

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

FLT ID: 961216N	FM: KMCF	TO: KMCF
FLT NO: 97-0	BLK IN: 0000Z	ATA: 2352
ETD: 1730 1730	BLK OUT: 1738Z	ATD: 1751
ETE: 2300	BLK TIME: 6:22 6.4	FLT TIME: 2352 6:01 6.0
SPONSOR ORG: NOAA	PROGRAM: TEST FLIGHT	PURPOSE: I-Comp

OAO PERSONNEL

AC PLAYER, G	SYS ENG GOLDSTEIN
CP MAXSON, B	DATA SYS PRADS, E
NAV	RADAR SMITH, J
FE	BT/ODW HALL, P
RADIO	CLD PHYS WEIHER, L ✓
FD CZ42YK, S	DOPPLER FRANKLIN, J

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
STUBBLEFIELD, W		
KITSON, G		

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

304.8 UHF
 GPS 2-seconds faster than N43RF
 1835-1837 CLOSE TO 43
 DPL 9° TOO COLD @ 15K ALL SPEEDS
 DPL BALANCED 1839:40 - 1841:43
 DPL BALANCED 1841:30 - 1843:00

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

FLT ID: 9612/6N

TIME OFF: 1751

TIME ON: 2352

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1018.3		1018.0	30.03

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES	1	
FAST FLT LVL TAPES		
RADAR TAPES		
DOPPLER TAPES		
ODW CASSETTES		
HARD COPIES		
AXBT		
AXCP		
ODW		
GPS	7	

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

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

AOC1:SC

December 12, 1996

MEMORANDUM FOR: All Gulfstream-IVSP Participants

FROM: Stan Czyzyk

SUBJECT: Sixth Gulfstream-IVSP Calibration Flight

The sixth test flight (tentatively scheduled for 16 December) will be an intercomparison flight with N43RF. James Franklin of HRD has requested that the dropsondes occur over a buoy. Depending on flight restrictions, if any, either buoy 42003 (25°56'N 85°5'W) or buoy 42036 (28°30'N 84°30'W) will be the likely target. This flight will be relatively short in duration (approximately 5 hours for N49RF and 2.5 hours for N43RF) and will consist of the following activities:

- 1) N43RF block out at 1215 local time, and N49RF at 1230 local time.
- 2) After take-off, both aircraft climb to 15000 feet pressure altitude (PA) and head west offshore. 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 three (3) three minute legs varying indicated airspeed... 180, 200, 220 knots.
- 5) After the work at 20000 feet PA in completed, both aircraft will climb to 25000 feet PA, form up, then fly three (3) three minute legs varying indicated airspeed... 180, 200, and 220 knots. After the 220 knot leg has been completed, three (3) omega-sondes will be launched from the P-3, simultaneously with three (3) GPS sondes on

the Gulfstream-IVSP.

After the third sonde has splashed, **the P-3 will depart the area and ferry back to MacDill AFB.**

- 6) Upon completion of the work at 25000 feet PA, the jet will climb to 30000 feet PA and fly three (3) three minute legs varying indicated airspeed... 180, 210 and 240 knots. These legs **ARE dependent** upon wind direction.
 - 7) Upon completion of the last leg at 30000 feet PA, the Gulfstream-IVSP will climb to 35000 feet PA and perform three (3) three minute legs varying indicated airspeed... 180, 210 and 240 knots.
 - 8) Upon completion of the last 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 of 5 cycles will be performed varying heading by 15-20 degrees. This will be followed by a pitch maneuver of ± 7 degrees.
- v
- 9) 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 indicated airspeed, four GPS dropsondes will be launched at two minute intervals.
 - 10) After the last 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.
 - 11) 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.
 - 12) Upon completion of the circles the Gulfstream-IVSP will return to MacDill AFB.

the Gulfstream-IVSP.

After the third sonde has splashed, **the P-3 will depart the area and ferry back to MacDill AFB.**

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- v 9) 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 indicated airspeed, four GPS dropsondes will be launched at two minute intervals.
- 10) After the last 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.
- 11) 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.
- 12) Upon completion of the circles the Gulfstream-IVSP will return to MacDill AFB.

DATE : 12/16/96
TO : Chief, AOC Flight Operations
FROM : Pilot/Flight Director, Aircraft N49RF ON 0000Z BLOCKTIME
OFF 1738Z 6.4
SUBJECT: Hazardous Duty

PURPOSE OF FLIGHT: INTERCOMPARISON WITH N43RF

Hazardous Duty Pay is required for flight made on 12/16/96
(DATE)

Request based on FLYING IN TANDEM W/ N43RF

Personnel on board authorized Hazard Pay:

CZYZYK, S

GOLOSTEIN, A

KITSON, G

SMITH, J

PRADAS-BERGNES, C

PILOT/FLIGHT DIRECTOR: Stanley Gynph

APPROVED: ✓

DISAPPROVED: _____

CHIEF, AOC FLIGHT OPERATIONS: Gayle J. Jansen-Berg

DATE : 12/16/96
TO : Chief, AOC Flight Operations
FROM : Pilot/Flight Director, Aircraft N49RF ON 0000Z BLOCKTIME
SUBJECT: Hazardous Duty OFF 1738Z 6.4

PURPOSE OF FLIGHT: INTERCOMPARISON WITH N43RF

Hazardous Duty Pay is required for flight made on 12/16/96
(DATE)

Request based on FLYING IN TANDEM W/ N43RF

Personnel on board authorized Hazard Pay:

12924K, S

GOLOSTEIN, A

KITSON, G

SMITH, J

PRADAS-BERGUES, C

PILOT/FLIGHT DIRECTOR: Stanley Gynph

APPROVED: ✓

DISAPPROVED: _____

CHIEF, AOC FLIGHT OPERATIONS: Gary A. Jordan Berg

ATTACK ANGLE DATA

FROM N971216 FLT

30K

202650 - 202820

20294⁴ - 203000

(180)

