



# AIR OBSERVER

## QUALIFICATION SYLLABUS

UNITED STATES COAST GUARD AUXILIARY  
AIR OPERATIONS - FLIGHT STANDARDS TEAM

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# 1. SCOPE

## ***A. Purpose***

This document is intended to provide guidance for a standardized initial examination of Auxiliary candidates for the Air Observer qualification in an effort to improve safety of operations and to provide a uniform standard of performance in the Auxiliary aviation program. Members qualifying as Air Observers are required to demonstrate a level of skill, knowledge, and judgement appropriate to the level of Auxiliary certification sought. These characteristics must be demonstrated to the examiner upon the candidate's initial entry into the program.

## ***B. Application***

This standard applies to all Auxiliary candidates for the positions of Auxiliary Air Observer (**AIROBS**).

**Candidates for any flight crew position; Pilot, Air Crew or Air Observer must complete the Air Observer Syllabus before certification at any other flight crew level.**

## ***C. References***

- a. United States Coast Guard Auxiliary Manual, M16790.1 (series)
- b. Auxiliary Aviation Program, COMDTINST 16798.1 (January 1997)
- c. United States Coast Guard Auxiliary Operations Policy Manual, M16798.3 (series)
- d. Auxiliary Aviation Training Manual, M16798.5B (series)
- f. BSX Policy Letter 19-01 (February 2019)
- g. Federal Aviation FAR, Part 91

## 2. DEFINITIONS

<b>Observer Trainee</b>	Candidates for the Auxiliary Air Observer qualification who have been designated by the DSO-AV to begin flight training.
<b>Air Observer</b>	Auxiliary flight crew member whose responsibilities include observing, reconnaissance, recording, photographic imagery, communications, and mission reporting.
<b>Auxiliary Pilots</b>	Pilots who by the nature of their FAA certifications and advanced training and testing in Coast Guard and Auxiliary procedures and practices, have been certified by the Director to exercise the duties of their level of qualification. Auxiliary pilots qualify as Co-Pilot (CP), First Pilot (FP) or Aircraft Commander (AC).
<b>Instructor Pilot</b>	Instructor Pilots are specially qualified Aircraft Commanders who have been selected by the Director of the Auxiliary to perform special duties as trainers of candidates for Auxiliary aviation qualifications.
<b>Flight Examiner</b>	Flight Examiners are specially qualified Aircraft Commanders who have been selected by the Director of the Auxiliary to perform special duties as examiners of candidates for Auxiliary aviation qualifications.
<b>Critical Error</b>	An error that could jeopardize the flight or the successful completion of the task. This shall be cause for withholding a satisfactory completion of the task(s).
<b>Non-Critical Error</b>	An error that causes no danger to the flight of mission completion, but which detracts measurably from the successful performance of the task. If a number of these occur, they shall be cause for withholding a satisfactory completion of the task(s).
<b>Minor Error</b>	An error that detracts from perfection but which in no way jeopardizes the flight or successful performance of the task. This shall be graded as satisfactory.

### 3. SPECIFICATION

#### *A. Implementation*

This syllabus shall be completed by the candidate for the Air Observer qualification. Any First Pilot (FP) or Aircraft Commander (AC) in the district for which qualification is sought, may conduct training, and sign off individual tasks on the syllabus checklist. The checklist must be approved by a Flight Examiner prior to submitting Form ANSC 7015 for certification. The Director may approve qualification from another district or flight and ground checks from another district, at the Director's discretion. **Candidates for any Auxiliary flight crew position, including pilot, must first successfully complete the syllabus for Air Observer.**

This syllabus must be completed to the required performance level prior to the candidate's certification as Auxiliary Air Observer. In the case of unsatisfactory completion, candidates are encouraged to seek training with an Auxiliary Instructor Pilot prior to requesting a subsequent check. In the case of repeated failures, candidates may appeal to the District Flight Examining Board. **Flight Examiners are encouraged to 'Train to Level' for non-critical or minor errors.**

The candidate's responses to the syllabus check elements shall be evaluated as either **LEVEL, TRAIN to LEVEL** or **UNSAT** (unsatisfactory). The basic criteria to be used for evaluating candidate performance shall be those of clearly and satisfactorily completing each task with a complete regard for safety. Signoffs of the elements shall not be made until the evaluator determines satisfactory completion of the task. Determinations shall be made using the following criteria:

**SATISFACTORY** – The Observer Trainee under Evaluator performed the task with accuracy and a complete regard for safety, with only a few minor errors.

