19. Orriss, *When Hollywood Ruled the Skies*, 47. Jones and McClure, *Hollywood at War*, second this opinion, noting that while some war films were “of a high quality,” many of them rose no higher than the “hiss-and-boo” variety (16).
 20. Jones and McClure, *Hollywood at War*, 15.
 21. Jones and McClure, *Hollywood at War*, 16. The authors also mention attempts to keep Hollywood from encouraging America to join the war in Europe, the most noted example being that of then ambassador to Great Britain, Joseph P. Kennedy, who after the 1940 presidential elections lectured Hollywood leaders to cease producing anti-Nazi films. Believing the fall of England was imminent, Kennedy felt that antagonizing the Nazi regime would only make matters worse for those persecuted by the Nazis, particularly the very ethnic Americans now among his audience. Jones and McClure note that historical evidence supports Kennedy’s controversial claims.
 22. Orriss, *When Hollywood Ruled the Skies*, 118.
 23. Pendo, *Aviation in the Cinema*, 238.
 24. The popular acceptance of such a Reagan-era turnaround is questioned by Stephen Powers, David J. Rothman, and Stanley Rothman, *Hollywood’s America: Social and Political Themes in Motion Pictures* (Boulder, CO: Westview Press, 1996) in which they ask how the same era could produce well-received but opposing images of the military such as *Top Gun* and *Platoon* (91-97).
 25. Paris, *From the Wright Brothers*, 201.

Chapter 2

1. See, for instance, Graeme Turner, “Culture Studies and Film,” in *Film Studies*, 193; as well as Dudley Andrew in the same text, where he adds the insight that television has usurped the “mass entertainment function” (181).
2. Marx, *The Machine in the Garden*, 4. In a footnote, Marx defines “cultural symbols” thus: “A ‘cultural symbol’ is an image that conveys a special meaning (thought and feeling) to a large number of those who share the culture.”
3. Richard Dyer, “Introduction to Film Studies,” in *Film Studies*, 6.
4. Richard Dyer, “Introduction to Film Studies,” in *Film Studies*, 6. See also Jostein Gripsrud’s comments on the Marxist conception of film “as a medium for changing people’s ways of thinking in ‘progressive’ directions, or, on the contrary, for reproduction and dissemination of ideology in the sense of ‘false consciousness’” (“Film Audiences,” in *Film Studies*, 200-201).
5. Jones and McClure, *Hollywood at War*, 25.
6. Powers et al., *Hollywood’s America*, 10, 287.
7. Margaret R. Miles, *Seeing and Believing*, 190-191. See also Jones and McClure, *Hollywood at War*, 16.

-
8. Robert Sklar, *Movie-Made America: A Cultural History of American Movies* (New York: Vintage Books, 1994), 195.
9. Sklar, *Movie-Made America*, ix-x.
10. David Desser and Lester D. Friedman, *American-Jewish Filmmakers: Traditions and Trends* (Urbana and Chicago: University of Chicago Press, 1993), 4-5.
11. Lewis Jacobs, "World War II and the American Film," *Cinema Journal*, Volume VII, Winter, 1967-68, 21; quoted in Jones and McClure, *Hollywood at War*, 25.
12. Jonathan Pearl and Judith Pearl, *The Chosen Image: Television's Portrayal of Jewish Themes and Characters* (Jefferson, NC: McFarland and Company, Inc. 1999), 8. The Pearls justify this attention to the content of television by arguing:

Because of its unique capacity to reach and influence a massive audience, television is gaining in prominence and stature as a resource for the study of popular culture and as a primary historical source. The significance of using television as a primary source lies in the need to know and understand what most people perceive. And a most effective way of gaining an awareness of people's perceptions is to tune into their channels of communication. As a measure of television's central position in the lives of most Americans, consider that "what a series such as 'The Waltons' has to say about life in the Depression is likely to have a far more penetrating and long-lasting effect on the nation's consciousness than any number of carefully researched scholarly articles or books" (8-9).

Richard Dyer also notes the power of television in this respect ("Introduction to Film Studies," in *Film Studies*), 6.

13. Marx critic Bruce Kuklick, for one, argues this, though he adds lesser contributors to the "movement" such as the following authors and their works: R.W.B. Lewis, *The American Adam* (Chicago: University of Chicago Press, 1955); Charles L. Sanford, *The Quest for Paradise* (Urbana, Ill.: University of Illinois Press, 1961); Alan Trachtenberg, *Brooklyn Bridge* (New York: Oxford University Press, 1965); and John William War, *Andrew Jackson: Symbol for an Age* (New York: Oxford University Press, 1953). See Bruce Kuklick, "Myth and Symbol in American Studies," *American Quarterly*, Volume 24, Issue 4 (October, 1972), 435.
14. Kuklick was a strong critic of the "myth and symbol" school. Brian Attebery's subsequent response to Kuklick--"American Studies: A Not So Unscientific Method," *American Quarterly* 48.2 (1996)--was obviously meant to build upon Marx's own earlier efforts at defending the movement, particularly as he did in "American Studies--A Defense of an Unscientific Method," *New Literary History* 1 (1969), 75-76.
15. Kuklick, "Myth and Symbol in American Studies," 437.
16. Kuklick, "Myth and Symbol in American Studies," 447.
17. Attebery has attributed this mode of attack to commentators such as Jeffrey Louis Decker and Patrick Brantlinger, "American Studies, 316.
18. Attebery, "American Studies," 322.
19. Attebery, "American Studies," 327.
20. Attebery, "American Studies," 333-334.
21. Henry Nash Smith, *Virgin Land: The American West as Symbol and Myth* (Cambridge and London: Harvard University Press, 1950, 1978), 91-92.
22. This is Marx's opening line, *The Machine in the Garden*, 3.
23. Marx, *The Machine in the Garden*, 13-14.

-
24. Marx, *The Machine in the Garden*, 229.
 25. Marx is quite taken by this observation about 19th-century American, noting another Melville work ("The Tartarus of Maids") in which the narrator happens upon a winter scene of a paper mill hidden among the mountains. Naturally he mentions *Walden Pond*, along with *The Education of Henry Adams*, then moves to the last century where *The Great Gatsby*, *The Grapes of Wrath*, and "The Bear" qualify. His explicit list of authors includes Walt Whitman, Sarah Orne Jewett, Henry James, Sherwood Anderson, Willa Cather, Eugene O'Neill, Robert Frost, Hart Crane, T.S. Eliot, John Dos Passos, and Ernest Hemingway. Indeed, he writes, "it is difficult to think of a major American writer upon whom the image of the machine's sudden appearance in the landscape has not exercised its fascination" (*The Machine in the Garden*, 15-16). That film incorporates the same "metaphoric design," then, is hardly surprising.
 26. Marx, *The Machine in the Garden*, 17.
 27. Marx, *The Machine in the Garden*, 191.
 28. Marx, *The Machine in the Garden*, 192.
 29. Marx, *The Machine in the Garden*, 192. These allusions were taken from Tocqueville.
 30. Marx, *The Machine in the Garden*, 193.
 31. Marx, *The Machine in the Garden*, 207.
 32. Marx, *Machine in the Garden*, 15.
 33. Of course, equal drama in the beginning of a movie can be realized when the scene is dark and suspenseful and is then suddenly interrupted by the intrusion of the machine/airplane. Such is the case in *Terminal Velocity* (1994, starring Charlie Sheen) in which a lone woman is driving in the dark desert, ominously being followed by an unknown individual. After one false scare, the darkness is suddenly broken by the brilliant lights of a landing 747 whose main carriage wheels graze off the top of the woman's car as it sets down on an abandoned desert runway.
 34. Marx, *The Machine in the Garden*, 13-14.
 35. In the original, Wyler and his crew flew actual missions over Germany using hand-held 16mm cameras (their 35mm cameras had been lost in 1942 when the ship transporting them from America to England failed to arrive). The Kodachrome stock was processed in Technicolor and then blown up to 35mm. Wyler was aboard the *Memphis Belle* when it completed its 25th mission over Germany (Pendo, *Aviation in the Cinema*, 163-165).
 36. See Robbie Shaw, *Boeing: 737-300 to 800* (Osceola, WI: MBI Publishing Company, 1999) and Malcolm L. Hill, *Boeing 737* (Ramsbury, Marlborough, England: Crowood Press, 2002).
 37. Rachel Carson, *Silent Spring* (Boston: Houghton Mifflin, 1962.). Marx uses the quote in *The Machine in the Garden*, 380.
 38. Marx, *The Machine in the Garden*, 184.
 39. Marx, *The Machine in the Garden*, 369.
 40. Marx, *The Machine in the Garden*, 369.
 41. Attebery, "American Studies," 317.
 42. Marx, *The Machine in the Garden*, 380-381.

Chapter 3

1. Macarthur Job, *Air Disaster: Volume 2* (Fyshwick, Australia: Aerospace Publications Pty. Ltd, 1996), 47.

-
2. Paris, *From the Wright Brothers*, 198.
 3. Pendo, *Aviation in the Cinema*, 277, 279; Paris, *From the Wright Brothers*, 199.
 4. Bob Serling, "Seen a Good Movie Lately? A Brief Guide to a Dozen Classic Films About Civil Aviation," *Airways Magazine*, December 1999, 47-53.
 5. Prior to the crashes of the Comets due to metal fatigue, this de Havilland plane had met with other problems. Because the Comet lacked leading-edge slats, two aircraft crashed due to a tendency to stall on takeoff if the nose was raised too high. Five months after its debut in May 1952, one Comet was lost at Rome's Ciampino Airport, and four months after that, another was lost in Karachi. On May 2, 1953, a third Comet was torn apart by severe weather near Calcutta. See David Owen, : *How Science is Making Flying Safer* (Somerset, England: Haynes Publishing, Ltd., 1998), 32-33.
 6. Owen, *Air Accident Investigation*, 31-40.
 7. Pendo, *Aviation in the Cinema*, 280.
 8. The script is based on Gann's best-selling novel *The High and the Mighty*. See Serling, "Seen a Good Movie Lately?," 47-53.
 9. Pendo, *Aviation in the Cinema*, 280-281.
 10. Pendo, *Aviation in the Cinema*, 284-285.
 11. Pendo, *Aviation in the Cinema*, 285-286.
 12. This may in part be based on an actual event. On May 22, 1962, a Continental 707 flying out of Chicago was blown out of the sky by a bomb concealed in the lavatory. See Owen, *Air Accident Investigation*, 174.
 13. MacPherson, *The Black Box: Cockpit Voice Recorder Accounts*, 10.
 14. MacPherson, *The Black Box: All New*, 101-111.
 15. Dennis R. Jenkins, Boeing 747-100/200/300/SP (North Branch, MN: Specialty Press Publishers, 2000), 39-41; see also Owen, *Air Accident Investigation*, 40-46.
 16. MacPherson, *The Black Box*, 36-37.
 17. For discussion of the crash of KAL 801, see James M. Walters and Robert L. Sumwalt III, *Aircraft Accident Analysis: Final Reports* (New York: McGraw-Hill, 2000), where they note that the National Transportation Safety Board determined that the captain's failure to heed clear warnings " could partly be due to ineffective Crew Resource Management training by KAL and an 'advocacy' mentality, or a reluctance to question an authority figure, found in the Korean culture (201-202). Additional KAL crashes are discussed pp. 204-205. An extensive discussion of human factors in airplane crashes can be found in David Beaty, *The Naked Pilot: The Human Factor in Aircraft Accidents*, (Shrewsbury, England: Airline Publishing Ltd, 1995). Macarthur Job is equally as censorious of China Airlines, particularly with respect to two crashes of Airbus A300-600s in nearly identical situations within the span of four years. "The degree of similarity--almost virtual repetition--of circumstances, data, and aircraft, between Nagoya and Taipei, less than four years apart, is nothing less than breathtaking" (*Air Disaster: Volume 3* [Fyshwick, Australia: Aerospace Publications Pty. Ltd, 1998], 154-155).
 18. The account of this incident can be found in Job, *Air Disaster: Volume 3*, 31-36.
 19. Owen, *Air Accident Investigation*, 178-184.
 20. The others are *Passenger 57*, which I deal with in another chapter, and the 1989 docu-drama *Fire and Rain*, which is based on the crash of Delta Flight 191 at Dulles-Fort Airport in August 1985. The Lockheed Tristar also appears in *Die Hard 2* but it plays a minor role as most of the drama unfolds on the ground.
 21. Rafael Yglesias, *Fearless* (New York: Warner Books, 1993). For an extended description of the crash of United Flight 232, see McPherson, *The Black Box*, 162-186.
 22. Most likely this scenario is taken from the two real-life crashes caused by suspected rudder malfunctions on Boeing 737s. The first was United Flight 585 on a final segment

from Denver to Colorado Springs, Co., while the second crash occurred near Pittsburgh, PA, when a USAir 737 suddenly nose-dived on approach and buried itself eight feet into the ground. See Job, *Air Disaster: Volume 3*, 65-80; and MacPherson, *The Black Box*, 151-156.

23. This recalls the loss of students from a high school in rural Pennsylvania when TWA Flight 800 exploded and crashed off the coast of Long Island on the evening of June 17, 1996.

24. Pendo quoting Jim Greenwood, *Aviation in the Cinema*, 276.

25. See Pendo, *Aviation in the Cinema*, 277 and 281.

26. Pendo, *Aviation in the Cinema*, 288. Pendo also notes another hijack film that aroused the attention of aviation authorities. *Skyjacked* (1972) featured a madman who wanted to hijack a Boeing 707 to Moscow. Because the hijacker was not glamorized, the FAA approved of the film, but Australian authorities banned it for six months.

Chapter 4

1. In their book *Boeing*, (Osceola, WI: MBI Publishing Company, 1998) Guy Norris and Mark Wagner use this appellation for their chapter title on the 747, chapter 6.

2. Quoted in Peter Gilchrist, *Boeing 747-400* (Osceola, WI: MBI Publishing Company, 1998), 15.

3. The B-52 Bomber, though a direct descendant of the B-47, had twin engines attached to each pylon, for a total of eight engines, rather than the more common four. But the commonality to the other aircraft mentioned is obvious. See, for example, Norris and Wagner, *Boeing*, 72-81.

4. Discussion of the development of the 747 comes largely from Guy Norris and Mark Wagner, *Boeing 747: Design and Development Since 1969* (Osceola, WI: MBI Publishing Company, 1997), 11-19.

5. Norris and Wagner, *Boeing 747*, 17.

6. The failure of the three main post-war aviation film books to acknowledge the place of the 747 not only in film but in aviation in general is a mystery. They came out twelve, sixteen, and twenty-six years respectively after the first flight of the 747, but the recurrent presence of the 747 in film appears not to have impressed any of the authors. Skogsberg (1981) only mentions the 747 in passing for its appearance in *Airport '75*. Pendo has three mentions in passing (one of which does not involve a filmed 747), while Paris inexplicably mentions it only once in a book published in 1995, long after the 747 had attained iconic status.

