

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO.1 OAOWF1 FILE

FLT ID: 961003H	FM: KMCF	TO: KMCF
FLT NO: 97-001	BLK IN: 1955	ATA: 1947
ETD: 1600	BLK OUT: 1601	RTD: 1616
ETE: 1900	BLK TIME: 3:54 3.9	FLT TIME: 3:31 3.6
SPONSOR ORG: AOC	PROGRAM:	PURPOSE: INTERCOMP.

OAO PERSONNEL

AC MCKIM, G	SYS ENG MC MCMILLAN, S
CP KENUL, P	DATA SYS BARR, J
NAV RATHBUN , D ✓	RADAR CARPENTER, D
FE BAST, G	BT/ODW HALL, P
RADIO	CLD PHYS
FD C2424K, S ✓	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
WILLIAMSON, F	PHOTO.	USAF
CLARK, W	↓	↓
FERRILL, S		

PROPOSED/ACTUAL MISSION/REMARKS (RECCO, FIXES, STORM, PENET, NHOP #)

APN-159 SEP 5500m

TIME CHECK

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO.2 OAOWF2

FLT ID:

TIME OFF:

TIME ON:

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1014.6	29.99	1012.2	29.99

NO

DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES		
FAST FLT LVL TAPES		
RADAR TAPES		
DOPPLER TAPES		
ODW CASSETTES		
HARD COPIES		
AXBT		
AXCP		
ODW		

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

2 sec Time DIFF BETWEEN 49 + 42

4961003

[illegible]

11AM BRIEF

5-10 MIN PHOTO. P.R.

PRACTICE DROPS
LET JET LEAD +
A LITTLE HIGHER

Aircraft Operations Center
P.O. Box 6829
MacDill AFB, FL 33608-0829

304.4
AOC1:ABD
WAT
400-462

3 SED
3 FLIGHT
2 PD / MPO
3 PHOTO

MEMORANDUM FOR: All Gulfstream-IVSP Participants

FROM: A. Barry Damiano

SUBJECT: Second Gulfstream-IVSP Calibration Flight

The second test flight (tentatively scheduled for 3 October) will be an intercomparison flight with a P-3. This mission will provide a more thorough examination of instrumentation performance (total temperature probes, pressure probes, etc.) on the Gulfstream-IVSP. Two GPS dropsondes will be launched from the Gulfstream-IVSP at 45000 feet pressure altitude near the end of the flight. This flight will be relatively short in duration (approximately 5 hours) and will consist of the following activities:

- 1) Both aircraft block out from Hangar 5 at ¹²⁰⁰ 1400 local time.
- 2) After take-off both aircraft climb to 15000 feet pressure altitude (PA) head west offshore west of NWS Ruskin (27° 43' N 82° 27' W). There both aircraft will form up in formation with the P-3 flying on the Gulfstream-IVSP.
- 3) Fly three (3) three minute legs varying indicated airspeed...180, 200 and 220 knots in that order. The legs are not dependent upon wind direction.
- 4) Upon completion of the 220 indicated airspeed leg at 15000 feet PA, the aircraft will climb to 20000 feet PA. After the aircraft have formed up in formation (P-3 on the Gulfstream-IVSP) fly the three (3) three minute legs varying indicated airspeed...180, 200 and 220 knots. After the 220 airspeed run, both aircraft will increase indicated airspeed to 240 knots. At this airspeed and in loose formation both aircraft will simultaneously launch a GPS sonde. ^{Dummy DROP} ~~HEAD~~ ^{HEADING EAST}
- 4) The aircraft will climb to 25000 feet PA, form up, then fly the three (3) three minute legs varying indicated airspeed...180, 200 and 220 knots.
- 5) Upon completion of the 220 indicated airspeed leg at 25000 feet PA, the aircraft will climb to 30000 feet PA, form up, then fly the three (3) three minute legs varying indicated airspeed...180, 200 and 220 knots. If the P-3 (3)

SUN RIGHT of P3 HEAD EAST

MAKE SURE PHOTOGRAPHERS
ARE READY FOR DROP
STATION & PHOTOGRAPH

cannot get to 30000 feet PA, both aircraft will level out at the highest altitude that the P-3 can attain, form up and begin the three runs.