**LEVEL** - The Observer Trainee under Evaluation performed at the required performance level (a satisfactory mark). If the Observer Trainee under examination identifies errors, self-corrects, and demonstrates the ability to maintain proficiency at the required performance level, a LEVEL mark is appropriate.

**TRAIN to LEVEL** - An error(s) that required additional training to ensure that the Observer Trainee under Evaluation is able to perform at the required performance level without further instruction (a satisfactory mark).

**UNSAT** – The Observer Trainee under Evaluation did not perform at the required level and committed critical and/or a number of non-critical errors.

## ***B. Procedures***

All sections of the syllabus must be completed. The evaluator may select sections or combine the tasks listed in the check list for evaluation. After completion of the syllabus, form ANSC 7015 must be completed and endorsed by a Flight Examiner.

## ***C. Instructions***

This section is intended to provide guidance for the Examiners and Observer Trainee under Examination.

**Each procedure or maneuver must not compromise safety. Any simulated emergencies must be briefed and conducted at an altitude that permits normal recovery and normal continuation of flight. Training must be conducted at an altitude of at least 1000 feet above the highest obstacle within 5 nm.**

**The purpose of section I** is to evaluate the mission planning phase. The Air Observer Trainee is expected to demonstrate an understanding of the mission and demonstrate the ability to obtain and evaluate pertinent information for the flight. Items in this category should include, but not be limited to, understanding the mission brief, ability to plot the mission on aeronautical and marine charts, and an understanding of airspace and aircraft considerations. The Trainee is expected to understand and demonstrate the use of Coast Guard Risk Management Tools (PEACE, STAAR, and GAR 2.0). The understanding of CRM shall be evaluated and demonstrated when in flight. Observer Trainees shall be evaluated on their ability to communicate mission requirements and expectations with the pilot during a pre-flight briefing.

**Section II** begins the operational evaluations. The Trainee's ability to correctly carry out these tasks without compromising safety or mission completion shall be of prime concern. The Trainee needs to demonstrate a working knowledge of the marine VHF radio and the ability to communicate with Coast Guard Sectors and units effectively using standard terminology.

**In Sections III through VI**, the Observer Trainee is expected to demonstrate an understanding of the use and evaluation of air-surface signals, surface-air signals, wind/sea states, and the selection of search patterns appropriate for a search and rescue case presented by the evaluator. Trainees shall demonstrate the ability to identify various types of vessels typically found in the area of operations, and to demonstrate familiarity with their normal operations. The ability to produce high quality photographic imagery is required.

Observer Trainees are to be evaluated on their response to emergency situations. These may be simulated by the evaluator or discussed with the candidate. Any simulated emergency must be conducted in a manner that shall not compromise flight safety at any time. **Loss of communications, engine out, in-flight fires, ditching and egress, and instrument failures shall be covered.**

Items on the checklist may be conducted during training flights when appropriate. Observer Trainees may also serve as part of the flight crew on regular missions

**Note: Observer trainees shall not be used in lieu of an Air Observer on other than scheduled daylight, routine, non-SAR missions**

## 4. OBSERVER TRAINEE

A member who completes all the pre-requisites and receives the permission of the DSO-AV is designated an **Observer Trainee** and may begin the flight training portion of the syllabus. **Observer Trainees shall have 2 years from the initial designation at the time of passing the written test to complete the Air Observer Certification.**

## 5. SYLLABUS

### ***A. Completion of the Air Observer Syllabus***

A member who meets all the pre-requisites, has been approved by the DSO-AV to begin Air Observer training, who has successfully completed the Air Observer Training Syllabus, who has been signed off by an Auxiliary Flight Examiner, and received a favorable determination on their DO PSI package, may be certified as Air Observer (AIROBS).

