

DOCKET NO. SA-510
EXHIBIT NO. 13X-R

NATIONAL TRANSPORTATION SAFETY BOARD

WASHINGTON, D.C.

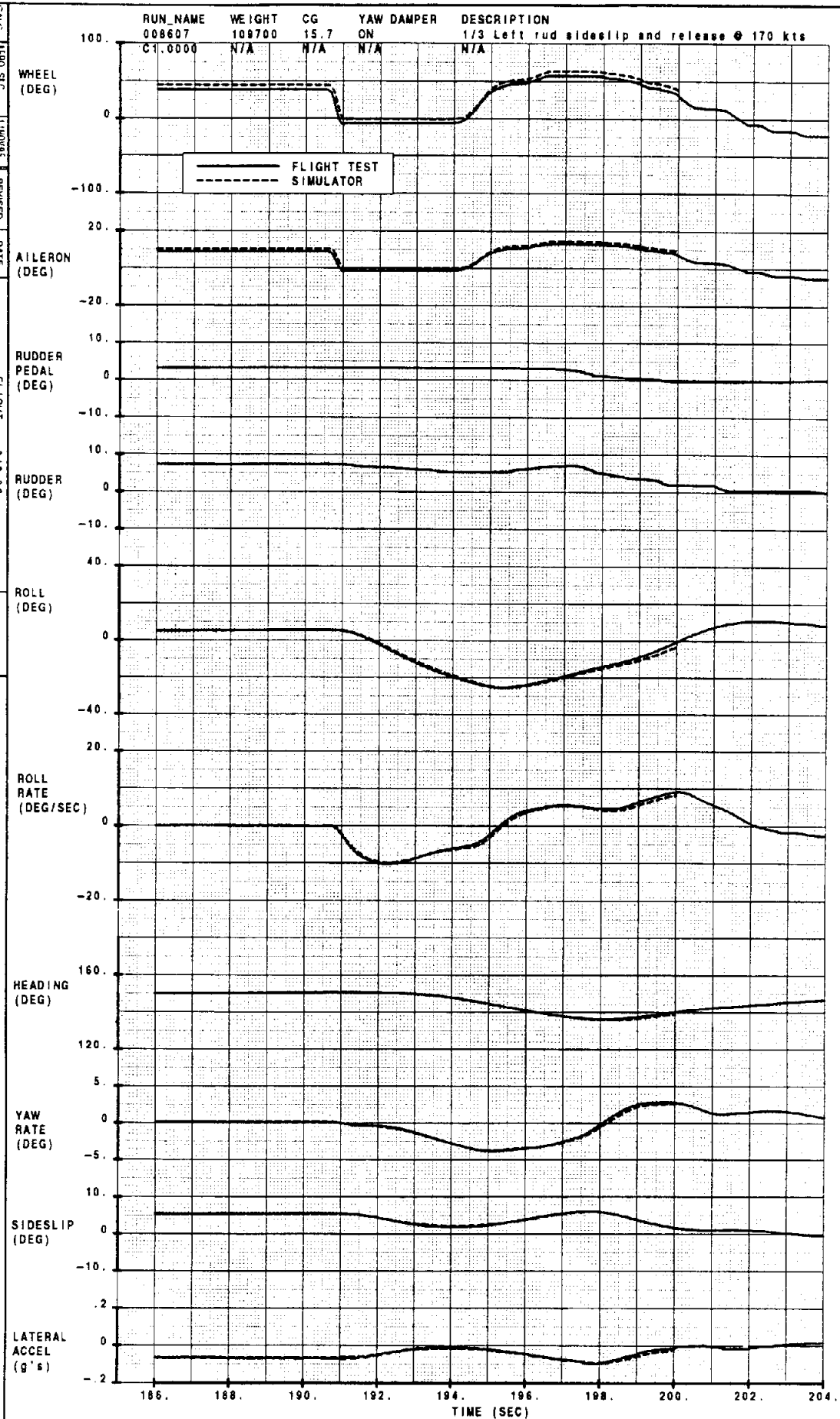
Boeing Presentation Materials
Jim Kerrigan

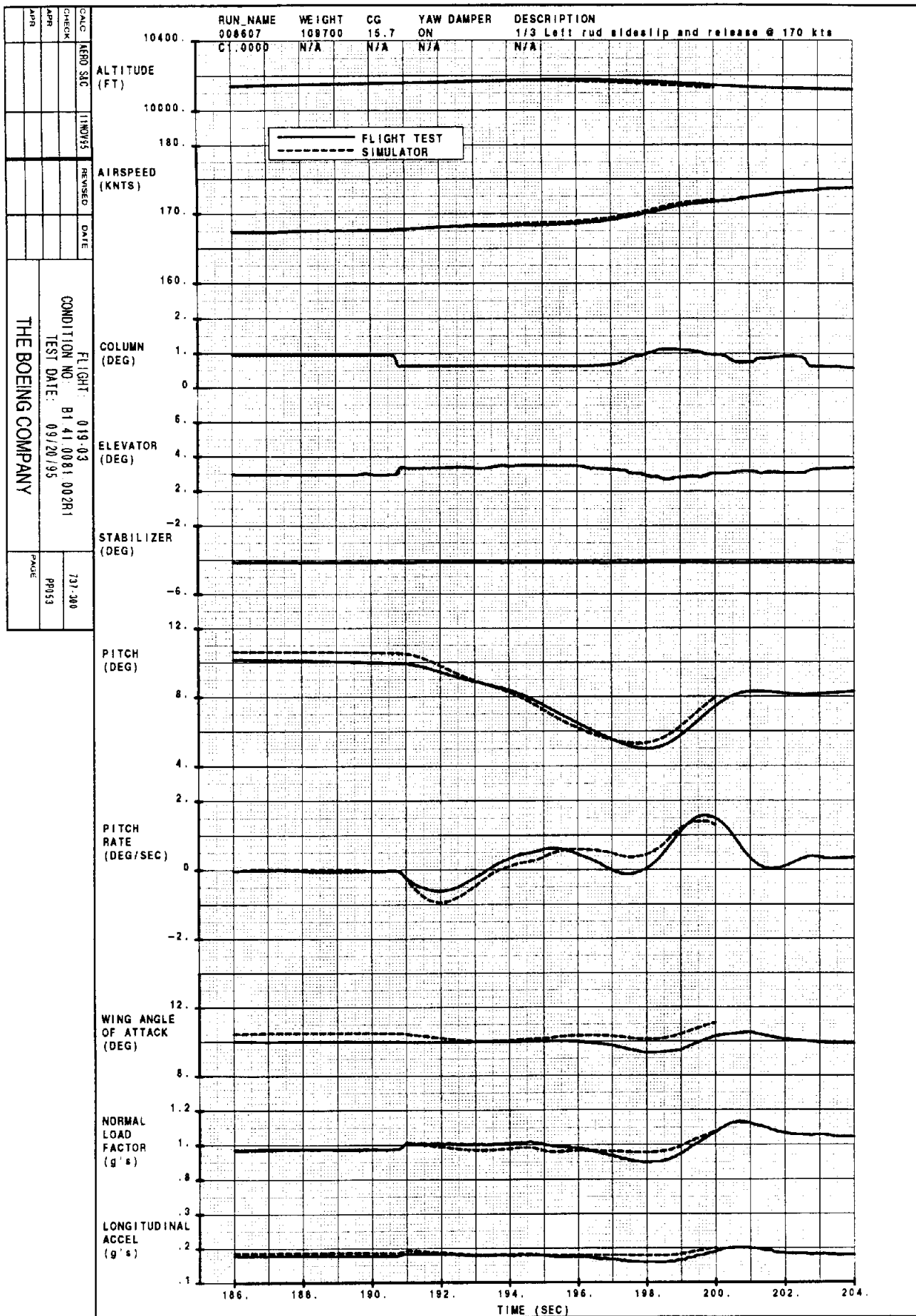
727/737 WAKE ENCOUNTER AND SIMULATOR FLIGHT TEST

Test No.	Sequence Number	Condition Number	Manuever Description	Yaw Damper	Control	Trailing Distance	IRIG at Time = 0
19-03	008607	B1.41.0081.002R1	1/3 Left rtd sideslip and release @ 170 kts	ON	PILOT	N/A	11:25:34.75
19-03	008608	B1.41.0081.002R2	2/3 Left rtd sideslip and release @ 170 kts	ON	PILOT	N/A	11:28:48.75
19-03	008609	B1.41.0081.002R3	Full Left rtd sideslip and release @ 170 kts	ON	PILOT	N/A	11:30:02.75
19-03	008610	B1.41.0081.007R1	2/3 Right rtd sideslip and release @ 170 kts	ON	PILOT	N/A	11:33:22.75
19-03	008611	B1.41.0081.007R2	Full Right rtd sideslip and release @ 170 kts	ON	PILOT	N/A	11:36:10.75
19-03	008616	B1.41.0081.003C	Full rudder calibration @ 190 kts	ON	PILOT	N/A	11:50:36.75
19-03	008617	B1.41.0081.003R1	1/3 Left rtd sideslip and release @ 190 kts	ON	PILOT	N/A	11:53:14.75
19-03	008618	B1.41.0081.003R2	2/3 Left rtd sideslip and release @ 190 kts	ON	PILOT	N/A	11:54:46.70
19-03	008623	B1.41.0081.013.1	Sideslip to left @ 190 kts	OFF	PILOT	N/A	12:20:05.70
19-03	008624	B1.41.0081.018.1	Sideslip to right @ 190 kts	OFF	PILOT	N/A	12:23:08.70
19-03	008633	B1.41.0081.037	1/4 pedal release @ 190 kts	ON	FREE	N/A	12:54:24.65
19-03	008634	B1.41.0081.038	1/4 pedal release @ 190 kts- wrong way	ON	AUTOPILOT	N/A	12:55:48.65
19-03	008636	B1.41.0081.043	1/4 pedal release @ 190 kts	OFF	FREE	N/A	12:59:35.65
19-03	008642	B1.41.0081.041	3/4 pedal release @ 190 kts	ON	FREE	N/A	13:05:08.65
19-03	008645	B1.41.0081.047	3/4 pedal release @ 190 kts	OFF	FREE	N/A	13:12:08.65
19-03	008656	B1.41.0081.053	3/4 pedal release @ 170 kts	ON	FREE	N/A	13:29:18.60
19-03	008657	B1.41.0081.059	3/4 pedal release @ 170 kts	OFF	FREE	N/A	13:30:26.60
19-04	008671	B1.41.0081.021	1/3 wheel response @ 190 kts	ON	PILOT	N/A	11:46:57.30
19-04	008674	B1.41.0081.022	Full wheel response @ 190 kts	ON	PILOT	N/A	11:51:14.30
19-04	008678	B1.41.0081.026	Full wheel response @ 190 kts	OFF	PILOT	N/A	11:57:09.30
19-04	008684	B1.41.0081.036	Full wheel response @ 170 kts	OFF	PILOT	N/A	12:06:11.30
19-04	008692	B1.41.0081.062.1	1/2 cross control @ 190 kts	ON	PILOT	N/A	12:32:20.25
19-08-1	008777	B1.41.0065.001	Intercept at 2 deg	ON	FREE	3*	07:53:43.25
19-10-1	008881	B1.41.0065.021.8	Straight thru descending wake	ON	FREE	2.1	08:11:07.85

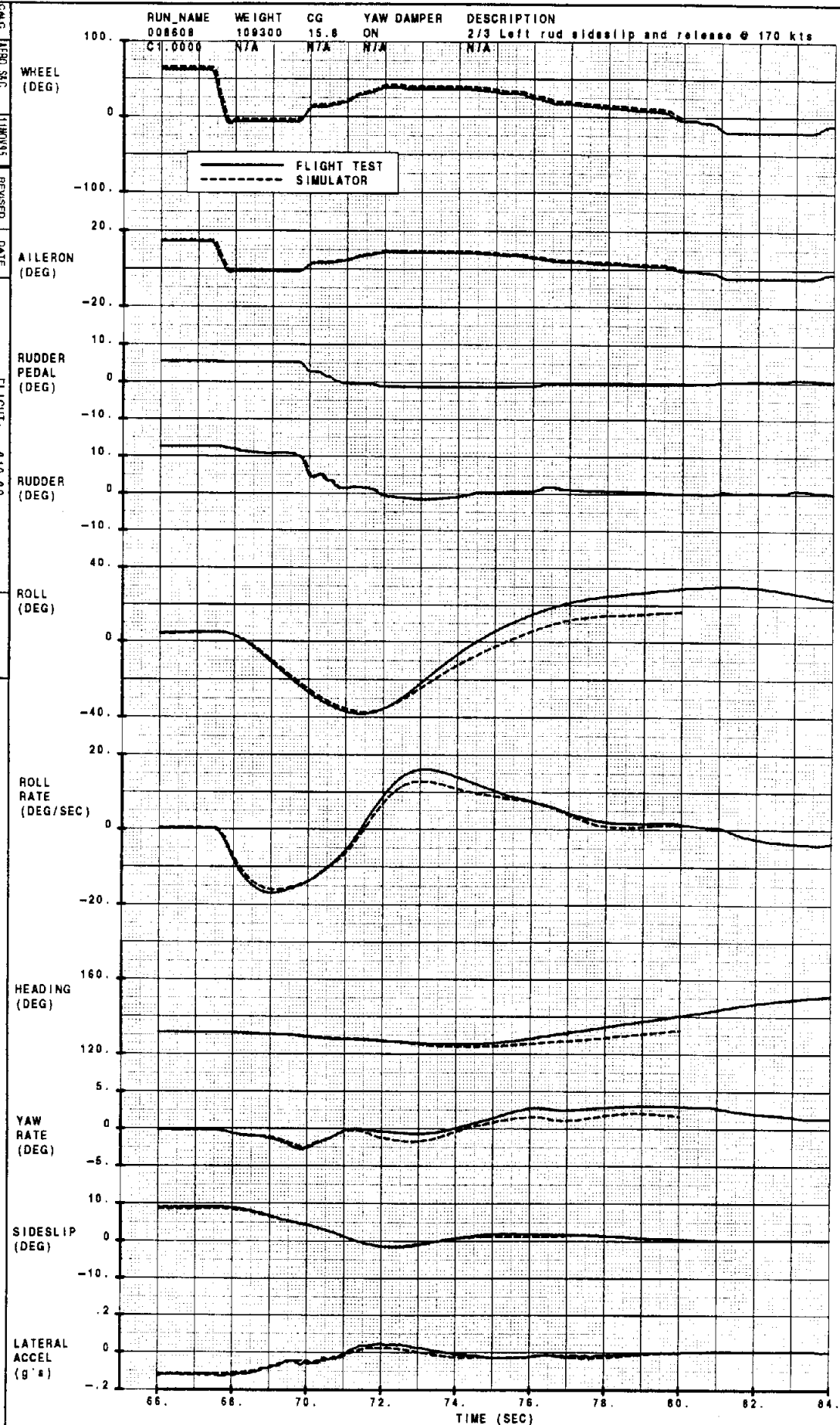
*Nominal target trailing distance is provided when TCAS distance is not available

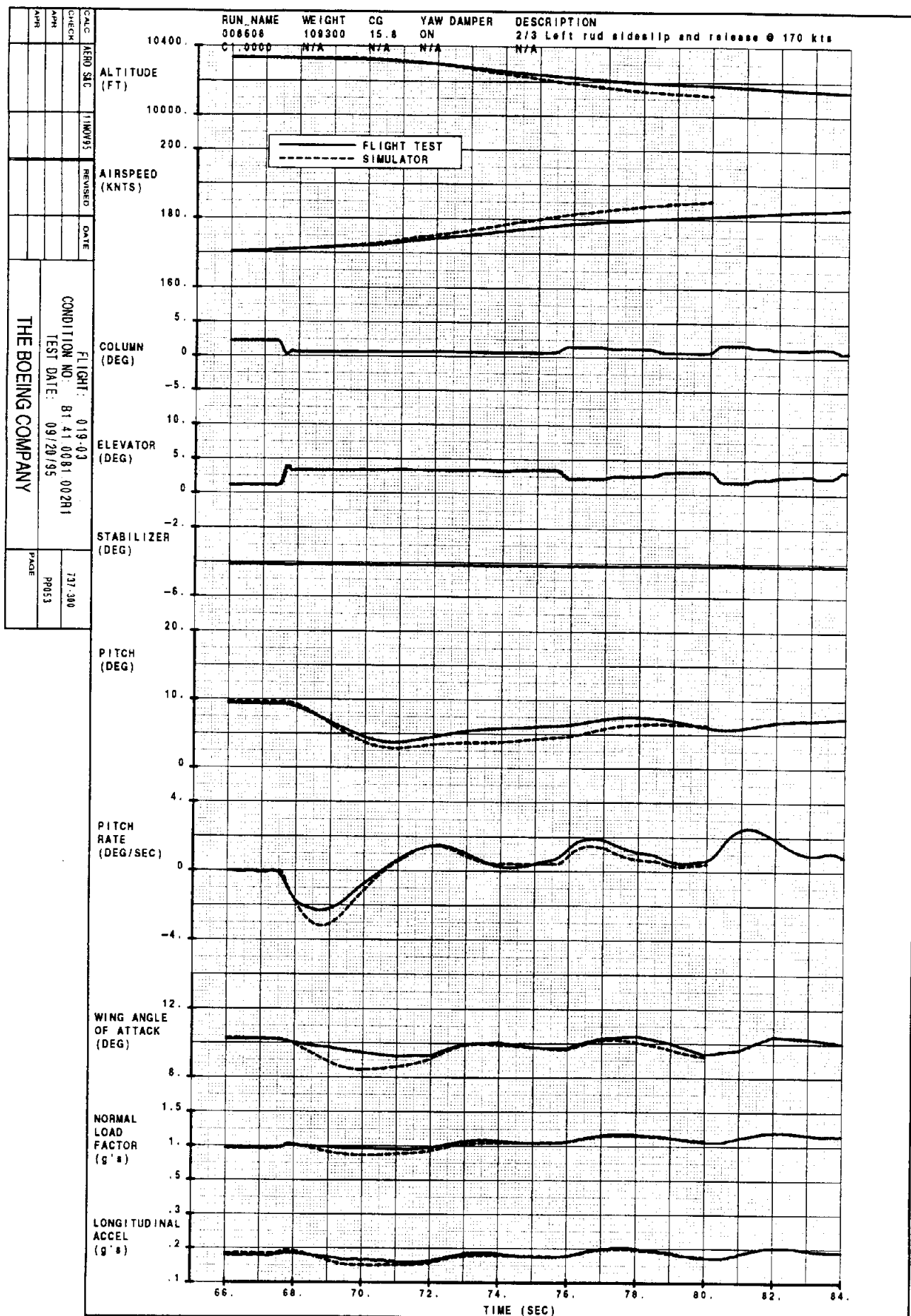
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CONDITION NO:	81.41.0081.00281
TEST DATE:	09/20/95
THE BOEING COMPANY	
PRCS	PRCS



