

19910805HI - FDIR

CaPE Research Flight #1

910805I

TYPE OF DATA

SENSOR OR OPTION

| | |
|--|--------------------|
| INE | 2 |
| Accelerometer | 1 |
| Temperature probe | 1 |
| Altitude change option (for vertical winds) | RA (APN-159) |
| Static pressure | Rosemount fuselage |
| Dynamic pressure | Rosemount fuselage |
| Time source | Micro 29 |
| Constants file | CO3913.CON |

Notes:

The spike in Dewpoint before takeoff is to balance the instrument, and was not removed.

The APN-159 Radar Altimeter was slightly noisy during the flight, causing the Surface Pressure and Geopotential Height calculation to also be slightly noisy. No filtering was attempted.

INE 2 was used to calculate positions and groundspeeds during post-processing. We used INE 1 for the real-time display during the flight, but it had about 12 miles total terminal error at landing. Thus, you will find significant differences in position between the back-end printout and the standard tape.

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.

| | Take off | Landing |
|--------------------------|----------|----------|
| | ----- | ----- |
| Aircraft static pressure | 1017.0mb | 1016.5mb |
| Corrected tower pressure | 1018.3mb | 1018.3mb |

Jack Parrish, Flight Director

```

TITLE (MAX 21 CHARACTERS) -- EX HURRICANE PAINE
CaPE Flight #1
YYMMDDL FLIGHT ID EX: 890808I
910805I
HHMMSS START TIME -99999 DEFAULT TO START OF DATA FOR PRINTOUT ONLY
180201
HHMMSS END TIME 999999 DEFAULT TO END OF DATA FOR PRINTOUT ONLY
221800
HHMMSS TAKE OFF TIME
180900
* NUMBER OF TAPE (I2)
01
* -----LOGICAL UNIT OF INPUT DATA (I1) 8 OR 9 FOR TAPE DRIVE
1 1 FOR READ FROM DISK
* -----LOGICAL UNIT OF OUTPUT TAPE DRIVE(I1)
9
* -----LOGICAL UNIT OF PRINTER (I1)
6
* -----TODAY'S DATE (MMDDY)
10071
* -----DATE OF PROGRAM (MMDDY)
07099
* -----STATIC PRESSURE PROBE (I1)
* 1 = PSRW (ROSEMOUNT WINGTIP)
* 2 = PSRF (ROSEMOUNT CO-PILOT/FUSELAGE)
2
* -----DYNAMIC PRESSURE PROBE (I1)
* 0 = PQRW (WNGTIP) 4 = FUTURE USE
* 1 = PQR1 (FUSLGE) 5 = FUTURE USE
* 2 = FUTURE USE 6 = FUTURE USE
* 3 = PQR3 (FUSLGE) 7 = FUTURE USE
1
* -----INE NUMBER (I1)
* 1 = INE 1
* 2 = INE 2
2
* -----ACCELEROMETER (I1) - USUALLY THE SAME AS YOUR INE #
1
* -----TEMPERATURE PROBE (I1)
1
* -----PRESSURE OPTION (I1) - FOR VERTICAL WIND COMPUTATION
* 0 = PRESSURE ALTITUDE (OVER LAND)
* 1 = RADAR ALTITUDE APN-159 (OVER WATER)
* 2 = RADAR ALTITUDE APN-232 (OVER WATER)
1
* -----PRINTOUT RATE, SECONDS (I2)
10
* -----WINDSPEED/DIRECTION RUNNING AVERAGE TIME, SECONDS (I2)
10
* -----TIME OPTION (I1)
* 1 = MICRO 29
* 2 = TIME BASED GENERATOR #1
* 3 = TIME BASED GENERATOR #2
1
* -----NAME OF CONSTANTS FILE EX C03863.CON
C03913.CON
*****

```