

AIRCRAFT DISPATCHER
UNIT 8 – AIRSPACE MAPPING
STUDENT GUIDE

UNIT OBJECTIVES

1. Manually deconflict airspace for a given area.
2. Identify reference materials needed to manually deconflict airspace for a given area.
3. Correctly identify Special-Use Areas (SUAs) and Military Training Routes (MTRs) given a sectional map.
4. Identify the scheduling office given a specific SUA or MTR.
5. Correctly determine the width of the route and the minimum/maximum altitudes flown on that route given a specific MTR.

NOTES

I. TERMINOLOGY

A. Scheduling Agency: Special-Use Airspace

- Schedules the use of the airspace

- Listed on the sectional

B. Using Agency: Special-Use Airspace

- The unit for which the SUA was originally constructed

C. Controlling Agency: Special-Use Airspace

- Controls the Special-Use Airspace

- Point of contact for deconfliction

D. Scheduling Activity: Military Training Routes

- Department of Defense (DOD) unit responsible for scheduling MTR

- Point of contact for deconfliction

II. SECTIONAL AERONAUTICAL CHART LEGEND

A. Expiration Date

B. Special-Use Airspace

- Prohibited , Restricted, Warning, and Alert Areas

- Military Operations Area (MOA)

C. Special Conservation Areas

- Description and boundary marker

D. National Security Areas

E. Victor Routes

F. MTR (IR/VR)

G. Maximum Elevation Figure (MEF)

- Highest obstacle in a 30-mile square
- Designated as blue numbers with superscript (e.g., **6⁴**)
- Add two zeros
 - **6⁴** = 6,400' MSL

H. Flight Levels (FL)

- Airspace 18,000 feet MSL and above in increments of 100

I. Miscellaneous Symbols

- Lookout towers, helibases, ultralights, gliders, parachutes, powerlines
- VOR, VOR/DME, VORTAC, TACAN

J. Compass Rose

K. Mileage Conversion Chart

- Statute miles stated in
 - Nautical
 - Kilometers

Selected Aeronautical Chart Symbols

SUA = Special Use Airspace

Blue Hatched Line

- PA = Prohibited Area
- RA = Restricted Area
- WA = Warning Area
- AA = Alert Area

PROHIBITED, RESTRICTED
OR WARNING AREA
P-56
OR
R-6401
OR
W-518

ALERT AREA
A - 631
CONCENTRATED STUDENT
HELICOPTER TRAINING

Magenta Hatched Line

MOA = Military Operations Area

VANCE 2 - MOA

Special Conservation Areas

National Parks, Wildlife Refuges,
Primitive and Wilderness Areas

HAVASU LAKE NATIONAL
WILDLIFE REFUGE

Low Altitude Airways = Blue Line (Victor Routes)

Arrows indicate single direction route

MTR's = Military Training Route Grey Line

Arrows indicate single direction route

MEF = Maximum Elevation Figure

(Thousands of Feet) — **67** — (Hundreds of Feet)

(Highest within each Sectional Chart)

- Parachute Jumping Area
- Glider Operating Area
- Hang Gliding Activity
- Ultralight Activity
- Lookout Tower
- Heliport

Isogonic Line and Value
14° E

- VOR VOR = VHF Omnidirectional Radio Range
- VOR/DME DME = Distance Measuring Equipment
- VORTAC
- TACAN TACAN = Tactical Air Navigation

COMPASS ROSE oriented to Magnetic North of NAVAID which may not be adjusted to the charted Isogonic Values

III. AP/1B CHART

A. MTR (IR/VR)

- IR–red line
- VR–blue line

B. SR–black line

C. AR–double black line

D. Starting Point

E. Segments

F. Turning Point

G. Ending Point

H. Single Route

I. Multiple Route

J. Surface, floor/ceiling

- Add two zeros (e.g., $300 + 00 = 30,000$)

- Floor is either surface or above ground level (AGL)

The altitude from ground level up (e.g., 300 AGL means 300 feet above ground level)

- Ceiling is mean sea level (MSL)

The “true” altitude (e.g., Lake Tahoe is at 7,000 feet, an aircraft flying 500 feet above Lake Tahoe will be flying at 500 feet AGL or at 7,500 feet MSL)

IV. AP/1B BOOK

- Published every 56 days
- Downloadable
- Contains all MTRs (IR/VR), SRs, ARs, and nuclear power plants
- Contains scheduling activity phone numbers, hours of operation, route description (altitudes), terrain following operations, route widths, and special operating procedures

NOTES

ORDERING INFORMATION

AP/1A and AP/1B Books:

1. Download the AP/1A and AP/1B Books from:
<https://164.214.2.62/products/digitalaero/index.cfm>

From the “Planning and Enroute Supplements” section, select either the “AP/1A” or “AP/1B” link.

2. Order from the National Aeronautical Charting Office (NACO):
 - Telephone (301) 436-8301 or (800) 638-8972
 - www.naco.faa.gov

From the “Catalogs/Ordering Info” link. Scroll down the page to the NIMA and NOAA Chart Catalog section. Select the “NIMA Worldwide Aeronautical Charts” link for pricing and ordering information.