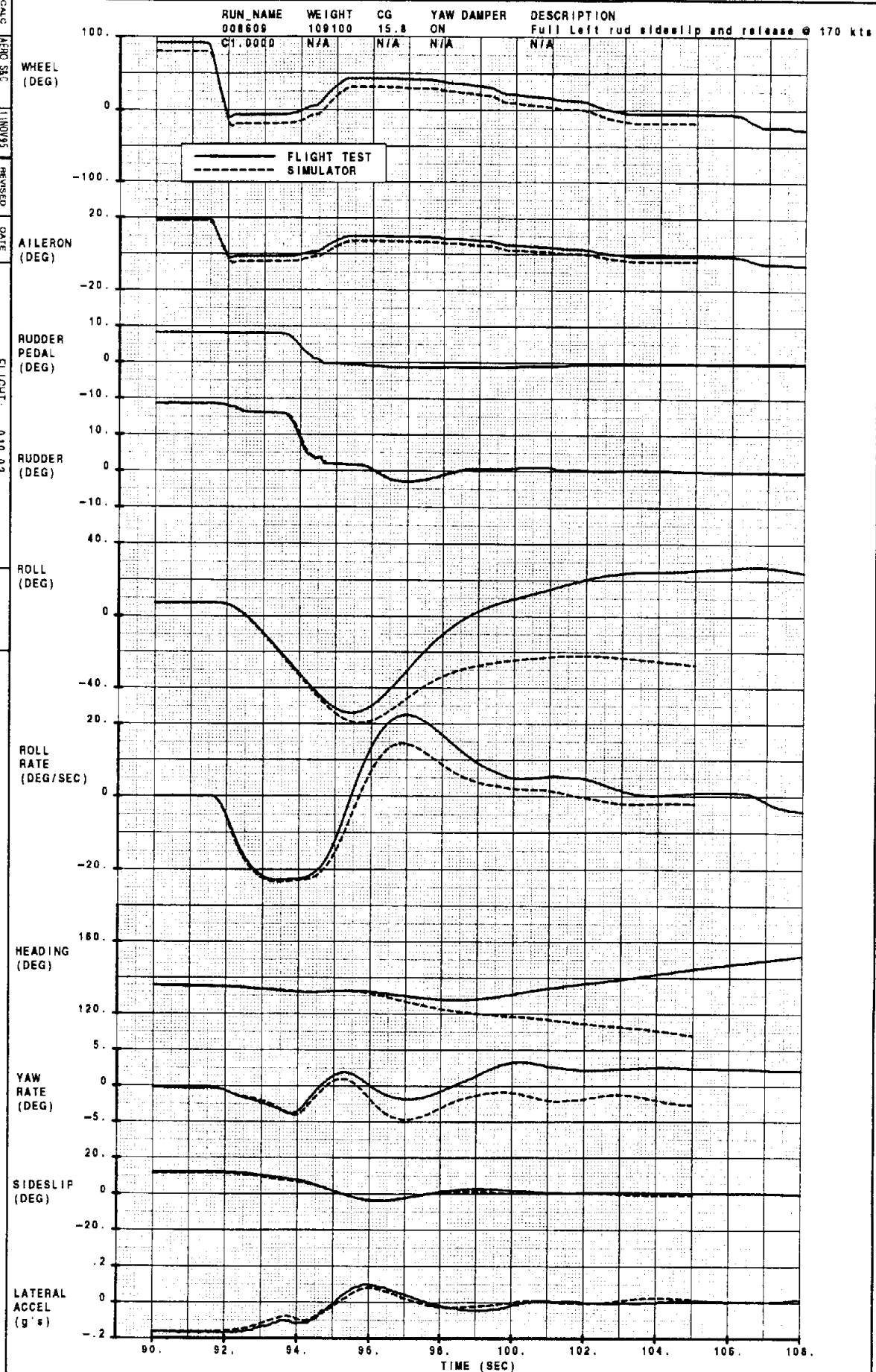


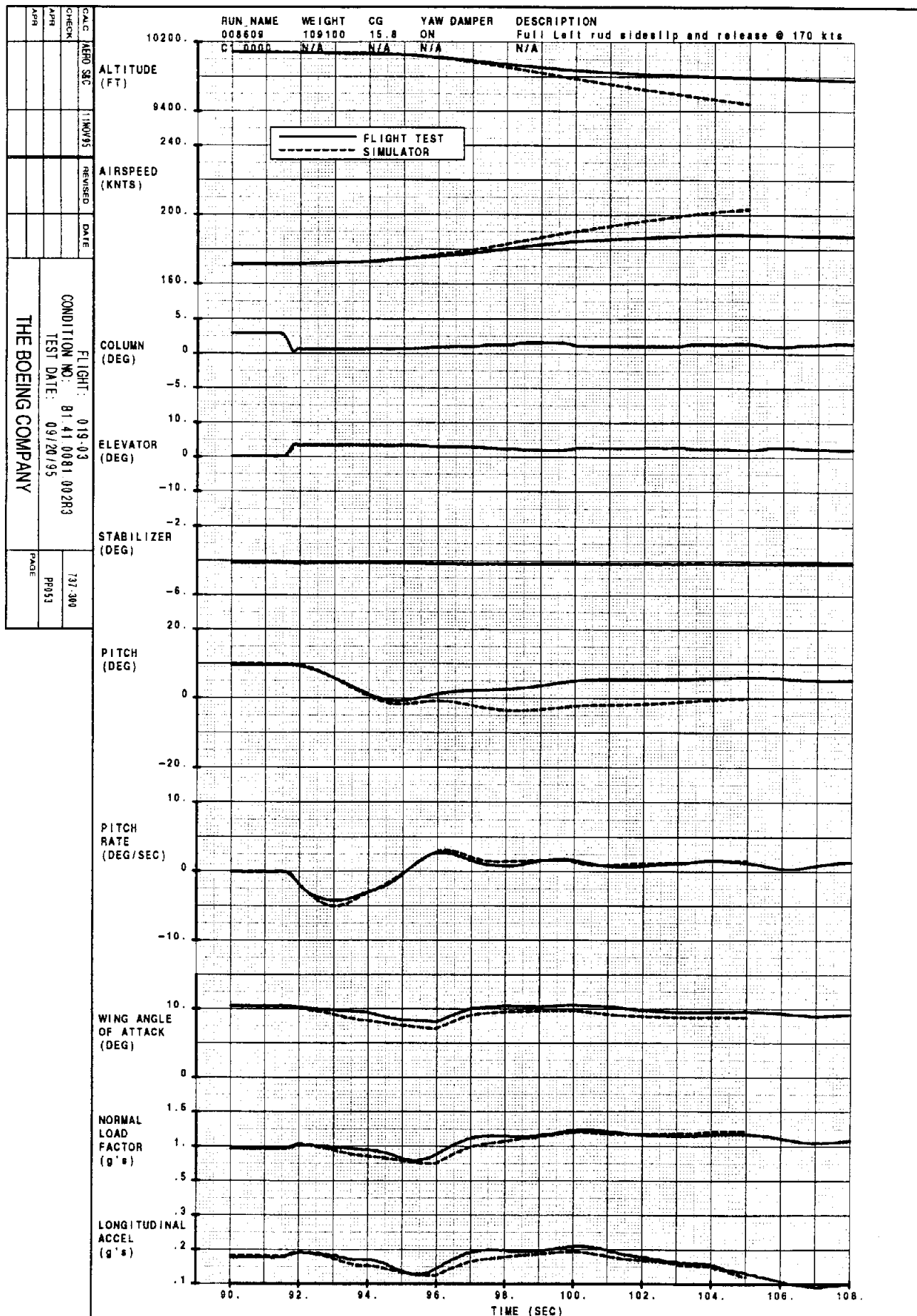
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APR					
APR					
FLIGHT: 019-03 CONDITION NO: B1.41.0081.002R2 TEST DATE: 09/20/95 THE BOEING COMPANY PAGE: 731-308 PP053					



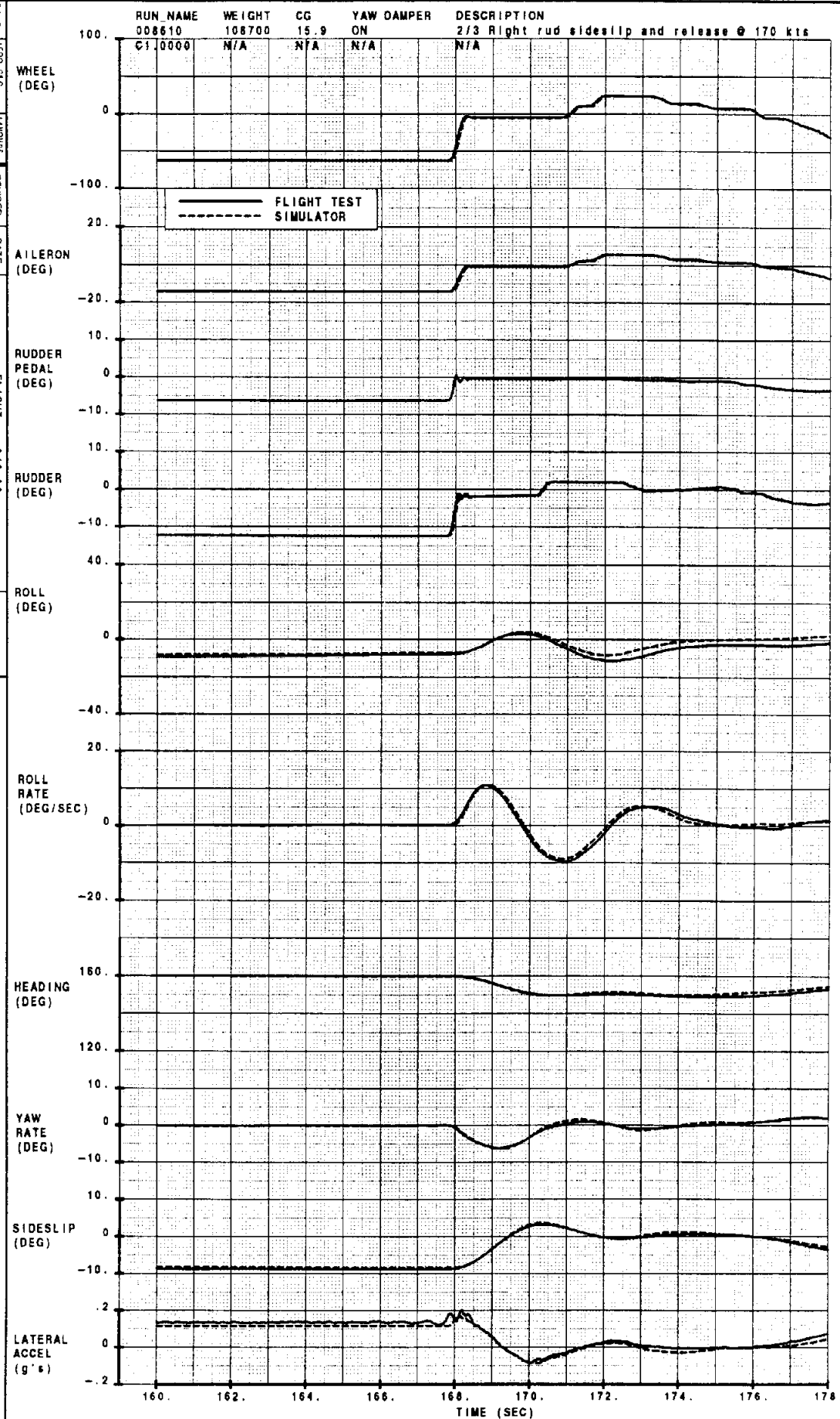


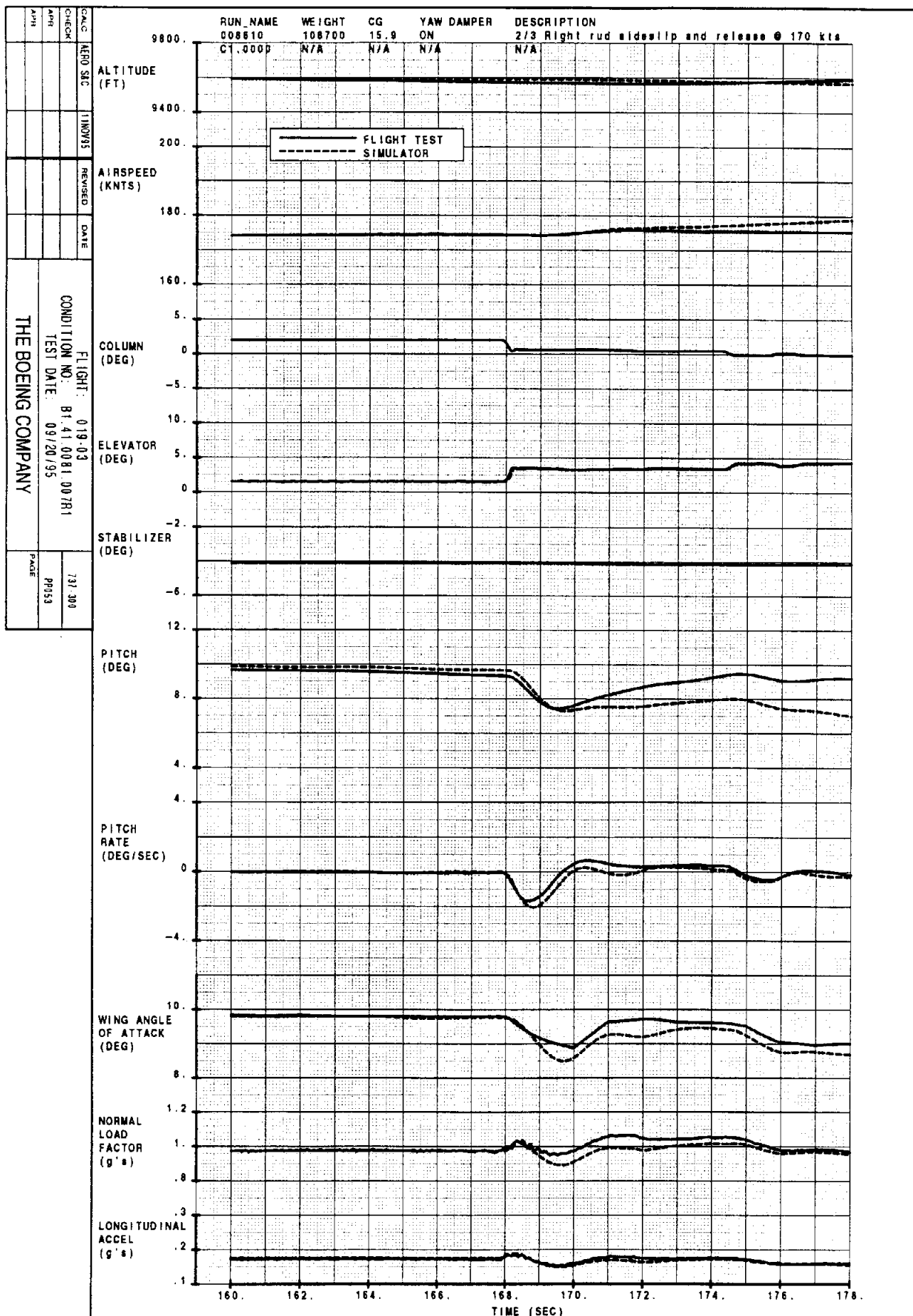
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APR						
THE BOEING COMPANY					PAGE	



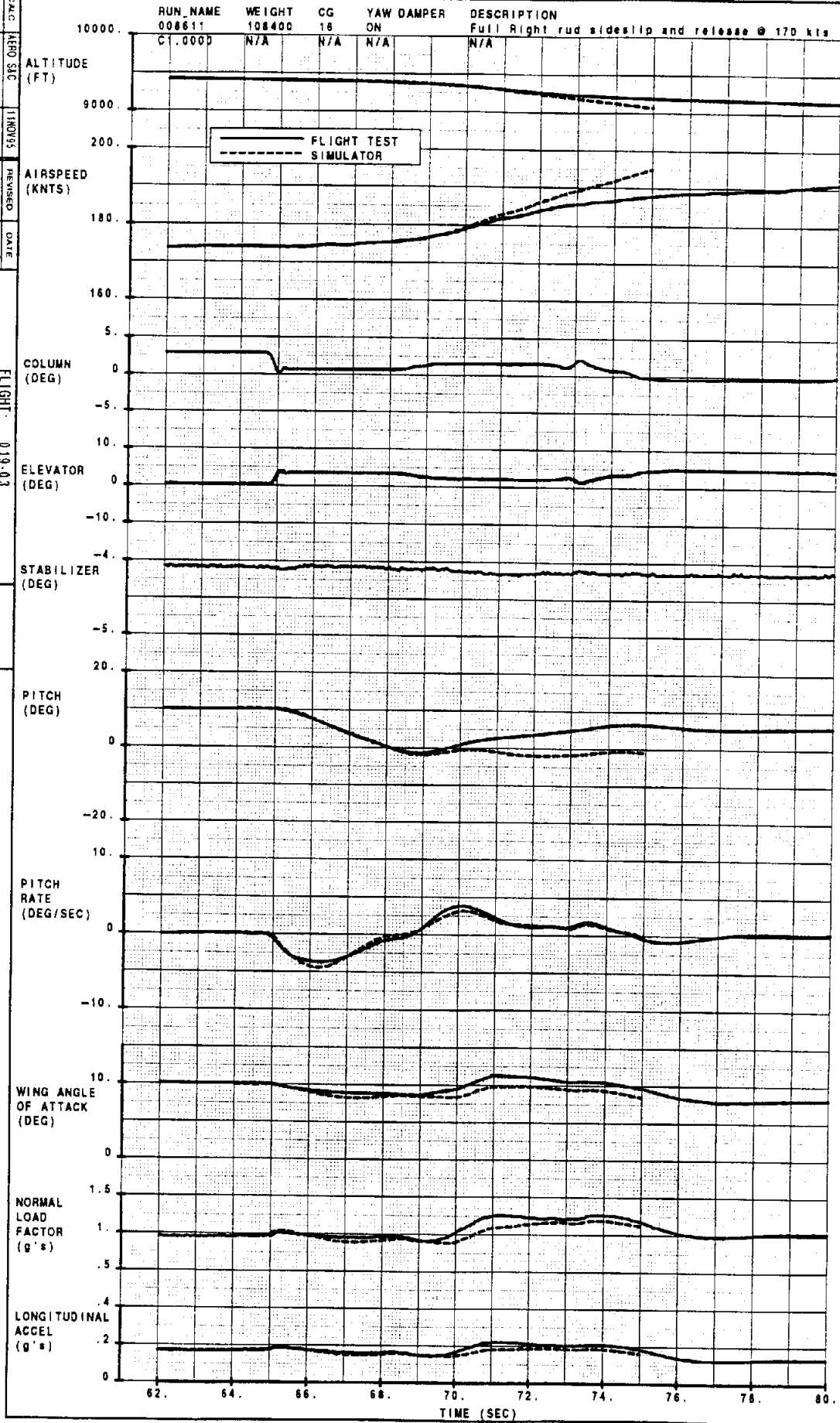


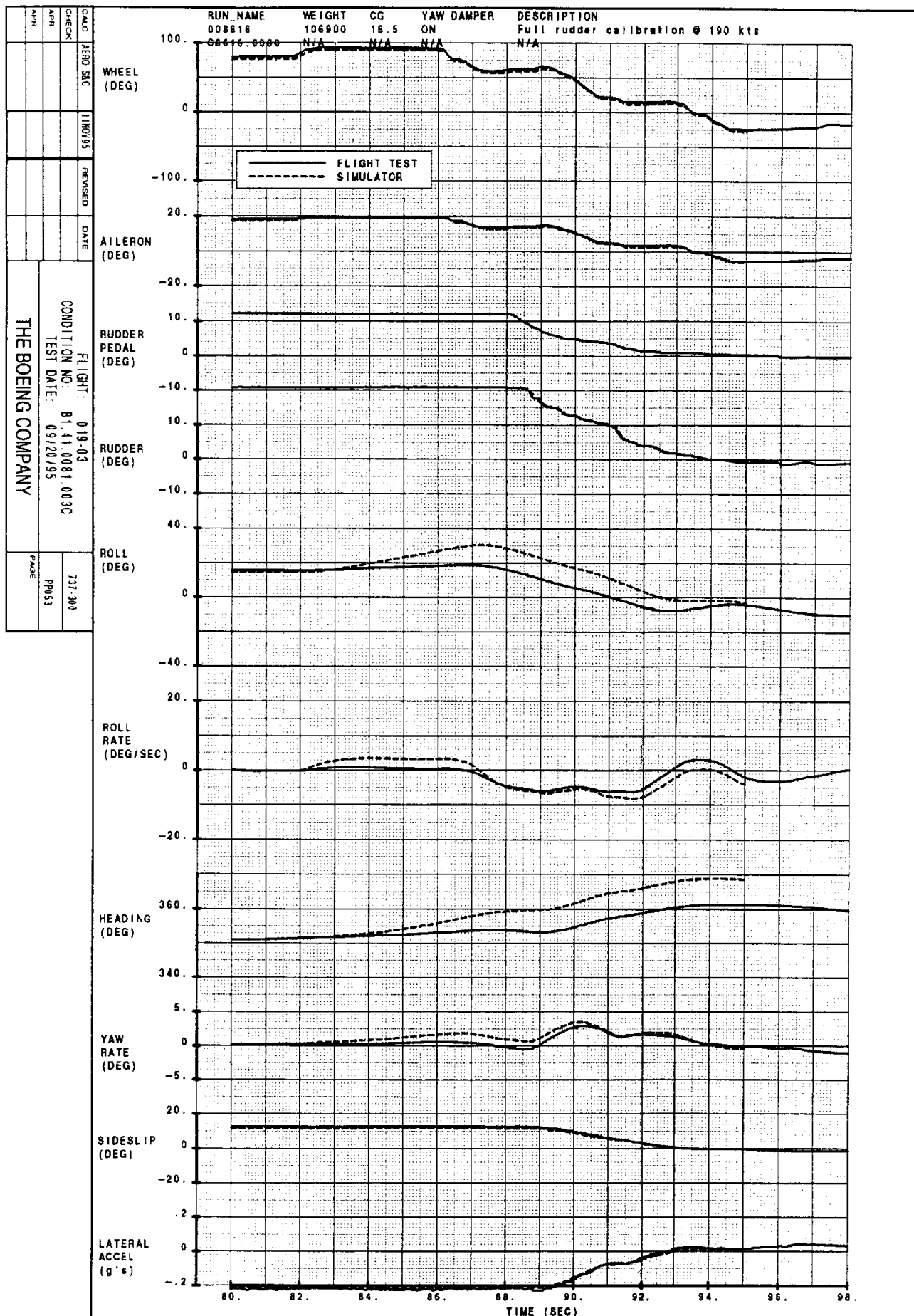
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APPROV	APPROV	DATE	TEST DATE	09/20/95
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			PP553	



