The Four Flights

Staff Statement No. 4

Members of the Commission, this statement continues our presentation of initial findings on how the individuals who carried out the 9/11 attacks defeated the civil aviation security system of the United States. We continue our investigation into the status of civil aviation security today and for the future. These findings and judgments may help your conduct of today’s public hearing and will inform the development of your recommendations.

The findings and judgments we report today are the results of our work so far. We remain ready to revise our understanding of these topics as our work continues. Our staff was able to build upon investigative work that had been conducted by various agencies, including the Federal Bureau of Investigation. The Department of Homeland Security’s Transportation Security Administration is fully cooperating with our investigators, as are the relevant airlines and the Federal Aviation Administration.

We spoke earlier today about how the hijackers defeated all of the pre-boarding defense layers the U.S. civil aviation security system mounted on September 11, 2001. We will return now to the last line of defense, the Common Strategy in response to hijackings, as implemented onboard the aircraft by the flight crew.

Common Strategy

The anti-hijacking training for civil aviation aircraft crews in place on 9/11 was based on previous experiences with domestic and international hijacking and other hostage situations. It was aimed at getting passengers, crew, and hijackers safely landed. It offered little guidance for confronting a suicide hijacking.

Air carrier responsibilities for security and anti-hijacking training for flight crews were set forth in the Air Carrier Standard Security Program. In addition to specifying several hours of security training, it provided an outline of inflight hijacking tactics for both the cockpit and cabin crews. Among other things, this outline advised air crews to refrain from trying to overpower or negotiate with hijackers, to land the aircraft as soon as possible, to communicate with authorities, and to try delaying tactics.

One of the FAA officials most involved with the Common Strategy in the period leading up to 9/11 described it as an approach dating back to the early 1980s, developed in consultation with the industry and the FBI, and based on the historical record of hijackings. The point of the strategy was to “optimize actions taken by a flight crew to resolve hijackings peacefully” through systematic delay and, if necessary,
accommodation of the hijackers. The record had shown that the longer a hijacking persisted, the more likely it was to have a peaceful resolution. The strategy operated on the fundamental assumptions that hijackers issue negotiable demands, most often for asylum or the release of prisoners, and that “suicide wasn’t in the game plan” of hijackers.

Thus, on September 11, 2001, the Common Strategy, the last line of defense, offered no defense against the tactics employed by the hijackers of Flights 11, 77, 93, and 175.

**The Hijackings of September 11, 2001**

The day of Tuesday, September 11, 2001, began for the U.S. civil aviation as one marked by the exceptionally fine weather across the country, and the absence of any significant overnight problems requiring attention as the workday shifts took over across the system.

We wish to advise the family members of victims who may be viewing this statement that the details we will be recounting may be especially painful for you to hear. Please consider whether you wish to continue viewing, at least at this time.

We first wish to pay tribute to the brave men and women who are the source for most of what we know about what transpired onboard American Airlines Flight 11, United Airlines Flight 175, American Airlines Flight 77, and United Airlines Flight 93. In just a few minutes, we will be hearing about one of those heroes, Flight Attendant Betty Ong who perished on Flight 11, from another individual, American Airlines Reservations Manager Nydia Gonzalez. She spoke with Ms. Ong on that tragic morning and made sure that her voice was heard then, and continues to be heard to this day. But there are many others who we wish to recognize, both passengers and crew, who were able to reach out to let their companies, friends, or families know what had befallen them, and in so doing enable us to tell their story here today. Among them are:

- Also from Flight 11, Betty Ong’s fellow Flight Attendant Madeline “Amy” Sweeney
- From Flight 175, Flight Attendant Robert Fangman, and passengers Peter Burton Hanson and Brian David Sweeney
- From Flight 77, Flight Attendant Rene May and passenger Barbara Olson
- From Flight 93, Flight Attendants Ceecee Lyles and Sandy Bradshaw, and passengers Todd Beamer and Jeremiah Glick.

There is every indication that all members of the flight crews did their duty with dedication and professionalism.

**Hijacker Tactics**

What do we know about the tactics used in the takeover of the four flights?
The hijackers strategically planned the flights they chose—early morning departures from east coast airports of large Boeing 757 and 767 aircraft fueled for a transcontinental flight to maximize the destructive power of the impact on their selected targets.