AP/1B Charts:

1. Order from the National Aeronautical Charting Office (NACO):
 - Telephone (301) 436-8301 or (800) 638-8972
 - www.naco.faa.gov

From the “Catalogs/Ordering Info” link. Scroll down the page to the NIMA and NOAA Chart Catalog section. Select the “NIMA Worldwide Aeronautical Charts” link for pricing and ordering information.

2. If available, download the AP/1B Charts from:
<https://164.214.2.62/products/digitalaero/index.cfm>

From the Flight Information Planning section, select the “Enroute Charts” link.

Sectional Aeronautical Charts:

1. Order from the National Aeronautical Charting Office (NACO):

- Telephone (301) 436-8301 or (800) 638-8972
- www.naco.faa.gov

From the “Catalogs/Ordering Info” link, select the “VFR Charts” link; select the “Sectional Aeronautical Charts” for pricing and ordering information.

2. To purchase locally, check the NACO website for local NACO agents in your area.

- Telephone (301) 436-8301 or (800) 638-8972
- www.naco.faa.gov

Select the “Agent Listings” link and complete the query.

Aeronautical Chart User’s Guide:

Order from the National Aeronautical Charting Office (NACO):

- Telephone (301) 436-8301 or (800) 638-8972
- www.naco.faa.gov

From the “Catalogs/Ordering Info” link, select the “Supplemental Charts/Pubs” link, then select the “Aeronautical Chart User’s Guide” link for pricing and ordering information.

MAPPING EXERCISE

The purpose of this exercise is to complete the necessary paperwork associated with performing the job of ACDP. Ensure that you understand the process by asking questions of your coach and group members.

SAMPLE EXERCISE: LAS VEGAS SECTIONAL

Use all reference material that is located on your table to answer the questions below. Transfer the information that you find to the Airspace Exercise Worksheet. Do not answer the questions directly below. Use the worksheet.

Location:

A fire is located at 37° 22' by 114° 37' (5 miles West of Elgin in Delamar Mountains)

Questions:

On the forms provided by the instructor, answer the following questions:

Is there special use airspace here? If so, what is the SUA?
(Refer to sectional)

Who is the controlling agency?
(Refer to sectional)

Which MTRs/SRs are involved?
(Refer to sectional and AP/1B book and chart)

Which segments of the MTRs are involved?
(Refer to AP/1B book and chart)

What is the floor and ceiling of the MTR?
(Refer to AP/1B book and chart)

What are the widths of the segments?
(Refer to AP/1B book)

Who is the DOD scheduling activity for the MTRs?
(Refer to AP/1B book)

NOTES

AIRSPACE EXERCISE WORKSHEET

Sample Exercise

Lat/Long: 37° 22' X 114° 37', Las Vegas Sectional

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

AIRSPACE EXERCISE WORKSHEET

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Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

AIRSPACE EXERCISE WORKSHEET

Exercise 1

Lat/Long: 39° 38' x 116° 45', Las Vegas Sectional

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

AIRSPACE EXERCISE WORKSHEET

Exercise 1, continued

Lat/Long: 39° 38' x 116° 45', Las Vegas Sectional

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

AIRSPACE EXERCISE WORKSHEET

Exercise 2

Lat/Long: 38° 00' x 116° 00', Las Vegas Sectional

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

AIRSPACE EXERCISE WORKSHEET

Exercise 2, continued

Lat/Long: 38° 00' x 116° 00', Las Vegas Sectional

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

AIRSPACE EXERCISE WORKSHEET

Exercise 2, continued

Lat/Long: 38° 00' x 116° 00' Las Vegas Sectional

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

AIRSPACE EXERCISE WORKSHEET

Exercise 3

Lat/Long: 43° 05' x 119° 58', Klamath Falls Sectional

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

AIRSPACE EXERCISE WORKSHEET

Exercise 3, continued

Lat/Long: 43° 05' x 119° 58', Klamath Falls Sectional

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

AIRSPACE EXERCISE WORKSHEET

Exercise 4

Lat/Long: 40° 17' x 120° 04', Klamath Falls Sectional

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

AIRSPACE EXERCISE WORKSHEET

Exercise 5

Lat/Long: 40° 15' X 121° 03', Klamath Falls Sectional

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

AIRSPACE EXERCISE WORKSHEET

Exercise 6

Lat/Long: 39° 50' X 118° 04', San Francisco Sectional

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

AIRSPACE EXERCISE WORKSHEET

Exercise 7

Lat/Long: 37° 40' x 121° 32', San Francisco Sectional

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:

AIRSPACE EXERCISE WORKSHEET

Exercise 8

Lat/Long: 39° 32' x 121° 03', San Francisco Sectional

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not
N/A	N/A	N/A		

Daily Contact
Remarks:

Date	Scheduling Activity (MTR) Controlling Agency (MOA)	Commercial Phone #	Contact Made to: (Scheduler or Controller's name)	Contact made by: (Dispatcher's name)

Airspace Identification (SUA or MTR)	Segment Affected (MTR)	Width (MTR)	Altitudes	Hot or Not

Daily Contact
Remarks:
