

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

FLT ID: 970205N	FM: SNN	TO: SNN
FLT NO: 97-040	BLK IN: 0439Z	ATA: 0435Z
ETD: 2230	BLK OUT: 2222Z	RTD: 2231Z
ETE: 0400	BLK TIME: 6.17 6.3	FLT TIME: 6:04 6.1
SPONSOR ORG:	PROGRAM: FASTEX	PURPOSE:

OAO PERSONNEL

AC PLAYER, G	SYS ENG PRANS-BERGENES, C ✓
CP MAXSON, B / FINKE, M ✓	DATA SYS GOLDSTEIN, A ✓
NAV	RADAR HILL, J ✓
FE KITSON, B / MEREK, M ✓	BT/ODW
RADIO	CLD PHYS
FD C2424K, S ✓	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
SHAPIRO, M ✓	PI	
GALL, B ✓	SCIENTIST	
BARTELS, D ✓	SCIENTIST	

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

HIT FRANT @ 0027Z 54 57N 27 55W

DYNAMIC PRESSURE LOSS @ 0024Z; 0058Z, DUE TO PLANE SLOWING

AVAPS PROBS 0051Z
SYSTEM DIED 0117Z

SONDE GOT STUCK ON HANGING BY PARACHUTE 0152Z

LOST AUTOPILOT + BOTH COMPUTERS 0240Z

AVAPS LOCKED UP 0255Z, 0304Z

31 OF 49 GOOD DROPS

U.S. DEPT. COMM./NOAA/OAD - DATA SECTION WORK FORM NO.2 OADWF2 F

FLT ID:

TIME OFF:

TIME ON:

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1017.3	1018 KPA	1011.2	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

