NASWHIDBEY INSTRUCTION 3770.1E

From: Commanding Officer

Subj: PACIFIC NORTHWEST TRAINING RANGE COMPLEX MANUAL (PACNORWEST TRCM)

Ref: (a) OPNAVINST 3770.2K
    (b) OPNAVINST 3710.7T
    (c) FAA Order JO7400.2F
    (d) FAA Order JO7610.4M
    (e) NASWHIDBEYINST 3722.3C
    (f) CINCPACFLTINST 3624.1G

Encl: (1) PACNORWEST TRCM

1. Purpose. Enclosure (1) provides PACNORWEST TRCM Operation Area (OPAREA) users with an overview of Naval Air Station (NAS) Whidbey Island training airspace areas. This manual incorporates guidance provided in references (a) through (f) and outlines safety precautions and procedures for scheduling; describes special use airspace (SUA) and surface facilities and establishes procedures for training within NAS Whidbey Island PACNORWEST TRCM OPAREAs. This revision incorporates the following updated and additional information:

   a. The addition of information giving the legal description of both the Chinook A and B Military Operating Areas (MOAs).

   b. The addition of information regarding the use of depleted Uranium ammunition per DOD Directive 4715.11P.

   c. The addition of concept of operations for scheduling and use of the AN/UPQ-8 (V) Threat Emitter Simulators.

   d. The addition of information regarding frequency and telephone number changes.

2. Cancellation. NASWHIDBEYINST 3770.1D

3. Policy and Guidance

   a. The PACNORWEST TRCM OPAREA is an air, surface and subsurface operating area off the coast of Washington and inland
Oregon and Washington. It includes the area covered by W-237, R-6701, R-5701, R-5706, A-680, Naval Weapons System Training Facility (NWSTF) Boardman, Boardman MOA/Air Traffic Control Assigned Airspace (ATCAA), Okanogan MOA/ATCAA, Molson ATCAA, Roosevelt MOA/ATCAA, Republic ATCAA, Olympic MOA/ATCAA, Chinook MOA and various air and surface training areas as defined in this instruction. The OPAREA is used for various air, surface, subsurface, air-to-surface and surface to air exercises.

b. Per reference (a), Department of the Navy (DON) Airspace Procedures Manual, real time joint-use of SUA shall be the goal and is the only reasonable manner to conduct training in peacetime. At those times when SUA is not activated or being used by the designated using agency, every reasonable attempt shall be made to provide the airspace to other users. DON activities must ensure a mutual use doctrine that provides for timely turnover of airspace to the Federal Aviation Administration (FAA). Activities requiring exclusive-use airspace must be identified and must provide justification.

c. Per reference (a), Fleet Area Control and Surveillance Facility (FACSFAC), San Diego, California is designated as the DON Regional Airspace Coordinator (RAC) and is the focal point and central clearinghouse for all SUA matters that pertain to any DON airspace related activity within their regional area of responsibility. NAS Whidbey Island acts as a direct airspace liaison to the RAC and is responsible for the scheduling and management of all airspace matters that pertain to the PACNORWEST TRCM OPAREA.

4. Recommended Changes. Forward recommended changes to:

Mail:  Commanding Officer (N331)
       NAS Whidbey Island
       3730 N Charles Porter Ave
       Oak Harbor, WA 98278-5300

Message:  NAS WHIDBEY ISLAND WA//N3/N33/N331//
FAX:     DSN 820-1283, COMM (360) 257-1283
Telephone:  DSN 820-2877, COMM (360) 257-2877
E-mail:     WHDB_Range_Schedules_All_Hands@navy.mil

/s/
G. K. DAVID

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USS ABRAHAM LINCOLN
CVW-2
CVW-9
CVW-11
CVW-14
FAIRECONRON THREE
MARPACHQ ESQUIMALT
MAWTS ONE, MCAS Yuma, AZ
142 FG Portland, OR
120 FIG Great Falls, MT
114 FS Kingsley Field, OR
391 FS Mountain Home AFB, ID
389 FS Mountain Home AFB, ID
190 FS Boise Air Terminal, ID
FAA Seattle ARTCC AUBURN SEATTLE WA (MOS)
AFREP, FAA Northwest Mountain Region (ANM-900)
PACIFIC NORTHWEST TRAINING RANGE COMPLEX MANUAL (PACNORWEST TRCM)

