19731005F1.FDIR

RFF - 1 WORK FORM
(8 - 72)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
RESEARCH FLIGHT FACILITY
MIAMI, FLORIDA

FLIGHT SUMMARY

FLIGHT ID	731005F
AIRCRAFT	N6541C
FLIGHT NO.	37-74
DATE	OCT. 5, 73

TAKE OFF (CITY OR AIRPORT)	LAND (CITY OR AIRPORT)	ALTITUDE(S)
MIA		1200', 12000', 23000'

PURPOSE: NASA & NNRL - RESEARCH

PROPOSED TAKEOFF TIME:	PROPOSED FLIGHT DURATION:
1400Z	5 - 7 HRS

TIME OUT:	TIME IN:	BLOCK TIME:
1340Z	1815Z	4:35 HRS
TIME OFF:	**TIME ON:**	**FLIGHT TIME:**
1349Z	1812Z	4:23 HRS

PROPOSED PATTERN

1) AT 23K OVR WATER RUNS FOR NASA COLOR SENSOR
2) AT 12K WARM CLOUD PENETRATION FOR NNRL CLOUD PHYSICS
3) AT 1.2K, 12K, 23K CLD BOX FOR NNRL (SEE ATTACHED)

ACTUAL PATTERN

1), 2) COMPLETED
3) BOXED CLD GP AT 10K & 12K — UNABLE TO LOCATE SUITABLE CLD IN TIME REMAINING FOR 23K BOX.

FLIGHT PERSONNEL

OPERATIONS CREW		SCIENTIFIC CREW		VISITORS	
WERLEY	METTERVILLE	DAVIS		(NNRL) SHEETS	(NNRL) LEWIS
GUNNOE		MACHIE		(AOML) MALL	(NNRL) WILLIS
SCHISSEL		COUNER		(NASA) BLAINE	(NNRL) SCHRICKER
CIGIRELLI		HAELZL			(NNRL) TRUE

REMARKS:

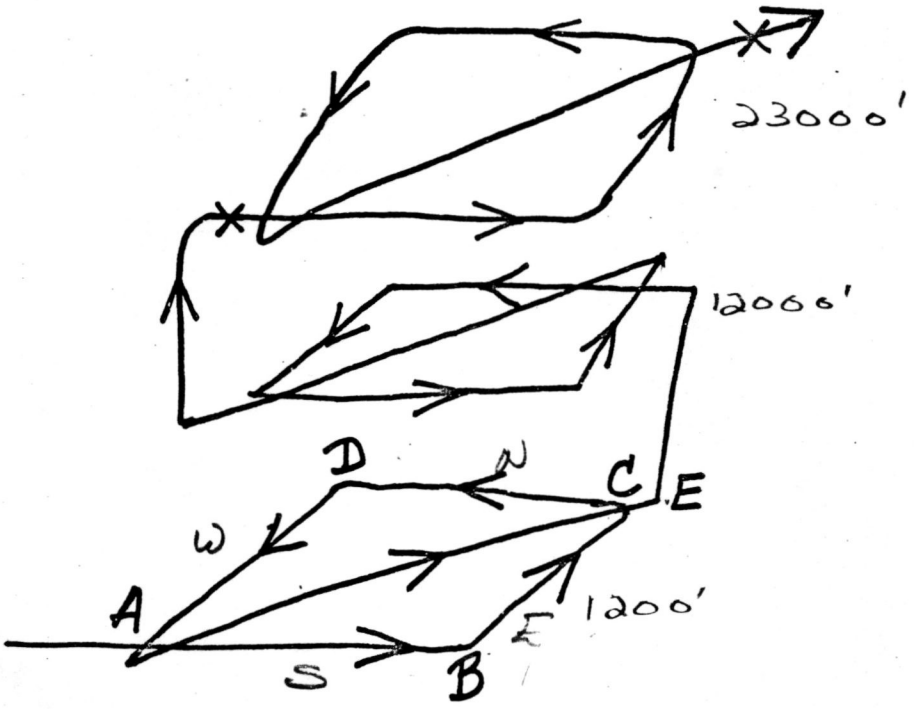
☐ USE REVERSE SIDE FOR ADDITIONAL REMARKS AS NECESSARY.

