

On-Board Lead Project Scientist Check List

Date 25 SEP 1994 Aircraft N42RF Flight ID 940925H1

A. Participants

HRD		OAO	
Function	Participant	Function	Participant
Lead Proj. Sci.	<u>GAMACHE</u>	Flight Director	<u>BOGERT</u>
Cloud Physics	<u>B</u>	Pilots	<u>KENNEDY, PLAYER</u>
Radar	<u>DODGE</u>	Navigator	<u>STRONG</u>
Doppler	<u>DODGE</u>	Sys. Engr.	<u>ROLES, BARR, Mc MILLAN</u>
Photographer		Data Tech.	
Omegasonde	<u>BURPEE (Listening)</u>	El. Tech.	
AXBT/AXCP	<u>P. BLACK</u>	Other	<u>RADIO, PAUL MASSON</u>
VIS	<u>LAWRENCE</u>		

Take-Off      Location      Landing      Location  
P.V

B. Past and Forecast Storm Locations

Date/Time	Latitude	Longitude	MSLP	Max. Wind

C. Mission Briefing

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\_\_\_\_\_  
\_\_\_\_\_

$$8 \times 25 + 7 \times 10$$



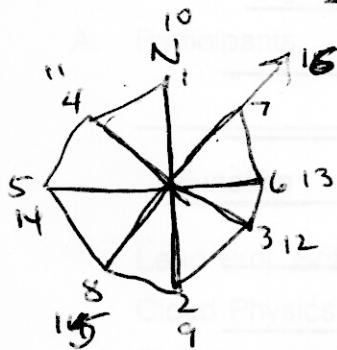
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Form E-2  
Page 3 of 5

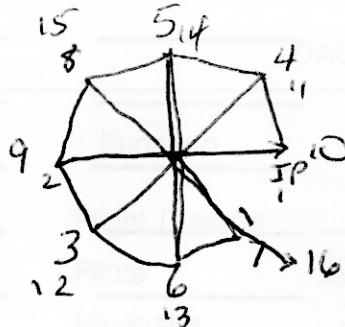
### On-Board Lead Flight Control Check List

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

#### INNER CORE STRUCTURE & EVOLUTION



N42RF



N43RF

#### E. II. Actual Flight Pattern

#### B. Past and Forecast Storm Locations

Date/Time      Latitude      Longitude      MSLP      Max. Wind

#### C. Mission Briefing

Lead Project Scientist Event Log

Date 25 SEP 1994

Flight 940925 HI

LPS GAmatchE

Time	Event	Position	Comments
215733	(7)	19° 43' 119° 31'	not tracking 225°
2203	AXB launch	19° 30' 119° 48'	185 kts
		19° 16' 120° 4'	115 kts N side
2209			110 kts SW side
			This position may have had slight blips
2221	(8)	18° 26' 120° 47'	Turn to ESE
2233	(9)		Orbiting at (9) 43° radar decline
2238			heading up N 110 kts on S side
9		19° 14' 120° 42'	B7 launch
2252		19° 28' 120° 4'	125 kts N side grouped perhaps small wind shear blip
2301	(IP)	20?	43 degree sonde
2307	(4)	19° 51' 120° 35'	
2320		119° 54' 19° 10'	
2318	9	119° 58' 19° 17'	
2326		↗ ↘	127 kts SE side
2330	(3)	18° 44' 119° 19'	track 24°
2337	(6)	19° 17' 119° 5'	tracking W
2339			ODW drop

Lead Project Scientist Event Log

Date 25 SEP 1994 Flight 940925 H1 LPS GAMACHE

Time	Event	Position	Comments
173230	T/O	P.V. <del>20°40'10.5"</del> <sup>20°40'10.5"</sup>	
1955	Began descent to 11700 ft	19°55'117°35'	
202000	IP	19°51'120°8'	track S.
2024			ODW launched <sup>at 1700</sup> reading nothing
202720	XBT drop	<del>19°57'</del> 19°21'8"	
2032	Neywanay II		Neywanay 125 kts 926 mb
2035	Seaweed	18°49'120°3'	135 kts
2037	6	18°58'120°04'	fix report about 2033
2045	(2)	18°8'120°3'	
2048			43 deg ODW drop getting signal
2053	(3)	18°22'119°26'	heading in toward NW
		18°57'120°0'	
210633	6	19°2'120°6'	925 mb
2108?	N.	19°7'120°10'	about 120 kts in NW eyewall
2118	(4)	19°37'120°44'	high SSW
2126	(5)	19°1'120°59'	
2139	Near center	19°7'119°59'	115 MAX W. Side
	Approx center	19°7'120°06'	125 MAX E-Side
214630		19°04'119°28'	BT good
2150		19°9'119°11'	
2151			43 ODW drop S side weak signal on sonde

EPS from  
940925 H1  
GARRETT

"OLIVE"

Time

Event

Position

Comments

E eyewall

$\sim 19^{\circ} 23' 119^{\circ} 54'$

125 ft/s

2349

(6)

$1928^{\circ} \text{W}$

$120^{\circ} \text{N}$

$119^{\circ} 59\text{W}$

931 mb

Center of DW drop

2352

SeaScat down

0000

(5)

$1924^{\circ} 120^{\circ} 51'$

heading back E  $180^{\circ}$  turn  
do fix go home

935 mb lowest  
press seen.

