SEA MACHINES ROBOTICS™

UNMANNED SURFACE VESSEL (USV)

OPERATIONS MANUAL AND CODE OF CONDUCT

AUGUST 2017

1.0 PREFACE

The following procedures are intended to promote safe, efficient and lawful operation of the SEA MACHINES ROBOTICS Unmanned Surface Vessel (USV). Safety, above all else, is the primary concern in each and every operation, regardless of the nature of the mission.

For purposes of this operations manual, any reference to a vessel otherwise described as Maritime Autonomous Systems (Surface) MAS(S), Unmanned Surface Vehicles (USV), Autonomous Surface Vehicles (ASV) or Unmanned Maritime System (UMS) will be referred to as a USV.

2.0 PHILOSOPHY & MISSION STATEMENT

It shall be the mission of those personnel of SEA MACHINES ROBOTICS who are trained in the use of USVs to use this resource to further testing, development, and implementation of USVs into the maritime space.

It shall be the intent of every USV operator to operate as a prudent mariner with due regard to safety of the public, environment, and property. When operating a USV, SEA MACHINES ROBOTICS operators will abide by all navigational regulations, best practices, and codes of conduct for vessel operations.

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3.0 BEST PRACTICES AND CODE OF CONDUCT

SEA MACHINES ROBOTICS resolves to adhere to current maritime industry Codes of Conduct and Best Practices as complementary guidance to the legal requirements for unmanned vessel operations.

3.1 CURRENT BEST PRACTICES AND CODES OF CONDUCT

Specifically, SEA MACHINES ROBOTICS incorporates the following current guidance documents into its vessel operations:[1]

1. UK Marine Industries Alliance, Being A Responsible Industry - An Industry Code of Conduct, Maritime Autonomous Systems (Surface) MAS(S) (Issue 1, 01/03/2016).
2. U.S. Coast Guard (USCG) Navigation Safety Advisory Council (NAVSAC) Resolution 16-0, Unmanned Maritime Systems Best Practices.

These guidance documents are not intended to be a substitute for any requirement of law. SEA MACHINES ROBOTICS understands that as responsible operators, we must understand and comply with the laws, regulations or policies that relate to our activities.

[1] Sea Machines is also aware that the UK Maritime & Coastguard Agency is developing a yet-to-be released voluntary "Maritime Autonomous Surface Ships Code of Practice."

3.2 PRINCIPLES AND COMPLIANCE WITH THE CODE OF CONDUCT

In furtherance of these Best Practices and Codes of Conduct, SEA MACHINES ROBOTICS resolves to undertake the following:

1. Display responsible and ethical behavior in relation to the design, manufacture, distribution, operation, maintenance and final disposal of our systems.
2. Encourage and support communication and dialogue with regulators and relevant authorities.
3. Comply with the principles set out by Best Practices and Codes of Conduct to the best of our abilities.
4. Comply with all applicable international, Federal, State, local and Tribal rules, regulations, ordinances, covenants, and restrictions as they relate to USV operations.
5. Be responsive to the needs of the public and other users of the marine environment.
6. Cooperate fully with international, Federal, State, local and Tribal authorities in response to emergency deployments and mishap investigations.
7. Establish contingency plans for foreseeable unplanned events and share them openly with all appropriate authorities.
8. Respect the rights of all members of the maritime community.
9. Respect the privacy and intellectual property of others.
10. Respect the concerns of the public and maritime community as they relate to USV operations.
11. Support improving public awareness and education on the function, purpose, deployment, value and operation of a USV.
12. Respect the impacts and risks associated with USV operations in the maritime environment.

3.3 MANAGER'S RESPONSIBILITIES

Managers or supervisors for SEA MACHINES ROBOTICS will:

1. Ensure that copies of Best Practices and Codes of Conduct are provided to, explained to and understood by employees they manage and supervise.
2. Provide guidance to those they manage or supervise on how they can meet the Best Practices and Codes of Conduct recommendations and requirements.
3. Promote the principles of the Best Practices and Codes of Conduct by setting a personal example.
4. Ensure employees receive training and guidance on applying Best Practices and Codes of Conduct.
5. Monitor compliance with Best Practices and Codes of Conduct by employees they manage or supervise.
6. Ensure that third parties are aware of, and comply with, the policies and principles of this Code.
7. Create an environment where employees can contribute to the industry's development and be recognized for doing so.

