

17751028A1 - FDIR

RFF - 1 WORK FORM (8-72)		U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION RESEARCH FLIGHT FACILITY MIAMI, FLORIDA		FLIGHT ID 751028A	
				AIRCRAFT N6539C	
				FLIGHT NO. 37-76	
				DATE OCT. 28, 1975	
FLIGHT SUMMARY					
TAKE OFF (CITY OR AIRPORT) MIAMI		LAND (CITY OR AIRPORT) MIAMI		ALTITUDE(S) 1500-14000-14000	
PURPOSE CALIBRATION & COMPARISON NH EML H.G.					
PROPOSED TAKEOFF TIME: 1615			PROPOSED FLIGHT DURATION: 5+0		
TIME OUT: 1615		TIME IN: 2110		BLOCK TIME: 4:55	
TIME OFF: 1631		TIME ON: 2106		FLIGHT TIME: 4:35	
PROPOSED PATTERN 4 PASSES THRU RAIN SHAFTS AT 1500' 6 PASSES THRU CLOUD AT 14000' 4 PASSES THRU CLOUD AT 18000' WITH 41C ALTERNATING LEAD. INTER COMPARISON AND WIND CALIBRATIONS					
ACTUAL PATTERN AS PLANNED EVENT #3 SIGNIFIES IN CLOUD.					
FLIGHT PERSONNEL					
OPERATIONS CREW		SCIENTIFIC CREW		VISITORS	
TURNER		MICHIE		LEWIS	LOPEZ
SALADIN		FENHILL	DUGRAND	JORGENSEN	TRUE
HATCH		CALVERT		DELGADO	
FLEURY		NORIMOTO		RICE	
REMARKS: "L" SIDE CAM. JAMMED 1826 TAS? OK 1830 (FROM ICE OR RAIN) TAS FREEZING UP IN CLOUD, TAKES A COUPLE OF MINS. TO COME UP. TAS NO GOOD AT 10000'					

☐ USE REVERSE SIDE FOR ADDITIONAL REMARKS AS NECESSARY.

751028A

(390)170908 = 170900 (410)

INTERCOMPARISON																
START	END	LA	LO	PA	RA	T	Td	DD	FF							
165900	170200			1167		25.6	16.6	203	18.8	39	LEAD					
171000	171300			1259		24.0	17.8	161	20.8	41	"					
END #3																
ON OFF																
171624	171651	RAIN SHAFT		1398	①											
172020	172047	"		1416	②											
172713	172806	"		1350	③											
173311	173443	"		1391	④											
180657	180722	CLOUD ①		11916	⑤											
181154	181218	"		11831	⑥											
181842	181900	"		11903	⑦											
182521	182603	NEW " ②		11995	⑧											
183116	183210	SAME " ①		12098	⑨											
183630	183705	" " ①		11961	⑩											
190538	190631	NEW " ③		18114	⑪											
191300	191336	SAME " ①		18030	⑫											
192009	192058	NEW " ④		18104	⑬											
192458	192533	SAME " ①		18123	⑭											
INTERCOMPARISON																
193509	193809			18097		-5.1	-12.7	355	23	39	LEAD					
194009	194309			18140		-6.3	-11.8	352	24	41	"					
WIND		"L" 'S														
195230	195330	180						012	41							
195515	195615	360						153	44							
195730	195830	090						256	25							
200015	200115	270						085	48							
200215	200315	180						009	37							
200500	200600	360						153	39							
200715	200815	090						256	27							
200945	201045	270						082	47							

RFF - 2 WORK FORM (8 - 72)						U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION RESEARCH FLIGHT FACILITY MIAMI, FLORIDA						FLIGHT ID 751028A					
FLIGHT DIRECTOR'S INFLIGHT DATA LOG												DATE OCT. 28, 1975					

T.A.S. SET.	G.S. SET.	D.A. SET.	I.R.H. DRY PT. (T/O)	I.R.H. TEMP. (T/O)	TIME	I.R.H. TEMP. (LAND)	TIME

A/C	T/O	TIME	PRESSURE	TEMPERATURE	DEW POINT	WIND
		1630	1015.7	30.4	22.7	
WX	STN.	160000	1018.3	84	73	090.14
A/C	LAND	2106	1014.1	29.8	22.1	
WX	STN.	2030	29.945	83	73	110 13

