American Airlines Flight 77 Presumed Down

Ohio

West Virginia

AA 77

NORAD Radar Coverage Lost

Lost on NORAD radar for 18 minutes 52 seconds
Less on FAA radar by a few minutes

Reacquired as Primary only

ZID = Indianapolis

Committee Sensitive
American Air 77, Leaves NEADS Coverage
0853-0851 EDT

HNN-R: American 77 cleared direct
FALMOUTH 0850:47
AA77: Direct FALMOUTH,
American 77 thanks. 0850:51

DC 03R: American 77 contact Indy
AA77: Thanks sir, Good Day
AA77: Center, American 77 with
you level 330
Indy HNN-R: Roger, squawk 3743
United Air 175 and American Air 77 Turn
0851-0853 EDT

Allentown

Ashland
American Air 77 Disappears
0851-0909 EDT

HNN-R: No exchanges with AA 77

DAC-RA and HNN-R: Six attempts to contact American 77 0858:20-0900:56

HNN-R: American 77, Indy. 0903:06

HNN-R: Six attempts to contact American 77 0856:32-0858:16
American Air 77, Indy Center Actions
0857-0900 EDT

HNN-R: American 77, Don't know what happened, looks like a turn South, Don't know altitude, what he's doing 0857:39.

DAC-R: Just let me know.

HNN-R: Still haven't got American 77, he was at 35 to Falmouth, don't know where he is, I'm trying to get hold of him, we contact[ed] Company. 0859:44

AA2493: We sent message to dispatch to have him come up on 22.7, that what you want. 0900:33

HNN-R: Had him on West side of air space, went into coast, don't have a track, not talking, we don't know what happened, we also contacted your company. 0900:37
American Air 77, Company Notified
0858-0902 EDT

AAL: American dispatch, Jim McDonnel. 0858:14
HNN-RA: Indy trying to get hold of American 77. 0858:16
AAL: We'll get hold for you. 0858:38

AAL: Jim McDonnel, I cell called him, did not get a reply. 0902:12
HNN-RA: We lost track control, in coast, we don't know where he is, can't get hold of him---you tried and no response. 0902:15
AAL: No response. HNN-RA: Try again. AAL: We're doing it. 0902:28
American Air 77, Controller and Company Discussion
0906-0909 EDT

HNN-RA: You have radar is he over Falmouth 0906:22. DAC-RA: No, we just moved the track there.
HNN-R: OK, you just have the track out there.
DAC-RA: You never raised him.
HNN-RA: We called Company, no radio communication, no radar. 0906:31
DAC-RA: Last clearance Falmouth, we’re going to treat him non-radar, told next sector to sterilize until we find out. 0906:39

AAL: No but second plane hit WTC. HNN-RA: Say again. AAL: We lost American 11 to a hijacking, Boston to LA, we were hijacked...and 77 is Dulles to LA and—a second plane just flew into WTC. 0909:29
HNN-RA: American 11, NY to LA hijacked, American 77 Dulles to LA, dispatch doesn't know where he is, confirmed two airplanes crashed into WTC---American 77, don't know where he is but American 11 was hijacked off NY airport going to LA. 0910:39

DAC-RA: We don't have a track, you mean [AA11] took off without clearance. 0911:10

HNN-RA: Guess he did. DAC-RA: Nobody ever tracked American 11 is what I'm asking. HNN-RA: Don't know 0911:21

DAC-RA: There's no flight plan. HNN-RA: Yeah, I looked too, far as we know that's all we know, I talked to dispatch---they confirmed two planes crashed into WTC. 0911:25
American Air 77 Enters Virginia
0914-0937 EDT

BTV R: Randy, you know about this American 77 thing. IMP R: Yes BTV R: Company 683 tried to raise him, never had a visual on him out there at all 0918:48

UNK: What's going on in NY. BTV R: Possible terrorist attack, two airplanes crashed into WTC and reports an American en route LA has been hijacked. 0928:01

* ARSR-3* is older radar without height-finding capability
American Air 77, Military Aircraft and Clutter
0925-0938 EDT
American Air 77, Approach, and Circle
0930-0935 EDT

DCA: Washington Approach
IAD Tower Area Supervisor: We're tracking fast moving
primary heading toward White House, they have been advised.

IAD Tower West Final: National sixty two anybody
quickly please
IAD TMC: Dulles, a primary only

West Final: You've got a primary heading for P56
to the west ten west fast moving

DCA Tower: Thanks, we're talking to P56 on it

Eastern Region QA: Listen, I need you to stop departures until we
account for United 175
IAD Tower Arrival: We have no info
QA: Disregard, he's out of Boston, we just found out
IAD: Terrorist activity could be VFR, we tracked fast moving primary
heading toward White House
QA: Wait a minute, there's a fast moving VFR toward the White House

Data from a DCA-related radar scope
Gofer 06, a Minnesota ANG C130, takes off routinely for home, sights primary only traffic, is vectored to follow by Washington Approach, and is two minutes behind when it observes the aircraft impact the Pentagon.
American Airlines Flight 77 and C130 Final Minutes

10nm separation at 9:33
2nm separation at 9:36
C130 2 min behind AA77 at impact
Pentagon Air Activity Before/After AA77 Impact

Committee Sensitive
Vertical grid is 10 minutes Latitude
One minute Latitude = one NM
AA77 proceeded at 10NM per minute
AA77 approached at 7.3 NM per minute

AA77 Began Turn at 9:34:50
Approximate 4 minute turn and final leg
If no turn, then at Mall approximately 9:35

5 Minutes to Mall
Four aircraft
- 3 change course prior to reappearance of AA77 as an unknown
- 1 changes course post reappearance, at approximately 13:12

M3 6666 originated in NY (Long Island) at 08:31

Committee Sensitive
AA77, Close Approach to Air Traffic

M3 1531 originated in Philadelphia at 8:58 EDT

Committee Sensitive
American Air 77 and Gopher 06
0933-0938 EDT

Time in minutes and seconds

Minnesota ANG C-130
Gopher-6

Andrews AFB

DCA Tower and Gopher 06
34:33 With you, climbing to 3000
35:26 Climb and maintain 4000 traffic eleven o'clock 5 miles northbound fast moving, altitude unknown
36:16 Traffic in sight at 12 o'clock
36:26 What kind, can you see. Looks like 757
36:34 Can you estimate altitude. Low altitude
36:51 Traffic still in descent, rolled out Northeast bound
37:07 Climb and maintain UNK: (OSIC) You got a military
Yeah (OSIC) Tell him to turn right
37:13 Turn right, follow the traffic, heading 080 we'll vector you
38:00 Aircraft at 12 o'clock just northwest of the airfield
38:26 Looks like aircraft crashed into the Pentagon
American Airlines Flight 77 and C130 Observer Aircraft

Committee Sensitive
American Airlines Flight 77 and C130 Final Minutes

10nm separation at 9:33
2nm separation at 9:36
C130 2 min behind AA77 at impact
Initial Detection of AA 77
08:19:58 ET
Mode 3A 6553
Mode C Altitude 100 ft

Mode 3A Change to 3743
08:40:07 ET
Mode C Altitude 33,000 ft

Aircraft Left The Plains Radar Coverage
08:50:38 ET
Mode C Altitude 35,000 ft

08:34:48 ET
Oceana Radar Measured Altitude 25,200 ft

08:34:31 ET
Gibbsboro Radar Measured Altitude 10,000 ft

Aircraft Reacquired by The Plains
09:09:29 ET

09:17:48 ET
Oceana Radar Measured Altitude 29,000 ft

09:25:36 ET
Oceana Radar Measured Altitude 12,400 ft

09:34:31 ET
Gibbsboro Radar Measured Altitude 10,000 ft

Last Detection of AA 77
09:37:47 ET

11 September 2001
Pentagon

Reinforced Radar Return
Beacon Radar Return
Search Radar Return
Pentagon