IPEX

Flight 1 I000205

DATA TYPE	SENSOR or OPTION
INE	1
Accelerometer	1
Temperature Probe	1
Altitude (for vertical wind)	Pressure Altitude
Static Pressure	Fuselage
Dynamic Pressure	Fuselage
Dewpoint Probe	1

Notes:

There were no data/time gaps.

Both dewpoint sensors performed poorly during the flight. Dewpoint sensor DW1 was selected because its values were less erroneous than DW2's values.
Dewpoint sensor, DW1, was balanced at 2036Z. The spikes that were generated during this action were removed and patched over.

Downward spikes in radar altimeter values were due to overflying mountain crests.

Aircraft INE positions were renavigated with respect to GPS.

SPECIAL NOTE!!! Locations 80, 81 and 82 of record five on the standard tape contain vertical ground, vertical air and vertical wind speeds, respectively, derived from Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

The King liquid water voltage is in location 79 of record five on the standard tape.

	Takeoff	Landing
Aircraft static pressure	870.0 mb	875.4 mb
Corrected tower pressure	N/A	N/A

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

FLT ID: I000205	FM: KSLC	TO: KSLC
FLT NO: 00-16	BLK IN: 2147Z	ATA: 2142Z
ETD: 1700Z	BLK OUT: 1652Z	ATD: 1709Z
ETE:	BLK TIME: 4:55	FLT TIME: 4:33
11 SPONSOR ORG: NSSL	PROGRAM: IPEX	PURPOSE: IOP #1 TETONS

OAO PERSONNEL

AC	TENNESEN	SYS ENG	
CP	O'MARA	DATA SYS	PRADAS-BERGNES
NAV	RATHBUN / ADLER	RADAR	BARR
21 FE	WADE	BT/ODW	
RADIO	SANS SOUCI	CLD PHYS	
FD	DAMIANO	DOPPLER	

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
31 SCHULTZ	PI	NSSL
JORGENSEN	ASST. PI	NSSL
FOX / CHISHOLM	OBS	U of U
IGELMAN / MILLS	MEDIA	PBS
KINGSMILL	PMS	DRI
COX	OBS / PMS	U of U
47 YOUNG	OBS	AOC

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

Carlos has spent about 30 minutes on DW2 1710Z ~~→~~ stop

2037 Bal DW1
2039

Switched to DW1 at 1655Z

59

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

FLT ID: I00 0205 TIME OFF: 17092 TIME ON: 21422

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	876.0	30.20	875.4	30.19

	NO	DATA DISPOSITION/DATE/QUALITY
1/SEC FLT LVL TAPES	2	
FAST FLT LVL TAPES		
RADAR TAPES	1	
DOPPLER TAPES		
ODW CASSETTES		
HARD COPIES		
PMS	2	
VIDEO	4	
AXBT		
AXCP		
ODW		

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS
2 30.20 1656Z
1

NOAA FORM 59-4
(2-72)

I000205

30.13

TIME	LAT	LON	TRK	HD	WD	WS	TA	TD	PA	GA	SP	PS			PQ
175000	4253	11100	354	349	256	25	-16.9	-15.8	4828	3092	821.3	552.8	IN	CLD	72.2
175900	4332	11057	24	20	264	29	-16.9	-16.5	4823	2975	810.2	553.1	IN	CLD	73.6
181000	4409	11052	261	262	260	27	-17.5	-16.7	4816	2735	795.4	553.6	IN	CLD	65.1
184130	4347	11143	82	84	256	18	-8.0	-9.2	3315	1773	840.8	673.4	EAST	INCW	67.2
184740	4357	11107			269	23	END EAST Leg								
184845	4353	11109			270	19	Begin West Leg				16K PA				
185430	4347	11138			268	20	END West Leg								
185930	4348	11141			271	27	East leg @ 16K PA								
190700	4352	11051	OVER TETONS												
191100	4354	11028	84	85	267	30	-17.7	-17.1	4833	2643	769.1	552.4	IN	CLD	68.2
191435	4354	11006	end EAST leg @ 16K PA												
191840	4354	10958			270	30	Begin West leg @ 18K PA								
193300	4350	11113	266	268	277	24	-22.4	-21.2	5509	3723	817.7	504.4	BTN	CLD	64.7
194100	4347	11156	262	265	278	32	-22.2	-21.1	5505	3906	840.8	504.8	BTN	CLD	64.7
193000						END	West leg at 18K								
194600	4339	11152	91	91	282	28	-17.2	-18.3	4837	3385	850.9	552.1	BTN	CLD	69.0
195400	4333	11102	121	125	270	30	-18.6	-17.1	4836	2230	729.1	552.1	BTN	CLD	70.0
200100	4351	11042	359	355	274	24	-18.4	-17.6	4833	2830	794.1	552.2	BTN	CLD	68.4
202700	4405	11100	185	193	280	32	-18.5	-17.8	4828	2907	804.2	552.7	ABV	CLD	69.9
203500	4352	11104	88	87	281	28	-17.8	-18.1	4828	2824	793.3	552.6	ABV	CLD	71.7
204930		missed approach at Jackson Hole													
210400	4307	11120	222	227	287	30	-16.4	-16.9	4864	2826	797.9	549.9	BTN	CLD	114.4