0012

0015

(6)

$1928^{\circ} 119^{\circ} 58'$

120 ft/s on E side

0019

climb out

$1920^{\circ} 119^{\circ} 27'$

305062 landing P.V.

(6) Just passed Ruby  
Impressive line  
of thunderstorms.  
Thanks to p1 ft/s,  
pretty smooth

191922

121

120

119

21

20

19



18

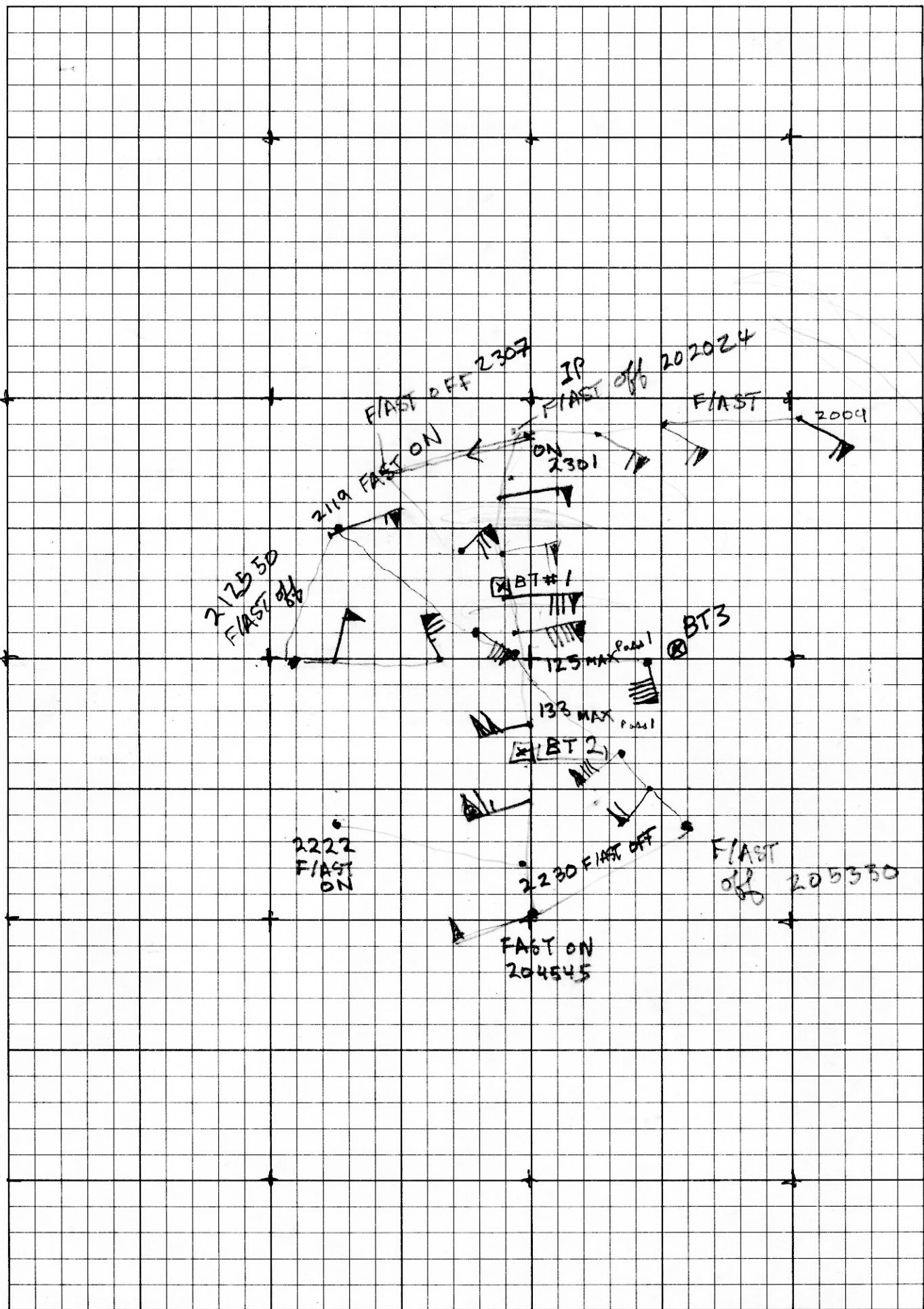
17

21

19

18

17



121

265 82 134

120

119

## INNER CORE STRUCTURE AND EVOLUTION EXPERIMENT

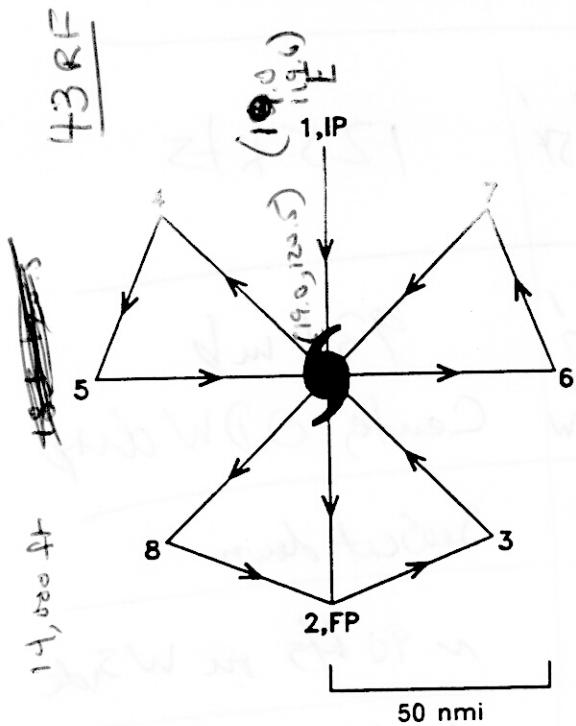


Fig. 9. Inner Core Structure and Evolution Experiment: Upper aircraft pattern.

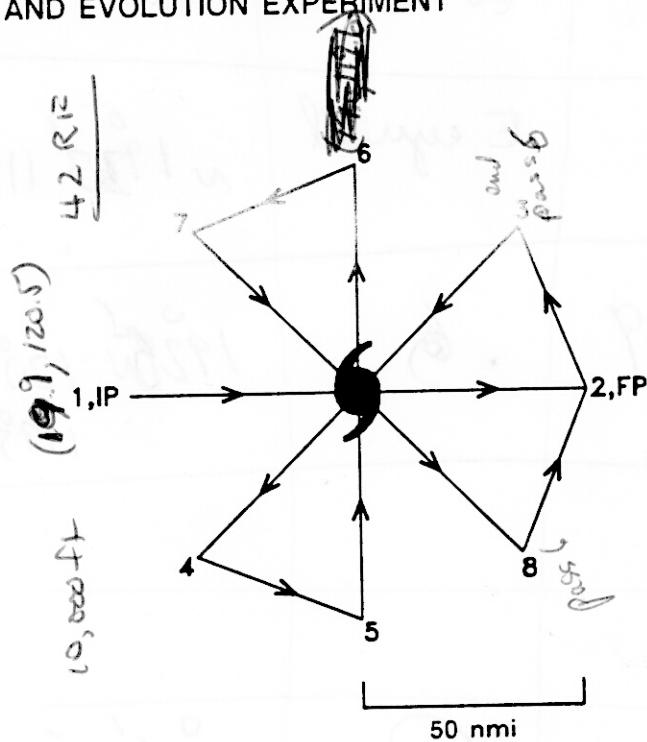


Fig. 10. Inner Core Structure and Evolution Experiment: Lower aircraft pattern.

- Note 1. AOC upper and lower aircraft fly 1-2-3-4-5-6-7-8-2 in their respective patterns (Figs. 9 and 10, respectively).
- Note 2. Each aircraft should be at the designated altitude upon reaching the IP and should maintain that altitude until point 8.
- Note 3. True air speed calibration is required (Fig. C-1).
- Note 4. The patterns may be entered along any compass heading, but the upper aircraft pattern should always be rotated 90° counterclockwise from the lower pattern.
- Note 5. Aircraft may attempt to find a wind center on each pass, but should not "hunt" unless directed to do so. Track deviations should be kept to a minimum (10° or less).
- Note 6. Cross checks between the aircraft INE and hard reference points or radio navigation aids are essential.
- Note 7. During each pattern, the ODW drop in the eye should occur during the first pass through the center (a backup would be dropped in the second pass). During passes with ODW drops, the upper aircraft should be 5 min behind lower aircraft.
- Note 8. During downwind legs, Doppler radar should be operated in FAST (forward/aft scanning technique) mode. (Not applicable to aircraft with dual-beam antenna.)

**N 43 RF**

MARKS	GILLOUGHBY FRANKLIN GR. FFIN R. BLACK T. PREMEL
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**N 42 RI**

MANACHE	A. DODGE	P. BLACK	R. BURREE	T. LAWRENCE
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