NASWHIDBEYINST 3770.1E
TABLE OF CONTENTS

CHAPTER 1 – GENERAL..............................................1-1

1.1 GENERAL............................................................1-1

1.2 NOISE ABATEMENT POLICY........................................1-1

1.3 DEFINITIONS..........................................................1-1

1.3.1 Air Combat Maneuvering (ACM)...............................1-1

1.3.2 Air Traffic Control Assigned Airspace (ATCAA).........1-1

1.3.3 Exclusive Use..................................................1-1

1.3.4 Co-Usage........................................................1-1

1.3.5 Cold Area.......................................................1-2

1.3.6 Hot Area........................................................1-2

1.3.7 Notice to Airman (NOTAM)..................................1-2

1.3.8 Notice to Mariners (NOTMARS)............................1-2

1.3.9 Practice Bomb................................................1-2

1.3.10 Restricted Area...............................................1-2

1.3.11 Scheduling Authority......................................1-2

1.3.12 Special Use Airspace (SUA)................................1-2

1.3.13 Warning Area................................................1-2

1.3.14 Military Training Routes (MTR)............................1-2

1.3.15 Military Operations Areas (MOA)..........................1-2

1.4 WARNINGS, CAUTIONS, AND NOTES...............................1-2

1.5 GENERAL PRUDENTIAL RULES..................................1-3

1.6 USER RESPONSIBILITIES..........................................1-3

1.7 NAS WHIDBEY ISLAND, RANGE SCHEDULES DIVISION..............1-3

1.8 SAFETY PRECAUTIONS.............................................1-4

1.8.1 General........................................................1-4

1.8.2 Scope..........................................................1-4

1.9 REGULATIONS APPLICABLE TO BOTH AIR AND SURFACE UNITS...1-4

1.9.1 Clear Range....................................................1-4

1.9.2 Firing with Cloud Cover......................................1-5

1.9.3 Firing Areas....................................................1-5

1.9.3.1 Firing Exercises Near Commercial Shipping Lanes....1-5
# ADDITIONAL SAFETY PRECAUTIONS FOR FIRING EXERCISES BY SURFACE UNITS

1.10

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.10.1</td>
<td>Responsibility</td>
</tr>
<tr>
<td>1.10.2</td>
<td>Lookouts</td>
</tr>
<tr>
<td>1.10.3</td>
<td>Observers</td>
</tr>
<tr>
<td>1.10.4</td>
<td>Sight Setters</td>
</tr>
<tr>
<td>1.10.5</td>
<td>Bravo Flag</td>
</tr>
<tr>
<td>1.10.6</td>
<td>Cease Fire</td>
</tr>
</tbody>
</table>

# SURFACE GUNNERY EXERCISES

1.11

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.11.1</td>
<td>Clear Range</td>
</tr>
<tr>
<td>1.11.2</td>
<td>Safety Bearings</td>
</tr>
<tr>
<td>1.11.3</td>
<td>Communications</td>
</tr>
</tbody>
</table>

# ANTI-AIRCRAFT GUNNERY

1.12

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.12.1</td>
<td>Restrictions</td>
</tr>
<tr>
<td>1.12.2</td>
<td>Communications</td>
</tr>
</tbody>
</table>

