

19880914 H2 - LPS

E.2 Lead Project Scientist (On-Board)

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).
- NA ☐ 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.]
- ☐ 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.

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Lead Project Scientist Event Log

Date 9-14-88Flight 880914H2LPS Powell

Time	Type Event Drop	LAT	Position	Comments
1836				Descend to 5000' for drops
184613	BT ch. 12	24°58.6'	88°03.7'	1st drop Good
185406	BT ch. 14	24°41.9'	88°39.5'	#2 BAD
1902				Turn WS up to 75kt. W SOME OUTER BAND cells
190248	BT ch. 12	24°25.5'	89°19.5'W	#3 Good
191149	BT ch. 14	24°54'	89°39'	#4 BAD
192045				Turn
192136	BT ch. 16	25°22.1'	90°02.9'	#5 Good
192155	CP ch. 14	25°21.4'	90°04.2'	#1 Good
192713	BT ch. 12	25°09.9'	90°27.1'	#6 Good
193418	BT 14	25°54.0'	90°56.8'	#7 bad
	CP 16	25°52.8'	90°59.1'	#2 bad
193903	BT			Turn
194018	BT 14	24°39.1'	91°15.1'	#8 Good
194509	BT 14	24°31.1'	90°58.5'	#9 Good
195129	BT 16	24°19.5'	90°37.0'	#10 BAD
200046	BT 12	24°2.2'	90°16.1'	#11 Good
200105	CP 14	24°1.4'	90°17.6'	#3 BAD
200656	BT 16	23°48.5'	90°42.3'	#12 Good
201545	BT 14	23°32.5'	91°18.3'	#13 Good
201609	CP 16	23°33.5'	91°19.2'	#4 BAD

190815 ESS 45-50 Gunner WS 48

1918 ESS 35-40 MP

194930 ESS 40-45 Rain from outer band

201035 ESS 50 Turner WS 52 (10-12) MP CRT

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Lead Project Scientist Event Log

Date 9-14-88

Flight 880914H 2

LPS Powell

Time	Event	Position LAT LON		Comments	
202323	BT 12539	23° 53.9'	91° 33.3'	#14	Good
202911	BT 16	24° 11.6'	91° 43.7'	#15	Good
203327	BT 14	24° 15.3'	92° 00.8'	#16	Good
203400	CP 12	24° 14.2'	92° 03.1'	#5	Good
204104	BT 16	24° 00.0'	92° 30.9'	#17	Good
204744	BT 14	23° 44.6'	92° 50.7'	#18	Good
204759	CP 12	23° 43.8'	92° 50.1'	#6	BAD
205440	BT 12	23° 23.4'	92° 33.8'	#19	BAD
210140				TURN from SE to SW	
210239	BT 14	22° 58.1'	92° 16.9'	#20	Good
210715				TURN Printer back to 10s	
211025	BT 16	22° 35.6'	92° 44.3'	#21	Good
211630				outer band	
211845				TURN SW to NW	
212001	BT 12	22° 16.0'	93° 19.0'	#22	Good
213805	BT 14	23° 05.8'	93° 53.8'	#23	Good
	CP			cu field Tops to 6000'	
215639	BT 16	24° 00.2'	94° 27.3'	#24	Good
	BT			#25	
220822	BT 12	24° 23.8'	93° 53.6'	#25	BAD
222233	BT 12	24° 50.5'	93° 13.1'	#26	Good

2031
ESS ~40kt.

205800 45kt ESS

(getting
Low on paper)

2102345kt STE with MP
N 25-30 GUNWDS
205°
185°
155°

213450 25-30 ESS

TURN @ 215630

215725 15kt ESS TURN

21.3 88.8
WNW 15
140 WATCH Tampico - Pt Arthur

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Lead Project Scientist Event Log

