

E.2 Lead Project Scientist

E.2.1 Preflight

- _____ 1. Participate in general mission briefing.
- _____ 2. Determine specific mission and flight requirements for assigned aircraft.
- _____ 3. Determine from field program director whether aircraft has operational fix responsibility and discuss with AOC flight director/meteorologist unless briefed otherwise by field program director.
- _____ 4. Contact HRD members of crew to:
 - a. Assure availability for mission.
 - b. Review filed program safety checklist
 - c. Arrange ground transportation schedule when deployed.
 - d. Determine equipment status.
- _____ 5. Meet with AOC flight director and navigator at least 3 hours before take-off for initial briefing.
- _____ 5. Meet with AOC flight crew at least 2 hours before take-off for crew briefing. 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).
- _____ 7. Before take-off, brief the on-board GPS dropsonde operator on times and positions of drop times.
- _____ 8. Collect "mess" fee (\$2.00) from all on-board HRD flight crew members.

E.2.2 In-Flight

- _____ 1. Confirm from AOC flight director that satellite data link is operative (information).
- _____ 2. Confirm camera mode of operation.
- _____ 3. Confirm data recording rate.
- _____ 4. Complete Form E-2.
- _____ 5. Check in with the flight director to make sure the mission is going as planned (i.e. turns are made when they are supposed to be made).

E.2.3 Post flight

- _____ 1. Debrief scientific crew.
- _____ 2. Report landing time, aircraft, crew, and mission status along with supplies (tapes, etc.) remaining aboard the aircraft to MGOC.
- _____ 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 AOC flight director.]
- _____ 4. Obtain a copy of the 10-s flight listing from the AOC flight director. Turn in with completed forms.
- _____ 5. Determine next mission status, if any, and brief crews as necessary.
- _____ 6. Notify MGOC as to where you can be contacted and arrange for any further coordination required.
- _____ 7. Prepare written mission summary using form E-2 p.3 (due to Field Program Director 1 week after the flight).

On-Board Lead Project Scientist Check List

Date 5 Dec, 2003 Aircraft N43 Flight ID 031205I1

A. Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>P. Dodge/J. Cione</u>	Flight Director	<u>B. Damiano</u>
Cloud Physics	<u>X</u>	Pilots	<u>P. Kennedy</u>
Radar	<u>M. Eastin</u>	Navigator	<u>D. Brakes</u>
Workstation	<u>N. Dorst</u>	Systems Engineer	<u>J. Smith</u>
Photographer/Observer	<u>S. MAJUMDAR</u>	Data Technician	<u>T. Lynch</u>
Omegasonde	<u>N. Dorst</u>	Electronics Technician	<u>R. Tong</u>
AXBT/AXCP/Guest	<u>J. CIONE</u>	Other	<u>D. Sans Souci</u>

Take-Off: 151230 Location: MacDill
 Landing: 000553 Location: n

Number of Eye Penetrations: 0

B. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

C. Mission Briefing:

First in a series of back to back
missions to capture ExtraTropical Transition of
Tropical Storm Claudette, including String of BT's
on NE side of storm,

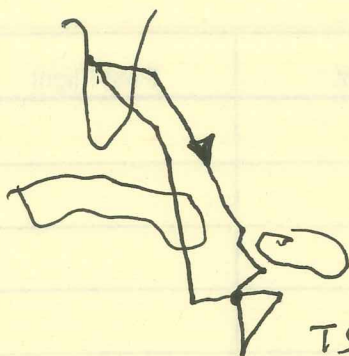
D. Equipment Status (Up, Down, Not Available, Not Used)

Equipment	Pre-Flight	In-Flight	Post-Flight
Aircraft			
Radar/LF			
Radar/TA (Doppler)			
Cloud Physics			
Data System			
Omegasondes			
AXBT/AXCP			
Workstation			
Videography			

REMARKS:

LANDED 000553

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

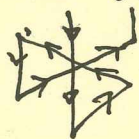


TS ODETTE at ~~10~~ 15°, 74°?

E (II) Actual Flight Pattern

Pretty much flew the pattern. However ∇ a center at flight level so we sort of abandoned the last

inner core sondes (G to West) except for two sonde/bt.



Might have been better inner core

pattern - would have extended flight by

another hour though. But what do you do

when the closed vortex only extends to 850 mb any way?