7. Judging which model a 747 is from visual factors alone is far from an exact science. Consider, for example, the exterior issue of windows on the upper deck. The original 747-100 had only three windows on either side of the upper deck, while the 200 series had ten (though the first six 200s off the production line had only three). Later, even 100s were manufactured with ten windows on either side, "making it an unreliable series identifier." See Jenkins, *Boeing 747*, 43. Thus, the 747 scene in *Executive Decision* could even be a 100 series model. Given the various design options on the "classic" series (100-300) 747, it becomes clear why these visual clues are never absolute. As another example, midway through its production run, the 200 series switched to a stairway in the rear, a modification carried over to all of the 300 series. In addition, the stretched upper deck (SUD) of the 300 series could be ordered not only with newer 200 series, but also with 100 series, though only two of these were ever manufactured (both went to Japan Airlines in the SR--short range--version). Finally, older planes could be refitted with SUDs, as, for

example, were ten KLM 200 series models during a period of slack work for Boeing. For specific details, see Jenkins, *Boeing 747*, 59-60; Norris and Wagner, *Boeing*, 137-139; and Norris and Wagner, *Boeing 747*, 61-63.

8. The original 747 had stairs that entered the upper deck at the front, just behind the cockpit. In 1976, "L"-shaped straight stairs were offered as an option. Later, straight stairs were moved further aft so they would enter the upper deck from the rear. See, for example, Brian Baum, *Boeing 747SP* (World Transport Press, 1997), 60-63.

9. See Jenkins, *Boeing 747*, chapter 5 for further details.

10. Baum, *Boeing 747SP*, 42-46.

11. Norris and Wagner, *Boeing 747*, 59-62. It is important here not to confuse the Combi with the convertible freighter, a design which offered either for passengers or freight, and can be distinguished from the dedicated freighter by its normal array of windows, which the freighter lacks.

12. See Jenkins, *Boeing 747*, 56.

13. See Gilchrist, *Boeing 747-400*, 99, and Robert Dorr, *Boeing 747-400* (North Branch, MN: Specialty Press Publishers, 2002), 34.

14. Baum, *Boeing 747SP*, 118-125.

15. Baum, *Boeing 747SP*, 114.

16. Baum, *Boeing 747SP*, 115-117. Those interested in following the progress of this program can go to: <http://sofia.arc.nasa.gov/Sofia/sofia.html>.

17. Jenkins, *Boeing 747*, 53-55, and Norris and Wagner, *Boeing 747*, 106-107.

18. See <http://www.boeing.com/defense-space/military/e4b/>

19. See http://www.af.mil/news/factsheets/E_4B.html

20. Gilchrist, *Boeing 747-400*, 72, and Dorr, *Boeing 747-400*, 63-64. For updates, see the official Air Force webpage at <http://www.airforce-technology.com/projects/abl/>.

21. For a view from America's ally Britain, see *Images for Battle: British Film and the Second World War, 1939-1945*, by Clive Coultass.

22. This crash scene has been called "one of the most spectacular scenes in any aviation film." Using an authentic Air Force B-17 for the stunt, Fox Studios had to contract a stunt flier because Air Force regulations would not permit a military pilot to be involved. Legendary stunt pilot Paul Mantz was chosen and he duly made a low practice pass over the crash site. Coming in for the crash scene, he cut the engines just above the grass field and settled in for a wild ride. As planned, he ripped through canvas tents set up by the side of the runway, and was nearly killed when a metal pole had inadvertently been set up in one of the tents in place of the intended wooden poles. The United States Air Force was cooperative in making this film, providing Eglin Field, Florida, as the setting for Archbury, England air base. Takeoffs and landings were done at Ozark Field, Alabama. See Orriss, *When Hollywood Ruled the Skies*, 147-154.

23. See Rothman et al., *Hollywood's America*, chapter 4. Of course there are major exceptions to this trend, including hit aviation films such as *Top Gun* and *Blackhawk Down*.

24. Marx, *The Machine in the Garden*, 207

25. Garth S. Jowett, "Hollywood, Propaganda and the Bomb: Nuclear Images in Post World War II Films," *Film and History*, 18:2 (May 1988), 32, quoted in Paris, *From the Wright Brothers*, 184.

26. Skogsberg, *Wings on the Screen*, 136. A popular account of such missions can be found in Stephen Ambrose's *The Wild Blue: The Men and Boys Who Flew the B-24s Over Germany, 1944-45* (New York: Touchstone, 2002). This covers the flying career of another famous American, George McGovern.

-
27. Elaine Tyler May, *Homeward Bound: American Families in the Cold War Era* (New York: Basic Books, 1988, 1999), xx-xxi.
 28. For encyclopedic discussion of the Consolidated-Vultee Aircraft Corporation (Convair) B-36, see Dennis R. Jenkins, *Magnesium Overcast: The Story of the Convair B-36* (North Branch, MN: Specialty Press Publishers, 2001-2002). Also see: <http://www.elite.net/castle-air/b36htm>.
 29. Marx, *The Machine in the Garden*, 192.
 30. Marx, *The Machine in the Garden*, 194. Marx is very unclear in his citations about exactly who it is he is quoting in this section. His reference to Tocqueville is clearly marked but the prior and following quotes are much harder to attribute. Even Marx is confused about authorship here. See note 30, 399.
 31. Paris, *From the Wright Brothers*, 185.
 32. Marx, *The Machine in the Garden*, 223. Smith also gives great weight to this impulse to find a way to India in chapter two of *Virgin Land*, which begins: "When Lewis and Clark reached the shores of the Pacific in 1804 they reactivated the oldest of all ideas associated with America--that of a passage to India" (19).
 33. Marx, *The Machine in the Garden*, 224.
 34. Marx, *The Machine in the Garden*, 224.
 35. The first production model of the eight-engine B-52 flew on Aug. 5, 1954. See Norris and Wagner, *Boeing*, 75.
 36. Quoted in Marx, *The Machine in the Garden*, 195.
 37. Marx in fact quotes one writer from an 1840 edition of *American Journal of Science* on his reaction to the sight of a new bridge: "What is there yet to be done upon the face of the earth, that cannot be effected by the powers of the human mind . . .?" Had this writer been able to peer into the future, he would have been amazed at how accurate his answer to his own question had become: "[Man] is indeed, 'lord of creation'; and all nature, as though daily more sensible of the conquest, is progressively making less and less resistance to his dominion" (Marx, *The Machine in the Garden*, 196).
 38. Discussed in Marx, *The Machine in the Garden*, 222-224
 39. A flub in this scene shows Captain Herlihy jettisoning Sgt. Brennan through the cockpit roof, but the subsequent shot from outside clearly shows a parachute opening under a small, straight-wing airplane, not the giant eight-engine, swept-wing B-52.
 40. Marx, *The Machine in the Garden*, 242.
 41. Henriksen, *Dr. Strangelove's America*, 307.
 42. The account of this incident comes from Malcolm MacPherson (ed.), *The Black Box: All-New Cockpit Voice Recorder Accounts of In-Flight Accidents* (New York: William Morrow and Company, 1998), 157-161.
 43. For details, see the official U.S. Air Force fact sheet at: http://www.af.mil/factsheets/fs_131.shtml.

Chapter 5

1. I have relied most extensively on Hopkins's excellent illustrated *Boeing KC-135 Stratotanker*. For extensive references on aerial refueling, see his notes on sources, 207-208.
2. Specifically, 92 B-29s were converted into DB-29M tankers, while an assortment of other B-29s were converted into a total of 175 receivers. Hopkins, *Boeing KC-135 Stratotanker*, 18. Initially, the B-29, known for its role toward the end of the war in the Pacific, including the dropping of two nuclear bombs on Japan, was adapted for this role.