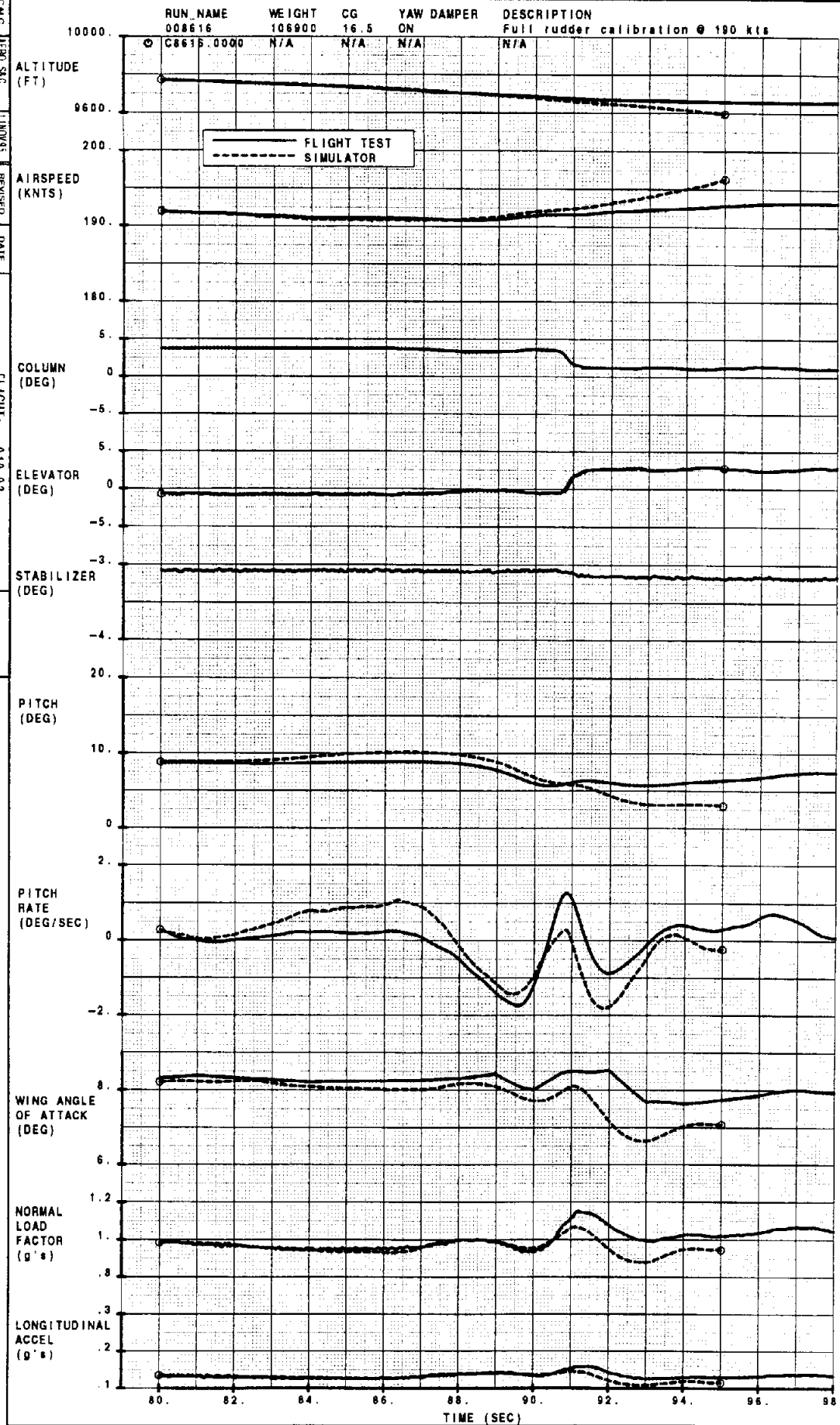


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APPROVED		TEST DATE:	09/20/95
APPROVED		THE BOEING COMPANY	
APPROVED		737-300	
APPROVED		PPSS3	
APPROVED		PAGE	





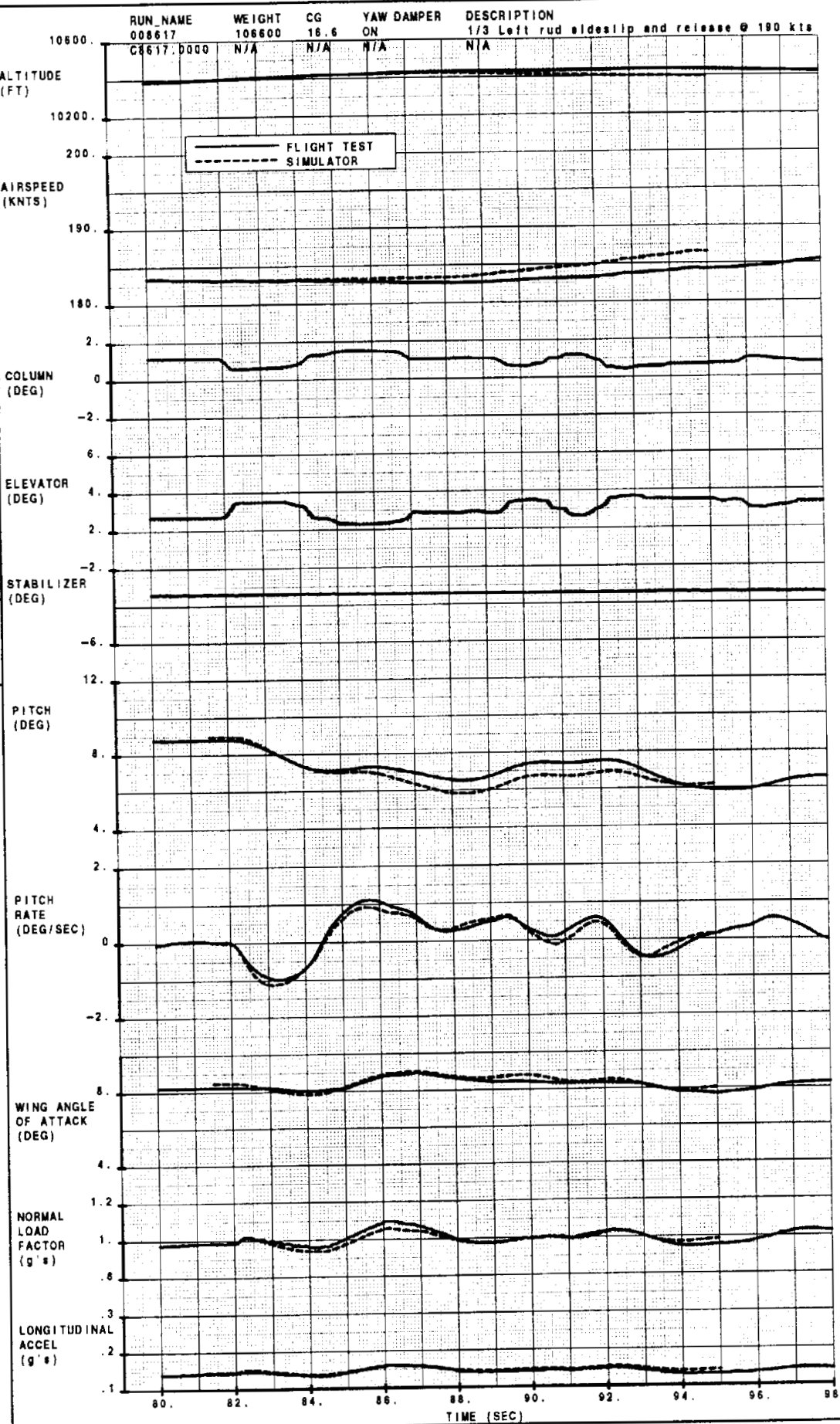
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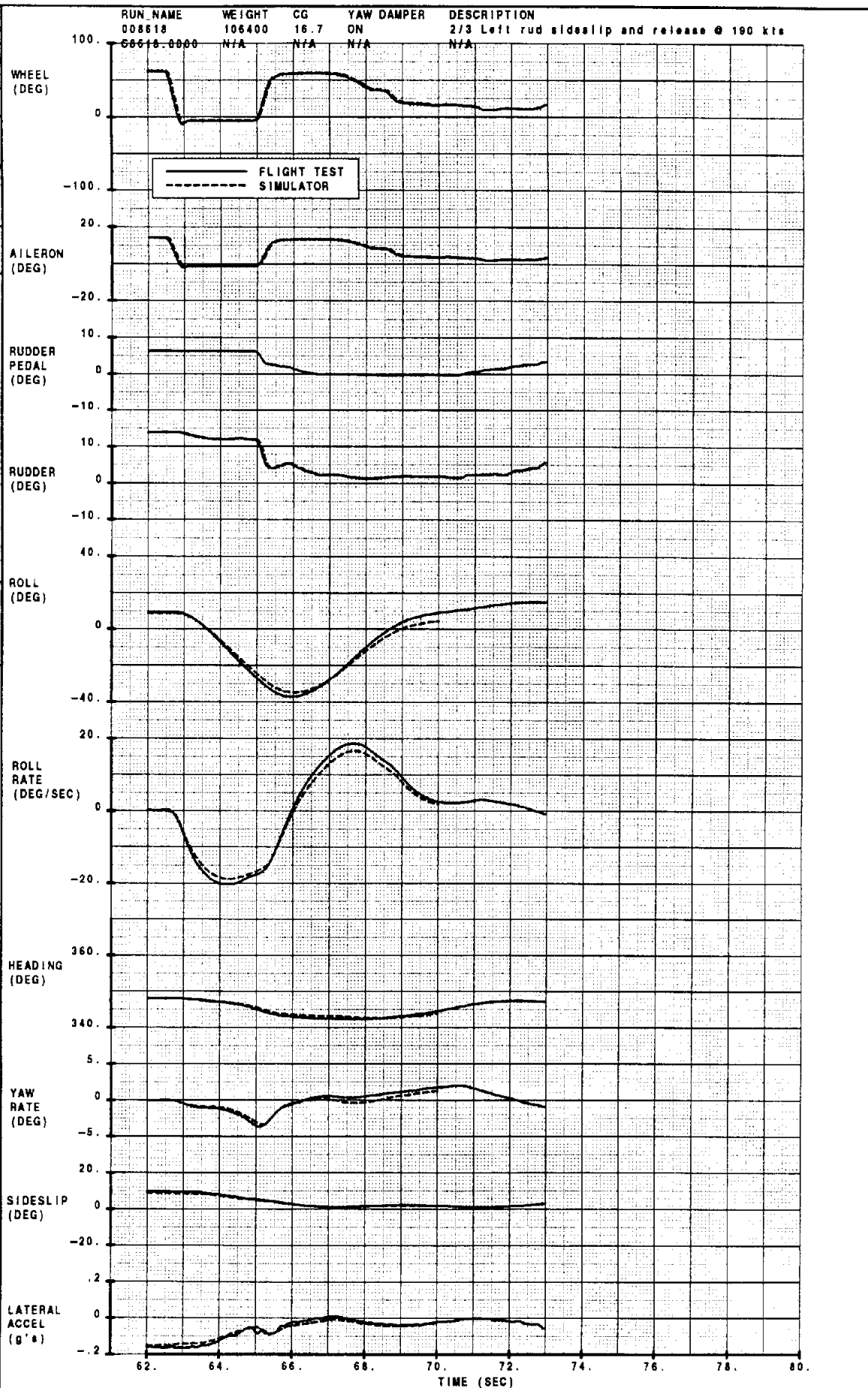
THE BOEING COMPANY

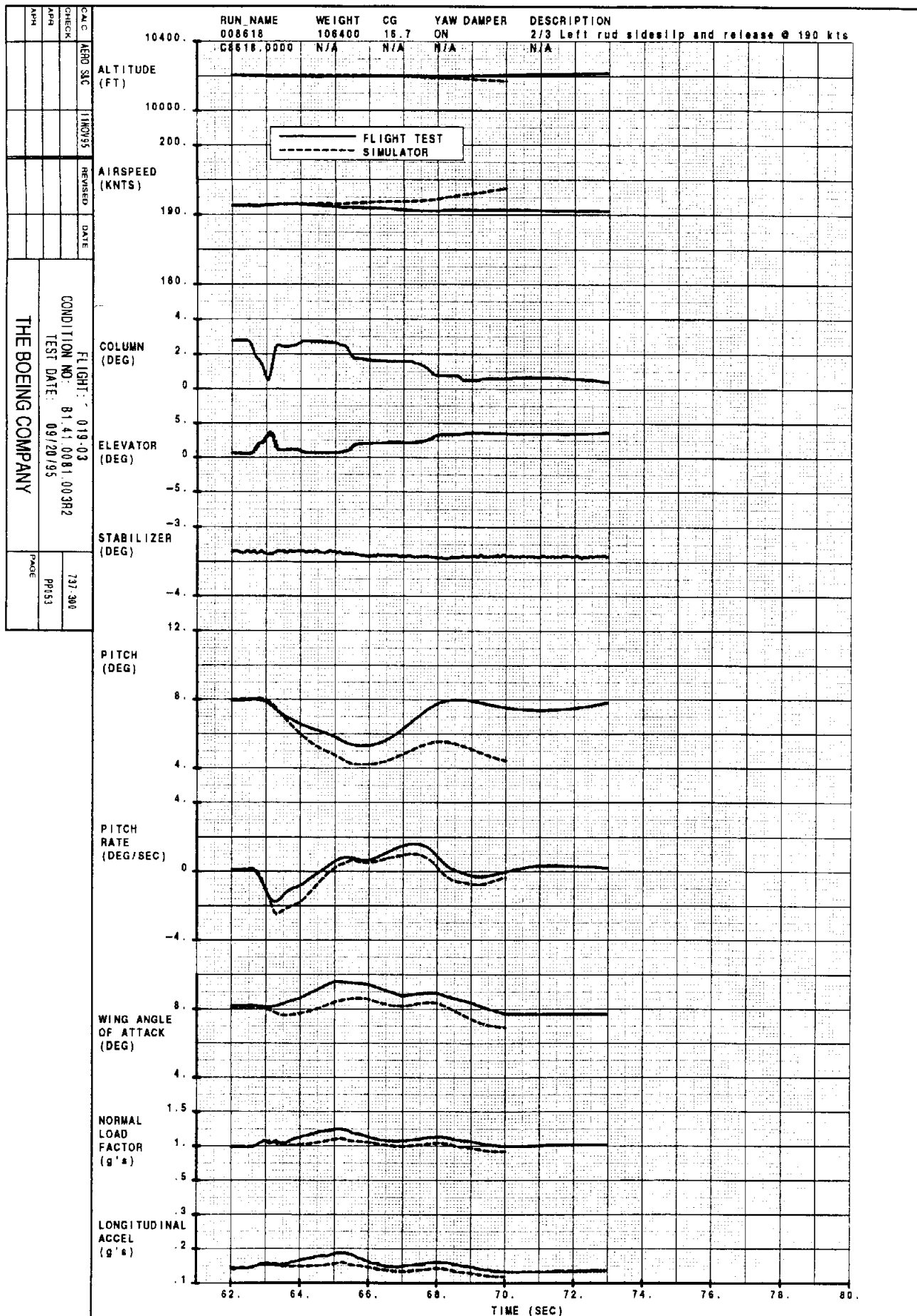


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			PAGE	PP053

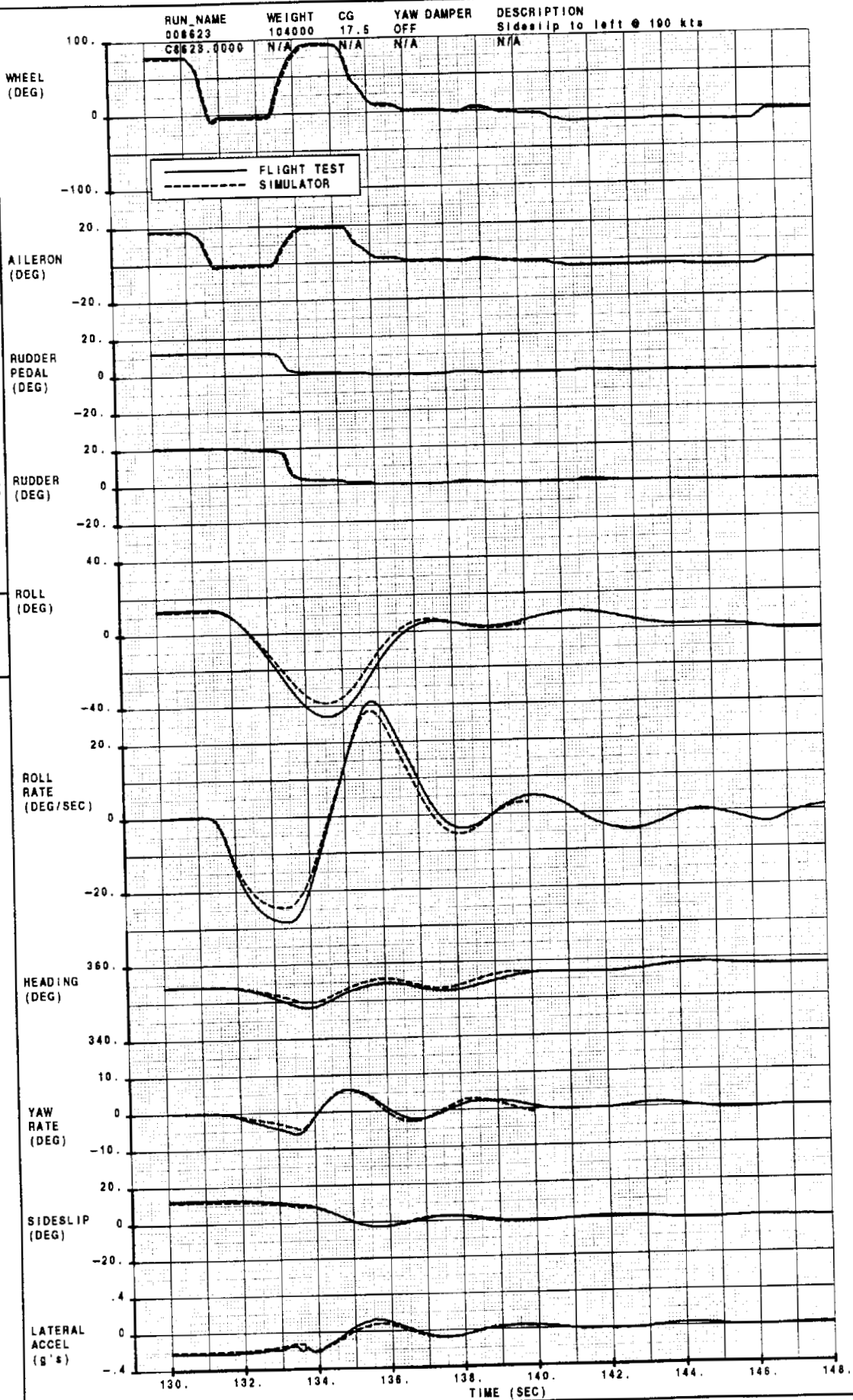


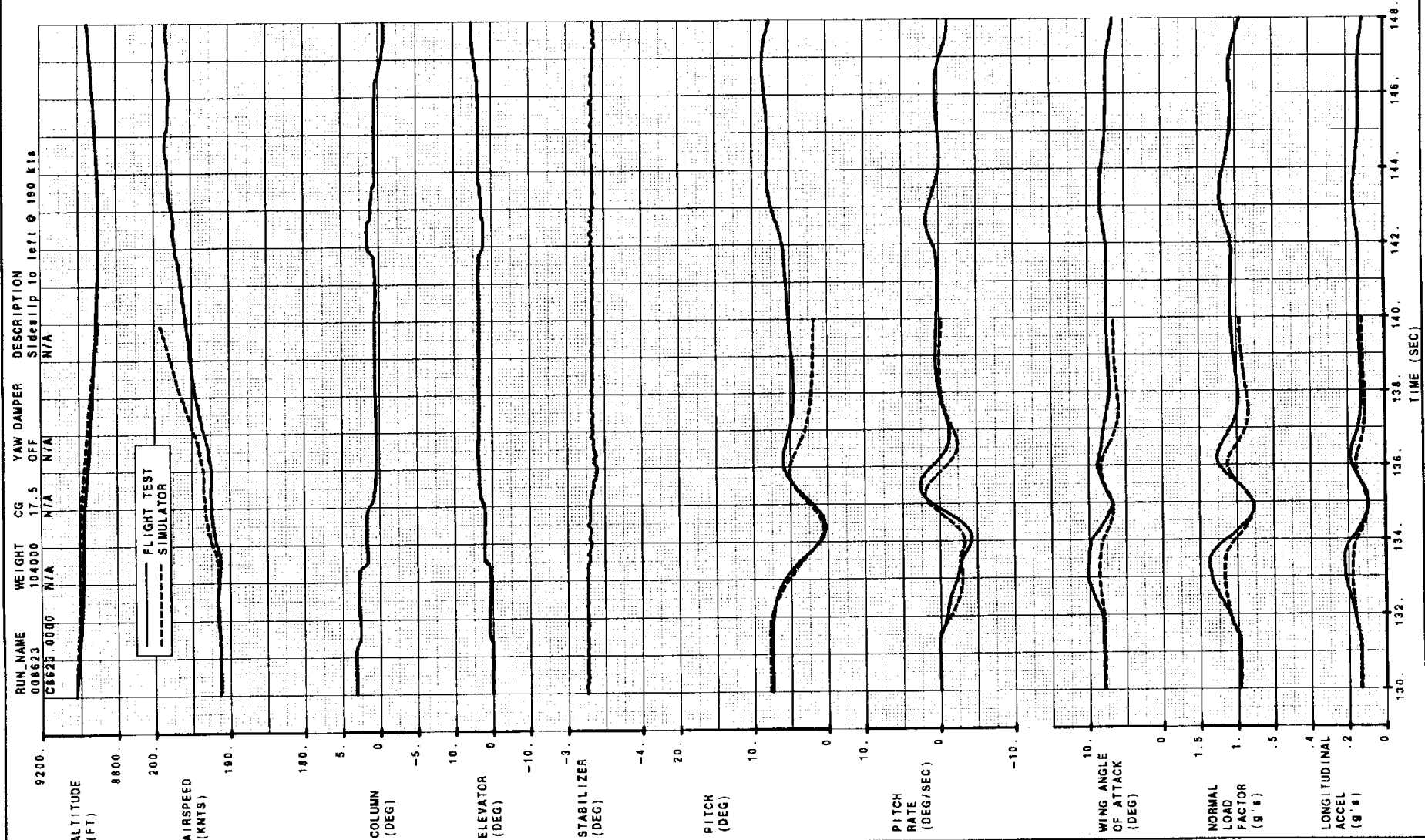
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CHECK					
APP					





