

U.S. DEPT. COMM. / NOAA / OAO - DATA SECTION WORK FORM NO. 1 OAO WF 1 FILE

FLT ID: 990703I	FM: KBNA	TO: KBNA
FLT NO: 99-	BLK IN: 0015Z	ATA: 0011E
ETD: 1600Z	BLK OUT: 1637Z	RTD: 1648Z
ETE: 2200Z	BLK TIME: 7.38 7.6	FLT TIME: 7.23 7.4
SPONSOR ORG: NOAA/AL	PROGRAM: AESOP	PURPOSE: DOUBLE NASHVILLE

OAO PERSONNEL

AC KENNEDY, P ✓	SYS ENG LYNCH, T ✓
CP OMAR, T	DATA SYS HORN BROOK, C ✓
NAV NEWMAN, C / RATHBUN ✓	RADAR
FE WADE, S	BT/ODW
RADIO XXXXXXXXXX	CLD PHYS
FD C2724K, S ✓	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
HUBLER, S ✓	PI	NOAA/AL
RYERSON, T / HEX ✓	SCIENTIST	"
FLOCKE, F ✓	AKA "	NOAA
LEE, Y ✓	"	NOAA
KUSTER, B / BOISSY, R ✓	"	NOAA-AL
HOLLOWAY, J ✓	"	"
JOHNSON, T ✓	"	"
MEAGHER, J ✓	"	"

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

FLT ID: 990703I TIME OFF: 1648Z TIME ON: 0011Z

FLT ID: 990703T

TIME OFF: 16 482

TIME ON: 00/17

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1000.4	30.20	999.6	30.15

NO	DATA DISPOSITION/DATE/QUALITY
1	10/10/10
2	10/10/10
3	10/10/10
4	10/10/10
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6	10/10/10
7	10/10/10
8	10/10/10
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98	10/10/10
99	10/10/10
100	10/10/10

1/SEC FLT LVL TAPES		
FAST FLT LVL TAPES		
RADAR TAPES		
DOPPLER TAPES		
ODW CASSETTES		
HARD COPIES		
AXDT		
AXCP		
ODW		

PHOTOGRAPHY

	FWD	LS	RS	VERT	
ON					
OFF					
RATE					

REMARKS

TIME	LOT	LOW	TR	HD	TA	TD	WD	WS	PA	6A	PS	SP	REMARKS
170430	36 17	87 52	284	284	2.7	-14.1	143	9.3	4366	4485	587.5	998.4	~3.1K FEET PA CLOUD BOSE / PBL LEVEL H.S PA
171140	36 25	88 30											PT 1
172255	36 27	89 30											TURN + DESCEND
172805	36 25	89 13	97	100	15.3	3.4	208	10.9	2220	2265	773.6	9903.4	LEVEL 7.5K
173245	36 25	88 50											DESCEND
173125	36 27	88 45	92	94	26.8	20.3	229	10.1	535	515	956.8	1007.2	LEVEL 2K PA
174005	36 25	88 29											PT 1
175630	36 06	87 20	109	111	27.1	20.9	239	8.4	538	406	980.4	991.6	PT 2
180950	35 50	86 25	110	111	26.6	20.8							PT 3
181707	36 00	86 30											PT 4
182740	36 11	87 07											PT 5
182918	36 16	87 05											PT 6
183819	36 05	86 29	110	111	22.0	20.5	195	4.4	533	453	951.1	996.5	PT 7
1839													PT 8
184835	36 18	87 04											PT 9
185405													CLIMB
185840	36 08	86 26											PT 8
190040	36 12	86 21											PT 11
191014	36 20	87 01	286	286	27.5	20.3	161	1.4	558	421	948.6	994.0	PT 10
192120	36 16	86 32	110	112	27.2	20.0	161	4.5	553	505	948.6	1003.0	PT 12
192355	36 18	86 12											PT 15
193948	36 34	87 07											PT 14
194645	36 28	86 42											CLIMB
195055	36 23	86 24											CLOUD BOSE LEVEL 4K
195345	36 19	86 12											PT 15
195540	36 24	86 09											PT 16 2K
2002817	37 05	8822											PT 17
203224	37 19	88 16											PT 18
204210	37 09	87 35											CL
205045	36 59	86 58	113	115	28.5	19.0	208	7.8	540	459	950.1	1001.8	LEVEL 2 1/2
210500	36 40	85 59											PT 19
210945													CLIMB
212755	36 14	87 06	244	245	-10.0	-24.4	26	4.0	6110	6329	464.5	997.3	LEVEL 200
215055	36 08	87 19											PT 20 SPAN ↓
220415	36 09	87 20	111	114	27.8	20.8	190	6.3	555	414	948.3	993.9	LEVEL 2K
221810	35 52	86 26											PT 21
222054	35 00	86 28											PT 22
223007	36 11	87 06	290	290	28.0	21.2	161	2.7	556	429	948.2	995.8	PT 23
223125	36 16	87 06											PT 24
224035	36 06	86 29	110	112	28.3	20.0	163	2.6	558	451	948.0	991.7	PT 25

