

## **MAINTENANCE PROGRAM**

### **PROGRAM OVERVIEW**

What is maintenance and why is it performed? Maintenance practices often are limited to the repair of equipment after it has failed. This is called **reactive maintenance**. Reactive maintenance may appear to be satisfactory in the short term, but it has been proven that this “run it till it breaks” maintenance approach is actually expensive and dangerous. When equipment fails, it can expose people and assets to **unacceptable risk**.

Maintenance is often defined as “The act of keeping something in proper condition”. This implies that maintenance should be actions taken to prevent equipment from failing. This includes the repair of normal wear and tear so that equipment is kept in proper working order. The focus of our Maintenance Program is on this more proactive approach, which is often called **preventive** and **predictive maintenance**.

This program discusses:

- **Preventive Maintenance Routines and Schedules for Pilot Boats**
- **Routine Pilot Boat Maintenance**
- **Action Request Form**
- **Daily Pilot Boat Report**
- **Tagging of Unserviceable Equipment**
- **Hot Work Permit (for use when performing hot work on board pilot boats)**
- **Maintenance & Inspection of Fire Extinguishers & Suppression Systems**
- **Maintenance & Inspection of Life Rafts and Hydrostatic Releases**
- **Maintenance & Inspection of Dispatch Centre HVAC System**

### **PREVENTIVE MAINTENANCE PROGRAM (ROUTINES & SCHEDULES)**

Part XIX of the Canada Occupational Health & Safety Regulations, (known as the *Hazard Prevention Program Regulations*) specifically requires the development and implementation of a preventive maintenance program in order to avoid failures that could result in a hazard to employees. The Pilot Boat Administrator shall be responsible for organizing and maintaining adequate maintenance routines and schedules to ensure the safe and reliable operation of APA-owned pilot boats.

# ***ATLANTIC PILOTAGE AUTHORITY OHS SYSTEM***

## **ROUTINE PILOT BOAT MAINTENANCE**

Routine pilot boat maintenance is described primarily in two Safe Operating Procedures (SOPs):

- *General Pilot Boat Duties, and*
- *Performing Routine Maintenance*

## **ACTION REQUEST FORM**

1. Action Requests are a three-part form, printed two forms per page and bound in booklets. They shall be kept on each pilot boat owned by the APA, and distributed to Pilots operating in areas where boat service is provided by contractors. The OHS Coordinator shall also maintain an Action Request booklet for use by office employees. Action Requests shall be used to report and request resolution of maintenance items and hazards that can't be immediately corrected. Action Requests shall also be used to suggest safety/maintenance improvements.
2. When completing an Action Request, the box corresponding with the most appropriate type of request ("*REPAIR/MAINTENANCE*" versus "*HEALTH & SAFETY*") must be checked. The originating person should complete the first part of the form, clearly describing the problem (or opportunity) and the action requested. If some temporary measure has been taken, that should also be briefly noted in the "ACTION TAKEN" box on the form.
3. When an Action Request is completed, the white and pink copies must be removed and sent to the APA office, leaving the bottom (yellow) copy in the booklet for reference.
4. When an Action Request is received at the APA office, it shall be logged in (by a person delegated by the OHS Coordinator). The log shall record the control number of the Action Request, the originator, the date received, and the person it is routed to. Routing shall occur as follows:
  - Requests marked "*REPAIR/MAINTENANCE*" shall generally be directed to the Pilot Boat Administrator (except for building maintenance)
  - Requests marked "*HEALTH & SAFETY*" shall generally be directed to the OHS Coordinator.
5. When an Action Request has been addressed, the Pilot Boat Administrator/OHS Coordinator shall note on the form any action taken or planned. If at all possible, planned actions should always include a deadline date for implementation.
6. Once an Action Request is addressed, the Pilot Boat Administrator/OHS Coordinator shall return both the white and pink copies to the person

## ***ATLANTIC PILOTAGE AUTHORITY OHS SYSTEM***

delegated for logging. That person shall return the pink copy to the originator. This confirms the action that has been taken. The date that the pink copy is sent to the originator shall be logged, and the white copy filed for reference.

7. When the pink copy is received by the originator, it must be stapled back in the Action Request booklet, to the corresponding yellow copy. This allows everyone involved to see what actions have been requested, taken and/or planned.
8. The Pilot Boat Administrator/OHS Coordinator are responsible to follow-up on actions taken and planned to ensure completion.

