James L. Sanders

Rules, Policies, and Guidelines

4100.055 Watercraft Response

For Surf Rescue

Implemented: 11-22-10

Revised:

Fire Chief Page 1 of 8



## **PURPOSE**

It is of the utmost importance that when personnel are requested to respond to water related emergencies, that they not only have the proper equipment, but also the proper training. Operating under general guidelines will help ensure that the proper equipment is brought to the scene, and that personnel are trained and proficient in its use. Aside from training, personnel will be required to maintain a certain degree of physical fitness and readiness as it relates to water emergencies. This will include, but is not limited to various exercises and drills in the water.

#### **OBJECTIVE**

To provide personnel with general operating guidelines as it pertains to, responding to aquatic emergencies; To provide personnel with training requirements as it pertains to aquatic emergencies; And finally, to provide personnel with physical conditioning requirements, that will allow them to carry out the task of water rescue.

#### **SCOPE**

To all ECFR personnel that may be involved in water rescue.

#### **Response To Water Related Emergencies**

Especially during the summer months, ECFR personnel are quite frequently summoned to respond to water related emergencies, to include: drowning, swimmer in trouble, boat in distress, or boating accidents. There is often much confusion regarding the actual type of call or the actual location. It is paramount that responding personnel obtain as much information as possible before leaving the station, so that proper equipment can be brought to the scene.

It is recommended that if at all possible that two PWCs respond to all aquatic emergencies. This will not only provide a second PWC in the event of multiple victims, but provides a backup in the event of mechanical failure. For water calls in Districts 8 and 19 both Station 8 and 19 water craft will be dispatched to provide a primary and backup watercraft. It will be at the discretion of the OIC in district 16 to call for assistance from station 8 or station 34.

Squads with their primary PWCs will be the first units to respond. This will not only assure the response of the PWC, but the Squads will also have any and all medical equipment that may be needed. The crews of Squads should always attempt to make direct access to the water closest to where the victim is or was last seen in the water. This will not only bring needed equipment close to the scene, but will also make for a land reference for those searching in the water and the air. Upon arrival the crew should gather information from bystanders regarding the number of victims involved and if they are still in the water. If victims are still in the water or missing, efforts should be made to get a description including sex, age, and a clothing description. Further the crew should obtain the exact location the victim or victims were last scene and their path of travel. In the event a victim or victims are

Rules, Policies, and Guidelines

4100.055

Revised:

Watercraft Response For Surf Rescue

Implemented: 11-22-10

## James L. Sanders

, Fire Chief Page 2 of 8

still in the water and prior to initiating a search, this pertinent information should be transmitted to dispatch, so it can be passed on to other responding agencies.

If congestion at the incident site prevents the Squad from launching the PWC, the crews should choose to launch down the beach in a non-congested area. This will provide for a safer launch location and prevent delays or interference from the public while attempting to launch the PWC. If it can be determined prior to arrival, that all victims are out of the water, it may be acceptable to detach the PWCs at the road and proceed on to the scene.

Due to the logistics of pulling these PWCs on the beach, the secondary squad and PWC or inflatable boat will respond with the primary squad, but stage on the road until a thorough assessment can be made. The secondary squad and watercraft will be contacted by radio with further instructions. These instructions may include standing by on the road in the event of another call, proceeding to the scene and launching the second PWC or leaving the second PWC on the road and responding to the incident.

#### **Attire**

The handling of aquatic emergencies often entails the rescuer getting in the water. Personnel that work at stations that frequently respond to water related emergencies should keep this in mind, and dress appropriately. This includes wearing a pair of swim trunks under normal uniform shorts or pants that personnel can rapidly strip down into in the event they must enter the water. A duty belt, which can hold radios, pagers, cell phone etc., is also highly recommended. This should eliminate personnel getting their electronic and personal belongings wet. Since the water we enter often has different types of sharp objects, that may cut or injure ones feet and wearing your duty boots into the water, is not practical, it is highly recommended that personnel working at stations that perform water rescue, purchase a pair of hard sole, zip up dive style boots. These boots should be donned prior to entering the water.

