

RESEARCH FLIGHT REPORT

AIRCRAFT 307D PROJECT 9-760 FLT R-1 DATE 3/21/89 /JD 80
 TITLE NELSON /D.P. TYPE _____
 PILOT RAGNI CO-PILOT HEITING F/E _____ PE _____
 OBSERVER(S) COOPER, NELSON, _____ PI NELSON

Tape No.	Start Time	End Time	Elapsed Time	File of
1. <u>V52962</u>	<u>13:49:38</u>	<u>15:08:07</u>	_____	_____ / _____
2. <u>V52863</u>	<u>13:11:38</u>	<u>16:21:43</u>	_____	_____ / _____
3. _____	____:____:____	____:____:____	_____	_____ / _____
4. _____	____:____:____	____:____:____	_____	_____ / _____
5. _____	____:____:____	____:____:____	_____	_____ / _____
6. _____	____:____:____	____:____:____	_____	_____ / _____

Input Tape Discrepancies:

CALIBRATION MANEUVERS			Takeoff <u>13:57</u> Landing <u>16:22</u>	Block Out <u>13:49</u> Block In <u>16:25</u> Flt Hrs <u>2:6</u>
	Start	End		
Rvrs.Hdg.	__:__:__	__:__:__		
Pitch	__:__:__	__:__:__		
Yaw	__:__:__	__:__:__		
Speed Var	__:__:__	__:__:__		

DEPART RAMP COORDINATES		IDENTIFIER	DEST. RAMP COORDINATES		IDENTIFIER
N S39 54.8	E W105 07.1	BJC	N S39 54.8	E W105 07.1	BJC

MODE	TIME
STBY	06:20
ALIGN	06:21
READY NAV	06:36
NAV	06:37
OFF	09:27
TIME IN NAV	2:50

INU SN

663

ALIGNMENT TRUE HDG

265.0

INS DEST. READOUT		GND SPEED
N S39 56.8	E W105 06.2	01 KTS

TERMINAL ERROR		POS ERROR
N S 2.0	E W 0.9	0.7 NM/HR

Brief summary of the mission:

VERIFICATION OF CONTRAIL ONSET CONDITIONS, AND SAMPLING IN CONTRAIL.
 CRYOGENIC HYGROMETER TURNED ON LATE. CN COUNTER BAD AFTER CONTRAIL
 SAMPLING.

PROBLEMS	OPERATIONS	INSTRUMENTATION
a) Pre-launch		LEFT EGT GAUGE NG FROM TAKEOFF TO PARTLY THROUGH CLIMB.
b) Operations		
c) Discrepancies		

CALIBRATION CHANGES							
<u>Variable</u>		Channel #	<u>Sample</u>	Filter (Hz)	C1	C2	C3
Name	Unit		Rate (Hz)				

AIRCRAFT FILM LOG						
Camera Location & Roll #	Frame Rate	F Stop	Start Time	Stop Time	Remarks	

RESEARCH FLIGHT REPORT

AIRCRAFT 307D PROJECT 9-760 FLT R-2 DATE 3/22/89 /JD 81
 TITLE NELSON /D.P. TYPE _____
 PILOT RAGNI CO-PILOT HEITING F/E _____ PE _____
 OBSERVER(S) COOPER, SKINNER, PI _____ NELSON _____

Tape No.	Start Time	End Time	Elapsed Time	File of
1. <u>V52864</u>	<u>13 : 51 : 56</u>	<u>15:09 : 67</u>	_____	_____ / _____
2. <u>V52865</u>	<u>15 : 11 : 58</u>	<u>16:05 : 13</u>	_____	_____ / _____
3. _____	____:____:____	____:____:____	_____	_____ / _____
4. _____	____:____:____	____:____:____	_____	_____ / _____
5. _____	____:____:____	____:____:____	_____	_____ / _____
6. _____	____:____:____	____:____:____	_____	_____ / _____

Input Tape Discrepancies:

CALIBRATION MANEUVERS			Takeoff <u>13:54</u> Landing <u>16:22</u>	Block Out <u>13:47</u> Block In <u>16:24</u> Flt Hrs <u>2:6</u>
	Start	End		
Rvrs.Hdg.	__:__:__	__:__:__		
Pitch	__:__:__	__:__:__		
Yaw	__:__:__	__:__:__		
Speed Var	__:__:__	__:__:__		