203500 - 203701

(200)

204115 - 204316

(240)

35K

205220 - 205421

(240)

210845 - 211045

(210)

211500 - 211701

(183.7)

2129

212735 - 212830

40K

212950 - 213021

(180)

~~213040~~

213635 - 213816

210

215840 - 220041

240

0800 or 0900

224430 - 224550 (180) 45K

220950 - 221150 (210)

SHAPIRO

BOND

WEBSTER

BARTELS

CAMAS

961216 FLT

1217 pts

1 AAS = 4.76197

1 AAI = 4.7698

SD = .1695

CORR = .97869

1217 pts

2 AAS = 4.98733

2 AAI = 4.8801

SD = .1516

CORR = .9928

ADDXX.CDF As 2020 - 2335 Z

970117 FLT 445 pts

AA2 from

AA2S 5.52764

AA2I = 4.988

SD = .1021 CORR = 1.0193

970117 FLT 445 pts

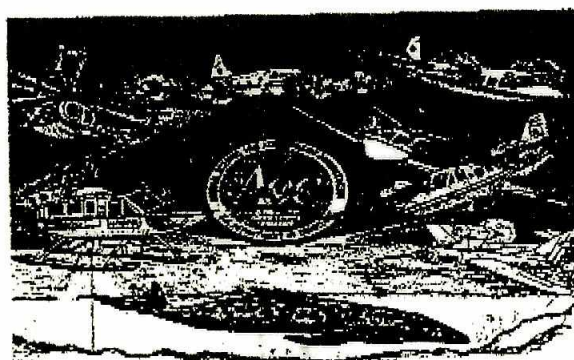
AAIS = 5.39601

AAI = 4.9135

SD = .0996 CORR = 1.0193

FAX TRANSMISSION**NOAA AIRCRAFT OPERATIONS CENTER
SCIENCE & ENGINEERING DIVISION**

P. O. Box 6829
MACDILL AFB, FL 33608-0829
(813) 828-3310
FAX: (813) 828-5061

To: BARRY DAMIANODate: 1/15/97Fax #: 011 353 61474656Pages: 3, including this cover sheet.From: STAN CzyzykPhone #: (813) 828-3310, Ext.Subject: FLIGHT LOG

COMMENTS:

961216N

ORM 413-50
63

[illegible]

~~96120~~ 961216N

[illegible]

961216N

[illegible]

TIME	LAT	LONG	TK	HO	TA	TD	WD	WS	GPAULT	SP	PJ	REMARKS
2058						35K FT						
	240	IAS										
205945	2610	8610	257	265	-48.08	-49.26	250.8	41.7	11092	238	238.50	LEG 1 BEGIN
210200												LEG 1 END
	210	IAS										
210710	2659	8627	81.1	84.7	-48.24	-51.20	262.5	36.6	11070	238.88	→	LEG 2 BEGIN
211020	2601	8602										LEG 2 END
	180	IAS										
211340	2603	8536	81	84	-48.40	-49.50	266.8	35.4	11081		238.87	LEG 3 BEGIN
211650	2605	8513										LEG 3 END
	180	KT IAS				40K FI						
212715	2555	8544	254	264	-61.35	-59.02	260	40.5	12614		188.23	(LEG 1) BEGIN
213030	2554	8559										LEG 1 END.
	210	KT IAS		(218)								
213445	2552	8622	255	264	-60.84	-58.27	258	42.6	12611		187.88	LEG 2 BEGIN
213800	2550	8647										LEG 2 END
214152												YAW
214435												
214442												PITCH
214840												
	240	KT IAS				41K FT DUE TO ATC						
215205	2545	8502	258									LEG 3 BEGIN
215740	2600	8507	249	259	-61.89	-56.48	258.6	40.8	12909		179.39	LEG 3 BEGIN
220050	2556	8529										LEG 3 END
						45 K						
	210	IAS										
220845	2548	8623	250	260	-68.88	-57.99	257	35.7	14073		148.10	LEG 1 BEGIN
221150	2544	8645										LEG 1 END
	SLOW TO	175	MACH	~	209	IAS	FON DROPS					
222050	2547	8554			9 MI	FROM BUOY	GOOD DROP					DROP 4
222922	2556	8555			2 MI		NO GPS PRESSURE					DROP 3
223911	2556	8602			8 MI		NO GPS VMO					DROP 6
224135	2603	8541			13 MI							DROP 7
224400	2610	8523	65	64	68.21	-60.10	277	37	14080		148.49	LEG 2 BEGIN
224705	2618	8501										LEG 2 END
225000~												DESCENDING
230100	2656	8315									325	STARTING CIRCLES
231425					CIRCLE	LOST AIRPERO						RIGHT CIRCLES
232140												LEFT CIRCLES
232730												CIRCLES DONE
233550												TOUCHDOWN
000011												

G-IV - P3 INTERCOMPARISONS

[illegible]

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[illegible]

G-IV - P3 INTERCOMPARISONS

[illegible]

G-IV - P3 INTERCOMPARISONS

[illegible]

G-IV - P3 INTERCOMPARISONS

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DATE : 12/16/96

TO : Chief, AOC Flight Operations

FROM : Pilot/Flight Director, Aircraft N49RF

ON 0000Z BLOCKTIME

OFF 1738Z 6.4

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SMITH, J

PRADAS-BERGNES, C

PILOT/FLIGHT DIRECTOR:

APPROVED:

DISAPPROVED:

CHIEF, AOC FLIGHT OPERATIONS:

W-470 / NOVA

at Stan C. Program's