V15 34R — — —

SLC → MLD HD 331 m — — —

40 46.58 111 57.720 RW 18 H16 in GPS (18)

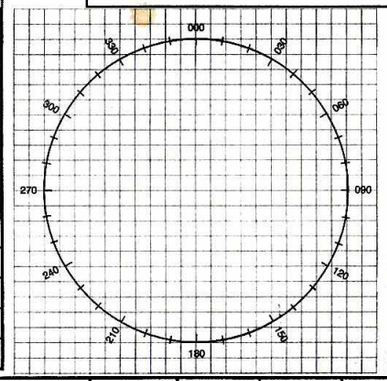
MISSION LOG

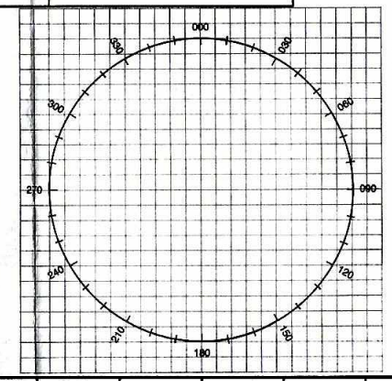
PAGE ___ OF ___

CLEARANCES

FREQ	ALT	HDG	OTHER
			AS FILED. JAZZ 2 dnRT3
			X21 MALAD
			BIG PINEY 37
			RW 35
			34R HS ↗ 10,000
			15,000
			1745 ↗ 16,000
			↘ 12,000
125.7			

1.89
-15
174





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
  _____ E / W AT _____ Z
- 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
- PILOT INTENTIONS
- WE HAVE _____ ENDURANCE REMAINING

11K
16K

TIME	FIX TYPE	POSITION	INS 1 POSITION	K ERR	INS 2 POSITION	K ERR	MH	VAR +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS
1648 / 1652	SLC																			1.3	ENG TAXI
1652 / 1709	SLC																				BLOCK T/O
1713	X✓	41 00.2 / 112 01.0	41 00.2 / 112 01.1	+0 / -.1	41 00.2 / 112 00.9	+0 / +.1				3R	347	222	245	20	13500	233 / 195I	MALAD -14C				132/14 SLC 152°T TAS GOOD
1733	△	42 15.5 / 112 11.2	42 15.4 / 112 11.3	+.1 / +.1	42 15.5 / 112 10.8	+.0 / +.3	060	15E	075	1L	075	281	250	35	15K	248	BIG-1 PINE	58	+12	1745	NEXT 352°T = 343°T
1805	△	43 57.0 / 110 41.5	43 56.8 / 110 41.3	+.2 / +.2	43 56.6 / 110 40.8	+.4 / +.7	341	15E	356	3R	000	253	250	15	16K	244	#4				025°T = 022°T
1849	△	43 52.9 / 111 16.0	43 52.8 / 111 10.5	+.1 / -.5	43 52.9 / 111 09.4	+.0 / +.6	242	15E	257	3L	253	226	295	20	11K	236	#2				TWC 1848 ⇄
1920	△	43 53.7 / 110 06.5	43 51.1 / 110 07.1	+2.6 / -.6	43 52.9 / 110 05.6	+.8 / +.9	253	15E	268	3L	267	226	290	30	18K	250	#3				HD 105T to 7
1946	△	43 38.8 / 111 51.5	43 37.8 / 111 51.0	+1.0 / +.5	43 37.7 / 111 50.0	+1.1 / +1.5	078	15E	093	1L	091	281	270	30	16K	245	#7				
2118	△	41 57.5 / 111 59.0	41 55.5 / 111 59.2	+2.0 / +.2	41 56.5 / 111 57.9	+1.0 / +1.1	174	15E	189	6L	184	337	290	35	16K	332	SLC				008T / 10
2142 / 2142	LAND BLOCK	40 46.6 / 111 57.5	40 45.9 / 111 58.7	+.7 / -1.2	40 46.5 / 111 56.4	+.1 / +1.1															

③ 43 46.0 112 - 035.

