

FLT NO: 97-~~10123~~35

BLK IN: 0124

ATA: 0118Z

ETD: 1600Z

BLK OUT: 1749Z

ATD: 1757Z

ETE:

BLK TIME: 7:35

FLT TIME: 7:21

SPONSOR ORG: NSF

PROGRAM: FASTEX

PURPOSE: DROPS OVER FRONTAL ZONE / JET-STREAM

DAO PERSONNEL

AC PLAYER

SYS ENG GOLDSTEIN

CP MAXSON

DATA SYS PRADAS-BERGUES

NAV

RADAR

FE KITSON

BT/ODW HILL

RADIO

CLD PHYS

FD DAMIANO

DOPPLER

PARTICIPATING SCIENTIST/VISITORS/DAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
CAMMAS	PI	FRANCE
BOND	AST. PI	PMEL
JORGENSEN	HAPS	NSSL
BARTELS	HAPS	NSSL
JOLY	OBS	FRANCE
La Penette	OBS	FRANCE

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

T/O delayed due to getting higher alt for a portion of flt...
~~19Z-22Z~~ 19Z-22Z for high alt box

0008Z circle

CONV. STUMET UNTIL 22Z

TS with 28K TOPS moving NE 30KTS
 100 NM either side of line from

58°N 20°W - 55°N 16°W

AVAPS Locked up

2117Z

Both DPs warmer than TA

0030Z
 0042Z PLT

0048Z Front
 30-35 DBZ

0113Z TA, DPT

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

FLT ID: N970123 TIME OFF: 175730Z TIME ON: 0118Z

A/C T/O

WX STN

A/C LAND

WX STN

PRESSURE

1018.1

1017.0

1013

NO

DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES

FAST FLT LVL TAPES

RADAR TAPES

DOPPLER TAPES

ODW CASSETTES

HARD COPIES

AXBT

AXCP

~~GPS~~ GPS

28

PHOTOGRAPHY

FWD

LS

RS

VERT

ON

OFF

RATE

REMARKS

FASTEX

Flight #05 N970123 (Jet stream and low-level frontal pass)

DATA TYPE

SENSOR or OPTION

INE

VEW_PITR

Accelerometer

ACINS_PITR

Temperature Probe

AT1

Altitude (for vertical wind)

PALT

Static Pressure

PS1M

Dynamic Pressure

QC1M

Dewpoint Probe

DPRC

Notes:

Both static pressure and dynamic pressure values were questionable throughout the entire flight.

No dynamic corrections were applied to the measured static and dynamic pressures. Thus wind direction and wind speed may not be representative of actual flight level conditions.

Dewpoint temperature was higher than ambient temperature during the time frame 002340Z - 011520Z.

Dropsonde data and event switch information ARE NOT on the tape.

Downward spikes in radar altimeter data are a result of overflying land.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1018.1mb	1017.0mb
Corrected tower pressure	NA	1013.0mb

