



AIR CREW

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 candidates for the **Auxiliary Air Crew** 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 Crew 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 Crew (**AIRCREW**).

Candidates for any flight crew position; Pilot, Air Crew or Air Observer must complete the Air Observer Syllabus (AV-06-1) 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)
- e. Auxiliary Air Crew Qualification Program, COMDTINST 16798.2 (August 1999)
- f. BSX Policy Letter 19-01 (February 2019)

2. DEFINITIONS

Air Crew Candidate	A member who completes all the pre-requisites, submits form ANSC-7043 (with the endorsement of the DSO-AV) and received permission from the Director is designated an Air Crew Candidate and may begin the flight training portion of the syllabus.
Air Crew	Auxiliary flight crew qualification to provide the Auxiliary pilot a capable assistant during all phases of Auxiliary aviation missions and especially during times of high cockpit workload. Qualified Air Crew fulfill all Auxiliary Air Observer's duties, while also assisting the Auxiliary pilot with radio communications, weather gathering and recording, navigation in both visual and instrument meteorological conditions, and visual and instrument approaches to the runway.
Auxiliary Pilots	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).
Instructor Pilot	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.
Flight Examiner	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.
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).
Non-Critical Error	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).
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.

3. SPECIFICATION

A. Implementation

This syllabus shall be completed by the candidate for the Air Crew qualification and evaluated by a Flight Examiner in the district for which qualification is sought. 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 check list. The Director may approve qualification from another district or flight and ground checks from another district, at the Director's discretion.

This syllabus must be completed to the required performance level prior to the candidate's certification as Auxiliary 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. **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**. 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 Air Crew Candidate under Evaluation performed the task with accuracy and a complete regard for safety, with only a few minor errors.

LEVEL - The Air Crew Candidate under Evaluation performed at the required performance level (a satisfactory mark). If the Air Crew Candidate under Evaluation 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 Air Crew Candidate under Evaluation is able to perform at the required performance level without further instruction (a satisfactory mark).

UNSAT – The Air Crew Candidate 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 examiner may select sections or combine the tasks listed in the check list for. 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 Evaluators, Flight Examiner and Air Crew Candidate under Evaluation.

The successful conclusion of each procedure or maneuver must never be in doubt. Each procedure or maneuver must be completed without compromising safety. Any simulated emergencies must be conducted at an altitude that permits normal recovery and normal continuation of flight.

Sections I through X covers all aspects of flight, flight/mission planning, communications, weather, airspace, charts, approach plates, navigation, aircraft systems, air traffic and emergency procedures – similar to material covered in a private pilot ground school.

Section XI covers electronic flight planning and flight monitoring tools. While this equipment is becoming more common, these tasks are only required if the equipment is readily available to the candidate. It is recommended that the candidate demonstrate appropriate skill with a district approved electronic flight planning tool loaded on a tablet. The candidate should be able to create a flight plan appropriate to the mission, file an ICAO flight plan, and be able to communicate (airdrop, etc.) the plan to both the pilot and the aircraft. The candidate should be able to create various search patterns. This skill should be demonstrated on the ground and in flight. The candidate should be able to create search patterns in flight and load them into the aircraft NAV system.

Section XII begins the operational evaluations of the candidate's ability to correctly execute these tasks without compromising flight safety or mission completion. In this phase of the syllabus candidates are expected to demonstrate an understanding of all practical elements of flight and Coast Guard Auxiliary aviation missions in-flight. All candidates shall be evaluated on their response to emergency situations. These may be simulated by the instructor 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, egress, and instrument failures shall be covered.**

During the flight training phase, the candidate is expected to demonstrate knowledge of CRM and Risk Management Tools/Procedures at all times. It is critical that the candidate demonstrate Situational Awareness in all aspects of the flight environment, including mission, aircraft operation, status of crew members, location, targets of interest, air traffic and separation, communication with ATC and the Coast Guard units, and an on-going Risk Assessment.

4. AIR CREW CANDIDATE

An Air Observer who completes all the pre-requisites, submits form ANSC-7043 (with the endorsement of the DSO-AV) and receives permission from the Director is designated an **Air Crew Candidate** and may begin the flight training portion of the syllabus.

5. SYLLABUS

A. Completion of the Air Crew Syllabus

A member who meets all the pre-requisites, has been approved by the Director to begin Air Crew training, who has successfully completed the Air Crew Training Syllabus and who has been signed off by an Auxiliary Flight Examiner, may be certified as Air Crew (AIRCREW).

The Air Crew Syllabus check list is to be completed by a First Pilot or Aircraft Commander. One copy is to be kept by the Air Crew Candidate and one copy shall be submitted to the Flight Examiner to be endorsed and submitted with an ANSC 7015 to the DSO-AV and filed in accordance with district procedures.

