EGLIN YACHT CLUB DIVE FLIGHT
LIBERTY 1 COMPRESSOR

SET UP and START CHECKLIST

1. Inside Building Fill Station Valves: Set the fill station valves so the air from the compressor goes into a storage bank or dive cylinders/tanks to prevent over-pressurization of the system when the compressor starts
    a. **COMP** Valve: **OPEN** (rotate counterclockwise)
    b. **Bank 1** Valve: **OPEN** (rotate counterclockwise)
    c. Bank Cylinder Valve(s): **OPEN** (rotate counterclockwise)
    d. **WHIPS** Valve(s): OPEN (rotate counterclockwise)
2. Outside Building Wall Mounted Circuit Lock: **ON** (rotate switch clockwise to vertical)
3. Padlocks: **UNLOCKED**
4. Compressor Main Control Panel: **OPEN**
    a. **GENERATOR ONLY** Switch: **OFF**
    b. **FLOOD LIGHT ON/OFF** Switch: **OFF**
    c. **EMERGENCY STOP/RESET** Button: **OUT**
    d. Mode Select Switch: **OFF**
    e. **FILL CONTROL** Valve: **CLOSED** (full clockwise)
5. Left Access Door: **OPEN**
    a. Compressor Oil Quantity Dipstick (9C): **CHECKED** (oil level between two hash marks)
        i. If oil quantity is below the lower hash mark, add Anderol 500 oil (in back room, oil kept under work bench, funnel and measuring cup kept on top of oil bucket)
        ii. Do not overfill; recommend adding one cup at a time, then recheck
    b. Condensate Container Switch Valve (9D): **OPEN** (rotate counterclockwise to vertical) and **DRAINED**
        i. This switch is located under the frame, in front of wheel axle
    c. Condensate Container Switch Valve (9D): **CLOSED** (full clockwise to horizontal)
    d. **GUEST** Battery Switch: **BOTH** (rotate)
    e. Left Access Door: **CLOSED**
6. Right Access Door: **OPEN**
    a. **DRAIN VALVE** (10C): **OPEN** (turn counterclockwise) and **DRAINED**
        i. Valve is located at the bottom of the white tube labeled “DRAIN VALVE”
    b. **DRAIN VALVE** (10C): **CLOSED** (full clockwise)
    c. ASME **STORAGE ISOLATION VALVE** (10F): **OPEN** (turn counterclockwise)
    d. Right Access Door: **CLOSED**
7. Hearing Protection: **ON**

SET UP and START CHECKLIST (continued)

8. Compressor Main Control Panel:
    a. Mode Selector Switch: **ELECTRIC** (rotate clockwise, single beep, red alarm light will flash once)
    b. **FILL CONTROL** Valve: **OPEN** (rotate counterclockwise to full open)
        i. Slowly turn the Fill Control Valve counterclockwise to open
        ii. Air will start transferring from the ASME cylinders to the fill station
        iii. If the Breathing Air Cylinder Pressure does not increase, ensure the charging station lid-locking handle is fully counterclockwise in the **LOCKED** position. This handle is located below main control panel
    c. LE5000 Controller/Monitor:
        i. **OVERRIDE** Key: NOT LIGHTED (DEPRESS OVERRIDE pushbutton to change)
        ii. **MUTE** Key: NOT LIGHTED (DEPRESS MUTE pushbutton to change)
        iii. DEPRESS ANY FUNCTION KEY (white pushbuttons)
        iv. DEPRESS **NORMAL**
        v. DEPRESS **AUTO**
        vi. DEPRESS **RUN** (compressor will start running/pumping)
        vii. NOTE COMPRESSOR START TIME
    d. Flow Control Dial: **MONITOR first** then ADJUST if necessary
        i. The flow control ball will rotate from red to red/green. The Flow Control dial should be adjusted at approximately 2000 psi, if required. Rotate the dial to adjust the Flow Control to obtain a 50/50 (red/green) reading
        ii. This provides the correct sample flow rate to the carbon monoxide monitor
9. Four Stage and one Compressor Pressure Gauges: **OBSERVE**
    a. Compressor Stage pressure gauges will start rising in order, first through fourth
    b. The Compressor pressure gauge, on the main control panel, will start rising last.
10. Main Control Panel LE5000 Controller/Monitor : **OBSERVE**
    a. Monitor the LE5000 display for system condition warnings
    b. Normal operating limits are: ° F ≤ 390°; CO ≤ 010; DP ≤ -30

        NOTE: Notify Dive Flt management if having compressor issues
11. Fill Operations: **MONITOR**
    a. Monitor the compressor, main control panel, and pressure gauges throughout fill operations
    b. WARNING! Do not let the Booster Bottles (largest Gauge) pressure rise above 3700 psi as it will trip the over-pressurization relief valve on the secondary filter pack, which may stick open.

SHUTDOWN CHECKLIST:

1. Compressor Main Control Panel **FILL CONTROL** Valve: **CLOSED** (full clockwise)
    a. When the inside storage bank pressure (Booster Bottles) reaches 3200 to 3500 psi, slowly turn the Fill Control Valve on the compressor clockwise to full closed
2. Inside Building Fill Station Valves: **CLOSED** (full clockwise)
    CAUTION: To avoid over-pressurization, do not close the inside building fill station valves until after the compressor's **FILL CONTROL** Valve is closed.
    a. **COMP** Valve: CLOSED (rotate clockwise)
    b. **Bank 1** Valve: CLOSED (rotate clockwise)
    c. Bank Cylinder Valve(s): CLOSED (rotate clockwise)
3. Compressor: **COOL AND PURGE**
    a. Allow the compressor to run and build up pressure until the compressor and storage pressures reach 4700 psi
    b. Once maximum pressure is reached, the compressor will run in a cool and purge mode for 2 minutes. The term "purging" will be displayed on the LE5000 Controller/Monitor instead of "pumping".
    c. During this time, the compressor will run unloaded, purging the moisture separators, and cooling down the compressor stages
    d. After the 2-minute Cool & Purge cycle, the compressor will automatically shut-down. IF COMPRESSOR DOES NOT SHUT DOWN AUTOMATICALLY IN 12 TO 15 MINUTES, GO TO STEP 4, ELSE, GO TO STEP 5 WHEN COMPRESSOR SHUTS DOWN. IF "PURGING" CHANGES TO "PUMPING", GO TO STEP 4
4. LE5000 Controller/Monitor: Depress **STOP** (right function key)
5. Main Control Panel:
    a. **GENERATOR ONLY** Switch: **OFF**
    b. **FLOOD LIGHT ON/OFF** Switch: **OFF**
    c. **EMERGENCY STOP/RESET** Button: **OUT**
    d. Mode Select Switch: **OFF** (rotate counterclockwise to vertical)
    e. **FILL CONTROL** Valve: Verify **CLOSED** (full clockwise)
    f. Main Control Panel Access Door: **CLOSED**
6. Right Access Door: OPEN
    a. ASME **STORAGE ISOLATION VALVE** (10F): **CLOSED** (full clockwise)
    b. Right Access Door: **CLOSED**
    c. Padlock: **LOCKED**
7. Left Access Door: **OPEN**
    a. Condensate Container Switch Valve (9D): **OPEN** (rotate counterclockwise to vertical) **and DRAINED**
        i. This switch valve is located under the frame, in front of wheel axle
    b. Condensate Container Switch Valve (9D): **CLOSED** (full clockwise to horizontal)
    c. **GUEST** Battery Switch: **OFF** (Rotate)
    d. Left Access Door: **CLOSED**
    e. Padlock: **LOCKED**

SHUTDOWN CHECKLIST (continued):

8. Wall Mounted Circuit Breaker: **OFF** (rotate switch counterclockwise to horizontal)
9. Compressor Log: **RECORD DATA**
10. Padlock keys: **RETURNED**
11. Inside Building Fill Station: Release Pressure within Fill Station

NOTE: Verify the Bank Cylinder Valves are CLOSED (turn clockwise) before releasing pressure in the Fill Station. You will release fill station pressure by letting air out of the Fill station whip hoses

a. **COMP** Valve: OPEN (rotate counterclockwise)
b. **Bank 1** Valve: OPEN (rotate counterclockwise)
c. **WHIPS** Valve: OPEN (rotate counterclockwise)
d. Valve 1, 2, 3 or 4: OPEN (rotate counterclockwise)
e. Fill hoses Bleed Valves: OPEN (rotate counterclockwise)

NOTE: You will hear air escaping through fill hoses and pressure decreasing on Fill Station Booster Bottle Pressure Gauge. Once this Gauge reads ZERO, close all the valves

f. Fill hoses Bleed Valves: CLOSED (rotate clockwise)
g. Valve **1**, **2**, **3** or **4**: CLOSED (rotate clockwise)
h. **WHIPS** Valve: CLOSED (rotate clockwise)
i. **Bank 1** Valve: CLOSED (rotate clockwise)
j. **COMP** Valve: CLOSED (rotate clockwise)