



AUXILIARY AIR OBSERVER INITIAL QUALIFICATION SYLLABUS

STANDARD FOR AUXILIARY AVIATION

UNITED STATES COAST GUARD AUXILIARY

AVIATION STANDARDIZATION TEAM

Table of Contents

Table of Contents 2

1. SCOPE 3

 A. Purpose..... 3

 B. Application..... 3

 C. References..... 3

2. DEFINITIONS..... 3

3. SPECIFICATION..... 4

QUALIFICATION CHECK LIST.....8

1. SCOPE

A. Purpose

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

B. Application

This Standard applies to all Auxiliary candidates for the position of Air Observer. However; **all candidates for any Flight Crew position, Pilot, Air Crew or Observer, must complete this syllabus during their initial training before certification at any other flight crew level.** Elements of this syllabus may be combined with other training for Pilot and Air Crew candidates.

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. The Auxiliary Air Operations Training Manual, M16798.5 (series).
- e. Federal Aviation Regulations, Part 91.

2. DEFINITIONS

Auxiliary Air Observers – Auxiliarists who, by virtue of their 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.

Instructor Pilots – Specially qualified Auxiliary Aircraft Commanders who are certified to perform special duties as trainers of candidates for Auxiliary aviation qualifications.

Flight Examiners – Specially qualified Auxiliary Aircraft Commanders who are certified to perform special duties as examiners of candidates for Auxiliary aviation qualifications.

Observer Trainee – Candidates for aviation qualification who have successfully passed the Air Operations Test, Level A, the "Pilot/Observer Test", within the past 24 calendar months.

3. SPECIFICATION



DEPARTMENT OF HOMELAND SECURITY

United States Coast Guard Auxiliary

National Aviation Operations

Auxiliary Flight Crew Initial Qualification Syllabus

1. Implementation

This syllabus shall be completed by the candidate for Air Observer qualification. Training may be conducted by any First Pilot or Aircraft Commander (including Instructor Pilots and Flight Examiners) in the district for which qualification is sought. Final submission of all qualifications must be evaluated and approved by an Instructor Pilot or Flight Examiner when 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 must first successfully complete this syllabus.

This syllabus shall be satisfactorily completed to the required performance level prior to the candidate's first certification as an Auxiliary Air Observer, Pilot or Air Crew. 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 (ref. b).

The candidate's responses to the syllabus elements shall be evaluated as either satisfactory or unsatisfactory. The basic criteria to be used for evaluating candidate performance shall be those of clearly and satisfactorily completing each task. Sign-offs of the elements shall not be made until the evaluator determines satisfactory completion of the task. Determinations shall be made using the following criteria:

- a. Critical Error: 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: An error that causes no danger to the flight or 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).
- c. Minor Error: 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.

Evaluators are encouraged to ‘train to standard’ for non-critical or minor errors.

2. Procedures:

All sections of this syllabus must be completed; however, the evaluator may select sections or combine the tasks listed below in any combination for evaluation. Elements of this syllabus may be combined with other training for candidates for Pilot and Air Crew, at the discretion of the evaluator.

3. Instructions:

This section is intended to provide guidance for the trainer and candidate in the examination process. During any training flights for the syllabus, the following must be adhered to:

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.

Completion of all items on the check-off list (page 7) is required of all candidates.

The purpose of section I is to evaluate the mission planning phase. The Air Observer candidate is expected to demonstrate an understanding of the proposed mission, and demonstrate the ability to obtain and evaluate pertinent information for this flight. Items in this category should include, but not necessarily be limited to, understanding of a mission brief, ability to plot the mission on aeronautical and nautical charts and an understanding of airspace and aircraft considerations. Candidates are expected to understand and demonstrate the use of the Risk Assessment Matrix. Use of CRM shall be evaluated in this section as well as other sections as appropriate. Candidates shall be evaluated on their ability to effectively communicate the mission requirements with the pilot during a preflight briefing.

Section II begins the operational evaluations. Evaluation of the candidate's ability to correctly carry out these tasks without compromising safety or mission completion shall be of prime concern.

In Sections II through V, candidates are expected to demonstrate an understanding of the use and evaluation of air-surface signals, surface-air signals, wind/sea states and selection of search patterns appropriate for a search and rescue case presented by the evaluator. Candidates 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.

All candidates shall 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 safety at any time. Loss of communications, engine out, in flight fires, ditching and egress and instrument failures shall be covered.