Flight Meteorologist: A. Barry Damiano, (813) 828-3310 ext. 3073

N970123

1013

TIME	LAT	CON	TRK	HT	WD	WS	TA	TD	PA	GA	PS	PQ		
180800	5312	941	311	307	277	14	-34.6	-47.8	7273	7245	392.7	74.3		---
181900	5344	1046	309	303	271	24	-46.6	-49.3	8812	8782	310.8	80.6		---
183700	5507	1236	336	328	252	26	-56.7	-61.0	12406	12236	178.2	84.3		---
184800	5620	1333	335	328	246	23	-56.6	-58.2	12417	12198	178	89.6		---
185600	5714	1419	335	328	235	23	-55.1	-56.6	12417	12175	177.9	88.3		---
190235	5800	1500	349	344	233	24	-57.2	-56.4	12419	12144	177.9	88.7	BAD P	DROP
191756	5959	1513	299	288	225	26	-55.3	-57.0	12422	12088	177.9	90.12		DROP
192814	6006	1728	274	266	218	30	-54.5	-56.8	12418	12054	177.8	83.6	BAD P	DROP
193837	6009	1945	272	265	221	29	-52.49	-57.2	12417	12019	177.9	83.6		DROP
194830	6011	2158	270	263	213	29	-51.4	-55.4	12422	11985	177.2	85.7		DROP
195845	6009	2415	268	262	229	30	-48.8	-52.0	12417	11954	177.8	83.1		DROP
200910	6006	2633	266	261	236	27	-49.8	-52.1	12487	12565	161.4	72.0	NO WS	DROP
202023	5957	2853	220	219	229	30	-51.1	-53.2	12482	12522	161.5	71.1		DROP
203803	5803	2849	126	123	243	28	-51.5	-53.9	12484	12598	161.4	72.2		DROP
204839	5807	2612	87	88	238	24	-48.9	-54.5	12479	12625	161.7	75.6		DROP
205939	5810	2338	88	90	239	22	-48.0	-53.3	12483	12652	161.6	76.8		DROP
211034	5811	2045	91	94	220	23	-53.2	-53.2	12485	12676	161.6	79.2		DROP
213241	5801	1518	93	93	237	23	-53.9	-54.5	12466	12647	161.6	78.8		DROP
215535	5631	1455	182	183	199	35	-42	-50.6	8225	7928	343.9	168.8		DROP
220844	5804	1505	226	227	231	33	-42.5	-50.7	8223	7974	344.2	171.0		DROP
221646	5801	1634	271	267	258	35	-44.1	-50.7	8223	7946	344.0	169.3		DROP
222358	5802	1754	270	270	282	39	-44.5	-51.7	8222	7952	344.1	168.9		DROP
223133	5800	1919	268	271	289	43	-43.5	-51.7	8222	7966	344.1	169.2		DROP
224012	5457	2054	222	228	285	44	-43.4	-46.8	8220	7965	344.2	167.9		DROP
230521	5332	2123	179	183	289	31	-43.0	-47.7	8218	8072	344.3	169.4		DROP
231643	5203	2054	120	120	302	23	-43.6	-49.6	8219	8118	344.2	169.7		DROP
232305	5200	1930	88	88	315	25	-44.0	-48.0	8217	8111	344.2	167.6		DROP
233045	5200	1750	90	85	315	17	-44.6	-51.0	8217	8096	344.2	167.8		DROP
233648	5200	1631	91	88	288	18	-43.9	-52.8	8218	8098	344.3	169.5		DROP
234329	5205	1503	35	29	251	25	-42.2	-50.9	8218	8097	344.4	171.0		DROP
235428	5220	1500	0	352	274	26	-43.2	-51.5	8215	8056	344.4	171.7	BAD PTH	DROP
000645	5459	1500	0	352	281	37	-44.2	-52.4	8219	7998	344.3	169.2		DROP
001722	5401	1500	180	185	276	24	-45.1	-52.2	8214	8053	344.4	167.9		DROP
002600	5357	1500	117	117	285	10	-6.0	-5.0	1494	1426	844.6	125.2		
003410	5338	1357	118	118	270	10	-5.4	-5.5	1496	1438	845.0	125.5		
004500	5312	1237	119	122	214	13	-0.3	2.2	1493	1449	844.8	126.0	CLD	
1004500				FRONTAL ZONE										
005400	5257	1126	98	99	238	14	0.8	4.8	1491	1462	845.0	125.0		
005800	5254	1053	98	102	230	18	1.3	4.6	1491	1464	845.2	124.1	PRECIP	