ODW

GPS

49

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

970205N

TIME	LAT	LO	TK	HOG	TA	TD	WD	WS	PA	GA	PS	QC	REMARKS
224530	53 08	10 43	287	281	-38.9	-43.5	259	35	7959	7889	357.2	156.9	26K
230657	53 44	14 20	284	277	-39.8	-44.0	248	40	7962	7834	357.1	156.6	DRAP
231634	53 58	16 00	283	275	-39.3	-42.0	239	39	7965	7810	356.9	156.8	DRAP
232756	54 13	18 00	281	272	-39.1	-39.1	234	42	7966	7756	356.9	157.4	DRAP
233337	54 20	19 00	280	271	-39.2	-42.5	233	44	7967	7724	356.9	156.1	DRAP
233619	54 23	19 28	280	270	-39.1	-43.3	231	44	7965	7709	356.9	156.9	DRAP
233915	54 26	20 00	279	269	-39.4	-43.1	230	45	7965	7719	356.9	156.9	P DRAP
234154	54 32	21 00	278	268	-39.8	-41.2	227	47	7965	7679	356.9	156.7	DRAP
235032	54 37	22 00	278	267	-40.1	-43.5	227	48	7966	7648	356.9	156.8	DRAP
235508	54 41	23 00	277	265	-40.5	-42.6	218	50	7965	7625	356.9	157.3	DRAP
000139	54 45	24 00	276	263	-40.6	-43.4	214	54	7966	7590	356.9	157.0	DRAP
*000211	54 49	25 00	276	261	-40.6	-42.7	210	58	7966	7555	356.9	156.2	DRAP
001244	54 52	26 00	275	259	-40.9	-44.0	208	64	7965	7510	356.9	156.6	DRAP
001924	54 55	27 00	274	257	-41.2	-44.5	210	67	7962	7469	356.9	155.9	DRAP
002417	54 57	28 00	273	257	-43.8	-46.5	208	64	7955	7419	357.0	131.6	(FRONT) DRAP
003001	54 58	29 00	272	259	-46.0	-52.4	208	51	7964	7392	357.0	157.1	P DRAP
003155	54 59	29 20	272	260	-48.5	-56.5	206	43	7965	7377	357.0	156.7	DRAP
003524	54 59	30 00	271	261	-42.7	-57.1	213	42	7965	7382	357.0	155.8	DRAP
004047	55 00	31 00	271	262	-48.9	-60.0	215	35	7964	7355	356.9	156.3	DRAP
004540	54 51	31 42	133	138	-48.5	-59.5	207	27	7966	7358	356.9	157.3	DRAP
004949	54 30	31 05	133	140	-49.2	-59.5	204	31	7965	7356	357.0	156.1	DRAP
005633	54 00	30 10	134	142	-46.2	-59.9	201	40	7960	7399	357.0	156.1	DRAP
010400	53 29	29 16	135	147	-43.8	-58.3	204	50	7952	7431	357.0	130.6	DRAP
011058	52 59	28 21	136	148	-43.7	-47.5	200	60	7961	7468	357.1	154.1	DRAP
012028	52 20	27 23	136	149	-41.5	-43.5	198	61	7958	7538	357.1	145.5	DRAP
012500	52 00	26 53	136	149	-40.6	-42.6	197	61	7961	7562	357.1	156.8	DRAP
013135	51 30	26 09	137	150	-39.9	-44.1	199	62	7960	7809	357.1	155.6	DRAP
013810	51 00	25 24	137	150	-39.7	-41.7	201	62	7960	7642	357.1	155.6	DRAP
014442	50 30	24 42	138	150	-38.4	-46.9	200	59	7958	7677	357.2	155.5	DRAP
015138	50 24	24 00	316 TURN		-38.2	-45.1	206	56	7959	7705	357.1	154.8	DRAP
015629	51 05	24 11	353	345	-39.0	-45.1	206	55	7960	7677	357.2	157.3	DRAP
020252	52 01	24 22	353	344	-39.4	-41.8	205	54	7967	7641	356.8	154.3	DRAP
020553	53 00	24 34	353	344	-40.1	-42.8	208	55	7968	7571	356.8	156.2	DRAP
021647	54 00	24 47	353	344	-40.2	-42.9	207	56	7968	7549	356.7	156.4	DRAP
*022341	55 00	25 00	353	343	-40.5	-44.0	209	56	7970	7499	356.8	155.4	P DRAP
022534	55 12	25 24	352	342	-40.8	-44.3	209	58	7969	7494	356.7	155.4	DRAP
023036	56 00	25 14	352	342	-41.3	-45.3	210	61	7967	7456	356.7	154.0	P DRAP
023732	57 00	25 28	352	341	-43.4	-47.1	218	57	7972	7396	356.8	152.2	DRAP
024453	58 00	25 44	352	352	-48.1	-50.9	218	45	7968	7355	356.7	157.3	DRAP
025209	58 55	25 42	99 TURN		-48.9	-52.1	216	44	7975	7352	356.4	159.8	DRAP
030051	58 26	23 56	118	132	-44.1	-47.9	217	59	7964	7398	356.8	145.8	P DRAP
030220	58 20	23 36	119	135	-42.9	-46.9	217	64	7964	7413	356.7	147.0	DRAP
031102	57 50	21 57	120	134	-41.0	-43.5	213	57	7964	7473	356.9	149.9	PT DRAP
031253	57 44	21 35	120	133	-41.3	-44.0	214	56	7966	7487	356.9	156.5	DRAP
032123	57 12	20 00	122	134	-40.4	-43.5	216	53	7966	7554	357.0	155.5	DRAP
033217	56 30	18 00	124	134	-39.7	-42.7	218	43	7961	7630	357.1	152.7	WNO DRAP
033444	56 20	17 33	124	133	-39.9	-42.5	218	42	7962	7646	357.1	153.9	DRAP
034332	55 39	16 12	127	136	-39.1	-42.1	231	45	7961	7694	357.1	154.4	T DRAP
035626	54 41	14 00	129	137	-38.6	-42.5	233	39	7962	7783	357.1	156.1	DRAP
040742	53 50	12 00	120	126	-38.6	-43.4	235	34	7963	7845	357.1	158.4	WNO DRAP

FASTEX

Flight #10 N970205

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:

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.

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

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

AVAPS system locked up 0255Z and 0304Z.

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

HGALT values deviated from 2231:45-2358:00, and HGALT values spike prior to takeoff and at landing (2228:00-2231:45 and 0434:52-0438:00).

DPRC exceeded ambient temperature (AT1) 2232:40-2233:40 (ascent), 2344:00-2344:45, and 0418:00-0429:00 (descent).

