



## U.S. DEPT. COMM./NOAA/ORA - DATA SECTION WORK FORM NO.2 DROWF2 FILE

FLT ID: I951219 TIME OFF: 1706Z TIME ON: 0025Z

|          |         |        |          |        |
|----------|---------|--------|----------|--------|
|          | A/C T/O | WX STN | A/C LAND | WX STN |
| PRESSURE | 1020.5  |        | 1008.2   |        |

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES

FAST FLT LVL TAPES

RADAR TAPES

DOPPLER TAPES

ODW CASSETTES

HARD COPIES

AXBT

AXCP

ODW

## PHOTOGRAPHY

|      |     |    |    |      |  |
|------|-----|----|----|------|--|
|      | FWD | LS | RS | VERT |  |
| ON   |     |    |    |      |  |
| OFF  |     |    |    |      |  |
| RATE |     |    |    |      |  |

REMARKS

# NOAA • AOC • SED Flight Performance Log

Aircraft : N43RF

COAST '95

Mission : FERRY TO KMC

SED Crew: LYNCH, McMillan, McNamara, Barr, ASS

Flight ID : 951219I

Pre-Flight: 1530

Take-Off: 17:05

Landing: 00:24

| System                     |                                      | Pre-Flight    | In-Flight       | Post-Flight               |
|----------------------------|--------------------------------------|---------------|-----------------|---------------------------|
| N<br>A<br>V                | INE #1                               | Aligned to :  |                 |                           |
|                            | INE #2                               | Aligned to :  |                 |                           |
|                            | GPS                                  |               |                 | Lat Long GS               |
| R<br>A<br>D<br>A<br>R      | Nose                                 |               |                 |                           |
|                            | L/F                                  | R/T SN :      | NA              | Mod Switch Off? <u>mb</u> |
|                            | Tail                                 | R&T SN : 1    | NA              | Mod Switch Off? <u>mb</u> |
|                            | ASAU's & RCU                         |               | NA              |                           |
|                            | MARS Data System                     |               | NA              | # DATs :                  |
| P<br>M<br>S                | 2DG-C                                | Ch 1/64: 1    | NA              |                           |
|                            | 2DG-P                                | Ch 1/64: 1    | NA              |                           |
|                            | FSSP                                 | Ref VDC:      | NA              |                           |
|                            | SEA Data System                      |               | NA              | # DATs :                  |
| T<br>E<br>M<br>P           |                                      | Cal High      | Cal Low         |                           |
|                            | Temp #1                              | 30.7          | -30.3           | RDM                       |
|                            | Temp #2                              |               |                 | RDM                       |
|                            | Temp #3 (Starboard)                  |               |                 | ① RDM                     |
|                            | Dewpoint #1                          |               |                 | RDM                       |
|                            | Dewpoint #2 (AOC)                    |               |                 | RDM                       |
|                            | Dewpoint #3 (EG&G)                   |               |                 | RDM                       |
| P<br>R<br>E<br>S<br>S      | Attack Angle (AP/DAP)                |               | ② RDM           |                           |
|                            | Slip Angle (BP/DBP)                  |               | ③ RDM           |                           |
|                            | Differential (PQ1/PQ2/PQ3)           |               | RDM             |                           |
|                            | Absolute (PS1/PS2)                   |               | RDM             |                           |
|                            | Radome Transducers                   |               | Plugs? STM      |                           |
| F<br>L<br>T<br>L<br>V<br>L | Cabin Transducer (Station 5)         |               | RDM             |                           |
|                            | Apn-159                              | SN:           | STM             |                           |
|                            | Apn-232                              | SN:           | STM             | Off? <u>mb</u>            |
|                            | King Liquid Water                    |               | NA              | Off? <u>mb</u>            |
|                            | J&W Liquid Water                     |               | STM             |                           |
|                            | Down PRT-5 (SST)                     |               | RDM             |                           |
|                            | Side PRT-5 (CO <sup>2</sup> )        |               | RDM             |                           |
|                            | Up PRT-5                             |               | Open? <u>NA</u> | Closed? <u>+</u>          |
|                            | RAMS Data System                     |               | STM             | # DATs :                  |
|                            | ASDL                                 |               | NA              | Off?                      |
| M<br>I<br>S<br>C           | Exterior Walk Around                 |               | STM             |                           |
|                            | Video                                | N L R D       | NA              |                           |
|                            | L <sup>2</sup> D <sup>2</sup> System |               | NA              |                           |
|                            | LDW Sondes                           | ∅: # On Board |                 | # Dropped : —             |
|                            | FCU                                  | A B C         |                 | # Good : —                |
| U<br>S<br>E<br>R           | Charge Probe                         |               | NA              | Accelerometers            |
|                            | AIR Lyman α                          |               | Plugs? STM      | #1 (2 G):                 |
|                            | Field Mills                          | L R U D       |                 | #2 (2.5 G):               |
|                            |                                      |               |                 | #3 (3 G):                 |
|                            |                                      |               |                 | #4 (3.5 G):               |