4.0 DEFINITIONS

For purposes of this document, the following definitions are used:

Vessel: includes every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water.

Unmanned Surface Vessels: vessels that operate on the surface of the water and navigate by remote control, autonomous means, or a hybrid of the two.

Remote vessel: vessel for which tasks of operating the vessel are performed via a remote control mechanism, e.g. by a shore- or ship-based human operator.

5.0 ADMINISTRATION

5.1 OPERATIONS MANUAL

1. The policies and procedures contained in this manual are issued by SEA MACHINES ROBOTICS. As such, it is an official business document of SEA MACHINES ROBOTICS and proprietary in nature.
2. This manual is not intended to be all-inclusive, but as a supplement to other company guidelines, U.S. Coast Guard requirements, pre-operational safety checklists, and other relevant requirements.
3. This manual addresses USV operations as they existed when it was drafted. Equipment, personnel, environment (internal and external), and other relevant factors change over time. The management of change involves a systematic approach to monitoring organizational change and is a critical part of the risk management process. Given this, it is essential that this manual be continually updated as necessary. The entire manual must be reviewed, at a minimum, annually to assure it is up to date. Any changes to the manual will be communicated as currently dictated by company policy.
4. A copy of the manual (electronic and/or paper) is issued to every person having USV responsibilities.

5.2 ORGANIZATION

The USV unit is comprised of those personnel approved by **SEA MACHINES ROBOTICS** and includes operators, observers, and others deemed necessary having assignment as part of the USV operational crew.

5.3 PERSONNEL

Person-in-Charge (PIC), Captain, or Master: is responsible for the overall direction and performance of the USV unit and exercises command and control over it. This person has total responsibility for the operation of the vessel and the safety of the passengers, crew and the overall condition of the vessel.

Operator: The RC-NXT system provides Control, Command, and Communications between the vessel and the Remote Command Station. To be considered for selection as an operator of the RC-NXT System, applicants must meet applicable vetting and credentialing requirements as established by SEA MACHINES ROBOTICS. An operator's primary duty is the safe and effective operation of the USV in accordance with the manufacturers' approved operation manual, Coast Guard requirements and company policy and procedures. Operators must remain knowledgeable of all Coast Guard regulations; USV manufacturer's operation manual and bulletins and company policy and procedures.

Observer: An observer's primary duty is to assist with operation of the USV's equipment including cameras, radio communications with other crew members and property owners as well as be an observer for anything that may affect the operator's primary duty (i.e. prudent seamanship and due regard in navigation).

5.4 MISCELLANEOUS

1. Inquiries from the news media must be forwarded to the SEA MACHINES ROBOTICS CEO. Operators/Observers shall follow currently established company policy regarding interactions and inquiries from the media.
2. Requests for assistance from third-parties will be responded to by the PIC, Captain, or Master, and all responses will adhere to applicable regulations and/or obligations on rendering assistance at-sea.
3. Complaints or inquiries regarding USV operations must be referred to the SEA MACHINES ROBOTICS CEO.

6.0 HEALTH, SAFETY AND ENVIRONMENT

6.1 SAFETY POLICY

To promote safety, SEA MACHINES ROBOTICS aims to ensure that we will not utilize, deploy, or operate a USV in a manner that presents undue risk to persons, property or environment on the surface or underwater.