DEPART RAMP COORDINATES		IDENTIFIER	DEST. RAMP COORDINATES		IDENTIFIER
N S39 54.8	E W105 07.1	BJC	N S39 54.8	E W105 07.1	BJC

MODE	TIME	INU SN
STBY	06:10	663
ALIGN	06:10	
READY NAV	06:25	ALIGNMENT TRUE HDG
NAV	06:27	
OFF	09:24	
TIME IN NAV	2:9	196.4

INS DEST. READOUT		GND SPEED
N S39 56.3	E W105 08.1	02 KTS
TERMINAL ERROR		POS ERROR
N S 1.5	E W 1.0	0.8 NM/HR

Brief summary of the mission:
 GOOD VERIFICATION FLIGHT SEGMENTS. SAMPLING AT VARYING DISTANCES BACK
 ON THE CONTRAST. STANDARD PROFILES.

PROBLEMS	OPERATIONS	INSTRUMENTATION
a) Pre-launch		OPHIR T "OUT-OF-CONTROL", LOOKED BAD.
b) Operations	TERMINATED VERIFICATION CLIMBS BECAUSE CIRRUS DEVELOPING IN AREA.	
c) Discrepancies		

CALIBRATION CHANGES							
Variable		Channel #	Sample	Filter (Hz)	C1	C2	C3
Name	Unit		Rate (Hz)				

AIRCRAFT FILM LOG						
Camera Location & Roll #	Frame Rate	F Stop	Start Time	Stop Time	Remarks	

RESEARCH FLIGHT REPORT

AIRCRAFT 307D PROJECT 9-760 FLT R-3 DATE 3/23/89 /JD 82
 TITLE NELSON /D.P. TYPE _____
 PILOT RAGNI CO-PILOT HEITING F/E _____ PE _____
 OBSERVER(s) COOPER, SKINNER, PI _____

Tape No.	Start Time	End Time	Elapsed Time	File of
1. _____	__:__:__	__:__:__	_____	_____/____
2. _____	__:__:__	__:__:__	_____	_____/____
3. _____	__:__:__	__:__:__	_____	_____/____
4. _____	__:__:__	__:__:__	_____	_____/____
5. _____	__:__:__	__:__:__	_____	_____/____
6. _____	__:__:__	__:__:__	_____	_____/____

Input Tape Discrepancies:

CALIBRATION MANEUVERS				
	Start	End		
Rvrs.Hdg.	__:__:__	__:__:__	Takeoff <u>13:52</u>	Block Out <u>13:47</u>
Pitch	__:__:__	__:__:__	Landing <u>16:18</u>	Block In <u>16:21</u>
Yaw	__:__:__	__:__:__		Flt Hrs <u>2:6</u>
Speed Var	__:__:__	__:__:__		

DEPART RAMP COORDINATES		IDENTIFIER	DEST. RAMP COORDINATES		IDENTIFIER
N S39 54.8	E W105 07.1	BJC	N S39 54.8	E W105 07.1	BJC

MODE	TIME	INU SN	INS DEST. READOUT	GND SPEED
STBY	06:10	663	N S39 56.6	01 KTS
ALIGN	06:11		E W105 06.1	

MODE	TIME	ALIGNMENT TRUE HDG	TERMINAL ERROR	POS ERROR
READY NAV	06:26	264.6	N S 1.8	0.7 NM/HR
NAV	06:30		E W 1.0	
OFF	09:21			
TIME IN NAV	2:51			

Brief summary of the mission:
 STANDARD "VERIFICATION" CLIMBS AND SAMPLING IN CONTRAILS. ALMOST
 CLIMBED OUT OF CONTRAIL-FORMATION LAYER.

PROBLEMS	OPERATIONS	INSTRUMENTATION
a) Pre-launch		CHANGED PMS PROBES: 300X (RIGHT WING) AND 260X (LEFT WING).
b) Operations		
c) Discrepancies		

CALIBRATION CHANGES							
<u>Variable</u>		Channel #	<u>Sample</u>	Filter (Hz)	C1	C2	C3
Name	Unit		Rate (Hz)				

AIRCRAFT FILM LOG						
Camera Location & Roll #	Frame Rate	F Stop	Start Time	Stop Time	Remarks	

RESEARCH FLIGHT REPORT

AIRCRAFT 307D PROJECT 9-760 FLT R-4 DATE 3/24/89 /JD 83
 TITLE NELSON /D.P. TYPE _____
 PILOT HEITING CO-PILOT RAGNI F/E _____ PE _____
 OBSERVER(S) COOPER, SKINNER, PI NELSON

