JOINT STANDARD OPERATING PROCEDURE FOR WATER SURVIVAL AND PARASAIL TRAINING

PURPOSE: This Joint Standard Operating Procedure (JSOP) provides overall guidance for administering water survival training outlined in USAF AETC Syllabus S-V86-A and USN Aviation Water Survival Training. Course N6 (9F7 Open Water Parachute Descent Training Device (Parasail)). It establishes certain instructions and procedures for the 9F7 Open-Water Parachute Descent Training Device system including the operation and deployment of the dual-purpose tow and pickup watercraft and launch vessels.

1. RESPONSIBILITIES:

a. USAF 17th Training Squadron (17 TRS) Commander and USN Commanding Officer, Naval Aerospace and Operational Medical Institute (NAMI) are responsible for the overall operational conduct of the Joint Water Survival Training.

b. USAF 17 TRS Operations Officer and NAMI Water Survival Department Head (Code 34) supervise activities which lead to the timely conduct of joint water survival training. They are responsible for the quality of training, acquisition and maintenance of training aids, and the overall safety of the course.

c. USAF 17 TRS Operations Officer and NASP Port Operations Officer manage watercraft operations supporting joint water survival training. Port Operations is responsible for providing boats and qualified personnel for use during training. Each MonArk boat crew will consist of, as a minimum, a Coxswain and an Engineer. Each launch vessel crew will consist of as a minimum a Coxswain, Engineer, Mate, and a Line Handler (LH). Each individual will have completed the applicable Job Qualification Requirements (JQR).

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NAMI

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d. Supervisor Of Water Operations (SOWO). The SOWO is appointed by, and is directly responsible to the 17 TRS Operations Officer and NAMI Bay Operations Department Head. The SOWO has overall command and control of all aspects of operational water survival training. All personnel, including civilian employees, will comply with the directions and guidance provided by the SOWO concerning watercraft operations to ensure safe, timely, and professional conduct of student training. The SOWO coordinates with the Launch Controller (LC) and Package Controller (PC) for accomplishment of training objectives. The SOWO is given the final authority to approve or disapprove visitor observation of student training aboard any of the assigned watercraft.

e. Package Controller. The skipper of the launch vessel who directs the dispatch of watercraft to accommodate the efficient conduct of water training.

f. Launch Controller. A qualified USAF Water Survival Instructor or USN staff member appointed to schedule, supervise, control, and conduct operational water training. The LC is primarily responsible for coordinating student training flow.

(1) The USAF LC will:

(a) Ensure students are properly equipped for operational training.

(b) Ensure each student is thoroughly briefed and follow established procedures and policies.

(c) Closely monitor all aspects of training to ensure safe mission accomplishment to include drop and drag, parasail, and helo hoist training.

(d) Closely monitor the deck crew coordination during parasail operation to ensure safe mission accomplishment.

(e) Ensure the applicable student training limitations in this JSOP are complied with.

(f) Ensure student training is maximized by providing alternative training inputs to the SOWO during adverse conditions.

(g) Provide observations on effectiveness and efficiency of parasail operational training to the SOWO.

(2) The USN LC shall:

(a) Ensure all trainees are in a medically "up" status.

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(b) Ensure students have met prerequisites and training objectives.

(c) Muster students and provide an exact count to the SOWO prior to the safety briefing.

(d) Ensure students are properly wearing all personal survival equipment required for parasail training (boots, flight suit, oxygen mask, gloves, helmet, torso harness, seat pack, and inflated LPU).

(e) Ensure each student is thoroughly briefed and is fully aware of procedures/policies.

(f) Ensure all safety procedures/policies are followed.

(g) Ensure launch platform and tow boat are heading "into-the-wind" prior to each launch.

(h) Upon SOWO approval, begin operation by launching the demonstration descent.

(i) Ensure canopy is properly inflated and rigged prior to each launch. Verify proper attachment of the safety hook.

NOTE: No one will be launched without properly attached Safety Hook.

g. Medical Personnel. A USN Corpsman is assigned by NAMI to treat environmental and traumatic injuries which may occur during training. Corpsman must be certified and current in CPR and First Aid. The Corpsman will be evaluated and recommended by a qualified hospital corpsman for approval by the NAMI Bay Operations Department Head. The Corpsman, if appropriately qualified may be tasked by the LC to assist in student training activities that do not impair their abilities to respond to medical emergencies. The corpsman shall:

(1) Be familiar with all emergency medical procedures in the Water Survival Department Pre-mishap Plan.

(2) Have all emergency medical first aid equipment required aboard the launch vessel.

(3) Provide emergency medical assistance for injuries and determine if the injury warrants further medical attention.

(4) Perform the duties of recorder.

(5) Review the AF students medical records. This review should look for a current 1042 (up-chit) for flyers or SF600 entry clearing non-flyers for water survival training.

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(6) All students should fill out the NAWSTPI Student Screening Sheet. It will be initialed by the reviewing corpsman. If there is any problem noted, (i.e. lack of SF600, non-current 1042 or recent medical problem) the student should be referred to NASP Flight Medicine Clinic for evaluation (up-chit).

h. Instructor. Course certified USAF Survival Instructor or Navy Instructor assigned duties other than LC.

i. Rescue Swimmer. The Rescue Swimmer must be a graduate of a CNO approved Rescue Swimmer School and maintain a valid 8215, 7815 NEC or equivalent Surface Rescue Swimmer NEC. They must also have successfully completed the appropriate sections of the NAWSTP JQR. The Rescue Swimmer shall:

(1) Complete Rescue Swimmer JQR.

(2) Ride in their assigned pick-up boat throughout the training evolution.

(3) Refrain from coaching student. Allow student to complete procedures.

(4) Be equipped and ready to provide immediate assistance to the student in the event of injury or equipment failure.

(5) Have available the following equipment:

(a) Divers mask, snorkel, and swim fins.

(b) SAR-1 Vest.

(c) Knife and shroud cutter.

j. Recorder. Any individual who has completed the parasail JQR, recommended by a qualified recorder, and evaluated/designated by the Bay Operations Department Head. The recorder shall:

(1) Maintain the class roster.

(2) Maintain the parasail status.

(3) Check student equipment prior to student going to the launch area. Ensure student has donned the equipment properly and LPU is fully inflated.

2. GENERAL PROCEDURES:

a. Training schedule inputs need to be submitted to 17 TRS/CCV by close of business Monday each training week.

b. The Navy N-6 students shall receive:

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(1) One open-water parachute drag (optional).

(2) One parasail descent (two if student load permits).

c. The AF S-V86-A students shall receive:

(1) Four open-water parachute drags (2 front 2 back).

