

# RIG FOR DIVE CHECKLIST

1. **OPEN HULL FOR PRE-UNDERWAY INSPECTION.**
2. **VERIFY ALL:**
  - A. MECHANICAL/ELECTRICAL EQUIPMENT IS SECURE
  - B. ELECTRICAL CONNECTIONS ARE SOUND.
  - C. SERVO OUTPUT ARM PUSH-ROD CONNECTORS ARE SOUND.
  - D. AIR INDUCTION CONNECTIONS ARE SOUND
  - E. ANTENNA CABLE/CONNECTIONS ARE SOUND
3. **PROPELLER SHAFT(S):**
  - A. VERIFY IN GOOD WORKING ORDER FREE OF DEBRIS AND BINDING.
  - B. PERFORM LUBRICATION OF MAIN SHAFT BEARING(S).
  - C. PERFORM LUBRICATION OF MAIN SHAFT SEALS(S).
4. **PERFORM LUBRICATION OF MBT VENT HOLE.**
5. **WATERTIGHT COMPARTMENT(S) INSPECTION:**
  - A. VERIFY ALL MECHANICAL/ELECTRICAL EQUIPMENT IS SECURE.
  - B. VERIFY ALL ELECTRICAL CONNECTIONS ARE SOUND.
  - C. PERFORM LUBRICATION OF SERVO SEALS.
    - I. STERN PLANES.
    - II. RUDDER.
    - III. SAIL/BOW PLANES.
    - IV. MBT BLOW/VENT.
    - V. OTHER.
6. **CHARGE ONBOARD GAS BANK(S)**
7. **FUNCTIONAL TEST 1:**
  - A. INSURE PROPELLER IS CLEAR
  - B. PLACE THROTTLE "ALL STOP"
    - I. SET MAIN POWER TO "STANDBY MODE"
    - II. ENERGIZE TX
    - III. VERIFY MODEL AS "NON-OPERATIONAL"
    - IV. RETURN THROTTLE TO "ALL STOP"
    - V. ENERGIZE MAIN POWER ("UNDERWAY MODE")
    - VI. INSURE PROPELLER IS CLEAR
      1. TEST MAIN ENGINE AHEAD/ASTERN BELLS
    - VII. TEST ALL CONTROL SURFACES
      1. RUDDER
      2. STERN PLANES
      3. F/W OR BOW PLANES
      4. MBT VENT
      5. MBT LPB
      6. EMERGENCY BLOW
    - VIII. TEST FAIL SAFE SYSTEMS
      1. SET MINIMAL POWER ON THROTTLE
      2. DEENERGIZE TX
        - A. THROTTLE SHOULD STOP
        - B. EMERGENCY BLOW ENERGIZE AFTER 5-7 SECONDS
      3. ENERGIZE TX
    - IX. SET MAIN POWER TO "STANDBY MODE"
    - X. DEENERGIZE TX
    - XI. RECHARGE ONBOARD GAS BANK(S)

8. **WATERTIGHT COMPARTMENT(S) SEAL**
  - A. INSPECT:
    - I. CLEAN.
    - II. GREASE.
  - B. SEAL WATERTIGHT COMPARTMENT(S):
    - I. VERIFY CLEAR OF WIRES AND DEBRIS.
    - II. VISUALLY INSPECT FOR UNIFORMITY AND SEAL.
  - C. VERIFY WATERTIGHT INTEGRITY
    - I. PRESSURIZE HULL THROUGH EQUALIZATION FITTING
    - II. HOLD FOR NLT 30s
    - III. RELEASE
9. **MAKE READY AND INSTALL :**
  - A. SCOPES , ANTENNA, SNORKEL MAST, ETC.
  - B. ROUTE AND MOUNT ANTENNA CABLE
  - C. ROUTE AND MOUNT AIR INDUCTION HOSE
10. **CLOSE HULL**
11. **FUNCTIONAL TEST 2:**
  - A. RETURN THROTTLE TO "ALL STOP"
  - B. ENERGIZE TX
  - C. ENERGIZE MAIN POWER ("UNDERWAY MODE")
  - D. INSURE PROPELLER IS CLEAR
    - I. TEST MAIN ENGINE AHEAD/ASTERN BELLS
  - E. TEST ALL CONTROL SURFACES
    - I. RUDDER
    - II. STERN PLANES
    - III. F/W OR BOW PLANES
  - F. SET MAIN POWER TO "STANDBY MODE"
  - G. DEENERGIZE TX
12. **READY FOR SEA**

