2020 SURFACE OPERATIONS GUIDELINES

United States Coast Guard Auxiliary

Division 16

Updated February 2020

INTRODUCTION

The AUXILIARY OPERATIONS POLICY MANUAL, COMDTINST M16798.3E, sets USCG Policy for Auxiliary Operations. Coxswains and boat crew must know and understand the Auxiliary policy.

The information in this document provides supplementary guidance for coxswains (Cx), boat crew (Cr) and boat crew trainees (Tr).

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ORDERS

Before any Operational Facility (OPFAC) may be used on CG (Coast Guard) or CG Auxiliary missions, orders must be assigned.

- Orders are requested in the AuxData Order Management System (AOMS)

- The SO-OP will request orders for all H-60 and C-130 missions supporting Air Station Elizabeth City (ASEC). The SO-OP will confirm that the Cx is currently qualified to operate the OPFAC specified for the mission

- The FSO-OP will determine the most appropriate process for requesting orders for other missions being executed in their Flotilla (e.g. safety patrols, training missions, event marshalling, cadet hoists etc.). The FSO-OP will confirm that the Cx is currently qualified to operate the OPFAC specified for the mission. Orders may be requested by the FSO-OP, CX and/or OPFAC owner as determined by the FSO-OP

- AOMS Comments must include:
    - Exact patrol area (example: Albemarle Sound, vicinity of PP2 and/or Lat/Lon)
    - Reason for patrol (example: support ASEC C130 training, member training, safety patrol, etc.)
    - If a QE check ride, the name of the QE (example: QE- F Spruill).
- Once the orders have been requested, they MUST be authorized.
    - The Coast Guard OIA (usually the local CG Boat Station) must authorize orders BEFORE the mission commences. If orders have NOT been approved, OIA can give verbal approval prior to getting U/W.
    - In the case of SAR or other emergencies, verbal orders may be issued by the Coast Guard OIA (local Coast Guard Boat Station) and entered and approved in AOM after the fact.

MISSION ASSIGNMENTS

The FSO-OP is responsible for the recruitment of Coxswains and Crew members for each mission.

- The SO-OP will maintain an updated mission schedule accessible via Division 16 DROPBOX for all ASEC support missions. This schedule will also address other Flotilla 1607 missions not associated with ASEC. The link will be distributed by email and will be good for 1 year, Jan-Dec.
- The FSO-OP for Flotilla's 1601, 1602 & 1604 will determine the best way to schedule and track their non-ASEC support missions.

AUXDATA ORDER MANAGEMENT SYSTEM ADMINISTRATION

Following the end of a mission, the AuxData Order Management System must be used to request reimbursement for expenses and to enter the mission details. Once submitted by the Cx, the OIA review and validates it by signing as OIA and submits to FINCEN for reimbursement.

SNC Surface Patrol Order Administration Handbook provides specific guidance. The following is a summary of main requirements:

- This should be done by the Coxswain or by the OPFAC Owner within three days of completing the patrol.
- Mission time is reported using the "ADD ITINERARY" function.
- Mission code 01A is almost always used when underway (exceptions are QE missions, ATON missions, SAR missions, and Regattas).
- Mission code 01D Operational Standby: This code is used for time spent available under Coast Guard Orders with an Auxiliary operational facility (vessel, aircraft or radio) and qualified crew who are operationally ready for duty (B-o status) but not currently underway or in operation. The facility must be ready for operations with a qualified crew in the immediate vicinity of the facility and in prescribed uniform, ready to proceed without delay. For example:
  -Prior to getting underway, as the crew is preparing for a mission
  -When moored for meals, breaks or other logistics stops
  -Standing by at a dock for pickup of passengers or equipment
  -Debriefing and cleaning up a facility after an underway mission
- Mission Code 23A SAR Standby: This code shall be entered ONLY when specifically assigned by the Order Issuing Authority (OIA) to assume dedicated SAR standby for an actual or potential SAR mission. The facility must be ready for immediate SAR response, with qualified crew in the immediate vicinity of the facility and in the prescribed uniform. Situations which may merit assignment to SAR mission Standby are:
  - Prolonged searches where active duty crews are likely to exceed fatigue standards
  - SAR coverage in cases where active duty assets are not available due to unexpected or prolonged machinery/equipment casualties
  - On busy holiday weekends to assist with a high likelihood of SAR events
  - For any situation deemed appropriate by the OIA

Time at the dock conducting the pre-mission briefing and post mission briefing (01D) are <u>NOT</u> included in the underway time.

- However, the pre and post mission briefing time ARE included in the fatigue time calculation.

Receipts are **required** for

- **All** fuel purchases. Note: Appendix 2 provides guidance on the process for handling UTL refueling
- **All** additive or 2-cycle oil purchases
  - Templates for reporting oil and additives are shown in Appendix 1
- Any other expense over $25 except for meals.
- Receipts are not required for meals.
- Refueling should be done on the day of the patrol; exceptions should be explained in the comments section.
- An image (JPG, PNG, or GIF) of the receipt must be uploaded in AOM.
- Engine hours are defined as the OPFAC underway time. This is the total patrol time less any 01D standby time.
- The time should be reported in hours with one decimal place (example 3.5). A log should be kept to record the engine hour (underway) time.

Comments must include:

- Risk Management score
- Statement that all PPE was in good working condition.
- Outside of the normal recreational boating season (typically 1 April – 31 October) decisions regarding PPE must be coordinated and approved by the OIA OOD.

MISSION CANCELLATION

- Coxswains who must cancel a mission, unless weather related, should assist the FSO-OP by making every effort to find a replacement Coxswain. Crew members who cancel must inform the coxswain as soon as possible and should make every effort to find a qualified replacement Crew member. If a mission supporting the Air Station or a Boat Station must be cancelled, then ASEC Operations or the affected Boat Station should be advised in a timely manner. The Coxswain will inform the Station.