A - 43-48 111-36
B - 43 59 110-06

A 43-48 111-12 (1)

B 43 54 110 30 (2)

MISSION LOG	PAGE ___ OF ___

FIX TYPES
(G) - GPS (I) - INS (R) - RADIO (V) - VISUAL (C) - CELESTIAL (D) - DR

TIME	FIX TYPE	POSITION	INS 1 POSITION	K ERR	INS 2 POSITION	K ERR	MH	VAR +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS

quark → JCS 188 → ~~city~~ BRIGMAN 1 | JAX TRANS BUG 1

34R → 35 RW = 340.9m +15 = 355.9 T 18 SOB MD 340°m

NOAA FORM 56-49
(2-95)

MISSION PREFLIGHT LOG

DESTINATION	MISSION	NAVIGATOR	AIRCRAFT COMMANDER	FLIGHT DIRECTOR	SCHEDULED / ACTUAL TAKEOFF Z	DATE OF TAKEOFF
SLC	0016	ADLER	TENESSEN	DAMIANO	1700Z	05 FEB 00

T/O 1709
+35
MLD 1744

	WP	LAT / LON	RTE	MH	VAR +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	LEG / TOT DIST	LEG / TOT TIME	PROP ETA	ETA	ATA	REMARKS
SLC	9	40 51.0 N 111 58.9 W																	
	1																		
	2							351T						42					
	3																		
	4								H0060 m°										
	5																		
	6																		
	7																		
MLD	8	42-12.0 N 112-23.0 W																	

INS PERFORMANCE	INS 1	INS 2
BEGIN ALIGN TIME	1456	1456
ALIGN STATUS (0-5)	0	0
END NAV TIME	2142	2142
START NAV TIME	1638	1638
DELTA T	5+04	5+04

GPS Fm 1

TERMINAL ERRORS	INS 1	INS 2
DELTA LAT	.7	.1
DELTA LON	-1.2	1.1
RGS	1	1
RADIAL ERROR	1	1.

REMARKS

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
AIRCRAFT OPERATIONS CENTER

426

Error setting

RANGE CONTROL GRAPH

TIME REMAINING

11+00 10+00 9+00 8+00 7+00 6+00 5+00 4+00 3+00 2+00 1+00

FUEL REMAINING

60K 55K 50K 45K 40K 35K 30K 25K 20K 15K 10K 5K 0

DISTANCE REMAINING

ETP = .5(TOTAL DISTANCE x OUTBOUND WIND FACTOR)

WIND FACTOR		
WINDSPEED	HEADWIND	TAILWIND
10	1.03	.97
20	1.06	.94
30	1.10	.92
40	1.14	.89
50	1.18	.87
60	1.22	.85

ENROUTE FUEL	
ENROUTE TIME	
ENROUTE FUEL (6K, 5K 4.5K RULE)	
RESERVE AT DESTINATION	
REQUIRED RAMP	
ACTUAL RAMP FUEL	

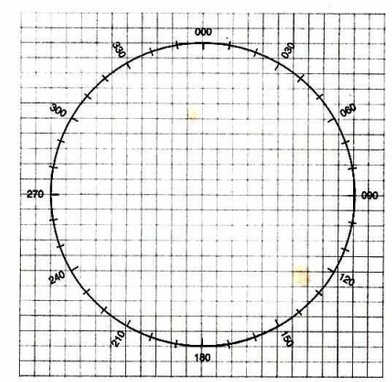
TACTICAL (OFFSTA TO DESTINATION)	4 ENG	3 ENG
DISTANCE (OFFSTA TO DEST)		
ENROUTE TIME (OFFSTA TO DEST)		
BURN RATE (LBS/HR)	4500	5500
ENROUTE FUEL REQUIRED		
RESERVE AT DESTINATION		
FUEL AT OFFSTA		

POINT OF SAFE RETURN	4 ENG	3 ENG
ETP DISTANCE (TO DEPARTURE)		
ENROUTE TIME (TO DEPARTURE)		
BURN RATE (LBS/HR)	4500	5500
FUEL REQUIRED		
RESERVE AT DEPARTURE		
PSR FUEL		

CEX - TRUE BEARING METHOD			
COMPASS TYPE	INS1	INS2	WET
MCH (READING)			
- MTH (SEXTANT)			
CE			
- VAR			
DEV			

CEX - ERB METHOD			
COMPASS TYPE	INS1	INS2	WET
MERB (DIAL 000)			
+ ZN			
= MTH			
MCH (READING)			
CE			
- VAR			
= DEV			

CEX SIGHT	
GMT	
GHA	
CORR	
GHA	
LONG +W -E	
EXACT LHA	
LAT	
BODY	
DEC	
HC / D	
CORR	
HC	
Z	
ZN	



"F" FACTOR				
PRESS ALT	200	250	300	350
10,000	1.0	1.0	.99	.99
20,000	.99	.98	.97	.97
30,000	.97	.96	.95	.94
40,000	.96	.94	.92	.90

TRUE AIRSPEED CROSS-CHECK							
TIME	IAS	PRESS ALT	"F" FACTOR	EAS	OAT	TAS	ITAS

P-3 CHIEF SCIENTIST EVENT/RADAR LOG

Flight Number: 000205I1

IPEX

Date: Feb. 5 2000 *Aircraft ID*: N43 *Ch. Scientist:* Schultz

Doppler Sci:Jorgensen

****

Radar Scientist: Jorgensen (NSSL) *Radar Tech: Carlos* (AOC)