Date 9-14-88Flight 880914H2LPS Powell

Time	Event	LAT	Position	LONG	Comments
223000					TURN to 105°
223101	BT 14	25° 04.0'	92° 48.2'		#27 Good
223847	BT 16	24° 53.2'	92° 21.2'		#28 Good
224651	BT 14	24° 41.4'	91° 54.2'		#29 Good
225245					TURN to 015 TRK
225343	BT 12	24° 34.0'	91° 33.1'		#30 Good WS 53
225956	BT 16	24° 54.0'	91° 29.4'		#31 Good
230653	BT 12	25° 17.9'	91° 29.8'		#32 Good
231537	BT 14	25° 48.2'	91° 24.7'		#33 Time OK LA, LO off Good
232908	BT 16	26° 05.9'	90° 46.3'		#34 Good
234320	BT 12	26° 24.4'	90° 02.0'		#35 BAD
235450					TURN to TRK 145
235750	BT 12	26° 30.4'	89° 18.5'		#36 Good
000803	BT 12	26° 01.2'	88° 57.7'		#37 LAST BAD DROP!

2309 ESS 45 Turner WS 52

AXBT/AXCP JUNQUE FLIGHT

O - turn points

IP:	(1.)	25.0 N	88.0 W	26.	24.8	93.2
	2.	24.8	88.8	(27.)	25.1	92.8
	(3.)	24.4	89.3	28.	24.9	92.1
	4.	24.9	89.8	29.	24.8	91.9
000 AXCP	(5.)	25.4 ^{good hls} GDLI-2	90.0 CP	(30.)	24.5	91.5
	6.	25.2	OK 90.5	31.	24.9	91.5
NG 186 CP	7.	25.0 GDLI-3	91.0	32.	25.3	91.5
	(8.)	24.7	NG 91.3	(33.)	25.8	91.5
	9.	24.5	91.0	34.	26.0	91.0
	10.	24.3	90.7	35.	26.3	90.1
267 CP	(11.)	24.1 GDLI-4	90.2	(36.)	26.7	89.3
	12.	23.9	NG 90.8 CP	37.	26.0	89.0
343, 131 CP	(13.)	23.5 GDLI-5	91.3			
	14.	23.9	NG 91.5			
	(15.)	24.2	91.7			
436, 264 CP	(16.)	24.3 GDLI-6	92.0			
	17.	24.1	NG 92.5			
000, 474 CP	(17.)	23.8 GDLI-8	92.9			
	19.	23.4	92.5			
	(20.)	23.0	92.2			
	21.	22.6	92.8			
	(22.)	22.2	93.3			
154, 587 CP	23.	23.0	94.0			
	(24.)	24.0	94.5			
	25.	24.3	93.9			

GDLIR 2
GDLIP 2
GDLIR 3 NG
GDLIR 4 NG

On-Board Lead Project Scientist Check List

Date 880914 HZ Aircraft 42RF Flight ID 880914H
Sept. 14, 1988

A. Participants

HRD		OAO	
Function	Participant	Function	Participant
Lead Proj. Sci.	<u>M. Powell</u>	Flight Director	<u>B. DAMIANO</u>
Cloud Physics	<u> </u>	Pilots	<u>D. TURNER GUNNOR</u>
Radar	<u> </u>	Navigator	<u>Gerish</u>
Doppler	<u> </u>	Sys. Engr.	<u>JARNE</u>
Photographer	<u> </u>	Data Tech.	<u>JAY THOMPSON</u>
Omegasonde	<u> </u>	El. Tech.	<u>STAN ROJAS</u>
AXBT/AXCP	<u>P. BLACK</u>	Other	<u> </u>
	<u>L. SHAY</u>		
Take-Off	Location	Landing	Location
<u>1715 UTC</u>	<u>MIA</u>	<u>0200</u>	<u>MIA</u>

B. Past and Forecast Storm Locations

Date/Time	Latitude	Longitude	MSLP	Max. Wind
<u>14-12Z</u>	<u>20.5 N</u>	<u>86.9 W</u>	<u>~895mb</u>	<u>160 kt.</u>
<u>1830Z</u>	<u>20.9</u> <u>21.3 N</u>	<u>87.9 W</u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

C. Mission Briefing

A/C will make 37 AXBT/AXCP Drops 3-5° LAT from
center of Hurr. Gilbert roughly on SW-NE orientation.
All drops NW of storm from 5000'.