Tape No.	Start Time	End Time	Elapsed Time	File of
1. <u>V52868</u>	<u>13:49:33</u>	<u>15:00:28</u>	_____	_____ / _____
2. _____	____:____:____	____:____:____	_____	_____ / _____
3. _____	____:____:____	____:____:____	_____	_____ / _____
4. _____	____:____:____	____:____:____	_____	_____ / _____
5. _____	____:____:____	____:____:____	_____	_____ / _____
6. _____	____:____:____	____:____:____	_____	_____ / _____

Input Tape Discrepancies:

CALIBRATION MANEUVERS			Takeoff <u>13:55</u> Landing <u>15:03</u>	Block Out <u>13:45</u> Block In <u>15:05</u> Flt Hrs <u>1:3</u>
	Start	End		
Rvrs.Hdg.	____:____:____	____:____:____		
Pitch	____:____:____	____:____:____		
Yaw	____:____:____	____:____:____		
Speed Var	____:____:____	____:____:____		

DEPART RAMP COORDINATES

N S39 54.8	E W105 07.1
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IDENTIFIER

BJC

DEST. RAMP COORDINATES

N S39 54.8	E W105 07.1
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IDENTIFIER

BJC

INS DEST. READOUT

N S39 55.3	E W105 08.4
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GND SPEED

1	KTS
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MODE	TIME
STBY	06:16
ALIGN	06:17
READY NAV	06:32
NAV	06:32
OFF	9:05
TIME IN NAV	2:33

INU SN

663

ALIGNMENT TRUE HDG

188.4

TERMINAL ERROR

N S	.5	E W	1.3
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POS ERROR

0.4	NM/HR
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Brief summary of the mission:
 SHORT VERIFICATION FLIGHT SEGMENT.

PROBLEMS	OPERATIONS	INSTRUMENTATION
a) Pre-launch		OPHIR OUT-OF-CONTROL, NOT USABLE?
b) Operations	BOOST PUMP FAILURE CAUSED FLIGHT TO BE ENDED EARLY.	
c) Discrepancies		

CALIBRATION CHANGES							
<u>Variable</u>		Channel #	<u>Sample</u>	Filter (Hz)	C1	C2	C3
Name	Unit		Rate (Hz)				

AIRCRAFT FILM LOG						
Camera Location & Roll #	Frame Rate	F Stop	Start Time	Stop Time	Remarks	

RESEARCH FLIGHT REPORT

AIRCRAFT 307D PROJECT 9-760 FLT 5 DATE 4/10/89 /JD 100
 TITLE OPHIR /D.P. TYPE _____
 PILOT RAGNI CO-PILOT HEITING F/E _____ PE _____
 OBSERVER(S) COOPER, SKINNER, PI _____

Tape No.	Start Time	End Time	Elapsed Time	File of
1. <u>V52869</u>	<u>16:56:24</u>	<u>18:14:57</u>	_____	_____ / _____
2. <u>V52870</u>	<u>18:17:26</u>	<u>19:14:43</u>	_____	_____ / _____
3. _____	____:____:____	____:____:____	_____	_____ / _____
4. _____	____:____:____	____:____:____	_____	_____ / _____
5. _____	____:____:____	____:____:____	_____	_____ / _____
6. _____	____:____:____	____:____:____	_____	_____ / _____

Input Tape Discrepancies:

CALIBRATION MANEUVERS				
	Start	End		
Rvrs.Hdg.	__:__:__	__:__:__	Takeoff <u>16:58</u>	Block Out <u>16:52</u>
Pitch	__:__:__	__:__:__	Landing <u>19:23</u>	Block In <u>19:25</u>
Yaw	__:__:__	__:__:__		Flt Hrs <u>2:6</u>
Speed Var	__:__:__	__:__:__		

DEPART RAMP COORDINATES IDENTIFIER DEST. RAMP COORDINATES IDENTIFIER

N S39 54.8	E W105 07.1
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BJC

N S39 54.8	E W105 07.1
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BJC

INS DEST. READOUT

GND SPEED

MODE	TIME
STBY	10:31
ALIGN	10:31
READY NAV	10:46
NAV	10:46
OFF	13:25
TIME IN NAV	2:59

INU SN

663

N S39 56.6	E W105 08.3
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02 KTS

TERMINAL ERROR

POS ERROR

N S 1.8	E W 1.2
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0.8 NM/HR

ALIGNMENT TRUE HDG

196.3

Brief summary of the mission:
 STANDARD (VERIFICATION & PLUME SAMPLING) EXCEPT FLOWN LATER IN THE
 DAY THAN DESIRED.