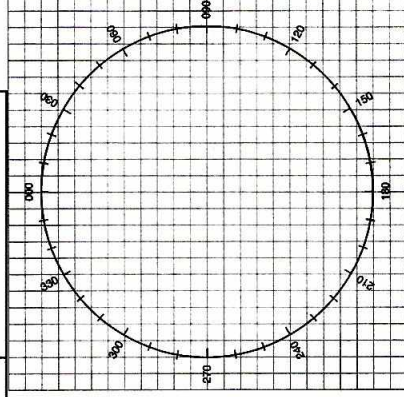
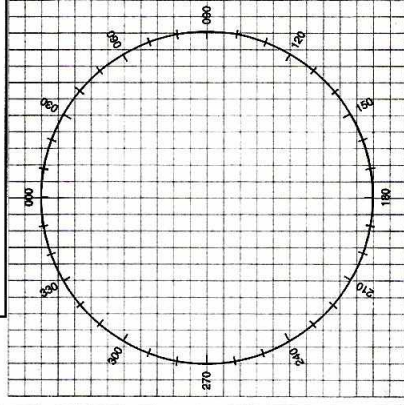
- 6) Upon completion of the last leg at 30000 feet PA (or highest altitude for the P-3), the **P-3 will depart the area and ferry to MacDill AFB**. The Gulfstream-IVSP will climb to 35000 feet PA and perform three (3) three minute legs varying indicated airspeed...180, 210 and 240 knots.
- 7) Upon completion of the 240 indicated airspeed leg at 35000 feet PA, the aircraft will climb to 40000 feet PA and perform the three (3) three minute legs varying indicated airspeed...180, 210 and 240 knots. After the 210 indicated airspeed leg is completed, a yaw (side to side) maneuver will be performed varying heading by 15-20 degrees. This will be followed by a pitch maneuver of ± 7 degrees.
- 8) Upon completion of the 240 indicated airspeed leg at 40000 feet PA, the aircraft will climb to 45000 feet PA and perform two (2) three minute legs varying indicated airspeed...180 and 210 knots. During the 210 airspeed a GPS dropsonde will be launched. This will coincide approximately with a radiosonde launch from NWS Ruskin. The purpose is to exercise the AVAPS system and the communication link by transmitting sonde data through the SATCOM system. After the sonde has splashed, a second sonde will be launched.
- 9) After the second sonde has been launched at 45000 feet PA, the jet will begin a spiral descent at a rate of 1500 feet per minute. The descent will continue to 10000 feet PA.
- 10) After reaching 10000 feet PA, the jet will commence three (3) left turn circles then three (3) right turn circles at a 25° roll angle.
- 11) Upon completion of the circles the Gulfstream-IVSP will return to MacDill AFB.

CLEARANCES

[illegible]

MISSION LOG

PAGE OF



POSITION REPORT

1. POSITION
 2. TIME
 3. ALTITUDE
 4. NEXT POSITION
 5. ETA
 6. NEXT POSITION

EMERGENCY MESSAGE

TRANSMIT THE FOLLOWING MESSAGE TO ANY AGENCY ON THE AIR-GROUND FREQUENCY IN USE. IF UNABLE TO ESTABLISH COMMS, ATTEMPT CONTACT ON ANY OF THE FOLLOWING EMERGENCY FREQUENCIES:

UHF/VOICE	VHF/VOICE	MF/VOICE	HF/CW	MF/CW
243.0	121.5	2182 KHZ	8364 KHZ	500 KHZ

MAYDAY, MAYDAY, MAYDAY

THIS IS NOAA _____, NOAA _____, NOAA _____

- POSITION _____ N / S

- HEADING _____ TRUE/MAG _____

-AT _____ KTS TRUE/INDICATED

- FLIGHT LEVEL OR ALTITUDE -

- WE ARE A P-3 AIRCRAFT WITH _____ SOULS ON BOARD _____

- NATURE OF EMERGENCY ASSISTANCE DESIRED

- ASSISTANCE DESIGNED
- BUT NOT INTENTIONS

- PILOT INTENTIONS
- WE HAVE

[illegible]