

# **NATIONAL TRANSPORTATION SAFETY BOARD**

Office of Research and Engineering  
Washington, D.C. 20594

January 13, 2003

Aircraft Performance

## **Group Chairman's Aircraft Performance Study: Errata Sheet #1 by John O'Callaghan**

### **A. ACCIDENT**

Location: Belle Harbor, New York  
Date: November 12, 2001  
Time: 09:17 AM Eastern Standard Time (EST)  
Flight: American Airlines Flight 587  
Aircraft: Airbus A300B4-605R, Registration N14053  
NTSB#: DCA02MA001

### **B. SUMMARY**

Attached are corrections to two tables in the Aircraft Performance Study: Table #7, in which erroneous longitude data for the White Plains ASR data is corrected; and Table #12, in which the last two CVR comments (missing in the original table) have been added.

Radar Time HH:MM:SS UTC	ATC Time HH:MM:SS EST	Range NM	Azimuth ACPs	Mode C Altitude feet	Latitude	Longitude	Distance East of Impact, NM	Distance North of Impact, NM
14:14:45.48	09:14:45.14	26.20	2291	600	N 40° 38' 25.67"	W 73° 47' 55.45"	2.36	3.80
14:14:50.19	09:14:49.85	26.16	2297	800	N 40° 38' 30.20"	W 73° 48' 13.76"	2.13	3.87
14:14:54.62	09:14:54.28	26.14	2304	1000	N 40° 38' 34.07"	W 73° 48' 35.36"	1.85	3.94
14:14:59.23	09:14:58.89	26.19	2305	1100	N 40° 38' 31.51"	W 73° 48' 39.12"	1.80	3.90
14:15:03.84	09:15:03.50	26.28	2312	1200	N 40° 38' 29.08"	W 73° 49' 02.21"	1.51	3.86
14:15:08.38	09:15:08.04	26.41	2317	1300	N 40° 38' 23.59"	W 73° 49' 19.72"	1.29	3.76
14:15:13.08	09:15:12.74	26.59	2320	1300	N 40° 38' 14.33"	W 73° 49' 31.80"	1.14	3.61
14:15:17.82	09:15:17.48	26.83	2324	1400	N 40° 38' 02.07"	W 73° 49' 48.09"	0.93	3.41
14:15:22.32	09:15:21.98	27.09	2327	1400	N 40° 37' 48.23"	W 73° 50' 01.69"	0.76	3.18
14:15:27.18	09:15:26.84	27.38	2329	1500	N 40° 37' 32.18"	W 73° 50' 12.71"	0.62	2.91
14:15:31.56	09:15:31.22	27.66	2329	1600	N 40° 37' 15.72"	W 73° 50' 17.15"	0.56	2.63
14:15:36.10	09:15:35.76	27.97	2331	1700	N 40° 36' 58.54"	W 73° 50' 28.69"	0.41	2.35
14:15:40.92	09:15:40.58	28.27	2332	1900	N 40° 36' 41.46"	W 73° 50' 36.85"	0.31	2.06
14:15:45.45	09:15:45.11	28.58	2333	2100	N 40° 36' 23.81"	W 73° 50' 45.25"	0.20	1.77
14:15:50.16	09:15:49.82	28.91	2334	2400	N 40° 36' 05.01"	W 73° 50' 54.05"	0.09	1.46
14:15:54.78	09:15:54.44	29.23	2334	2600	N 40° 35' 46.25"	W 73° 50' 59.30"	0.03	1.14
14:15:59.33	09:15:58.99	29.56	2332	2700	N 40° 35' 25.76"	W 73° 50' 57.74"	0.05	0.80
14:16:03.93	09:16:03.59	29.89	2330	2700	N 40° 35' 05.25"	W 73° 50' 56.02"	0.07	0.46

**Table 7.** HPN ASR9 secondary returns for AAL 587 (beacon code 2650).

ATC Time	CVR Transcript Text
09:14:38.46	[HOT-2] heading select.
09:14:41.87	[HOT-1] clear left.
09:14:42.55	[TWR] American five eight seven heavy, turn left. fly the bridge climb. contact New York departure. good morning.
09:14:48.33	[RDO-1] American five eighty seven heavy, so long.
09:14:51.38	[HOT-1] gear's up.
09:14:52.45	[HOT-2] check speed, level change.
09:14:54.84	[HOT-2] flaps up.
09:14:56.52	[HOT-2] climb power.
09:14:57.14	[CAM] [sound of click]
09:15:00.02	[RDO-1] ah New York, American five eighty seven heavy, thirteen hundred feet, we're climbing to five thousand.
09:15:04.67	[DEP] American five eight seven heavy, New York departure. radar contact. climb maintain one three thousand.
09:15:10.18	[RDO-1] one three thousand feet, American five eighty seven heavy.
09:15:14.64	[HOT-2] one three I see, slats retract.
09:15:16.46	[HOT-1] slats.
09:15:17.21	[CAM] [sound of several clicks]
09:15:28.47	[HOT-1] clean machine.
09:15:29.34	[HOT-2] [sound similar to yawn] thank you.
09:15:36.43	[DEP] American five eighty seven heavy, turn left, proceed direct WAVEY.
09:15:37.25	[HOT-1] [sound of brief squeak and a rattle]
09:15:41.00	[RDO-1] uh, we'll turn direct WAVEY, American five eighty seven heavy.
09:15:44.35	[HOT-2] left turn direct WAVEY...
09:15:44.67	[HOT-1] little wake turbulence, huh?
09:15:45.60	[HOT-2] ...yeah.
09:15:47.31	[HOT-2] [sound similar to five sets of stabilizer trim switch clicks]
09:15:48.20	[HOT-2] two fifty thank you.
09:15:51.80	[CAM] [sound of a thump]
09:15:52.30	[CAM] [sound of click]
09:15:52.92	[CAM] [sound of two thumps]
09:15:54.19	[HOT-2] max power. [spoken in strained voice]
09:15:54.96	[HOT-1] you all right?
09:15:55.34	[HOT-2] yea, I'm fine.
09:15:56.29	[HOT-1] hang onto it. hang onto it.
09:15:56.60	[CAM] [sound of snap]
09:15:57.45	[HOT-2] let's go for power please.
09:15:57.69	[CAM] [sound of loud thump]
09:15:58.51	[CAM] [sound of loud bang]
09:16:00.00	[HOT-2] [sound similar to human grunt]
09:16:00.18	[CAM] [roaring noise starts and increases in amplitude]
09:16:00.97	[CAM] [sound similar to single ECAM chime]
09:16:00.98	[HOT-2] holy #
09:16:01.98	[CAM] [sound similar to single ECAM chime]
09:16:04.44	[CAM] [sound similar to stall warning repetitive chime for 1.9 sec]

**Table 12 (page 1 of 2).** Last 1.5 minutes of CVR transcript.

ATC Time	CVR Transcript Text
09:16:06.20	"FLASH" ON TOLL BOOTH VIDEO
09:16:06.23	[CAM] [roaring noise decreases and ends]
09:16:07.45	[HOT-2] what the hell are we into *. we're stuck in it.
09:16:07.46	[CAM] [sound similar to continuous repetitive chimes for one second]
09:16:09.58	[CAM] [sound similar to continuous repetitive chimes for three seconds]
09:16:12.84	[HOT-1] get out of it, get out of it.
09:16:14.78	[END of RECORDING]

**Table 12 (page 2 of 2).** Last 1.5 minutes of CVR transcript.