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1017.3	1011.2
Corrected tower pressure	1018.0	1013.0

Flight Meteorologist: Stan Czyzyk, (813) 828-3310 ext. 3086

970205N. DF

⑥ VNS-PITR

VEW-PITR

PSIM

QCIM

~~HGALT~~ ~~PGALT~~ HGALT

ATI

DPRC

ATI .50 to .65°C

warmer than AT2

HGALT SPIKE BEFORE TAKEOFF 2228:00 - 2231:40

HGALT DOWNWARD SPIKE 2259:30 - 2259:40

HGALT DOWNWARD SPIKES 2233:00 - 2234:45

✓ SPIKE IN GPGALT 2251:30 - 2252:00

✓ ~~PGALT~~ ~~UPWARD OFFSET~~ 0249:30 - ~~0251:00~~ 0307:45

✓ GPGALT UPWARD OFFSET 0035:00 - 0054:30

✓ GPGALT UPWARD OFFSET 0201:45 - 0208:00

~~GPGALT~~ ~~UPWARD OFFSET~~ 2315:00 - 2356:00

~~PGALT~~ ~~UPWARD OFFSET~~ 0307:30 - 0308:00 ~~SPR~~ JUMP

PSIM + PS2M AUG 0.3 MD DIFF ENTIRE FLIGHT

✓ ~~GPGALT 2315:00 - 2326:00 UNSTEADY~~

✓ ~~GPGALT 2337:00 - 2356:00 UNSTEADY~~

AKRD2 SPIKES DRAMATICALLY @ TAKEOFF

DPRC exceeded ambient temp 2232:40 - 2233:40

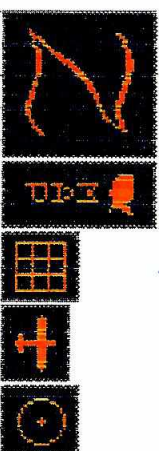
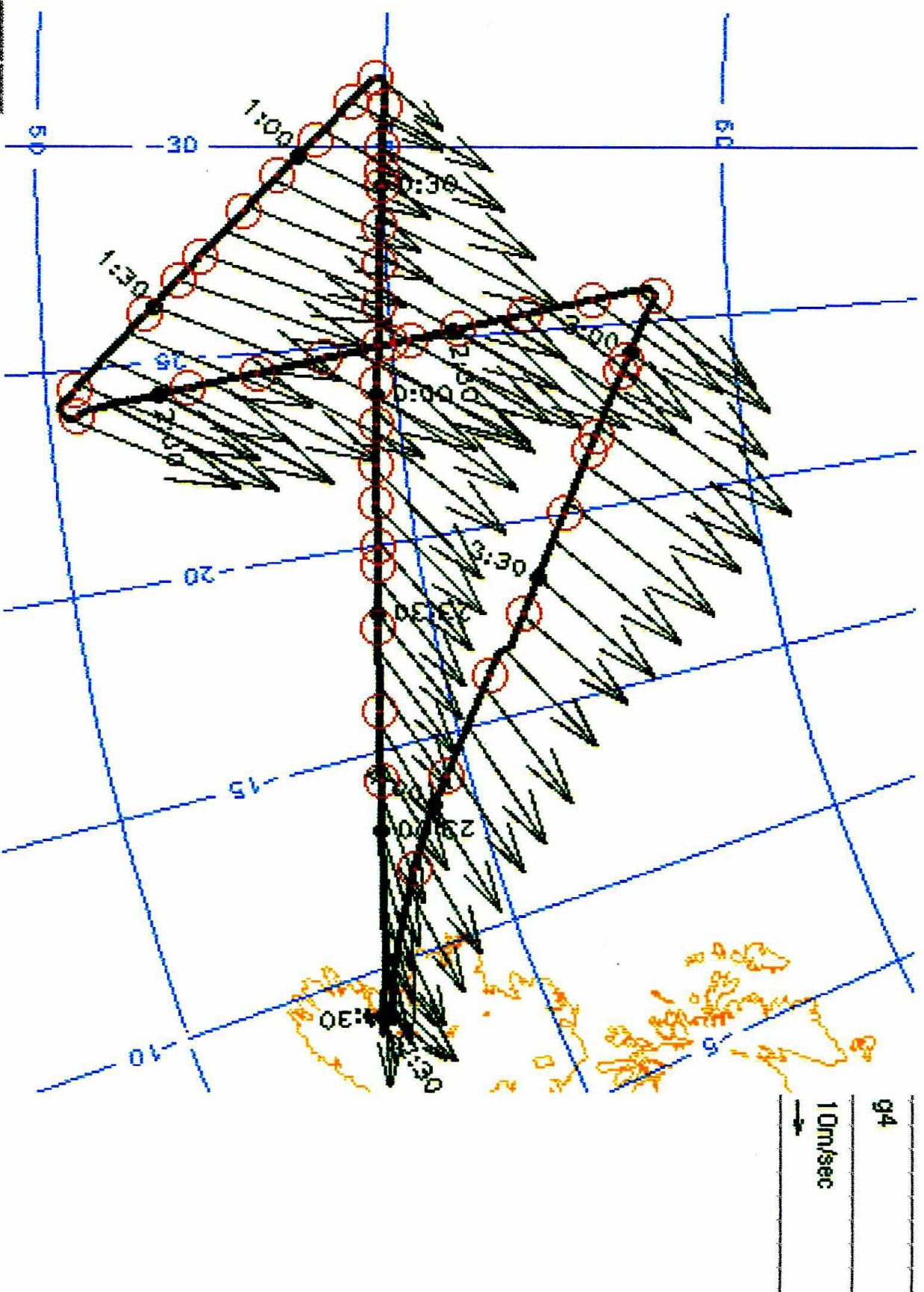
~~2328:20 - 2329:30~~

