

Summary Report for Individual Task
011-15Q-3024
Prepare Minimum Vectoring Altitude Chart (MVAC)
Status: Approved

Distribution Restriction: Approved for public release; distribution is unlimited.

Destruction Notice: None

Foreign Disclosure: FD5 - This product/publication has been reviewed by the product developers in coordination with the USAACE/Fort Rucker foreign disclosure authority. This product is releasable to students from all requesting foreign countries without restrictions.

Condition: In an air traffic services radar facility (tactical or installation), given TC 3-04.81, FAAO 7210.3, FAAO 8260.3, FAAO 8260.19, FAA Form 7210-9, CFR Title 14 Part 95, and two current 1:100,000 joint operational graphic (JOG) or FAA sectional aeronautical charts, you are assigned as the facility chief with a requirement to prepare a minimum vectoring altitude chart (MVAC). Some iterations of this task should be performed in MOPP 4.

Standard: Prepare a MVAC centered on the location of the radar that accurately depicts MVA by segmented area and identifies obstacles (manmade or natural) within 25 nautical miles IAW TC 3-04.81.

Special Condition: None

Safety Risk: Low

MOPP 4: Sometimes

Task Statements

Cue: You determine the requirement to, or are directed to, prepare a minimum vectoring altitude (MVA) chart.

DANGER
None

WARNING
None

CAUTION
None

Remarks: None

Notes: FAAO 7210.3, FAAO 8260.19, FAAO 8260.3, and FAA Form 7210-9 are non-APD linked references/forms; these publications/forms can be found on the Federal Aviation Administration (FAA) website under "Air Traffic Plans and Publications" or by going to the following address: http://www.faa.gov/air_traffic/publications/.

CFR Title 14 Part 95 is a non-APD linked reference and can be found on the U.S. Government Publishing Office website (www.gpo.gov) by searching for "Code of Federal Regulations."

Performance Steps

1. Identify MVA coverage area and buffer.
2. Gather charts/maps for coverage area in hard copy or digital form.
3. Identify required accuracy of charts/maps.
4. Compare accuracy code of charts/maps to required accuracy standard for MVACs.
5. Plot NAVAID location.
6. Divide MVA area for scanning and label.
7. Sub-divide scanning areas by range and label.
8. Plot adverse assumption obstacle exempt area based on landing surfaces.
9. Scan for controlling obstructions and document on working copy of FAA Form 7210-9.
10. Consult digital obstacle databases or applicable chart updating manual (CHUM/electronic chart updating manual[ECHUM]) for a source with a higher level of obstacle data accuracy.
11. Determine distance and bearing to each obstruction and document on working copy of FAA Form 7210-9.
12. Enclose obstructions in applicable buffer (3NM/5NM).
13. Identify areas of controlled airspace and document on working copy of FAA Form 7210-9.
14. Determine the MVA applicable to each obstruction or airspace area and document on working copy of FAA Form 7210-9.
15. Identify a separate obstruction clearance altitude when MVA must be established in uncontrolled airspace.
16. Apply reductions for precipitous terrain if necessary.
17. Group or isolate obstructions into sectors to obtain an operational advantage and update the working copy of FAA Form 7210-9.
18. Label final MVA sectors and update working copy of FAA Form 7210-9.
19. Prepare 2 copies of the final MVA chart and final FAA Form 7210-9 and forward for approval.

(Asterisks indicates a leader performance step.)

Evaluation Guidance: Score the Soldier GO if all performance measures are passed (P). Score the Soldier NO GO if any performance measure is failed (F). If the Soldier scores NO GO, show the Soldier what was done wrong and how to do it correctly.

Evaluation Preparation: Setup: Test this task in conjunction with other air traffic control facility related tasks. Brief Soldier: Tell the Soldier to prepare a minimum vectoring altitude (MVA) chart.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Identified MVA coverage area and buffer.			
2. Gathered charts/maps for coverage area in hard copy or digital form.			
3. Identified required accuracy of charts/maps.			
4. Compared accuracy code of charts/maps to required accuracy standard for MVACs.			
5. Plotted NAVAID location.			
6. Divided MVA area for scanning and label.			
7. Sub-divided scanning areas by range and label.			
8. Plotted adverse assumption obstacle exempt area based on landing surfaces.			
9. Scanned for controlling obstructions and documented on working copy of FAA Form 7210-9.			
10. Consulted digital obstacle databases or applicable chart updating manual (CHUM/electronic chart updating manual[ECHUM]) for a source with a higher level of obstacle data accuracy.			
11. Determined distance and bearing to each obstruction and documented on working copy of FAA Form 7210-9.			
12. Enclosed obstructions in applicable buffer (3NM/5NM).			
13. Identified areas of controlled airspace and documented on working copy of FAA Form 7210-9.			
14. Determined the MVA applicable to each obstruction or airspace area and documented on working copy of FAA Form 7210-9.			
15. Identified a separate obstruction clearance altitude when MVA must be established in uncontrolled airspace.			
16. Applied reductions for precipitous terrain if necessary.			
17. Grouped or isolated obstructions into sectors to obtain an operational advantage and updated the working copy of FAA Form 7210-9.			
18. Labeled final MVA sectors and updated working copy of FAA Form 7210-9.			
19. Prepared 2 copies of the final MVA chart and final FAA Form 7210-9 and forwarded for approval.			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	CFR TITLE 14 PART 95	IFR Altitudes	Yes	No
	FAA FORM 7210-9	Minimum IFR Altitude/Minimum Vectoring Altitude Obstruction Documentation	Yes	No
	FAAO JO 7210.3	Facility Operation and Administration (Use Current Version)	Yes	No
	FAAO 8260.19	Flight Procedures and Airspace(Use Current Version)	Yes	No
	FAAO 8260.3	United States Standard for Terminal Instrument Procedures (TERPS)(Use Current Version)	Yes	No
	TC 3-04.81(FM 3-04.303)	Air Traffic Control Facility Operations, Training, Maintenance, and Standardization	Yes	Yes

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT. It is the responsibility of all Soldiers and DA civilians to protect the environment, and to participate in the Army's Environmental Management System (EMS) at the installation where they are assigned. The key points of an EMS are:

- a. We are committed to the prevention of pollution.
- b. We are committed to meeting all applicable legal and regulatory requirements.
- c. We will strive for continual improvement in environmental management.

A sustainable installation will use resources wisely to support the current mission, without compromising the ability to accomplish future missions.

Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment and reduce waste during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects.

Safety: In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination. Everyone is responsible for safety. A thorough risk assessment must be completed prior to every mission or operation.

Prerequisite Individual Tasks : None

Supporting Individual Tasks : None

Supported Individual Tasks : None

Supported Collective Tasks : None