- **Routine Safety Patrols.** Typically, these missions involve only one OPFAC and do not involve supporting CG activities. Therefore, coxswains can wait until shortly before the mission is scheduled to begin before deciding to cancel the patrol. The coxswain will inform the crew members and the FSO-OP if the mission is cancelled.

- **Missions in support of C-130 and H-60 Helicopter Operations:** These missions are the most complex because they always involve active duty CG assets, multiple levels of command and responsibility (USCG Air Station Elizabeth City, Small Boat Stations, Sector North Carolina, etc.), and the cost per aircraft flight hour is high ($15,000 per H-60 flight hour). When a cancellation decision appears likely due to weather or other operational concerns, the coxswain must make a decision at the earliest possible time and inform the FSO-OP or SO-OP. The Coxswain will notify ASEC Operations of the cancellation.

- **2-Boat Training with CG Boat Stations:** When active duty CG schedule time to work directly with CGAUX on towing skills, every effort should be made to take advantage of the opportunity.

MISSION SAFETY

Safety of the crew and the Auxiliary vessel is the single most important responsibility of each coxswain. Before undertaking any mission, the coxswain is responsible for the accurate assessment of all risk including expected environmental conditions. The coxswain must complete a Risk Management assessment before every mission with input from each of the crew members.

Any crew member may decide to vacate a mission at any time for any reason. If such action results in insufficient crew to complete the mission, then the mission will be cancelled unless a qualified replacement can be found.

- **Eight Hour Limit**
  To facilitate safety, missions should last no more than 8 hours in accordance with the Crew Fatigue Standards (Policy Manual page 4-20). Crew underway time begins when the crew member reports to the designated place to prepare for a specific mission. Computation of such time ends when the mission is complete.

  Crew underway time includes time spent accomplishing pre-mission and post-mission vessel checks. Time spent conducting trailering activities and time moored or at a sheltered anchorage counts as 50% underway time (e.g., one hour spent at a sheltered anchorage counts for ½ hour accumulated crew underway "fatigue" time).

  Missions may exceed the 8-hour limit only after securing a waiver from the Sector Watch Officer (910-362-4015). If a waiver is granted, record the name of the person granting the waiver in the AOM comments section.

- No mission is important enough to place crew and vessels in situations that exceed their capabilities.
- No one will second-guess the Coxswain's or crew's decision to cancel a patrol because of safety considerations.
- When in doubt, don't go out!
- Note: No one is permitted on an OPFAC supporting surface operations within 12 hours of consuming alcohol or ingesting medications with a caution or warning regarding operation of vehicles or machinery

SEARCH AND RESCUE (SAR) MISSION

The Flotilla may be called upon by the Coast Guard to perform SAR missions at any time or any place. Typically, this is within the geographic area of responsibility (AOR), but it could also be outside of the AOR if requested by the Coast Guard. Orders may be issued verbally or in writing by the Coast Guard OIA.

- **Non-emergency assists and SAR**
  The Maritime SAR Assistance Policy (MSAP) establishes conditions under which the Auxiliary may provide public assistance under non-emergency conditions. The MSAP states that an Auxiliary boat on orders that **discovers or comes upon** a boat needing assistance, but not in radio contact with the Coast Guard or commercial towing service, has the option of determining

whether or not to provide non-emergency assistance. **This is the coxswain's decision.** The following guidance applies:

- When you sight a distressed vessel, come along side and ask what assistance is needed. If assistance is requested, find out if they have contacted anyone for help and if anyone has responded. Ask the people on board to put on life jackets and then gather the following information:

    1. Nature of the problem
    2. Anyone sick or injured
    3. Number of persons on board
    4. Owner's name and cell/radio contact information
    5. Length of vessel, description, registration number
    6. Location of nearest safe haven where you will tow the vessel

    - The maximum size and weight of vessel to be towed and the maximum sea conditions are at the COXSWAIN'S DISCRETION. USCG station can provide guidance.
    - BEFORE taking the vessel under tow, notify the USCG station which has the radio guard (Boat Station or Sector NC) of your intent and where you will be towing the vessel. Request assignment of a SAR (MISLE) case number if appropriate
    - A SAR Incident Report (CG-4612) must be completed if the SAR mission code 24 is used. The report must be uploaded to the AOM order (except for UTL (279526) which is sent by email to AOM and OIA).
    - Towing will typically not be undertaken if the distressed vessel has already contacted the USCG or a commercial towing service. Notify the USCG station which has the radio guard and follow their instructions.
    - Note: AUX OPFAC's encountering flotsam/jetsam that could be considered a hazard to navigation will inform the OIA of the nature and location of the hazard. The OIA will coordinate the appropriate Sécurité messaging with Sector. The AUX OPFAC should not attempt to remove the hazard to navigation unless directed by the OIA.

NIGHT AND RESTRICTED VISIBILITY OPERATIONS

In accordance with NAVRULES and existing policy, operations during periods of darkness or limited visibility require additional precautions. Any OPFAC equipped with an operable radar shall have the radar on and manned at all times, night or day. This is particularly important during periods of reduced visibility. All NAVRULES for operating in restricted visibility will be followed including setting a lookout, engaging navigation lights and sounding appropriate signals.

HEAVY WEATHER LIMITATIONS

The term "heavy weather" is often used to define conditions that are considered dangerous for a vessel. Auxiliary vessels less than 30 feet in length WILL NOT DEPLOY IF NATIONAL WEATHER SERVICE HAS ISSUED A "SMALL CRAFT

ADVISORY" OR HIGHER, FOR THE PROPOSED MISSION AREA COVERED IN THE ORDERS.

- Weather guidance applies to all OPFACs in Division 16 and to all missions including SAR.

WINTER WEATHER

The potential of hypothermia and the possibility for the formation of ice in the water and ice on the OPFAC warrant special precautions during winter operations.

- All Coxswains and Crew members participating in winter operations with water temperatures below 60 degrees must complete the annual Winter OPS training and must have a semi-annual inspection of the Mustang suit. If participating in winter ops with both ambient air and water temperatures of 50 degrees or lower, the dry suit must have annual leak test (refer to Division PPE Guidelines).

- Proper PPE must be worn to protect from hypothermia

- Operations will not be conducted in any of the conditions that follow:
  - Ambient air temperature lower than 34°F
  - Ice on the OPFAC (deck, gunnels, etc.)
  - Ice or slush in the water (potential damage to outboard motors)

- The Risk Management assessment must give special consideration to weather conditions, especially temperature, wind, and wind chill. The crew's condition should be monitored closely, and the mission cancelled or discontinued if there are any indications of hypothermia or loss of dexterity in the hands due to the cold.

- The safety of the crew and the OPFAC are always paramount and the Coxswain ultimately must determine whether or not a winter mission can be conducted safely regardless of the specific temperature and wind conditions.

AREA OF OPERATIONS (AOR)

The Flotilla AORs have been assigned generally following the Elizabeth City, Hatteras Inlet, and Oregon Inlet Boat Stations' AORs. Exceptions have been made due to geographical situations and Flotilla locations. The main boundaries are shown below. Off-shore operations must be approved by the CG Station and are limited to 10 NM.

AOR DIVISION 16			UPDATED: 06 JUN 2014
Flotilla	Waterway	North or East Limit	South or West Limit
1601	Albemarle Sound	Line from Camden Pt. to Long Shoal Pt-076° 01 (east)	Line from Harvey Point to Columbia-76°18 (west)
1601	Little River	All	All
1601	Pasquotank River	All including ICW to Va. / NC. State line	All
1601	Perquimans River	All	All
1602	Albemarle Sound	Line from Harvey Point to Columbia-76°18 (east)	All
1602	Alligator River	Fairfield Swing Bridge-51°54 (north)	Alligator River Canal / Intracoastal to Pungo River
1602	Chowan River	US 158 (north)	Albemarle Sound (south)
1602	Pungo River	All	Pamlico River (south)
1602	Ronoake River	Albemarle Sound (east)	Williamston (west)
1602	Swan Quarter Waters	077°31 (east)	35°20 (south) 077°50 (west)
1604	Pamilco Sound	Rodanthe / Chicamacomico Channel-35°37 (north)	Portsmouth Island
1607	Albemarle Sound	All	Line from Camden Pt. to Long Shoal Pt-076° 01 (west)
1607	Alligator River	Albemarle Sound / Mouth of River (north)	Fairfield Swing Bridge-35° 54 (south)
1607	Croatan Sound	All	All
1607	Currituck Sound	Duck-36°25.0	Wright Memorial Bridge / Albemarle Sound (south)
1607	Currituck Sound *	Va. / NC. State line	Duck-36°25.0
1607	North River *	All including the ICW to Currituck Sound	All
1607	Pamlico Sound	All	North of Chicamacomico Channel-35°37(south)
1607	Roanoke Sound	All	All
* Radio Guard should be with the Elizabeth City Small Boat Station			

AREA FAMILIARIZATION

The Flotilla must have the capability to conduct operations throughout their AOR even though they may not routinely patrol all areas. To maintain this capability, it is desirable each year, at the beginning of boating season, to have coxswains and their crews re-acquaint themselves with their AOR while boating traffic is light.

UNIFORMS & Personal Protective Equipment (PPE)

Coxswains are responsible for selection of the appropriate uniform for the weather conditions expected to be present during a mission. Coxswains are also responsible for ensuring that everyone on board has proper uniform, has the required personal protection equipment (PPE), and ensuring that the PPE is in serviceable condition. Each boat crew member will carry a registered and functional Personal Locator Beacon (PLB) which must be verified to be operational at the beginning of each month.

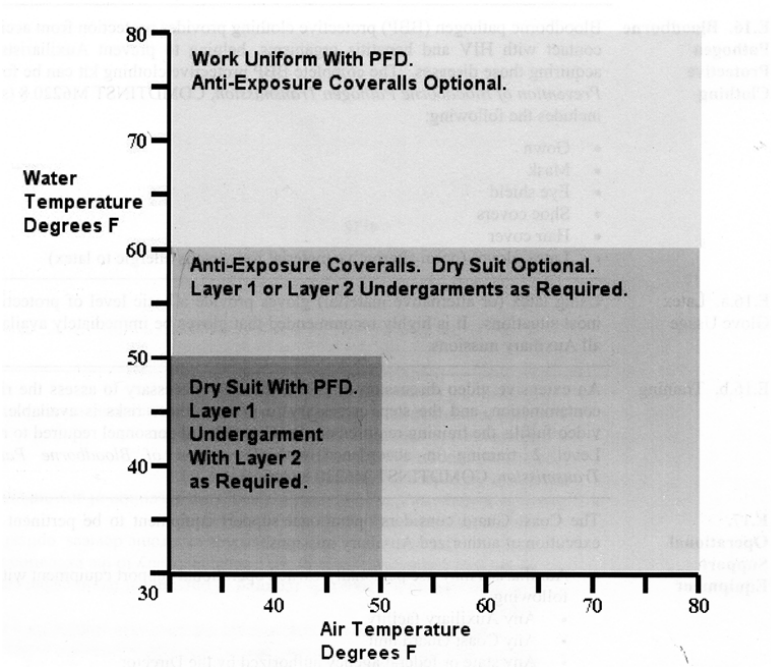
- **Uniforms**:
  - Working Blue (ODU) is the standard uniform
    - Socks: black
    - Shoes: black boots, boat shoes (brown or blue), or black athletic shoes
  - Hot Weather Uniform
    - Blue color short trousers (ODU-style) & T-shirt, Navy Blue
    - Socks: white (crew or quarter crew length)
    - Shoes: boat shoes (brown or blue) or athletic shoes (black or white)
  - Hat: Auxiliary approved ball cap or Tilly (sun hat)
  - Uniform items shall be in good condition (not faded or torn)
  - All Auxiliary members on board shall wear the same uniform
  - If the patrol will involve working with USCG personnel on the water then the ODU uniform should be worn unless hot weather uniform is approved for CGAUX use by the CG command
- The uniform selection is the coxswain's choice and it should be the same for all crew members. Coxswains will notify crew of uniform selection prior to the patrol
- The wearing of jewelry, including rings, wristwatches, necklaces or other items not consisting of organizational clothing, PPE, or uniform articles by boat crew members engaged in hoisting, towing, or other deck evolutions where the potential for snagging exists is prohibited.