Wetsuits in several different sizes and styles are available at some of the stations, and will assist in keeping personnel warm during times of cooler water temperatures or prolong exposures. Wetsuits will be purchased and assigned to PWCs as they can be budgeted for. It is highly recommended that personnel working at stations that perform water rescue purchase a wetsuit. It is recommend that personnel don a wet suit when water temperatures are below 80 degrees F or if personnel anticipate being in the water for an extended period of time. Wet suits also offer protection from getting scraped up against pilings as well as protecting against orifice injuries encountered during high speed PWC operations. Wet suits also provide a sufficient amount of floatation often eliminating the need for a life jacket. Remember rescuers needing to submerge themselves to extract a victim might encounter great difficulty while wearing a wetsuit.

All personnel operating or riding on PWCs shall wear a personal floatation device (PFD). These may be the standard life jackets or an inflatable style PFD. The inflatable style is

Rules, Policies, and Guidelines

4100.055

Revised:

Watercraft Response For Surf Rescue

Implemented: 11-22-10

## James L. Sanders

, Fire Chief Page 3 of 8

preferred for the rescuer on the sled so he or she can easily submerge in the event a victim is found underwater. PFDs should be properly secured prior to beginning a rescue or training operation. The rescuer on the sled should considering wearing mask, fins and snorkel. This will help rescuers not only swim with more power, but will aid in keeping the surf out of the rescuers face and allowing them to see underwater.

Proper Watercraft response helmets shall be worn at all times by the rescuer and the PWC operator. The helmet shall be buckled and adjusted to proper fit.

All personnel operating on the water or beaches should keep in mind the harmful effects of the sun and dress appropriately. This should include having sun screen, hats and sunglasses. Additionally personnel should take into consideration the possibility of being stung by jellyfish or sting rays while performing water rescue. This is sometimes unavoidable, but rescuers can wear a thin skin on days where jelly fish are reported to be heavy.

- One Rescue board should be on one of the water rescue response vehicles.
- During night operation, there will be lights on all PFDs
- The PWC shall carry two soft buoys. One should be attached to the rear of the driver's seat and one attached to the rescue board. These buoys allow the rescuers to facilitate assistance of multiple victims in the water. Each PWC shall also be equipped with a small rope bag containing at least 60'of approved water rescue rope.
- There shall be three starter keys assigned to each PWC. The PWC driver and rescuer shall have a starter key attached to their PFDs. The remaining starter key shall be attached to the PWC.
- All first out Firefighting Apparatus in the designated water rescue districts shall carry two soft buoys on the apparatus in case a call for water rescue assistance is requested when the PWCs are not in service.
- The designated water rescue response vehicle in the designated water rescue districts shall carry a set of approved water rescue fins and fin belt.

As with any PPE, your gear will be checked at the start of each shift. Assure all buckles, straps, and zippers are functioning properly. Any equipment not meeting standard will be removed from service until repairs are made or a replacement is acquired.

Rules, Policies, and Guidelines

# 4100.055

Revised:

Watercraft Response For Surf Rescue

Implemented: 11-22-10



## James L. Sanders

Fire Chief Page 4 of 8

### **Water Operations**

Upon arriving on scene, and making a size up the company officer will determine if there is a need to enter the water. However, it is up to the discretion of the PWC operator whether the water conditions are safe enough to operate the PWC. Several situations may warrant either getting into the water or launching one or both of the wave runners. These situations may include, but not limited to: A swimmer in trouble, an overturned boat, a boat that has been involved in an accident, a boat on fire, or to search for a drowning victim or victims. Fire/Rescue may also possibly be called to assist local law enforcement agencies. Each situation poses unique and challenging circumstances.

Swimmer in Trouble - National statistics have shown most ocean drowning occur not more than 40 yards from the beach. However in the presence of a strong rip current, this may become a couple hundred yards very quickly. The first arriving unit should attempt to spot just in front of where the victim was last seen; this will provide for a land reference during operations. In the interest of safety, the rescuer or rescuers should always minimize their exposure as much as possible to the water, and practice the reach, throw, row, and go strategies of water rescue. This simply means if you can not reach the victim or victims, then you should attempt to throw some type of floatation device on a rope. The PWC operator may utilize their buoy not only by throwing to a conscious victim while the rescuer utilizes their buoy for rescue of an unconscious victim, but the operator could also use their buoy as an extension of their arm as a technique to pass the rescuer and/or victim directly onto the rescue board. In the event this fails a rescuer will then have to enter the water. A rescuer may deploy several options; however he or she must always have with them a rescue tube or can before entering the water. A few options are swimming out to the victim, deploying the rescue board, deploying a PWC or all of the above. Our goal is to reach a victim or victims and keep them afloat until additional help can arrive. During these cases it is highly advisable that the rescuer wear swim fins. Remember, victims are usually panicking and may appear as though they are trying to drown the rescuer; however, they are attempting to remain on the surface of the water. If at all possible victims should be contacted from behind. If the victim is conscious simply extend the device out to victim and allow him or her to grab hold of it. In the event a victim gets a hold of a rescuer, the rescue should simply submerge him or her self to escape the victim, then off swim and re-engage. Rescue personnel should know and use basic hand signals to communicate between rescuers on the shore and those in the water.