DATE	TIME	REVISED	DATE
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TEST DATE: 09/20/95			
THE BOEING COMPANY			
PAGE			737-300
PAGE			PM53

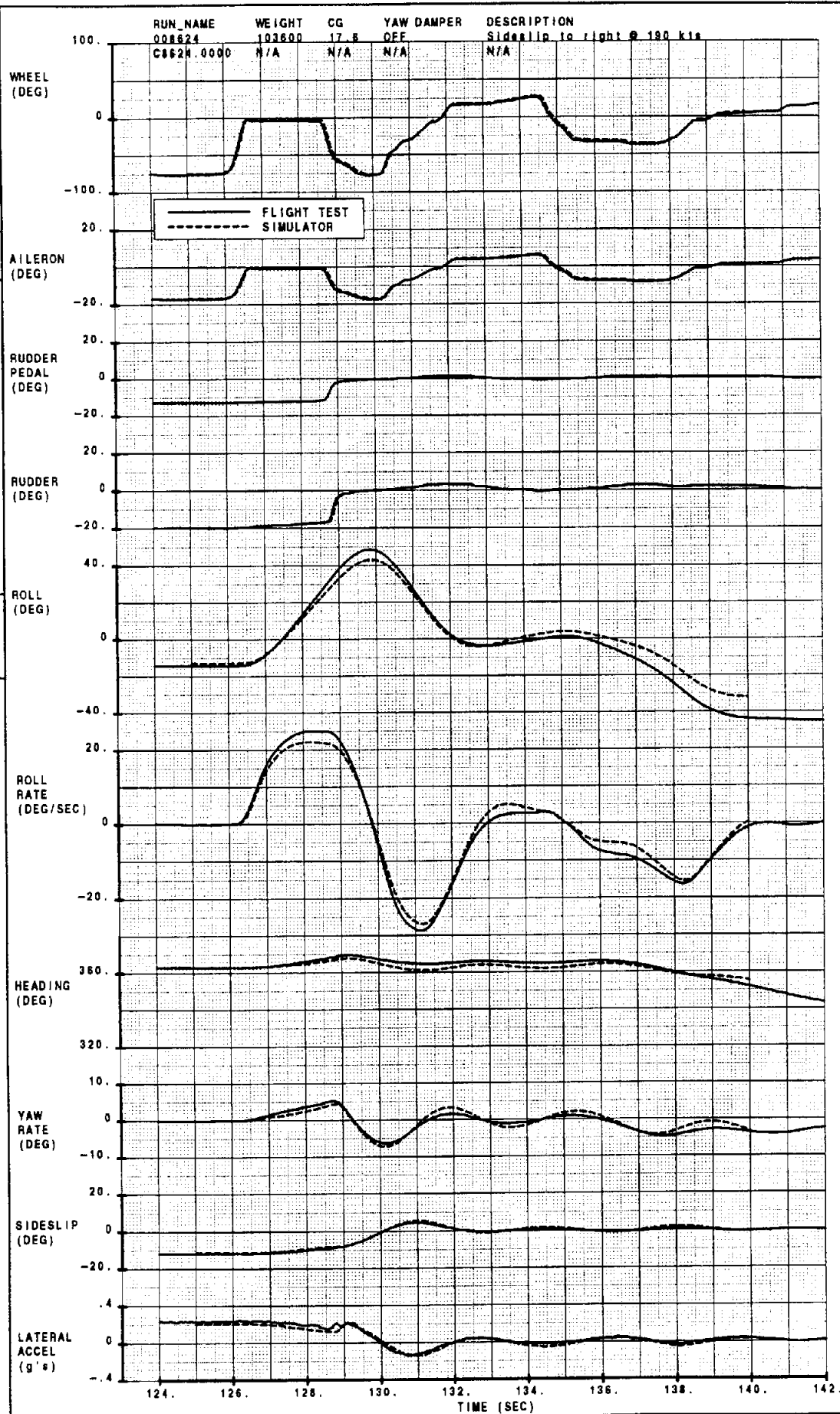




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APR					TEST DATE: 09/20/95	PP053
APR					THE BOEING COMPANY	PAGE

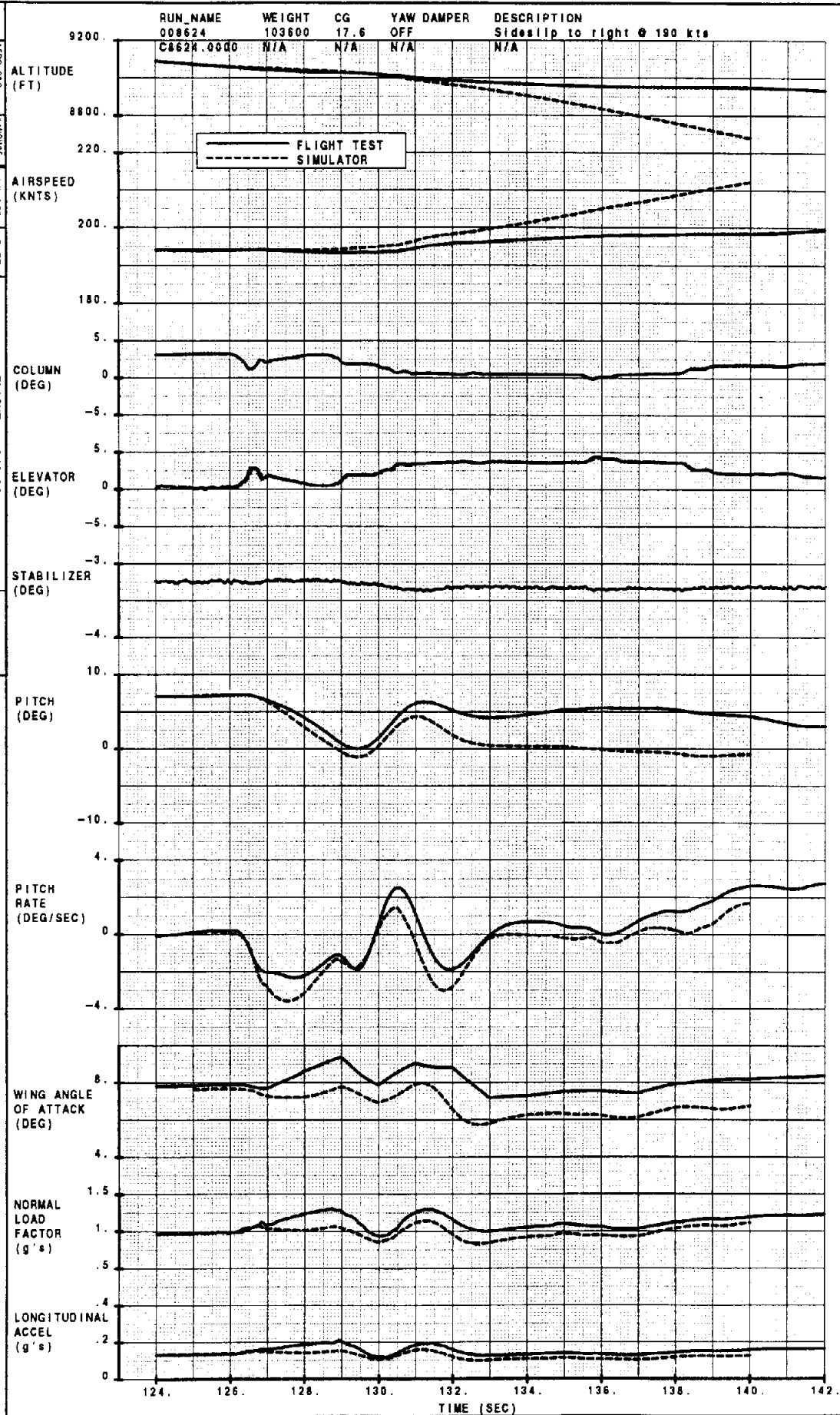
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CONDITION NO: B1.41.0081.018.1		PP053
TEST DATE: 09/20/95		
THE BOEING COMPANY		PAGE

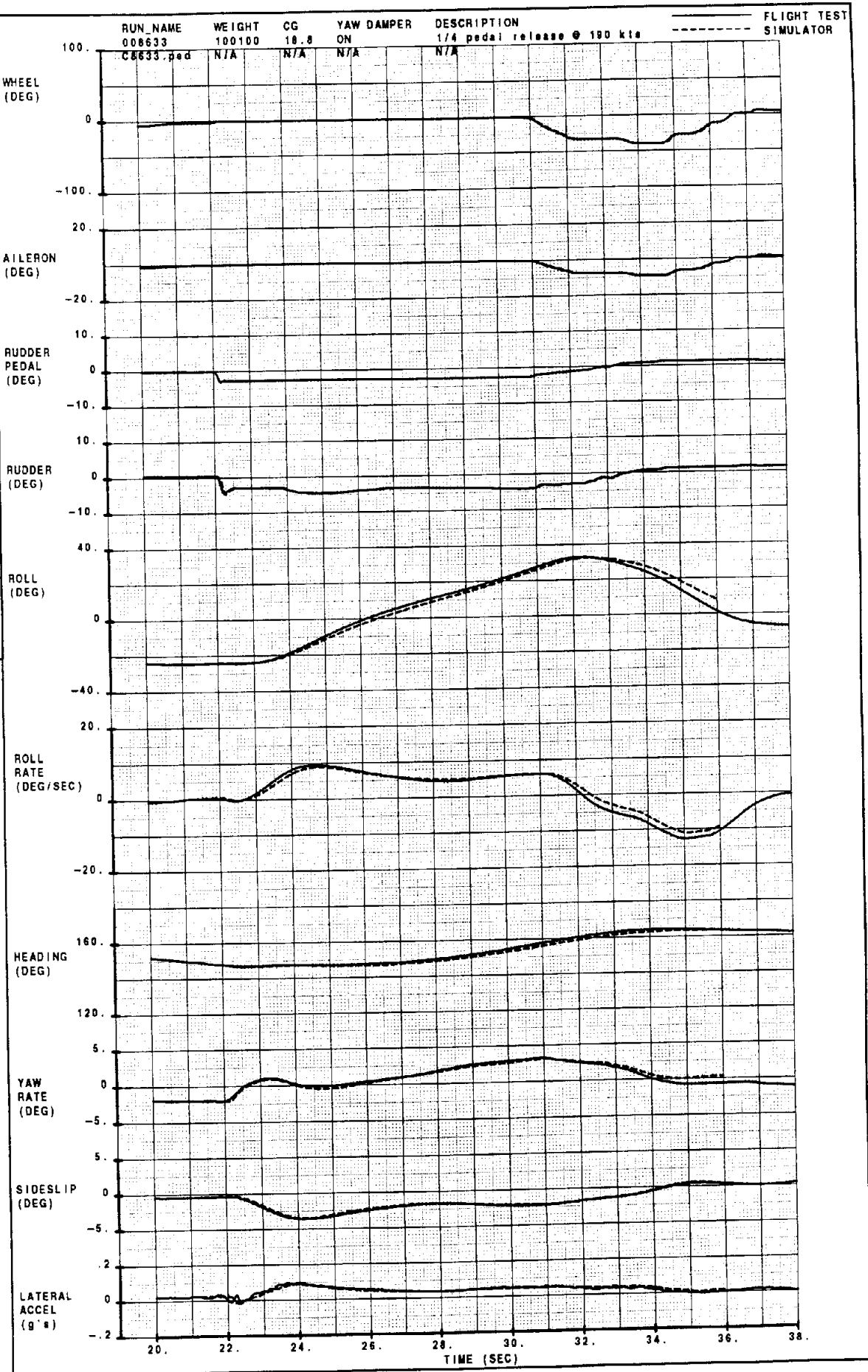


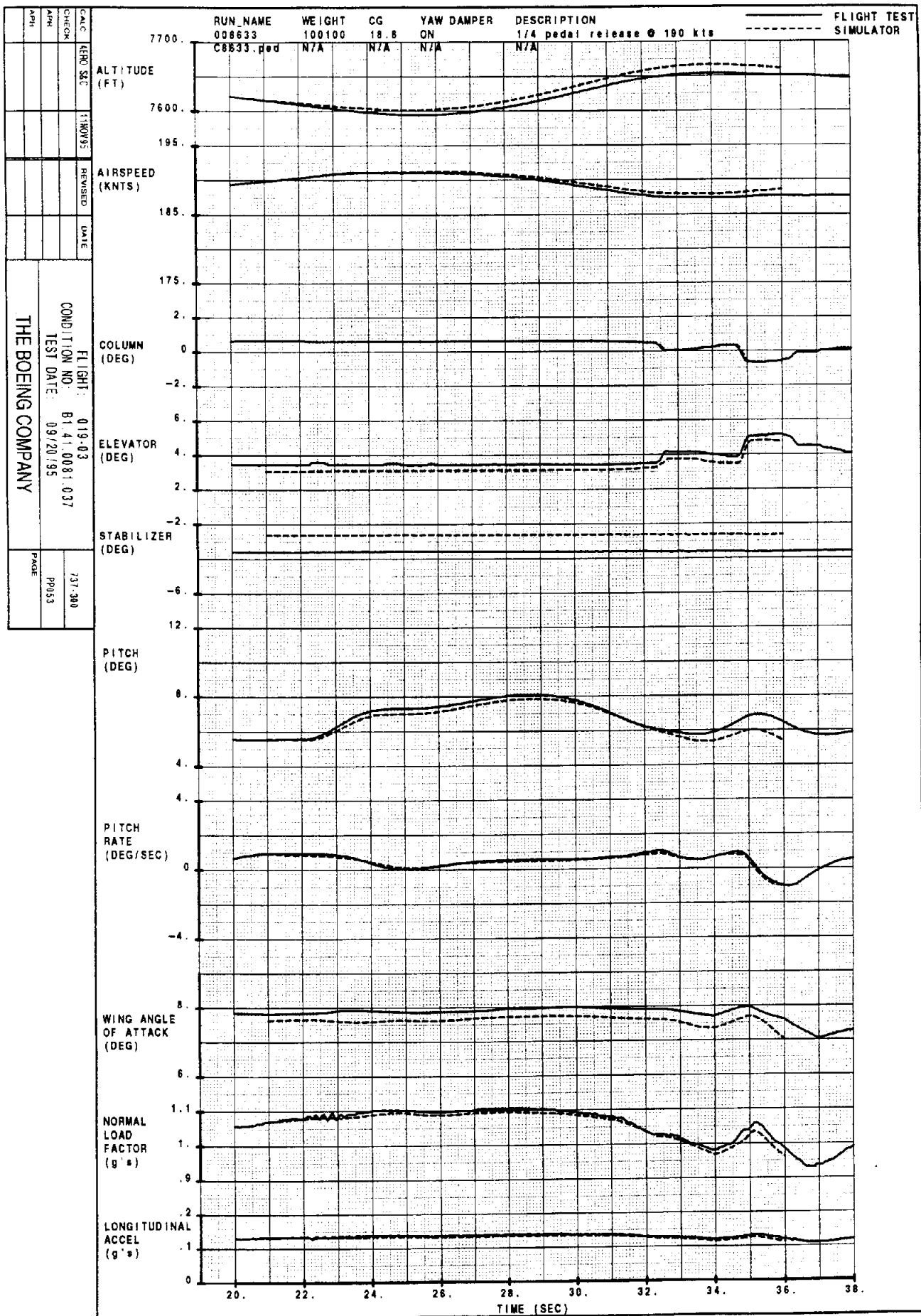
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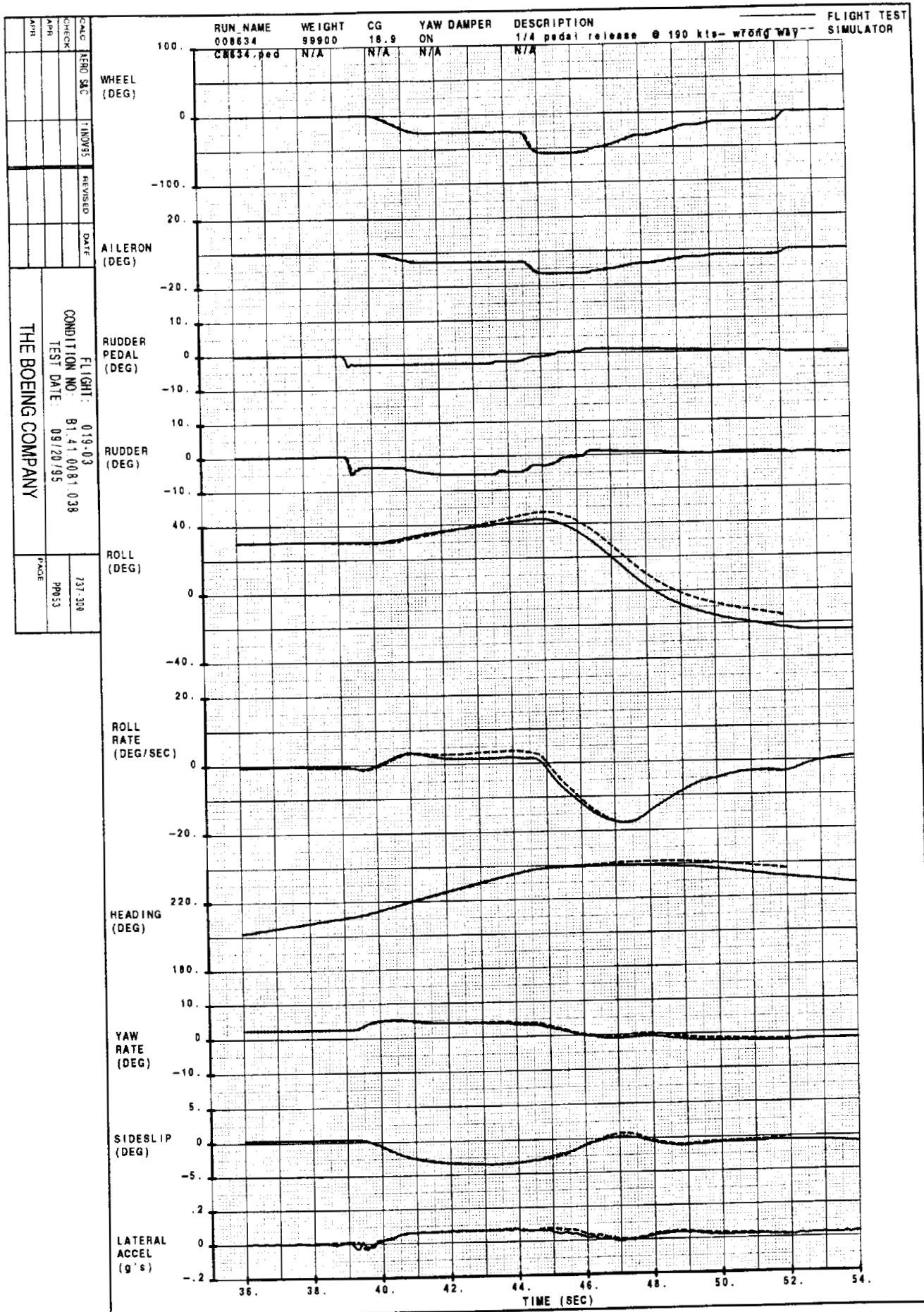
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TEST DATE: 09/20/95	
THE BOEING COMPANY	
7/31-200	PP53
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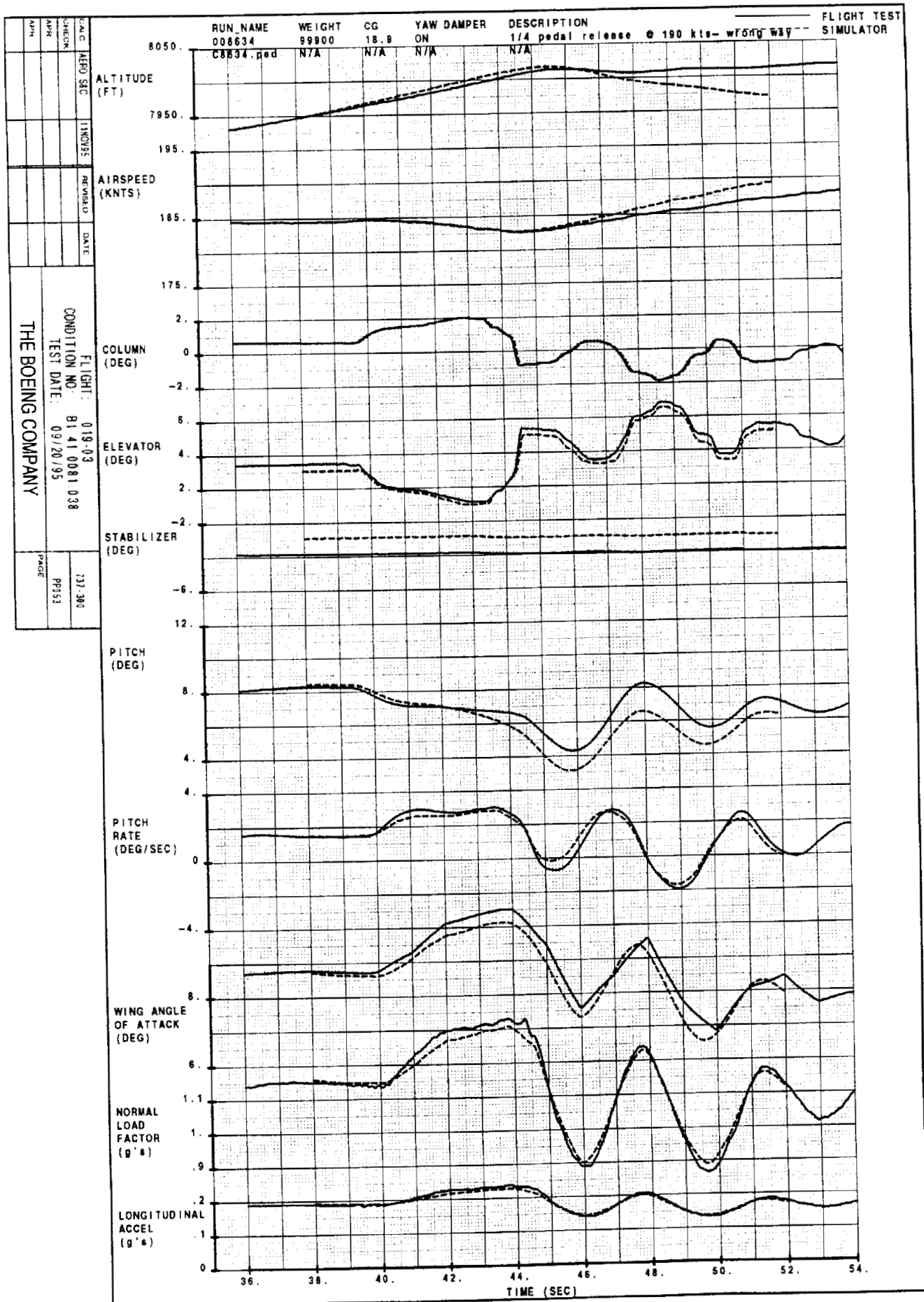