PPE

- Signal mirror, personal marker light, and whistle are always required. A survival knife is recommended.
- Type I, II, or III Life Jackets, Float Coat or Mustang suit MUST be worn while on the DOCK and while on the OPFAC.

- If an inflatable life jacket is worn, it must meet USCG speed requirements and have an in-date gas canister with a gauge showing green. Manual only inflatable PFDs are not authorized.
- Anti-exposure Suit (Mustang) or Dry Suit MUST be worn to protect from hypothermia when the water temperature is between 51° - 60° or when the water temperature is below 51° and the air temperature is above 50°.
    - A waiver may be granted if the air temperature is above 60°F and there is a concern about heat exhaustion. Waivers must be granted by the Station Officer-In-Charge. Mustang or Dry Suits must be carried on board even if a waiver is granted
- Dry Suits MUST be worn when both air **and** water temperatures are 50° or below. There are NO exceptions!
    - A PFD must be worn with the Dry Suit
- Gloves should be as form fitting as possible to provide dexterity and to reduce possibility of becoming fouled with hoisting equipment

- Water temperature will be determined by the equipment on board the OPFAC; Boat Station may request the water temperature reading.



PERSONAL LOCATOR BEACON (PLB) MANAGEMENT

All boat crew personnel on OPFACs under orders must carry a CG approved and provided PLB. All crew members shall know how to test and operate their assigned PLB.

PLB Issuance and Management
Effective October 2019, DIRAUX, under the leadership of the OTO BOSN2 Jack Williams, has initiated a program for the transition of older PLBs (both McMurdos and ACR's) to a newer model of McMurdo FastFind 220 PLB due to improvements in the capabilities of the new model and the expense of maintaining the older models.

This program specifies that PLB management will be centralized at the Division level with the SO-OP responsible for overall PLB management.

The following paragraphs describe the procedures adopted by Division 16 to execute the upgrade and control of PLB's across the Division. Note: PLB activation triggers a rapid series of notifications from NOAA-Sector-OIA and local Flotilla leadership that is intended to clarify and react to the situation.

Updating custody of current PLB's - Each SO-OP is responsible for keeping a record of all PLB's issued in their Division that includes the Flotilla Number, Member Number, Member Name, Serial Number of the assigned PLB, the NOAA Expiration Date, and the Battery Expiration Date.

Division 16 has assigned an SO-OP assistant designated as the "PLB Coordinator" to be responsible for managing all aspects of PLB management across Division 16. Milo Hyde (Flotilla 1607) has been designated Division 16 PLB Coordinator for 2020. His e-mail address is milo.hyde@verizon.net. In this role, Milo is tracking all PLBs in Division 16 and he has created a master spreadsheet containing all information regarding PLB ownership.

Current PLBs will be replaced with the new models based on battery expiration date. The Division16 PLB Coordinator will initiate the turn-in and replacement of existing PLBs beginning approximately two months from battery expiration based on information maintained by the PLB Coordinator in the Master PLB spreadsheet.

The following procedure applies to replacement of current PLBs and the issuance of new PLBs:

1. PLB Coordinator (or designee) provides new PLB to member along with DD-1149 property transfer form and "PLB Questionnaire" requesting all information required for the PLB Coordinator to register the members PLB with NOAA.

   For new members, the FSO-OP contacts the PLB Coordinator with contact information for member who needs a PLB

   i. The PLB questionnaire and DD-1149 form will be maintained as editable PDF files in the Division 16 dropbox (SO-OP/PLB folder)

ii. Note: PLB's will be mailed to members of Flotilla's 1601, 1602, and 1604 unless otherwise arranged between the PLB Coordinator and the FSO-OP or individual member. PLBs for 1607 members will be directly transferred from the PLB Coordinator to the member.

2. Member returns questionnaire and completed DD-1149 to PLB Coordinator (e-mail preferred). PLB Coordinator will retain DD-1149's and Questionnaires for records purposes

3. Upon return of completed DD-1149, PLB coordinator will notify the appropriate FSO-MA of the PLB transfer. The FSO-MA will record the transaction on the members' AF-538."

4. PLB Coordinator registers and activates the new PLB with NOAA. **Note: all NOAA database management (i.e. registration, data entry, & deregistration) activities will be performed by the PLB coordinator to ensure accuracy and timeliness.**

5. PLB Coordinator notifies member that PLB is registered and active for use

6. Member sends old PLB back to the PLB Coordinator within two days of receiving notification that new PLB has been activated. Flotilla 1601, 1602 & 1604 members will mail their PLBs to the PLB Coordinator unless other arrangements are made. Contact Milo Hyde's e-mail address for mailing instructions. Flotilla 1607 members will return PLBs directly to the PLB Coordinator

7. PLB Coordinator will deactivate old PLB.

8. PLB coordinator will recycle batteries and destroy and discard old units at DIRAUX direction

- All Division 16 PLBs will be maintained under a single NOAA account.
- Access to NOAA for purposes of assigning and maintaining PLB information will be limited to the PLB Coordinator, the SO-OP and any other resource designated by the SO-OP
- PLB Coordinator will maintain an updated spreadsheet of issued PLBs with appropriate information. PLB Coordinator will maintain this updated spreadsheet in the Division 16 Dropbox and will also send a copy on a quarterly basis to all FSO-OP's
- SO-OP will provide updated Division PLB spreadsheet to the OTO at the end of each quarter (Dec, Mar, Jun, Sep) as required by DIRAUX
- The PLB Coordinator will work through SO-MA to procure and maintain a Division level inventory of PLBs. Inventory of unassigned PLBs will not be allowed at the Flotilla level
- SO-MA will maintain physical custody of all unassigned PLBs