(2) Three parasail descents (2 without seat kit, 1 with seat kit).

(3) Twenty-man life raft training (approximately 90 minutes).

(4) One-man life raft training (approximately 90 minutes).

(5) Helicopter hoist training.

(6) Parachute jump demonstration.

(7) Helicopter hoist demonstration.

d. The minimum required for USAF students:

(1) One open-water parachute drag (front and back).

(2) One parasail descent.

(3) Twenty-man life raft training.

(4) One-man life raft training.

e. Watercraft assignment required support:

(1) S-V86-A and N-6 will normally consist of one launch vessel, three tow boats and three pickup boats.

(2) The following personnel must be assigned for every water package: SOWO, Corpsman, LC, and PC.

(3) The SOWO, LC, and PC will coordinate any changes to the watercraft assignment.

f. All Navy student training shall begin with an audiovisual and/or slide presentation and classroom lecture.

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g. The actual sequence of training may be modified with consent of the LC, PC, and SOWO due to extenuating circumstances such as class size, facility limitations, weather conditions, etc.

3. OPERATIONAL WATER TRAINING:

a. Training is conducted on Pensacola Bay. Every effort will be made to accomplish all S-V86-A operational training requirements in two days, usually Thursday and Friday of each week. However, adverse weather or equipment breakdown may result in training delays.

NOTE: The backup day for USAF water survival training will be Saturday.

b. The LC and PC are jointly responsible for the safe conduct of operational water training. The LC will:

(1) Contact the base weather forecaster immediately prior to the start of operational training to obtain the most accurate weather information. If weather conditions are marginal, the PC should dispatch a MonArk to determine current conditions in the training area

(2) Modify the training schedule as necessary. Keep the PC and SOWO informed of schedule changes.

c. The corpsman will assist the LC as requested to determine actual water temperature, wind speed, and wind chill equivalent on scene. The corpsman and all instructors will closely monitor students for signs of hypothermia or heat stress and will notify the appropriate training supervisors ASAP.

d. The SOWO closely monitors all aspects of the operational training package and has the authority to intervene at any time to ensure the syllabus training is safely achieved. The SOWO will notify the 17 TRS Operations Officer, NASP Parasail Support Division Officer, and NAMI Bay Operations Department Head as soon as practical of any applicable schedule changes.

NOTE: Due to the inherently dangerous environment in which water operations is conducted, it is imperative that all personnel are able to carry out their duties at peak performance levels. To ensure mission effectiveness, the following are specified limits on consumption of alcohol and crew rest.

(1) Each member actively involved in the water package will not participate in water operations/training within 12 hours after consuming alcoholic beverages.

(2) All personnel involved with the training package must be allotted 10 hours crew rest prior to water operations.

NOTE: If at any time during the training exercise a student does not desire to continue, the student will be excused and directed to the Primary Instructor for further evaluation and counseling. Training Time Out (TTO) procedures are to be utilized for all students.

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4. HAZARDOUS ENVIRONMENT TRAINING OPERATIONS:

a. Hot Weather:

(1) During hot weather, the assigned corpsman will monitor the Wet-Dry Oxford index (WD) and notify the LC when the WD exceeds 86 degrees. At this time, a heat stress watch is in effect. The LC will brief students on preventive actions and then monitor all personnel for heat stress signs and symptoms.

(2) If any symptoms of heat stress are observed, the corpsman will be immediately notified.

(3) Additional information is contained in DO OI 44-1, Prevention and Control of Heat Stress Casualties.

(4) Drinking water will always be available on the launch vessel.

b. Cold Weather:

(1) Water training (bay) will be canceled or delayed if the ambient air or wind chill temperature is at or below 35 degrees Fahrenheit (F). Water operations will be canceled or delayed if water temperature falls below 40 degrees F. The SOWO will use the wind chill factor chart (atch 7) to determine the wind chill factor.

(2) Normally, cold-weather conditions occur between October and March. Impact on training can be reduced if students use anti-exposure suits and limit their exposure time. Monitor students for possible overheating symptoms on sunny days while wearing anti-exposure suits.

(3) Use of anti-exposure suits and wet suits.

(a) (AF) When the ambient air temperature is 70 degrees F or less and the winds are forecast greater than 10 mph, students will wear anti-exposure suits during operational training. When water (surface) temperature drops below 60 degrees F, anti-exposure suits will be worn with wet suits. **NOTE: Wet suits are an optional item when water temperature is above 60 degrees F or wind chill temperature is above 50 degrees F.**

(b) (USN) Students will wear anti-exposure suits or wet suits when water temperature is below 60 degrees F or the wind chill is below 50 degrees F.

(4) Between 1 October and 30 March, each pickup boat will carry one blanket or poncho per student provided by the Air Force. Also, USN Bay Operations Support Personnel will ensure warm fluids are available on the launch vessels.

(5) The SOWO, LC, and PC will analyze the situation and modify training to safely meet minimum syllabus objectives.

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c. Thunderstorms: The SOWO, LC, and PC will use all available resources as necessary to determine the location, intensity, and direction of movement of thunderstorm activity. Special attention must be given to fast-moving thunderstorms associated with frontal activity.

d. Lightning:

(1) Lightning strikes are a serious hazard. The NASP duty forecaster is required to notify 17 TRS/SOWO when lightning strikes are within three miles; however, these notices often come after-the-fact. Additionally, this notification may not cover the entire operational area.

(2) LC, PC, and SOWOs will use the following guidance to reduce the risk of lightning strikes:

(a) PC will ensure at least two vessels have operational radar for all water packages. During periods of potential thunderstorm activity, the PC will obtain frequent updates of radar information from radar equipped boats (the most accurate radar information is available from NAS Weather). When hazardous weather activity is within five miles of the training area, the PC will immediately inform the LC and SOWO.

(b) Personnel will immediately pass thunderstorm and lightning advisories received to the PC, LC, or SOWO.

(c) All operational water training activities will be stopped when thunderstorms and lightning are within three miles. Ensure all students are out of the water and transported to the launch vessel. This "weather hold" will continue until it is safe to resume training. If the launch vessel has already departed, students will quickly be recovered by all available vessels.

(3) The SOWO, LC, and PC will use the following to determine relative lightning distance. The lightning distance may be computed by counting the seconds between the lightning flash and the following thunderclap and dividing the number of seconds by five (5). The resulting figure is the distance in miles, i.e. 15 seconds equals 3 miles.

e. Waterspouts:

(1) A waterspout is caused by a tornado or whirlwind over water and results in a whirling column of spray and mist. Even a moderately sized waterspout may pose a significant safety hazard.