① TS Odette

Lead Project Scientist Event Log

Date 5 Dec 2003

Flight 031205I1

LPS Dodge/Wone

Time	Event	Position	Comments
1512	T/O from NACTILL		
165251	SND # PT 1	23° 76°	PAS 029 -8.6° -27° 228°, 9 KT
173803	PT 2	20°51' 73°13'	-8° -15° 236/6 KT
1740	turn	20°20' 73°00'	skirting Coast
180150	Sonde PT 3	18°56' 73°00'	-7° -19.5° 315/7 KT
1816	Just coming off coast, decent		waves off coast
181911	CH 16 BT #1	18° 73°12.7'	27.9° / GOOD
182431	CH 12 BT #2	17°45' 72°50.5'	/ GOOD
1829	TURN, PT #4	17°31' 72°31'	
182955	BT #3, CH 16	↑ same	GOOD/25°
183008	SND PNT #4	17°27' 72°32'	No LAUNCH DET
183140	SND	17°22' 72°35'	Back UP Sonde
1833	AVAPS system by Ray TONG	being reset,	as both sondes N GOOD
183642	CH 12 BT #4	16°59' 72°45'	27.5° / GOOD
184342	CH 16 BT #5	16°28' 72°58'	AVAPS is BACK UP.
185335	CH 12 BT #6	15°46' 73°18'	/ GOOD
185458	SND	15°40' 73°21'	90 nmi NE of 183/15 -5.3°
190122	"	15°12' 73°33'	WINDS LATE (2 minutes)
190725	"	14°44' 73°45'	-4.2° 298/27 KT (CENTER)
191040	SND / BT #16	14°30' 73°51'	313/27 BT
191450	SND	14°10' 73°55'	38 KT Fit level

TELL SIM 16's Are Better BT'S

↑
"Center"
THIS very close
to AB fix at
1714

② 031205I

Form E-2
Page 5 of 5

Lead Project Scientist Event Log

Date 5 Dec 2003 Flight 031205I LPS Dodge/Cirne

AF
1713 14° 12'
73° 54'
998
50kts

Time	Event	Position	Comments
191728	SNP / BT #12	13°56' 73°55'	S of Center 3
192029	SNP	13°40' 73°56'	AIR Drier in the Southern side of whatever Odette was
1932	turn →	12°40' 73°55'	
19335	SND	" 73°49'	300/26, -6.40
194645	"	13°30' 73°	on SW-NE leg
1953	13°54' 72°37'		and wind 340 37.9 KT/ 240° so where is the freaking center? Has system really been sheared apart already? Or trough moved S of Hiponiola? Wonder if next flight going
195744	turn to ←	14°10' 72°21'	253° 33 KTS fit land
195944	SND (PT 7)	14°14' 72°27'	254° 56 KTS
200447	SND	14°14' 72°50'	251° 41 KTS
201225	"	14°14' 73°21'	290 34 KTS
2016	turning to 45°		to go back and see if there is a center near the strong LF echo we just passed
2020	turn to head back west		Did not get wind shift and Pr did n't drop much although fit level temp went up to -2°
2030	so that is it for the "inner core" sondes.		We'll do one more 50 m mi with BT, then sonde/BT at point B

GOOD

Good
Good
Good

03/205I (3) LPS Notes

2039 SND/BT $14^{\circ}52'$ $74^{\circ}90'$

204931 Turn at (new) Point B $14^{\circ}30'$ $75^{\circ}42'$
 315° 24 KTS

205012 BT/SND $14^{\circ}33'$ $75^{\circ}44'$ Good Sonde
BT Good

2057 turn to head N.

