E.2 Lead Project Scientist (On-Board)

19870924 HI. LPS

E.2.1 Preflight

1. Participate in general mission briefing.
2. Determine specific mission and flight requirements for assigned aircraft.
3. Determine from CARCAH or field program director whether aircraft has operational fix responsibility and discuss with OAO flight director/meteorologist and CARCAH unless briefed otherwise by field program director.
4. Contact HRD members of crew to:

   a. Assure availability for mission.
   b. Arrange ground transportation schedule when deployed.
   c. Determine equipment status.

5. Meet with OAO flight crew at least 90 minutes before takeoff, provide copies of flight requirements and provide a formal briefing for the flight director, navigator, and pilots.
6. Report status of aircraft, systems, necessary on-board supplies and crews to appropriate HRD operations center (MGOC in Miami or FGOC at remote recovery location).

E.2.2 In-Flight

1. Confirm from OAO flight director/meteorologist that satellite data link is operative (information).
2. Confirm camera mode of operation.
3. Confirm data recording rate.
4. Complete Form E-2.

E.2.3 Postflight

1. Debrief scientific crew.
2. Report landing time, aircraft, crew, and mission status along with supplies (tapes, etc.) remaining aboard the aircraft to the appropriate HRD operations center (MGOC or FGOC).
3. Gather completed forms for mission and turn in at the appropriate operations center. [Note: all data removed from the aircraft by HRD personnel should be cleared with the OAO flight director.]

D. Equipment Status

Equipment	Pre-Flt	In-Flt	Post-Flt
Aircraft	↑	↑	
Radar	↑	↑	
Cloud Physics	↑	↑	
Data System	↑	↑	
Omegasondes	↑ ①	↑	
AXBT/AXCP	N/A		
Doppler	NOB		
Photography	↑		

REMARKS: ① BASE-LINE PRESSURES ON SONDES SEEM ERRATIC

E. I. Proposed Flight Pattern (Sketch or designate by number)

SEE ATTACHED SHEET

E. II. Actual Flight Pattern

SEE ATTACHED SHEET

Form E-2
Page 1 of 5

On-Board Lead Project Scientist Checklist

Date 24 SEP 87 Aircraft N42RF Flight ID 870924H

A. Participants

HRD		OAO	
Function	Participant	Function	Participant
Lead Proj Sci	WILLOUGHBY	Flight Direc	PARRISH
Cloud Physics	DORST	Pilots	TURNER/LAYDON/EILERS
Radar	DORST	Navigator	HENDERSON
Doppler		Sys Engr	GOLDSTEIN
Photographer		Data Tech	THOMPSON
Omegasonde	GANACHE, KAPLAN	El Tech	
AXBT/AXCP		Other	