**Boat Accidents, Overturned Boats, or Boats on Fire** - In any of the above situations it is our mission to rescue those in the water, and bring them safely to shore. In most situations this will require deploying one or both PWCs with the sleds.

**Drowning** - In the event arriving units arrive on scene and bystanders report a victim or victims are missing, a quick search and recovery should be undertaken. This effort should consist of an intense 15-20 minute search using any means possible. This should include deploying both PWCs calling either Life Flight or the Navy for aerial reconnaissance and

Rules, Policies, and Guidelines

4100.055

Revised:

Watercraft Response For Surf Rescue

Implemented: 11-22-10



## James L. Sanders

, Fire Chief Page 5 of 8

having the Coastguard, and FWC respond. After 15-20 minutes of searching without success, and confirming someone is actually missing, the IC will contact dispatch for additional assistance. This may include, but is not limited to: ESAR, ECSO, Navy FD, Battalion Chief, Coast Guard and the FWC. In addition the IC should continue to get more information regarding a physical description including clothing and the last place the victim was seen. This is very important since many victims are found walking along the beach. Depending on the visibility of the water it is possible to spot a submerged victim from the air or from the water if the rescuer is wearing a mask or goggles. In the event of a drowning at a guarded beach, lifeguards have been trained to remain in the water in the area the victims were last seen. The lifeguard will then place both arms over his head declaring a code "X" the sign for a missing victim. Responding rescue personnel should respond to the guard's position and deploy basic search patterns.

### **Night Operations**

Many times aquatic emergencies happen at night, this can include but not limited to drowning, boat accidents, boats in distress and so forth. Anytime personnel operate at night, whether on a water rescue call, a vehicle accident or a fire, there are inherent dangers to operating in the dark. This will require personnel to be extra cautious. Although our PWCs are not equipped with Coast Guard approved running lights, we may have to as a last resort or as a first response deploy them in order to save a life. In these situations, the Coast Guard does make provisions for using unlighted craft, but this is strictly for emergencies. Each PFD should be equipped with a waterproof battery powered strobe light; these lights are to be turned on and worn by personnel entering the water at night. This will at least offer some type of recognition for those in the water. Personnel operating off of the PWCs, should carry with them one of the hand held search lights located on the squad or engine. Thermal Imaging Cameras can also be used at night to locate victims in the water, providing some part of them is above the surface.

Except for operating in dark, water rescue operations at night will not change. There will be the logistics of dealing with communications as addressed in the next section, but when operating at night personnel will have to almost completely rely on radio communication.

#### **Communications**

A communications system should be initiated prior to beginning a search or a rescue.

**Hand Signals** - water rescue personnel should become familiar with basic hand signals. These are:

One arm or both arms in the air with hands touching head- Rescuer okay One arm straight up in the air- Assistance needed One arm in air waving side to side- Resuscitation needed Arms crossed overhead (code "X" signal)- submerged swimmer.

Rules, Policies, and Guidelines

4100.055

Revised:

Watercraft Response For Surf Rescue

Implemented: 11-22-10



## James L. Sanders

, Fire Chief Page 6 of 8

These basic hand signals will be used between rescuers in the water and rescuers on the shore. The rescuer in the water will give the initial signal upon making contact with a victim. The rescuer on the shore will respond with the same signal acknowledging receipt of their signal. In addition to these basic hand signals, the rescuer on the shore can also help direct the rescuer in the water towards his/her victim. This can best be accomplished when the rescuer on shore can somehow elevate his or her self. The shore rescuer should then obtain a fix on the victim. Using one of the yellow rescue tubes, wave it in the air the direction the rescuer in the water needs to go.