-
- (www.geocities.com/CapeCanaveral has pertinent data: 92 B-29s converted to KB-29M with hoses; 116 B-29s converted to KB-29P which had flying boom.) This propeller-driven plane was succeeded by the Boeing KC-97, another straight-wing plane driven by propeller power (at 814 copies, it was the most prolifically produced American tanker).
3. The first combat use of aerial refueling occurred over Korea when a KB-29M refueled four American fighter jets. The date was July 6, 1951. The Air Force's decision to keep both systems for years after created havoc with America's and its European allies' plans for capability (Hopkins, *Boeing KC-135 Stratotanker*, 20).
 4. At the end of hostilities in the Pacific, 49 "Silverplate" B-29s were capable of carrying the 10,000 lb. atomic bomb; one year later that figure had dropped to 23. In addition, the limited range of this bomber meant forward stationing on foreign soil was required, and this resulted in predictable political problems. A more reliable way of projecting nuclear deterrent force drove SAC during these years (Hopkins, *Boeing KC-135 Stratotanker*, 12).
 5. Hopkins, *Boeing KC-135 Stratotanker*, 18-19.
 6. For the entire story of the B-36, see Dennis R. Jenkins's magisterial account of the B-36, *Magnesium Overcast: The Story of the Convair B-36* (North Branch, MN: Specialty Press, 2001-2002). The discussion referenced here can be found in detail in chapters 1 and 3.
 7. Jenkins, *Magnesium Overcast*, 161.
 8. The website <http://www.aviation-central.com/1946-1970/afb20.htm> notes that "The B-47 was the first true modern bomber to fill the ranks of General Curtiss LeMay's new Strategic Air Command. With long range, high altitude capabilities, the "Stratojet" became the backbone of SAC in the early 1950s. As fast as many early jet fighters, with sophisticated defenses and an operational altitude of up to 40,000 feet, the B-47 was a strong deterrent in the early days of the nuclear standoff. The Air Force accepted a grand total of 2,041 B-47s, which included bombers, reconnaissance aircraft, combat crew trainers, drones, and others."
 9. see <http://www.aviation-central.com/1946-1970/afc30.htm>.
 10. The authors at <http://www.aviation-central.com/1946-1970/afc30.htm> write of the KC-97: "When acting as a transport, the C-97 could carry 68,500 pounds of cargo or up to 96 fully-equipped troops. In the tanker role, the KC-97 was capable of off-loading 15,000 gallons of fuel. . . ."
 11. Jan Tegler, *B-47 Stratojet: Boeing's Brilliant Bomber* (New York: McGraw-Hill, 2000), 98. One fascinating tidbit about this refueling pair noted by the author is the fact that the B-47 could operate on regular 115/145 avgas as well as the normal JP-4 jet fuel. Should the need arise, the KC-97 could pump its own internal load of avgas straight on top of the bomber's jet fuel. Though mildly less efficient, the avgas burned safely in the bombers jet engines (97).
 12. The military version that resulted from the Dash 80 program was known as the C-135 series, encompassing both cargo and tanker versions, neither of which is really a 707. One obvious visual difference is that the C-135 series has no passenger windows. In addition, the crew entry point is a small hatch forward of the left side of the nose gear. See Don Logan, *The Boeing C-135 Series: Stratotanker, Stratolifter, and Other Variants*, 10-12). It was originally designated the 717, a designation that was never adopted until Boeing acquired McDonnell Douglas in 1995 and used that number for the DC-9/MD-80 series of planes (Hopkins, *Boeing KC-135 Stratotanker*, 26).
 13. Logan, *The Boeing C-135 Series*, 11. Logan's calculations about aircraft losses are a bit puzzling. On page 11 he states that "75 have been lost due to accidents," which

includes *all* variants of the C-135, including twelve built for the French Air Force. Yet in his appendix on aircraft losses, he lists only 73 hull losses (251-252).

14. Logan, *The Boeing C-135 Series*, 251. Tragically, a sister ship thousands of miles away in Okinawa, Japan, crashed on takeoff two days later, killing the crew there also.

15. Hopkins, *Boeing KC-135 Stratotanker*, 187.

16. See www.brook.edu/dybdocroot/fp/projects/nucwcost/box7-3.htm. Note that this site incorrectly gives the date as January 16, which I have amended.

17. Tad Szulc, *Bombs of Palomares* (New York: Viking Press, 1967). In addition to these two inflight-collisions, two other KC-135s were lost; one with a B-47 and another with an F-105. There have also been cases where KC-135s have been involved in mid-air collisions while refueling and have not crashed, though the receiver has. A Lockheed SR-71, for example, was lost in this way (Hopkins, *Boeing KC-135 Stratotanker*, 50).

18. See Logan, *The Boeing C-135 Series*, 51-55.

19. Arthur A. C. Steffen, *McDonnell Douglas DC-10 and KC-10 Extender: Wide-Body Workhorses* (Leicester, England: Midland Publishing Ltd., 1998), 104.

20. Detailed information about the next likely tanker can be found at: www.airforce-technology.com/projects/kc767/, which notes:

The Boeing 767 tanker transport aircraft, designated KC-767 for the US Air Force, is a high performance version of the 767-200ER twin aisle jetliner equipped for fully integrated tanker operations. It is fitted with either boom and receptacle refueling, hose and drogue refueling or both. The commercial 767 first entered service in 1982 and more than 880 aircraft have been delivered. The cabin of the tanker can be configured for passenger transport, as a freighter, convertible (passenger or freighter) or Combi (passenger and freighter).

In the 1980s and in 1990/91 Boeing conducted studies directed towards the identification of an appropriate successor to the KC-135 Stratotanker, a derivative of the Boeing 707 jetliner. In 1991 the 707 production line was finally closed and studies confirmed that the long range twin engine 767 was a strong candidate to replace the KC-135. In May 2003, the US Air Force announced that it would lease 100 tankers to replace the oldest of its KC-135 tankers, subject to congressional approval.

Further information on the KC-767 can be found at Boeing's official website for the project, www.boeing.com/news/releases/2003/q3/nr_030717b.html.

21. Barbara Creed, "Film and Psychoanalysis," in *Film Studies*, 75.

22. Of course this assumption was challenged and largely overturned by subsequent theories, particularly those arising out of feminism and film studies. That issue will be addressed in Chapter nine, "Race and Gender."

23. Henriksen, *Dr. Strangelove's America*, 320.

24. For example, Steffen, *McDonnell Douglas DC-10 and KC-10 Extender*, 104, notes that the KC-10 "can transfer 1,200 US gallons per minute to the receiving craft." This fuel is drawn from tanks wing and center wing area tanks, as well as two large tanks under the cargo floor, plus one each in the fore and aft lower cargo compartments.

25. Hopkins, *Boeing KC-135 Stratotanker*, 3.

26. Hopkins, *Boeing KC-135 Stratotanker*, 20.

27. Logan, *The Boeing C-135 Series*, 21-22.

28. Steffen, *McDonnell Douglas DC-10 and KC-10 Extender*, 104.

29. See www.boeing.com/news/releases/2003/q3/nr_030717b.html.

-
30. Obviously, it would be wrong to project the events of September 11, 2001, back in time onto the movie, but once both film and terror attack had passed into history, they could then be viewed in context. I do this in the conclusion of the dissertation.
 31. I have the video in my personal collection.
 32. Like other Boeing commercial products of its generation, the 727 had a three-man flight deck: captain, first officer, and second officer. *Airspeed*, like many other flying films, takes liberties with the cockpit composition.
 33. Personal e-mail communication from Bruce L. Gillman, (bruce.gillman@afnews.af.mil), August 11, 2003.
 34. See www.bubbasoft.com.
 35. See the discussion of *The Perfect Storm: So that others may live*,” by Michael Canders:
http://www.usna.com/News_Pubs/Publications/Shipmate/2000/2000_07/perf.htm.