There is no evidence to suggest that the 9/11 hijackers or their associates purchased unused tickets for the hijacked flights. As you will note from the charts, the seats selected by each hijacker team appear to have been determined by aircraft type, the Boeing 757 for Flights 77 and 93, and the Boeing 767 for Flights 11 and 175. The seat selections clearly recognized the difference between the single aisle (Boeing 757) and double aisle (Boeing 767) configurations. Thus for Flights 77 and 93, in order to ensure the hijacker pilot had ready access to the cockpit, he was seated in the very front of the plane, with the others placed close behind in First Class. For the twin-aisled Flights 11 and 175, which offer more operational maneuverability, the hijacker pilot sat in Business Class with accomplices both in front in First Class and just behind, covering both aisles.

The question has been raised about whether one or more of the hijackers may have used pilot’s credentials in order to sit in the cockpit with the pilots during the flight to facilitate the takeover. A review of the requisite paperwork and other procedures, which must be followed to permit such “jump seat” privileges, provides no evidence that such a tactic was used by the hijackers.

We do know that the seating arrangement chosen by the hijackers facilitated the isolation of the front of the aircraft and the terrorist pilot’s entry into the cockpit. The exact method of entry is not known. The strength of the cockpit doors in use on 9/11 would not have precluded forced entry. Cockpit keys were widely available on that day. Also, the Common Strategy did authorize flight crews to allow entry into the cockpit under certain circumstances. There is no way to know whether the terrorists had access to a key, but if not, access to the cockpit could be readily gained by luring the flight deck crew out of the cockpit or forcing the door open.

From what we have learned so far, the hijackers successfully gained control of the forward section of the cabin after the aircraft’s seatbelt sign was turned off; the Flight Attendants began cabin service; and passengers were allowed to begin to move around the cabin. This was followed by the hijackers gaining access to the cockpit. There is scattered and conflicting evidence about what happened to the cockpit crew during the takeover, but what we do know is that at some point, the pilots were displaced and no longer in command of the aircraft.

The evidence we have examined to date indicates that the terrorists’ tactics and techniques initially resembled the traditional hijacking scenarios.

The hijackers took over the aircraft by force or threat of force. This was reported on all four flights.

The hijackers gained access to the cockpit and sealed off the front of the aircraft from the passengers and cabin crew. This was reported, with slight variation, on all four flights.
Some of these reports included the presence of mace and/or pepper spray in the cabin, and indications that passengers had difficulty breathing. We believe this indicates that the terrorists created a “sterile” area around the cockpit by isolating the passengers and attempting to keep them away from the forward cabin, in part, by using mace or pepper spray. Pepper spray was found in Atta’s checked luggage that was recovered at Logan Airport.

The hijackers used the threat of bombs. This was reported for all but Flight 77. They also used announcements (reported for Flights 11, 77, and 93) to control the passengers, as the aircraft supposedly flew to an airport destination.

These long standing tactics for terrorist hijackings were consistent with the paradigm of the Common Strategy developed for flight crew response to hijackings. There were no reasons for the flight crew to respond outside the training they had received at the time their respective flight was hijacked.

Even so, as the hijackings progressed, there is evidence of growing awareness onboard the aircraft that something extraordinary was unfolding. Callers from both Flights 11 and 175 noted early in the process very erratic flying patterns and talked about the possibility that the hijackers were piloting the aircraft. Reports from Flight 175 included one passenger predicting the hijackers intended to fly the aircraft into a building. Another said the passengers were considering storming the cockpit.

Later, on Flight 77, at least one passenger was explicitly informed about what had happened to Flights 11 and 175. And, as is widely known in the case of Flight 93, the growing awareness among the passengers of what had already occurred with the other flights spurred a heroic attempt to take over the plane from the hijackers. The nation owes an eternal debt of gratitude to those who took action to ensure that Flight 93 never reached its target.

**Pilot Training**

To successfully complete the 9/11 plot aboard the aircraft, at least one member of the team had to be able to pilot the plane, navigate it to the desired location, and direct it into the intended target. These tasks required extensive training and preparation.

FAA records show that four of the 19 hijackers—one aboard each flight—possessed FAA certificates as qualified pilots. FAA certification required that a candidate complete a requisite amount of flight training and pass both a written exam and practical skills test. Each of the four pilots received flight training in the United States, which is recognized as having one of the world’s most advanced pilot training education and certification system in the world, and trains many pilots from many nations.