- The FSO-OP's will coordinate PLB requirements for new members with the Division 16 PLB coordinator. FSO-OP's should plan for a 7 day turnaround between request and receipt of PLB's for new members depending on location

PLB Owner Responsibilities:

- Place the 2 year NOAA registration update sticker on the PLB when received by U.S. Mail from NOAA in accordance with NOAA instructions
- Know the procedure for activating the PLB in case of emergency
- Keep the unit clean
- Self-Test MUST be conducted monthly consistent with the PLB manufacturer and OTO instructions.
- Attach a 2" by 3" piece of Velcro hook tape to the back of the PLB so in the event of an emergency it can be secured to the Velcro strip on the SAR vest. Do not cover the battery expiration date with the Velcro strip.
- Alert Division PLB coordinator (Milo Hyde – Flotilla 1607) immediately and before going out on the water if there are any problems
- Respond to PLB coordinator within 24 hours if contacted for any reason
- Alert PLB Coordinator when battery is within two months of expiration if not already contacted by the Division PLB Coordinator

COMMUNICATIONS

Each Auxiliary OPFAC operating under orders must maintain VHF radio communications with a USCG Station on the assigned channel (usually channel 22A or 23A) being used by the Station for the radio guard. Channel 16 must also be continuously monitored. The following procedures should be observed:

- **Prior to getting underway:** Phone call to the Station which will have the radio guard (Boat Station or Sector NC) providing the following:
  - AOM Order number
  - OPFAC number
  - Number of people on board (POB)
  - Names of all crewmembers (including crew trainees) and passengers
  - On-board cell phone number
  - Preliminary Risk Management score (final RM developed with crew input)
  - Indicate geographic location and nature of your patrol (example: Safety patrol from Duck to Manteo; C-130 support at PP2, etc.)
  - Winter OPS: Obtain Station OOD approval for appropriate PPE.
  - Confirm VHF radio channel that will be used for communications (assigned channel) – usually 22A or 23A

- **Starting a mission and underway reporting**
  - Before departing the dock, establish communications on the assigned channel (usually channel 22A or 23A). If communications cannot be established on these channels, it is acceptable to use a cell phone to provide mission status updates.
    - Conduct pre-underway inspection and document results on the Pre-Underway checklist specific to the OPFAC
    - Conduct Risk Management Assessment with crew, determining Operational Risk and Gain. Provide final Risk Management score, confirm number of POB and request station to assume radio guard.
  - Monitor assigned channel (usually 22A or 23A). Also monitor channel 16 if possible
  - OPS Report: Every 30 minutes provide the Station with operation condition and position (latitude / longitude). The Station will generally initiate the request.
  - Station or Sector NC may request that you perform additional tasks while patrolling. Be flexible and willing to change the plans based on CG request.
  - Upon completion of the mission request permission to secure the patrol.

- Cell phones or text messaging should not be used when making way and never while at the helm unless required to provide mission status updates to OIA.

- VHF radios with Digital Selective Calling (DSC) capabilities should be programmed with the Maritime Mobile Service Identity (MMSI) number.

ASEC (Air Station Elizabeth City) - TRAINING SUPPORT

Scheduling of Auxiliary Support for ASEC Training is coordinated by CGAUX Division 54-16 SO-OP

SO-OP will furnish ASEC with a "Proposed" schedule for the upcoming month during the 1st week of the current month. This schedule will show proposed dates, times and missions only. ASEC (C-130 and H-60 schedulers) will review the schedule and let SO-OP know if changes are needed. SO-OP recruits for the established missions and updates/distributes the schedule via Dropbox. Schedule will be updated as changes occur. The schedule will include contact information for relevant CG/CGAUX personnel.

H60 missions are assumed to be conducted in the Pamlico Sound unless otherwise arranged between ASEC and the FSO-OP.

H-60 and C-130 AIRCREW TRAINING

On Scene Rendezvous Positions:

- 16-01/ASEC/E-City: 36° 06 N/076° 04 W
- 16-04/STAHI/Hatteras: 35° 16 N/075° 44 W
- 16-07/SOI/Outer Banks: 36° 00 N/075° 49 W (Albemarle Sound missions)
  35° 44 N/075° 40 W (Pamlico Sound missions)
- On Scene times may vary from AM (warm weather) to Midday (cooler weather).
- On Scene positions will vary due to wind conditions
- ASEC Operations: (H-60 and C-130) (252-335-6333)

General Communications

- **Pre-mission communications:** Communications between Coxswain, Pilot, schedulers are encouraged. Mission confirmation, O/S time adjustments, weather checks, special arrangements, training specifics can be discussed. Wise to note CG source of Information.
- **On-scene Communications:** On-scene communications between the aircraft and the AUX facility will be via VHF radio on Channel 23A unless otherwise directed and acknowledged.
- **Delays/Cancelations**: Due to costs and risk mitigation, it is important that Cancellations/delays be communicated with mission participants/SO-OP as soon as possible.
  - Coxswain alerts appropriate personnel at the air station.
  - Air Station alerts coxswain, SO-OP or OIA (in that order)
  - It is important that cancel/delay communications be person to person. Avoid message machines.