HOURLY INFLIGHT DIGITAL DATA STATUS												
ITEM \ HOUR	1	2	3	4	5	6	7	8	9	10	11	12
TIME (CHECK)	1630	1730	1830	1930	2030							
AMBIENT PRESSURE	✓	✓	✓	✓	✓							
RADAR ALTITUDE	✓	✓	✓	✓	✓							
TRUE AIR SPEED	✓	✓	✗	✗	✗							
MAG. HEADING	✓	✓	✓	✓	✓							
D.T.C.												
DRIFT ANGLE	✓	✓	✓	✓	✓							
WIND	✓	✓	✗	✗	✗							
TEMPERATURE (VORTEX)												
LONGITUDE	✓	✓	✓	✓	✓							
LATITUDE	✓	✓	✓	✓	✓							
I.R.H.												
DIFFERENTIAL PRESSURE	✓	✓	✗	✗	✗							
J.W. LIQUID WATER	✓	✓	✓	✓	✓							
VARIATION												
TEMPERATURE (RSMNT.)	✓	✓	✓	✓	✓							
C.S.I. DEWPOINT	✓	✓	✓	✓	✓							
I.R. SFC. TEMP.	✗	✓	✓	✓	✓							

✓ - System O.K. X - System Output, In Error C - Corrective Measures Initiative O - System Inoperative NA - Not Applicable

REMARKS

DIFF. PRESS. DROPS OFF IN CLOUD AND FOR A MINUTE OR SO AFTER.

RFF - 3A WORK FORM (8 - 72)		FLIGHT ID 751028A									
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION RESEARCH FLIGHT FACILITY MIAMI, FLORIDA		DATE OCT. 28, 1975									
ELECTRONIC SYSTEMS STATUS											
PRE - FLIGHT STATUS: Preslight 39C Stats operational S.R.C											
INFLIGHT OUTAGES: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 25%; font-size: 0.8em;">TIME NOTED</th> <th style="width: 35%; font-size: 0.8em;">SYSTEM</th> <th style="width: 40%; font-size: 0.8em;">CORRECTIVE ACTION</th> </tr> </thead> <tbody> <tr> <td colspan="3" style="height: 100px; vertical-align: top; font-family: cursive;"> Presume TO. Reading to hzy wind speed. S.R.C </td> </tr> </tbody> </table>				TIME NOTED	SYSTEM	CORRECTIVE ACTION	Presume TO. Reading to hzy wind speed. S.R.C				
TIME NOTED	SYSTEM	CORRECTIVE ACTION									
Presume TO. Reading to hzy wind speed. S.R.C											
POST FLIGHT SUMMARY: System operators except List of one. S.R.C											
APS - 20 RADAR INFLIGHT CHANGES											
STC	DIAL										
	TIME										
150 ECHO	DIAL										
	TIME										
ANTENNA TILT	DIAL										
	TIME										
ANTENNA RPM	DIAL										
	TIME										
MAG CURRENT	DIAL										
	TIME										
REMARKS S.R.C ELECTRONIC SYSTEMS SUPERVISOR											

RFF - 3B WORK FORM (8 - 72)												U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION RESEARCH FLIGHT FACILITY MIAMI, FLORIDA												FLIGHT ID 751028A			
												DATE OCT. 28, 1975															
ELECTRONIC SYSTEMS INFLIGHT DATA LOG																											
INSTRUCTIONS: Make all entries in pencil. At Flight Termination, give completed form to the Flight Director. Initials of person checking equipment will be put in the columns if the equipment is operating normally. If the equipment is inoperative, put an x and elaborate on malfunction (i.e., time out, time restored, etc.) below. Check equipment every 30 minutes.																											
		16 00	16 30	17 00	17 30	18 00	18 30	19 00	19 30	20 00	20 30	21 00	21 30	22 00	22 30	23 00	23 30	24 00	24 30	25 00	25 30	26 00	26 30	27 00	27 30		
DIGITAL	SEC	S _{1C}	S _{2C}	S _{3C}	S _{4C}	S _{5C}	S _{6C}	S _{7C}	S _{8C}	S _{9C}	S _{10C}	S _{11C}	S _{12C}	S _{13C}	S _{14C}	S _{15C}	S _{16C}	S _{17C}	S _{18C}	S _{19C}	S _{20C}	S _{21C}	S _{22C}	S _{23C}	S _{24C}		
PRESSURES		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
ADP-20																											
ADP-20 ADP-30		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
WP-101		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
RDR-1E		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
RADAR ALT.		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
TEMP. (VORTEX)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
TEMP. (ROSEMNT)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
PR-5		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
J.W. LIQ. WATER		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
CSI DEWPOINT		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
OMEGA		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
INERTIAL NAV.		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
REMARKS: Radar altimeter in STBY Interference from NOAA 41C R.A. . Pressure working but wind speed too high S. M. L.																											

□ USE REVERSE SIDE FOR ADDITIONAL REMARKS AS NECESSARY.