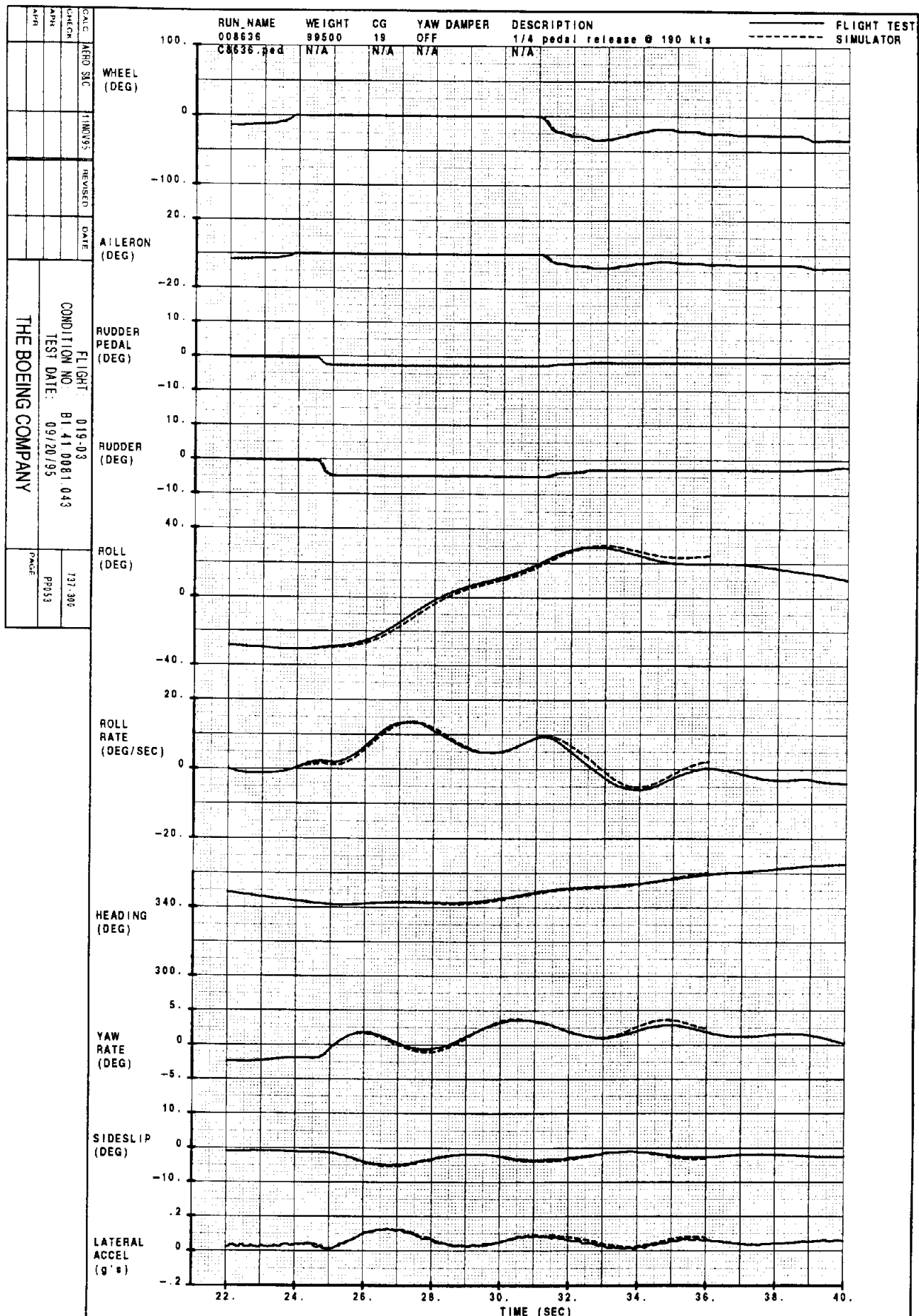
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APP		TEST DATE:	09/20/95
APP			
THE BOEING COMPANY		PAGE	737-300 PP033