Typical Training Exercise: C-130

- Initial radio contact near rendezvous position establishes communication and position of AUX support vessel.
- C-130 deploys flare as a target. In some cases, the AUX vessel will itself be a drop target but offset from drops by 100 yards or more.
- C-130 will normally make 4 drops/2 sets. (1 ADR8 + 1 Modified ASRK = 1 set);
    - ADR8: 40 lb. bag on parachute with drogue on 400 ft of line
    - Modified ASRK: 4 bags, 250 feet of line between each bag: bag 1=40 lb., bag 2=15 lb., bag 3=15 lb., bag 5=40 lb.
    - Drop sequence will usually be ADR8, Modified ASRK, ADR8, Modified ASRK but may vary depending upon conditions and training scenarios.
- **OPFAC Position.** The boat will be positioned at least 150 yards from the flare/target in a direction determined by the wind, sun and type of drop. The pilot may inform the coxswain of a desired position for the boat relative to target.
    - **General guidance** :
        - **ADR8 drop:** The aircraft will generally make the drop flying into the wind. The boat will typically be positioned cross-wind (perpendicular to flight path) from the flare.
        - **Modified ASRK:** The aircraft will generally make the drop flying perpendicular to the wind. The boat should generally be positioned down/upwind from the drop target, depending upon conditions and/or scenario.
        - **CAUTION:** AIRCRAFT DO NOT ALWAYS FOLLOW PATTERNS SHOWN ABOVE. ALWAYS KEEP EYES ON AIRCRAFT, BE READY TO MOVE QUICKLY IF IT APPEARS THE AIRCRAFT IS COMING STRAIGHT AT THE OPFAC.

Equipment Recovery: The OPFAC may approach the equipment following the drop but wait for clearance from aircraft before beginning actual equipment recovery. Aircrew will usually want to view the position of the equipment in relation to the target

- ***Important note***: If the boat has been used as the target, do not change boat position until aircraft gives the all clear. They will be checking drop accuracy relative to the boat.

SAFETY REMINDERS:

- SO-OP and Coxswain should ensure that the OPFAC is able to accommodate drop gear (approximately 450 lbs./set.)
- SO-OP and Coxswain should ensure that the assigned crew are able to safely recover the drop gear (coxswain and 2/3 crew preferred depending on OPFAC)

- If a crew member is leaning over the gunwale to recover equipment, then another crew member should secure their PFD / SAR vest
- Heavy (40 lbs.) bags can be recovered most effectively by turning the bag vertical next to the boat. Lift with your legs.. not your back!
- Refrain from all crew members leaning over the same side of the OPFAC (especially important for smaller boats).
- Boats with a cuddy cabin should have two crew members assisting with carrying bags forward (one member forward and one member aft passing the bags forward)
- Helmets should be worn for recovery of the ADR8 when wind is strong enough that the parachute “flies” the payload.

Return of Drop Gear:

- Coxswain calls line shop (252.335.6056) before securing mission to confirm pick-up location.
- Coxswain tells line shop how many spare spools and/or reels should be replenished to support future missions

Typical Training Exercise: H-60

- Helo training is typically conducted 3 days each week. There are both day and night missions. **The UTL is the only vessel certified to support helicopter "hoist" training.** Other OPFACs can support H60 approaches to the water and rescue swimmer work.
- H-60 will generally begin with hoists to the UTL. When hoisting evolutions are complete, the H-60 and crew will do "Swimmer Work". The UTL assumes an observation role and maintains visual on Helo and Swimmers until Swimmer Work is completed.
- **IMPORTANT NOTE**: In the event fixed wing and H-60 missions overlap (should be rare and due to extenuating circumstance), UTL can attend to fixed wing gear recovery but shall maintain visual contact with the H-60 at all times. Radio traffic should be monitored closely. Should a problem arise with the H-60, the UTL will leave drop recovery area to assist H-60/crew. Communications with both aircraft and OIA become priority.

- **Location / Time.** Unless otherwise noted, H-60 training will take place in the Pamlico Sound near 35° 44N/075° 40 W . Swimmers need 12 + feet of water for training.

  - Coxswain/crew decide where to rendezvous w/Helo depending upon wind direction and strength. The goal is to accomplish all hoisting on one heading without the need of a break in training to reposition the OPFAC

  - On Scene time may vary during warm/cold seasons. H-60 day missions will generally be midday.

  - On-scene time for night missions is sundown (1700 – 2000 depending on the time of sunset).

  Communications.

    - See Communications under the C-130 Aircrew Training section.
    - On the water, Pre-Hoist communications should include hoist briefing from pilot, numbers of POB on both facilities and emergency procedures.

  - **In Case of EMERGENCY:** H-60 breaks forward and left, OPFAC to the right and away. Important Helo Comms Note: H-60 is to back off OPFAC for communications between hoists and hoist gear re-set for next evolution.
  - **Approaches to the Water Support.** Provide standby-safety while the Helo hovers close to the water (normally within fifty feet of the surface) or is performing other over water flight training exercises.
  - **If the Helo has to ditch**, the Aux boat is the primary rescue vessel for the crew. Must know number of people on board the H60 and must maintain visual contact or know the H60's current location (lat / long).
  - **Rescue Swimmer Support.** Monitor the swimmers when in the water and be prepared to take on board in the event the H-60 is unable to do so. A crew

member should be assigned to maintain visual contact of swimmer(s) in the water at all times.

- **OPFAC vessel will** position itself approximately 200-400 yds away from the helo, in the 2-4 o'clock area (relative to aircraft). OPFAC crew should have clear view of Mech, Helo door and swimmer hoist evolutions.
- The Aux Boat may also be asked to conduct training with the swimmers boarding the vessel. DO NOT USE DISCHARGE ROD ON SWIMMERS. Allow them to discharge static by stepping on the cage.
- **Rescue Basket Hoist Training.** Drills are conducted either making way or DIW (dead in the water). When underway the coxswain normally maintains a heading about 45 degrees to the right of the wind at about 7 knots (~2,000 RPM). The helo pilot will normally request a specific heading and may ask for a different course or speed for various exercises. Let the aircraft know if the requested course will be an issue for any reason (sea state/ride, obstacle avoidance, etc.). **Maintaining a steady course/speed is essential to safe evolutions.** Hoisting should be stopped if the course cannot be maintained within 10 degrees of the desired heading. The coxswain also maintains communication with the helo.

