NOAA Earth System Research Lab

July 2, 2014 **DIGITAL OZONESONDE CHECKLIST**

INITIAL PREPARATION 10-14 DAYS BEFORE FLIGHT.

DATE (LOCAL): 9/17/14
INITIALS: BW
PUMP#: 2327568

1. Run zero air 10 minutes ✓ (√)
2. **PUMP CURRENT:** 78 **(mA)**
3. **PUMP PRESSURE:** 106.07 **(psi)**
4. **DMT Press/vac:** 30 / 19 **(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 # ✓
11. ADD 1.5 CC ANODE SOLUTION: ✓ (√)
12. RUN 10 MINUTES on NO O_3 ✓ (√)
13. **RECORD CURRENT BEFORE O3: BG =** 0.376 **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:** 38.39 **sec.**
16. Run sonde for 10 mins on NO O_3 ✓ (√)
17. **RECORD CURRENT: BG =** 0.294 **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): 9/23/14 ✓

1. RUN 5 MINS on NO O_3 ✓ (√)
2. RECORD CURRENT: .072 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: 25.14 sec
5. Short cell leads and Store in Styrofoam flight box: ✓ (√)

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 9/27/14
INITIALS: QD

1. Cathode solution # or date written on bottle: May, 10, 2014
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= 0.032 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: 20.16 sec
9. **RECORD:** 5 – T100 FLOWRATE TIMES:

T100 FLOWRATE TIMES:

ROOM TEMP (C): 23.8 ROOM RH (%): 41%
Flowrate Correction: 4.6 (%)

FLOWRATE #1: 29.20 sec
FLOWRATE #2: 29.23 sec
FLOWRATE #3: 29.24 sec
FLOWRATE #4: 29.13 sec
FLOWRATE #5: 29.21 sec
AVERAGE T100: 29.20 sec

dry 27.49 27.28 27.43 avg 27.40
Wet ~~28.72~~ ~~28.81~~ 28.67 ~~8.80~~
wet 28.63 28.71 28.70 28.68

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: HU884
GMT DATE (YYMMDD): 9/27/14 LOCAL DATE: 9/27/14
GMT LAUNCH TIME: 6:18 LOCAL TIME: 1:18
Operator Initials: QD
BALLOON SIZE: _____ Grams: TOTEX ____ Hwoyee ____ PAWAN ____ (√ one)
PAY-OFF-WEIGHT: _____ Grams: Burst Alt: _____ (km) Turn/Burst: _____

O_3 sn: _____ **O_3 CELL BACKGROUND (µamps):** _____ O_3 Ventilation Holes: _____
O_3 Flowrate: _____ **(sec)** **O_3 Flowrate Correction:** _____ **(%)**

Radiosonde sn: _____ Freq: _____ (MHz)

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

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

REMARKS: water got into the intake tube for the wet flowrate. It was dried and run again