Data Tech: Jim Barr (AOC)

Radar parameters: PRF1/PRF2 3200/2133

Setup file = mprs1

Pulses/sample = 32

Threshold on Ref

Radar tapes (this flight):

Event Log

Time (Lat, Lon), Trk (deg), Prs (mb), Alt (m), RH (%)	*Event & Comments*
164751 Z (40.78, -111.96) 237.4°, 876.4 mb, 243.0 m, 170.5%	Engine Start
165248 Z (40.78, -111.96) 219.7°, 876.3 mb, 243.0 m, 280.2%	Block Out
170725 Z (40.77, -111.97) 246.0°, 876.0 mb, 274.0 m, 54.2%	Light precip outside as we taxi to the runway. Sky overcast
170838 Z (40.78, -111.97) 355.4°, 876.2 mb, 231.0 m, 64.1%	Takeoff
	Initial flight pattern will box the Teton mnts. Pt 1 is 42¡ 30', -110¡ 55', pt 2 is 43¡ 12' -111¡ 3', pt. 3 is 43¡ 45' -110¡ 43', pt 4 is 44¡ 9' -110¡ 41', pt 5 is 44¡ 8' -111¡ 00', pt 6 is 43¡ 47' -111¡ 3', pt 7 is 43¡ 35' 111¡ 9',
171344 Z (41.05, -112.03) 347.6°, 683.0 mb, 1993.0 m, 101.2%	Breaking through the lower cloud layer at about 700 mb
171447 Z (41.12, -112.05) 345.3°, 651.2 mb, 2319.0 m, 109.2%	Entering the upper cloud layer at630 mb
171656 Z (41.25, -112.11) 345.0°, 594.1 mb, 3078.0 m, 132.0%	some light precip indicated on te LF radar 100 km north of current position 10-20 dbz max, widespread stratiform
172226 Z (41.63, -112.23) 346.4°, 576.0 mb, 3300.0 m, 114.5%	LF up, TA not yet
174315 Z (42.48, -111.12) 75.7°, 576.9 mb, 2024.0 m, 110.3%	Radars working and recording - still working on the PMS system

174802 Z (42.74, -110.98) 353.5°, 552.8 mb, 3037.0 m, 115.2%	at pt 1 tracking to pt.2 at 16 kft moderate precip on the TA radar to our east 5-15 dbz, echo tops just above us, echo does not quite go to the ground, maybe 500 m off the sfc
175058 Z (42.95, -111.01) 353.6°, 552.9 mb, 3102.0 m, 112.8%	PMS system now up and running
175417 Z (43.20, -111.04) 17.4°, 552.7 mb, 3175.0 m, 111.6%	at pt. 2 - attempting to contact NSSL 5 no contact yet
175717 Z (43.41, -110.92) 23.9°, 553.1 mb, 2653.0 m, 108.5%	precip increasing to our west on the LF and TA, TA dbz now up to 15-20 dbz near the sfc. Echo tops still about 1 km above our altitude (4.8 km)
180359 Z (43.88, -110.69) .2°, 553.5 mb, 2798.0 m, 106.8%	at pt 3 heading North to pt. 4 at 26 kft 250 knots TAS
180715 Z (44.11, -110.69) .2°, 553.6 mb, 2784.0 m, 108.5%	Elongated band of reflectivity oriented NE-SW on LF about 50-60 km to our west -
180736 Z (44.14, -110.69) 359.7°, 553.6 mb, 2724.0 m, 108.0%	at pt 4 precip on TA still moderate 20-25 dbz sfc, echo tops about 1 km above us. Turning to track to the west
181117 Z (44.14, -110.98) 260.3°, 553.6 mb, 2923.0 m, 109.2%	at pt 6, turning to track S. Precip still moderate
181625 Z (43.81, -111.04) 186.1°, 553.7 mb, 2881.0 m, 112.8%	at pt. 6, trun to pt 7
181907 Z (43.64, -111.12) 199.5°, 554.0 mb, 3008.0 m, 112.5%	precip getting lighter as we move to the south, sky getting lighter, echo tops coming down
182009 Z (43.59, -111.17) 274.0°, 553.9 mb, 3025.0 m, 119.8%	at pt. 7 turning back to the north to set up the stack pattern around pt 4 &5
182123 Z (43.66, -111.20) 17.4°, 554.1 mb, 3015.0 m, 117.5%	no contact with NSSL5 on the radio even though we are right on top of them
182427 Z (43.87, -111.10) 3.2°, 554.1 mb, 2929.0 m, 110.9%	setting up the stack leg running roughly E-W Pt A is 43.8 -111.6 pt B is 43.9 -110.1, will attempt 10 kft, 15 kft, 18kft and 22 kft levels
182634 Z (43.85, -111.18) 162.5°, 554.2 mb, 3028.0 m, 111.3%	winds at 550 mb is 260 at 26 knots, which verifies the AVN forcast but not the ETA which had 260/55 knots forecasted at 18 Z
183219 Z (43.87, -111.13) 251.0°, 563.3 mb, 2832.0 m, 103.6%	descending to 11 kft at this spot, then will head west to Pt. A
183435 Z (43.84, -111.33) 258.6°, 643.5 mb, 1654.0 m, 87.8%	breaking through the cloud base, ground visible, at 664 mb
183732 Z (43.80, -111.58) 257.7°, 673.4 mb, 1675.0 m, 88.5%	that NE to SW oriented reflectivity band still evident about 30 km to our west
183833 Z (43.79, -111.67) 270.2°, 673.5 mb, 1745.0 m, 89.9%	at Pt. A executing a 90/270 to reverse course
184359 Z (43.81, -111.47) 81.9°, 673.6 mb, 1537.0 m, 91.5%	tracking eastward at 11 kft, we are repeating this leg because we descended during the earlier leg in the middel of it
184731 Z (43.85, -111.13) 80.3°, 673.8 mb, 1488.0 m, 101.3%	near the Tetons, reverse course and staying at 11 kft
185220 Z (43.82, -111.44) 253.6°, 673.7 mb, 1556.0 m, 96.9%	precip gets much lighter as we go west away from the Tetons,
185358 Z (43.79, -111.58) 253.8°, 673.8 mb, 1667.0 m, 91.2%	at Pt A, climbing 90-270 turn to reverse course
190007 Z (43.81, -111.68) 84.7°, 552.2 mb, 3299.0 m, 116.7%	tracking to Pt. A at 16 kft precip light - echo top at about 16,500 ft echo base is about 500 m off the sfc
190332 Z (43.83, -111.32) 84.3°, 552.3 mb, 2872.0 m, 111.4%	precip picking up again as we approach the Tetons, TA indicates precip reaching the ground and extending perhaps 500 m above our altitude, no sign of bright band. The few visuals of the ground shows white snow on the ground