    - A speed higher than 7 knots can be used if needed to facilitate maintaining the desired course
    - Notify the aircraft if there is any system degradation that may be an issue to conduct the hoists. (Example: inability to hold steady course due to a steering or navigation malfunction.) Both the aircraft and boat crew will evaluate whether it is safe to proceed

- **Helo Boat Crew Responsibilities.**
    - UTL boat crew for H-60 hoist training requires a minimum of coxswain and 3 qualified crew members (preferably 4). A qualified crew member is one who has attained Crew qualification and who has completed 3 prior H60 missions.

    - Night helo missions require a minimum of coxswain and 4 qualified crew.

- **Crew Deck Positions**:

    - **Primary Position (#1) – Equipment Retrieval:** This crew member maintains position at the aft starboard quarter and his/her primary responsibility is to recover the trail line and/or the rescue device as they are lowered from the H60. The device may be lowered with or without a trail-line.

        - If a trail-line is used, it will be lowered with a weighted bag to the boat by the flight mechanic. The Primary maintains **light tension** on the line to ensure that the rotor wash does not lift the trail line up to the rotors. Once the flight mechanic has lowered the trail line, it is connected to the rescue hook and the device lowered to the boat. As the device (basket) clears the helo, the Primary should pull the device (basket) to the boat with

the trail line using **moderate tension.** As the device nears the boat, the Primary should exert **maximum tension** on the trail line to guide the basket to the boat.

- When the rescue device reaches the boat (with or without a trail-line), the Primary and the Secondary must guide or lift the device onto the rack on the aft of the boat. <u>The device should not be touched until it has first made contact with the rack, the water, or with the grounding rod</u>.
- When the Primary is satisfied that it is safe to let the helo lift the device off the boat's rack, he/she checks with the other crew members to be sure there are no safety issues and then gives a thumbs up indicating a ready for pick up signal for the helo to lift the device.
- As the device is being retrieved by the helo, the Primary and Secondary guide the device out of the boat. If a trail-line is being used, the Primary maintains moderate tension on the line and releases the weight bag at the end of the trail line when all the slack line has been retrieved by the helo mech.

    - The trail line is not connected to the basket until all of the line is lowered out of the helo. Until connected to the basket, the line is held manually by the flight mechanic. When the rescue basket is returned to the helo, the flight mechanic disconnects the trail line from the basket and retrieves it manually. The boat crew must avoid excessive tension on the trail line when the flight mechanic is manually handling the line.

o **Secondary Position (# 2) – Discharge Static Electricity**. This crew member maintains position at the aft port quarter and his/her primary responsibilities are:

- Use the grounding rod to guide the trail line to the Primary (if a trail-line is being used)
- Use the grounding rod to discharge static electricity before the device (basket) is touched by anyone on board
- Assist the Primary with the recovery of the device
- Watch the trail-line to prevent anyone from becoming entangled in the event the helo has to pull away quickly.

o **Mid-ship Port Position (#3) -Trail Line Control & Safety Observer.** This crew member maintains position at the forward port corner of the cockpit and his/her primary responsibilities are to control the trail line when it is being used:

        - Coil the trail line as it is pulled on board by the Primary; the line should be coiled in large loops. The weight bag at the end of the trail line should be secured under one foot.
        - Let out the trail line as the Primary maintains control of the line while the device is being lifted from the boat by the helo
        - Pass the weight bag on the end of the trail line to the Primary.
        - The #3 Position will also handle the duties of Position #4 when only three crew members are on board.

    - **Forward Port Position (#4)–Safety Observer & Communications.** Assists the coxswain in communications with both the helo and the Primary and Secondary crew.
        - Ensures that all communications within the crew are understood and acknowledged.
        - Keeps the coxswain informed on the actions of the helo and the crew.
        - Monitors the trail line as it is retrieved and released ensuring that there is no entanglement.

- **Dewatering Pump Delivery (Simulated Pump).**
    - **Indirect Method of Delivery:** A trail line is attached to the pump container and is lowered to the boat. The helo backs off from the boat and its crew deploys a pump into the water clear of the boat. The boat crew uses the "trail line" to recover the pump and lifts it aboard the UTL. To retrieve the pump, the helo crew will lower a "bear hook" to the boat where it is connected to the pump.
    - **Direct Method of Delivery:** The pump is directly lowered to the boat. Just like other hoisting evolutions, there may or may not be a trail line..
- CAUTION: The pump is extremely heavy and awkward requiring all deck crew be available to assist in pump recovery.

- **Helo Mission Hazards**
    - **Communications.** Operating in close proximity with the helicopter creates challenges in communications between UTL/helo and between crew members on the UTL. Care must be taken to ensure clear communications. The Cx should consider asking the helo to back off if necessary to facilitate clear communications.
    - **Wind and Spray.** The most obvious hazards associated with operating a boat under a helicopter are high wind conditions and blowing spray. Even during summer months with high temperatures, the use of rain gear is encouraged to protect the skin from wind driven water and to prevent the onset of hypothermia. These conditions always require special protection for the eyes and exposed skin and get progressively more difficult to manage with colder weather.

- **Boat Rolling (Leaning to one side).** The combination of the wind generated by the helo rotor and the surface waves can cause the boat to roll and lean. This is generally more pronounced during dead-in-the-water training exercises. Crew members should anticipate that the boat will roll and lean and be sure that they are braced and have a hand-hold to prevent sliding on the deck.

- **Line entanglement.** A serious hazard associated with helo exercises is the potential for a crew member to become entangled in the trail line as it is being retrieved or in the event the helo has to make an emergency/unplanned break away from the boat. Entanglement can also happen with the discharge stick. An entangled crew member could be injured, even though the line has a break-away coupling designed to minimize this risk. The Primary, Secondary and Safety Observer positions must maintain constant awareness of the trail line and be prepared for the line to be pulled rapidly by the helo. Sheath knives are available and positioned strategically for use by the crew if it becomes necessary to quickly cut lines loose from a crew member or from the facility.