PROBLEMS	OPERATIONS	INSTRUMENTATION
a) Pre-launch		NEW RADIOMETRIC THERMOMETER, CHANGED LYMAN-ALPHA GAP TO 1 CM, MODIFIED ICE SAMPLING ROD FROM 1 CM TO 1/2 CM WIDTH.
b) Operations		
c) Discrepancies SLIDES EXPOSED INCORRECTLY, NG		

CALIBRATION CHANGES							
Variable		Channel #	Sample	Filter (Hz)	C1	C2	C3
Name	Unit		Rate (Hz)				

AIRCRAFT FILM LOG						
Camera Location & Roll #	Frame Rate	F Stop	Start Time	Stop Time	Remarks	

RESEARCH FLIGHT REPORT

AIRCRAFT 307D PROJECT 9-760 FLT R-6 DATE 4/11/89 /JD
 TITLE NELSON /D.P. TYPE _____
 PILOT HEITING CO-PILOT RAGNI F/E _____ PE _____
 OBSERVER(s) COOPER , _____ , _____ PI NELSON

Tape No.	Start Time	End Time	Elapsed Time	File of
1. <u>V52871</u>	<u>12:50 : 43</u>	<u>14:08 : 30</u>	_____	_____/____
2. <u>V52872</u>	<u>14:10 : 57</u>	<u>15:16 : 38</u>	_____	_____/____
3. _____	____:____:____	____:____:____	_____	_____/____
4. _____	____:____:____	____:____:____	_____	_____/____
5. _____	____:____:____	____:____:____	_____	_____/____
6. _____	____:____:____	____:____:____	_____	_____/____

Input Tape Discrepancies:

CALIBRATION MANEUVERS				
	Start	End		
Rvrs.Hdg.	__:__:__	__:__:__	Takeoff <u>12:53</u>	Block Out <u>12:48</u>
Pitch	__:__:__	__:__:__	Landing <u>15:21</u>	Block In <u>15:22</u>
Yaw	__:__:__	__:__:__		Flt Hrs <u>2:6</u>
Speed Var	__:__:__	__:__:__		

DEPART RAMP COORDINATES		IDENTIFIER	DEST. RAMP COORDINATES		IDENTIFIER
N S39 54.8	E W105 07.1	BJC	N S39 54.8	E W105 07.1	BJC

INS DEST. READOUT		GND SPEED
N S39 56.3	E W105 06.6	2 KTS

MODE	TIME	INU SN
STBY	06:18	663
ALIGN	06:19	
READY NAV	06:34	ALIGNMENT TRUE HDG
NAV	06:35	
OFF	09:23	
TIME IN NAV	2:48	

TERMINAL ERROR		POS ERROR
N S 1.5	E W .5	0.6 NM/HR

Brief summary of the mission:
 GOOD, STANDARD-PROFILE MISSION. SOME HUMIDITY VARIATIONS; GOOD CASE TO EXAMINE FOR DEPENDENCE OF CONTRAIL FORMATION ON HUMIDITY.

PROBLEMS	OPERATIONS	INSTRUMENTATION
a) Pre-launch		OPHIR T. LOCKED ON SINGLE VALUE THROUGH-OUT FLIGHT.
b) Operations	UNABLE TO GET UPPER ALTITUDES FOR CONTINUED VERIFICATION RUNS. SLIDES EXPOSED	
c) Discrepancies	INCORRECTLY.	

CALIBRATION CHANGES							
<u>Variable</u>		Channel #	<u>Sample</u>	Filter (Hz)	C1	C2	C3
Name	Unit		Rate (Hz)				

AIRCRAFT FILM LOG						
Camera Location & Roll #	Frame Rate	F Stop	Start Time	Stop Time	Remarks	

RESEARCH FLIGHT REPORT

AIRCRAFT 307D PROJECT 9-760 FLT R-7 DATE 4/12/89 /JD 102
 TITLE NELSON /D.P. TYPE _____
 PILOT RAGNI CO-PILOT HEITING F/E _____ PE _____
 OBSERVER(s) COOPER, SKINNER, PI _____