NOAA • AOC • SED Flight Performance Log

Aircraft : N43RF

Project : Ozone '99

Mission : BVA Mission 2SED Crew: Lynch, Hornbrook, RogersFlight ID : 990703IPre-Flight: 13/0Take-Off: 16:47Landing: 00:11

System			Pre-Flight	In-Flight	Post-Flight		
N A V	INE #1	Aligned to: <u>0</u>	<u>✓</u> <u>ch</u>		<u>0</u>	<u>0</u>	<u>2</u>
	INE #2	Aligned to: <u>0</u>	<u>✓</u> <u>ch</u>		<u>+2</u>	<u>-3</u>	<u>3</u>
	GPS	<u>Fm1</u>	<u>✓</u> <u>ch</u>		<u>Lat</u>	<u>Long</u>	<u>GS</u>
R A D A R	Nose		<u>✓</u> <u>TL</u>				
	L/F	R/T SN: <u>103</u>	<u>✓</u> <u>ch</u>		Mod Switch Off? <u>✓</u> <u>TL</u>		
	MARS Data System		Clean DAT? <u>✓</u> <u>TL</u>		# DATs: <u>1</u>		
T E M P		Cal High	Cal Low			Cal High	Cal Low
	Temp #1	<u>30.9</u>	<u>-30.2</u>	<u>✓</u> <u>ch</u>			
	Temp #2			<u>✓</u> <u>ch</u>			
	Dewpoint #1			<u>✓</u> <u>ch</u>			
P R E S S	Dewpoint #2 (AOC)			<u>✓</u> <u>ch</u>			
	Attack Angle (AP/DAP)			<u>✓</u> <u>ch</u>			
	Slip Angle (BP/DBP)			<u>✓</u> <u>ch</u>			
	Differential (PQ1/PQ2/PQ3/PQ4)			<u>✓</u> <u>ch</u>			
F L T L V L	Absolute (PS1/PS2)			<u>✓</u> <u>ch</u> <u>2 is 2 mblow</u>			
	Radome Transducers			<u>Plugs?</u> <u>✓</u> <u>ch</u>			
	Cabin Transducer (Station 5)			<u>✓</u> <u>ch</u>			
	Apn-159	SN: <u>5471-01</u>		<u>✓</u> <u>ch</u>		Off?: <u>✓</u> <u>TL</u>	
M I S C	Apn-232	SN: <u>1699</u>		<u>✓</u> <u>ch</u>		Off?: <u>✓</u> <u>TL</u>	
	J&W Liquid Water			<u>✓</u> <u>TL</u>			
	Lyman Alpha Hygrometer			<u>Plugs?</u> <u>✓</u> <u>ch</u>		Plugs?:	
	Down PRT-5 (SST)			<u>✓</u> <u>ch</u>			
U S E R	Side PRT-5 (CO ₂)			<u>✓</u> <u>ch</u>			
	RAMS Data System			Clean DAT? <u>✓</u> <u>ch</u> <u>(3)</u>		# DATs: <u>2</u>	
	F/D Laptop			<u>✓</u> <u>ch</u>		Off? <u>✓</u> <u>TL</u>	
	C.I. Printer			<u>✓</u> <u>ch</u>			
U S E R	ASDL			<u>nl</u>		Off?: <u>✓</u> <u>TL</u>	
	Epply Radiometers (PSP / PIR)			<u>✓</u> <u>ch</u>			
	Exterior Walk Around			<u>✓</u> <u>ch</u>			
	Video	<u>N) (V) (B) (D)</u>		<u>✓</u> <u>ch</u>		Lens Covers?: <u>✓</u> <u>TL</u>	
U S E R	AVAPS			<u>nl</u>		# Tapes: <u>—</u>	
	GPS Digital Dropsondes (GD ²)			# On Board: <u>—</u>	# Dropped: <u>—</u>	# Good: <u>—</u>	
	FCU	<u>A B C —</u>		<u>✓</u> <u>ch</u>		UPS Off?: <u>—</u>	
	Wing Pods - Bolts & Covers					Accelerometers	
U S E R	Zenith SAFS Radiometer			Secure? <u>✓</u> <u>ch</u>		#1 (2 G): <u>8190</u>	
	Pump Bay Temp Sensor			<u>✓</u> <u>ch</u>		#2 (2.5 G): <u>6686</u>	
	Window Inlet Covers			Removed? <u>✓</u> <u>ch</u>		#3 (3 G): <u>5967</u>	
	CO & NO Alarm Operational			Test? <u>✓</u> <u>ch</u>		#4 (3.5 G): <u>2892</u>	
U S E R	CO & NO Gas PSI Check			Start PSI: <u>✓</u> <u>ch</u>		End PSI: <u>355</u>	
	All Gas Cylinders Secure			Mounting? <u>✓</u> <u>ch</u>		Valve Closed?	