1. SEA MACHINES ROBOTICS is committed to having a safe and healthy workplace, and will maintain healthy and secure workplaces and promote safe working practices during all stages of the USV design, build, maintenance and operation lifecycle, including:

- The ongoing pursuit of an accident-free workplace, including no harm to people, no damage to equipment, the environment and property.
- A culture of open reporting of all safety hazards in which management will not initiate disciplinary action against any personnel who, in good faith, disclose a hazard or safety occurrence due to unintentional conduct.
- Support for safety training and awareness programs.
- Conducting regular audits of safety policies, procedures and practices.
- Monitoring the USV community to ensure best safety practices are incorporated into the organization.
- Aim to prevent accidents happening by identifying and understanding the risks present in the workplace and daily operating environment, and by understanding how accidents can occur.
- Seek to identify those areas that can be improved to protect the safety of all those in the maritime industry and how identified risks can be mitigated.

2. Every SEA MACHINES ROBOTICS employee has a responsibility for safety in the workplace and must be familiar with and comply with the company's Health and Safety Policy and all local requirements and by thinking through the risks and hazards in our workplace and daily operating environment.
3. It is the duty of every member within the USV operations crew to contribute to the goal of continued safe operations. This contribution comes in many forms and includes always operating in the safest manner practicable and never taking unnecessary risks. Any safety hazard, whether procedural, operational, or maintenance related must be identified as soon as possible after, if not before, an incident occurs. Any suggestions in the interest of safety should be made to the respective SEA MACHINES ROBOTICS PIC.
4. If any member observes, or has knowledge of an unsafe or dangerous act committed by another member, the USV PIC is to be notified immediately so that corrective action may be taken. ALL MEMBERS ARE AUTHORIZED TO TAKE ACTION TO CORRECT A HAZARD if in that member's opinion delay will result in accident or injury. The USV PIC will be notified immediately in such situations.

ALL MEMBERS ARE AUTHORIZED TO TAKE ACTION TO CORRECT A HAZARD

6.2 ENVIRONMENT

SEA MACHINES ROBOTICS is committed to high standards of environmental management and protection, and aims to reduce the environmental impact of systems and services at all stages from design, assessment, development, manufacture and in-service support, through removal from service and disposal at end of life. Accordingly, SEA MACHINES ROBOTICS will adhere to the following principles:

1. Use resources effectively and to minimize the impact of its products, activities and operations on the environment.
2. Give appropriate consideration to the management of environmental impacts in the development, design, procurement, manufacture, test, training delivery, maintenance, support and disposal of our products.
3. Comply with applicable environmental legal requirements.
4. Use best practice engineering and management techniques and processes to understand the potential use of the product by customers, and consider how products and components, including fuels, batteries and chemicals, can be designed and manufactured with recyclability and responsible disposal in mind.
5. Comply with applicable environmental response requirements.

6.3 PRODUCT SAFETY DESIGN AND CONSTRUCTION

SEA MACHINES ROBOTICS will work with each customer to agree the level of safety required for a specific operational situation of each product through its life, and will suggest

Design or modifications to mitigate, where possible, any identified risks. As such, SEA SEA MACHINES ROBOTICS endeavors to:

1. Work with customers to achieve a level of safety that is required, evaluating what risks are acceptable, and work to ensure that it delivers products that meet or exceed that level. SEA MACHINES ROBOTICS will not agree to a level of safety that is unlawful or unethical
2. Establish policies and practices built on a set of principles of product safety that apply throughout the product's life, and that may extend beyond the formal end of the project.
3. Ensure that the safety of products relies on the application of safety policies and processes, and on the behaviors and attitudes of all within the industry. There is a chain of accountability for product safety and signatories are responsible for ensuring that the products both match their design and have the agreed level of safety.
4. Share information about product safety with customers and within the industry and endeavor to learn from anything about the performance and use of products that can be used to improve safety.
5. Be aware of the product safety implications of their role and ensure that operations are in full compliance both with the law and with each company's safety policies and processes. Immediately raise any concerns regarding the safety of a product, or the application of policies and processes, should be raised immediately.
6. Ensure that it employs Suitably Qualified and Experienced (SQEP) personnel in the design and construction of its systems. SEA MACHINES ROBOTICS will source good quality, traceable, consistent materials and components and use appropriate design, build and test standards where applicable to ensure quality, safe and predictable products are delivered to customers.

