July 2, 2014

*U.S. DEPT. OF COMMERCE*
*NOAA Earth System Research Lab*
**DIGITAL OZONESONDE CHECKLIST**

***FLT #*** HU902

**INITIAL PREPARATION 10-14 DAYS BEFORE FLIGHT.**

**DATE (LOCAL):** 1-14-15
INITIALS: CVC
PUMP#: Z722239

1. Run zero air 10 minutes ✓ (√)
2. **PUMP CURRENT:** 85.42 (mA)
3. **PUMP PRESSURE:** 210 (psi)
4. **DMT Press/vac:** 26 / 20 (in Hg)
5. **Bypass cell** / (√)
6. Add 5-6cc cathode ✓ (√)
7. 30 MINUTES HI $O_3$ ✓ (√)
8. 3 MINUTES NO $O_3$ ✓ (√)
9. DUMP CATHODE RINSE: ✓ (√)
10. ADD 3.0 CC FRESH CATHODE # ✓ 243
11. ADD 1.5 CC ANODE SOLUTION: ✓ (√)
12. RUN 10 MINUTES on NO $O_3$ ✓ (√)
13. **RECORD CURRENT BEFORE O3: BG =** .017 **µA**
14. RUN 10 MINS on 5 µA $O_3$ ✓ (√) - then switch to NO $O_3$ AIR.
15. **RECORD: TIME TO DROP FROM 4 TO 1.5 µA:** 26.48 **sec.**
16. Run sonde for 10 mins on NO $O_3$ ✓ (√)
17. **RECORD CURRENT: BG =** .052 **uA**
18. Short the cell leads: / (√)
19. Intake tube stored in sonde frame: / (√)
20. Place Sonde inside plastic bag: / (√)
21. Store inside Styrofoam flight box: / (√)

**AFTER 1 WEEK: REPLACE SOLUTIONS: DATE (LOCAL):** 1-23-2015

1. RUN 5 MINS on NO $O_3$ ✓ (√)
2. RECORD CURRENT: 0.004 µamps
3. RUN 5 MINS on 5 µamps $O_3$ ✓ (√) – then switch to NO $O_3$ AIR
4. RECORD TIME TO DROP FROM 4 TO 1.5 µamps: 25.16 sec
5. Short cell leads and Store in Styrofoam flight box: ✓ (√)

**FLIGHT PREPARATION IN LAB.**

DATE (LOCAL): 1-31-15
INITIALS: CVC

1. Cathode solution # or date written on bottle: 251
2. CHANGE CATHODE SOLUTION (3cc): ✓ (√)
3. CHANGE ANODE SOLUTION (1.5cc): ✓ (Yes/No)
4. RUN ON NO $O_3$ FOR 10 MINUTES: ✓ (√)
5. RECORD THE NO $O_3$ BACKGRND#1: BG1= .002 µamps
6. RUN ON 5 microamps of $O_3$ for 10 Minutes: ✓ (√)
7. SWITCH TO NO $O_3$ AIR
8. **RECORD:** DECAY TIME TO DROP FROM 4 TO 1.5 µamps: 26.44 sec
9. **RECORD:** 5 – T100 FLOWRATE TIMES:

*T100 FLOWRATE TIMES:*

ROOM TEMP (C): 15.8, ROOM RH (%): 18
Flowrate Correction: 1.6 (%)

FLOWRATE #1: 29.44 sec
FLOWRATE #2: 29.49 sec
FLOWRATE #3: 29.40 sec
FLOWRATE #4: 29.29 sec
FLOWRATE #5: 29.38 sec
AVERAGE T100: 29.40 sec

| | | | | | avg |
|---|---|---|---|---|---|
| wet | 29.44 | 29.25 | 29.34 | | 29.34 |
| dry | 28.93 | 28.97 | 29.03 | | 28.976 |

**DAY OF FLIGHT @ THE LAUNCH SITE.**

FLIGHT NUMBER: HU902
***GMT*** DATE (YYMMDD): 1-31-15 LOCAL DATE: 1-31-15
***GMT*** LAUNCH TIME: 7:24 LOCAL TIME: 1:24
Operator Initials: CVC
BALLOON SIZE: 1200 Grams: TOTEX ___ Hwoyee ___ PAWAN ___ (√ one)
PAY-OFF-WEIGHT: _____ Grams: Burst Alt: _____ (km) Turn/Burst: 36.4 km

**$O_3$ sn:** Z722239 **$O_3$ CELL BACKGROUND (µamps ):** .002 $O_3$ Ventilation Holes: N
**$O_3$ Flowrate:** 29.40 (sec) **$O_3$ Flowrate Correction:** 1.6 (%)
**Radiosonde sn:** 29078 Freq: _____ (MHz)

**NOAA FPH sn:** _____ (if using Frost Point Hygrometer.)

SURFACE PRES: _____ (hPa)
SURFACE TEMP: _____ (C)
SURFACE RH: _____ (%)
Sky Conditions: _____
REMARKS: _____