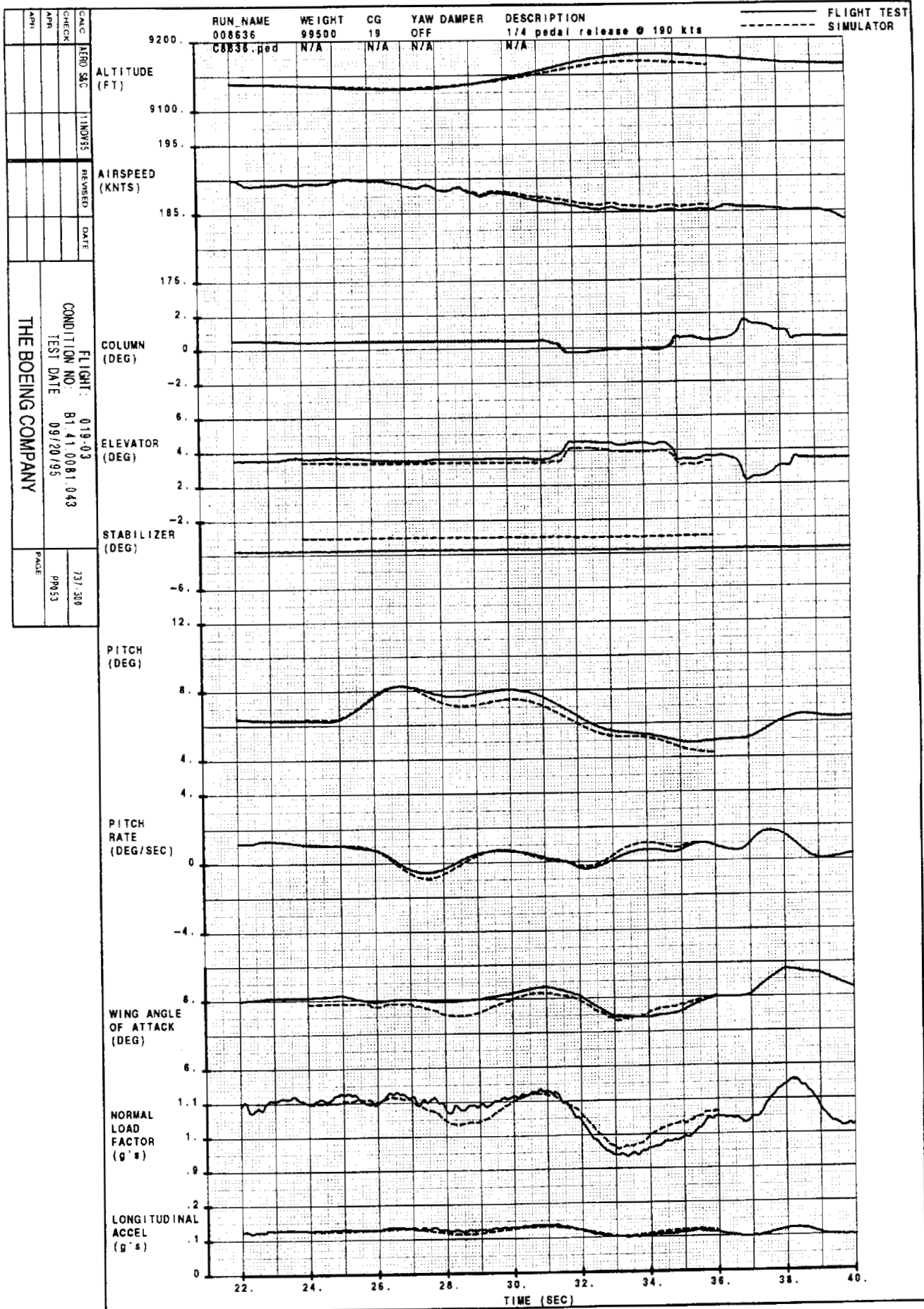


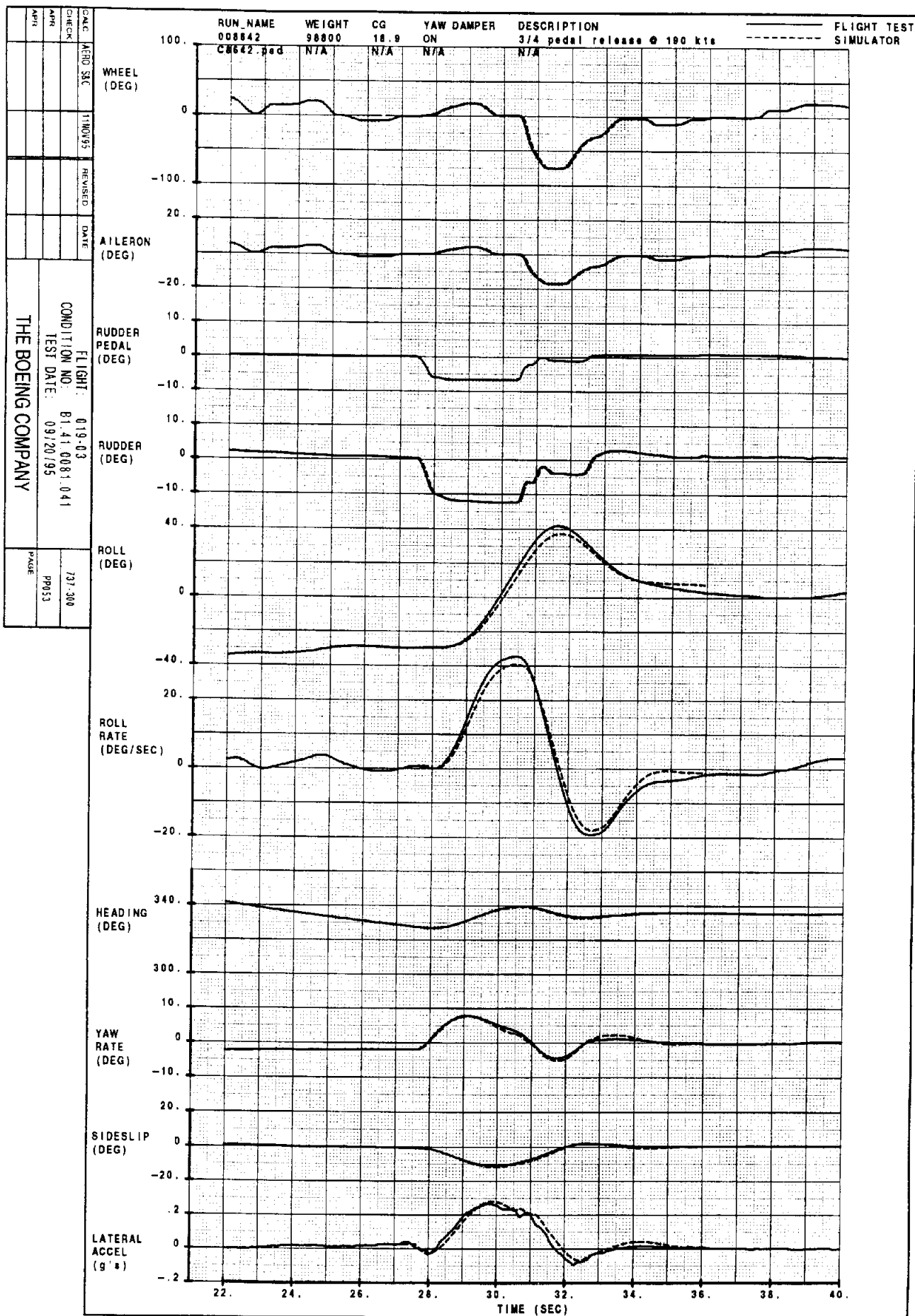


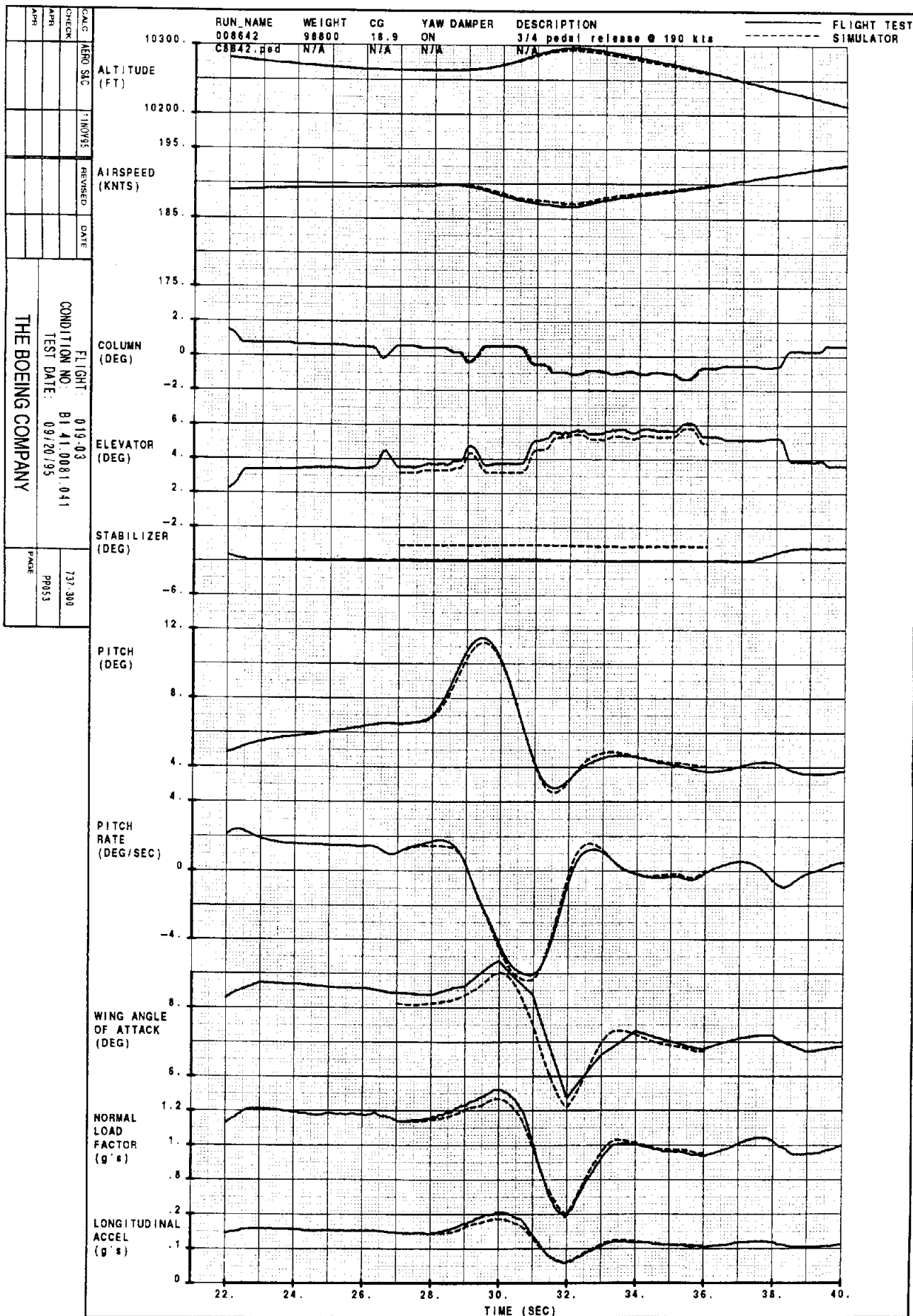


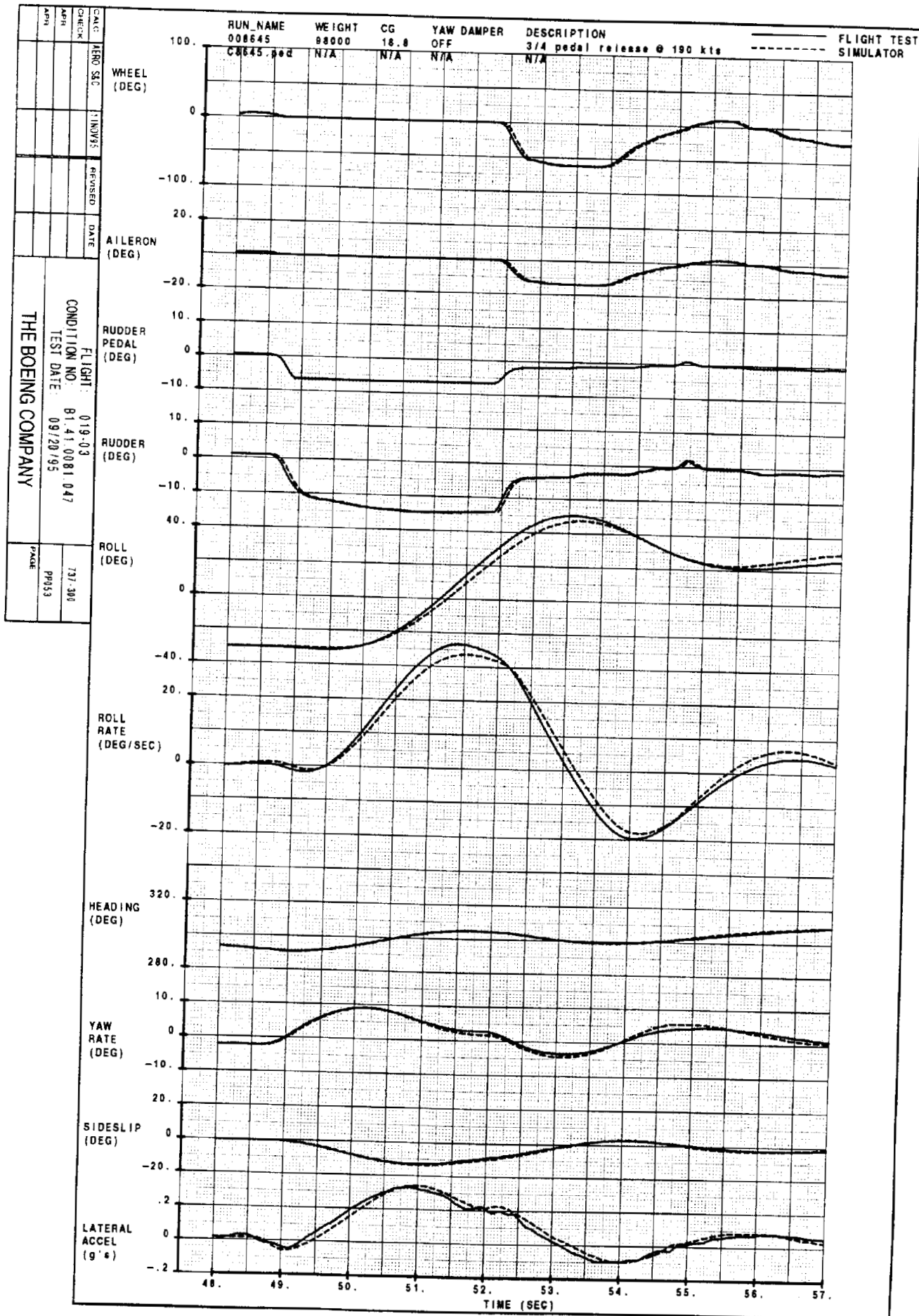


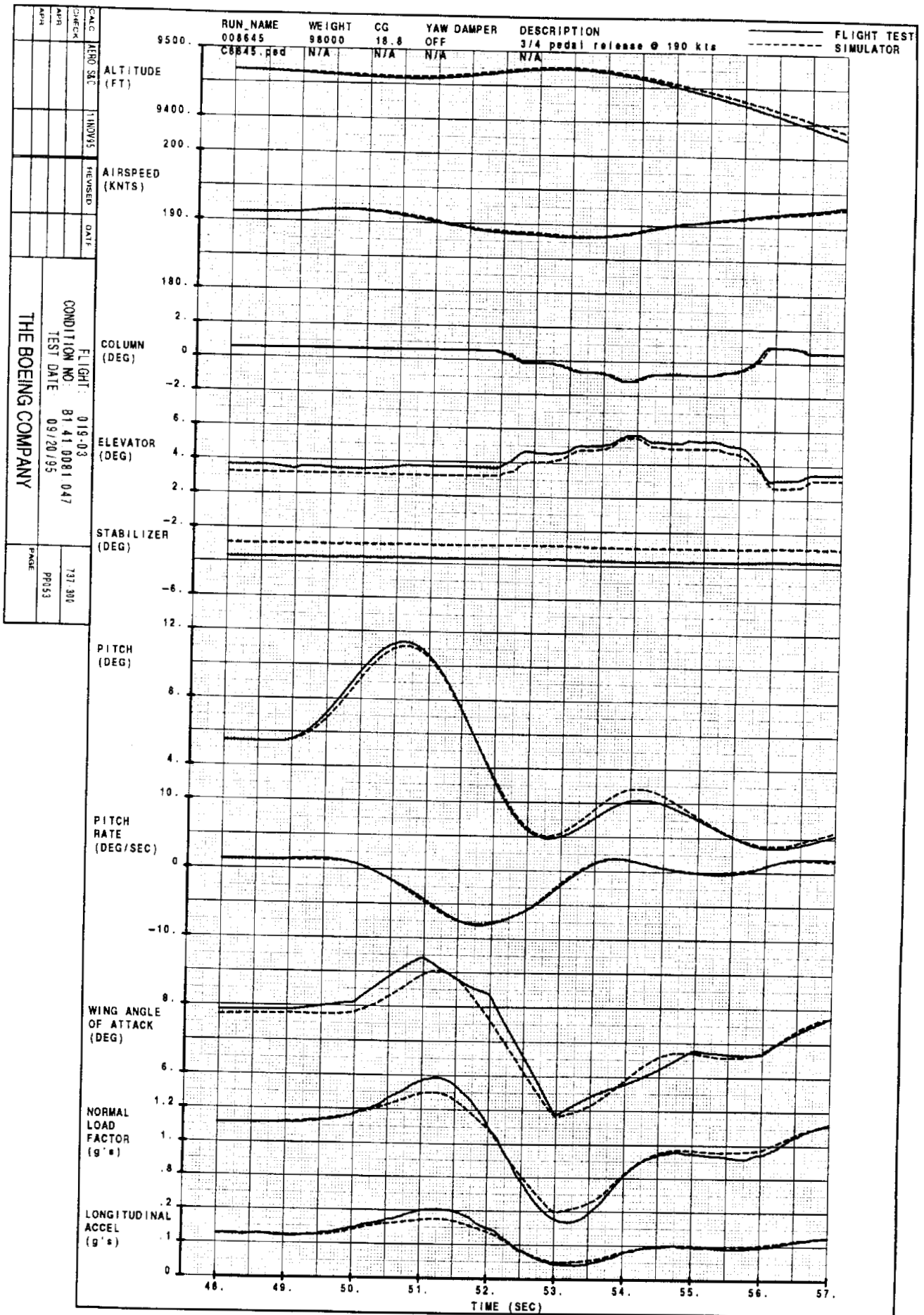


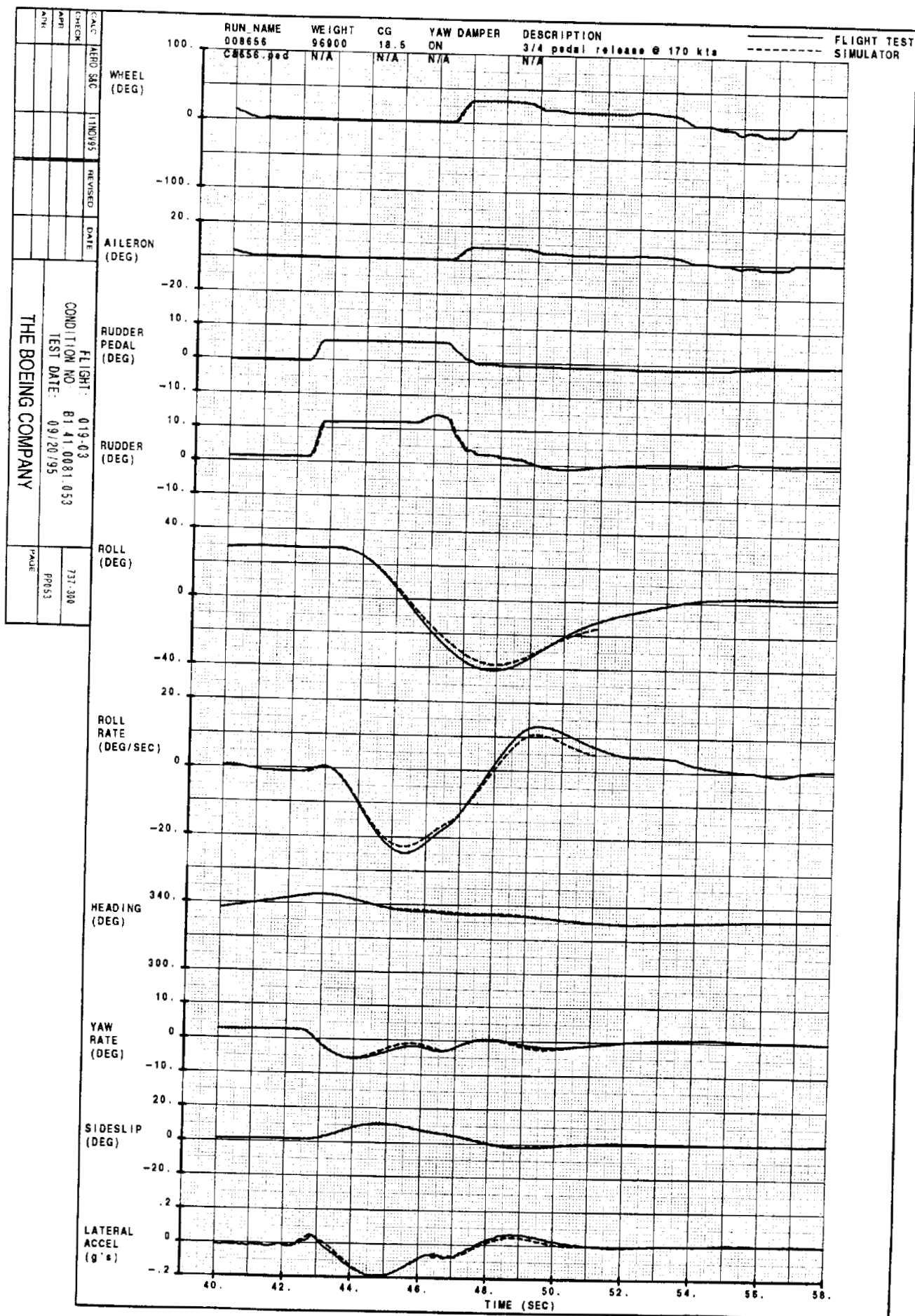


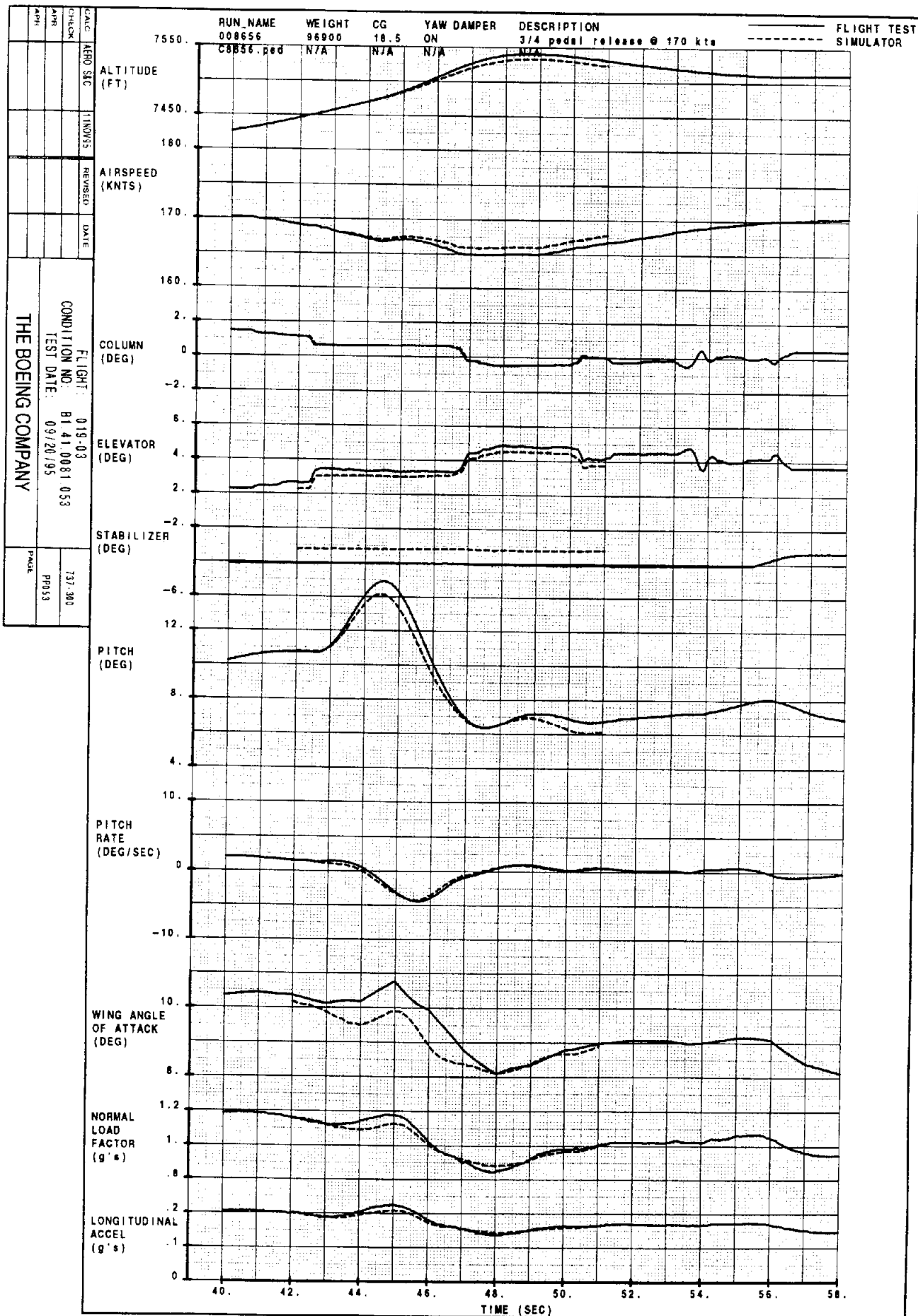


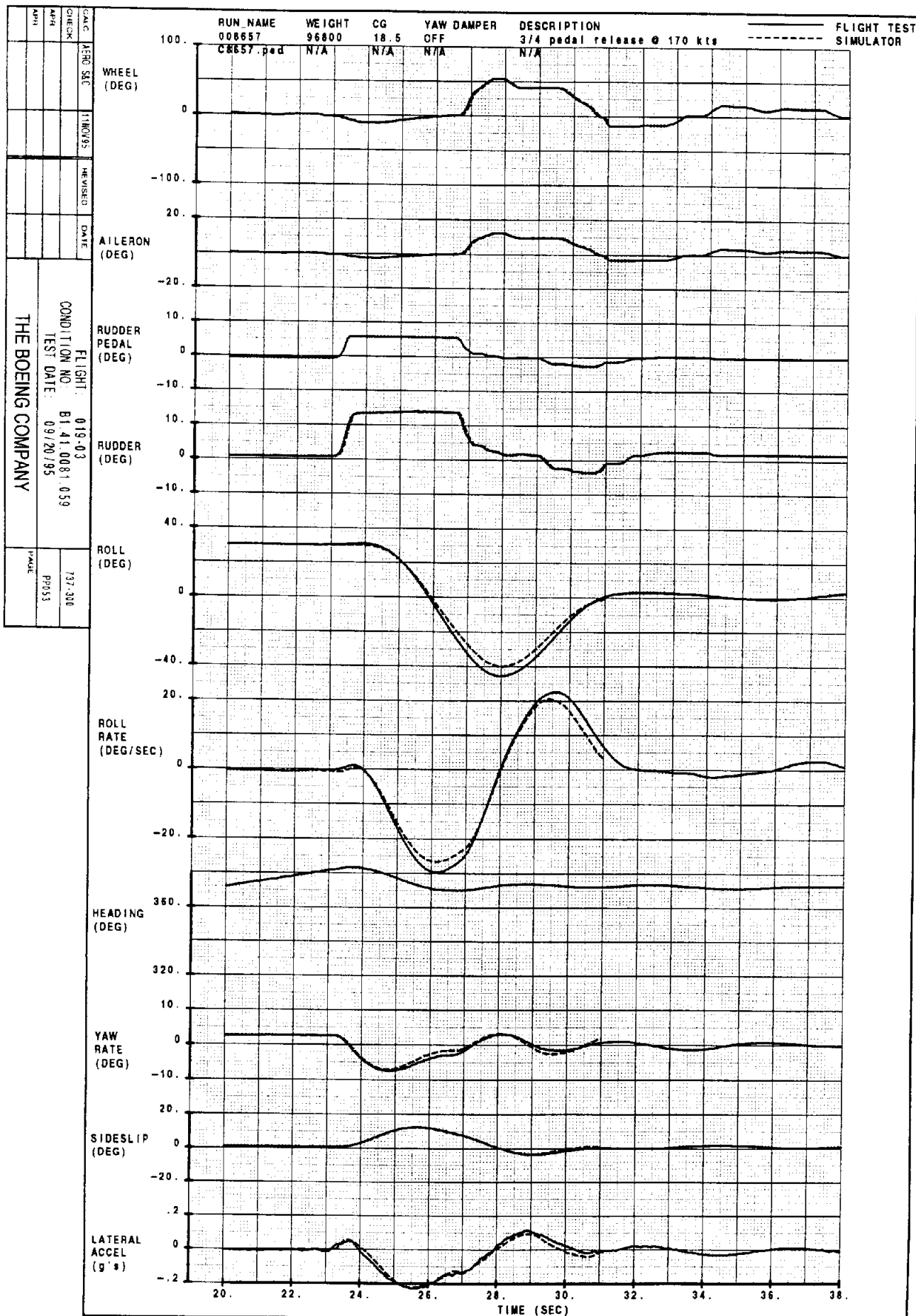


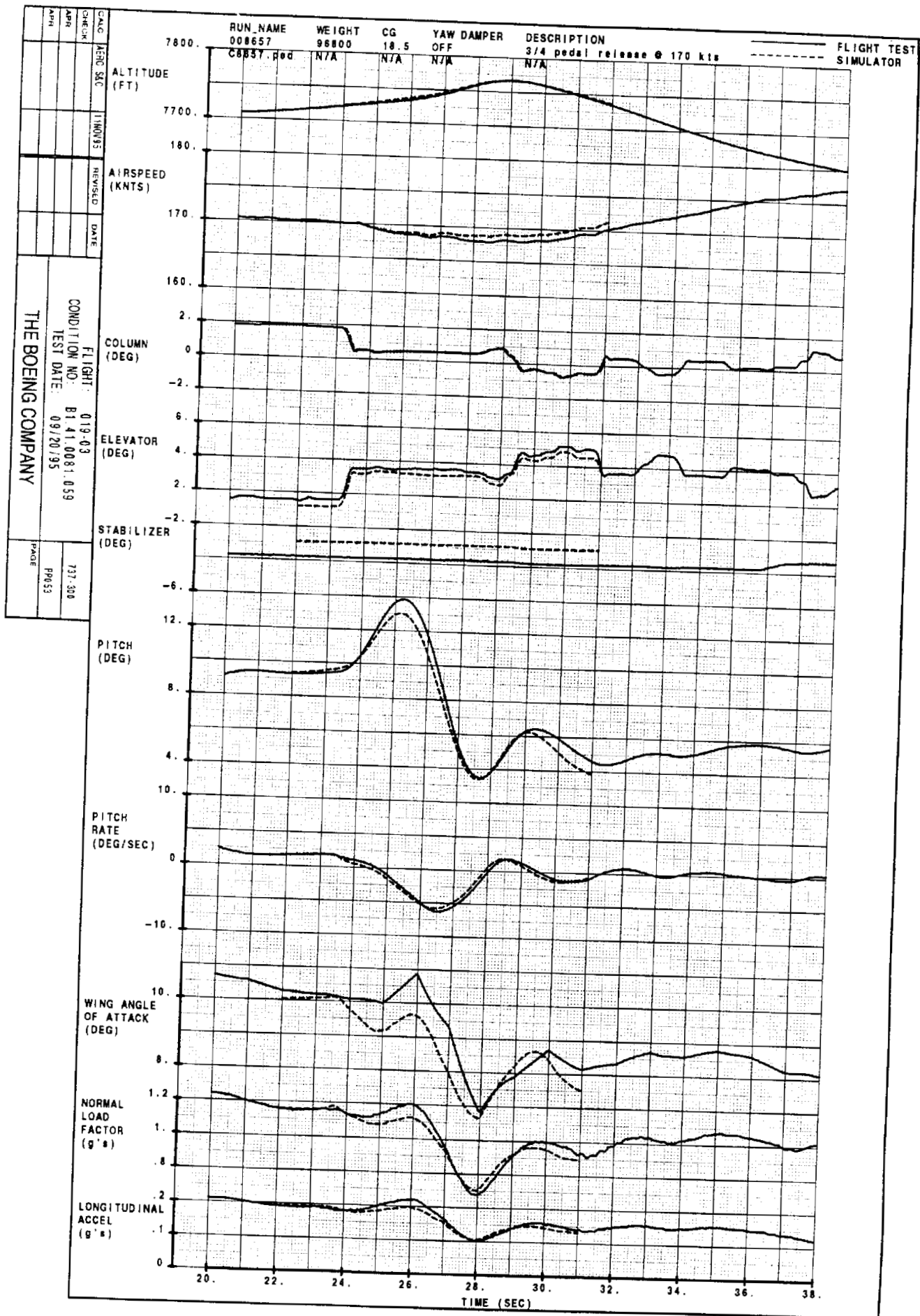


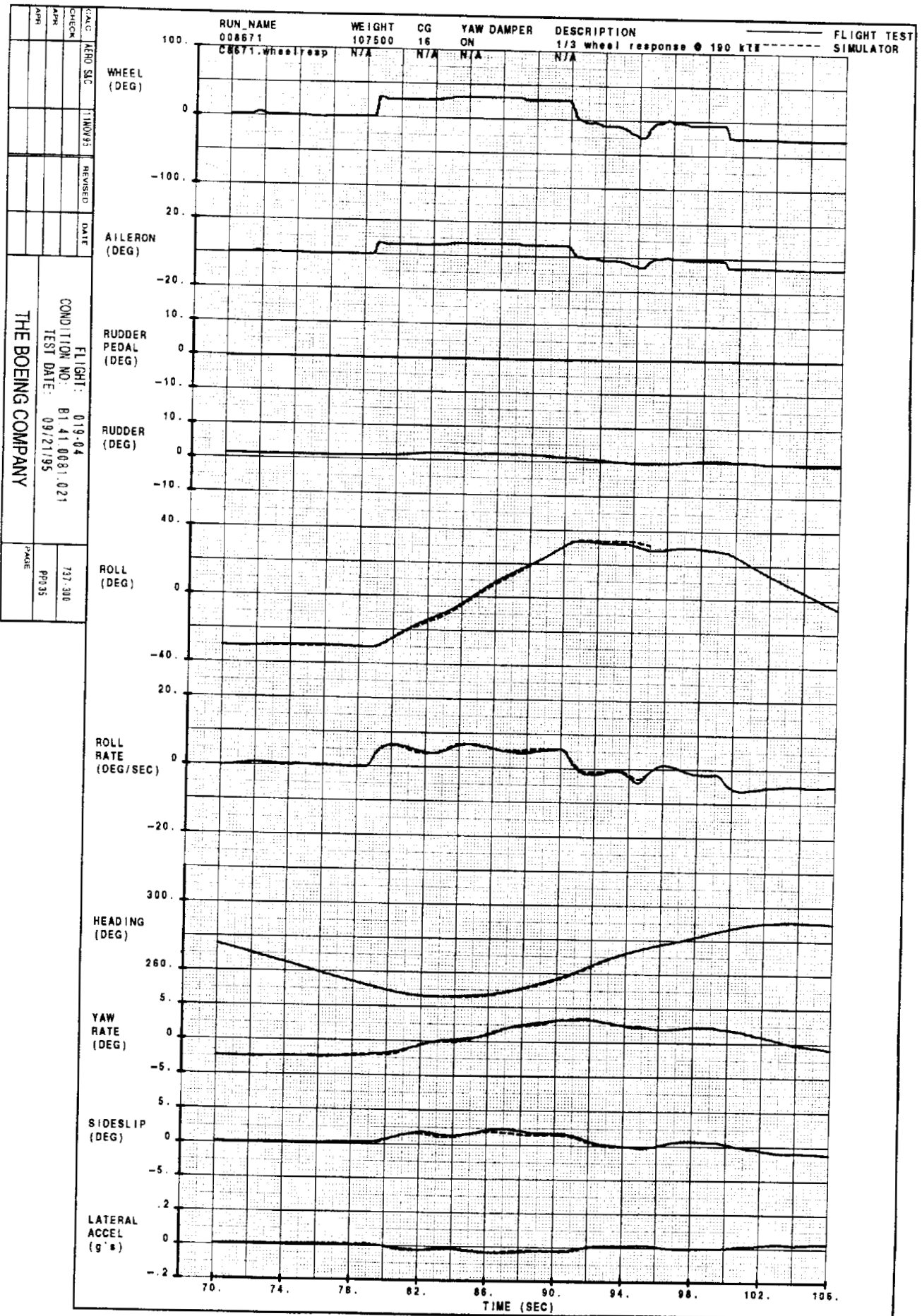


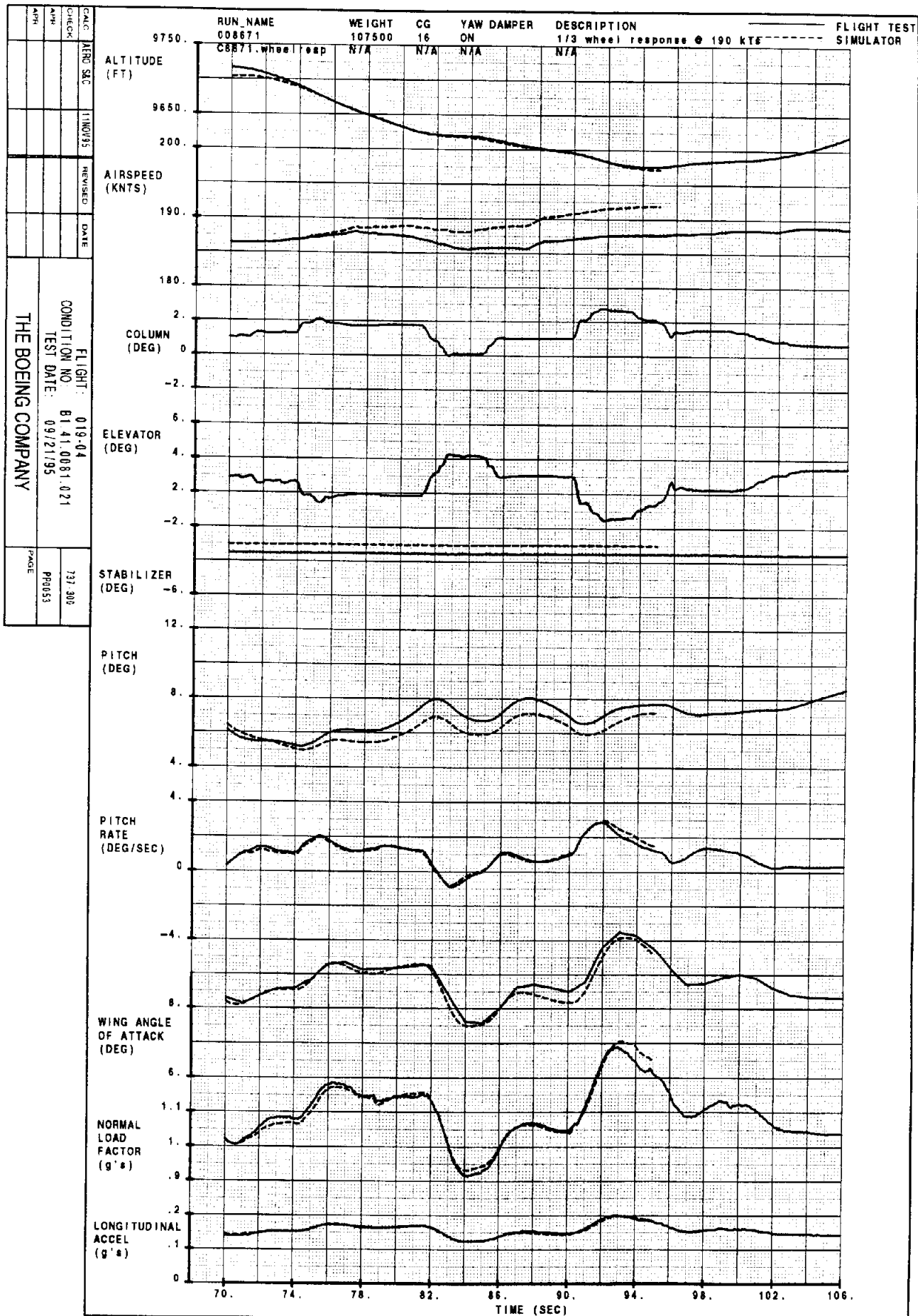


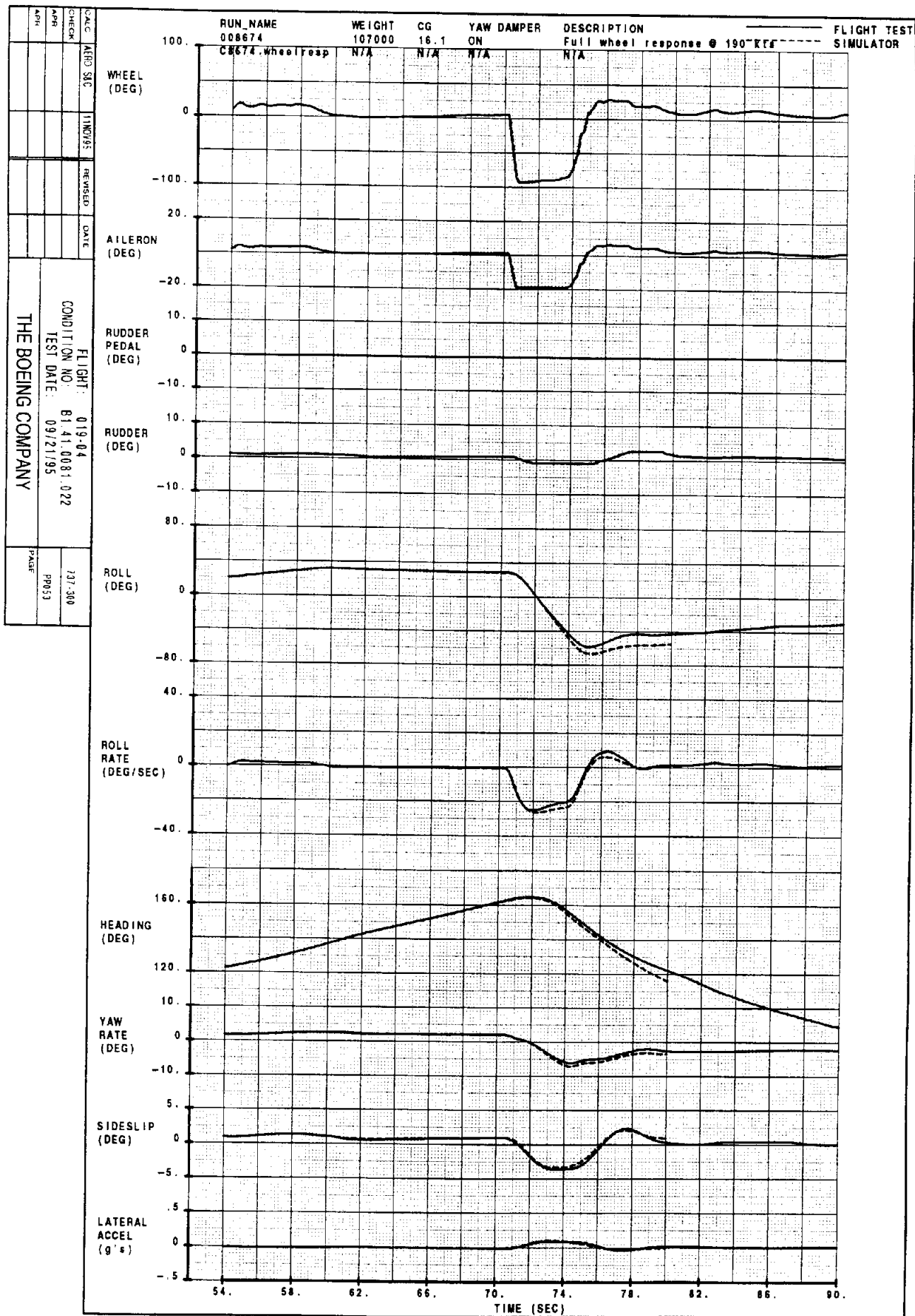








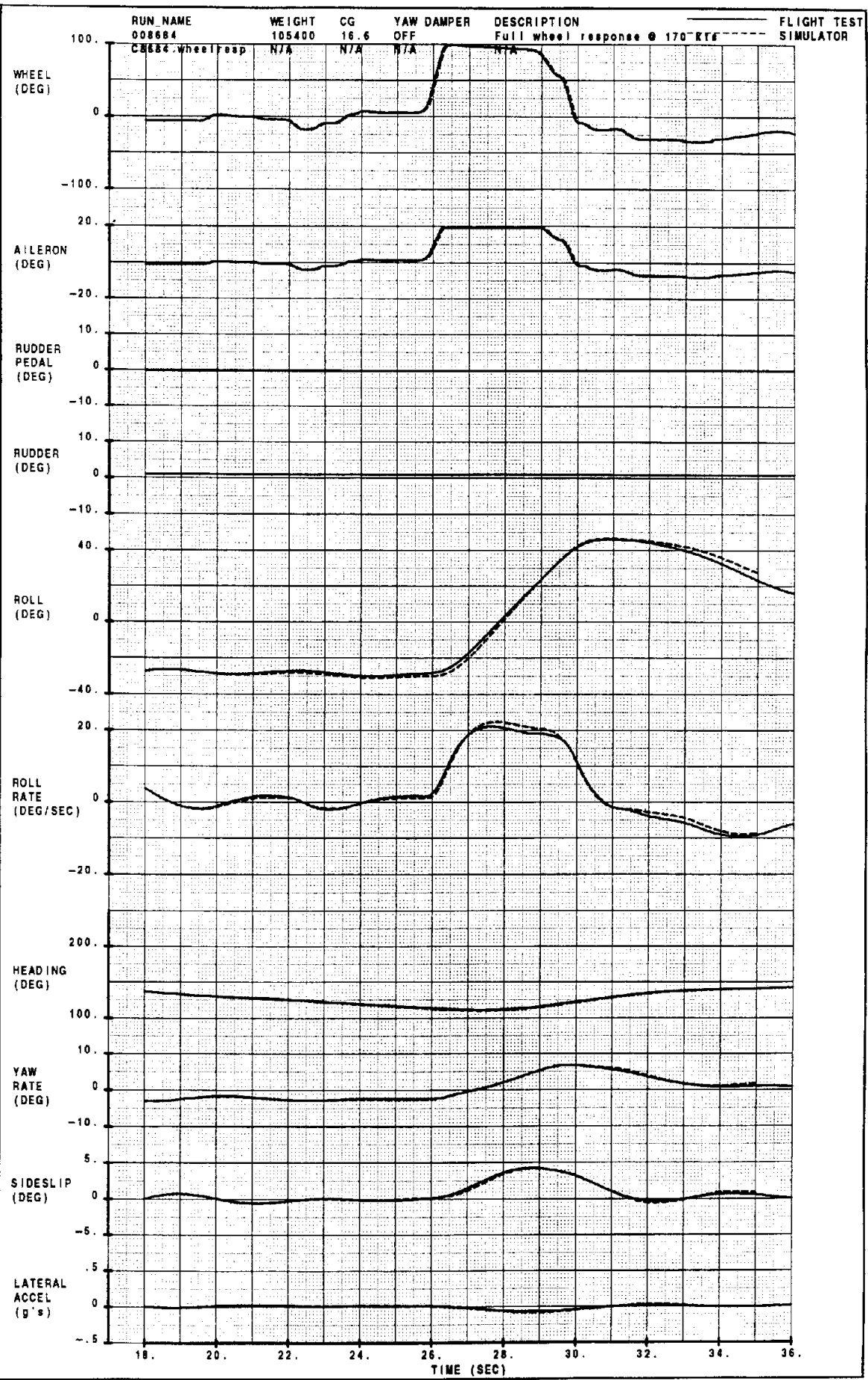


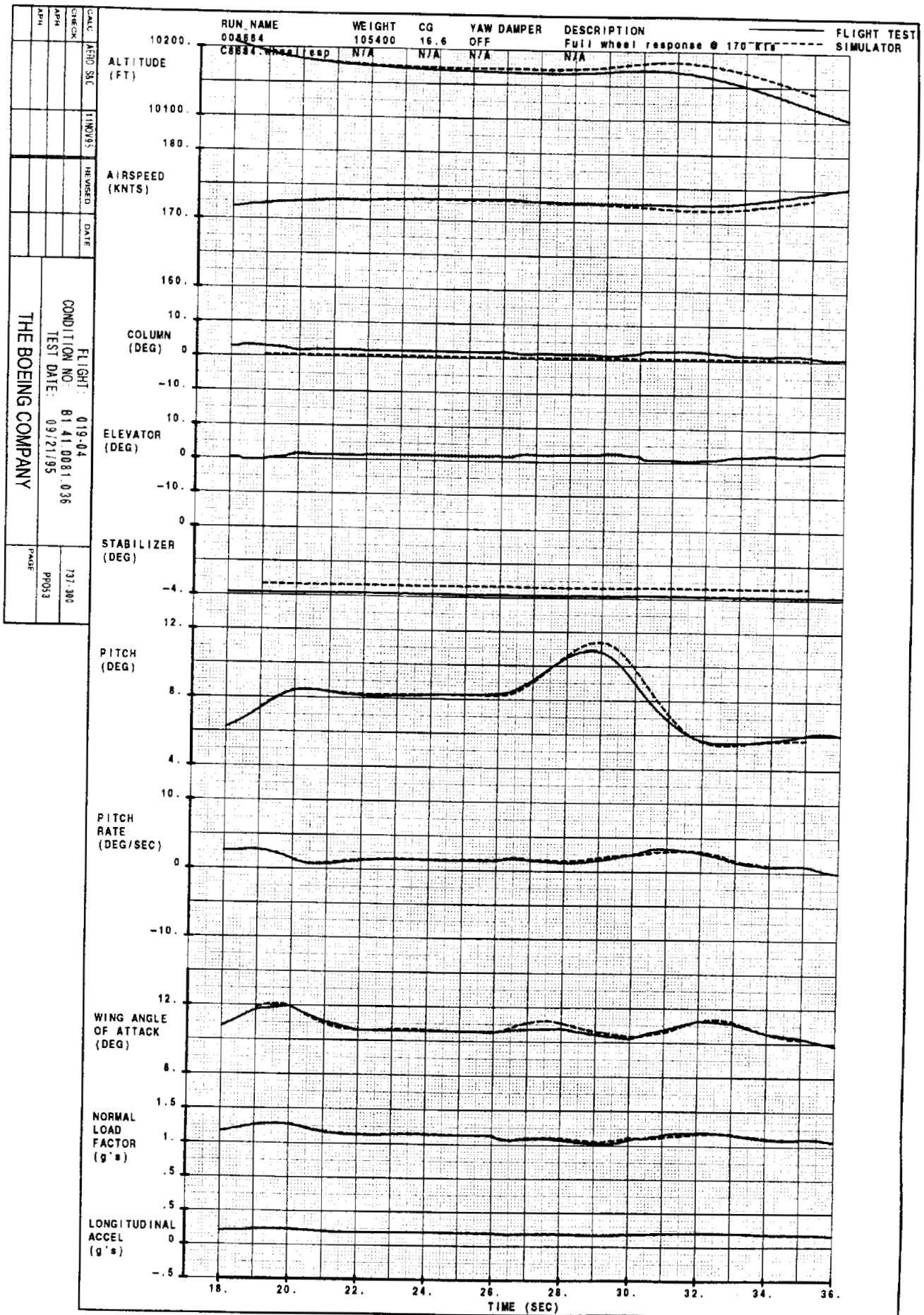


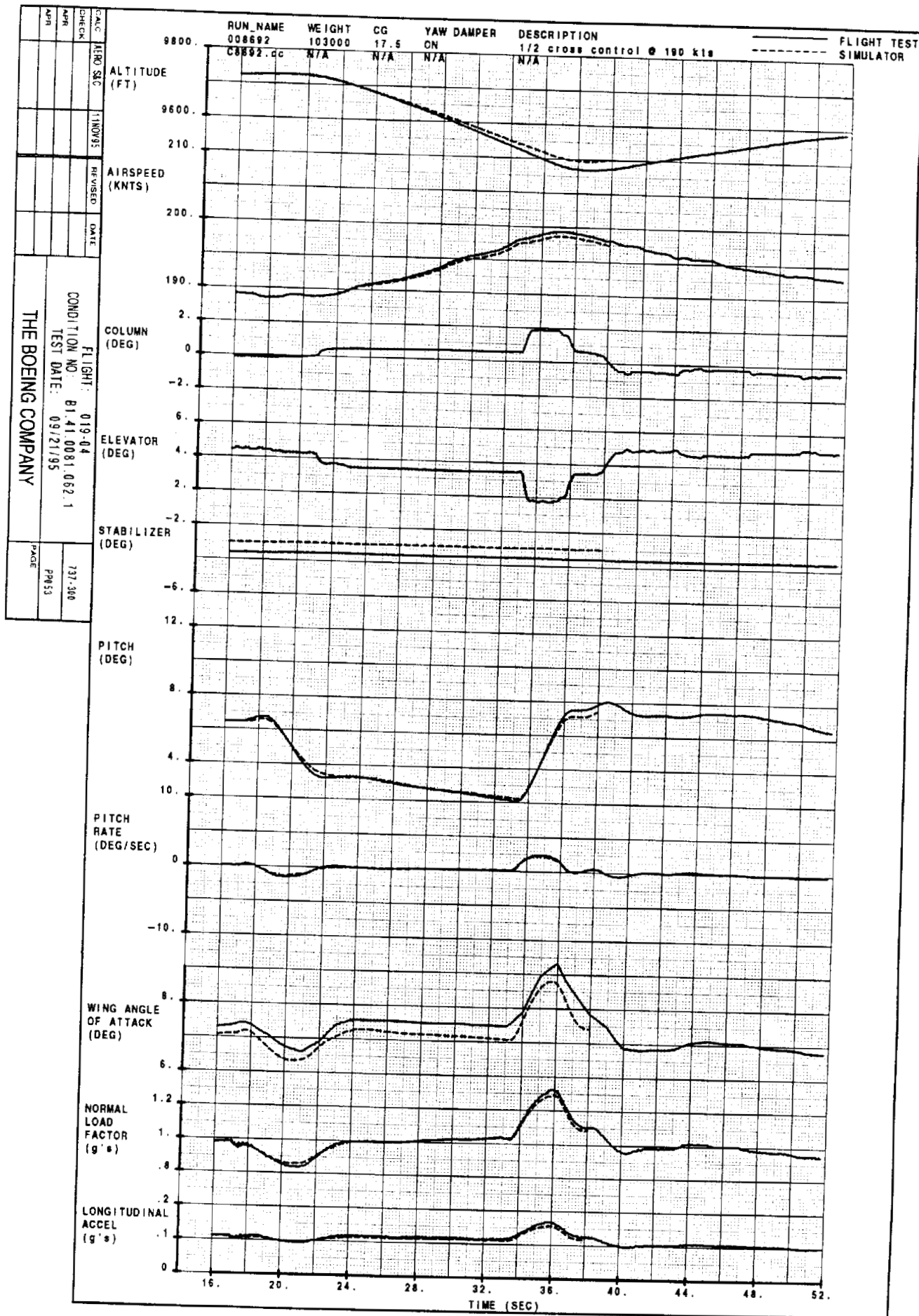
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09/21/95	019.04	10000	205	5	5	-2	12	10	10	1.5	0.2
09/21/95	022.00	9800	195	0	0	-6	8	0	10	1.0	0.0
09/21/95	025.00	9600	190	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	028.00	9400	185	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	031.00	9200	180	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	034.00	9000	175	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	037.00	8800	170	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	040.00	8600	165	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	043.00	8400	160	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	046.00	8200	155	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	049.00	8000	150	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	052.00	7800	145	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	055.00	7600	140	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	058.00	7400	135	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	061.00	7200	130	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	064.00	7000	125	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	067.00	6800	120	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	070.00	6600	115	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	073.00	6400	110	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	076.00	6200	105	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	079.00	6000	100	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	082.00	5800	95	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	085.00	5600	90	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	088.00	5400	85	-5	-5	-6	8	0	10	1.0	0.0
09/21/95	091.00	5200	80	-5	-5	-6	8	0	10	1.0	0.0