Among the five hijackers of American Airlines Flight 11, only Mohammed Atta held a certificate from the FAA as a qualified private and commercial pilot, including
proficiency rating in multi-engine aircraft operation. Atta received his commercial pilot certificate in December, 2000. Records indicate that Atta received Boeing flight simulator training sessions.

According to experts questioned by Commission staff, simulator training was critical for the hijacker to familiarize himself with the cockpit controls and proper operation of the Boeing 757 and 767—the type hijacked on 9/11, and to gain the operational proficiency, “feel,” and confidence necessary to fly the aircraft into an intended target.

Among the five hijackers aboard United Airlines flight 175, only Marwan al Shehhi is known to have completed flight training and possessed an FAA pilot certification. Al Shehhi received his commercial pilot certificate in December, 2000, on the same day and at the same facility as Atta received his. He also had Boeing flight simulator training.

Among the five hijackers aboard American Airlines Flight 77, Hani Hanjour was the sole individual who FAA records show completed flight training and received FAA pilot certification. Hanjour received his commercial multi-engine pilot certificate from the FAA in March 1999. He received extensive flight training in the United States including flight simulator training, and was perhaps the most experienced and highly trained pilot among the 9/11 hijackers.

Among the four hijackers aboard United Airlines Flight 93, Ziad Jarrah was the lone individual who is recorded as having received flight training and FAA pilot certification. Jarrah received his private pilot certificate from the FAA in November, 2000, and was recorded as having received Boeing flight simulator training. Staff would note that Jarrah had logged only 100 flight hours, and did not possess a commercial pilot certificate or multi-engine rating.

The staff would note the existence of computer-based software programs that provides cockpit simulation available on the open market to the general public. According to experts at the FAA such computer-based training packages, including products that simulate cockpit controls of the Boeing 757 and 767, provided effective training opportunities. The terrorists were known to use computers, and there is no reason to believe they did not have the computer literacy necessary to take advantage of computer-based training aids.

**Flying the Aircraft**

Although the investigation is still ongoing into what methods the hijackers employed to navigate and direct the aircraft toward their target, the following information is offered in regard to this analysis.

Boeing 757 and 767 aircraft are outfitted with highly capable flight management systems and auto pilot features. Knowledge of these systems could be gained through simulator training, readily available operational manuals, and, perhaps, PC-based simulator
software. Information from the flight recorder recovered from Flight 77 indicated that the pilot had input auto-pilot instructions for a route to Reagan National Airport.

It should be noted that the Flight Management Computer could be programmed in such a manner that it would navigate the aircraft automatically to a location of the hijackers’ choosing, not merely a commercial airport, at a speed and altitude they desired, provided the hijackers possessed the precise positioning data necessary. By using sequenced waypoints dialed into the computer, the hijackers could also approach the target from the direction they wanted.

Financial records indicate that one of the hijackers had purchased a global positioning system perhaps for the purpose of acquiring precise positioning data on al Qaeda’s 9/11 targets. They had also purchased a Boeing flight deck video and flight simulator software program. Flight manuals were also found among their belongings.

The Commission continues to acquire and analyze data on pilot training, operational requirements, flight information, and other relevant evidence that will provide the most informed theory of what means the hijackers used to fly the aircraft to their targets.

Whether the hijackers flew the aircraft manually, engaged the flight management computer to take them to a programmed destination, or employed some combination of the two, experts consulted by the Commission believe it quite credible that, given the certificates held by the hijackers, the training and educational opportunities available to them through publicly available flight operations manuals and computer-based flight training software, the hijackers—particularly Atta, Hanjour, and al Shehhi—had the know-how to complete the mission.

**Weapons**

Records of purchases by the hijackers and other evidence indicate that knives with blades of less than four inches long were their primary weapons of choice.

With regard to reports from crew and passengers, knives were cited on all four flights. The threat of a bomb was reported on Flights 11, 175, and 93. Box cutters were specifically indicated only in one report, from Flight 77.

Staff specifically notes reports from callers aboard at least two of the hijacked aircraft (Flights 11 and 175) suggesting that the terrorists used mace or pepper spray aboard the flight. As mentioned previously, the evidence suggests that one of the tactics employed by the hijackers on all the flights was to move passengers to the back of the airplane away from the cockpit. Mace, pepper spray, or a similar substance would have aided the terrorists in that effort and assisted them in maintaining a controlled area around the flight deck.
Both mace and pepper spray were specifically prohibited items under the Air Carrier Standard Security Program. The question of how these items were carried on board remains an issue under investigation.