RFF - 4 WORK FROM (8 - 72) U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION RESEARCH FLIGHT FACILITY MIAMI, FLORIDA DIGITAL STATION	FLIGHT ID 7510 28 A DATE OCT. 28, 1975
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INSTRUCTIONS: Make all entries in pencil. At Flight Termination, give completed form to the Flight Director.

DIGITAL SYSTEM	TIME ON: 16 13 00 Z	TIME OFF: 21 06 30 Z	NO. OF TAPES: 12d	RATE: 1-10
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INFLIGHT LOG		
TIME RESET	TIME STANDARD USED FOR RESET	REMARKS
Z		
Z		
Z		
Z		
Z		
Z		
Z		
Z		
Z		

REMARKS: (MALFUNCTIONS, RATE CHANGES, ETC.)

S. R. ...

A/C COMMANDER		NAVIGATOR		A/C NO.		MISSION NO.		TIME AIRBORNE		LOCATION		DATE		PROJ. NAME	
TURNER/ SALADIN		HATCH		39C		751028		163048Z		MIA		28 OCT 75		INTER- COMPARISON	
TIME OF ENTRY	POSITION		CONF FACT	TYPE NO.	DOPPLER POSITION		LA LO CORR	STA OR REF. POSN.	TRUE BEAR- ING	RANGE OR READING		CORR	REMARKS		
	25 48.3 80 17.6				25 48.3 80 17.6							ALT	RAMP		
1630 48	25 48.0 80 17.5				25 48.3 80 16.9		- .3 + .6						T.O. MIA R'NY		
1709 03	26 33.0 78 42.0				26 33.9 78 41.5		- .9 + .5						OVR. FREEPORT APRT		
1716 36					26 44.4 78 31.4							1.5M	IN RW ↓ PASS #1		
1727 29					26 41.6 78 14.3							1.5M	IN RW → PASS #3		
1733 20					26 41.2 78 13.1							1.5M	IN RW ← PASS #4		
1807 01					26 08.5 77 49.5							12M	CLD #1 →		
1812 06					26 08.8 77 50.0							12M	CLD #1 PASS 2 ←		
1818 54					26 09.5 77 50.1							12M	CLD #1 PASS 3 →		
1825 30					26 06.2 77 26.8							12M	CLD #2 PASS 1 ↑		
1831 20					26 08.3 77 25.8							12M	CLD #2 PASS 2 ↓		
1836 34					26 07.8 77 28.4							12M	CLD #2 PASS 3 ↑		
1905 45					26 49.7 76 09.3							19M	CLD #3 PASS 1 ↑		
1913 31					26 49.7 76 07.6							19M	CLD #3 PASS 2 ↓		
192016					26 43.7 76 30.0							19M	CLD #4 PASS 1 ↓		
192503					26 45.1 76 30.8							19M	CLD #4 PASS 2 ↓		

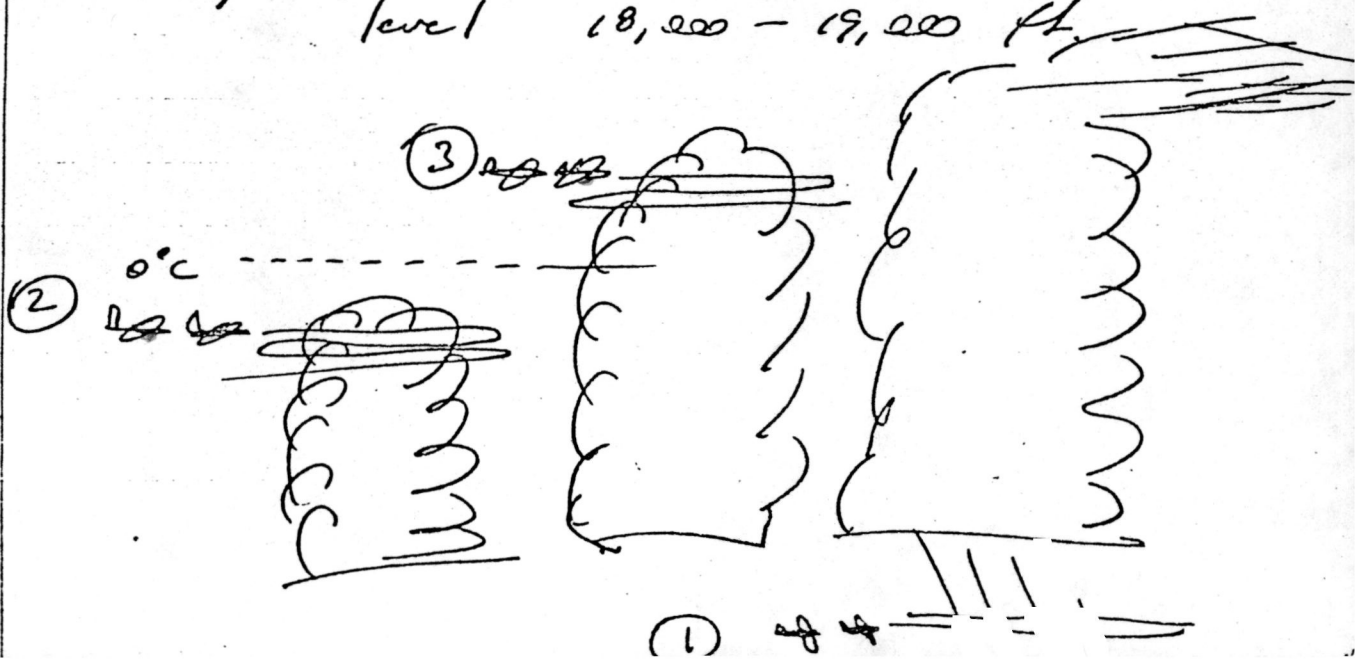
TYPE OF FIX. (1) DR. (2) RADIO (3) CELESTRAL (4) VISUAL (5) LORAN (6) RADAR
(7) DOPPLER (8) OMEGA
CONFIDENCE FACTOR (Nautical Miles) (1-5,1) (6-10,2) (11-15,3) (16-UP,4)