Tape No.	Start Time	End Time	Elapsed Time	File of
1. <u>V52882</u>	<u>12: 51: 13</u>	<u>14:09 :46</u>	_____	_____/____
2. <u>V52883</u>	<u>14: 12: 33</u>	<u>15:12 :32</u>	_____	_____/____
3. _____	____:____:____	____:____:____	_____	_____/____
4. _____	____:____:____	____:____:____	_____	_____/____
5. _____	____:____:____	____:____:____	_____	_____/____
6. _____	____:____:____	____:____:____	_____	_____/____

Input Tape Discrepancies:

CALIBRATION MANEUVERS			Takeoff <u>12:54</u>	Block Out <u>12:46</u>
	Start	End		
Rvrs.Hdg.	__:__:__	__:__:__	Landing <u>15:20</u>	Block In <u>15:22</u>
Pitch	__:__:__	__:__:__		Flt Hrs <u>2:6</u>
Yaw	__:__:__	__:__:__		
Speed Var	__:__:__	__:__:__		

DEPART RAMP COORDINATES		IDENTIFIER	DEST. RAMP COORDINATES		IDENTIFIER
N S39 54.8	E W105 07.1	BJC	N S39 54.8	E W105 07.1	BJC

MODE	TIME
STBY	06:22
ALIGN	06:22
READY NAV	06:37
NAV	06:37
OFF	09:22
TIME IN NAV	2:55

INU SN
663

ALIGNMENT TRUE HDG
186.2

INS DEST. READOUT		GND SPEED
N S39 55.4	E W105 09.1	01 KTS

TERMINAL ERROR		POS ERROR
N S .4	E W 2.0	0.6 NM/HR

Brief summary of the mission:
 STANDARD PROFILE MISSION. SOME POWER EFFECTS SEEN.

PROBLEMS	OPERATIONS	INSTRUMENTATION
a) Pre-launch		OPHIR THERMOMETER IN CONTROL MODE UNTIL 1450
b) Operations		
c) Discrepancies SLIDES EXPOSED INCORRECTLY.		

CALIBRATION CHANGES							
<u>Variable</u>		Channel #	<u>Sample</u>	Filter (Hz)	C1	C2	C3
Name	Unit		Rate (Hz)				

AIRCRAFT FILM LOG						
Camera Location & Roll #	Frame Rate	F Stop	Start Time	Stop Time	Remarks	

RESEARCH FLIGHT REPORT

AIRCRAFT 307D PROJECT 9-760 FLT R-8 DATE 4/12/89 /JD 102
 TITLE OPHIR /D.P. TYPE _____
 PILOT HEITING CO-PILOT RAGNI F/E _____ PE _____
 OBSERVER(S) COOPER, FREDRICK, _____ PI NELSON

Tape No.	Start Time	End Time	Elapsed Time	File of
1. <u>V52884</u>	<u>16:23 : 04</u>	<u>17:02 : 07</u>	_____	_____/____
2. _____	____:____:____	____:____:____	_____	_____/____
3. _____	____:____:____	____:____:____	_____	_____/____
4. _____	____:____:____	____:____:____	_____	_____/____
5. _____	____:____:____	____:____:____	_____	_____/____
6. _____	____:____:____	____:____:____	_____	_____/____

Input Tape Discrepancies:

CALIBRATION MANEUVERS			Takeoff <u>16:22</u> Landing <u>17:03</u>	Block Out <u>16:18</u> Block In <u>17:07</u> Flt Hrs <u>0:8</u>
	Start	End		
Rvrs.Hdg.	__:__:__	__:__:__		
Pitch	__:__:__	__:__:__		
Yaw	__:__:__	__:__:__		
Speed Var	__:__:__	__:__:__		

DEPART RAMP COORDINATES		IDENTIFIER	DEST. RAMP COORDINATES		IDENTIFIER
N S39 54.8	E W105 07.1	BJC	N S39 54.8	E W105 07.1	BJC

MODE	TIME
STBY	09:56
ALIGN	09:56
READY NAV	10:11
NAV	10:12
OFF	11:07
TIME IN NAV	1:25

INU SN
 663
 ALIGNMENT
 TRUE HDG
 202.6

INS DEST. READOUT		GND SPEED
N S39 55.9	E W105 07.4	2 KTS

TERMINAL ERROR		POS ERROR
N S 1.1	E W .3	0.8 NM/HR

Brief summary of the mission:
 SPECIAL FLIGHT TO MAKE PASSES NEAR THE BASES OF SMALL CUMULUS CLOUDS,
 TO CHECK THAT PMS PROBES ARE WORKING PROPERLY. LEARJET NOT PRESENT
 ON THIS FLIGHT.