6.4 MEDICAL FACTORS

1. SEA MACHINES ROBOTICS crew shall only deploy the USV when rested and emotionally prepared for the tasks at hand.
2. Physical illness, exhaustion, emotional problems and other similar factors can seriously impair judgment, memory and alertness. Members are expected to "stand down" when these problems could reasonably be expected to affect their ability to perform operation duties.
3. A self-assessment of physical condition shall be made by all members during pre-operation activities.
4. Performance can be seriously hampered by prescription and over-the-counter drugs. The PIC must be advised anytime such drugs are being taken. If it is determined that the medication being taken could hamper an operator or observer, that member shall be prohibited from the deployment or exercise.
5. No member shall act as an operator or observer within eight hours after consumption of any alcoholic beverage, while under the influence of alcohol, or while having an alcohol concentration exceeding applicable limits.

7.0 TRAINING

SEA MACHINES ROBOTICS is committed to operating USVs by individuals who are properly trained and experienced to a competent level to operate a USV.

Such training and experience will satisfy certification or license requirements per applicable regulations or standards, if and when developed, under the following objectives:

1. Ensure the appropriate level of training and certification for all USV Operators.
2. Enable staff development and the sharing of best practices.
3. USV Operators will be trained and certified to at least the same recognized standards as far as the equivalent manned vessels.
4. Have staff development processes in place to capture and progress skill generation.
5. Provide training to the highest standards possible and wherever possible to a level that would be an assessed as suitable by an external and accredited organization resulting in suitably qualified and experienced personnel (SQEP).

SAFETY TRAINING:

All members shall receive training in the following subjects prior to operating a USV:

Company commitment to safety

Company policy

USV member's role in safety

Emergency safety procedures

All members shall review the company safety policy and procedures on an annual basis and that review shall be noted in their training history.

8.0 GENERAL OPERATING PROCEDURES

SEA MACHINES ROBOTICS will at all times conduct USV operations in a safe and effective manner with full regard for other users of the maritime space.

1. SEA MACHINES ROBOTICS will ensure that the USV is seaworthy and fit for its intended purpose, and equipped with means of navigation, machinery, radio system and fire prevention and fire-fighting equipment in order to secure the vessel and cargo.
2. Operations will fully comply with local rules and regulations governing safe operations of vessels at sea and environmental issues as far as practically possible.
3. SEA MACHINES ROBOTICS will contribute, to the extent practicable, to the development of special rules and regulations covering USV operations.

8.1 LEGAL COMPLIANCE

SEA MACHINES ROBOTICS recognizes that regulatory development governing USV is still in progress, and will ensure compliance with all applicable requirements as far as practically possible. SEA MACHINES ROBOTICS will fully contribute to regulatory development using informed judgment and practical experience.

As more guidance develops, SEA MACHINES ROBOTICS will conduct activities and operations in full recognition of the status of a USV. In any event, SEA MACHINES ROBOTICS will comply with currently applicable regulations to operation of ships, such as, but not limited to:

1. International Regulations for Preventing Collisions at Sea (COLREGS) as amended from time to time, including but not limited to the following obligations:

Rule 5: Maintain Proper Look-out
Rule 6: Proceed at Safe Speed
Rule 7: Determine the Risk of Collision
Rule 8: Actions to Avoid Collision
Rules 20-31: Lights and Shapes Requirements
Rules 32-37: Sound and Light Signals

2. International Convention for the Prevention of Pollution from Ships(MARPOL) as amended from time to time.
3. International Convention for the Safety of Life at Sea (SOLAS) as amended from time to time.
4. International Convention on Standards of Training, Certification and Watchkeeping for Seafarers as amended from time to time (STCW).
5. Other maritime laws, rules and conventions as applicable.
6. Local or temporary arrangements in place in the areas of USV operations.