Chapter 6

1. Quoted in Henriksen’s discussion of nuclear war films, 56.
2. See May, *Homeward Bound*; and Paul Boyer’s two contributions, *By the Bomb’s Early Light: American Thought and Culture at the Dawn of the Atomic Age* (New York: Pantheon, 1985), and *Fallout: A Historian Reflects on America’s Half-Century Encounter With Nuclear Weapons* (Ohio State University Press, 1998).
3. Henriksen, *Dr. Strangelove’s America*, 56-57.
4. Jeremy Laurance, “One family went on a holiday--and made Toronto a global pariah,” *The Independent* [London], in cooperation with *The Daily Yomiuri* [Japan], April 27, 2003, 15.
5. As of August 9, 2003, West Nile virus cases are nearing their record in the United States, including areas of the West that had previously been unscathed. See “West Nile virus cases in U.S. triple to 164, nearing record,” *The Daily Yomiuri*, August 9, 2003.
6. Henriksen, *Dr. Strangelove’s America*, 241
7. Henriksen, *Dr. Strangelove’s America*, 305-309.
8. Henriksen takes it for granted that this plays out of a sexual fantasy, asserting without support the view that “the bomb becomes an extension of his [Kong’s] sexuality and the connections between sex, death, and the bomb are sealed” (320). She argues that Kubrick’s portrayal of American leaders and their “strange” form of love--”Only ‘strange’ forms of love and sex are practiced by these American leaders, and the very propagation of life becomes associated with death: it is the bomb, and all forms of technology that they love” (319)--is accurate, given that the era embraced “stultifying expectations” with regard to sex. See her discussion of the youthful rebellion against this presumed sexually inhibited era, 380-383.
9. See Pendo, *Aviation in the Cinema* (281-282), for further discussion.
10. These films obviously inspired a send-up of the genre, Jim Abrahams and David Zucker’s 1980 farce, *Airplane!* I have not included this film because it seems not to fit with the more serious atmosphere of the flying as menace films I have studied.
11. The dialogue of 100 feet could be a mistake on the part of the actor playing the co-pilot, as it is unlikely a jumbo jet would end a dive at such a perilously low altitude. That the Japanese subtitles read “300 meters,” a figure which translates into almost 1,000 foot, makes me suspect the script in fact said 1,000 feet.
12. Holland’s heroism is emphasized in an exchange he has in the cockpit with Rachel, the Ambassador’s aide. “So, how are you holding up?” she asks, to which the captain

replies, "Well, that would be my job--to hold up." "This goes far beyond anyone's job description," she answers. "It's not about flying a 747 anymore. . . . Yeah, maybe 'cause this situation may be as cosmic as it gets. This is about how everyone on this plane confronts life's big questions, how they face up to mortality, including you." "I have been there, I have done that, day after day in Iraq," he says. "Death is a self-fulfilling prophecy. . . . I'm not going to die, you are not going to die, no one's going to die. I just won't let it happen, okay?"

13. Prior to its "retirement" in 1983, the upper deck was reconfigured to the 200-series standards, meaning there were added windows along the upper deck (Jenkins, *Boeing 747-100/200/300/SP*, 68). After three years, it was brought back into service as a mock-up for the new presidential plane (Air Force One when the serving President is aboard), then donated to Seattle's Museum of flight in 1990, though it has since served as a test bed for the Boeing 777 program (Norris and Wagner, *Boeing 747*, 108).

14. See Powers et al., *Hollywood's America*, ch. 4.

15. Henriksen, *Dr. Strangelove's America*, 374-377. The parallel to Stanley Kubrick's 1964 satire *Dr. Strangelove* is patent, but this comes as no surprise to readers of Henriksen's book, given its title. Incidentally, though the *Planet of the Apes* series is not a flying film, it is based on space travel. Henriksen contrasts the dystopia of *The Planet of the Apes* with the worlds in another space drama from the same era, the TV series *Star Trek*, where humans had learned to avoid violence and overcome the threat of nuclear destruction.

16. In the current flap over his new movie *The Passion of Christ*, for example, Gibson has said, "This is not communist Russia. Does anybody realise that my rights as an American, as an artist, as a human being ... are being violated here?" See: <http://www.abc.net.au/news/newsitems/s1031113.htm>.

Chapter 7

1. See <http://www.thetzsite.com/pages/movie/lithgow.html>.

2. Marx, *Machine in the Garden*, 26.

3. Marx, *Machine in the Garden*, 26.

4. "Richard Reid pleads guilty,"

<http://www.cnn.com/2002/LAW/10/04/reid.guilty.plea/>.

5. Paris, *From the Wright Brothers*, 203.

6. Paris, *From the Wright Brothers*, 203-204.

7. For discussions on Hollywood's image of the Nazi, see Lester D. Friedman, *Hollywood's Image of the Jew* (New York: Frederick Ungar Publishing Co., 1982), 242-246; and Patricia Erens, *The Jew in American Cinema* (Bloomington: Indiana University Press, 1984), 345-351.

8. In order to keep a tight-knit team of three together, the owner of the jet has added a 727 flight engineer's panel to a jet that normally needs only a two-man crew. When the 737 was in the design stage, there was controversy over whether there should be two or three crewmembers in the cockpit. The earlier three-engine 727 had two pilots and a flight engineer, but Boeing and the airlines argued that the 737 could be safely flown with only two pilots. Political maneuvering among the Air Line Pilots' Association (ALPA), the Flight Engineer's International Association, Boeing and the airlines delayed production. Rather than a flight engineer's station, the ALPA wanted a third pilot to ride in the cockpit. (The comparable twin-engine Douglass DC-9 and BAC One-Eleven had only two pilots.)

In the end, the FAA certified the two-man design as being safe, although bargaining compromises resulted in two airlines--United and Western--operating with three crewmembers on the flight deck. See Malcolm L. Hill, *Boeing 737* (Farnham, England: Crowood Press, 2002), 23-24, 29-30.

9. The series, which premiered September 22, 1999, airs Wednesday nights at 9 pm/ET, and stars Sheen as Josiah Bartlet, President of the United States. See <http://www.tvguide.com/showguide/ShowPage.asp?iProgramID=1877707>.

10. Baum, *Boeing 747SP*, 110-111, 124.

Chapter 8

1. Alexander Pope, *Martinus Scriblerus on the Art of Sinking in Poetry*. Chap. xi, cited in Marx, *The Machine in the Garden*, 194.

2. Marx, *The Machine in the Garden*, 196

3. Marx, *The Machine in the Garden*, 8-9.

4. Marx mentions *Walden*, *Moby-Dick*, and *Huckleberry Finn* in this respect. This was in relation to his extended discussion of Shakespeare's *The Tempest*, in which the hero, Prospero, is taken from society and deposited in nature (69).

5. Discussed in Marx, *The Machine in the Garden*, 194.

6. Marx, *The Machine in the Garden*, 15. Here, Marx is quite taken by this observation about 19th-century American, noting another Melville work ("The Tartarus of Maids") in which the narrator happens upon a winter scene of a paper mill hidden among the mountains. Naturally he mentions *Walden Pond*, along with *The Education of Henry Adams*, then moves to the last century where *The Great Gatsby*, *The Grapes of Wrath*, and "The Bear" qualify. His explicit list of authors includes Walt Whitman, Sarah Orne Jewett, Henry James, Sherwood Anderson, Willa Cather, Eugene O'Neill, Robert Frost, Hart Crane, T.S. Eliot, John Dos Passos, and Ernest Hemingway. Indeed, he writes, "it is difficult to think of a major American writer upon whom the image of the machine's sudden appearance in the landscape has not exercised its fascination" (15-16). That film incorporates the same "metaphoric design," then, is hardly surprising.