**Please Note any Discrepancies**

[illegible]

## NOAA • AOC • SED

## N43RF DATA STATION LOG

**Project : COAST '95**

Mission : Ferry → KMCF

Flight ID: 951219I

Operators : Lynch

Take Off: 17:05

Landing : 00:24

|                             |  |                       |  |                      |  |
|-----------------------------|--|-----------------------|--|----------------------|--|
| RAMS DAT 1 On (B) 9]: 16:55 |  | RAMS DAT 1 Off: 00:33 |  | CPU Selected: (A) B  |  |
| RAMS DAT 2 On [ 8 . 9 ]:    |  | RAMS DAT 2 Off:       |  | VCR's Used : N L R D |  |
| RAMS DAT 3 On [ 8 9 ]:      |  | RAMS DAT 3 Off:       |  |                      |  |
| Printer On : 16:56          |  | Printer Off :         |  |                      |  |
| VCR's On :                  |  | VCR's Off :           |  | VCR Count :          |  |
| MARS DAT On :               |  | MARS DAT Off:         |  |                      |  |
| PMS DAT On :                |  | PMS DAT Off:          |  |                      |  |

[illegible]

R = Recco V = Vortex S = Sonde B = AXBT

### Data Station Operator Notes

# COAST II

FLIGHT #09 I951219 (Ferry to MacDill AFB, FL)

| TYPE OF DATA<br>-----                          | SENSOR OR OPTION<br>----- |
|------------------------------------------------|---------------------------|
| INE                                            | 1                         |
| Accelerometer                                  | 1                         |
| Temperature probe                              | 1                         |
| Altitude change option<br>(for vertical winds) | PA                        |
| Static pressure                                | Rosemount fuselage        |
| Dynamic pressure                               | Rosemount fuselage        |
| Time source                                    | Micro 99                  |
| Constants file                                 | CO3961.CON                |

## Notes:

There were no time/data gaps.

Short duration (quick) pitch maneuver: 191200Z - 191300Z.  
 Long duration pitch maneuver: 191340Z - 191510Z.  
 Yaw maneuver: 191550Z - 191800Z.  
 Speed-up maneuver: (178 - 242 kts IAS): 191910Z - 192330Z.

Downward spikes in radar altimeter output are a result of overflying land.

The aircraft INE positions were renavigated with respect to GPS.