8.2 OPERATIONAL RESPONSIBILITIES

1. A thorough risk assessment process will be applied to each USV operation and consideration given to and approval obtained from any local controlling authority.
2. Responsible individuals will be identified for all stages of USV deployment and operations and given the appropriate directions and authority to act on those responsibilities.
3. The USV will only be operated by approved personnel in a manner consistent with safe navigation to eliminate unreasonable navigational risk.
4. SEA MACHINES ROBOTICS will adhere to industry Best Practices and Codes of Conduct in developing and applying its own standard operating procedures, including those used to plan the conduct and authorization of operations, and system operating manuals.

8.3 IDENTIFICATION OF USV

SEA MACHINES ROBOTICS intends to operate a USV in compliance with the COLREGS, and thus equipped, deployed, operated and maintained in a manner equivalent to a manned vessel of its size and configuration in such a manner as to eliminate unreasonable risk of collision, allision, or harm to vessels, persons, property and the marine environment including, but not limited to, the use of lights, sounds, and electronic signals to ensure that the USV can be detected and identified.

1. **SEA MACHINES ROBOTICS will ensure, to the extent practicable, that the USV is configured with:**

- Unique retro-reflective markings.
- Markings that identify the USV as a USV, e.g.: UNMANNED.
- Yellow paint.
- An Automatic Identification System (AIS) that broadcasts a unique identifier; e.g.: UNMANNED.
- A radar transponder that displays Morse code Romeo (“.-.”).
- A sound producing device that, if practicable, can produce the sound signal Morsecode Romeo (“.-.”).
- A position recorder.

2. **Additionally, both sides of the USV will be marked with the following information, to the extent practicable:**

- Name of Operator.
- Contact telephone number of Operator (including international dialing code).
- Email address of Operator.
- Hazmat label (if applicable).

3. **Additionally, the USV will be registered on a National registry appropriate to the size of the vessel.**

8.4 CUSTOMER INFORMATION

SEA MACHINES ROBOTICS understands that improper or unauthorized handling of protectively marked and commercially sensitive information may damage the national security of the countries in which business is done. It also may damage the industry and may harm the operational and financial performance of companies within the industry.

SEA MACHINES ROBOTICS therefore strives to:

1. Handle customer protectively marked and commercially sensitive information confidentially and as a minimum in accordance with appropriate requirements, policies and processes.
2. Refrain from discussing or working with classified information in a public area where the conversation may be overheard or information compromised.
3. Not discuss classified information with anyone unless it is confirmed that they have a need to know and the appropriate clearance.

9.0 PRE-OPERATION/POST-OPERATION ACTIONS

SEA MACHINES ROBOTICS will conduct USV operations only after a thorough assessment of risks associated with the activity. This assessment should include, but not be limited to:

1. Weather conditions relative to the performance capability of the USV.
2. The identification of normally anticipated failure modes (lost link, power or equipment failures, loss of control, etc.) and the resultant consequences of the failures.
3. Circumstances with respect to the operating area, including: visibility conditions, anticipated vessel traffic to be encountered, compliance with regulations as appropriate to the operation; and abnormal procedures.
4. The need to notify mariners with respect to their intended operations by all reasonable means, including the use of escort vessels where practicable.
5. Communication, command, and control requirements.
6. Reliability, performance, and seaworthiness in relation to established standards.

9.1 INSPECTIONS

1. Operators/Observers are both responsible for a thorough preparation and inspection of the USV.
2. Before and after each deployment (whether a mission or training), the operator and observer shall conduct a thorough inspection of the USV in accordance with the instructions contained in the manufactures user's manual.
3. Any issues found that will put in jeopardy the safe operation of the USV shall be documented and resolved immediately prior to operation.
4. Use of a pre-operation checklist may be utilized prior to each operation.
5. Any physical equipment that cannot be resolved on-site, and which have an impact on safety or the mission, will override the deployment. These issues will be resolved before operation.

9.2 WEATHER

1. Before each deployment the operator/observer will ensure that he/she gathers enough information to make themselves familiar with the weather situation existing throughout the area of deployment.
2. The weather conditions reported for the operation shall be recorded in the pre-operation checklist.