7. For details on these DC-10 crashes, see David Owen, *Air Accident Investigation*, 159-173.

8. This chilling account of the attack, including the cockpit voice recorder transcript, can be read at: <http://www.tailstrike.com/070494.htm>.

9. For a more detailed discussion of this premeditated attack, see Dave Hirschman, *Hijacked: The True Story of the Heroes of Flight 705* (New York: William Morrow and Company, Inc., 1997).

10. For a synopsis of all MD-11 crashes to date, including the crashes that follow in the text, see <http://airlinesafety.com/faq/faq9.htm>

11. Further details about the crash read: About 56 minutes after departure while at flight level 330, the flightcrew declared "PAN PAN PAN" and advised air traffic control (ATC) of smoke in the cockpit. The flightcrew requested to divert to a convenient airport and was cleared direct to Halifax International Airport in Nova Scotia, Canada. About 11 minutes after the report of smoke, the airplane's electrical systems began to deteriorate. The flightcrew then declared an emergency, and communications between ATC and the flightcrew ceased shortly thereafter. Approximately 6 minutes later, at 2231 Atlantic daylight time, the airplane crashed into the Atlantic Ocean near Peggy's Cove, Nova Scotia, Canada. All 14 crewmembers and 215 passengers were killed, and the airplane was destroyed. The Transportation Safety Board of Canada (TSB) is in charge of the accident

investigation, and the National Transportation Safety Board is participating in accordance with the provisions of Annex 13 to the Convention on International Civil Aviation. See <http://airlinesafety.com/faq/faq9.htm>.

12. A report on the Korean Air crash reads:

The Seoul-bound plane, carrying 68 tons of cargo, crashed into an industrial development zone 10 kilometers (6 miles) southwest of Hongqiao airport. The plane plunged to the ground, plowing into housing for migrant workers and exploded. Weather at Shanghai around 16.00hours was: temperature: 13deg C; dew point 13deg C; 1014mB; wind South at 11mph; light rain. A two-year investigation led by the CAAC found that the co-pilot mistook a control tower command to fly at 1,500m for 1,500 feet and so put the aircraft into a steep dive from which he could not recover.

See <http://aviation-safety.net/database/1999/990415-0.htm>.

13. A report on the China Airlines crash reads:

China Airlines flight 642 departed Bangkok for a flight to Taipei via Hong Kong. Weather in the Hong Kong area was very poor with a severe tropical storm ('Sam') 50km NE of the airport and gale force winds and thunderstorms. Extra fuel was carried, because the crew intended to continue to Taipei, depending on weather at Hong Kong on arrival. Before the arrival of flight 642 four flights carried out missed approaches, five planes diverted and 12 planes landed successfully. Weather information obtained by the crew at 18.06 reported a 300deg wind at 35 kts and an RVR of 650m in heavy rain. The flight crew then prepared for a runway 25L ILS approach. Landing reference speed was calculated to be 152kts and the captain (pilot-in-command) would fly the approach at 170kts and would continue to land depending on a wind check on finals. At 18.41h, while flying the runway 25L ILS approach, weather was reported to the crew being 1600m visibility in the touchdown zone, wind 320deg/25kts gusting to 33kts. The aircraft was then cleared to land. At an altitude of 700ft prior to touchdown a further wind check was passed to the crew: 320deg/28kts gusting to 36kts. Maximum crosswind limit for the aircraft was 24kts. The pilot-in-command continued with the approach, disconnected the autopilot but left auto throttle engaged. The MD-11, with a weight very close to the maximum landing weight permitted, stabilized slightly low on the glide slope. At 50ft above the runway, upon power reduction to flight idle, the airspeed decreased from 170 to 152kts. An attempt was made to flare in a slightly right wing down (less than 4 deg) attitude. The aircraft landed hard on its right main gear and the no.3 engine touched the runway. The right main gear separated and the right wing separated. The MD-11 then rolled inverted as it skidded off the runway in flames. It came to rest on a grass area next to the runway, 1100m from the runway threshold. The right wing was found on a taxiway 90m from the nose of the plane. The crash sequence in this case bears similarities to the FedEx MD-11 which also flipped upside down on landing at Newark.

See <http://aviation-safety.net/database/1999/990822-0.htm>.

14. A report on this FedEx flight reads:

FedEx flight 87 departed Shanghai at 21.16 for a flight to Subic Bay. The MD-11, named "Joshua", touched down at Subic Bay runway 07 at 23.15h. The plane rolled onto runway 25, hitting a concrete post and slamming into a wire fence before plunging into the bay. All of the plane was submerged, 10m offshore, except for the cockpit. The cargo reportedly consisted mainly of electronic goods and garments. N581FE was also part of the US Civil Reserve Air Fleet (CRAF).

PROBABLE CAUSE: "The failure of the flight crew to properly address an erroneous airspeed indication during descent and landing, their failure to verify and select the correct airspeed by checking the standby airspeed indicator, and their failure to execute a missed approach. These failures led to an excessive approach and landing speed that resulted in a runway overshoot. Contributing factors to the accident were clogged pitot tube drain holes, the MD-11's insufficient alerting system for airspeed anomalies, and the failure of the SEL ELEV FEEL MAN and SEL FLAP LIM OVR D checklists to refer the crew to the standby airspeed indicator."

See <http://aviation-safety.net/database/1999/991017-0.htm>.

15. Dave Hirschman, *Hijacked: The True Story of the Heroes of Flight 705*, 28-29.

16. Hirschman, *Hijacked*, 213-214.

Chapter 9

1. Barbara Creed, "Film and Psychoanalysis," in *Film Studies: Critical Approaches*, 80. See also Graeme Turner, "Cultural Studies and Film, 196 and Jostein Gripsrud, "Film Audiences, 207, in the same volume.

2. Wiegman, "Race, Ethnicity, and Film, in *Film Studies*, 163.

3. Wiegman, "Race, Ethnicity, and Film," 156.

4. For a discussion of the sociology of the rise of film, see Miles, *Seeing and Believing*, where she traces the development of popular film as it "coincided historically and geographically with the emancipation of public life from church control and patronage. 'Congregations' became 'audiences' as film created a new public sphere in which, under the guise of 'entertainment,' values are formulated, circulated, resisted, and negotiated" (25).

5. David Beaty, for one, believes "there is no reason why women should not be just as good pilots as men. Yet men have resisted their move to the flight deck, as they have resisted every advance in women's equality." See *The Naked Pilot*, 14.

6. Beaty discusses this in *The Naked Pilot*, 17-18.

7. Friedman, *Hollywood's Image of the Jews*, 90, 95.

8. *Lethal Weapon*, *Beverly Hills Cop*, *NYPD*, *Homicide*, etc. are examples.

9. The case of actor John Lone, the male antagonist in *Year of the Dragon*, makes the point: Despite starring in the 1987 Best Picture *The Last Emperor*, his career has largely dried up. In contrast, Asian female stars continue their success, as witnessed by the popularity of actresses such as Lucy Liu (*Aly McBeal*; *Charlie's Angels*) and Tia Carrere (*Wayne's World*). See Steve Sailer, "The Joy Unlucky Club," *The American Conservative*, June 2, 2003, 23-24.