~~2341:30 - 2342:00~~

2344:00 - 2344:45

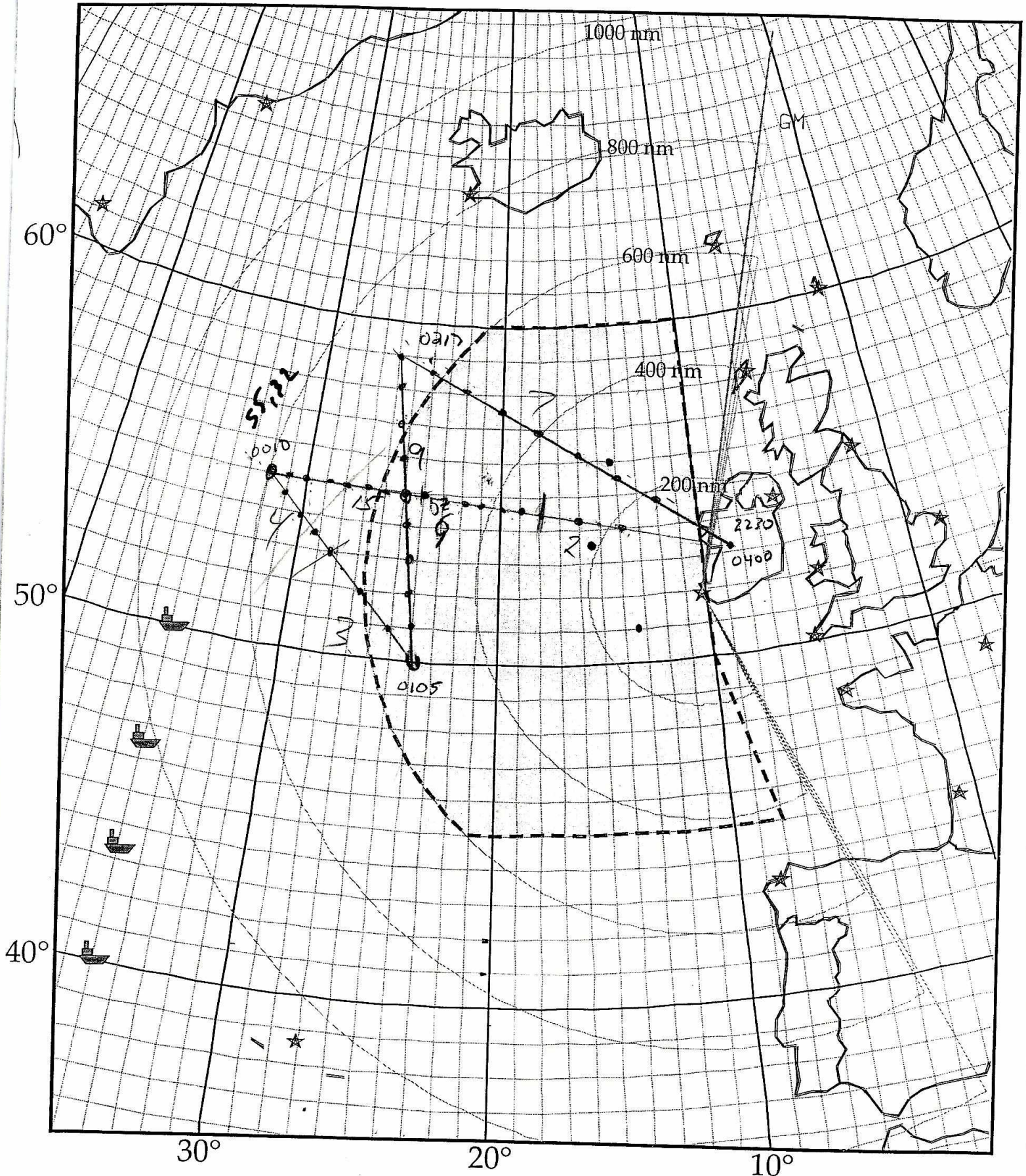
0418:00 - 0422:00

6-feb-1997,06:00:00 Lambert conformal polar projection: g4 track with wind vectors.