### **DAILY PILOT BOAT REPORT**

1. The Daily Pilot Boat Report serves as a pre-start check of important vessel systems and equipment. It also acts as a reminder for crews to perform key maintenance tasks and provides critical information to the Pilot Boat Administrator.
2. The on-duty Launchmaster or contract operator is responsible to ensure that a Daily Pilot Boat Report is completed at the start of each shift. For crews in Saint John NB, one report must be completed daily.
3. Unacceptable conditions must be indicated by marking an "X" in the appropriate box on the front of the Daily Pilot Boat Report. If the crew corrects the condition, that information is to be noted in the box on the back of the Daily Pilot Boat Report. If the crew cannot correct the condition and/or service is required, an Action Request form must be generated and the control number of the Action Request must be noted in the box on the back of the Daily Pilot Boat Report.
4. Completed Daily Pilot Boat Reports must be signed by both the Launchmaster and the Deckhand and submitted daily to the APA Pilot Boat Administrator.
5. The Pilot Boat Administrator shall keep completed Daily Pilot Boat Reports on file for a minimum of five years.

### **TAGGING OF UNSERVICABLE EQUIPMENT**

1. Equipment and tools that are damaged, defective, or otherwise in need of maintenance or repair can be a hazard to users. For this reason, such equipment must be tagged or marked "**Unserviceable**" and taken out of service.

## ***ATLANTIC PILOTAGE AUTHORITY OHS SYSTEM***

2. Once equipment has been identified as “unserviceable”, the Pilot Boat Administrator must be advised. An Action Request should be initiated, to document the problem and to provide everyone with a means of follow-up.

### **HOT WORK PERMIT**

1. “Hot work” is defined as welding, soldering, cutting (or other use of torches), and grinding. Hot work performed on board pilot boats can be an extreme fire/explosion hazard.
2. Because of the high risk, all hot work on board pilot boats must be performed in accordance with the *SOP – Onboard Hot Work* and the Hot Work Permit attached to this program.

### **MAINTENANCE & INSPECTION OF FIRE EXTINGUISHERS & SUPPRESSION SYSTEMS**

1. The Pilot Boat Administrator shall be responsible for scheduling the routine maintenance and inspection of all portable fire extinguishers and fire suppression systems installed on pilot boats owned by the Authority.
2. Launchmasters and Deckhands shall assist the Pilot Boat Administrator, as required, to schedule the maintenance and inspection activities.
3. Portable extinguishers must be maintained and inspected at least annually by a qualified technician.
4. Fixed suppression systems must be maintained and inspected by a qualified technician, in accordance with Transport Canada and manufacturers’ recommendations. This generally requires at least an annual maintenance and inspection of the entire system, bi-annual weighing of bottles, and periodic hydrostatic testing of bottles.
5. The Pilot Boat Administrator shall maintain all records relating to the maintenance and inspection of portable fire extinguishers and suppression systems.

### **MAINTENANCE & INSPECTION OF LIFE RAFTS, INFLATABLE TENDERS AND HYDROSTATIC RELEASES**

1. The Pilot Boat Administrator shall be responsible for scheduling the routine maintenance and inspection of all life rafts, inflatable tenders and hydrostatic releases installed on pilot boats owned by the Authority.

## ***ATLANTIC PILOTAGE AUTHORITY OHS SYSTEM***

2. Launchmasters and Deckhands shall assist the Pilot Boat Administrator, as required, to schedule the maintenance and inspection activities.
3. Life rafts are required to be maintained and inspected at regular intervals by a qualified service technician.
4. Hydrostatic release mechanisms that require annual or other periodic servicing must be serviced at the same time as the life raft. Disposable release mechanisms must be replaced before the expiration date.
5. The Pilot Boat Administrator shall maintain all records relating to the maintenance and inspection of life rafts, inflatable tenders and hydrostatic releases.

### **MAINTENANCE & INSPECTION OF DISPATCH CENTRE HVAC SYSTEM**

1. The dedicated heating, ventilation and air conditioning (HVAC) system installed at the Cogswell Tower Dispatch Centre requires regular maintenance and inspection to ensure the reliable delivery of clean, healthy air.
2. A service contract provides for quarterly maintenance and inspection. The Director of Operations is responsible to renewal of the contract.
3. A log sheet is attached to the front of the HVAC unit, for the technician to record each service.
4. The Dispatch Centre Supervisor shall monitor the log sheet to ensure that maintenance is performed regularly.

### **REVIEW OF EFFECTIVENESS**

1. At least annually, at the May meeting, the WHSC shall discuss and evaluate the effectiveness of this program.
2. The results of this annual program review, including any recommendations for improvement, shall be noted in the minutes of the WHSC meeting.