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Launch PTS, Dev. Smi.
5 min Log Time & Location of Drops
1 min

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D. Equipment Status

<u>Equipment</u>	<u>Pre-Flight</u>	<u>In-Flight</u>	<u>Post-Flight</u>
Aircraft	_____	_____	_____
Radar	_____	_____	_____
Cloud physics	_____	_____	_____
Data system	_____	_____	_____
Omegasondes	_____	_____	_____
AXBT/AXCP	_____	_____	_____
Doppler	_____	_____	_____
Photography	_____	_____	_____

REMARKS:

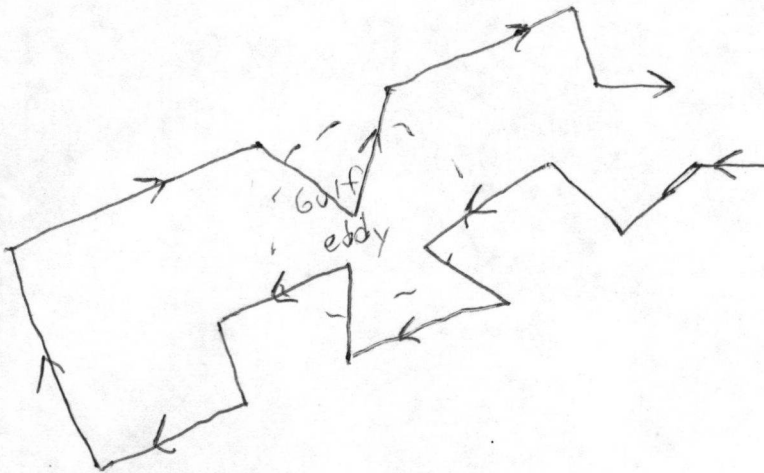
BT 151 VS 1 min pass
drop 4 min

- AXBT ONBOARD PRINTOUT ~~NOT~~ AVAILABLE (will try 15 min ^{After 1st Drop})
- NO RADAR Recording, TAIL RADAR OFF, LF on for NAV purposes.
Doppler off
- Drops from 5000', Depressurized
- AXCP Drops stopped After #6 @ 2048

880914#2

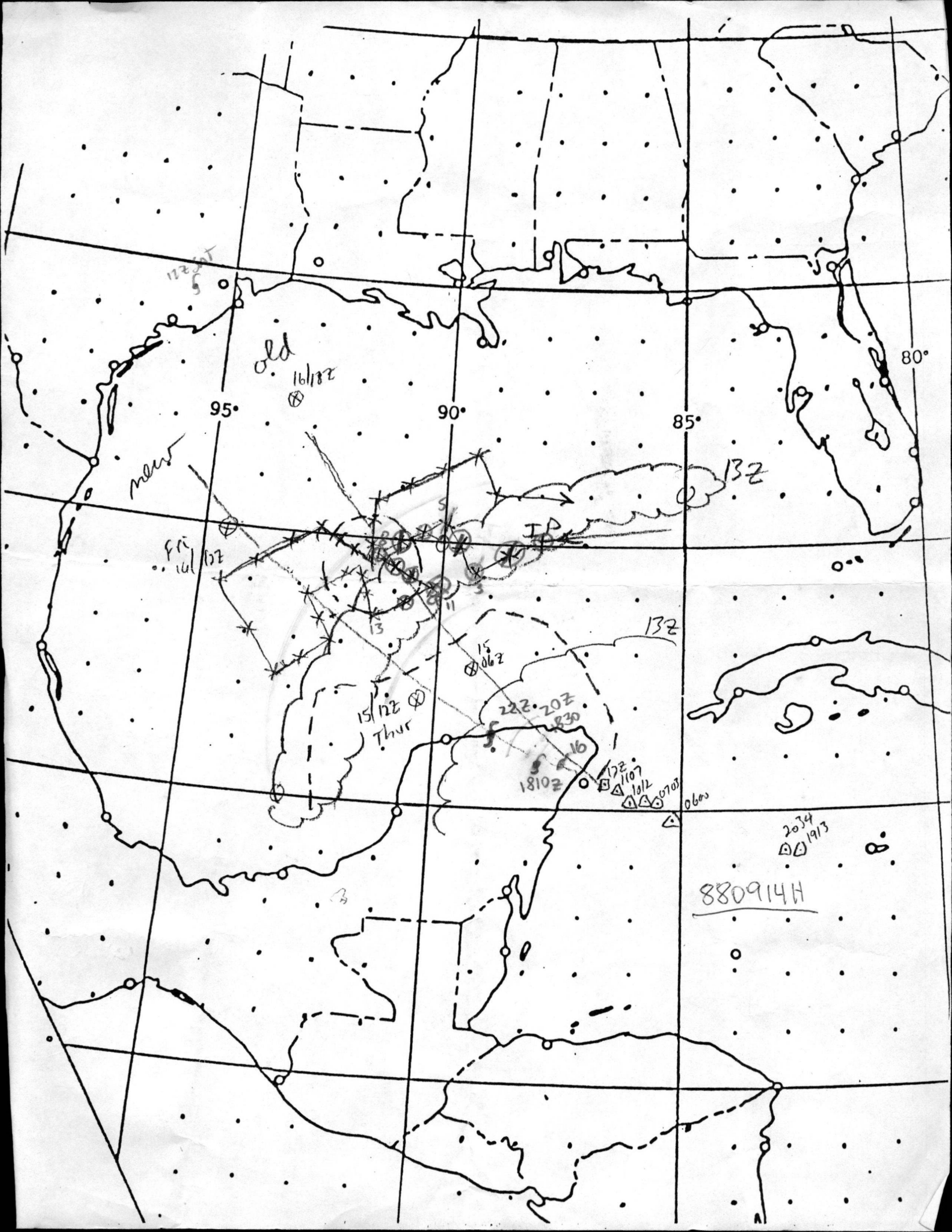
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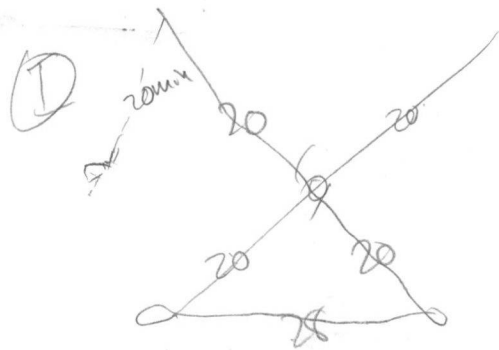
E. I. Proposed Flight Pattern (sketch or designate by number)