FASTEX MSA Planning Chart

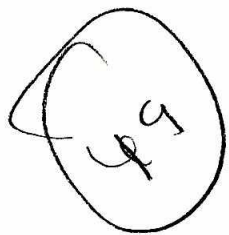
64



Drops

~~54° 00' N 14° 00' W~~
~~54° 6.7' N 16° 00' W~~
~~54° 13.4' N 18° 00' W~~
~~54° 16.7' N 19° 00' W~~
~~54° 20.0' N 20° 00' W~~
~~54° 23.3' N 21° 00' W~~
~~54° 26.6' N 22° 00' W~~
~~54° 30.0' N 23° 00' W~~
~~54° 33.3' N 24° 00' W~~
~~54° 36.6' N 25° 00' W~~
~~54° 40.0' N 26° 00' W~~
~~54° 43.3' N 27° 00' W~~
~~54° 46.6' N 28° 00' W~~
~~54° 50.0' N 29° 00' W~~
~~54° 53.3' N 30° 00' W~~
~~54° 56.6' N 31° 00' W~~
~~55° 00' N 32° 00' W~~
~~59° 30' N 31° 05' W~~
~~54° 00' N 30° 10' W~~
~~53° 30' N 29° 15' W~~
~~53° 00' N 28° 20' W~~ ⁺²²
~~52° 30' N 27° 40' W~~
~~52° 00' N 26° 53' W~~ ²²
~~51° 30' N 26° 10' W~~
~~51° 00' N 25° 26' W~~ ^{23 (27)}
~~50° 30' N 24° 42' W~~ ^{23 (27)}
~~50° 00' N 24° 00' W~~ ^{24 (29)}
~~51° 00' N 24° 13' W~~ ⁽³⁰⁾
~~52° 00' N 24° 27' W~~ ⁽³¹⁾
~~53° 00' N 24° 40' W~~ ⁽³²⁾
~~54° 00' N 24° 54' W~~ ⁽³³⁾
~~55° 00' N 25° 08' W~~ ⁽³⁴⁾
~~56° 00' N 25° 21' W~~ ⁽³⁶⁾
~~57° 00' N 25° 34' W~~ ⁽³⁷⁾
~~58° 00' N 25° 47' W~~ ³⁸
~~59° 00' N 26° 00' W~~ ³⁹

~~58° 24' N 24° W~~ (41)
~~57° 48' N 22° W~~ (43)
~~57° 12' N 20° W~~ (44)
~~56° 36' N 18° W~~ (46)
~~56° 00' N 16° W~~
~~55° 24' N 14° W~~
~~54° 48' N 12° W~~



$$\begin{array}{r} 120 \\ 7 \overline{) 840} \\ \underline{714} \\ 126 \end{array}$$

$$\begin{array}{r} 36 \\ 7 \overline{) 254} \\ \underline{21} \\ 44 \end{array}$$

3.33

$$\begin{array}{r} 3.83 \\ 18 \overline{) 6000} \\ \underline{54} \\ 600 \\ \underline{540} \\ 600 \\ \underline{540} \\ 600 \\ \underline{540} \\ 600 \end{array}$$

$$\begin{array}{r} 8 \\ \sqrt{480} \end{array}$$

143°
1548
1530
1549

$$\begin{array}{r} 13 \\ 9 \overline{) 120} \\ \underline{9} \\ 30 \end{array}$$

$$\begin{array}{r} 3 \\ 16 \overline{) 60} \\ \underline{48} \\ 120 \\ \underline{96} \\ 240 \\ \underline{192} \\ 480 \\ \underline{480} \\ 0 \end{array}$$

10/8

$$\begin{array}{r} 55 \\ 4 \overline{) 220} \\ \underline{20} \\ 20 \end{array}$$

NETMAN
 56 45 N
 1410 W

09- 53° 47'
53° 49'

$$\begin{array}{r} 87 \\ 3 \overline{) 260} \\ \underline{24} \\ 20 \end{array}$$

004745 54 41
31 24