190841 Z (43.87, -110.77) 83.9°, 552.5 mb, 1940.0 m, 107.3%	over the Teton crest - TA ground return shows large undulations. Precip intensity is 20-25 dbz, much stronger over the crest and to the east of it than to the west
191437 Z (43.92, -110.13) 84.0°, 552.6 mb, 2218.0 m, 107.4%	at the easternomost turn point (Pt. B) climbing turn to 18 kft
191831 Z (43.90, -109.94) 264.5°, 504.3 mb, 2386.0 m, 119.5%	we're just at the top of the echo at 18 kft, temp is -22. Surface precip increasing as we go to the west, now up to about 10 dBZ.. We'll extend the westernmost point 20 na mi farther west to go through the reflectiivty band evident on LF.
192600 Z (43.87, -110.60) 266.0°, 504.4 mb, 3483.0 m, 115.6%	Since we're right at the top of the cloud we will truncate the stack at this level. After Pt. A we will re-enter the original box at Pt. 7 at 16,000 ft to complete another survey.
193105 Z (43.85, -111.05) 265.7°, 504.6 mb, 3501.0 m, 116.0%	Over the crest now and precip intensity decreasing rapidly on the west side. Most intense precip (20-25 dbz sft intensity) at the crest. Decreases rapidly to the west
194156 Z (43.78, -112.02) 261.2°, 504.8 mb, 4087.0 m, 109.6%	at the extended Pt. A. No precip here. Whatever was evident on the LF from long range must have been ground return coupled with light precip
194520 Z (43.65, -111.94) 91.3°, 552.1 mb, 3409.0 m, 93.1%	at 16 kft, 7 minutes to Pt. 7 and re-entry of our survey box. We'll do the box 7-8-3-4-5, then decide on either another stack or a missed approach to Jackson Hole airport to get a sounding in the more intense precip on the leeward side of the Tetons.
` 195320 Z (43.58, -111.10) 117.1°, 552.3 mb, 2959.0 m, 113.6%	at pt 7, precip picking back up again as we go through Teton Pass
195514 Z (43.51, -110.92) 121.1°, 552.5 mb, 2480.0 m, 104.6%	at pt 8, moderate precip on the lee of the Tetons. Max dbz now up to 25, the highest we've seen all day.
200000 Z (43.78, -110.69) 7.7°, 552.4 mb, 2782.0 m, 106.6%	at pt. 3, slight turn to north. Sfc precip as intense as we've ssen all day around 25 dbz.
200501 Z (44.14, -110.69) 354.5°, 552.6 mb, 2730.0 m, 102.5%	at pt 4, turning westbound, precip as we approach the crest still moderate with sfc dbz near 25.
200828 Z (44.14, -110.96) 263.5°, 552.4 mb, 2917.0 m, 109.9%	At pt 5 on the west side of the crest. Sfc precip much weaker on this side. We are now at the top of the cloud at 16 kft, whereas on the first survey we were in cloud at this location. An upper cirrus cloud deck can be seen above us.
201113 Z (43.97, -111.02) 185.2°, 552.4 mb, 2749.0 m, 105.7%	Have not been able to contact NSSL5 all day long on the radio. The current plan is to repeat the stack A-B (with shorter legs this time), then execute a missed approach at Jackson Hole airport, then RTB.
201523 Z (43.70, -110.99) 96.5°, 552.5 mb, 2191.0 m, 107.0%	Reversing course to enter the stack location. Will do a spiral descent close to the mnts, then westbound at 11 kft to Pt. A' (48.8, -111.2), then spiral ascent, then eastbound to Pt. B' (43.9, -110.5).
202016 Z (43.88, -111.03) 1.6°, 552.6 mb, 2708.0 m, 106.5%	Precip virtually gone now on the west side of the Tetons. We are out of cloud at 16 kft.
202400 Z (44.13, -110.99) 74.4°, 552.7 mb, 2898.0 m, 105.9%	At point 5, waiting for clearance for 11 kft. May not be able to get it because of ATC.
203057 Z (43.81, -111.03) 185.3°, 552.7 mb, 2896.0 m, 102.1%	Turning west from near Pt. 6 at 16 kft. Can't get lower due to ATC. Virtually no precip here. Lower cloud deck is visible just off the ground, otherwise the sun is shining with blue sky above
203307 Z (43.81, -111.18) 303.0°, 552.6 mb, 3047.0 m, 97.6%	At Pt. A, reversing course
203759 Z (43.87, -110.73) 87.2°, 552.7 mb, 2817.0 m, 441.8%	Sfc precip on TA radar picking up again as we move over the crest.
203957 Z (43.89, -110.51) 84.3°, 552.9 mb, 2766.0 m, 85.1%	at pt. B, turning to intercept the approach vector for Jackson Hole, and descending.