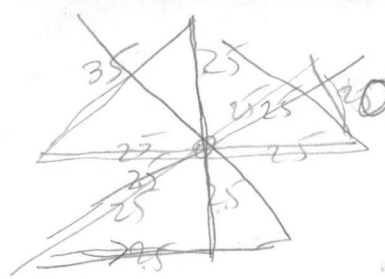
Drop AXBTs,
AXCPs
at .2-.5° spacing,
higher resolution
at estimated eddy pos'n.
(see list of drop pos'ns
and sketch - Attached)

E. II. Actual Flight Pattern



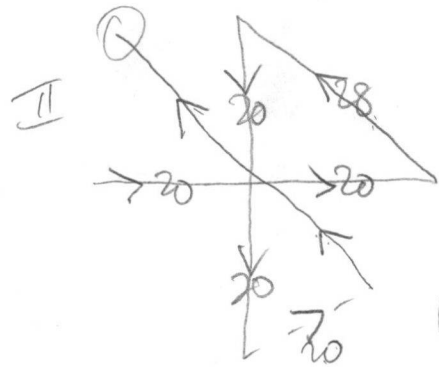


$$\begin{array}{r}
 92 \\
 71.45 \\
 \hline
 370 \\
 170.20 \text{ km} \\
 130 \text{ min} \\
 23 \\
 4 \\
 \hline
 92 \text{ mi}
 \end{array}$$

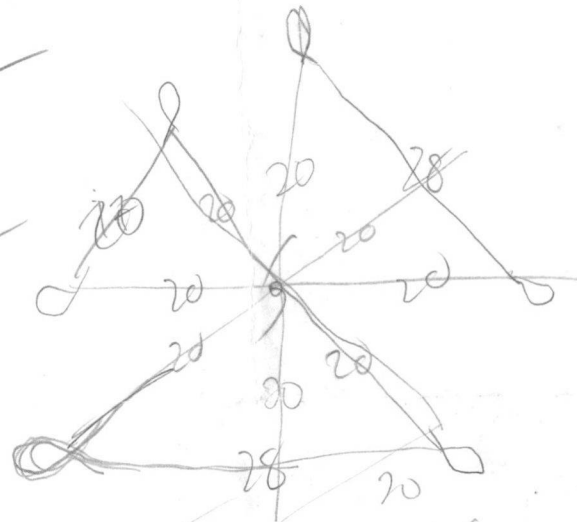


90mi 20

$$\begin{array}{r}
 2/20 \\
 10/23 \\
 2/35 \\
 \hline
 70 \text{ min} \\
 346 \text{ min} \\
 336 \\
 140 \\
 56 \\
 \hline
 196
 \end{array}$$