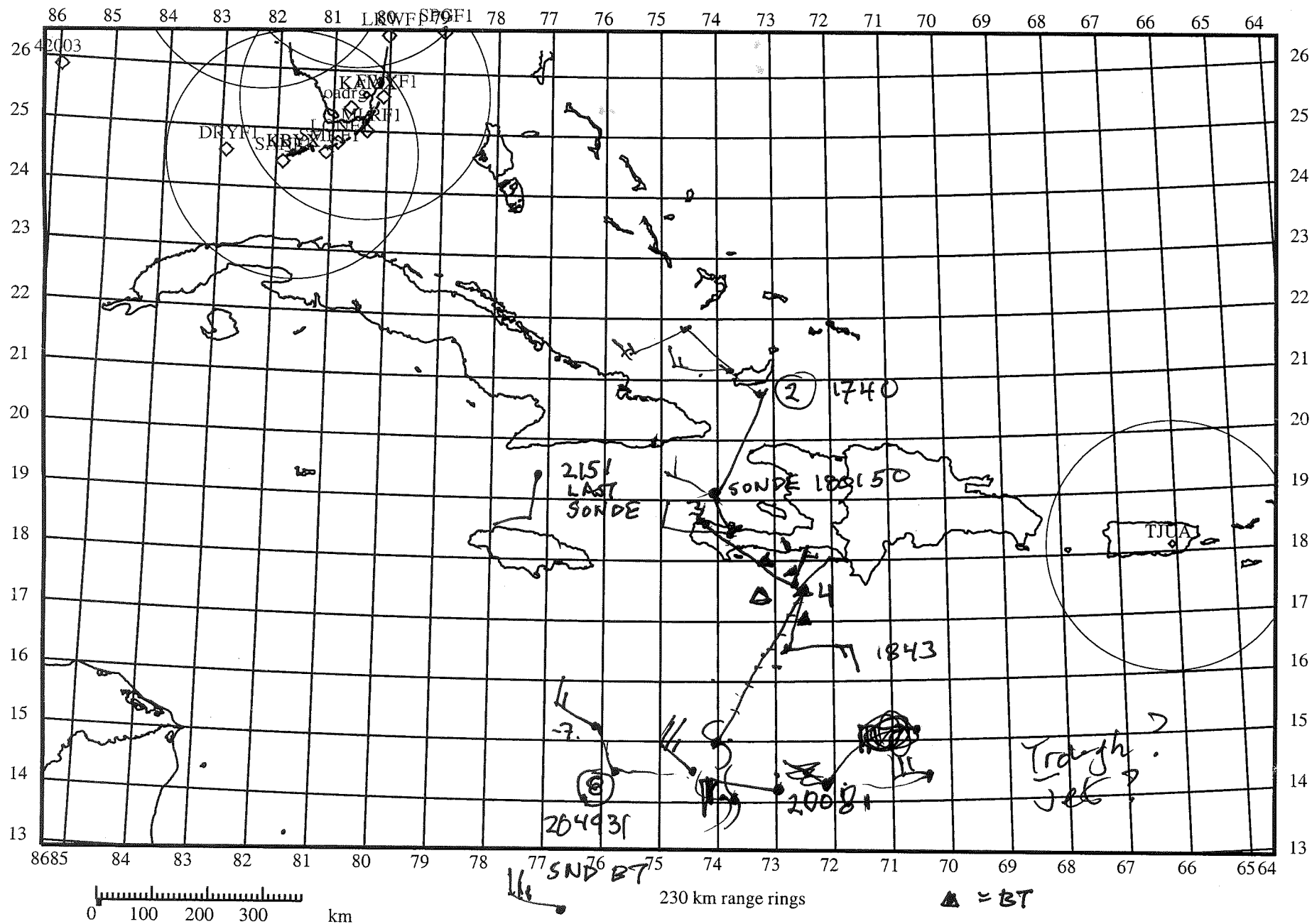
2148 Sonde no good $19^{\circ}12'$ $77^{\circ}04'$
wind now 181° 10 kts!