(updated)

Gas Cylinders located in:

- (3) C1/C2 Cabinet
- (1) B3 Cabinet
- (3) Bookcase Sidewall
- (3) Station C3X
- (1) Station 2 Sidewall
- (3) Station 3
- (5) Aft Bottle Rack
- (3) Station 6
- (2) Station 7 Sidewall

Please Note any Discrepancies

[illegible]

NOAA • AOC • SED
N43RF DATA STATION LOG

Project : Ozone '99

Mission : Ozone # 2

Flight ID : 990703 I

Operators : _____

Take Off : 1647 Landing : 0011

RAMS DAT 1 On [8/9]: <u>16:36</u>	RAMS DAT 1 Off: <u>0026</u>	Data : <u>Slow</u> <u>Fast</u> AVAPS
RAMS DAT 2 On [8/9]: <u>16:36</u>	RAMS DAT 2 Off: <u>0026</u>	Data : <u>Slow</u> <u>Fast</u> AVAPS
RAMS DAT 3 On [8/9]:	RAMS DAT 3 Off:	Data : Slow Fast AVAPS
Printer On : <u>16:35</u>	Printer Off: <u>0030</u>	
MARS DAT 1 On [8/9]: <u>17:07</u>	MARS DAT 1 Off: <u>0043</u>	CPU Selected : <u>A</u> B
MARS DAT 2 On [8/9]:	MARS DAT 2 Off:	VCR's Used : <u>N</u> <u>Q</u> <u>R</u> <u>D</u>
MARS DAT 3 On [8/9]:	MARS DAT 3 Off:	VCR Mode : <u>VHS</u> S-VHS 2/12 <u>(6h)</u>
PMS DAT 1 On:	PMS DAT 1 Off:	
PMS DAT 2 On:	PMS DAT 2 Off:	Tapes Given To
PMS DAT 3 On:	PMS DAT 3 Off:	RAMS:
VCR Tape 1 On: <u>16:35</u>	VCR Tape 1 Off: <u>0015</u>	MARS:
VCR Tape 2 On:	VCR Tape 2 Off:	PMS:
VCR Tape 3 On:	VCR Tape 3 Off:	VCR:

CARCAH Tasking

N/A

Mission Number : _____

Storm Name : _____

Data Station Operator Notes

DATE : 7/3/99
TO : Chief, AOC Flight Operations
FROM : Pilot/Flight Director, Aircraft N43RF ON 0015Z BLOCKTIME
OFF 1637Z 7.6
SUBJECT: Hazardous Duty

PURPOSE OF FLIGHT: AIR CHEMISTRY (AESOP)

Hazardous Duty Pay is required for flight made on 7/3/99
(DATE)

Request based on HAZARDOUS MATERIALS ONBOARD

Personnel on board authorized Hazard Pay:

<u>CZYZYK, S</u>	_____
<u>HORN BROOK, C</u>	_____
<u>LYNCH, T</u>	_____
<u>WADE, S</u>	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

PILOT/FLIGHT DIRECTOR: S. Gymb

APPROVED: _____ DISAPPROVED: _____

CHIEF, AOC FLIGHT OPERATIONS: _____

990703I

1645:01 - 0015:00

ERROR: undefined
OFFENDING COMMAND:

STACK:

1648 - 2410

TTI STILL 0.1°C SPIKES

173000, -0.5, 0.5	36 24.9	-89 4.0
183000, -0.7, 0.2	36 16.2	-87 3.0
191500, -1.1, 0.6	36 23.9	-86 49.3
195700, -1.4, 1.0	36 26.7	-86 12.0
202900, -2.1, 1.9	36 7.3	-86 22.6
210700, -1.6, 1.2	36 38.2	-85 51.9
214300, -2.6, 2.6	35 48.2	-87 58.4
223200, -2.3, 1.6	36 16.4	-87 40.3
233700, -2.5, 2.4	36 33.8	-86 40.0
001500, -2.7, 3.7	36 7.2	-86 40.6

DWZ (NOBJ)

2122:00 - 2126:50 X

2152:00 - 2156:30

RA-159 SET TO ZERO DUE TO SPIKE AT TAKEOFF

1645:00 - X

1648:17 X

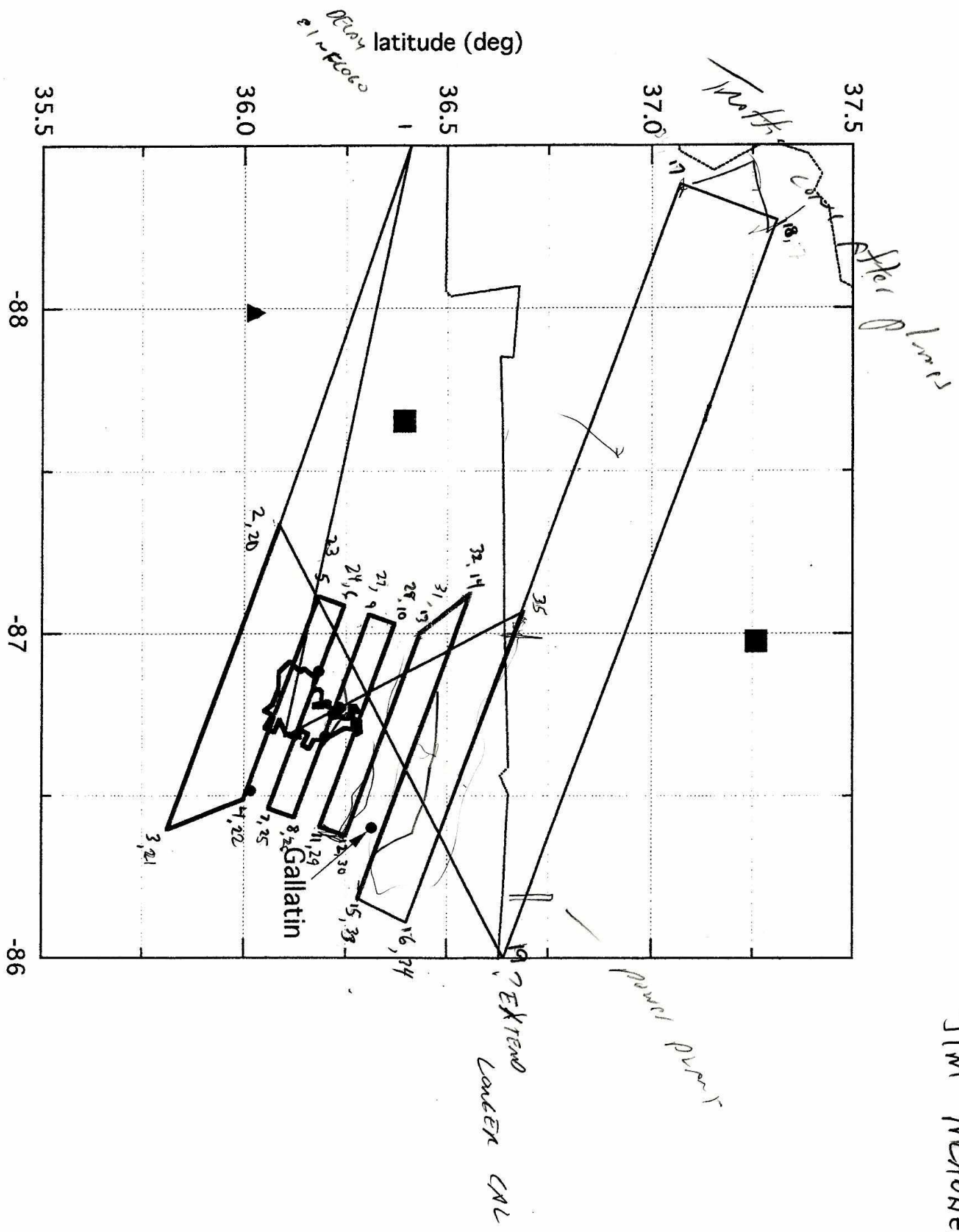
RA-232

1648:17 - 1650:25 X

RA-159 SET TO ZERO @ LANDING 0010:32 - 0015:00 X

TTZ, DPZ, IZ, AZ

JIM MEAGHER

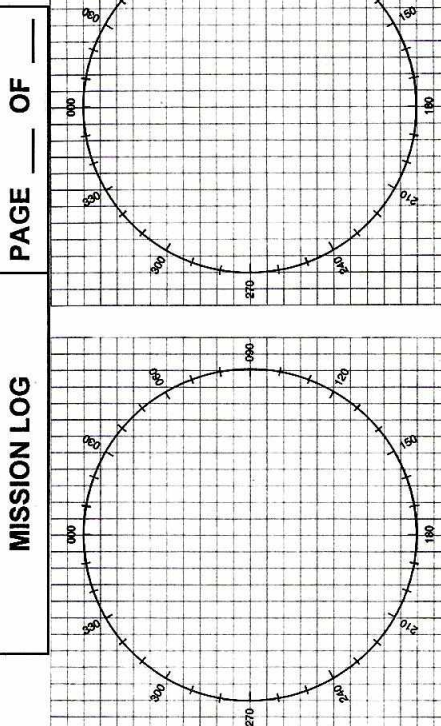


BNA 252/72

3625.1
8636.8

282 to pt 1

CLEARANCES			OTHER	
FREQ	ALT	HDG		
			30.13	2R
			B 1105	E



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 243.0 VHF/VOICE 121.5 MF/VOICE 2182 KHZ HF/CW 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