$$\begin{array}{r}
 178 \\
 139 \\
 \hline
 174 \\
 138 \\
 \hline
 302 \\
 178 \text{ min} \\
 147 \\
 310 \text{ min} \\
 300 \text{ min}
 \end{array}$$

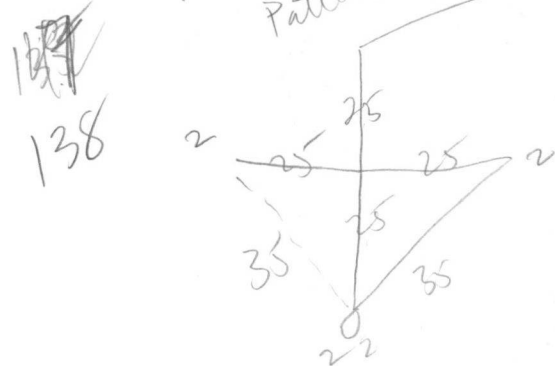
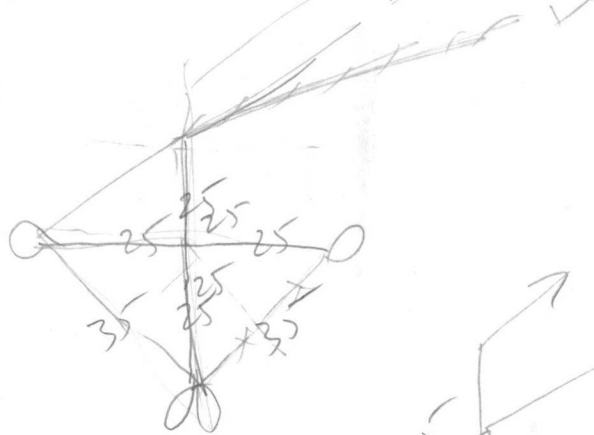


$$\begin{array}{r}
 25 \\
 4 \\
 \hline
 100
 \end{array}$$

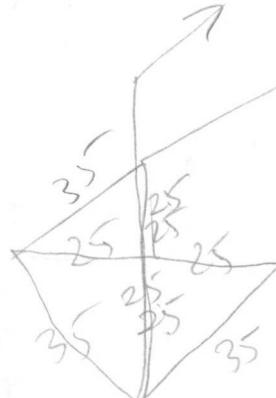
$$\begin{array}{r}
 2/28 \\
 3 \\
 56 \text{ min} \\
 20 \\
 4 \\
 16 \text{ min} \\
 40
 \end{array}$$



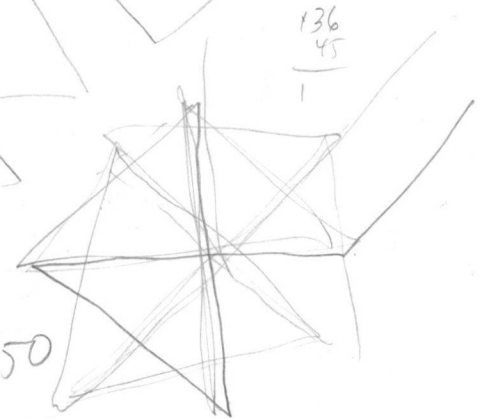
5h



$$\begin{array}{r}
 96 \\
 100 \\
 70 \\
 \hline
 174
 \end{array}$$



$$\begin{array}{r}
 6/25 \\
 2/35 \\
 \hline
 150 \\
 70 \\
 220 \\
 85
 \end{array}$$



$$\begin{array}{r}
 136 \\
 45 \\
 \hline
 1
 \end{array}$$