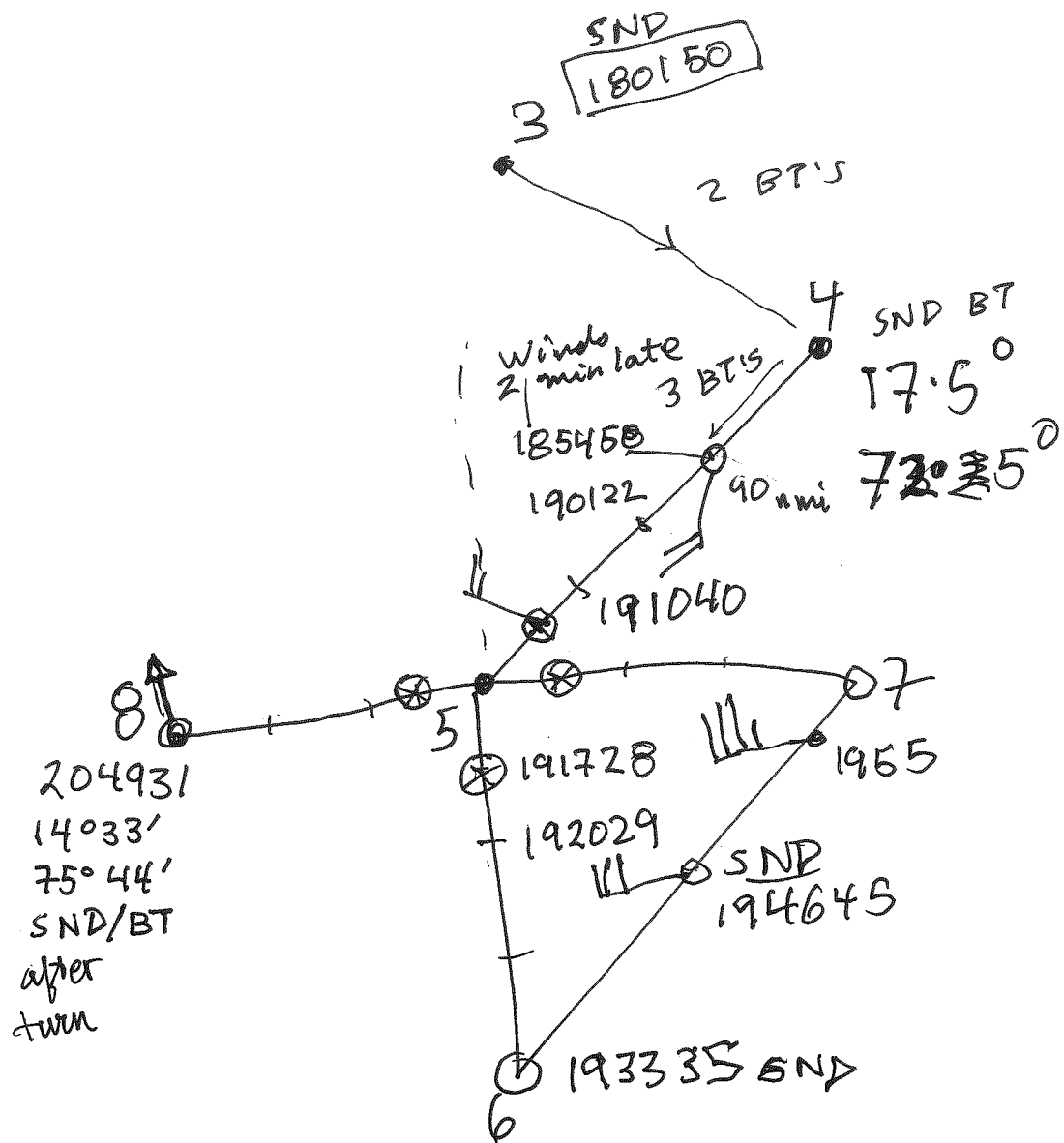
215141 $19^{\circ}24'$ $77^{\circ}07'$ SND (LAST)
6137m PA -10.4 -21.5
185° 9 kts GOOD

So last sonde definitely in a different environment.

22 sondes 10 BT's launched.