SPECIAL NOTE!!! Locations 80, 81 and 82 of record five on the standard tape contain vertical ground, vertical air and vertical speeds, respectively, computed using Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

|                          | Takeoff<br>----- | Landing<br>----- |
|--------------------------|------------------|------------------|
| Aircraft static pressure | 1020.5mb         | 1008.2mb         |
| Corrected tower pressure | 1020.0mb         | 1008.5mb         |

Flight Meteorologist: A. Barry Damiano, (813) 828-3310 ext. 3073

I 951219

115

| TIME   | LAT                        | LONG  | TRK | HD  | WD  | WS | PA   | GA   | TA    | TD    | SP     | PS    |     | FL   |
|--------|----------------------------|-------|-----|-----|-----|----|------|------|-------|-------|--------|-------|-----|------|
| 170900 | 4723                       | 12211 | 175 | 180 | 200 | 14 | 1424 | 1359 | -0.6  | -1.0  | 1003.8 | 842.5 | CLR | 65.3 |
| 173500 | 4606                       | 12036 | 121 | 123 | 132 | 14 | 6429 | 5683 | -27.2 | -38.6 | 950.4  | 444.7 | CLR | 79.3 |
| 181000 | 4449                       | 11700 | 93  | 96  | 195 | 12 | 6424 | 5325 | -24.7 | -37.7 | —      | 445.0 | CLR | 78.3 |
| 190300 | 4236                       | 11150 | 115 | 115 | 70  | 9  | 6415 | 4796 | -25.0 | -38.7 | —      | 444.9 | CLR | 84.4 |
| 191200 | short pitch                |       |     |     |     |    |      |      |       |       |        |       |     |      |
| 191300 |                            |       |     |     |     |    |      |      |       |       |        |       |     |      |
| 191340 | long pitch                 |       |     |     |     |    |      |      |       |       |        |       |     |      |
| 191500 |                            |       |     |     |     |    |      |      |       |       |        |       |     |      |
| 191550 | yaw                        |       |     |     |     |    |      |      |       |       |        |       |     |      |
| 191800 |                            |       |     |     |     |    |      |      |       |       |        |       |     |      |
| 191910 | speed up 178-242 IAS (KTS) |       |     |     |     |    |      |      |       |       |        |       |     |      |
| 192330 |                            |       |     |     |     |    |      |      |       |       |        |       |     |      |
| 192600 | 4146                       | 10931 | 112 | 111 | 54  | 9  | 7046 | 6092 | -31.5 | -38.8 | —      | 408.2 | CLR | 78.7 |
| 200200 | 4031                       | 10558 | 107 | 102 | 35  | 29 | 7029 | 3483 | -30.8 | -41.5 | —      | 409.1 | CLR | 77.6 |
| 204100 | 3821                       | 10257 | 121 | 122 | 131 | 14 | 7043 | 5713 | -34.4 | -44.0 | —      | 408.1 | CLR | 77.8 |
| 211200 | 3639                       | 10028 | 135 | 139 | 273 | 25 | 7637 | 6846 | -37.4 | -45.5 | —      | 374.9 | CLR | 74.1 |
| 220900 | 3304                       | 9513  | 125 | 130 | 282 | 60 | 7641 | 7606 | -33.5 | -43.6 | —      | 374.9 | CLR | 74.8 |
| 224600 | 3050                       | 9139  | 120 | 130 | 263 | 82 | 7647 | 7782 | -29.9 | -38.1 | —      | 373.4 | CLR | 72.9 |
| 231500 | 2913                       | 8846  | 120 | 129 | 260 | 76 | 7651 | 7866 | -28.2 | -36.5 | —      | 374.3 | CLR | 71.3 |

19 53 00 ✓  
19 58 30 P  
20 05 30 P  
20 24 30 } P+R  
20 34 00 } P+R  
20 51 00 } P+R  
20 51 30 }  
20 52 00 }  
20 54 00 }  
20 55 00 }  
21 04 30 P  
21 07 30 P+R  
21 10 00 P+R  
21 18 30 P+R  
21 26 00 } P  
21 27 30 } P  
21 30 30 } P+R  
21 37 00 P  
21 41 30 } P+R  
21 42 30 } P+R  
21 55 30 } P  
21 58 30 }  
22 13 30 }  
22 15 00 } P+R  
22 17 00 }