Take-Off 24/1820 Location SJU Landing 25/0355 Location MIA

B. Past and Forecast Storm Locations

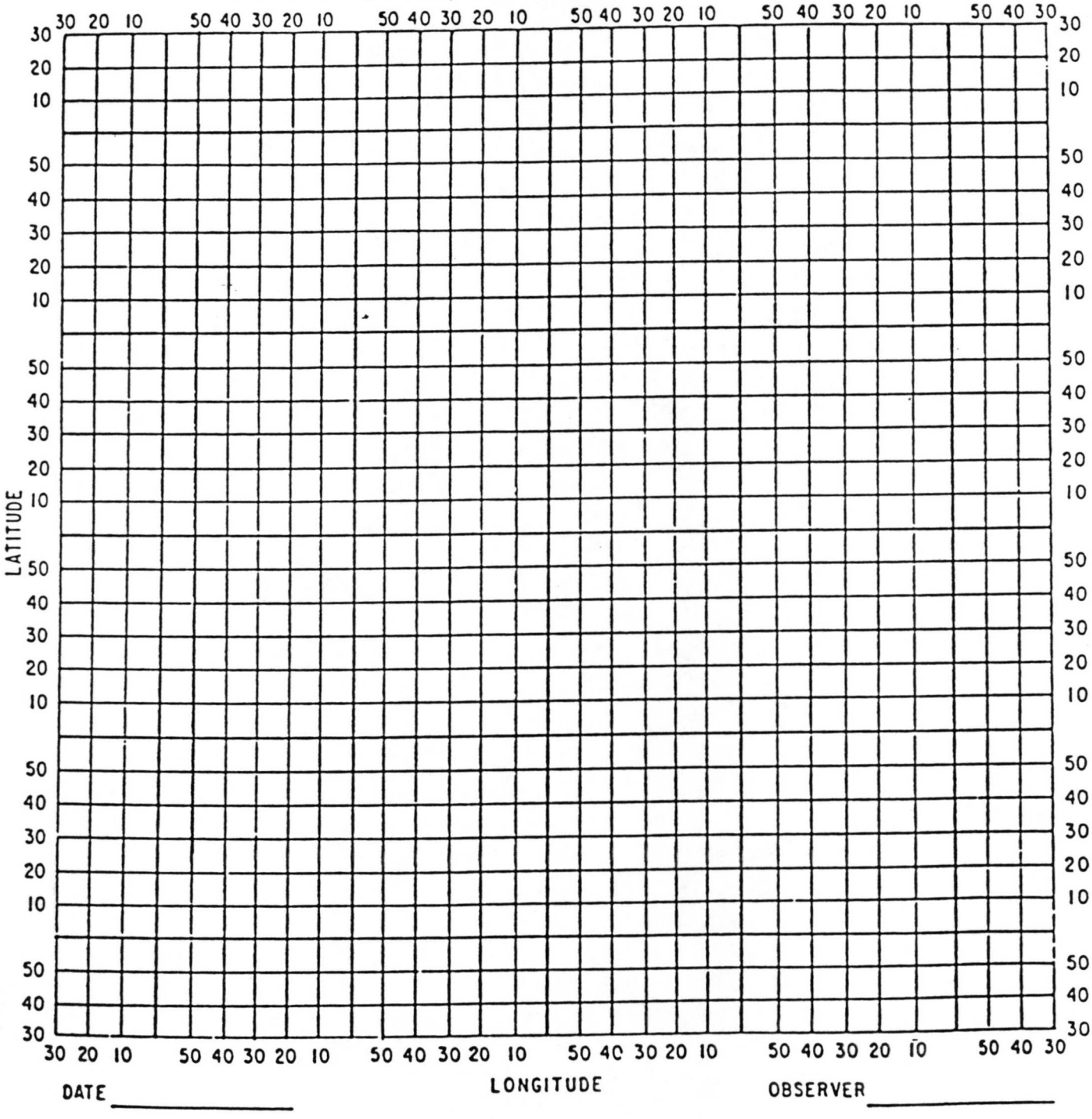
Date/Time	Latitude	Longitude	MSLP	Max Wind

C. Mission Briefing

FLY SYNOPTIC FLOW, RECOVER MIA

HURRICANE RECCO PLOTTING CHART

TRUE AT 25° LATITUDE, IN DEGREES AND MINUTES OF ϕ AND λ



DATE _____ OBSERVER _____

NOTE: Label full degrees according to location of flight area

Form E-1
Page 5 of 5

2 of 2

DATE 24 SEP 87 FLIGHT 870924H LPS WILLOUGHBY

Lead Project Scientist Event Log

EVENT	TIME*	POSITION	COMMENTS**
DROP 21	0056	25 N 70.1 W	
DROP 22	0126	27.6 69.9	40 NMI S OF ⑤
DROP 23 ③	0134	28-21 69-48	COMP SLP=1000MB
DROP 24 POINT ⑧	0142	28.9 69.9	TRAK WSW
DROP 25	0201	28.5 71.5	
DROP 26- POINT ⑨	0222	28.4 73.4	TURN TO SW FOR MIA
DROP 27	0243	27.8 75.0	
DROP 28	0302	27.1 76.5	LAST SONDE
RECOVER	0355	MIA	

*Log times of all significant altitude changes, turns, and eye fixes
**New altitude, heading, center position, etc.

DATE_____ FLIGHT_____ LPS_____

Lead Project Scientist Event Log

EVENT	TIME*	POSITION	COMMENTS**

*Log times of all significant altitude changes, turns, and eye fixes
**New altitude, heading, center position, etc.