B. Pre-Requisites

PRE-REQUISITES
I. Prior to appointment as Air Crew Candidate
A. Certified Air Observer
B. AUX-17 completed within past 5 years
C. CRM Refresher, emergency egress training and swim - current
D. Current FAA 3 rd class medical or AV-10-1 screening
E. Successfully complete aviation exam B
F. Auxiliary Core Training (AUXCT) - current
G. Annual flight safety workshop - current
H. Submit ANSC-7043 and be designated an Air Crew Candidate
II. Prior to Certification
A. Successfully complete Syllabus Checklist
B. Minimum 5-hour Air Crew flight training

B. FAA Airman's Certificate

A member possessing a valid FAA airman's certificate (Private Pilot or higher) and current FAA medical certificate or medical screening (AV-10-1) will be considered to have completed the Air Crew training syllabus. However, to be certified as Auxiliary Air Crew, the member must complete Air Observer Training and complete all other requirements for Air Crew (minimum 5-hour Air Crew flight training, Air Exam B, and be current on all the pre-requisites). Pilots that do not possess an instrument rating shall review the IFR procedures and approaches included in the syllabus with an instrument rated Auxiliary First Pilot or Aircraft Commander.

C. Awarding of Air Crew Wings

An Auxiliarist who satisfactorily completes Auxiliary Air Crew training or an active-duty Coast Guard Air Station Air Crew training program will be designated as an Auxiliary Air Crew member by letter from the Director of Auxiliary and will receive and wear the Auxiliary Air Crew Device.



AUXILIARY AIR CREW 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
AIRCREW		TRAIN to LEVEL	LEVEL		
				I. MISSION PLANNING – discuss and demonstrate	
S				1. Provide mission brief to flight crew	
S				2. Discuss pertinent NOTAMS, including TFRs	
S				3. RM including PEACE, STAAR, RAM and GAR 2.0	
S				4. Provide weather briefing to flight crew	
S				5. Contact Air Station and Sector prior to flight	
S				6. CRM	
S				7. Cockpit assignments and crew responsibilities	
S				8. Communication frequencies	
S				9. Assist the Pilot perform the aircraft pre-flight inspection	
				II. COMMUNICATION SYSTEMS – explain and use	
S				10. Aircraft communication panel	
S				11. Transponder	
S				12. Aircraft intercom	
				III. COMMUNICATION SKILLS - demonstrate	
S				13. Clearance delivery	
S				14. Ground control	
S				15. Tower	
S				16. Departure and approach	
S				17. Air Route Traffic Control Center (ARTCC)	
S				18. Automated Flight Service Station (AFSS)	
S				19. UNICOM	
				IV. WEATHER – explain and interpret	
S				20. Aviation weather report (METAR)	
S				21. Terminal Area Forecast (TAF)	
S				22. Winds aloft chart	
S				23. NOTAMS, AIRMETs, and SIGMETs	
S				24. ATIS, AWOS and ASOS	
S				25. AFSS Services	
S = Satisfactory				AIR CREW	Updated FEB 2022



AUXILIARY AIR CREW 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
AIRCREW		TRAIN to LEVEL	LEVEL		
				V. AIRSPACE – explain concept and use	
S				26. Class A, B, C, D, E, G - requirements and procedures	
S				27. Military Operating Areas (MOA)	
S				28. Restricted Areas	
S				29. Prohibited Airspace	
S				30. Air Defense Identification Zone (ADIZ)	
S				31. Temporary Flight Restriction (TFR)	
				VI. CHARTS & APPROACH PLATES - function and use	
S				32. VFR sectional chart	
S				33. Low altitude enroute chart	
S				34. Terminal Procedure Publication (TPP)	
S				35. VOR/DME, LOC, ILS, RNAV approach plates	
S				36. Standard Arrivals and Departures (STAR, SID)	
S				37. Interpret approach plate symbology	
				VII. NAVIGATION SKILLS – explain and demonstrate	
S				38. Locate landmarks, airports, TOIs, depicted on aeronautical charts	
S				39. Pilotage and DEAD reckoning	
S				40. Use of aircraft GPS navigational equipment in flight	
S				41. Plot an airborne course	
S				42. Use of VOR/DME in flight (frequencies, operation)	
S				43. Plot search patterns on aeronautical and marine charts	
S				44. Chart symbology	
S				45. Use of the aircraft navigational panel	
				VIII. AIRCRAFT SYSTEMS – explain and interpret	
S				46. Attitude instruments (AH, HI, TC)	
S				47. Air Speed Indicator (ASI) operation	
S				48. Altimeter and VSI operation	
S				49. Gyro instrument operation (vacuum, electric, precession, etc.)	
S				50. Compass operation and limitations	
S = Satisfactory				AIR CREW	<i>Updated FEB 2022</i>