9.3 DOCUMENTATION

1. Inspection and weather will be documented as appropriate.
2. After each operation, the operator should complete a statement documenting the USV operations.

9.4 PLANNING

1. The operator/observer shall familiarize themselves with all available information concerning the deployment including, but not limited to: weather conditions, hazards, description of the incident, deployment goals, etc.
2. Operators will ensure that they are aware of their surroundings in the event that an emergency action must be taken.

9.5 CHECKLISTS

1. Operators shall utilize pre-operation checklists to ensure the highest level of safety for deployment.
2. Prior to operation, the operation log shall be initiated.

9.6 MAINTENANCE

1. The manufacturer's maintenance schedule will be followed and properly documented.
2. Any issues that arise during maintenance that cannot be resolved by routine methods shall be forwarded to the manufacturer for further technical support.

10.0 SECURITY

10.1 PHYSICAL SECURITY

SEA MACHINES ROBOTICS will ensure that security measures are in place to restrict access to the USV, and have the capability to remotely secure the operational capabilities while underway.

10.2 CYBERSECURITY

SEA MACHINES ROBOTICS will adhere to Industry best practices regarding cybersecurity protection for the vessel, including but not limited to software function testing procedures for software upgrades.

11.0 TRADE RESTRICTIONS AND EXPORTS

SEA MACHINES ROBOTICS will comply with all applicable laws and regulations and export controls requirements when importing and exporting products, services and information.

As necessary, training will be provided to those employees who are involved in export and import, or that regularly have contact with foreign nationals.

12.0 INSURANCE

SEA MACHINES ROBOTICS will obtain and maintain third party liability insurance sufficient to cover foreseeable risks, losses and claims.

13.0 EMERGENCY RESPONSE PLAN

Emergency preparedness is vital to SEA MACHINES ROBOTICS operations, and the following considerations, plans, and procedures are intended to prepare for and respond to potential emergency situations which may represent a danger to personnel, the environment, property, or equipment.

13.1 PERSONNEL AND RESPONSIBILITIES

A local PIC will be assigned to each operation. This person has direct responsibility to report an emergency by VHF CH 16 and directly to the Sea Machines Director of Operations. The PIC will instigate direct emergency response procedures. The Director of Operations will confirm all required notifications and support the response.

13.2 OPERATION SPECIFIC RESPONSE PLAN

Prior to commencing new operations in a geographical area, the PIC will ensure that an operational-specific ERP is established and the PIC will meet with local responders and authorities to confirm plan acceptance prior to operations. The ERP will include a training plan to ensure readiness.

13.3 EMERGENCY EQUIPMENT

The following minimum emergency equipment is required to be available or readily accessible to the PIC during autonomous vessel operations: VHF radio, cellular telephone with confirmed connectivity, chase vessel capable of towing autonomous vessel, personnel protective equipment, and flashlight. All operational-specific equipment will be established in the ERP.

13.4 NOTIFICATION PROCEDURES WHILE OPERATING IN NATIONAL WATERS

If an emergency situation occurs, an emergency call shall be broadcasted on VHF Ch. 16 by the PIC and measures to be taken to directly contact the local emergency response authorities.

SEA MACHINES ROBOTICS will implement the following procedures during an emergency response:

13.5 LOSS OF CONTROL OVER VESSEL CAUSED BY TECHNICAL/ ELECTRICAL REASONS

Loss of control over vessel caused by technical/electrical reasons (DGPS drop out or lost connectivity):

1. Depending on the operation, the vessel will be programmed to either stop and hold station or shut down and go “dead in the water” if there is loss of control.
2. The PIC will broadcast the emergency on VHF Ch. 16 to warn of the navigation hazard and notify local authorities.

