DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION DEPORT OF AIRCRAFT ACCIDENT				(1) - [사용: [2] (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)				EPORT NO BW-ARTCC-148				
REPORT OF AIRCRAFT ACCIDENT					Boston (ZBW) ARTCC							
1 AIRCRAFT TYPE AND IDENTIFICATION:  Boeing 767-200, (B762), AAL11  2. DATE/TIME OF ACC.  September 11, 1												
4. NATURE OF ACCIDENT: Impact With World Trade Center North Tower			S TYPE OF FLIGHT Air Carrier, Domestic Flight, IFR Flight Plan									
	NAME		POSITION		ADDRESS (CITY AND STATE)				UN JUF		IN- JURED	FATAL-
6. FLIGHT CREW	John Ogonowski		Pilot		Dracut, Massachusetts				_		x	
	Thomas McGuinness		First Officer		Portsmouth, New Hampshire				4		Х	
	Barbara Arestegui		Flight Attendant		Marston Mills, Massachusetts						Х	
	Jeffery Collman		Flight Attendant		Novato, California						х	
e.	Sara Low		Flight Attendan	ıt	Batesville, A	rkansas					x	
	Karen Martin		Flight Attendan	ıt	Danvers, Massachusetts							х
(1	ASSENGER DATA: f available, list names, addresses, extent of ther information on continuation sheet.)	injuries, and	1	ABC	MBER DARD 81 CRAFT	NUMBER UNIN- JURED		NUMBER INJURED (	NUM ) FAT		81	
1000000	IRCRAFT DAMAGE.			Ain	9. PROPERTY DAMAGE: World Trade Center North Tower Destroyed							
	OPERATING STATUS OF NAVIGATIONAL	AIDS/LIGHTS/C	OMMUNICATIONS:									
11. WEATHER DATA	CONDITIONS IN ACCIDENT AREA AT TIME OF ACCIDENT: METAR La Guardia, Flushing, New York, 0851 EDT, wind three two z thousand, temperature two zero degrees celsius, dew point one four deg discriminator, sea level pressure two zero one, temperature positive, ten nine degrees celsius.  REPORT JUST PRIOR TO ACCIDENT: METAR La Guardia, Flushing, New York, 0751 EDT, wind three two z few clouds at twenty five thousand, temperature one nine degrees celsius				egrees celsius, altii emperature twenty o zero degrees at n sius, dew point one	point zer	visibility or	hree; remarks - autilisius, dewpoint pos e zero statute mile altimeter three zero	omated s sitive, de	tation wpoin E/TIME	with wea t thirteen	ther
11. WEA	one one; remarks - automated station with weather discriminator, sea level pressure one nine six, twenty four hour precipitation group - point five three inches, temperature positive, temperature nineteen point four degrees celsius, dewpoint positive, dewpoint thirteen point nine degrees celsius.							1113	1151 UTC			
	FIRST REPORT SUBSEQUENT TO ACCIDENT: METAR La Guardia, Flushing, New York, 0951 EDT, wind three four miles, few clouds at one thousand, scattered twenty five thousand, tem degrees celsius, altimeter three zero one three; remarks - automated sta zero four, smoke, few clouds one thousand, smoke plume drifting soutl two degrees celsius, dewpoint positive, dewpoint thirteen point three de				or zero degrees at nine knots, visibility one zero statute inperature two two degrees celsius, dew point one three ation with weather discriminator, sea level pressure two theast, temperature positive, temperature twenty two point			09/	09/11/01 1351 UTC			
	NAME FACILITY			OPERATING POSITION				CHECK IF EYEWITNESS				
	Stephen Roebuck	*(SR)	Boston ARTC		Sector 47 Radar							
	Richard Beringer - Peter Zalewski	(RB)	Boston ARTC		Sector 47 Radar Associate Sector 46 Radar							
ÆD	Brazalino Martins	(NO)	Boston ARTC	C	Sector 38 Radar							
ATS PERSONNEL INVOLVED	Shirley Kula	(SO)	Boston ARTC	_	Sector 38 Radar Associate			-				
님	David McGlauflin Glen Poncet	(CC) (PN)	Boston ARTC		Sector 09 Radar Sector 09 Radar Associate				-	-		
N	Maria Moran	(ET)	Boston ARTC		Sector 10 Radar Associate							
RSC	Michael Royer	(RY)	Boston ARTC		Sector 10 Radar							
SPE	Thomas Roberts	(RT)	Boston ARTC		Sector 39 Radar				نسبت	-		
A.	William Smith Scott Johnson	(PU)	Boston ARTC		Sector 36 Radar Sector 36 Radar	Associate	:			-		
12.	Jonathan Schippani	(SH)	Boston ARTC		Area C Operations Supervisor							
	Donald Larson	(LN)	Boston ARTC		Sector 10 Radar							
13. SIGNATURE OF FACILITY CHIEF												
Heather Hemdal Adal												

# DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION REPORT OF AIRCRAFT ACCIDENT

November 13, 2001

REPORT NO ZBW-ARTCC-148

(Continuation Sheet)

3. NAME OF REPORTING FACILITY
Boston (ZBW) ARTCC

14. CHRONOLOGICAL SUMMARY OF FLIGHT (including control or other services provided by ATS facilities, and emergency action taken )

September 11, 2001

#### ALL TIMES BELOW ARE COORDINATED UNIVERSAL TIME UNLESS OTHERWISE SPECIFIED

- 1205 American Airlines Inc. Flight 11 (AAL11) reported on Sector 47 Radar position's (47R) frequency leaving 11,000 feet for 14,000 feet and was issued flight level two three zero and direct routing to the Chester (CTR), MA VOR.
- 1208 47R issued AAL11 a frequency change to Boston ARTCC frequency 127.82. AAL11 acknowledges frequency change.
- 1209 AAL11 reported on Sector 46 Radar position's (46R) frequency leaving Flight Level one nine zero for Flight Level two three zero. Sector 46 Radar Position (46R) instructed AAL11 to climb and maintain Flight Level two eight zero. AAL11 acknowledges clearance.
- 1210 46R instructed AAL11 to climb and maintain Flight Level two niner zero. AAL11 acknowledges clearance.
- 1211 46R issued AAL11 merging target procedure for traffic at Flight Level three one zero. AAL11 acknowledges the advisory.
- 1213 46R issued AAL11 a twenty degree right turn. AAL11 acknowledges clearance. 46R issued AAL11 Flight Level three five zero. AAL11 does not reply. 46R re-issued AAL11 Flight Level three five zero. AAL11 does not reply.
- 1214 46R broadcasts over frequency for AAL11. AAL11 does not reply. 46R broadcasts over frequency for AAL11. AAL11 does not reply. 46R completed coordination with Sector 38 Radar Position (38R) concerning AAL11 and advises aircraft in turn and not responding.
- 1215 46R attempts contact with AAL11. AAL11 does not reply. 46R attempts contact with AAL11 and asks AAL11 to ident. AAL11 does not reply. No ident observed from AAL11.
- 1216 46R attempts contact with AAL11 via frequency 121.5 and restates frequency AAL11 should be monitoring. AAL11 does not reply. 38R attempts twice to contact AAL11. AAL11 does not reply.
- 1217 46R attempts contact with AAL11. AAL11 does not reply. 46R attempts contact with AAL11 and requests AAL11 to ident. AAL11 does not reply. No ident observed from AAL11.
- 1218 46R attempts contact with AAL11. AAL11 does not reply. 38R attempts contact with AAL11. AAL11 does not reply. Sector 38 Radar Associate Position (38RA) requests Sector 47 Radar Associate Position (47RA) to query Boston Approach to determine if AAL11 has returned to Boston Approach frequency.
- 1220 46R attempts contact with AAL11. AAL11 does not reply. Sector 39 Radar Position (39R) requests American Airlines Flight 269 (AAL269) to attempt to contact AAL11 on company frequency. Last transponder return from AAL11 at 1220:48 UTC. All further radar data is primary target only.
- 1221 38R attempts contact with AAL11. AAL11 does not reply.
- 1222 46R attempts contact with AAL11. AAL11 does not reply.
- 1223 38R attempts contact with AAL11. AAL11 does not reply. Sector 36 Radar Position (36R) broadcasts on frequency 121.5 for AAL11 asking aircraft to ident. AAL11 does not reply. No ident observed from AAL11. 39R advises AAL269 that AAL11 may have an electrical problem as AAL11's transponder is not operating.
- 1224 36R broadcasts on frequency 121.5 for AAL11. Unknown transmission on Sector 46 frequency. 46R asks if AAL11 is trying to call on frequency. Unverified source transmits, believed to be hijacker. 46R queries twice as to who is calling on frequency. No reply. Unverified source transmits, believed to be hijacker.