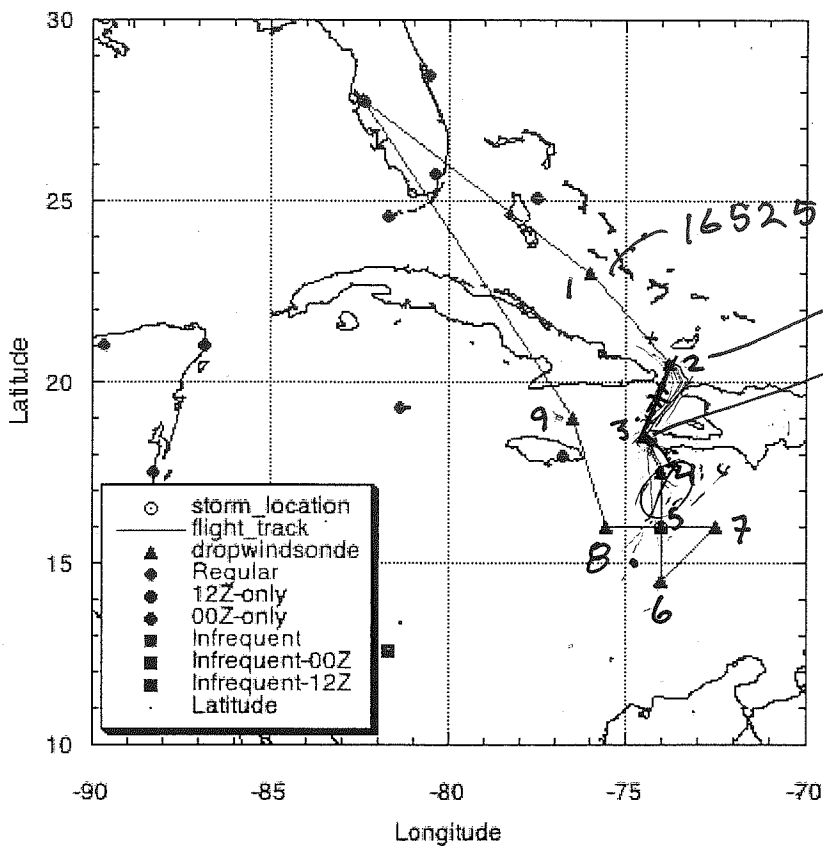
Center Lat: 20.00 Lon: -75.00





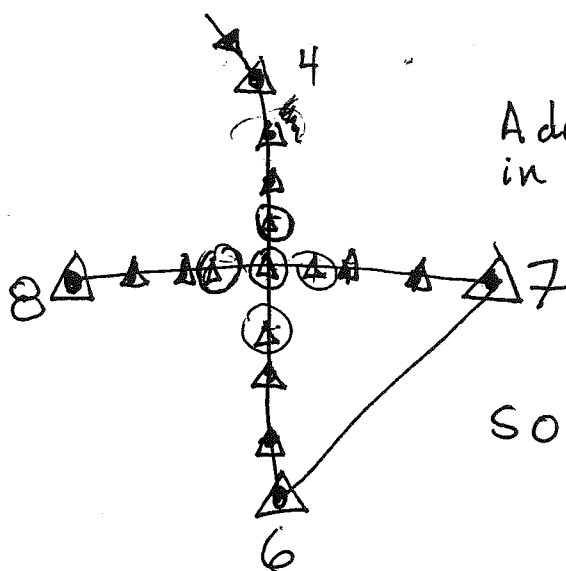
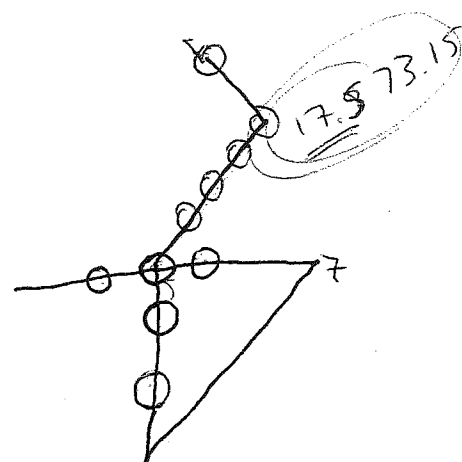
3 18.66 74.16

03120511 ODETTTE



173803

180150



Additional Sondes
in Figure 4 at
60, 30^{nmi} and
"eye wall"