890924H PROPOSED
DROP EVERY 1.5°
PROPOSED: —
ACTUAL: —
40°
35°
30°
25°
20°
45°
50°
55°
60°
65°
70°
75°
80°

Form E-2
Page 5 of 5

1 of 2

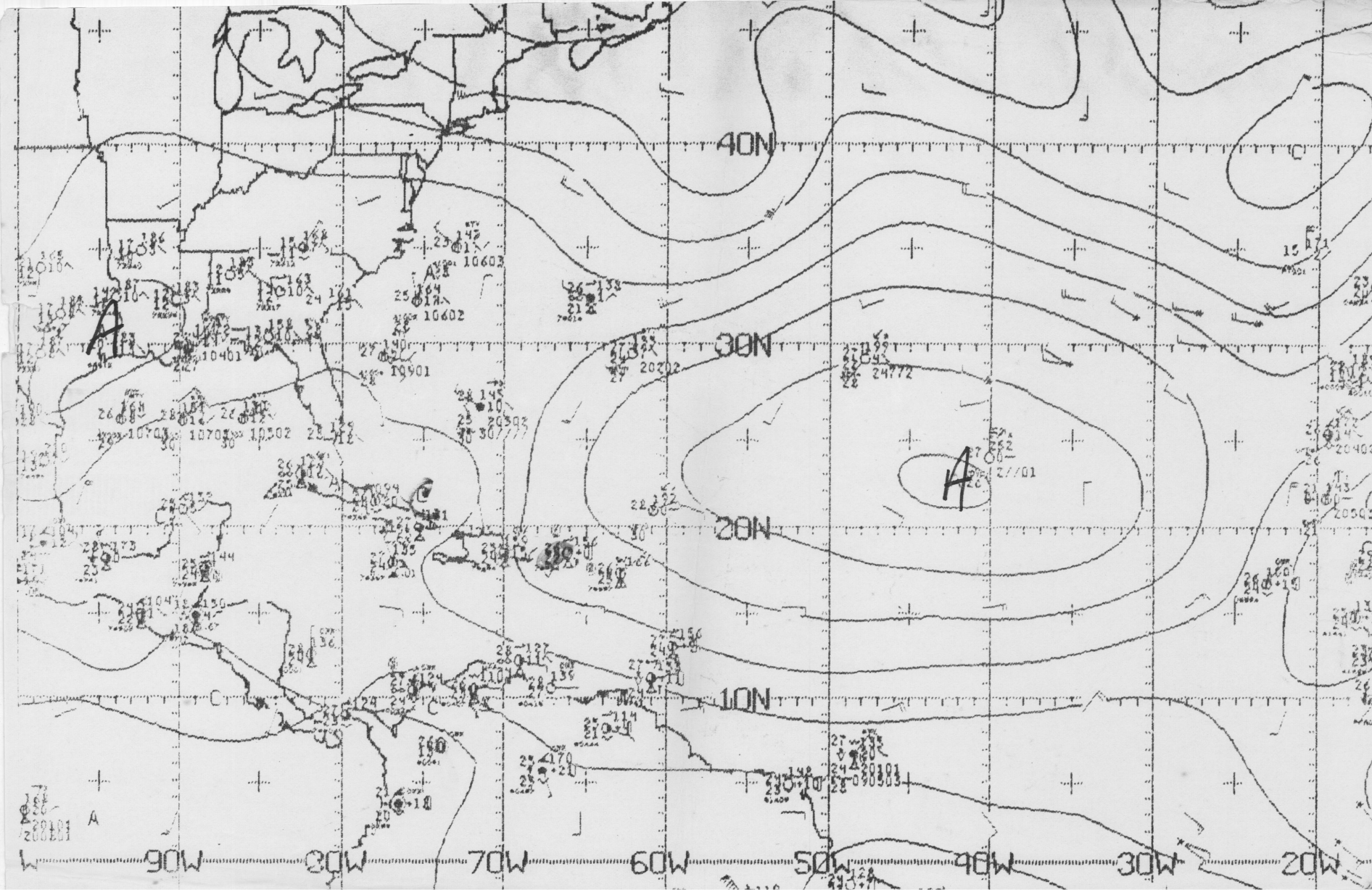
Date 24SEP 87 Flight 870924H LPS WILLOUGHBY