1ST , FL 13-14K

, SPENET IN WARM CLD

and

Mission is to obtain data at three levels about a well developed cumulus ocean cloud.



$$A \rightarrow B \rightarrow C \rightarrow D \rightarrow A \rightarrow E.$$

The legs of each box is a minimum of 3.5 min. at TAS 280 kts or faster at pilots discretion. First box at cloud base at approximately 1200 ft. Second box at inversion level at approximately 12,000 ft. Third box at 23,000 ft. All altitudes P.A. Boxes must be closed.

Requirements: Digitized INS ground speed, True Heading, Drift or Track, Rosemount temperature, CSI dew point, Sea Surface temperature, doppler winds, ground speed and drift, Pitch and Roll.

Cloud cameras and Radar camera.

✕ Drop Sound.

RFF - 2 WORK FORM
(8 - 72)

U.S. DEPARTMENT OF COMMERCE
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RESEARCH FLIGHT FACILITY
MIAMI, FLORIDA

FLIGHT DIRECTOR'S INFLIGHT DATA LOG

FLIGHT ID: 731005F

DATE: OCT 5, 73

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

	TIME	PRESSURE	TEMPERATURE	DEW POINT	WIND
A/C T/O	1348Z				
WX STN.					
A/C LAND	1811Z				
WX STN.	1800Z	1013.6	89.4	83.7	12010

HOURLY INFLIGHT DIGITAL DATA STATUS

ITEM \ HOUR	1460	2	3	4	5	6	7	8	9	10	11	12
TIME (CHECK)	✓											
AMBIENT PRESSURE	✓											
RADAR ALTITUDE	✓											
TRUE AIR SPEED	✓											
MAG. HEADING	✓											
~~D.T.C.~~ GS	✓											
DRIFT ANGLE	✓											
WIND	✓											
TEMPERATURE ~~(VORTEX)~~ TRIO	✓											
LONGITUDE	✓											
LATITUDE	✓											
~~L.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

☐ USE REVERSE SIDE FOR ADDITIONAL REMARKS AS NECESSARY.

RFF - 3A WORK FORM
(8 - 72)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
RESEARCH FLIGHT FACILITY
MIAMI, FLORIDA

ELECTRONIC SYSTEMS STATUS

FLIGHT ID: 031005F

DATE: OCT 5 1973

PRE - FLIGHT STATUS:

OK

INFLIGHT OUTAGES:

TIME NOTED	SYSTEM	CORRECTIVE ACTION
None		

POST FLIGHT SUMMARY:

OK.

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

Paul A Connor
ELECTRONIC SYSTEMS SUPERVISOR

☐ USE REVERSE SIDE FOR ADDITIONAL REMARKS AS NECESSARY.

RFF - 3B WORK FORM
(8 - 72)

U.S. DEPARTMENT OF COMMERCE
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RESEARCH FLIGHT FACILITY
MIAMI, FLORIDA

ELECTRONIC SYSTEMS INFLIGHT DATA LOG

FLIGHT ID: 031005F

DATE: OCT 5 1973

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.

	00	13 30	14 00	14 30	15 00	15 30	16 00	16 30	17 00	17 30	18 00	18 30	00	30	00	30	00	30	00	30	00	30	00	30
DIGITAL		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	OFF												
PRESSURES		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓													
APN - 82 WIND		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓													
~~APS - 20~~ APN 147		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓													
~~WP - 101~~ APN-59		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓													
RDR - 1																								
RADAR ALT.		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓													
TEMP. (VORTEX)																								
TEMP. (ROSEMNT)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓													
IRH																								
J.W. LIQ. WATER		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓													
CSI DEWPOINT		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓													
OMEGA																								

REMARKS:

☐ 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: 031005F

DATE: OCT 5, 1973

INSTRUCTIONS: Make all entries in pencil. At Flight Termination, give completed from to the Flight Director.