Radio Communications - Upon doing a muster at the beginning of a water rescue, the company officer should determine a common channel. The radios in the trucks, as well as our portables are equipped with 3 marine frequencies. These frequencies are Marine 16, 22, and 23, but many times these frequencies are occupied by other boaters and the Coast Guard, so an alternative channel may have to be found. If the IC will relay what marine channel fire rescue is working on to dispatch, they will notify USCG and other responding agencies. Ideally the company officer or incident commander on shore would want to have 2 separate radios, one he or she can communicate directly with the rescue crew in the water and another he or she can use to communicate with dispatch. Our portables are only 5 watt transceivers, so there range is limited to only 3-5 miles under ideal conditions. Crews are not equipped with waterproof radios, so it is mandatory that radios used on the PWCs be placed in one of the waterproof bags and affixed to the rescuer to prevent them from becoming lost or damaged.

**Special Note** - When speaking to the Coast Guard, we will identify ourselves, as Escambia Fire Rescue. In addition when hailing the Coast Guard it will be backwards, from what we are accustomed to. Example: "Coast Guard Pensacola Coast Guard Pensacola this is Escambia County Fire Rescue on channel 16 over". They will in turn reply "Escambia County Fire this is Coast Guard Pensacola on channel 16 over" You should then state your radio traffic, starting your transmission out with "Coast Guard Pensacola, this is Escambia County Fire, we are responding to a boat accident in the ICW at the Bob Sikes Bridge, and will be monitoring this channel over" They should reply and possibly ask to switch channels, since channel 16 in a primary hailing channel. In addition the Coast Guard may ask for a cell phone number so they can make a land line contact.

#### **Maintenance**

The PWCs along with all water rescue equipment shall be kept in good working order. This shall include but not limited to:

Rules, Policies, and Guidelines

### 4100.055

Watercraft Response For Surf Rescue

Implemented: 11-22-10



## James L. Sanders

Revised: , *Fire Chief* Page 7 of 8

## **Daily Checks**

- Morning start-ups-kill switch lanyard on PWC
- Batteries charged
- Fuel/Oil levels
- No fuel leaks- Engine compartments ventilated.
- Air in trailer tires- All straps tight and in good working order-PFDs and rescue tubes attached to PWC.

## **Weekly Checks**

- In addition to above each PWC should be hooked to water and run outside for a brief period.
- During the summer months every effort should be made to run PWCs under a load once a week.
- Batteries shall be checked for proper water level

#### **Post-Usage Checks**

- After each use PWCs are to be run and flushed with fresh water for 5-10 min.
- Wash with soap and water and rinse out any sand in the intakes
- Prior to storing, fuel and oil levels should be checked and topped off as needed.

### **Training**

Every effort should be made to make training progressive, realistic and ongoing. This should not only involve using the PWCs, but should also include one-on-one rescues. One of the best sources of training ideas are actual incidents encountered, identifying any problems, and making adjustments to make the rescue efforts smoother. Considerations should also be given to training during rough surf days. Efforts should be made to incorporate physical fitness into training as it pertains to water rescue. This should include swimming using various styles such as freestyle, side stroke and the use of swim fins. Water rescue personnel should make an effort a minimum of once a week to conduct a 500 meter non-stop swim focusing on keeping their time around 10 minutes. In addition, rescuers should work on 50 and 100 yard sprints.

## **One-on-One Training**

- Buoy Drills using the rescue tubes and cans (conscious and unconscious victims), rescuer swimming to an object in the water as it drifts.
- Removing victims from the water (conscious and unconscious victims) 1 and 2 rescuer carries. Spinal immobilization while patient is still in the water.
- Escape techniques
- Communication using hand signals.

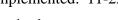
James L. Sanders

Rules, Policies, and Guidelines

## 4100.055

Watercraft Response For Surf Rescue

Implemented: 11-22-10



Revised:

, Fire Chief Page 8 of 8



## **Wave runner Training**

- Operating squads on the beach. Launching and recovering PWCs.
- Backing a trailer
- Getting on and off of the PWC while it is in the water.
- Attaching the sled or basket
- General maneuvering ovals, circles, figure 8's and quick turns.
- Getting out through the surf and returning.
- Dropping off and picking a crew member.
- Conscious and unconscious victim rescue.

#### **Individual Training:**

- All members assigned to a station performing water rescue will be required to maintain the following:
  - Annual physical
  - o Participate in all water related training