Lead Project Scientist Event Log

Time	Event	Position	Comments
1820	T/O	SJU	
1858	DROP #1 POINT (1)	21-00 65-50	GOOD DROP Ω-9
1923	DROP #2	22-00 63-50	GOOD DROP Ω-8
1948	TURN DROP #3 POINT (2)	23-00 62-00	Ω=6-7 AT START DETERIORATED CAME BACK FOR 850
2006	DROP #4	24-30 62-12	NO Ω
2010	DROP #5	24-45 62-13	Ω-9
2025	DROP #6	26-00 62-23	Ω-9 CLIMB TO 500 MB
2046	DROP #7	27-45 62-36	Ω-9 17 MB BASELINE OFSET
2101	DROP #8	29-00 62-50	
2118	TURN POINT (3) DROP#9	30-30 63-00	TURN TO W
2142	DROP #10	30.30 65.00	Ω-9
2206	TURN S POINT (4) DROP 11	30-30 66-58	TRAK → S Ω-9
2229	DROP 12	28.9 66.9	Ω=8 0129 DIED AT 600 MB
2251	DROP 13	27.2 66.8	Ω=9
2309	DROP 14	26.0 66.8	Ω=9
2334	POINT (5) DROP 15	24.0 67.0	TURN TO 216
2349	DROP 16	23.0 67.8	TURN W
0005	DROP 17 POINT (6)	22.0 68.6	TURN W
0022	POINT (7) DROP 18	22.0 70.2	TURN N
0039	DROP 19	23.5 70.2	NO TEMP C
0043	DROP 20	23-55 70-09	GOOD

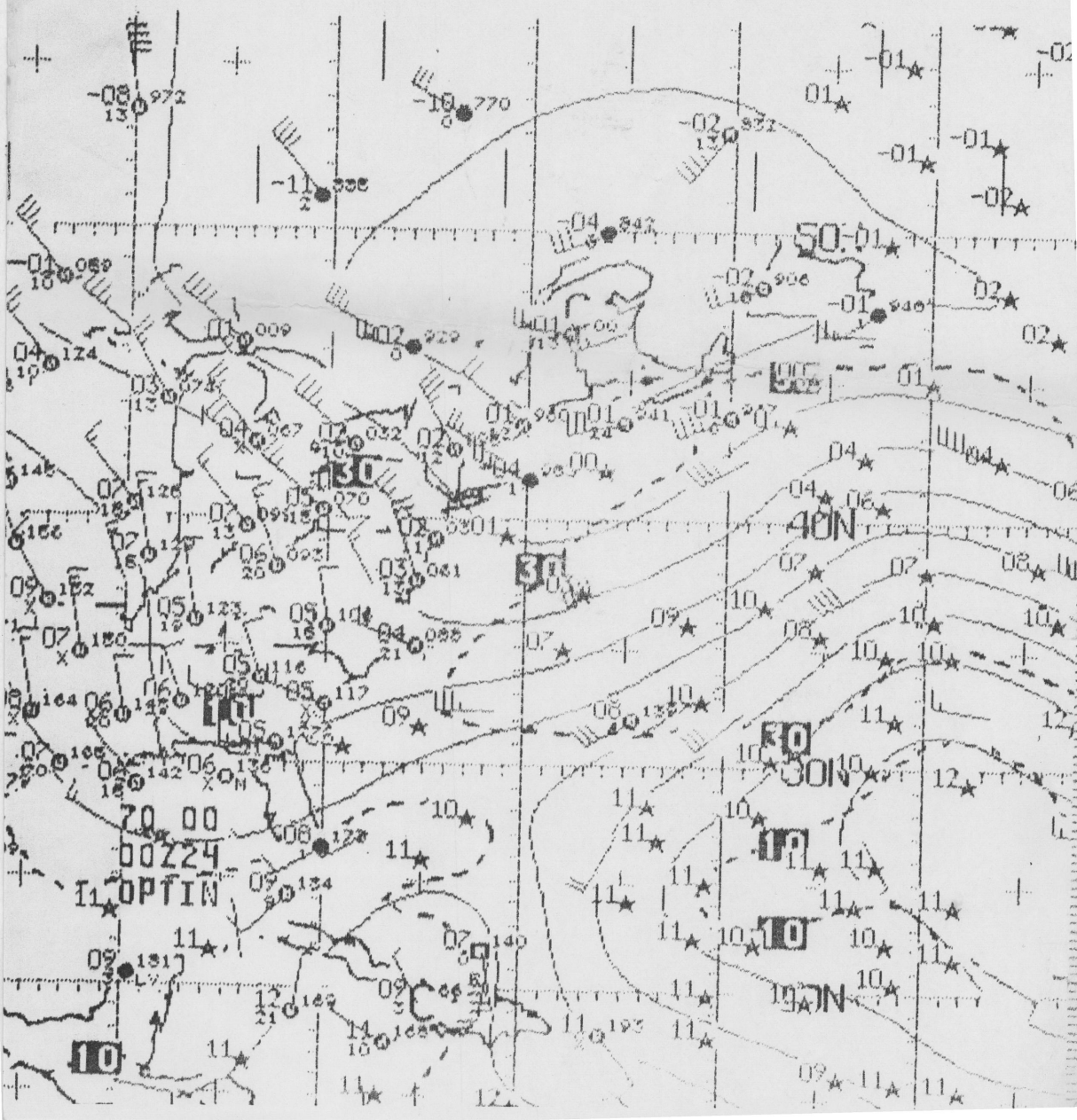
_____ 4. Determine next mission status, if any, and brief crews as necessary.