One is left to consider the following. Had the consequences of being a “selectee” under the passenger prescreening program, as nine of the terrorists were, required a more intense screening of the selectee, as had been the case before the prescreening system was computerized in 1998, the system would have stood a better chance of detecting the prohibited item, possibly depriving the terrorists of an important weapon.

Staff notes this in order to highlight a major policy question arising from the Commission’s investigation. Was it wise to ease the consequences of being a prescreening selectee at a time when the U.S. government perceived a rising terrorist threat, including domestically, and when the limits of detection technology and shortcomings of checkpoint screening efficacy were well known?

Moreover, we believe that in practice the FAA’s approach of admonishing air carriers to use common sense about what items should not be allowed on an aircraft, while also approving the air carrier’s checkpoint guidelines that defined the industry’s “common sense,” created an environment where both parties could deny responsibility for making hard and most likely unpopular decisions.

**Gun Onboard?**

We continue to investigate allegations that a gun was used aboard American Airlines Flight 11. This allegation arose from a notation in an executive summary produced on September 11, 2001, by FAA staff indicating that the FAA Headquarters had received a report of a shooting aboard the plane, reportedly from an American Airlines employee at the company’s operations center. The individual alleged to have made the report to the FAA denies having done so.

While staff continues to investigate the origins and accuracy of the report, we note: Regardless of what reports were received in the chaotic environment of various operations centers at the FAA, the airports and the airlines, the only authoritative information about whether a shooting occurred on Flight 11 had to have come from individuals on the aircraft who were reporting what was taking place to contacts on the ground.

Two flight attendants aboard American Airlines Flight 11 placed calls to ground contacts to report what was happening on the aircraft, and as indicated above, the Commission will receive testimony shortly about Ms. Ong’s call. Staff notes that the flight attendants did their duty with remarkable courage. The evidence shows that the flight attendants remained in phone contact with authorities for an extended period of time, providing valuable information with extraordinary professionalism. Their actions were nothing short of heroic.
Neither the tape recordings of the call from flight attendant Betty Ong nor the accounts by at least seven separate witnesses to the calls placed by Ms. Ong or Ms. Madeline Sweeney reported the presence of a gun or the occurrence of a shooting. The witnesses’ accounts of the phone calls are consistent and are quite specific about the kind of weapons that were reported present—knives, mace, and a bomb—as well as the nature of the assaults on board—the “stabbing” of two crew members and a passenger.

In order to accept the accuracy of the initial FAA executive summary with regard to a shooting (disregarding the evidence by eyewitnesses to the contrary), one would have to believe that the American Airlines System Operations Center (SOC) relayed to the FAA the account of a shooting that no witness recalls while neglecting to include the account of a stabbing that was widely reported, including to personnel in the SOC. This seems highly implausible.

Finally, staff notes that the alleged victim of the shooting was seated in 9(B). Both the seat and its occupant are described by several of the witness accounts from the aircraft as the place where the stabbing occurred.

At this point in the investigation it seems evident that the form of attack on the business class passenger—the only attack upon a passenger reported by eyewitnesses—became garbled as the account of the assault was relayed between airline and FAA authorities in the fog and confusion of the rapidly unfolding events of the day.

Other relevant evidence bears mentioning. While investigators have uncovered evidence of numerous knife purchases by the 19 hijackers leading up to September 11, 2001, no firearm purchases or possession are in evidence.

Further, the tactics of all four hijacking teams involved in the plot were similar. No evidence has been uncovered to suggest that the hijackers on any of the other flights used firearms, and none were found in evidence at any of the crash sites, notably the crash site of United Airlines Flight 93 where items from the aircraft were collected as evidence.

To the contrary, the common tactic among the four teams of employing knives and mace, and the wielding of a bomb (either real or simulated), is indicated by all other evidence. It seems unlikely that one of the teams would depart from the tactical discipline of the plotters’ mutual strategy.

Finally, though it appears erroneous at this point in the investigation, staff continues to develop information on how the gun story may have come to be reported. Again, we stress our investigative work, including on the issues we have discussed today, is by no means complete. Our investigation continues.

**Conclusion**

We started today by asking us all to try to remember the world before 9/11, and the factors and pressures that influenced the civil aviation security system prior to that day. We cannot and will not forget the events of 9/11. The lessons of that tragedy continue to
inform our work, especially our effort to develop recommendations to make America safer and more secure.