22 23 30 } P+R  
22 24 30 }  
22 38 00 P  
22 41 30 }  
22 42 30 } P+R  
22 45 00 }  
22 52 30 } P+R  
22 53 30 }  
23 05 30 } P+R  
23 07 00 } P  
23 42 00 - P

I951219  
NO DATA GPS

DAP glitch  
2107Z

~~RA159~~  
RA159 fixes  
at T/O and  
landing



17 28 00 +0.3 0.0

18 28 00 -0.1 -0.1

19 28 00 -0.2 0.0

20 28 00 -0.4 +0.1

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↓ 21 28 00 -1.4 +0.2

22 28 00 -1.9 +1.4

23 28 00 -2.2 +1.6

002800 +2.9 +1.2



| MISSION PREFLIGHT LOG |                     |         |    |              |    |                    |     |                |    | FLIGHT DIRECTOR |     | SCHEDULED / ACTUAL TAKEOFF Z |                | DATE OF TAKEOFF |          |     |                       |
|-----------------------|---------------------|---------|----|--------------|----|--------------------|-----|----------------|----|-----------------|-----|------------------------------|----------------|-----------------|----------|-----|-----------------------|
| DESTINATION           |                     | MISSION |    | NAVIGATOR    |    | AIRCRAFT COMMANDER |     | LEG / TOT DIST |    | LEG / TOT TIME  |     | PROP ETA                     |                | REMARKS         |          |     |                       |
| WP                    | LAT / LON           | RTE     | MH | VAR<br>+E--> | TH | DR<br>+R-->        | TRK | GS             | WD | WS              | ALT | TAS                          | LEG / TOT DIST | LEG / TOT TIME  | PROP ETA | ATA | REMARKS               |
| BFL                   | 47 32.3<br>122 18.3 |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     | 1700Z '1705Z 19DEC 95 |
| SEA                   | 47 26.1<br>122 18.6 |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| SUMMA                 | 46 37<br>122 00     |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| BAKER                 | 44 50.4             |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| BKE                   | 44 46.0             |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| WHEEL                 | 42 52.2             |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| ONT                   | 41 35.4             |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| ROCK                  | 39 53.7             |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| OC5                   | 109 00.1            |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| WHEA                  | 104 37.5            |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| WHEA                  | 103 37.6            |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| WHEA                  | 102 41.3            |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| WHEA                  | 37 02.7             |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| WHEA                  | 35 41.3             |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| WHEA                  | 34 12.7             |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| WHEA                  | 31 15.4             |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| WHEA                  | 30 01.8             |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| WHEA                  | 28 37               |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| WHEA                  | 27 56.2             |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| WHEA                  | 27 54.9             |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| WHEA                  | 27 54.8             |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| WHEA                  | 27 54.5             |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| WHEA                  | 27 51.0             |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |
| WHEA                  | 27 29.6             |         |    |              |    |                    |     |                |    |                 |     |                              |                |                 |          |     |                       |

| INS PERFORMANCE    |  | INS 1 | INS 2 |
|--------------------|--|-------|-------|
| BEGIN ALIGN TIME   |  | 1510Z | 1510Z |
| ALIGN STATUS (0-5) |  | 0     | 0     |
| END NAV TIME       |  | 0025Z | 0025Z |
| START NAV TIME     |  | 1650Z | 1650Z |
| DELTA T            |  | 7435  | 7435  |

| TERMINAL ERRORS |  | INS 1 | INS 2 |
|-----------------|--|-------|-------|
| DELTA LAT       |  | -2.8  | +9.9  |
| DELTA LON       |  | +1.2  | -5.1  |
| RGS             |  | 1     | 2     |
| RADIAL ERROR    |  | 3     | 11    |

| REMARKS |  |
|---------|--|
|         |  |
|         |  |
|         |  |
|         |  |
|         |  |
|         |  |
|         |  |