970123

AT ~~1~~

VEW - PTR

VNS - PTR

DPRC

~~LAD~~

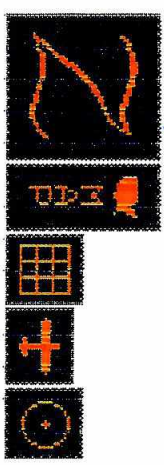
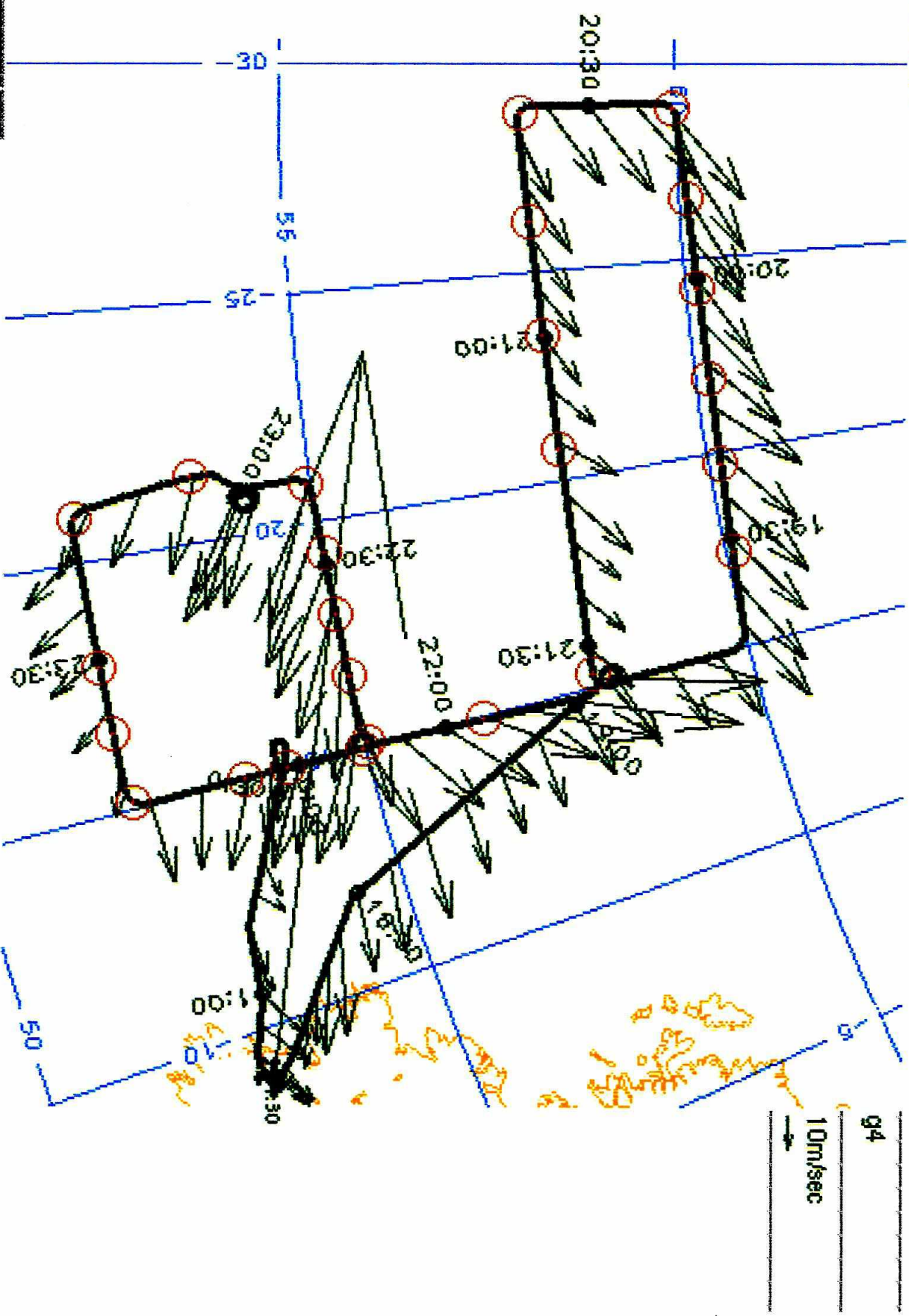
Both PS + PQ
messred up

~~002410Z~~

002340Z TDD>TA

011520Z

24-jan-1997,02:00:00 Lambert conformal polar projection: g4 track with wind vectors.