DIGITAL SYSTEM	TIME ON:	TIME OFF:	NO. OF TAPES:	RATE:
	134600 Z	Z		

INFLIGHT LOG

TIME RESET	TIME STANDARD USED FOR RESET	REMARKS
None Z		
Z		
Z		
Z		
Z		
Z		
Z		
Z		

REMARKS: (MALFUNCTIONS, RATE CHANGES, ETC.)

☐ USE REVERSE SIDE FOR ADDITIONAL REMARKS AS NECESSARY.

RFF - 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: 731005 F

DATE: 5 Oct. 1973

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	1355				1/2	4x50
RIGHT SIDE	1342	1800			1/5	193'
LEFT SIDE	1342	1800			1/5	1931
PHOTO PANEL	NA					
VERTICAL	NA					

ELAPSED TIME COUNTERS	TIME ON:	TIME OFF:	FINAL COUNT:
	140000 Z	175500 Z	14100

APN ~~WP - 101~~ CAMERA	TIME ON	TIME OFF	LENS SETTING	NO. OF ROLLS
	1356 Z	175600 Z	f/ 5.6	1

APN5a ~~WP - 101~~ INFLIGHT CHANGES

RATE	DIAL	4									
	TIME	1356									
RANGE	DIAL	30									
	TIME	1356									
TIME MAGAZINE CHANGED											

APS - 20 CAMERA	TIME ON	TIME OFF	LEN SETTING	NO. OF ROLLS
	Z	Z	f/	

APS - 20 INFLIGHT CHANGES

RATE	DIAL										
	TIME										
RANGE	DIAL										
	TIME										
FTC	DIAL										
	TIME										
TIME MAGAZINE CHANGED											

RDR - 1 CAMERA	TIME ON	TIME OFF	LENS SETTING	NO. OF ROLLS
	Z	Z	f/	

RDR - 1 INFLIGHT CHANGES

RATE	DIAL										
	TIME										
RANGE	DIAL										
	TIME										
RECEIVER GAIN	DIAL										
	TIME										
TIME MAGAZINE CHANGED											

☐ USE REVERSE SIDE OFR ADDITIONAL REMARKS AS NECESSARY.

RFF - 5B WORK FORM
(8 - 72)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
RESEARCH FLIGHT FACILITY
MIAMI, FLORIDA

TIME CHECK LOG

FLIGHT ID: 731005F

DATE: 5. Oct. 1973

IRH "T" (°C)	WP - 101			APS - 20			RDR - 1		
	DIGITAL	WP - 101	COR'N	DIGITAL	APS - 20	COR'N	DIGITAL	RDR - 1	COR'N
	142308	142300	+8						
	151914	151900	+14						
	162621	162600	+21						
	173029	173000	+29						

ELAPSED TIME COUNTERS

DIGITAL	COUNTER	~~FWD~~ DIGITAL	COUNTER	DIGITAL	COUNTER
140000	000	1359007	#1		
175500	14100	1502007	#2		
		1610007	#3		
		1720007	#4		

REMARKS:

☐ USE REVERSE SIDE FOR ADDITIONAL REMARKS AS NECESSARY.

WB Form 413-50
2 - .63

73100 5 F

TIME																		
1340	BLK OUT																	
1349	OFF																	
1422	ON																	
142449	BGN																	
1510	END																	

CLD DENET

C1P1	154102	154125	1.5
C1P2	154417	154445	1.0
C1P3	154801	154841	0.8
C2P1	155107		0.5
C3P1	155059	155300	1.0
C4P1			1.3
C2P2			0.5
C3P2	155722	155748	1.5

161037	—	163340	10K CLD	50X
164031	—	170306	1.0 K CLD	50X

A/C COMMANDER	NAVIGATOR	A/C NO.	MISSION NO.	TIME AIRBORNE	LOCATION	DATE	PROJ. NAME
WERLEY	SCHISSEL	61C	731005F	134900	MIAMI	5 OCT 73	AOML NHRL