(2) When thunderstorms are present, a waterspout hazard exists. When waterspouts are sighted, all training stops and all students will be transported to the launch vessel. The PC will maneuver the launch vessel to avoid the waterspout. If the launch vessel is not on scene, assigned vessels will recover students and take evasive action.

(3) The SOWO will direct resumption of training when safe.

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f. Reduced Visibility:

(1) Training will be suspended when inclement weather reduces visibility preventing the SOWO, LC, or PC from being able to see all training. Regardless of the operational training phase, student location and performance must be observed.

(2) Training may resume once the weather clears.

5. PRE-MISSION CHECKLISTS: Checklists will be accomplished at least 20 minutes prior to mission for all boats supporting the water package.

a. The launch boat will be easily and safely accessible for student boarding at approximately 20 minutes prior to dock departure. Instructor staff will supervise student boarding.

b. Pre-mission Actions:

(1) Launch Vessel:

Skipper will:

(a) Attend pre-mission briefing.

(b) Ensure pre-mission checklist is completed.

(2) Tow and Pickup Boats:

Each skipper will:

(a) Attend pre-mission briefing.

(b) Ensure pre-mission checklist is completed.

(3) Tow reel brake (on each MonArk assigned to the package) will be checked prior to each day's towing operation by letting out 600-feet of tow line enroute to the training area. Tow line will be inspected thoroughly prior to each day's use. The line will be checked for excessive wear, frays, and security of knots and splices. The bowline knot used to secure the pelican hook yoke to the tow line will be inspected daily and retied as necessary. The tow hooks must be free of corrosion, function as designed, and be in standard hookup position with handles down.

6. DEPARTURE: The launch boat will normally depart the docks for the training area at approximately 0730 on Thursday and 0900 on Friday.

7. SIGNALING, PARACHUTING, VECTORING, AND HELICOPTER HOIST DEMONSTRATION:

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a. When helicopter support is used to conduct the parachuting demonstration, the following will be accomplished:

(1) Tow Boat A departs docks 15 minutes before the launch boat to deploy a spotter raft in the center of the Drop Zone (DZ). The raft will be anchored in place with sea marker dye attached to mark its position. Tow Boat A will use sea marker dye to mark the position of streamers deployed from the aircraft.

(2) Upon arrival in the DZ, position the launch boat into the wind with the spotter raft approximately 40-yards abeam (see atch 2), or as directed by the Drop Zone Control Officer (DZCO).

(3) The PC maintains the launch boat in this position until all the parachutists (jumpers) have landed. It is the responsibility of the jumpers to maneuver as necessary to avoid contact with the launch boat. **Exception: If it is determined that the jumper has a malfunction or a maneuvering problem, the PC will take prompt action to prevent the jumper from hitting the launch boat.**

(4) The DZCO ensures the launch boat is in position and that the DZ is clear. The DZCO monitors VHF 122.9, UHF 251.9 as primary, or VHF 122.85, UHF 236.0 as backup and ensures all communication with helicopter is relayed to all vessels involved with the jumps. Vessels monitor Marine VHF Ch 74 or Ch 12 (backup).

(5) Tow Boat A recovers Jumper #3, equipment, and spotter raft after the parachute demonstration.

(6) Pickup Boat A will recover Jumper #1 and equipment.

(7) Pickup Boat B will recover Jumper #2's equipment. The jumper remains in the water and performs the vector and helicopter pickup demonstration. After completion, the jumper is recovered by Pickup Boat B.

(8) In the event of a parachute malfunction/reserve deployment, the watercraft nearest the affected jumper will be identified by radio to proceed to the jumper. All other watercraft will remain clear until they can maneuver safely to recover the other jumpers. The watercraft should be in position to collapse the canopy when necessary. All training and unnecessary radio communication stops until the affected jumper is safely aboard the watercraft.

(9) After the jumpers have been recovered, position the launch boat into the wind, approximately 40-yards abeam the demonstrator or as directed by the LC. Hold the position until the vector/signaling and recovery demonstration is complete.

b. If required, a signal demonstration will be conducted from Tow Boat A. The LC will inform the PC when the students are ready for the signal demonstration. The PC will then notify Tow Boat A, by radio, to proceed with the demonstration.

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c. Upon completion of the demonstrations, the launch boat will proceed to the training area to deploy the 20-man life raft(s). The launch boat LHs are responsible for all aspects of deployment of the raft(s). A designated AF instructor will be responsible for loading all student training equipment into the life raft(s).

8. DROP AND DRAG TRAINING:

NOTE: AF students must satisfactorily pass this phase of training before parasailing.

a. Set-up:

(1) The PC positions the launch boat for the safest and most efficient dropping of the students. The LC controls positions and releases the students from the drop and drag platform.

(2) The LHs are responsible for inspecting the equipment, assisting in connecting the parachute release to the drag yoke, holding the line to avoid student entanglement following the drop, recovering the line, and attaching the drag yoke to the drop trolley for the next student.

(3) LCs manage the students and oversee hooking up parachute releases to the drag yoke. The student is maneuvered out on the drag boom and talked into a proper water entry position. When the student is ready, the instructor nods to the LC to initiate the student's drop into the water.

(4) During this phase of training, while students are being towed behind the launch boat, Tow Boat A assumes drop and drag safety duties (see atch 3).

(5) The PC will adjust speed based on environmental conditions and input from the LC.. When support boats and students are ready, the LC will signal for drop and drag training to begin. The LC gets a thumbs up from the Drop and Drag Safety Instructor on Tow Boat A (student safety boat) before starting drag training.

(6) Tow Boat A maintains position near the stern of the launch boat and maintains an adequate and safe distance from the student being dragged to allow the safety instructor to give verbal instructions to the student. The Tow Boat A skipper and safety instructor maintain constant communications.

(7) The pickup boats will be positioned to allow student time to close parachute release safety covers before recovering them.

(8) The pickup boat recovering students dropped from port side of the launch boat will maintain position behind Tow Boat A aligned with the port side drop and drag platform.

(9) The pickup boat recovering students from the starboard side of the launch boat will be slightly behind the other pickup boat and aligned with the starboard drop and drag platform.

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NOTE: The LC will ensure that no more than three students are in the water at any one time.

b. Student Recovery:

(1) The skipper will position the pickup boat so that the ladder is within arms length, in front of student. Wait until student is on board the pickup boat before moving ahead.

(2) In the event that a student misses the ladder and slides towards the stern of the vessel, the skipper will shut down the engines in gear, to immediately stop prop rotation and will retrieve student by boat hook.

c. Abort Procedures:

(1) In the event of an abort, the PC will bring the vessel to a complete stop. An abort will be determined either by verbal notification or by sounding the abort horn. The all clear will be given by the LC. The LH reassembles the abort release as soon as the student is clear of the line and yoke.