PROBLEMS	OPERATIONS	INSTRUMENTATION
a) Pre-launch		
b) Operations		
c) Discrepancies		

CALIBRATION CHANGES							
<u>Variable</u>		Channel #	<u>Sample</u>		C1	C2	C3
Name	Unit		Rate (Hz)	Filter (Hz)			

AIRCRAFT FILM LOG						
Camera Location & Roll #	Frame Rate	F Stop	Start Time	Stop Time	Remarks	

RESEARCH FLIGHT REPORT

AIRCRAFT 307D PROJECT 9-760 FLT R-9 DATE 4/13/89 /JD 103
 TITLE OPHIR /D.P. TYPE _____
 PILOT RAGNI CO-PILOT HEITING F/E _____ PE _____
 OBSERVER(S) COOPER, TWOHY, _____ PI _____

Tape No.	Start Time	End Time	Elapsed Time	File of
1. <u>V52885</u>	<u>12:52:00</u>	<u>14:10:39</u>	_____	_____
2. <u>V56067</u>	<u>14:13:30</u>	<u>15:15:03</u>	_____	_____
3. _____	____:____:____	____:____:____	_____	_____
4. _____	____:____:____	____:____:____	_____	_____
5. _____	____:____:____	____:____:____	_____	_____
6. _____	____:____:____	____:____:____	_____	_____

Input Tape Discrepancies: _____

CALIBRATION MANEUVERS			Takeoff <u>12:55</u> Landing <u>15:22</u>	Block Out <u>12:48</u> Block In <u>15:23</u> Flt Hrs <u>2:6</u>
	Start	End		
Rvrs.Hdg.	__:__:__	__:__:__		
Pitch	__:__:__	__:__:__		
Yaw	__:__:__	__:__:__		
Speed Var	__:__:__	__:__:__		

DEPART RAMP COORDINATES

N S39 54.8	E W105 07.1
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IDENTIFIER

BJC

DEST. RAMP COORDINATES

N S39 54.8	E W105 07.1
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IDENTIFIER

BJC

MODE	TIME
STBY	06:22
ALIGN	06:22
READY NAV	06:37
NAV	06:37
OFF	09:23
TIME IN NAV	2:46

INU SN

663

ALIGNMENT TRUE HDG

268.4

INS DEST. READOUT

N S39 57.0	E W105 06.4
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GND SPEED

02	KTS
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TERMINAL ERROR

N S 3.2	E W .7
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POS ERROR

0.8	NM/HR
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Brief summary of the mission:
 STANDARD PROFILE BUT EMPHASIZING SLIDE COLLECTIONS. GOOD SET OF SLIDES.

PROBLEMS	OPERATIONS	INSTRUMENTATION
a) Pre-launch		
b) Operations		
c) Discrepancies SLIDES OKAY.		

CALIBRATION CHANGES							
Variable		Channel #	Sample	Filter (Hz)	C1	C2	C3
Name	Unit		Rate (Hz)				

AIRCRAFT FILM LOG						
Camera Location & Roll #	Frame Rate	F Stop	Start Time	Stop Time	Remarks	

RESEARCH FLIGHT REPORT

AIRCRAFT 307D PROJECT 9-760 FLT R-10 DATE 4/14/89 /JD 104
 TITLE OPHIR /D.P. TYPE _____
 PILOT HEITING CO-PILOT RAGNI F/E _____ PE _____
 OBSERVER(s) COOPER , _____ , _____ PI NELSON

Tape No.	Start Time	End Time	Elapsed Time	File of
1. <u>V56068</u>	<u>12:46 : 50</u>	<u>13:59 : 49</u>	_____	_____ / _____
2. <u>V56069</u>	<u>14:02 : 36</u>	<u>14:59 : 57</u>	_____	_____ / _____
3. _____	____:____:____	____:____:____	_____	_____ / _____
4. _____	____:____:____	____:____:____	_____	_____ / _____
5. _____	____:____:____	____:____:____	_____	_____ / _____
6. _____	____:____:____	____:____:____	_____	_____ / _____

Input Tape Discrepancies:

CALIBRATION MANEUVERS			Takeoff <u>12:48</u> Landing <u>15:08</u>	Block Out <u>12:42</u> Block In <u>15:10</u> Flt Hrs <u>2:5</u>
	Start	End		
Rvrs.Hdg.	__:__:__	__:__:__		
Pitch	__:__:__	__:__:__		
Yaw	__:__:__	__:__:__		
Speed Var	<u>14:28:__</u>	<u>14:52:__</u>		

DEPART RAMP COORDINATES		IDENTIFIER	DEST. RAMP COORDINATES		IDENTIFIER
N S39 54.8	E W105 07.1	BJC	N S39 54.8	E W105 07.1	BJC

MODE	TIME	INU SN
STBY	06:21	663
ALIGN	06:21	
READY NAV	06:36	
NAV	06:37	
OFF	09:10	
TIME IN NAV	2:33	193.7

ALIGNMENT TRUE HDG

INS DEST. READOUT		GND SPEED
N S39 55.4	E W105 08.9	1 KTS

TERMINAL ERROR		POS ERROR
N S .6	E W 1.8	0.6 NM/HR

Brief summary of the mission:
 STANDARD FLIGHT PATTERN, THEN SET AT HIGH-ALTITUDE SPEED RUNS.

PROBLEMS	OPERATIONS	INSTRUMENTATION
a) Pre-launch		
b) Operations		
c) Discrepancies		

CALIBRATION CHANGES							
<u>Variable</u>		Channel #	<u>Sample</u>	Filter (Hz)	C1	C2	C3
Name	Unit		Rate (Hz)				

AIRCRAFT FILM LOG						
Camera Location & Roll #	Frame Rate	F Stop	Start Time	Stop Time	Remarks	

RESEARCH FLIGHT REPORT

AIRCRAFT 307D PROJECT 9-760 FLT R-11 DATE 4/20/89 /JD 110
 TITLE OPHIR /D.P. TYPE _____
 PILOT RAGNI CO-PILOT SUMMERS F/E _____ PE _____
 OBSERVER(S) COOPER, MILLER, PI NELSON

Tape No.	Start Time	End Time	Elapsed Time	File of
1. <u>V52886</u>	<u>15:07:47</u>	<u>15:56:10</u>	_____	_____/____
2. _____	____:____:____	____:____:____	_____	_____/____
3. _____	____:____:____	____:____:____	_____	_____/____
4. _____	____:____:____	____:____:____	_____	_____/____
5. _____	____:____:____	____:____:____	_____	_____/____
6. _____	____:____:____	____:____:____	_____	_____/____

Input Tape Discrepancies:

CALIBRATION MANEUVERS			Takeoff <u>09:08</u> Landing <u>10:02</u>	Block Out <u>09:04</u> Block In <u>10:04</u> Flt Hrs <u>1:00</u> 1.0
	Start	End		
Rvrs.Hdg.	____:____:____	____:____:____		
Pitch	____:____:____	____:____:____		
Yaw	____:____:____	____:____:____		
Speed Var	____:____:____	____:____:____		

DEPART RAMP COORDINATES		IDENTIFIER	DEST. RAMP COORDINATES		IDENTIFIER
N S39 54.8	E W .8	BJC	N S39 54.8	E W105 07.1	BJC

MODE	TIME
STBY	08:38
ALIGN	08:38
READY NAV	08:53
NAV	08:55
OFF	10:04
TIME IN NAV	1:09

INU SN

663

ALIGNMENT TRUE HDG

206.9

INS DEST. READOUT		GND SPEED
N S39 55.2	E W105 07.7	002 KTS

TERMINAL ERROR		POS ERROR
N S .5	E W .6	0.6 NM/HR

Brief summary of the mission:

CLOUD PASSES N.W. DEN. 313 DEGREES RADIAL APROX. 30-50 DME.
 SET OF IMPACTOR SLIDES COLLECTED IN WATER CLOUDS. ALSO,
 WAVE-CLOUD PASSES. LEARJET NOT PRESENT.

PROBLEMS	OPERATIONS	INSTRUMENTATION
a) Pre-launch	NONE	
b) Operations	NONE	
c) Discrepancies	NONE	

CALIBRATION CHANGES							
Variable		Channel #	Sample	Filter (Hz)	C1	C2	C3
Name	Unit		Rate (Hz)				

AIRCRAFT FILM LOG						
Camera Location & Roll #	Frame Rate	F Stop	Start Time	Stop Time	Remarks	