TIME OF ENTRY	POSITION	CONF FACT	TYPE NO.	DOPPLER POSITION	LA LO CORR	STA OR REF. POSN.	TRUE BEARING	RANGE OR READING	CORR	REMARKS
1349 00	25-48.3 80-17.6	1	9	25-48.3 80-17.6						
14 1900	25-48 80-23	1	2	25 48 80 24		FIX				25 - 46.9 80 - 23.3
142452	25-46.9 80-14.9	1	9	25-49 80-16	-2 -1					START RUN
14 3130	25-41.1 79-46.1	1	9							END RUN
1440 02	25408 79-45.5	1	9	25-44 79-52	-3 -6					START RUN
1446 35	25-46.9 80-13.2	1	9	25 49 80 18	-2 -5					END RUN
1454 40	25-38.3 80-07.0	1	9	25-41 80-10	-3 -3					START EAST RUN
15 02 10	26-12.4 80-02.6	1	9	26-16 80-06	-4 -3					MID RUN
1510 30	26-41.7 79-59.5	1	9	26-46 80-04	-4 -4					END RUN
1541 05	24-35.3 79-33.8	1	9	24-35 79-39	0 -5					C,A P1
1544 23	24-37.7 79-32.2	1	9	24-35 79-39	+2 -6					C A P2
1548 23	24-35 79-32.9	1	9	24-35 79-39	0 -6					C A P3
1551 28	24-30.4 79-36.9	1	9	24-30 79-45	0 -8					CB P1
1552 34	24-29.8 79-40.7			24 30 79 49	0 -8					C C P1

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)

A/C COMMANDER	NAVIGATOR	A/C NO.	MISSION NO.	TIME AIRBORNE	LOCATION	DATE	PROJ. NAME

TIME OF ENTRY	POSITION	CONF FACT	TYPE NO.	DOPPLER POSITION	LA LO CORR	STA OR REF. POSN.	TRUE BEARING	RANGE OR READING	CORR	REMARKS
1556 01	24-28.4 79-43.2	1	9	24-29 79-50	0 -7					CD P1
1556 34	24-29.2 79-41.5	1	9	24 30 79 48	-1 -6					CCP2
1557 26	24 30.2 79 38.4	1	9	24 31 79 46	-.8 -7					CAP1
1610 37	24-16.2 78-42	1	9	24-15½ 78-48	+7 -6					PTA
1614 07	23-59.8 78-42.2	1	9	23-57 78-45						PTB
1617 37	23-58.4 78-25.4	1	9	23-58 78-27						PTC
1621 07	24-13.5 78-22.4	1	9	24-13 78-25						PDD
1625 40	24-16.4 78-42.0	1	9	24-14 78-48	+2 -6					PTA
1627 10	24-19.5 78-44	1	2				163	89		24-20.4 78-43.8
1628 10	24-19.7 78-40.2	1	9	24-15 78-45						
1633 44	24-01.8 78-29.1	1	9							PTC PTD
1640 31	24-00.7 78-26.3	1	9	23-58 78-33	+2 -7					PTC
1644 01	24-16.4 78-26.4	1	9	24 15 78-34						PTB
1647 40	24-21.1 78-42.5	1	9	24 19 78-51						PTA

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)

A/C COMMANDER	NAVIGATOR	A/C NO.	MISSION NO.	TIME AIRBORNE	LOCATION	DATE	PROJ. NAME

TIME OF ENTRY	POSITION	CONF FACT	TYPE NO.	DOPPLER POSITION	LA LO CORR	STA OR REF. POSN.	TRUE BEARING	RANGE OR READING	CORR	REMARKS
165110	24-08.1 78-45.1	1	9	24-05 78-53	+3 -7					PTB
165541	24-06.9 78-26.1	1	9	24-05 88-32	+2 -6					
170300	24-22.0 78-44.9	1	9	24-21 78-52	+1 -6					
172345	25-26.1 79-05.4	1	9	25-25 79-14	+1 -8					START RUN
173202	26-05.9 78-52.9	1	9	25-58 79-06						TERMINATE
174418	26-12.2 78-51.3	1	9	26-02 79-08	+10 -17					START RUN
180416	25-40 80-11	1	2	25-33 80-28	+7 -17		B S/			25-42.8 -2.8 80-11.4 -.4
				FINAL						
				25-49.5 80-19.5						

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)