204619 Z (43.78, -110.65) 202.7°, 694.1 mb, 1029.0 m, 68.7%	entering cloud top at 10 kft. Precip really has decreased dramatically in the last hour
204842 Z (43.67, -110.71) 197.0°, 766.2 mb, 370.0 m, 88.3%	going through cloud base at 7400 MSL, lots of snow on the ground
205036 Z (43.59, -110.75) 198.5°, 758.3 mb, 483.0 m, 88.7%	executed missed approach, climbing out for return to SLC
210917 Z (42.76, -111.72) 216.2°, 550.0 mb, 3014.0 m, 101.2%	LF died. No echoes on screen.
211701 Z (42.09, -111.97) 187.1°, 552.3 mb, 3459.0 m, 102.5%	Wave clouds evident on the nose camera near SLC and over the mnts to the east.
212613 Z (41.30, -112.08) 184.1°, 648.5 mb, 2392.0 m, 84.9%	descending into SLC
214145 Z (40.77, -111.96) 359.2°, 874.9 mb, 1.0 m, 53.8%	Touchdown
214640 Z (40.78, -111.96) 265.4°, 875.4 mb, 245.0 m, 47.3%	Block In

tion of Airport: 40.78 -111.97 Take off time: 1200 UTC 7

Point # 1 Lat: 42 29.8 Lon: -110 55.0
nd Dir: 270.0 Wind Spd: 20.0 kts TAS: 225.0 kts Alt: 12000 ft
ist to Way point: 113.1 nm Leg duration: 29.2 mins Arrival Time: 1229 UTC
ground Speed: 232.5 kts Track: 24.3 degrees

Way Point # 2 Lat: 43 11.6 Lon: -111 3.0
Wind Dir: 270.0 Wind Spd: 20.0 kts TAS: 225.0 kts Alt: 12000 ft
Dist to Way point: 42.2 nm Leg duration: 11.4 mins Arrival Time: 1240 UTC
Ground Speed: 221.4 kts Track: 352.0 degrees

Way Point # 3 Lat: 43 44.8 Lon: -110 42.6
Wind Dir: 260.0 Wind Spd: 30.0 kts TAS: 225.0 kts Alt: 15000 ft
Dist to Way point: 36.3 nm Leg duration: 9.1 mins Arrival Time: 1249 UTC
Ground Speed: 240.3 kts Track: 23.9 degrees

Way Point # 4 Lat: 44 9.1 Lon: -110 41.3
Wind Dir: 260.0 Wind Spd: 30.0 kts TAS: 225.0 kts Alt: 15000 ft
Dist to Way point: 24.3 nm Leg duration: 6.4 mins Arrival Time: 1256 UTC
Ground Speed: 229.6 kts Track: 2.6 degrees

