

U.S. DEPT. OF COMMERCE  
 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
 CLIMATE MONITORING AND DIAGNOSTICS LABORATORY  
 DIGITAL OZONESONDE CHECKLIST

FLT# 630

APR 2010 format

**INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT.**

DATE (LOCAL): 6/25/10  
 INITIALS: BXX  
 PUMP#: 229269

1. Run zero air 10 minutes  (v)  
 2. PUMP CURRENT: 75  
 3. PUMP PRESSURE: 14  
 4. ENSCI Press-Vac: 28/21

5. Bypass cell  (v)  
 6. Add 5-6cc cathode  (v)  
 7. 30 MINUTES HI O<sub>3</sub>  (v)  
 8. 3 MINUTES NO O<sub>3</sub>  (v)

9. DUMP CATHODE RINSE:  (v)  
 10. ADD 3.0 CC FRESH CATHODE # 201  
 11. ADD 1.5 CC ANODE SOLUTION:  (v)  
 12. RUN 10 MINUTES on NO O<sub>3</sub>  (v)  
 13. RECORD CURRENT: = .09  $\mu$ amps  
 14. RUN 10 MINUTES on 5  $\mu$ amps O<sub>3</sub>  (v) - then switch to NO O<sub>3</sub> AIR.  
 15. RECORD: TIME TO DROP FROM 4 TO 1.5  $\mu$ amps: 22.4 sec.

16. Run sonde for 10 minutes on NO O<sub>3</sub> AIR  (v)  
 17. Short the cell leads:  (v)  
 18. Place Instrument inside plastic bag:  (v)  
 19. Store inside Styrofoam flight box:  (v)

Check @ 100 ppb cali 6  
 sonde = 100  
 TEST UNIT T100 flow: \_\_\_\_\_

**FLIGHT PREPARATION IN LAB.**

DATE (LOCAL): 7/3/2010  
 INITIALS: WTC  
 Cathode solution # or date written on bottle: Oct 14, 2009  
 CHANGE CATHODE SOLUTION (3cc):  (v)  
 CHANGE ANODE SOLUTION (1.5cc):  (Yes/No)  
 RUN ON NO O<sub>3</sub> FOR 10 MINUTES:  (v)  
 RECORD THE NO O<sub>3</sub> BACKGRND#1: BG1 = 0.012  $\mu$ amps  
 RUN ON 5 microamps of O<sub>3</sub> for 10 Minutes:  (v)  
 SWITCH TO NO O<sub>3</sub> AIR.  
 RECORD: Response Time (4 TO 1.5  $\mu$ amps): 26.78 sec.

T100 FLOWRATE TIMES:

FLOWRATE #1: 29.03 sec  
 FLOWRATE #2: 28.99  
 FLOWRATE #3: 28.99  
 FLOWRATE #4: 29.09  
 FLOWRATE #5: 28.95  
 AVERAGE T100: 29.01

Dry  
 27.65  
 27.84  
 27.95  
 Avg: 27.81  
Wet  
 28.25  
 28.19  
 28.18  
 Avg 28.50

RECORD: ROOM TEMP (C) 24.2 ROOM REL. HUMID. (%) 42 Flowrate Correction 2.48% (Tables)  
 RECORD: 5 - T100 FLOWRATE TIMES: LAB CAL: \_\_\_\_\_ SONDE = \_\_\_\_\_ TEI CAL = \_\_\_\_\_

**DAY OF FLIGHT**

@ THE LAUNCH SITE

FLIGHT NUMBER: H4630

YY MM DD  
 GMT DATE: 2010 07 03 LOCAL DATE: 2010 07 03  
 GMT LAUNCH TIME: 18:09:03 LOCAL TIME: 13:09:03  
 BALLOON TYPE 1000 Gram: Kaymont  Scientific Sales \_\_\_\_\_ (None)

O<sub>3</sub> BACKGROUND ( $\mu$ amps): \_\_\_\_\_

VAISALA NUMBER (9 digit): 229111746  
 SURFACE PRESSURE: \_\_\_\_\_ (MET)  
 SURFACE TEMP. (C): \_\_\_\_\_ (MET)  
 SURFACE HUMIDITY: \_\_\_\_\_ (MET)  
 REMARKS: \_\_\_\_\_

SKY CONDITIONS: Cloudy  
 Burst Alt: 31.4 km  
 Press: \_\_\_\_\_

weighoff = \_\_\_\_\_ grams      Ventilation Holes: \_\_\_\_\_      Heating/Cooling Thermal bags: \_\_\_\_\_