C-130, DC-6 Cloud Physics Intercomparison Flights

- A. Purpose: To compare cloud physics readings in as nearly the same environment as possible in order to assess the effects of the C-130 exposures. Also to quantify the IPC performance in a large drop environment.
- B. Operational Plan: To complete cloud penetrations with both aircraft as close together as ~~flight~~ flight safety permits. Aircraft should alternate leads through the cloud.

Required in this order:

- 1) 4 passes through rain shafts
1500 ft
- 2) 6 passes through vigorous clouds
that have not yet been above 0°C
at 1000 ft below freezing level
 $\approx 19,000$ ft.
- 3) 4 passes through clouds at -10°C
level 18,000 - 19,000 ft.



NHRL CALIBRATION 39-C

REF - 5A WORK FORM (8 - 72) U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION RESEARCH FLIGHT FACILITY MIAMI, FLORIDA PHOTO - OPTICAL STATION	FLIGHT ID 751028A DATE 28 OCT 75
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INSTRUCTIONS: Make all entries in pencil. At Flight Termination, give completed form to the Flight Director. Mark all film cans with Flight ID, Type, and Number. All Times GMT (Z).

CAMERA	ON	OFF	ON	OFF	RATE	FILM USED (FT.)
FOREWARD	162500	211000Z			1/2	230
RIGHT SIDE	162500	211000Z			1/5	230
LEFT SIDE	162500	211000Z			1/5	230
PHOTO PANEL	—	—	—	—	—	—
VERTICAL	162500	211000Z			1/5	230

ELAPSED TIME COUNTERS	TIME ON: 164000 Z	TIME OFF: 210000 Z	FINAL COUNT: 16599
WP - 101 CAMERA	TIME ON: Z	TIME OFF: Z	LENS SETTING: f/11 NO. OF ROLLS: 1

WP - 101 INFLIGHT CHANGES

RATE	DIAL								
	TIME								
RANGE	DIAL								
	TIME								
TIME MAGAZINE CHANGED									

ADD. 30 APS - 20 CAMERA	TIME ON: 164900 Z	TIME OFF: 205300 Z	LENS SETTING: f/5.6 NO. OF ROLLS: 1
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APS - 20 INFLIGHT CHANGES

RATE 1/1	DIAL								
	TIME								
RANGE	DIAL								
	TIME								
FTC	DIAL								
	TIME								

TIME MAGAZINE CHANGED									
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RDR - 1 CAMERA	TIME ON: 164031 Z	TIME OFF: 205600 Z	LENS SETTING: f/11 NO. OF ROLLS: 1
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RDR - 1 INFLIGHT CHANGES

RATE 1/4	DIAL								
	TIME								
RANGE 50	DIAL								
	TIME								
RECEIVER GAIN	DIAL								
	TIME								

TIME MAGAZINE CHANGED									
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RFF - 5B WORK FORM (8 - 72)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION RESEARCH FLIGHT FACILITY MIAMI, FLORIDA	FLIGHT ID
		DATE
	TIME CHECK LOG	

[illegible][illegible]

REMARKS:

REMARKS: AT 171700Z LEFT SIGC. CAMERA HAD NO FILM. JAM.
CAMERA IN OP.