### DEPARTMENT TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

November 13, 2001

ZBW-ARTCC-148

REPORT OF AIRCRAFT ACCIDENT
(Continuation Sheet)

3 NAME OF REPORTING FACILITY

Boston (ZBW) ARTCC

14 CHRONOLOGICAL SUMMARY OF FLIGHT (including control or other services provided by ATS facilities, and emergency action taken.)

- 1225 Sector 47 Radar Position (47R) advises 38R of hijack. Sector 39 Radar position (39R) completed coordination with Sector 09 Radar Position (09R) and advises AAL11 is not in communication with Boston Center and transponder is not operating.
- 1226 38RA advises 09R that AAL11 is a hijack and that they have amended the flightplan database to coincide with current heading.
- 1227 Sector 39 Radar Associate Position (39RA) completed coordination with Sector 22 Radar Position (22R) concerning AAL11 and advises aircraft is not in communication with Boston Center and transponder is not operating, and that aircraft might land at the Albany, NY Airport (ALB). Boston ARTCC Supervisory Traffic Management Coordinator (STMC) advises the Air Traffic Control System Command Center (ATCSCC) East Position that AAL11 is possible hijack.
- 1228 38RA completed coordination with Sector 20 Radar Associate Position (20RA) concerning AAL11 and advises of hijack situation and attempts to communicate with aircraft. 09R requests American Airlines Flight 1757 (AAL1757) to attempt to contact AAL11 on company frequency. 39R advise AAL269 to discontinue attempts to contact AAL11.
- 1229 38RA completed coordination with Sector 24 Radar Position (24R) concerning AAL11 and advises of hijack situation. New York ARTCC (ZNY), Cleveland ARTCC (ZOB) and Boston ARTCC (ZBW) conference with ATCSCC East position regarding status of AAL11.
- 1230 Boston Approach (A90) advises AAL11 is not on A90 frequency. Sector 36 Radar Associate Position (36RA) requests 22R to obtain a visual altitude verification of AAL11 from a Delta Airlines Flight. 22R advises the Delta Airlines Flight is no longer under his control and to try Sector 21. Sector 10 Radar position (10R) requests a visual altitude verification of AAL11 from Delta Airlines Flight 9930 (DAL9930).
- 1231 38RA completed coordination with Sector 05 Radar Position (05R) concerning AAL11 and advises of hijack situation. Sector 36 Radar Associate position (36RA) requests Sector 21 Radar position (21R) to have an aircraft under 21R control to verify altitude of AAL11. DAL9930 advises 10R that AAL11 is approximately six thousand feet below his altitude.
- 1232 Sector 09 Radar Associate Position (09RA) queries 38RA if they have tried frequency 121.5 for AAL11. Sector 38RA confirms 121.5 attempts.
- 1233 Unverified source transmits, believed to be hijacker.
- 1234 ZBW STMC coordinates with Cape TRACON (K90) regarding a military scramble on AAL11.
- 1235 20RA advises New York ARTCC Kennedy Sector (ZNY56) that AAL11 is heading for his airspace and is not in communication with Boston Center and transponder is not operating and altitude is not verified.
- 1236 Sector 20 Radar Position (20R) requests a visual altitude verification of AAL11 from US Airways Flight 583 (USA583). USA583 estimates AAL11's altitude to be twenty nine thousand feet.
- 1237 24R attempts twice to contact AAL11. AAL11 does not reply. 20RA advises ZNY56 that there are threatening transmissions coming from the cockpit of AAL11 and AAL11 is projected to enter New York Center Airspace. Sector 20 Radar Position (20R) requests a visual altitude verification of AAL11 from United Airlines Inc Flight 175 (UAL175). ZBW Military Operations Position contacts Northeast Air Defense Sector (NEADS) to advise of hijack situation and requests fighters to scramble on AAL11.
- 1238 UAL175 estimates AAL11's altitude to be between twenty-seven and twenty eight thousand feet. New York ARTCC Elmira Sector (ZNY34) Supervisor queries the position of AAL11. 10R advises ZNY34 Supervisor of AAL11's position and that AAL11 is a confirmed hijack.
- 1240 ZBW STMC requests ATCSCC East position to coordinate a conference call with New York TRACON (N90) reference status of AAL11.
- 1241 20RA advises ZNY56 of AAL11's current position.

## DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

November 13, 2001

ZBW-ARTCC-148

REPORT OF AIRCRAFT ACCIDENT

(Continuation Sheet)

3 NAME OF REPORTING FACILITY

Boston (ZBW) ARTCC

14. CHRONOLOGICAL SUMMARY OF FLIGHT (including control or other services provided by ATS facilities, and emergency action taken.)

1242 - Unknown New York ARTCC Sector advises 20RA that United Airlines Inc. Flight 175 (UAL175) heard a suspicious transmission when they were leaving Boston.

-	T1:-1-4	C	C
6.	Flight	Crew.	Continued.

NAME	POSITION	ADDRESS (CITY AND STATE)	<b>FATALITY</b>
Kathleen Nicosia	Flight Attendant	Unknown	X
Betty Ong	Flight Attendant	Andover, Massachusetts	X
Jean Roger	Flight Attendant	Longmeadow, Massachusetts	X
Dianne Snyder	Flight Attendant	Westport, Massachusetts	X
Madeline Sweeney	Flight Attendant	Acton, Massachusetts	X

#### 12. ATS Personnel Involved, Continued.

NAME .	ů.		FACILITY	OPERATING POSITION
Gregory Taccini		(TF)	<b>Boston ARTCC</b>	Sector 47 Radar
Mark O'Neil		(MO)	Boston ARTCC	Sector 47 Radar Associate
Myron Smith		(RS)	Boston ARTCC	Sector 39 Radar Associate
Henry White		(WE)	<b>Boston ARTCC</b>	Sector 22 Radar
Stephen Schmalz	8	(ST)	Boston ARTCC	Sector 21 Radar
Karan Waggoner		(KT)	<b>Boston ARTCC</b>	Sector 05 Radar
Alan Miller		(TV)	<b>Boston ARTCC</b>	Sector 46 Radar Associate
William Dean	14	(WD)	<b>Boston ARTCC</b>	Sector 20 Radar Associate
John Hartling		(HT)	<b>Boston ARTCC</b>	Sector 20 Radar
Terry Biggio		(OE)	<b>Boston ARTCC</b>	Operations Manager In Charge
Daniel Bueno		(BD)	<b>Boston ARTCC</b>	Supervisory Traffic Management Controller In Charge
Joseph Cooper		(OP)	<b>Boston ARTCC</b>	Traffic Management Departure Spacing
Colin Scoggins		(CS)	<b>Boston ARTCC</b>	Military Position
* Operating Initials		#10000E)		**************************************

No More Follows