Items on the check list may be conducted during training flights when appropriate. Observer Trainees may also serve as part of the flight crew on regular missions. During training flights, the evaluator shall assess all phases of the qualification check. This includes such items as: communications, CRM and mission understanding and cockpit organization.

Each item in the above check list is to be graded in accordance with the criteria outlined in implementation section above.

4. OBSERVER TRAINEES

Candidates are deemed to be **Observer Trainees** once they have taken and successfully passed the **Air Operations Test, Level A, the "Pilot/Observer Test"**. Candidates for any level of training first must transition this phase of training. Observer Trainees shall have 2 years from their initial designation at the time of passing the written test to complete the Observer or higher certification. If certification is not completed to any level within 24 calendar months of test completion, the test must be taken and passed again.

5. Syllabus

The Air Observer Initial Syllabus Qualification Check form is found on the page below:

This form is to be completed by a First Pilot / Aircraft Commander. One copy is to be kept by the candidate and one copy shall be submitted to a Flight Examiner or Instructor Pilot to be validated and submitted with a Form 7015 to the DSO-AV and filed in accordance with district procedures. If the requirements are completed over a period of time, then evaluators shall note the date of the completions in the "Performance/Date" column, and initial the appropriate SAT/UNSAT box.

| | | | | |
|--|--|------------------|----------|------------|
| CANDIDATE: | | DATE: | | |
| MEMBER #: | | EVALUATOR: | | |
| District/Division/Flotilla _____ / _____ / _____ | | MEMBER #: | | |
| ITEM | PERFORMANCE/Date | SAT/UNSAT | | |
| I. MISSION PLANNING /PERFORMANCE Demonstrate ability to: | | S | U | n/a |
| 1. keep appropriate records | | | | |
| 2. make pertinent observations and write post-mission reports | | | | |
| 3. use and understand emergency equipment | | | | |
| 4. use safety equipment | | | | |
| 5. identify characteristics of vessels in distress | | | | |
| 6. understand crew organization and duties | | | | |
| 7. understand concepts of Maritime Domain Awareness | | | | |
| 8. understand use of Risk Assessment Matrix | | | | |
| II. COMMUNICATIONS Demonstrate ability: | | | | |
| 1. to identify various CG and Auxiliary units and call signs | | | | |
| 2. to communicate with and direct surface vessels to a datum | | | | |
| 3. to change guard stations | | | | |
| 4. to communicate by radio, including SITREP, "Ops Normal", Initial and End of Mission Calls | | | | |
| SAR COMMUNICATIONS Demonstrate ability: | | | | |
| 1. to communicate search patterns between pilot and ground units | | | | |
| 2. to communicate with vessels in distress | | | | |
| 3. to understand search pattern selection | | | | |
| III NAVIGATION Demonstrate ability | | | | |
| 1. to navigate from aeronautical sectional charts | | | | |
| 2. to locate/transfer a datum between sectionals/marine charts | | | | |
| 3. to locate nearest airport and direct the pilot to its location | | | | |
| 4. to plot a course to a given lat/long | | | | |
| 5. to communicate chart information to flight crew | | | | |
| 6. to coordinate search pattern legs and timings with the pilot | | | | |
| IV EMERGENCIES Demonstrate | | | | |
| 1, knowledge of location and use of emergency equipment | | | | |
| 2. Ability to properly egress an aircraft | | | | |
| 3. Procedures for emergencies | | | | |
| 4. Emergency communications – internal and external | | | | |
| V FLIGHT OBSERVATION | | | | |
| 1, Identify waterway features and vessel traffic | | | | |
| 2. Demonstrate ability to properly use binoculars and cameras | | | | |
| 3. Maintain situational awareness | | | | |
| 4. Maintain good observation technique, both surface and air | | | | |
| 5. Identify characteristics of oil spills | | | | |
| 6. Demonstrate knowledge of surface/air and air/surface signals | | | | |
| 7. Demonstrate knowledge of wind/sea states and direction | | | | |
| VI FLIGHT EXPERIENCE | | | | |
| 1. Successfully complete 10 flight hours on missions as Observer Trainee | | | | |
| INITIAL AIR OBSERVER REQUIREMENTS COMPLETED SATISFACTORILY YES ___ NO ___ | FP/AC Signature Mem # _____ Dist / Div / Flot _____ | | | |

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