(2) The safety boat (Tow Boat A) will immediately be maneuvered to enable the safety instructor to talk to the student, or to deploy the instructor into the water to provide assistance if necessary.

(3) When the drop and drag safety instructor is in the water, the safety boat skipper will follow his directions.

(4) The appropriate pickup boat skipper will move into position for immediate pickup.

(5) The pickup boat skipper will notify the PC by radio of student's condition.

(6) After drags are complete, the launch boat will turn down (see atch 1, Definitions) to recover students for any required remedial training, group critique, and to prepare for the next phase of training.

9. TWENTY-MAN LIFE RAFT TRAINING (AF ONLY):

a. Approach and Deployment:

(1) The pickup vessel will approach at idle speed into the wind approximately 20-feet from either side of the raft. The skipper gives clearance for the instructor to deploy students from the stern of the boat.

(2) Safety: The students will remain seated until clearance is given. The students jump clear of the transom and the students already in the water. The pickup boat will remain in the area until all students are in the 20-man life raft.

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(3) The PC keeps the launch boat far enough away from the raft so as not to interfere with raft training. Prior to student recovery, the PC will direct pickup boats to transfer training equipment to the launch boat.

(4) When indicated by the LC, or at a pre-arranged time, the PC will initiate 20-man life raft and student recovery.

(a) When Manatee 54 is used:

1 Ensure the 20-man life raft anchor is up and all lines are stowed.

2 Approach the raft with the bow into the wind and the raft on the starboard side of the launch boat.

3 The launch boat seaman will throw the heaving line to raft personnel (instructors will pull raft to launch boat).

(b) When Manatee 93 is used:

1 Ensure the 20-man life raft anchor is up and all lines are stowed.

2 Approach the raft with the bow into the wind and the raft on the starboard side of the tow/pickup vessel. Recover students from the raft via ladder.

3 The launch boat seaman will throw the heaving line to raft personnel (instructors will pull raft to launch boat).

(5) Vector training normally occurs during the 20-man life raft training. If the vector aircraft is late, the SOWO will notify NASP air traffic control tower of the time change.

10. PARASAIL OPERATIONS:

NOTE: At the discretion of the SOWO, parasail operations may occur simultaneously with vector training. The SOWO notifies the vector aircraft pilot of intentions and approximate location. The vector aircraft must remain clear of the parasail operational area.

NOTE: When directed by the LC, USAF students will parasail with a seat kit and remain in the water for the one-man life raft exercise and helicopter pickups. The PC will move the launch boat at a slow forward speed so that the tow and pickup boats will not be required to maneuver through the student line in the water. This will separate students for upcoming helicopter pickups. Parasails will be recovered and students will remain in the water with their equipment.

a. Parasail operations will be directed from the launch control vessel. The safety of the students is paramount during parasail operations. The SOWO contacts and maintains two way

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communication with NASP tower before starting parasail operations. Parasailing will be conducted at or below 500-feet Mean Sea Level (MSL) and remain within the designated training area.

b. Primary considerations for this training are boat position, wind direction, shipping channels, and shallow water.

c. Prior to launching parasails, the PC will:

(1) Determine general wind direction and velocity.

(2) Advise all MonArk skippers, the SOWO, and LC.

(3) Position and hold the launch boat with the bow into wind.

(4) Hold the launch boat as stationary as possible to aid in tow boat alignment and deployment of tow line.

d. Approach and tow line deployment: As the tow boat approaches the launch boat, the safety observer waves the flag until the student gives a thumbs up, then the tow reel operator heaves the tow line to the hook catcher. The tow line is secured to the bow hook and the tow boat skipper aligns the vessel heading directly into the wind.

e. The assigned hook catcher will be responsible for catching the tow hook assembly, passing the assembly to the hookup crew, and securing the line to the bow hook with a clove hitch while ensuring adequate slack is provided to hookup the student.

f. The tabbers lay out the sail, the port side tabber takes the releases to the hookup instructor (HI). The HI straightens the parasail lines, while both tabbers spread the sail on the screen. The port side tabber and HI connect the safety hook and releases to the student; then they connect the tow hooks to the V-rings on the parasail risers. The HI performs a final safety check on the student and tells the LC the student is ready to parasail.

g. Launch boat signals and commands:

(1) Thumbs up by the hookcatcher to the tow boat skipper: Tow line secure on the bow hook.

(2) "Safety" by the HI: student is ready to parasail.

(3) "Roger safety. Canopy" by LC: acknowledge safety check, tabbers inflate parasail on the screen.

(4) "Canopy's up, hook's coming down" by LC: parasail is inflated, LC gives thumbs up to the tow boat skipper, indicating student is ready to tow. Tow boat skipper returns thumbs up, indicating ready to tow.

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(5) "Hook is down" by LC: bow hook is down, tow line is free, tow boat powers up, LC gives wave-off signal to tow boat.

h. Hand Signals:

(1) One-hand forward motion by LC: move ahead with sufficient speed to take all slack out of the tow line.

(2) Two-handed forward motion by LC: slack is out, parasail clear of the screen.

i. Flag waved by LC: abort.

j. The first parasailer will be a demonstration ride performed by a USAF instructor (for AF students) or NAWSTP instructor, a rescue swimmer, or an N-6 graduate (Navy students). IAW reference (c), Bay operations personnel may act as the demonstration rider (Navy students) upon completion of the following training: N-3 curriculum modified to include devices 9H1, 9F2, and 9F6. The Demonstration Rider shall demonstrate to the students:

(1) The proper pre-launch procedures (i.e., stepping up to the designated area, acknowledging signal flag, and reciting descent procedures).

(2) Proper ride position.

(3) Walking-in-place prior to and walking forward during launch.

(4) Proper release of tow line.