Way Point # 5 Lat: 44 8.2 Lon: -111 .6
Wind Dir: 260.0 Wind Spd: 30.0 kts TAS: 225.0 kts Alt: 15000 ft
Dist to Way point: 13.8 nm Leg duration: 4.3 mins Arrival Time: 1300 UTC
Ground Speed: 195.1 kts Track: 266.1 degrees

Way Point # 6 Lat: 43 47.2 Lon: -111 3.4
Wind Dir: 260.0 Wind Spd: 30.0 kts TAS: 225.0 kts Alt: 15000 ft
Dist to Way point: 21.1 nm Leg duration: 5.9 mins Arrival Time: 1306 UTC
Ground Speed: 215.1 kts Track: 185.6 degrees

Way Point # 7 Lat: 43 35.4 Lon: -111 9.1
Wind Dir: 260.0 Wind Spd: 30.0 kts TAS: 225.0 kts Alt: 15000 ft
Dist to Way point: 12.6 nm Leg duration: 3.6 mins Arrival Time: 1309 UTC
Ground Speed: 208.2 kts Track: 200.6 degrees

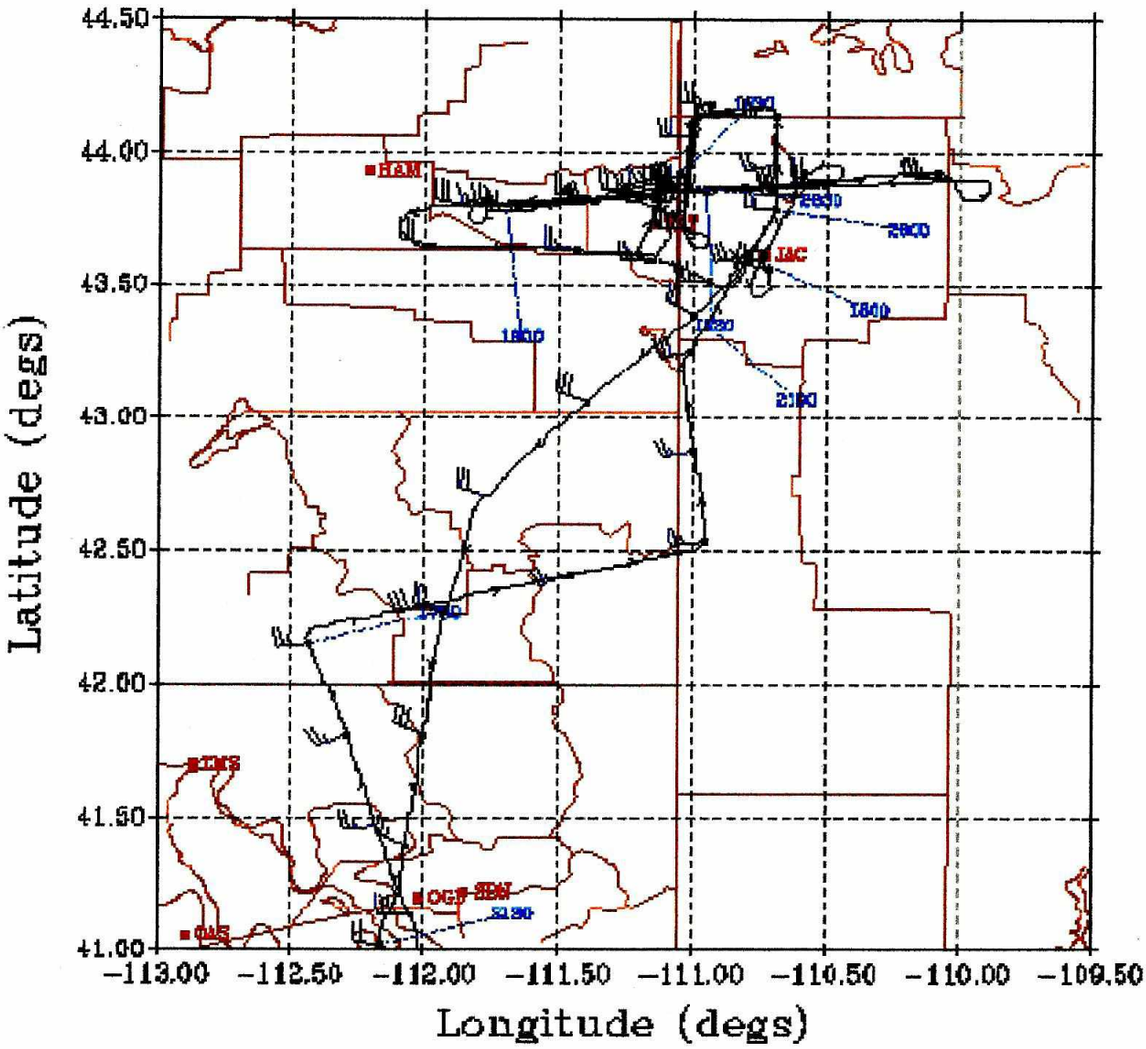
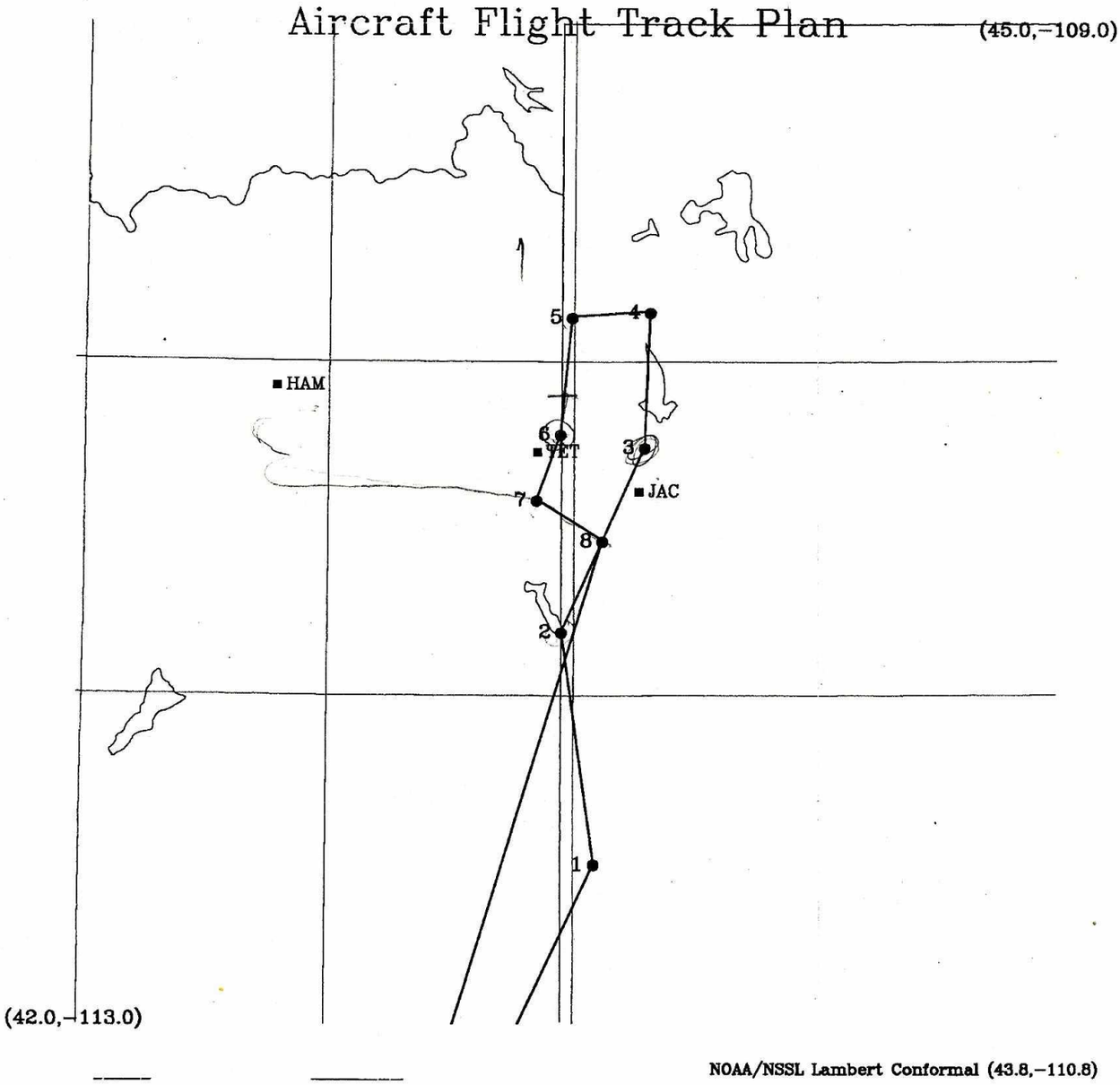
Way Point # 8 Lat: 43 28.0 Lon: -110 53.0
Wind Dir: 260.0 Wind Spd: 30.0 kts TAS: 225.0 kts Alt: 15000 ft
Dist to Way point: 13.8 nm Leg duration: 3.4 mins Arrival Time: 1313 UTC
Ground Speed: 246.3 kts Track: 122.3 degrees

Dist to base: 168.1 nm Leg duration: 48.1 mins Landing time:1401 UTC
Wind Dir: 260.0 Wind Spd: 30.0 kts TAS: 225.0 kts Alt: 15000 ft
Ground Speed: 209.8 kts Track: 197.0 degrees

Total mission duration: 2.0 hrs

NORTH END OF BOX FOR APP TO JACKSON HOLE

Flight= 000205I IPEX IOP 1
Time Interval=170000-213000 UTC



Aircraft Flight Track Plan