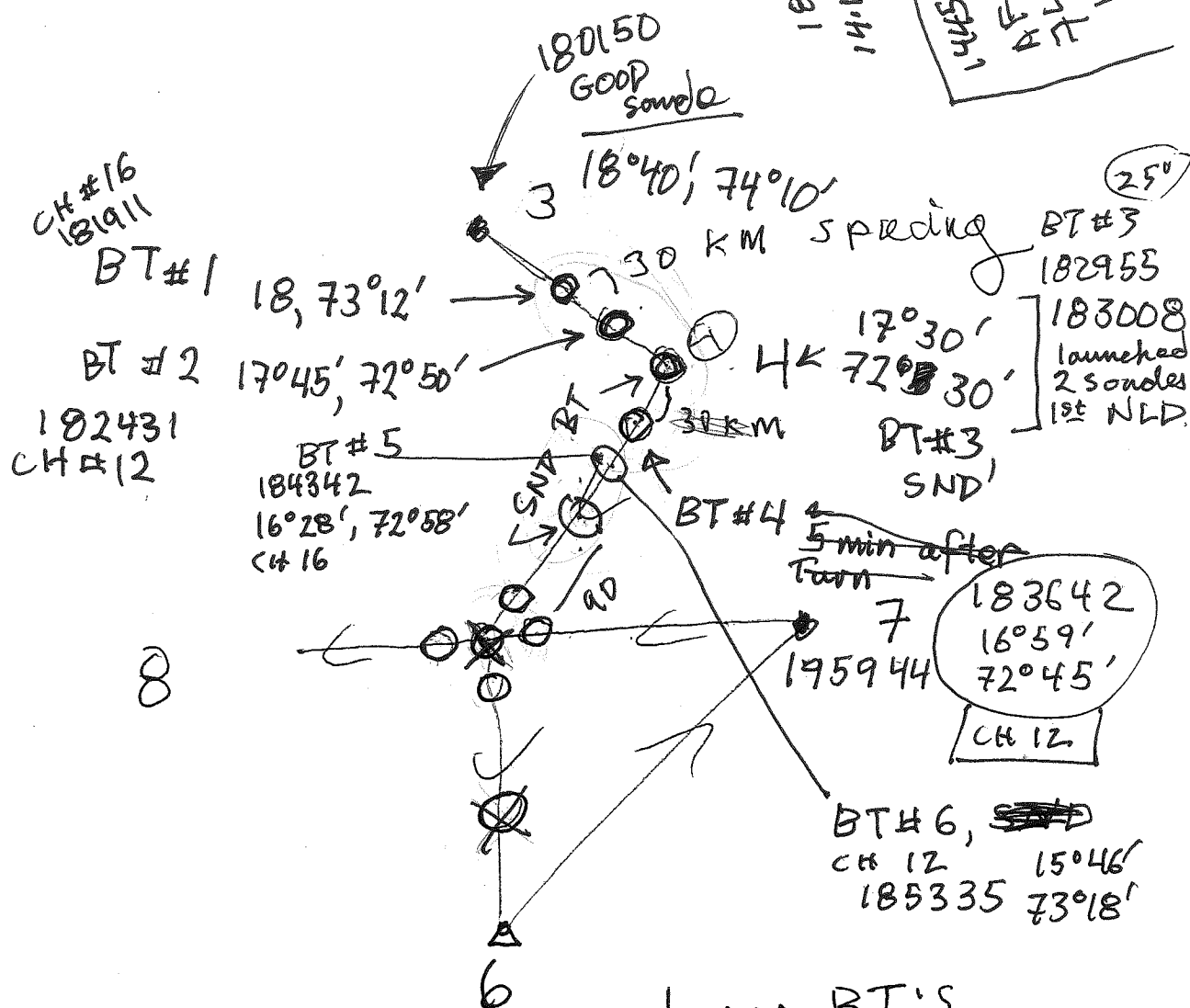
SONDES

74
72.28
73.15°

039205I
FRIDAY flight
BT'S O

Test 18 74

445 5 wt 5
H6M NE



1750:

Revised

PLAN
3 BT's After
Point 4

4 inner core
No center BT
No S BT

Inner BT's
eyewall

5-6 45 nmi

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HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: ODETTE/SYNOPTIC

NOAA/Hurricane Research Division Friday, December 5, 2003 6:47:11 am
 Aircraft: N43RF Proposed takeoff: 05/1500Z

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TRACK DISTANCES

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#	LAT (d m)	LON (d m)	RAD/AZM (nm/dg)	LEG (nm)	TOTAL (nm)	TIME (h:mm)
0	MACDILL			0.	0.	0:00
1	23 00	76 00		472.	472.	1:58
2	20 30	73 45		199.	671.	2:47
3	18 30	74 30		128.	798.	3:19
4	17 30	74 00	90/ 0	67.	865.	3:36
5	16 00	74 00	0/ 0	90.	955.	3:58
6	14 30	74 00	90/180	90.	1045.	4:21
7	16 00	72 28	90/90	127.	1173.	4:53
8	15 59	75 32	90/269	180.	1353.	5:38
9	19 00	76 30		190.	1543.	6:25
10	MACDILL			634.	2176.	9:04

T.D. Odette Ø3 12Ø5 I 1

~~Ø567~~
Ø561.1trk

1915 } corpl 1855 - 1925 N → S leg?

corpl 1958 - 2028 E → W leg?

AF 1445
AF 1714