AUXILIARY AIR CREW 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
AIRCREW		TRAIN to LEVEL	LEVEL		
S				51. Instrument landing system (ILS)	
S				52. Flight control surfaces (aileron, rudder, flaps)	
S				53. Engine operation	
S				54. Fuel system, fuel pump, and switching tanks	
S				55. Aircraft electrical system	
S				56. Constant speed prop (variable pitch)	
S				57. Engine fuel mixture, carb heat	
S				58. Landing gear	
				IX. EMERGENCY PROCEDURES – explain and demonstrate	
S				59. Aircraft and personal PPE	
S				60. Loss of engine	
S				61. Instrument failure	
S				62. Loss of communication	
S				63. On-board fire	
S				64. Ditching and egress	
S				65. Emergency communications	
S				66. Demonstrate boarding a life raft	
				X. AIR TRAFFIC SEPARATION	
S				67. Explain the concept and operation of ADS-B	
				68. Discuss crew responsibilities for air traffic observation	
S				69. Discuss techniques of air traffic observation	
				XI. ELECTRONIC FLIGHT PLANNING and MONITORING	
S				70. Discuss the use of electronic flight planning and app tools (<i>Tasks 71-74 are required if the equipment is available</i>)	
S				71. Develop a flight plan using electronic flight planning tools	
S				72. Transfer (air drop, etc.) the flight plan to the pilot, aircraft, and ATC	
S				73. Create a search pattern using electronic flight planning tools	
S				74. Monitor flight and air traffic using tool	
S = Satisfactory				AIR CREW	<i>Updated FEB 2022</i>



AUXILIARY AIR CREW CHECK

CANDIDATE

MEMBER #

DISTRICT / DIVISION / FLOTILLA

REQUIRED LEVEL	UNSAT	SATISFACTORY	
AIRCREW		TRAIN to LEVEL	LEVEL

EVALUATED TASK/PROCEDURE
Place "X" in corresponding blocks to the left of tasks/procedures.

EVALUATOR / DATE
FP or AC

AIR CREW FLIGHT TRAINING

XII. AIR CREW FLIGHT TRAINING – demonstrate in flight

S			75. Challenge and response use of checklists
S			76. Develop a communications frequency plan
S			77. Plot the course on an aeronautical chart (may be electronic)
S			78. Prepare aircraft weight and balance
S			79. Identify surface features and navigation checkpoints
S			80. Fuel calculations (pre-flight planning and in-flight)
S			81. Communicate with Coast Guard Air Station and units
S			82. Prepare and file an ICAO flight plan
S			83. Open and close an ICAO flight plan (VFR and IFR)
S			84. Provide flight/mission briefing, CRM, RM
S			85. Communicate with ATC facilities listed in Section III
S			86. Navigate using pilotage, DEAD reckoning, and available electronic aids
S			87. Understanding of all airspace types and limitations
S			88. Use of all charts (sectional, enroute, etc.) including available electronic tools
S			89. Demonstrate techniques of air traffic identification, including the use of ADS-B information
S			90. Use of approach plates
S			91. Back up pilot on instrument approaches (VOR, ILS, RNAV)
S			92. Gathering of weather information in-flight
S			93. Load data into NAV system
S			94. Understanding and proficiency of all aircraft systems
S			95. Understanding and execution of emergency procedures

S = Satisfactory

AIR CREW

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AUXILIARY AIR CREW CHECK

		CANDIDATE	MEMBER #	DISTRICT / DIVISION / FLOTILLA
REQUIRED LEVEL	UNSAT	SATISFACTORY		EVALUATOR / DATE <i>FP or AC</i>
AIRCREW		TRAIN to LEVEL	LEVEL	

AIR CREW FLIGHT CHECK

XIII. AIR CREW FLIGHT MISSION 1				
S				96. Minimum one hour
XV. AIR CREW FLIGHT MISSION 2				
S				97. Minimum one hour
XV. AIR CREW FLIGHT MISSION 3				
S				98. Minimum one hour
XVI. AIR CREW FLIGHT MISSION 4 (Cross Country)				
S				99. Minimum two hour
XVII. AIR CREW SUPPLEMENTAL FLIGHT MISSION(S)				
S				99. As Needed

LEVEL = The Air Crew Candidate under Evaluation performed the task with accuracy and a complete regard for safety, with only a few minor errors

TRAIN to LEVEL = An error that required additional training to ensure that the Air Crew Candidate under Evaluation is able to perform at the required level without further instruction (a satisfactory mark)

UNSAT = The Air Crew Candidate under Evaluation did not perform at the required level and committed critical errors and/or a number of non-critical errors

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Was CRM performance satisfactory?	YES <input type="checkbox"/>	NO <input type="checkbox"/>
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Did the AIR CREW CANDIDATE meet required performance level?	YES <input type="checkbox"/>	NO <input type="checkbox"/>
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Flight Examiner	Signature
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Member #	Date
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<i>S = Satisfactory</i>	AIR CREW	<i>Updated FEB 2022</i>
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