- **Special Clothing for Helo Operations.** Goggles are required. Helmets are required for the coxswain and all crew members. Gloves are also strongly recommended to prevent rope burns. Rain gear is recommended except during hot weather. Mustang survival suits or dry suits are required for winter operations consistent with PPE policy. Particular attention should be paid to warm headgear and extra gloves during cold weather helo operations.

- **Hearing Protection:** Noise levels during helo operations are extremely high and can be damaging to hearing in addition to making communications more difficult. Disposable hearing protection is available that may be used in conjunction with normal PPE headgear

APPENDIX 1 – Oil and Fuel Additive Reimbursement

Facility owners may be reimbursed for 2 cycle oil and fuel additive required or recommended by the engine manufacturer. This does not apply to 4 cycle oil used in the crank case or lower unit. Oil and additive are usually purchased in different quantities and only a portion of the purchased amount is used for a patrol. The Coast Guard Finance Center requires that expenses be documented so they can be audited. Therefore, the methods stipulated in this Section shall be used for calculating the amount to be reimbursed.

When oil or fuel additive is purchased the original receipt should be up-loaded in AOM for the patrol which first used the oil or additive, but the total amount of the purchase should **not** be entered for reimbursement since reimbursement will be only for the amount of oil actually used for the patrol.

The manufacturer's oil-to-gas or (additive to gas) ratio should be used to calculate the quantity and value of the oil (or additive) used for the patrol. The Engine Oil (or Additive) template should be completed and uploaded to AOMS as an image (JPG, PNG, or GIF). The quantity remaining is the quantity purchased less the quantity used for this and prior patrols and for personal use.

An Excel spreadsheet can be used as an alternative to the templates. The sheet can be accessed in the SO-MT dropbox file or can be provided by the SO-OP. The sheet will need to be uploaded to AOMS as an image.

ENGINE OIL REIMBURSEMENT:

- **Oil Receipt Uploaded to AOMS:**
  - **Order Number:** _____
  - **Date:** _____
  - **Quantity Purchased:** _____
  - **Quantity Reimbursed on Prior Orders:** _____
  - **Quantity Remaining (Quantity Purchased – Reimbursed on Prior Orders & for personal use):** _____
- **Price per Gallon:** _____
- **Fuel / Oil Mixture Ratio:** _____
- **Quantity of Oil Used (Gallons of Fuel Used / Fuel Oil Ratio):** _____
- **Cost of Oil Used (Quantity Used x Price per Gallon):** _____

FUEL ADDITIVE REIMBURSEMENT:

- **Type of Additive Recommended by Engine Manufacturer: _____**
- **Additive Receipt Uploaded to AOMS**
  - **Order Number: _____**
  - **Date: _____**
  - **Quantity Purchased: _____**
  - **Quantity Reimbursed on Prior Orders: _____**
  - **Quantity Remaining (Quantity Purchased – Reimbursed on Prior Orders & for personal use): _____**
- **Price per Ounce: _____**
- **Fuel / Additive Ratio: _____**
- **Quantity of Additive Used (Gallons of Fuel Used / Fuel-Additive Ratio):_____**
- **Cost of Additive Used (Quantity Used x Price per Ounce): _____**

Appendix 2 - UTL FUEL PROCESS ADMINISTRATION

PUCHASES WITH GOVERNMENT CREDIT CARD

- Refuel and pay for purchase using the government credit card at the completion of each patrol
- Enter the quantity used for the patrol in the AOMS "Facility Data – Gallons of Fuel" box
    - This will typically be the quantity purchased unless the UTL was not refueled after the prior patrol(s). Examples of reasons for not refueling after a patrol include:
        - Fueling facility closed (night patrol)
        - Return directly to dock because of approaching weather
        - Limited quantity used and distance to fuel facility (training patrol in JG Creek).
    - If not refueled after prior patrol, then quantity used will be beginning tank inventory, plus quantity purchased, minus ending inventory.
- Enter in AOMS comments:
    - If the UTL was not refueled after the patrol, the reason should be shown in the AOMS comments. "Did not refuel because xxxxxx"
    - If fueled, show "Fuel purchased with govt credit card: xxx gals / $YYY".
    - If the fuel purchased was for the current and prior patrol (boat not refueled after prior patrols) this should be shown in the comments: "Fuel purchased with govt credit card for this and prior patrols: xxx gals / $YYY".
- Click on the AOMS Fuel Government Provided box
    - The value shown should be 0.00
- Provide the UTL custodian with the fuel receipt
    - UTL custodian sends the fuel receipt to SOI.
    - Receipt cannot be uploaded in AOMS

REFUELING AT STATION OREGON INLET

- Refuel using the Station Oregon Inlet fueling equipment
- Enter the quantity used for the patrol in the AOMS "Facility Data – Gallons of Fuel" box and click on AOMS Fuel Government Provided box
    - The quantity entered in AOMS "Facility Data – Gallons of Fuel" will usually be what is shown on the SOI fuel pump meter unless the UTL was not refueled after the prior patrol(s). Examples of reasons for not refueling after a patrol include:
        - Late return for night patrol
        - Approaching weather
        - Limited quantity used
    - If not refueled after prior patrol, then quantity entered in AOMS "Facility Data – Gallons of Fuel" will be beginning tank inventory, plus quantity added (SOI pump meter), minus ending tank inventory
    - If not refueled after current patrol, then the Quantity entered in AOMS "Facility Data – Gallons of fuel" will be beginning tank inventory minus ending tank inventory

- Enter in AOMS comments:
    - If the UTL was not refueled after the patrol, the reason should be shown in the AOMS comments. "Did not refuel because xxxxxx"
    - If fuel added was for current and prior patrol then show "xxx gals added from SOI fuel facility for current and prior patrol" (xxx will be the quantity shown on the SOI fuel meter)