



Over Water Survival

Training Guide



Over Water Survival Training

PREFACE

This pamphlet is designed to provide training guidance for those aircrews that may require flight over water beyond the power-off gliding distance of land. It prescribes the training and responsibilities of all Civil Air Patrol (CAP) aircrews as applicable to the procedures necessary to promote safety and water survival. Most coastal wings already have some baseline over water training, many using dated information found on the CAP website; however, there has been considerable variation in the requirements. In an effort to standardize this training, there is a prescribed curriculum and testing protocol for classroom training, aircraft ditching procedures and egress, and in-water related training.

Documented successful completion of a USCG or other military service water survival course may be used as a substitute to the CAP standardized course; however, egress training must be performed in CAP or like aircraft prior to approval and validation.

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Section 1 – EXTENDED OVER WATER OPERATIONS

In the past few years, some CAP mission requirements have included extended over water operations and the trend is likely to continue. Operational Risk Management requires the risk of these extended over water missions to be mitigated by standardized training. Although, the training would be beneficial, over water flights that are incidental to an airport landing or shoreline reconnaissance do not require aircrew over water survival training.

For the purpose of supporting operational missions in accordance with CAP regulations, except for the take-off and landing phase, an extended overwater flight is defined as any flight operation, sortie or event, conducted outside the normal power-off gliding distance of land, as determined by altitude, distance, glide speed, wind and other determining factors.

Instructors

Instructors should have taken the course prior to instructing, have a working knowledge of sea conditions, survival techniques, and be able to address any discussion item or question. Former military instructors and/or commercial dive instructors are excellent candidates; however, those who have successfully completed the course, at least, twice can also be considered. Credentials should be reviewed and instructors approved by the wing commander or designee.

Who must take the course?

All crew members who are participating in an extended overwater flight or sortie must have successfully completed overwater survival training within the past three years and validated in the members Operations Qualifications (Ops Quals).

Please note that non-CAP crew members are expected to have completed equivalent training within their own agency.

Mission Minimums

Flights are limited to within 50 nm of shore except for special operational missions approved by the National Operations Center (NOC) in advance. The reconnaissance phase of the mission will be flown IAW CAPR 60-1, paragraph 2-2e, unless deviation is approved by the NOC, and any required confirmation phase will be flown no lower than 500 feet above the surface of the water, 1,000 feet during night operations.

During night overwater operations, both front-seat crew members must be CAP qualified mission pilots and instrument qualified and current. The right-seat pilot need not be qualified in that specific aircraft.

Extreme caution should be taken and proper notifications should be in place when operating in the vicinity of or beyond the Air Defense Identification Zones (ADIZ).

Required Onboard Equipment

During the duration of extended overwater flights, each occupant will wear an FAA and U.S.

Coast Guard or Department of Defense (DoD) approved personal flotation device (PFD). The aircraft will also contain a U.S. Coast Guard or Department of Defense (DoD) approved inflatable rafts of sufficient number and size to accommodate all occupants and will contain at least one pyrotechnic signaling device. IAW with CAPR 60-1, the personal flotation devices and rafts used on these missions will be certified and recertified in accordance with the manufacturer's suggested schedule. It is recommended that each occupant also carry a waterproof personal strobe light and survival kit. The wear of survival vests or belts should not be in a position to impede or inhibit PFD deployment or inflation.

Constant wear U.S. Coast Guard or Department of Defense (DoD) approved anti-exposure or emersion suits will be worn by crew members on any pre-planned overwater flight when the water temperature is or is forecast to be 60°F or less. The wing commander may waive the requirement to wear the anti-exposure or emersion suit after reviewing appropriate safety and Operational Risk Management (ORM) considerations, such as the distance from land in which the aircraft will be required to operate.

Section 2 – COURSE PLANNING

Pre-Classroom Preparation

Training slides and this course syllabus are provided to wing, region and national approved instructors for classroom use. Although, the intent is to standardize the over water survival curriculum, there are geological and climatic differences that must be address. In addition to the standard course curriculum, instructors should make sure they present pertinent information and training that would apply to their particular coastal or regional area.

Course Syllabus

The Course syllabus includes four parts:

Standardized classroom curriculum; Regional classroom curriculum, if applicable

Aircraft egress training with timed egress exercise

In-water training and execution

Cold water emersion suit training and testing, if applicable

Course Training Aids

Downloadable Course Slides

Survival kit examples (optional)

Aircraft (Recommend using the aircraft to be used over water for crew familiarity)

Training Personal Floation Devices (PFD)

Training Rafts, one for aircraft and one for in-water training

Swimming pool

Section 3 – Course Requirements

Water Survival Classroom Training

The minimum classroom instruction will:

- Review the Over Water Survival Course Slide presentation
- Discuss the key components necessary for an adequate survival kit and where to get them.
- Discuss the use of the various emergency-signaling devices available for use in CAP Overwater operations, including rescue streamers, dye packs, types of pyrotechnic flares, etc.
Discuss the Beaufort Wind Scale and the Douglas Sea Scale.
- Present a practical demonstration of the use and testing procedures (to verify validity and proper operation) of the BRAVO type personal flotation device (PFD) used in CAP Overwater operations.
- Discuss the procedures used to orientate all flight crewmembers to the location of aircraft exits for each crew position, regardless of visibility or aircraft orientation (underwater, dark, inverted aircraft).
- Discuss the advantages and disadvantages of boots vs. shoes and flight suits vs. other approved uniforms or combinations
- Discuss emergency procedures that would apply based on local conditions.

Water Survival Practical Training

Minimum practical requirements will include:

Aircraft Ditching and Egress Procedures

- Crew position exits
- Crew position pre-ditch responsibilities
- Crew Ditching positions
- Crew Egress Procedures

In-water Procedures (Raft already deployed)

- Swim
- Tread water
- Stabilization and Entry into raft

Anti-exposure/Emersion Suit (Only if a required course addition)

- Demonstration on proper wear
- Swim
- Float
- Stabilization and Entry into raft

Course Testing

Classroom

Once, the classroom course has been completed, the student will have 30 days to access the Over Water Training Course Quiz in eServices and successfully complete it with a score of 70 or better.

Aircraft Egress Procedures

There will be a timed egress and all crew members will have to properly evacuate within 30 seconds in order to pass this section of the course.

In-water Procedures

While wearing flight suit, boots or shoes and inflated PFD, each crew member will be required to:

Swim a minimum distance of 50 feet

Tread water for a minimum of 10 minutes

And as a crew: Stabilize the raft and get all crew members into the raft (as soon as possible, but with no time limit).