DATE : ~~1/17/97~~ 1/29/97

TO : Chief, AOC Flight Operations

FROM : Pilot/Flight Director, Aircraft

ON 0124Z BLOCKTIME
~~N49KF~~
OFF 1749Z 7:35

SUBJECT: Hazardous Duty

PURPOSE OF FLIGHT: FASTEX PROJECT

Hazardous Duty Pay is required for flight made on 1/23/97
(DATE)

Request based on INTENTIONALLY WENT ^{DOWN} TO 5000 FEET
TO PENETRATE FRONTAL ZONE AT THAT ALTITUDE

Personnel on board authorized Hazard Pay:

RITSON

DAMIANO

HILL

GOLDSTEIN

PRADAS-BERGUES

PILOT/FLIGHT DIRECTOR: A. Benny Damiano

APPROVED: _____

DISAPPROVED: _____

CHIEF, AOC FLIGHT OPERATIONS: _____

GS-IV FLIGHT PLAN
THURSDAY 23
Take-off: 1800Z
Landing: 0024Z
FL: 450/270

24 23
20

24 23
20

6 1427
36

71
426

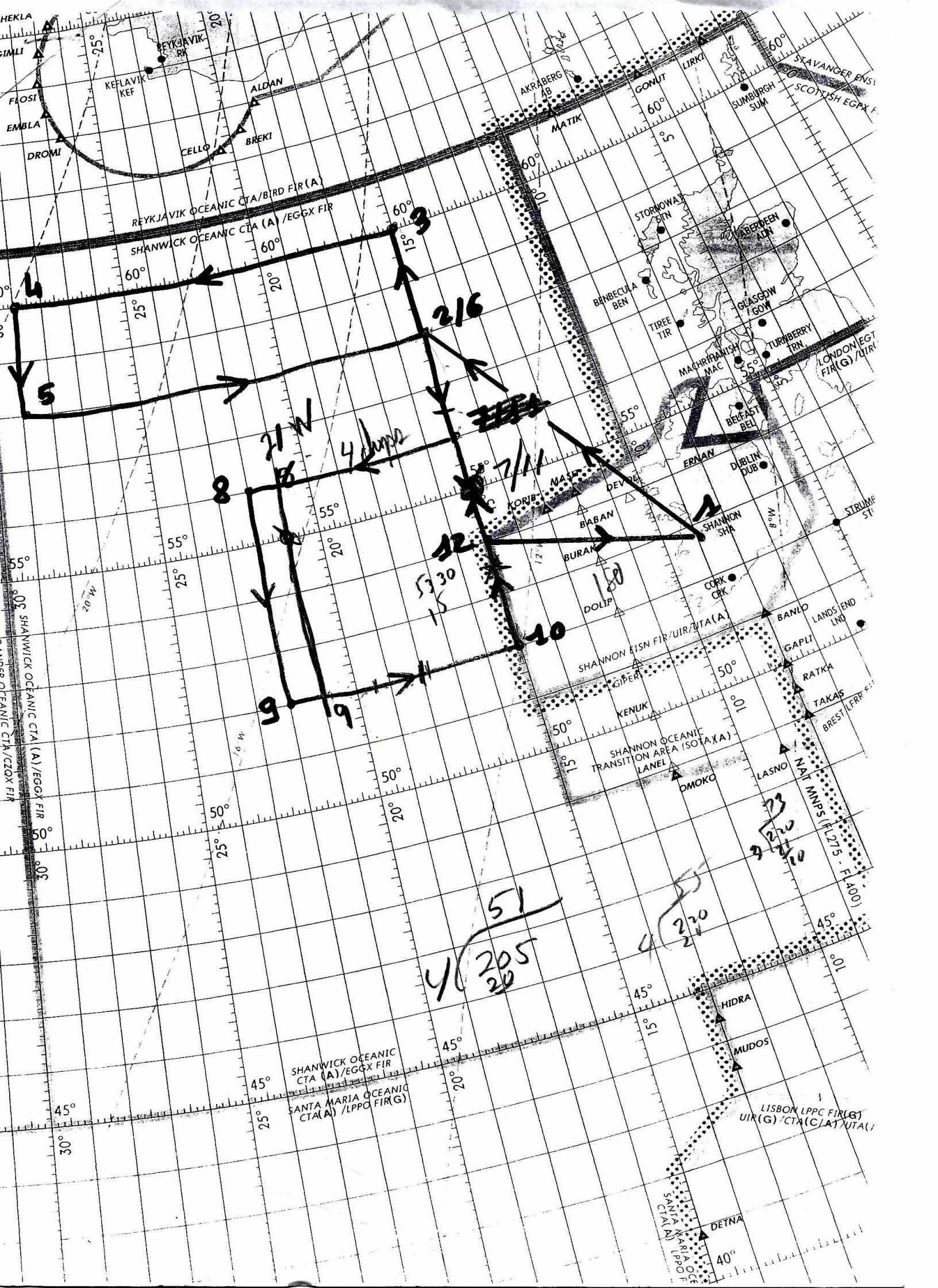
87
5/436
40/36
57

WYPt	Longit.	Latitud	Distan.	Wind FF	Wind DD	Sg. Time	T. Time	UTC T.	NSd.	DSd.
1	-8.92	52.70	.00	34.62	269.80	.00	.00	18.00	0	0
2	-15.06	57.98	379.73	38.42	259.09	.85	.85	18.85	1	1
3	-15.07	59.99	120.41	52.61	244.06	.25	1.10	19.10	2	1
4	-29.33	60.01	427.12	55.95	233.25	1.02	2.13	20.13	8	6
5	-28.91	58.07	117.42	59.47	233.18	.27	2.40	20.40	9	1
6	-15.16	57.99	435.97	54.89	236.83	.86	3.26	21.26	14	5
7	-15.15	55.00	119.22	46.31	246.70	.29	3.55	21.55	15	1
8	-21.00	55.02	229.04	46.40	242.38	.59	4.14	22.14	18	3
9	-21.00	57.00	244.20	48.40	243.56	.60	4.74	22.74	21	3