### ***B. Pre-Requisites***

<b>PRE-REQUISITES</b>
<b>I. Prior to appointment as Observer Trainee</b>
A. Member in AP, BQ or AX status
B. Auxiliary Core Training (AUXCT) - current
C. Complete a certified Recreational Boating Safety Course
D. Pass Aviation Exam Part A
E. Current FAA 3 <sup>rd</sup> class medical or AV-10-1 medical screening
F. ICS 100 and ICS 700
G. Obtain permission of the DSO-AV to enter Aviation Program
<b>II. Prior to Flight Training</b>
A. Submit DO PSI security package
B. Emergency egress training
C. Aviation swim prior to flying beyond gliding distance from shore
<b>III. Prior to Certification</b>
A. AUX-17 (Initial CRM)
B. Complete all BQ requirements
C. Successfully complete the Syllabus Checklist



# AUXILIARY AIR OBSERVER CHECK

CANDIDATE

MEMBER #

DISTRICT / DIVISION / FLOTILLA

REQUIRED LEVEL	UNSAT	SATISFACTORY		EVALUATED TASK/PROCEDURE <i>Place "X" in corresponding blocks to the left of tasks/procedures.</i>	EVALUATOR / DATE FP or AC
AIROBS		TRAIN to LEVEL	LEVEL		
				<b>I. MISSION PLANNING – discuss/demonstrate</b>	
S				1. Explain the mission and its objectives	
S				2. Keep appropriate records	
S				3. Use of safety equipment	
S				4. Identify characteristics of vessels in distress	
S				5. Make pertinent observations and write post-mission reports	
S				6. Understand crew organization and duties	
S				7. Understand concepts of Maritime Domain Awareness	
S				8. RM Tools including PEACE, STAAR, RAM and GAR 2.0	
S				9. Contact Air Station and Sector prior to flight	
S				10. Assist the Pilot perform a challenge and response checklist	
				<b>II. COMMUNICATIONS – discuss/demonstrate</b>	
S				11. Identify various CG and Auxiliary units and call signs	
S				12. Communicate with and direct surface vessels to a datum	
S				13. Establish and change Guard Stations	
S				14. Communicate by radio, including SITREP, "OPS Normal", Initial and End of Missions calls	
S				15. Communicate search patterns with ground units.	
S				16. Understand search pattern selection criteria.	
S				17. Communicate with vessels in distress	
				<b>III. NAVIGATION - demonstrate</b>	
S				18. Navigate from aeronautical sectional and marine charts	
S				19. Locate/transfer a datum between sectional and marine charts	
S				20. Locate nearest airport and direct pilot to its location	
S				21. Plot a course to a given LAT/LONG	
S				22. Communicate chart information to flight crew	
S				23. Coordinate search pattern legs and timings with the pilot	
S				24. Determine aircraft location from the navigation system	
S				25. Explain the use of electronic flight planning tools	
S = Satisfactory				<b>AIR OBSERVER</b>	<i>Updated FEB 2022</i>





# AUXILIARY AIR OBSERVER CHECK

CANDIDATE

MEMBER #

DISTRICT / DIVISION / FLOTILLA

REQUIRED LEVEL	UNSAT	SATISFACTORY		EVALUATED TASK/PROCEDURE <i>Place "X" in corresponding blocks to the left of tasks/procedures.</i>	EVALUATOR / DATE FP or AC
AIROBS		TRAIN to LEVEL	LEVEL		
				<b>IV. EMERGENCY PROCEDURES – discuss/demonstrate</b>	
S				26. Location and use of emergency equipment	
S				27. Emergency and ditching procedures	
S				28. Ability to properly egress the aircraft	
S				29. Emergency communication – internal and external	
				<b>IV. FLIGHT OBSERVATION - demonstrate</b>	
S				30. Identify waterway features and vessel traffic	
S				31. Ability to properly use binoculars and camera	
S				32. Maintain situational awareness	
S				33. Maintain good observation techniques, surface and air	
S				34. Identify characteristics of oil spills	
S				35. Knowledge of surface/air and air/surface signals	
S				36. Knowledge of wind/sea states and direction	
S				37. Produce useable photographic imagery	
S				38. Air traffic observation techniques	
				<b>VI. FLIGHT EXPERIENCE</b>	
S				39. Successfully complete minimum of 10 flight hours as an Observer Trainee under orders	
S				40. Demonstrate CRM in flight. Explain how CRM should be used in a situation.	
S				41. Demonstrate understanding of Risk Management tools and update the assessment as flight conditions change.	
Was CRM performance satisfactory?				YES <input type="checkbox"/>	NO <input type="checkbox"/>
Did the Observer Trainee meet required performance level?				YES <input type="checkbox"/>	NO <input type="checkbox"/>
Flight Examiner				Signature	
Member #				Date	
S = Satisfactory		AIR OBSERVER			Updated FEB 2022