-
10. This movie's film credits list the character Rattner's name as Nick Corri, though the Internet Movie Database (Imdb) lists his name as Jsu Garcia (see <http://us.imdb.com/Credits?0120224>).
 11. Richard Herrnstein and Charles Murray, *The Bell Curve: Intelligence and Class Structure in American Life* (New York: The Free Press, 1994), 85.
 12. Wiegman, "Race, ethnicity, and film," 163-164.
 13. Paris, *From the Wright Brothers*, 139-140. Paris here notes that the Air Force produced a documentary about the Tuskegee Airmen in action, but "not once is any reference made to the fact that these pilots are black." As pilots for the famous 99th Fighter Squadron, they were slated for combat duty in North Africa. Additional pilots were assigned to the 322d Fighter Group which flew combat along with the 99th Squadron from bases in Italy. In 1995, a movie about these men, *The Tuskegee Airmen*, was directed by Robert Markowitz and starred Laurence Fishburne.
 14. See the recent *Washington Post* article about African American pilot Nicole Lewis and her father for these statistics. Ironically, this very story points up the difficulty of making racial classifications and producing clear statistics on the race of American pilots: Ms. Lewis, we find, is "a child of an interracial marriage -- her mother is white . . ." Keith L. Alexander, "The 21st Century's Answer To the Wright Brothers: Father and Daughter Team Up in 737 Cockpit," *Washington Post*, August 5, 2003. Figures from the Organization of Black Airline Pilots (OBAP) show that black pilots at major national, regional and commuter passenger airlines and freight carriers "make up just one percent of the 70,000 U.S. pilots in the U.S." For statistics on female commercial airline pilots, see:
<http://www.iswap.org/ISAFaqs.html> and:
<http://www.aviationnow.com/content/careercenter/global/car2001g.htm>. As recently as 1976, the number of black pilots was only 80 and 400 ten years later. (Patricia Brown, "Special Report: Blacks in Aviation," *2003 Aviation Week*, <http://www.aviationnow.com/avnow/spSec/blackhistory1.jsp>.)
 15. Dave Hirschman, *Hijacked*, 60, 174.
 16. See <http://edition.cnn.com/US/9702/05/oj.timeline/> for dates relevant to the O.J. Simpson case.
 17. Hirschman, *Hijacked*, 201, 225-236, 242-251.
 18. Rapper Ice T, born Tracy Morrow in Newark, NJ in 1959, became notorious for his homicidal lyrics in "Cop Killer," about which the website <http://it.uwp.edu/gangsters/ice-t.cop.killer.html> says:

This song came out originally on *Body Count* (1992), an album by a rap & heavy metal band of that name which Ice-T had been fronting. They had been playing a version of it in concert for a year, including as part of the 1991 Lollapalooza tour. The recorded version includes references to Rodney King, a black motorist whose beating by LAPD officers had been caught on videotape. Shortly after the record came out, a suburban jury acquitted the officers and riots broke out in South Central LA. Soon after that outbreak, a Dallas police group called for a boycott of the Ice-T record. Said Ice-T, who actually played a cop in the 1991 movie *New Jack City*, "I'm singing in the first person as a character who is fed up with police brutality. I ain't never killed no cop. I felt like it a lot of times. But I never did it." Soon, however, the offending song was removed from the record, and the next year, Warner Brothers dropped both the band and Ice-T as a solo artist.

As with *New Jack City*, it is ironic that he plays a policeman in *Sonic Impact* and *Air Rage*.
19. Paris, *From the Wright Brothers*, 203.
20. See movie review at <http://us.imdb.com/Title?0049388>.
21. *Top Gun* box office: <http://www.imdb.com/title/tt0092099/business>
Budget \$15,000,000; Gross\$168,000,000 (Non-USA); \$176,781,720
(USA)\$344,800,000 (worldwide); Rentals\$79,400,000 (USA). *Air Force One* box office:
<http://us.imdb.com/title/tt0118571/business>, budget \$85,000,000. *Black Hawk Down* box
office: <http://us.imdb.com/title/tt0265086/business>, budget \$90,000,000.

Chapter 10

1. Corn, *The Winged Gospel*, xiii.
2. This sentiment is expounded upon in Marx's essay "The Neo-Romantic Critique of Science," in *The Pilot and the Passenger* and reconfirmed in the new Afterword (2000) of *The Machine in the Garden*.
3. Kuklick, "Myth and Symbol," in *American Studies*, 441.
4. John Hill, *Film Studies: Critical Approaches*, xiii.
5. Marx, *Pilot and Passengers*, xi.
6. Ed Hayward, Tom Farmer and Cosmo Macero Jr., *The Boston Herald*, September 12, 2001.
7. Lisa Beamer and Ken Abraham, *Let's Roll: Ordinary People, Extraordinary Courage* (Tyndale House Publishers, 2002).
8. Frenchman Thierry Meyssan's *9/11: The Big Lie--The Pentagon Plane Crash that Never Happened* (London: Carnot Publishing Ltd., 2002) is among the most prominent books on this view of September 11. See also Albert D. Pastore, *Stranger Than Fiction: An Independent Investigation of the True Culprits Behind 9-11* (Tempe, Arizona: Dandelion Books, 2003). France and Germany--but also England to a lesser extent--continue to be a hotbed of conspiracy theories alleging that the U.S. government played a direct role in bringing about the terror of September 11. See Andreas von Buelow--Germany--and Michael Meacher--England--in NYTs and WSJ. Also cite German polls.
9. http://www.suntimes.com/ebert/ebert_reviews/1996/03/3151.html. The site <http://www.kstatecollegian.com/issues/v100/sp/n115/cam-Executive-Decision-abd.html> is also critical of Arab images in this film.
10. See <http://www.nybooks.com/articles/13830>. Also, see NYRB October 26, 2000, "TWA 800 and Electromagnetic Interference: Work Already Completed and Work that Still Needs to be Done"; October 5, 2000, "The Fall of Egyptair 990; September 21, 2000, "Swissair 111, TWA 800, and Electromagnetic Interference." I am not positive that these are the correct dates since the NYRB website mixes print and electronic versions. Works related to this crashes are James Sanders, *The Downing of TWA Flight 800: The Shocking Truth Behind the Worst Airplane Disaster in U.S. History* (New York: Kensington Publishing Corp., 1997); and Jack Cashill and James Sanders, *First Strike: TWA Flight 800 and the Attack on America* (Nashville: Thomas Nelson, Inc., 2003).
11. See, for example: <http://aviation-safety.net/database/2001/011112-0.htm>.
12. See <http://www.geocities.com/mknemesis/airbus.html>.
13. See <http://www.nts.gov/Pressrel/2003/031110.htm>.
14. See <http://www.nytimes.com/2003/04/03/arts/music/03POPL.html?pagewanted=print&position=top>. According to IMDb, there is a 2003 movie that explicitly depicts scenes based on Sept. 11. It is called *Air Marshal* and is Directed by

Alain Jakubowicz. It even includes a character saying "Let's roll." See:
<http://www.imdb.com/title/tt0318281/>
15. Tom Clancy, *Debt of Honor* (New York: G.P. Putnam's Sons, 1994; Jack Ryan
Limited Partnership, 1995), 982-986.