10	-14.97	52.03	257.62	38.25	248.75	.55	5.29	23.29	24	3
11	-15.14	56.05	241.35	37.87	251.01	.55	5.84	23.84	27	3
12	-15.05	53.98	124.52	39.58	249.62	.30	6.14	24.14	28	1
13	-8.92	52.70	232.76	34.84	260.27	.51	6.65	24.65	28	
			2930				6h 39m		28	

86
3 258
24

78
3 229
219

~ 71nm
~ 87nm
~ 80nm
~ 86nm
80



Proposal for GS-IV Flight Plan

Thursday 23, 1800Z

Take-Off: 1500Z

Landing: 2118Z

35 dropsondes : 1/8 mm

FL 270

TAS 430 knots

60

49

30 15

Wy Pt	Longit.	Latitud	Distan.	Wind FF	Wind DD	Sg.Time	T. Time	UTC T.	NSd.	DSd.
1	-8.92	52.70	.00	44.29	286.73	.00	.00	15.00	0	0
2	-14.96	56.99	331.27	50.62	257.02	.81	.81	15.81	1	1
3	-24.85	58.93	335.37	61.49	212.77	.80	1.62	16.62	7	6
4	-26.96	58.01	86.07	64.67	226.58	.24	1.85	16.85	8	1
5	-15.05	55.07	431.25	62.49	223.05	.96	2.81	17.81	15	7
6	-17.08	54.04	93.50	71.39	224.54	.26	3.07	18.07	16	1
7	-29.02	57.00	441.94	64.42	240.68	1.13	4.20	19.20	24	8
8	-28.95	54.07	175.65	83.85	270.39	.41	4.61	19.61	27	3
9	-24.88	55.09	154.21	78.35	268.11	.31	4.92	19.92	29	2
10	-18.96	52.10	276.69	62.74	247.34	.61	5.52	20.52	33	4
11	-14.96	53.05	156.49	66.22	235.86	.32	5.84	20.84	35	2
12	-8.92	52.70	219.84	45.61	264.44	.46	6.30	21.30	35	0

2702 nm

6H 18

176

69
4 277
24 37

210
110
25

55
6 331
30 30

61
7 431
42 11
24

every 55

every 62 nm

every 55 nm

every 70