[illegible]

CALC	CHK	APR	APR	APR
MEMO	MEMO	MEMO	MEMO	MEMO
DATE	DATE	DATE	DATE	DATE
FLIGHT: 019-04 CONDITION NO: B1.41.0081.036 TEST DATE: 09/21/95 THE BOEING COMPANY PAGE: 737-300 P9853				

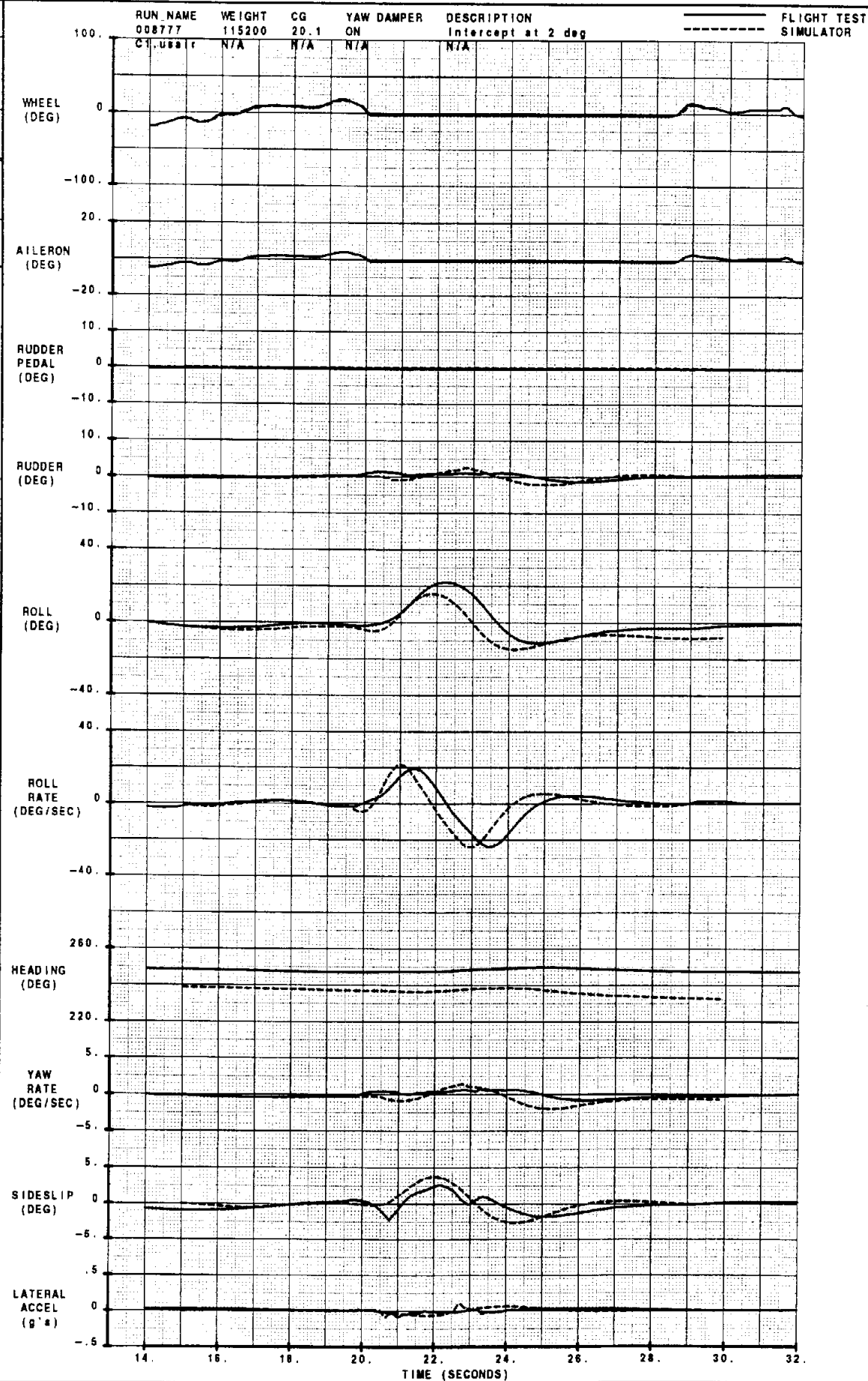


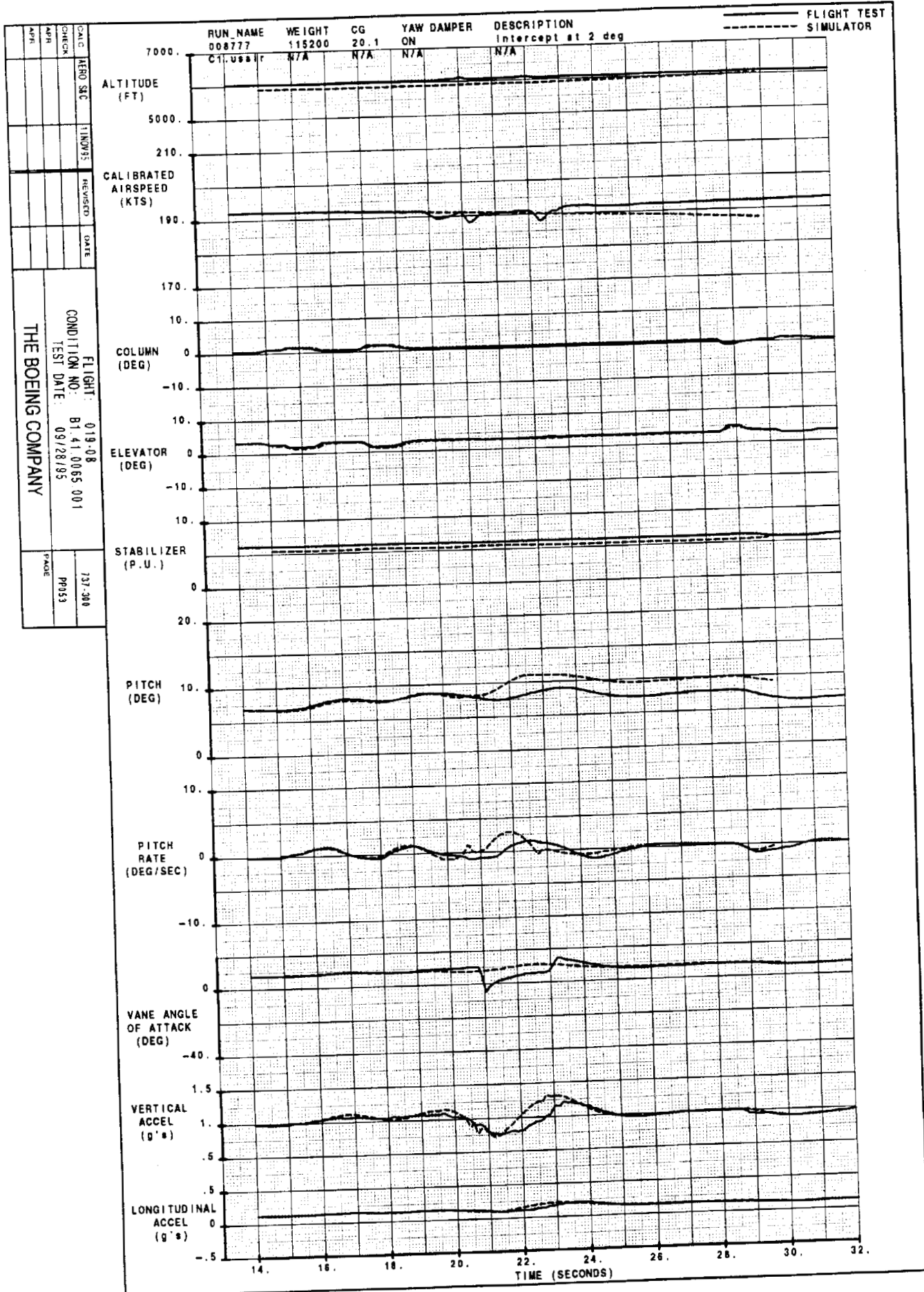




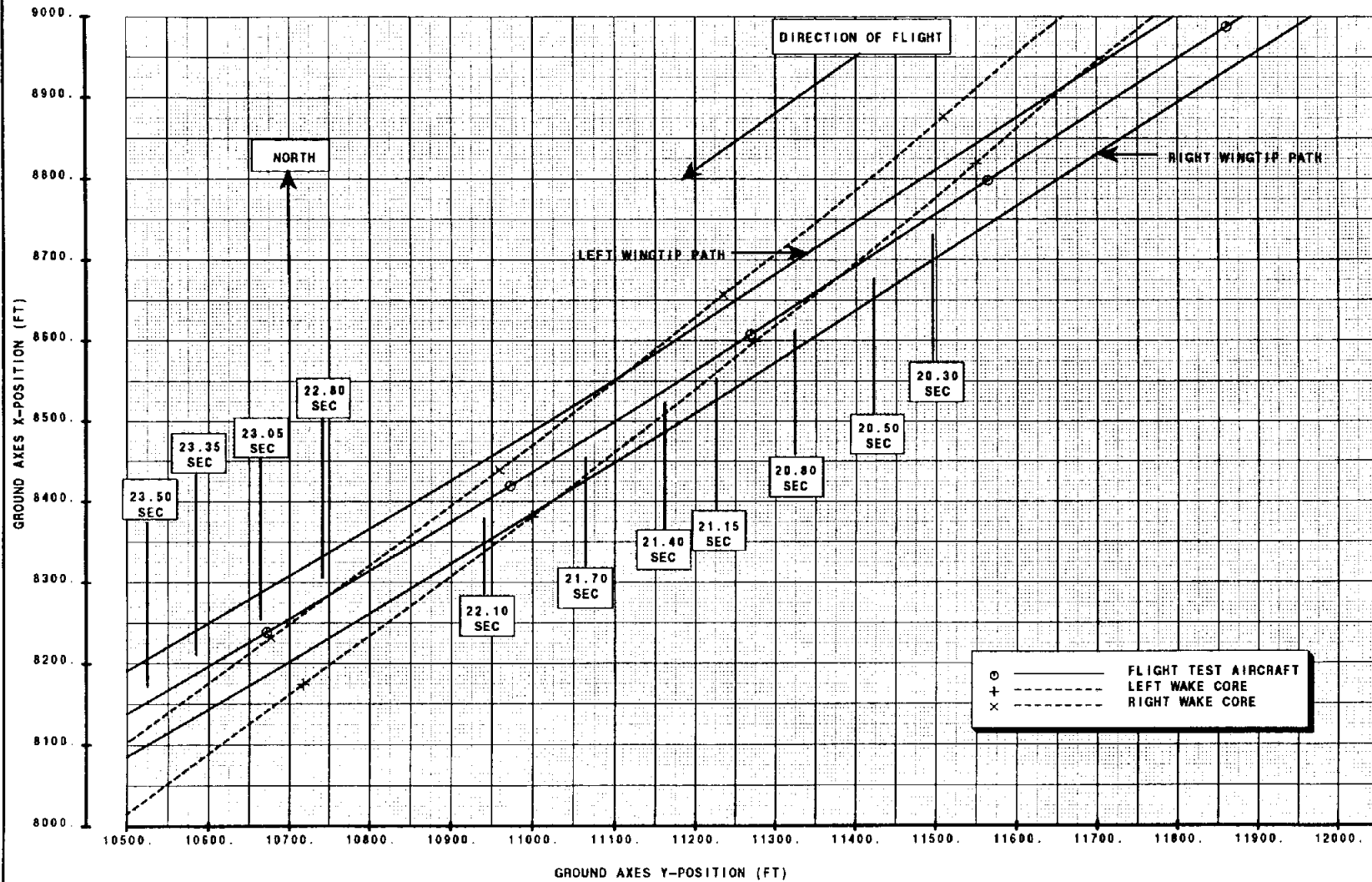
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CHECK					
APR					
APR					

FLIGHT: 019-08	
CONDITION NO: B1 41 0065 001	
TEST DATE: 09/28/95	
THE BOEING COMPANY	
737-300	PP053
PAGE	





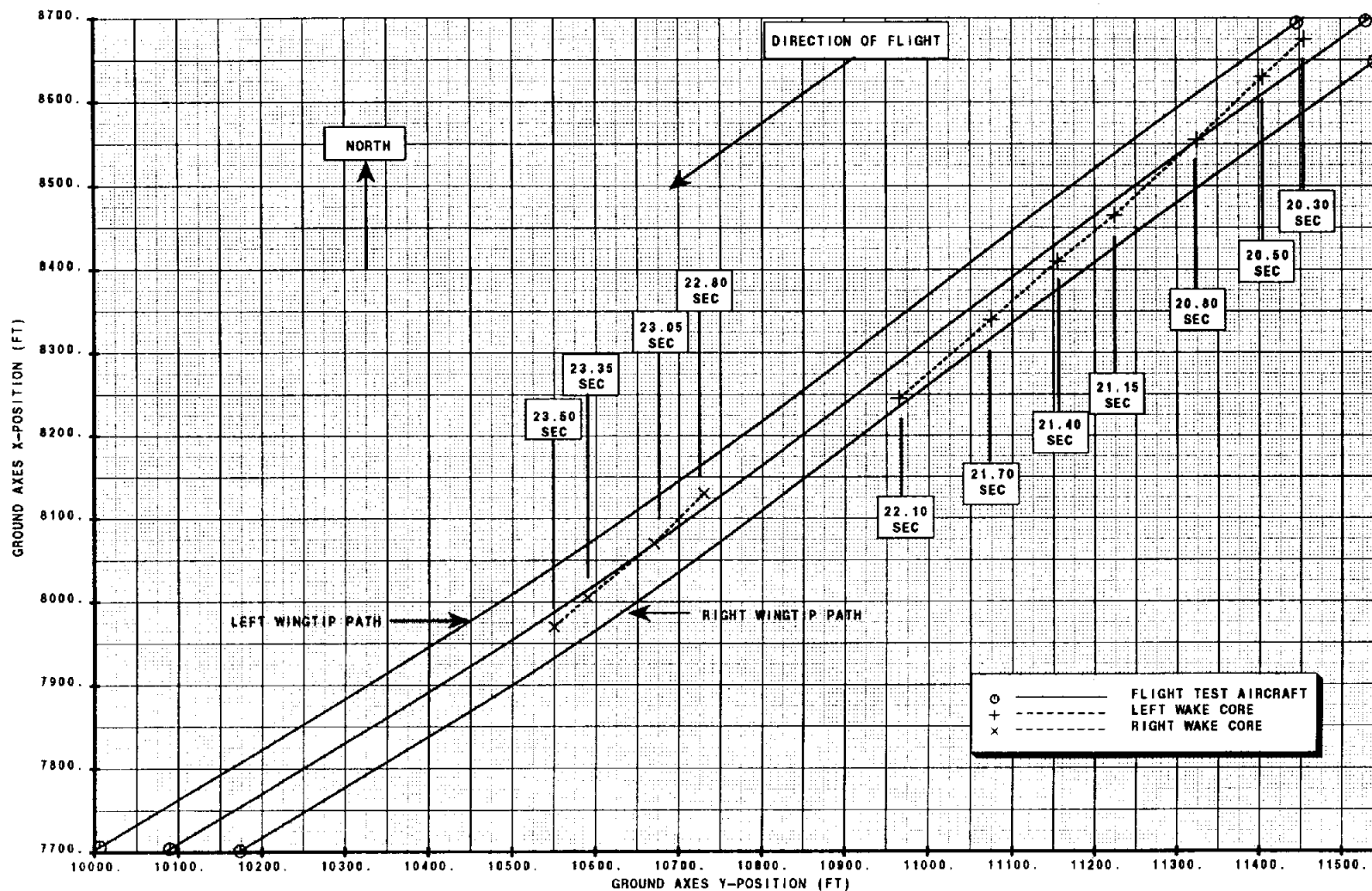
WAKE ENCOUNTER TRACK - SIMULATOR MATCH



CALC	AERO SEC	11NOV95	REVISED	DATE	FLIGHT: 019-08	PP053
CHECK					CONDITION NO. B1 41.0065 001	FIGURE
APPD					TEST DATE: 9/28/95	
APPD						
REV					PAGE	

BOEING

WAKE ENCOUNTER TRACK - FLIGHT TEST AIRCRAFT PP053



CALC	AERO SAC	11NOV95	REVISED	DATE
CHECK				
APPRO				
APPRO				

FLIGHT: 019-08
 CONDITION NO: B1.41.0065.001
 TEST DATE: 9/28/95

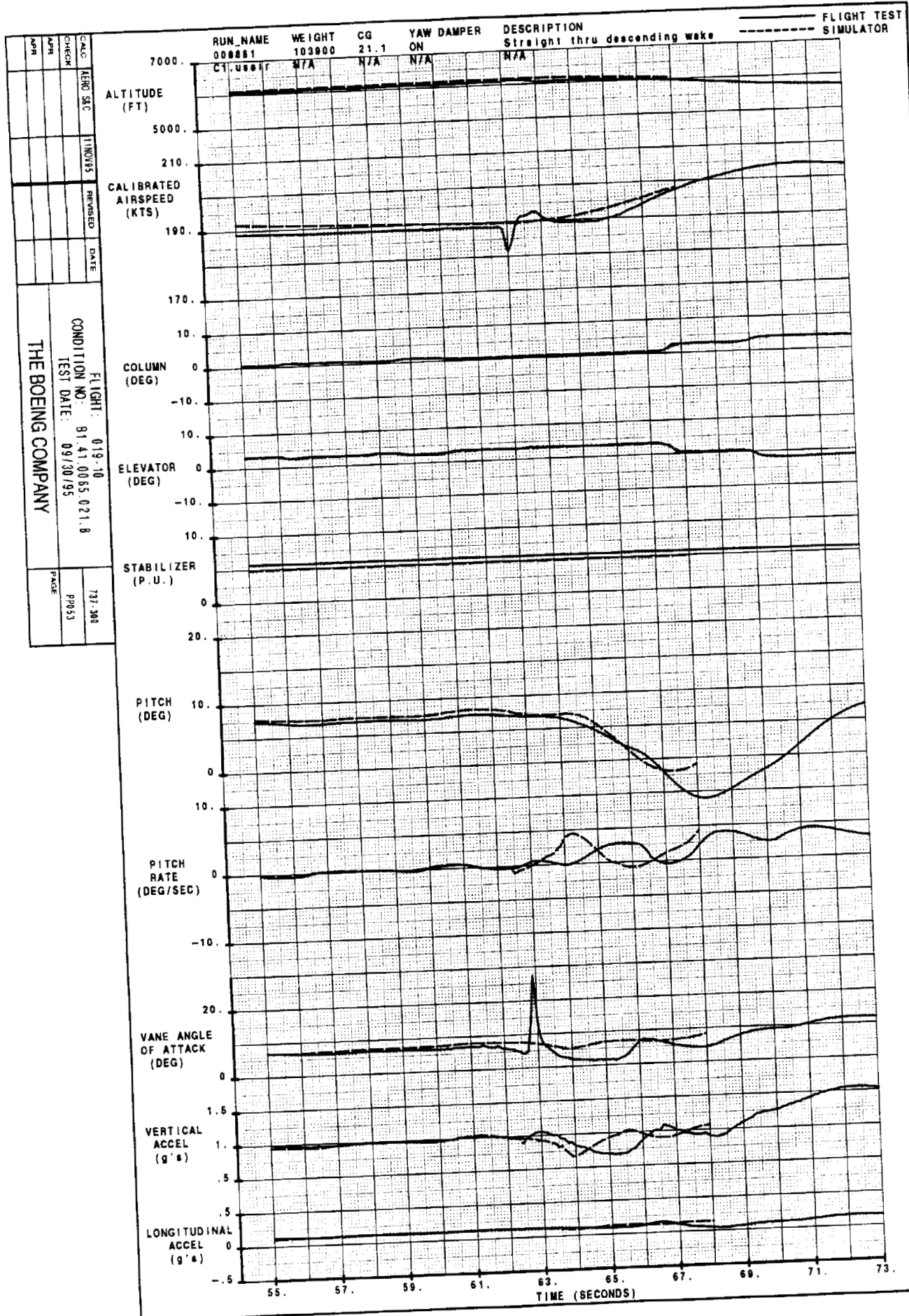
PP053

FIGURE

REV

PAGE

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TC NOV 15 '95 11:22AM PROSPERITY MORTGAGE

DATE 11/10/95

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NO. PAGES
INCLUDING
THIS PAGE

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FAX #: 703 924 0856 PHONE #: 703 924 0929

FLIGHT TEST
SIMULATOR