SELECTED BIBLIOGRAPHY

- Ambrose, Stephen. *The Wild Blue: The Men and Boys Who Flew the B-24s Over Germany, 1944-45*. New York: Touchstone, 2002.
- Baum, Brian. *Boeing 747SP*. World Transport Press, 1997.
- Beatty, David. *The Naked Pilot: The Human Factor in Aircraft Accidents*. Shrewsbury, England: Airlife Publishing Ltd, 1995.
- Bergstrom, Janet, ed. *Endless Night: Cinema and Psychoanalysis, Parallel Histories*. Berkeley and Los Angeles: University of California Press, 1999.
- Cashill, Jack and James Sanders. *First Strike: TWA Flight 800 and the Attack on America*. Nashville: Thomas Nelson, Inc., 2003.
- Clancy, Tom. *Debt of Honor*. New York: Berkley Book, 1995.
- Cobb, Roger W. and David M. Primo. *The Plane Truth: Airline Crashes, the Media, and Transportation Policy*. Washington, D.C.: Brookings Institution Press, 2003.
- Corn, Joseph J. *The Winged Gospel: America's Romance With Aviation*. Baltimore: Johns Hopkins University Press, 1983, 2002.
- Coultass, Clive. *Images for Battle: British Film and the Second World War, 1939-1945*.
- Desser, David and Lester D. Friedman. *American-Jewish Filmmakers: Traditions and Trends*. Urbana and Chicago: University of Chicago Press, 1993.
- Dorr, Robert. *Boeing 747-400*. North Branch, MN: Specialty Press Publishers, 2002.
- Farmer, James H. *Broken Wings: Hollywood's Air Crashes*. Missoula, Montana: Pictorial Histories Publishing Company 1984.
- Farmer, James. *Celluloid Wings: The Impact of Movies on Aviation*. Blue Ridge Summit, PA, 1984.
- Gabbard, Glen O. and Krin Gabbard. *Psychiatry and the Cinema*, 2nd ed., Washington, D.C.: American Psychiatric Press, Inc., 1999.
- Gilchrist, Peter. *Boeing 747-400*. Osceola, WI: MBI Publishing Company, 1998.

- Henriksen, Margot. *Dr. Strangelove's America: Society and Culture in the Atomic Age*. Berkeley and Los Angeles: University of California Press, 1997.
- Hill, John and Pamela Church Gibson, editors. *Film Studies: Critical Approaches*. Oxford and New York: Oxford University Press, 2000.
- Hill, Malcolm L. *Boeing 737*. Farnsbury, Marlborough, England: Crowood Press, 2002.
- Hirschman, Dave. *Hijacked: The True Story of the Heroes of Flight 705*. New York: William Morrow and Company, Inc., 1997.
- Hoffer, William and Marilyn Mona Hoffer. *Freefall*. New York: St. Martin's Press, 1989.
- Hopkins, Robert S. III. *Boeing KC-135 Stratoganker: More than Just a Tanker*. Leicester, England: Midland Publishing Limited, 1997.
- Jenkins, Dennis R. *Boeing 747-100/200/300/SP*. North Branch, MN: Specialty Press Publishers, 2000.
- Jenkins, Dennis R. *Magnesium Overcast: The Story of the Convair B-36*. North Branch, MN: Specialty Press, 2001-2002.
- Job, Macarthur. *Air Disaster: Volume 1*. Fyshwick, Australia: Aerospace Publications Pty. Ltd, 1994.
- _____. *Air Disaster: Volume 2*. Fyshwick, Australia: Aerospace Publications Pty. Ltd, 1996.
- _____. *Air Disaster: Volume 3*. Fyshwick, Australia: Aerospace Publications Pty. Ltd, 1998.
- Jones, Ken D. and Arthur F. McClure. *Hollywood at War: The American Motion Picture and World War II*. Cranbury, NJ: A.S. Barnes and Co., Inc., 1973.
- Logan, Don. *The Boeing C-135 Series: Stratotanker, Stratolifter, and Other Variants*.
- MacPherson, Malcolm, ed. *The Black Box: Cockpit Voice Recorder Accounts of Nineteen In-Flight Accidents*. New York: William Morrow and Company, 1984.
- _____. *The Black Box: All-New Cockpit Voice Recorder Accounts of In-Flight Accidents*. New York: William Morrow and Company, 1998.

- _____. *On a Wing and a Prayer: Interviews with Airline Disaster Survivors*. New York: HarperCollins, 2002.
- Marx, Leo. *The Machine in the Garden: Technology and the Pastoral Ideal in America*. Oxford and New York: Oxford University Press, 1964, 2000.
- _____. *The Pilot and the Passenger: Essays on Literature, Technology, and Culture in the United States*. New York: Oxford University Press, 1988.
- May, Elaine Tyler. *Homeward Bound: American Families in the Cold War Era*. New York: Basic Books, 1988, 1999
- Meysan, Thierry. *9/11: The Big Lie--The Pentagon Plane Crash That Never Happened*. London: Carnot Publishing Ltd., 2002.
- Miles, Margaret R. *Seeing and Believing: Religion and Values in the Movies*. Boston: Beacon Press, 1996.
- Norris, Guy and Mark Wagner. *Boeing 747: Design and Development Since 1969*. Osceola, WI: MBI Publishing Company, 1997.
- _____. *Boeing*. Osceola, WI: MBI Publishing Company, 1998.
- Orriss, Bruce. *When Hollywood Ruled the Skies: The Aviation Film Classics of World War II*. Hawthorne, CA: Aero Associates, Inc., 1984.
- Owen, David. *Air Accident Investigation: How Science is Making Flying Safer*. Somerset, England: Haynes Publishing, Ltd., 1998.
- Paris, Michael, *From the Wright Brothers to Top Gun: Aviation, Nationalism and Popular Cinema* (Manchester and New York: Manchester University Press, 1995).
- Pastore, Albert D. *Stranger Than Fiction: An Independent Investigation of the True Culprits Behind 9-11*. Tempe, Arizona: Dandelion Books, 2003.
- Pearl, Jonathan and Judith Pearl *The Chosen Image: Television's Portrayal of Jewish Themes and Characters*. Jefferson, NC: McFarland and Company, Inc. 1999.
- Pendo, Stephen, *Aviation in the Cinema*. Netuchen, New Jersey and London, The Scarecrow Press, 1985.
- Pomerantz, Gary M. *Nine Minutes, Twenty Seconds: The Tragedy and Triumph of ASA Flight 529*. New York: Crown Publishers, 2001.

- Powers, Stephen, David J. Rothman, and Stanley Rothman. *Hollywood's America: Social and Political Themes in Motion Pictures*. Boulder, CO: Westview Press, 1996.
- Sanders, James. *The Downing of TWA Flight 800: The Shocking Truth Behind the Worst Airplane Disaster in U.S. History*. New York: Kensington Publishing Corp., 1997.
- Shaw, Robbie Shaw. *Boeing: 737-300 to 800*. Osceola, WI: MBI Publishing Company, 1999.
- Sklar, Robert. *Movie-Made America: A Cultural History of American Movies*. New York: Vintage Books, 1994.
- Skogsberg, Bertil. *Wings on the Screen: A Pictorial History of Air Movies*. London: Tantivy Press, 1981.
- Smith, Henry Nash, *Virgin Land: The American West as Symbol and Myth*. Cambridge and London: Harvard University Press, 1950, 1978.
- Steffen, Arthur A. C. *McDonnell Douglas DC10 and KC-10 Extender: Wide-Body Workhorses*. Leicester, England: Midland Publishing Ltd., 1998.
- _____. *McDonnell Douglas MD-11: A Long Beach Swansong*. Leicester, England: Midland Publishing Ltd., 2001.
- Szulc, Tad. *The Bombs of Palomares*. New York: Viking Press, 1967.
- Tegler, Jan. *B-47 Stratojet: Boeing's Brilliant Bomber*. New York: McGraw-Hill, 2000.
- Upton, Jim. *Lockheed L-1011 TriStar*. North Branch, MN: Specialty Press Publishers, 2001.
- Waddington, Terry. *McDonnell Douglas DC-10*. World Transport Press, 2000.
- Walters, James M. and Robert L. Sumwalt III. *Aircraft Accident Analysis: Final Reports*. New York: McGraw-Hill, 2000.
- Winslow, John. *Mayday!* Fyshwick, Australia: Aerospace Publications Pty. Ltd, 2002.