13.6 LOSS OF CONTROL OVER VESSEL CAUSED BY ENGINE/ MATERIAL BREAK DOWN

Loss of control over vessel caused by engine/material break down:

1. Report the emergency immediately on VHF Ch. 16: and describe the situation with:
   - Vessel location
   - Summary of emergency
   - Type and severity of the emergency
2. Clarify with local authorities which measures to be taken.
3. If fail-safe (automatic shut-down) did not occur, safely board the vessel to evaluate the situation, troubleshoot and manually operate.
4. Re-establish connectivity, determine cause, and assess if operational before remotely operating.

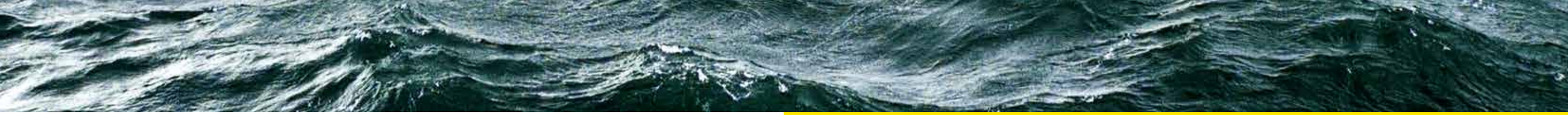
13.7 LOSS OF CONTROL OVER VESSEL CAUSED BY ACTS OF THIRD PARTY

Loss of control over vessel caused by acts of third party/ criminal acts or threats:

1. Report the emergency immediately on VHF Ch. 16 and describe the situation with:
   - Vessel location
   - Summary of emergency
   - Type and severity of the emergency
2. Clarify with local authorities which measures to be taken.
3. Disable engine remotely if possible.

13.8 FIRE/EXPLOSION

1. Evaluate the situation and report the emergency immediately on VHF Ch. 16 and describe the situation with:
   - Vessel location
   - Summary of emergency
   - Type and severity of the emergency
2. Clarify with local authorities which measures to be taken.
3. Determine if any individuals are injured or trapped by the incident.
4. Evaluate the size of the fire: For small fires, attempt to extinguish the fire with a portable fire extinguisher. Leave the area of the fire and proceed to a safe location. For larger fires, ensure persons and property maintain a safe distance while awaiting fire fighting assistance.



13.9 GROUNDING/CAPSIZE

1. Evaluate the situation, report the emergency immediately on VHF Ch. 16.
2. Clarify with local authorities which measures to be taken.
3. Determine safest method for extracting boat safely with the least damage.
4. Check for flooding or damage and any environmental impact. If pollution discharge occurred, deploy pollution response steps to mitigate damage to environment.
5. Determine deepest water, extent of grounding, and potential for underwater damage.
6. Consider present and future state of tide, current or other weather conditions regarding re-floating or salvage operations.
7. Deploy anchor if situation involves potential for being set further aground.
8. Conduct engine checks to attempt re-floating or salvage.
9. Crews must exercise extreme caution when responding to the sinking, grounded, or capsized USV due to the inherent dangers associated with a vessel in that condition.

13.10 COLLISION OR STRUCTURAL DAMAGE TO VESSEL

1. Evaluate the situation, determine if any individuals are injured or trapped by the incident, report the emergency immediately on VHF Ch. 16, and describe the situation with:

- Vessel location
- Summary of emergency
- Type and severity of the emergency and potential injuries

2. Clarify with local authorities which measures to be taken.
3. Check for flooding or damage and any environmental impact. If pollution discharge occurred, deploy pollution response steps to mitigate damage to environment.
4. Document damage to vessel/s involved in incident.

13.11 POLLUTION

1. Evaluate the situation and determine type of discharge and impact to environment and wildlife.
2. Deploy pre-staged pollution response equipment as required, including: boom, absorbent pads, etc. Call VHF Ch. 16 and report the incident and the pollution response measures taken and clarify further measures to be taken.
3. Contact local port and describe the situation with description of discharge, request for assistance, and mitigation steps being taken.

SEA MACHINES ROBOTICS™

SEA MACHINES ROBOTICS reserves the right to propose, amend, and update this document to reflect technological developments, regulatory changes or commercial practices.

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