(5) Proper descent procedures.

k. Parasail Launch. When it has been determined that it's safe to launch, the LC will drop the launch hook and initiate the launch of the parasail. NOTE: **This is the most critical period of the launch. The PC must be prepared to move the launch boat at once to take evasive action in the event of an aborted launch.**

l. To insure the safety of the parasailer, the tow boat, and students already in the water, a safety observer will be positioned on the tow boat to monitor it's direction of travel and to warn the tow skipper of any dangers existing in the vessels path. Under normal crew conditions, this will be the tow vessel engineer.

m. The tow boat skipper, on (two-handed) wave-off signal from LC, will advance the throttles in a manner to cause the parasailer to climb while under tow. During this phase, the tow skipper will closely monitor the parasailer, making necessary corrections to speed and heading. **If other students are in the water, the tow skipper must know the position of students in the immediate area before beginning tow.**

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n. Upon receiving the two-handed wave-off signal from the LC, the tow reel operator will, in a loud clear voice, tell the skipper "I've got him/her." The tow reel operator will also give a thumbs up.

o. Tow reel and brake procedures. After giving thumbs up "I've got him/her," the tow reel operator will gradually let out 600- to 700-feet of line and give a thumbs up. The tow reel brake will be applied just after the skipper decreases engine RPM. Then the skipper proceeds forward pulling the parasail to altitude. After the parasailer has reached maximum height as determined by the tow skipper, the skipper will initiate the disconnect sequence by reducing power to idle. As soon as engine RPM reaches to idle, both engines will be reversed. The tow reel operator will, as soon as boat speed falls off, release brake on the tow reel, allowing line to play out. With sufficient slack in the line, the safety observer/flag waver will wave the green flag to signal the parasailer that it is safe to slap away. After the parasailer has slapped away from the tow line and the line is retrieved, the tow boat will return to the launch boat and stand by for the next launch.

**** NOTE: Specific instructions for handling the parasail while airborne will not be discussed here, as each launch varies. When training new operators, sufficient tows will be made under varied weather conditions to ensure that the trainee is well versed in the skills of towing a parasail.**

p. A pickup boat must never force the tow boat to slow or alter course while towing a student. Never cross under the tow line attached to the parasail. **The tow boat has the right-of-way while towing.**

q. The pickup boat position for parasail launch will be as follows:

(1) Behind and to the port or starboard of the launch boat, or as directed by the PC prior to student launch.

(2) The pickup boat skipper will position the vessel so that the student parasailer can be observed from launch to water entry. The standoff distance from the airborne student will be determined by prevailing weather conditions.

(3) The watercraft will enter the student's drop zone as soon as it can be determined that the student will not come in contact with the vessel during descent. The skipper will ensure the vessel is positioned in a manner which normally allows the student to be reached within 30 seconds.

(4) A USN Rescue Swimmer will be onboard for all USN student training.

(5) Recover the parasail as soon as safely possible.

r. Rolling parasails. The pickup boat sailroller assigned by bay operations and engineer will be responsible for recovering and rolling the parasail.

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s. The instructor onboard the pickup boat observes the student's descent, and the students checklists procedures. Once the student is recovered, the instructor critiques each student's performance and is responsible for overall student safety while they are on board the pickup boat.

t. In the event of entanglements or maintenance problems, the pickup boat skipper will notify the launch vessel of the delay.

u. All pickup boats may rotate to the safety boat position (behind the launch boat) anytime three pickup boats are required. In this position, the safety boat is responsible for recovering any aborts. All pickup boats will recover an equal amount of parasails by rotating in and out of the safety position (Pickup Boat C establishes the rotation schedule).

v. MINIMUM WIND LAUNCHES:

(1) If the prevailing wind speed is so low that the student will likely go into the water upon launch, or that the parasail will not stay inflated on the screen, special procedures can be utilized at the discretion of the PC, LC, or SOWO.

(2) The launch boat can be moved forward at a slow speed to aid inflation and provide lift for the parasail. The PC will notify all boats, SOWO, and LC of this action.

(a) As soon as the LC's two-handed wave-off signal is given and it appears the parasail will safely launch, the PC will return engines to idle.

(b) Extreme care should be taken with this maneuver. The safety of the student is the primary concern at all times.

(3) The SOWO, LC, or PC may request one of the launch boat crew to hold up the top of the parasail while it's on the screen.

w. HIGH WIND CONDITIONS:

(1) The most critical phase of parasail operations is during the launch. The student, under ideal conditions, should be gently raised from the launch deck in a straight line; however, an improperly adjusted parasail harness or a poorly trimmed parasail can result in unusual flight characteristics. This, combined with high winds, wind sheer, poor tab, and misalignment of the launch and tow vessels, can cause a faulty launch and create a potential safety hazard.

(2) The PC will ensure the launch boat maintains a heading within 5 degrees of the wind line.

(3) The PC will inform the SOWO and LC of steady wind speed and gusts. The SOWO will ensure parasail launches are not accomplished when winds are in excess of 23 mph.

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(4) Under high-wind conditions, when the parasail remains inflated after contact with the water, the students will be given sufficient time to release the parasail. If the student is unable to disconnect, and the parasail remains inflated, the pickup boat skipper will approach close enough to the parasail so that it can be collapsed from the pickup boat.

(5) A weather hold should be established when indicated steady winds reach 23 mph. Occasional gusts in excess of 23 mph do not necessarily require the establishment of a weather hold. Gust frequency, strength, and parasail handling characteristics all affect whether training can safely be conducted. If winds have changed significantly since the parasail demonstration, or the students' first parasail ride, the LC may consider sending up an experienced instructor on a "test sail" to determine current parasail flight characteristics.

x. ABORT PROCEDURES:

(1) Any crew member observing a dangerous situation may initiate an abort.

(2) The tow reel operator maintains brake pressure until the student is clear of the launch boat. When the student is safely clear of the launch boat, the skipper turns into the wind and backs down to allow the student to enter the water. The tow reel operator will slowly let the line out until the student is in the water and the sail collapses.

(3) The disconnect flag is then waved to indicate to the student that it is safe to slap away the tow hooks.

(4) The PC will monitor the students in the water, ensuring that boats respond quickly to all distress signals, and all other boats operate safely in the student's water entry area.

11. PARASAIL OPERATIONS COMPLETION:

a. The PC will inform all boats when the last student is on deck.

b. The PC will coordinate with the SOWO and LC for any additional training requirements.

c. Upon completion of the parasail operation prior to the USAF one-man raft exercise, the PC will give new boat assignments, normally as follows:

(1) Tow Boat A - Control.

(2) Tow Boat B - Package Safety.

(3) Tow Boat C - May return to docks if not needed.

(4) Pickup Boat A - Raft and student recovery and helicopter safety.

(5) Pickup Boat B - Same as Pickup Boat A.

(6) Pickup Boat C - Same as Pickup Boat A.

d. Boats not needed for remaining water training may return to docks at the discretion of the PC, LC, and SOWO.

e. Tow Boat A will pick up the SOWO, Training Supervisor, and Corpsman and assume control boat duties. At this time Tow Boat A becomes Manatee Control. Tow Boat A will position on the first student to be recovered.

f. Pickup boats will come along side launch boat as necessary to off-load training equipment and personnel.

g. Pickup Boats A, B, and C will position themselves at the downwind side of the water package as directed by Manatee Control.

(1) Tow Boat B will act as package safety boat and remain at the upwind side of the last student.

