U.S. DEPT. OF COMMERCE
NOAA Earth System Research Lab

FLT # HU871

March 2014 NEW

# DIGITAL OZONESONDE CHECKLIST

## INITIAL PREPARATION 10-14 DAYS BEFORE FLIGHT.

DATE (LOCAL): 6-4-14
INITIALS: CLC
PUMP# (add x,y,z,R): 2Z26396

1. Run zero air 10 minutes ✓ (√)
2. PUMP CURRENT: 90.72
3. PUMP PRESSURE: >10 lbs
4. ENSCI Press/vac: 25/21 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 # ✓ 239
11. ADD 1.5 CC ANODE SOLUTION: ✓ (√)
12. RUN 10 MINUTES on NO $O_3$ ✓ (√)
13. RECORD CURRENT: **BG** = .183 µamps
14. RUN 10 MINUTES on 5 µamps $O_3$ ✓ (√) - then switch to NO $O_3$ AIR.
15. **RECORD:** TIME TO DROP FROM 4 TO 1.5 µamps: 39.23 sec.
16. Run sonde for 10 minutes on NO $O_3$ AIR ✓ (√)
17. Short the cell leads: ✓ (√)
18. Intake tube stored in sonde frame: ✓ (√)
19. Place Instrument inside plastic bag: ✓ (√)
20. Store inside Styrofoam flight box: ✓ (√)

## AFTER 1 WEEK: REPLACE SOLUTIONS: DATE (LOCAL): 6-12-14

1. RUN 5 MINS on NO $O_3$ ✓ (√)
2. RECORD CURRENT: 0.069 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: 24.72 sec
5. Short cell leads and Store in Styrofoam flight box: ✓ (√)

## FLIGHT PREPARATION IN LAB. (Under 24 hours to launch)

DATE (LOCAL): 6/27/14
INITIALS: CLC

*T100 FLOWRATE TIMES:*
ROOM TEMP (C): 26.3, ROOM RH (%): 55
Flowrate Correction: 1.4 (%)

1. Cathode solution # or date written on bottle: 239
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**=0.010 µamps
6. RUN ON 5 microamps of $O_3$ for 10 Minutes: ✓ (√)
7. SWITCH TO NO $O_3$ AIR.
8. **RECORD:** THE TIME TO DROP FROM 4 TO 1.5 µamps: 23.67 sec
9. **RECORD:** 5 – T100 FLOWRATE TIMES:

FLOWRATE #1: 29.64 sec
FLOWRATE #2: 29.81 sec
FLOWRATE #3: 29.73 sec
FLOWRATE #4: 29.80 sec
FLOWRATE #5: 29.73 sec
**AVERAGE T100:** 29.74 sec

| | | | | avg |
|---|---|---|---|---|
| wet Dry | 27.68 | 27.43 | 27.52 | 27.5433 |
| wet | 27.99 | 27.81 | 27.99 | 27.9167 |

## DAY OF FLIGHT @ THE LAUNCH SITE.

**Results:** $O_3$ Sonde TCO extrap: _____ (DU)

FLIGHT NUMBER: HU871
***GMT*** DATE (YYMMDD): 6/21/2014 LOCAL DATE: 6/21/2014
***GMT*** LAUNCH TIME: 18:02 LOCAL TIME: 1:02
Operator Initials: CLC

BALLOON SIZE: 800 Grams: TOTEX ___ Hwoyee ✓ PAWAN ___ (√ one)
PAY-OFF-WEIGHT: _____ Grams: Burst Alt: ~33 (km) Turn/Burst: ___

**$O_3$ sn:** 2Z26396 **$O_3$ CELL BACKGROUND (µamps ):** 0.010 $O_3$ Ventilation Holes: (Y/N) Y
**$O_3$ Flowrate:** 29.74 (sec) **$O_3$ Flowrate Correction:** 1.4% (%)
**Radiosonde #:** 26236 Freq: 403 (MHz) If Vais **RS-80,** Pressure offset written on bag: _____ (hPa)
**NOAA FPH sn:** _____
**Other instruments:** _____

SURFACE PRES: 990.6 (hPa)
SURFACE TEMP: 43.2 (C)
SURFACE RH: 43.6 (%)
Sky Conditions: _____
REMARKS: _____