## **PRIOR TO GETTING UNDERWAY:**

**EXAMINE SAILING ENVIRONMENT**

**ACCESS TO WATER IS NOT ENCUMBERED OR RESTRICTED**

**LAUNCH AND HAUL SUPPORT IS READY AND AVAILABLE**

## **WHILE UNDERWAY:**

**NOTE AND/OR SET START TIME**

**VERIFY OPERATIONAL WORTHINESS PRIOR TO FIRST DIVE**

**DURING FIRST DIVE, VERIFY SUBMERGED TRIM IN SHALLOW WATER**

**MAINTAIN SITUATIONAL AWARENESS**

**RETURN TO SHORE/SHALLOW WATER UPON ANY SIGN OF OPERATIONAL DISCREPANCIES**

## FIELD KIT INVENTORY

### 1. TOOLS:

- A. SMALL SCREWDRIVERS
- B. ALLEN WRENCHES
- C. CHARGING HOSE
- D. TWEEZERS
- E. X-ACTO
- F. NEEDLE NOSE PLIERS
- G. "T"-PINS
- H. MULTI-METER
- I. SPONGE
- J. TIRE VALVE CAP
- K. SUNGLASSES
- L. HAT

### 2. CONSUMABLES:

- A. CA (THICK/THIN)
- B. CA ACCELERATOR
- C. CA FILLER
- D. "CORROSION X" OIL
- E. GREASE
- F. WIPES
- G. RUBBER BANDS
- H. ELECTRICIANS TAPE
- I. CLOSED CELL FOAM
- J. LEAD WEIGHTS
- K. "PROPEL"
- L. SUNBLOCK

## "GREY LADY DOWN" SOP:

1. THROTTLE TO ALL-STOP
2. TURN OFF THE TRANSMITTER
3. STAND YOUR GROUND, FIND A LANDMARK ON THE OPPOSITE SHORE IN LINE WITH WHERE YOU ASSUME THE MODEL TO BE AND MARK THE SPOT WHERE YOU'RE STANDING IF THERE IS ANOTHER PERSON WHO WAS WATCHING WHEN THE BOAT WENT MISSING -- HAVE HIM DO THE SAME, AND TO MARK THE SPOT WHERE HE'S STANDING, TRIANGULATION IS YOUR FRIEND HERE.
4. AFTER ALL THAT, AND THE MODEL HAS NOT RESPONDED TO THE FAIL-SAFE, ASSUME THE MODEL IS ON THE BOTTOM NOT TOO FAR REMOVED FROM YOUR ESTIMATED POINT-OF-LOSS.
5. WITH YOUR ASSISTANT STANDING WHERE YOU MARKED YOUR POSITION AT TIME-OF-LOSS, SWIM OUT IN LINE BETWEEN HIM AND THE LANDMARK ON THE OPPOSITE SHORE -- IF A SECOND OR THIRD LINE HAS BEEN ESTABLISHED HAVE THOSE PEOPLE SING OUT WHEN YOUR SWIM LINE INTERSECTS THEIR LINE-OF-SITE TO THEIR OPPOSED SHORE LAND-MARK; KEEP SWIMMING TILL YOUR ASSISTANT(S) SING OUT.
6. OK, YOU'RE OVER WHERE THE MODEL IS LIKELY TO BE -- STICK YOUR FAT HEAD UNDERWATER AND LISTEN (A TRUSTED BUDDY HAVING BEEN INSTRUCTED TO TURN THE TRANSMITTER ON AND TO CYCLE THE MOTOR AHEAD-ASTERN EQUAL AMOUNTS IN QUICK JABS OF THE STICK
7. IF YOU HEAR THE MODEL MOVE A BIT AND REPEAT THE LISTENING TRICK -- AS SOUND TRAVELS TOO FAST IN WATER FOR YOUR TINY BRAIN TO READ DIRECTION, YOU HAVE TO MOVE AROUND UNTIL THE NOISE IS THE LOUDEST
8. "X" MARKS THE SPOT -- DROP AN ANCHORED BUOY MARKER SO YOU DON'T COVER OLD TERRITORY
9. TAKE A DEEP BREATH AND GO LOOKING (WITH YOUR HANDS IN MOST CASES) AS YOUR ASSISTANT KEEPS UP WITH THE FORWARD-REVERSE NOISE MAKING