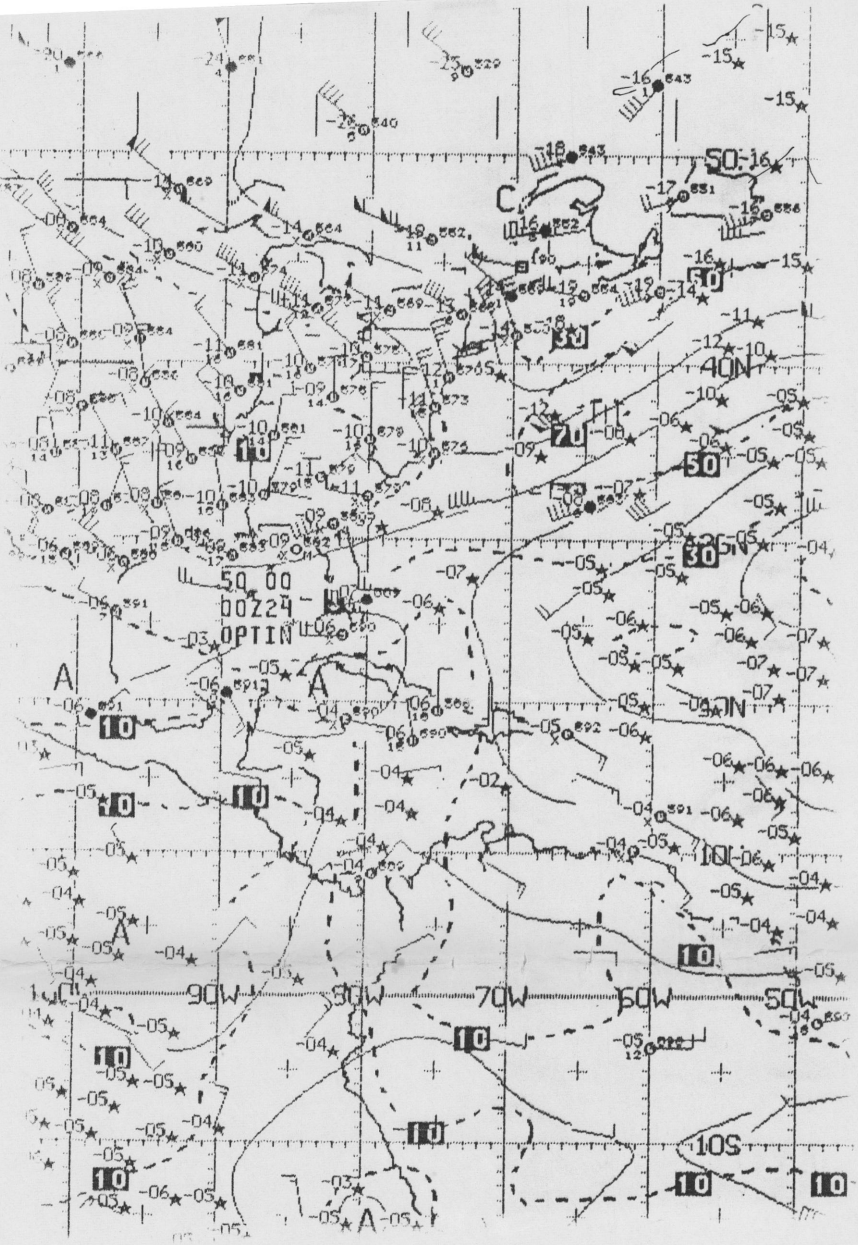
_____ 5. Notify the appropriate operations center (FGOC or MGOC) as to where you can be contacted and arrange for any further coordination required.


40N
30N
20N
10N
90W
80W
70W
60W
50W
40W
30W
20W

700 MB

00Z 24 Sept





500 mB

00Z Sept 24 1987