(2) All personnel will be alert for students in distress. Any person seeing a distress signal or a civilian watercraft in the immediate training area will notify the PC. The PC dispatches a boat to assist the student or to divert civilian watercraft away from the training area.

12. HELICOPTER HOISTS:

a. Package control boat (Tow Boat A) will be identified by leaving its flag displayed. The control boat shall guide the helicopter from one student to another and ensure students are prepared for helicopter pickup. All personnel should observe helicopter actions for any safety problems. The LC keeps in constant radio contact with the helicopter.

b. Position pickup boat at the one-three o'clock position of the helicopter, out of the rotor wash area, no closer than two rotor lengths from the helicopter.

c. If a student has a problem getting on or off the pickup device, the pickup boat instructor may need to get into the water to assist. The pickup boat skipper should request permission from the control boat to move in as close to the student as safely possible so the instructor can disembark and assist the student. The pickup boat should move in and out as quickly as possible.

d. All pickup boats will rotate at recovering students and equipment following each helicopter pickup. The skipper will maintain an accurate head count of the students recovered. The skipper will wait for clearance from the control boat prior to returning to the docks.

e. AF Instructor Responsibilities:

(1) Ensure pickup boat skipper positions the boat no closer than two helicopter rotor lengths from the helicopter. NOTE: Outside the rotor wash.

(2) Monitor student performance. If necessary, enter the water and assist the student. Ensure student performs correct pickup procedures. Seat each student on the pickup boat and critique their individual performance.

13. DEPARTURE FROM TRAINING AREA. After all the students have been picked up and counted, the control boat skipper will direct all boats to return to docks.

14. POST MISSION CONSIDERATIONS: The SOWO will conduct a package debrief ASAP upon return to dock. The skipper of each boat will conduct a crew debrief as necessary and will ensure the crew accomplishes the post mission checklists.

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Commander
336th Training Group

ROBERT E. HAIN, Capt, USN
Commanding Officer
NAVAEROPMEDINST

TIMOTHY THOMSON
Commanding Officer
NAS Pensacola

Attachments:
1. Definitions
2. Parachute Operations
3. Drop and Drag Operations
4. Parasail Operations
5. Boat Positions for One Man Raft Exercise
6. Hoist Operations
7. Wind Chill Factor Chart

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DEFINITIONS

- CANOPY TABBER - An AF/USN instructor who straightens, inflates, and controls the parasail to ensure the students' ascent from the launch deck is performed in a safe manner.

- DROP AND DRAG SAFETY INSTRUCTOR - The instructor who critiques the performance of the student being dragged. The Drop and Drag Instructor is assigned to Tow Boat A behind the launch boat and can initiate an abort when needed. Normally performs Jumper #3 duties.

- DROP AND DRAG TRAINING - Simulates high wind parachute drag conditions. It involves the use of the launch boat and tow/pickup boats.

- DROP ZONE CONTROL OFFICER - An individual designated by the jumpmaster who is responsible for all actions on the drop zone.

- HELICOPTER CONTROL BOAT - Normally Tow Boat A with the SOWO, LC, and HI aboard which moves from student to student in a safety position during helicopter pickup training and directs all other boats involved in this phase of training.

- HELICOPTER HOISTS - Hands-on training given to simulate helicopter hoist recovery from a survival situation. Training involves use of helicopter and tow/pickup boats.

- HELICOPTER HOIST SAFETY INSTRUCTOR - The survival instructor who observes the student during helicopter hoist operations. Responsible for ensuring the student is prepared and hoisted in a safe and expeditious manner. When necessary, the instructor will enter the water and assist the student.

- HOOK CATCHER - The seaman responsible for catching the tow hooks from the tow boat and securing the line to the bow hook on the launch boat.

- HOOKUP INSTRUCTOR (HI) - The instructor responsible for organizing, briefing, and critiquing students during operational training. Responsible to the LC.

- LAUNCH BOAT - The boat specially designed for launching parasails and conducting drop and drag training.

- LAUNCH CONTROLLER - A USAF Water survival instructor or Qualified Naval Aviation Water Survival Training Program Instructor (NAWSTPI) appointed to schedule, supervise, control, and conduct operational water training. The LC is primarily responsible for coordinating student training flow.

- MONARK - The vessel supporting S-V86-A/N6 water survival training as a dual purpose parasail/recovery vessel and helicopter safety boat

- PACKAGE CONTROLLER - The skipper of the launch vessel who directs the dispatch of watercraft to accommodate the efficient conduct of water training.

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- PARACHUTE DEMONSTRATION - A demonstration for students to observe a simulated ejection scenario from start to finish. This normally includes three parachutists demonstrating the performance of the C-9 parachute canopy, the same parachute students would use in an actual ejection situation. Following this, a survival radio is used to direct a helicopter to the parachutist's position for recovery. The helicopter hoist the parachutist's and then sets him back in the water to be recovered by Pickup Boat B. This is usually the first thing done during operational training, if aircraft support is available.

- PARASAIL OPERATIONS - Coordinated use of a Launch Boat and MonArks within the training area to give students practice in parachute descent and post egress procedures.

- PICKUP BOAT - Any of the assigned MonArks are capable of recovering students. The boat designated as a pickup boat will recover students and equipment from the water during all phases of training.

- PICKUP BOAT INSTRUCTOR - Responsible for student safety during all pickup boat operations and critiques student performance of post egress and recovery procedures. In the event of a problem, the instructor is prepared to assist the student by going into the water if necessary.

- SAFETY OBSERVER - Person performing line handling, parasail recovery, look out and other related duties.

- SIGNAL DEMONSTRATION - A demonstration to show students the performance characteristics of pyrotechnic and visual signaling devices under open water conditions.

- SKIPPER - Responsible for providing a safe ascent training vehicle, recovering instructor personnel during jump and parasail demonstrations, recovering students and equipment during water survival training, and providing transportation to and from the training area. Also responsible for the safety, security, and well-being of the passengers, crew and boat at all times.

- SUPERVISOR OF WATER OPERATIONS (SOWO) - The SOWO is appointed by, and is directly responsible to the 17 TRS Operations Officer and the Department Head, Aviation Water Survival Department. The SOWO has overall command and control of all aspects of operational water survival training. All personnel, including civilian employees, will comply with the directions and guidance provided by the SOWO concerning watercraft operations to ensure safe, timely, and professional conduct of student training. The SOWO coordinates with the Launch Controller (LC) and Package Controller (PC) for accomplishment of training objectives. The SOWO is given the final authority to approve or disapprove visitor observation of student training aboard any of the assigned watercraft.

- TOW BOAT - Any of the assigned MonArks are capable of performing this duty. The boat designated as a tow boat will use the winch that is equipped to tow parasailers.

- TRAINING AREA - The designated area within Pensacola Bay where S-V86-A/N6 operational training is performed.

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- TURN AROUND - A break in water operations where the launch boat turns down to allow other boats to come along side and load/unload equipment and personnel.

- TURN DOWN - When the launch boat is turned starboard side into the wind, port side down wind, to allow other boats to come along side and load/unload equipment and personnel.

- TWENTY-MAN LIFE RAFT INSTRUCTOR - The instructor responsible for guiding the students through various scenarios and critiquing their performance during the 20-man life raft training exercise.

- TWENTY-MAN LIFE RAFT TRAINING - An exercise to simulate a group survival scenario in an open water environment. The training encompasses noncombat/combat and various environmental, as well as non-combat aircraft vectoring. A survival instructor is on board to monitor and critique student performance.

- USAF ENGINEER - Skilled in the operation, servicing, and repair of marine diesel engines and related mechanical, hydraulic, and electrical system. Performs other duties at the skipper's discretion.

- USAF MARINE SUPERINTENDENT - Manages military and civilian personnel and watercraft operations supporting the USAF Water Survival School. Coordinates training support with the Operations and Training Manager or his designated representative, and the SOWO.

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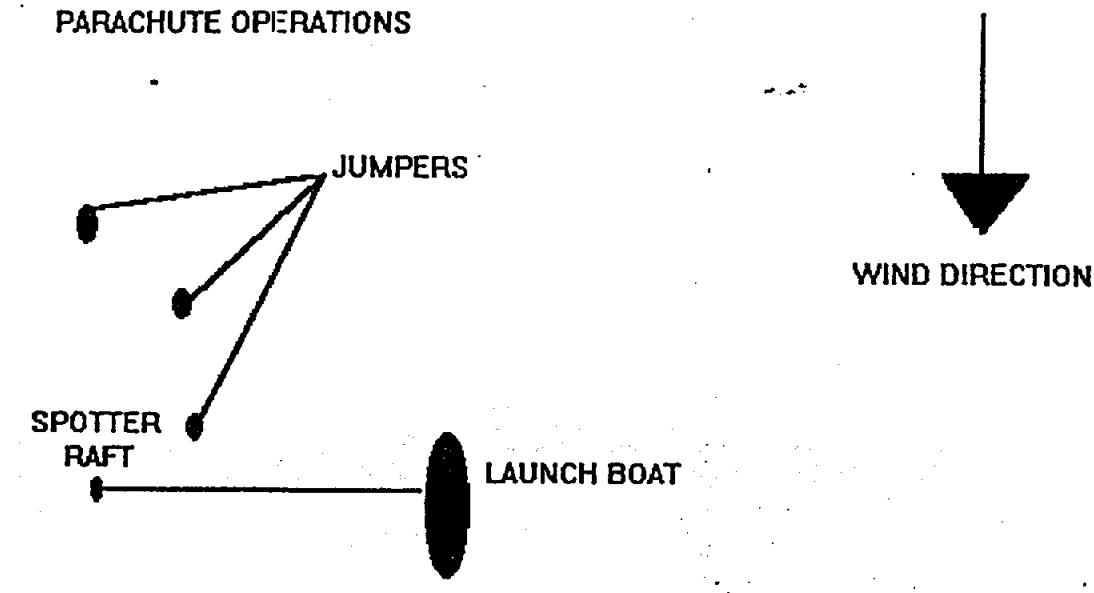
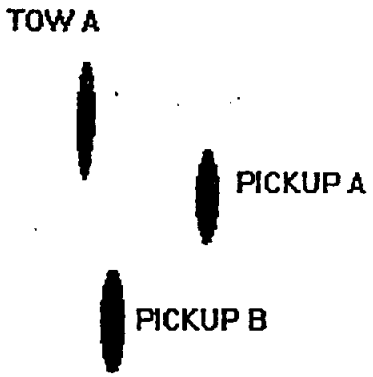
PARACHUTE OPERATIONS





1. TOW "A" RECVERS JUMPER #3 AND EQUIPMENT, PICKUP "A" RECOVERS JUMPER #1
2. PICKUP "B" RECOVERS PARACHUTE. THEN JUMPER #2 AFTER HOIST DEMO IS COMPLETE

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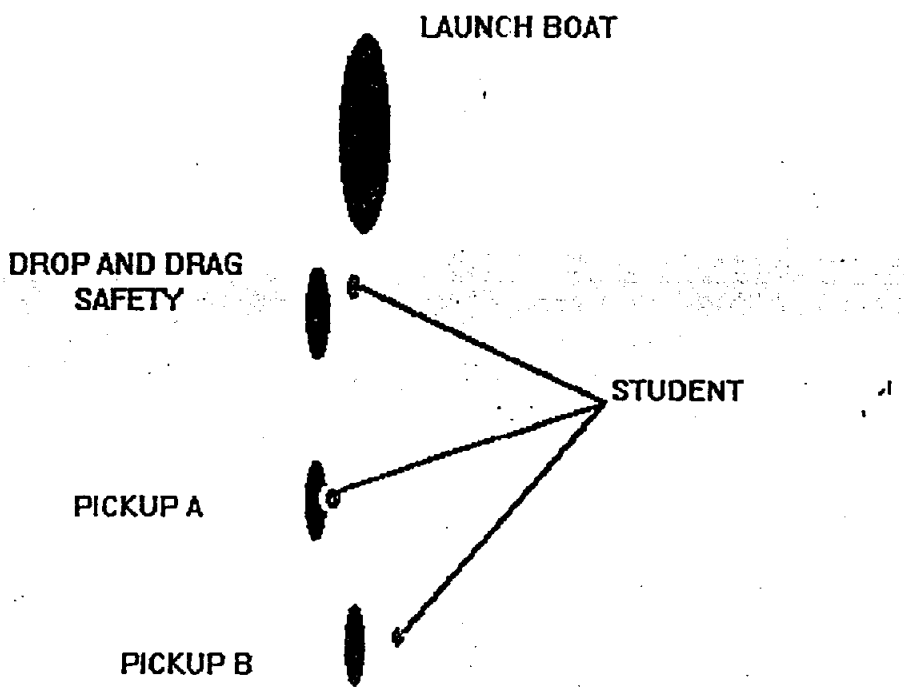
DROP AND DRAG OPERATION



1. ONLY THREE STUDENTS IN THE WATER AT ONE TIME
2. PICKUP A RECOVERS THE PORT SIDE, PICKUP B RECOVERS STRABOARD SIDE

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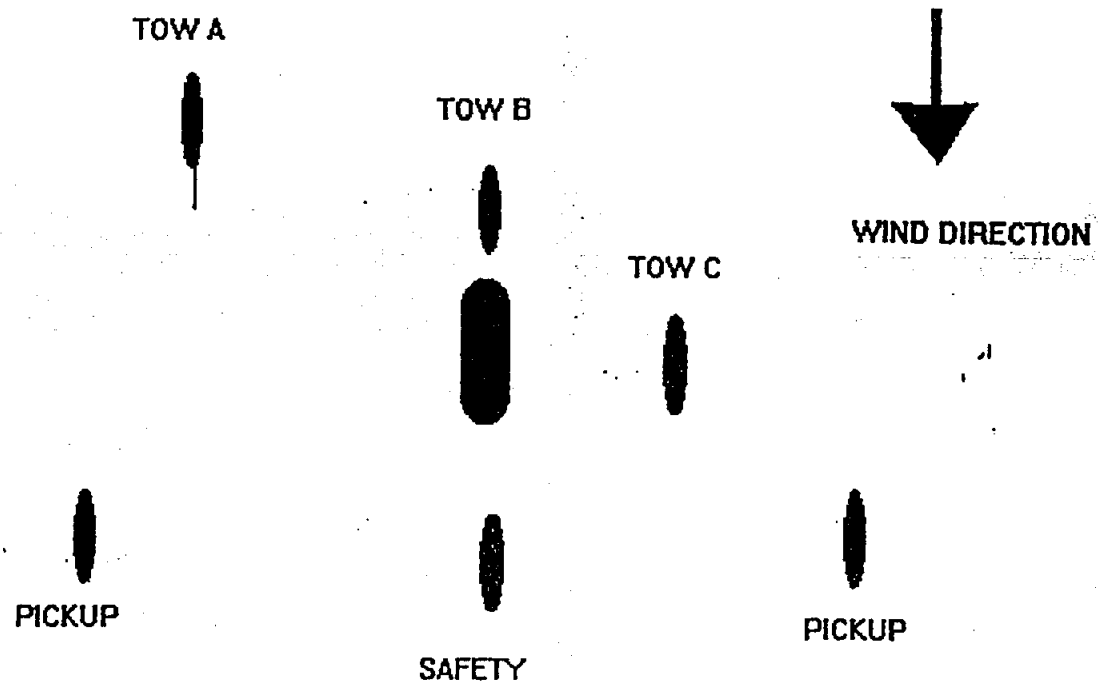
PARASAIL OPERATIONS

1. TOW BOATS ALTERNATE SAILS TO PORT AND STARBOARD

2. PICKUP C STARTS AS SAFETY BOAT



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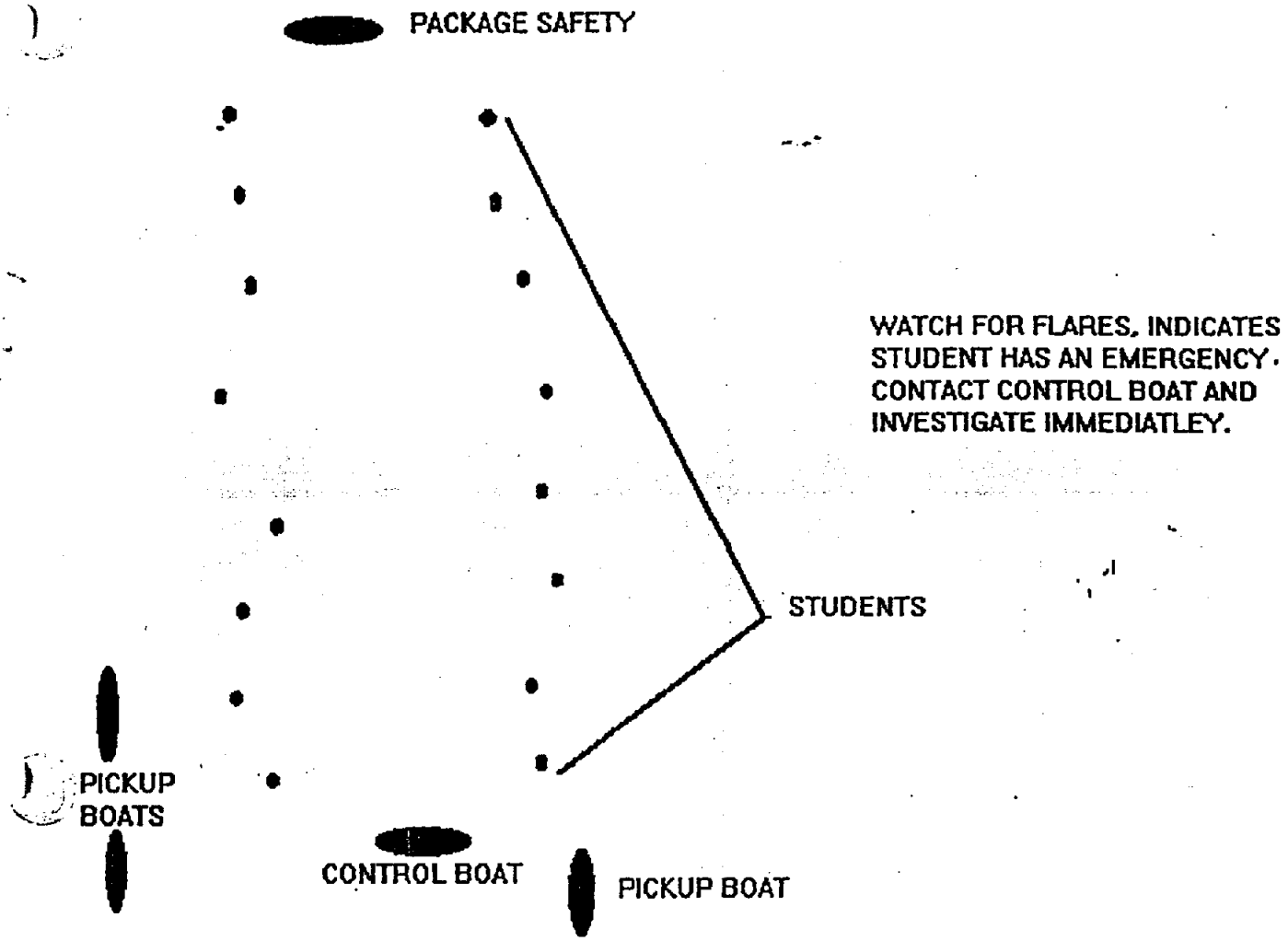
BOAT POSITIONS FOR ONE MAN RAFT EXERCISE



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