TIME	FIX TYPE	POSITION	INS 1 POSITION	K ERR	INS 2 POSITION	K ERR	VAR +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS
1635																				
1637																				ENG START
1647																				3020 48K
1730		3025N 8905W	3025N 8905W	0	3625N 8904W	+1		91	21	89	235	220	12	75K	235					TAXI 20C
1830		3012 8707	3011 8707	+1	3012 8707	0														TOTF 20C
1915	FMI	3023.9 8649.2	3023.4 8649.4	+1.5 -1.2	3024.9 8649.5	+1.6 +1.7		112	12	111	212	154	5	2000	214					
1957		3626.2 8610.6	3624.9 8610.8	+1.3 -1.2	3627.7 8609.7	-1.5 +1.9		290	12	291	213	266	5	2000	214					305K FUEL
2029		3707.0 8822.7	3705.8 8823.2	+1.2 -1.5	3709.2 8820.8	-2.2 +1.9		024	12	023	221	195	8	2000	210					
2107		3638.0 8551.0	3635.6 8551.4	+2.4 -1.4	3639.5 8549.9	-1.5 +1.1		113	12	112	207	147	5	2000	210					
2143		3547.8 8759.1	3544.8 8756.4	+3.0 -1.9	3550.4 8756.4	-2.6 +2.7		061	32	058	278	152	15	FL200	275					
2232		3616 8651	3614 8650	+2 +1	3619 8649	-3 +2		287		289	215	159	6	2000	215					18.8K
2337		3634 8641	3634 8641	0	3637 8639	-3 +2		289		290	216	190	6	2K	214					LAND
0010																				Block
0016																				

7.7 BLOCK 7.4 FLIGHT 7+ 7.3 1700 0000

REMARKS	INS #1	INS	UPDATED
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