# ANTI-SUBMARINE WARFARE EXERCISES

1.13

# ADDITIONAL SAFETY PRECAUTIONS/RANGE REGULATIONS FOR AIR UNITS

1.14

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.14.1</td>
<td>Responsibility</td>
</tr>
<tr>
<td>1.14.2</td>
<td>Visual Inspection</td>
</tr>
<tr>
<td>1.14.3</td>
<td>Ordnance Jettison</td>
</tr>
<tr>
<td>1.14.4</td>
<td>Hung Ordnance</td>
</tr>
<tr>
<td>1.14.5</td>
<td>Air Separation</td>
</tr>
<tr>
<td>1.14.6</td>
<td>Target Identification</td>
</tr>
<tr>
<td>1.14.7</td>
<td>Cease Fire for Safety</td>
</tr>
<tr>
<td>1.14.8</td>
<td>Runs on Submarines</td>
</tr>
<tr>
<td>1.14.9</td>
<td>Clearance from Helicopters</td>
</tr>
<tr>
<td>1.14.10</td>
<td>Disturbance of Wildlife</td>
</tr>
<tr>
<td>1.14.11</td>
<td>Reporting Danger to Life or Property</td>
</tr>
</tbody>
</table>

# AIR-TO-AIR GUNNERY EXERCISES

1.15

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.15.1</td>
<td>Armament Switch</td>
</tr>
<tr>
<td>1.15.2</td>
<td>Range Clear</td>
</tr>
<tr>
<td>1.15.3</td>
<td>Target Safety Cone</td>
</tr>
<tr>
<td>1.15.4</td>
<td>Break-aways</td>
</tr>
<tr>
<td>1.15.5</td>
<td>Visibility</td>
</tr>
</tbody>
</table>

# AIR-TO-SURFACE EXERCISES

1.16

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.16.1</td>
<td>Characteristics of Ordnance</td>
</tr>
<tr>
<td>1.16.2</td>
<td>Populated Areas</td>
</tr>
<tr>
<td>1.16.3</td>
<td>Armament Switch</td>
</tr>
<tr>
<td>1.16.4</td>
<td>Direction of Runs</td>
</tr>
</tbody>
</table>

# AIR-TO-AIR EXERCISES

1.17
1.18 OTHER MISSILE EXERCISES...............................1-9

1.19 DEPLETED URANIUM AMMUNITION..........................1-9

CHAPTER 2 – SCHEDULING PROCEDURES.............................2-1

2.1 GENERAL.................................................................2-1

2.2 SCHEDULING..............................................................2-1
2.2.1 NAS Whidbey Island Range Schedules Division...........2-1
2.2.2 Hours of Operations..............................................2-1
2.2.3 Scheduling Times................................................2-1
2.2.4 Notice to Mariners (NOTMARS)...............................2-1

2.3 CHANGES AND CANCELLATIONS....................................2-2
2.3.1 Times.................................................................2-2
2.3.2 Notices to Airman (NOTAM)....................................2-2
2.3.3 Extensions...........................................................2-2
2.3.4 Military Training Routes (MTRs)..............................2-2

2.4 PRIORITIES...............................................................2-2
2.4.1 Conflict Resolution...............................................2-3
2.4.2 Scheduling...........................................................2-3

2.5 REQUESTS VIA MESSAGE.............................................2-3
2.5.1 Message Format....................................................2-3

2.6 ELECTRONIC COUNTERMEASURES (ECM) AND CHAFF REQUESTS...2-4
2.6.1 ECM Area.............................................................2-4
2.6.2 ECM Coordination................................................2-4

CHAPTER 3 – MILITARY OPERATIONS AREAS (MOAs)/AIR TRAFFIC
CONTROL ASSIGNED AIRSPACE (ATCAA).............................3-1

3.1 GENERAL.................................................................3-1
3.1.1 Description..........................................................3-1
3.1.2 Operating Hours....................................................3-1
3.1.3 Scheduling...........................................................3-1
3.1.4 Communications..................................................3-1

3.2 OKANOGAN MOA/ATCAA...........................................3-2
3.2.1 Okanogan A Boundaries........................................3-2
3.2.2 Okanogan B Boundaries........................................3-2
3.2.3 Okanogan C Boundaries........................................3-2
3.2.4 Molson ATCAA.....................................................3-3

3.3 ROOSEVELT A MOA/ATCAA.........................................3-3
3.3.1 Roosevelt A Boundaries.........................................3-3
3.3.2 Roosevelt B Boundaries.........................................3-4
3.3.3 Republic ATCAA.................................................3-4

3.4 OLYMPIC A MOA/ATCAA...........................................3-4
3.4.1 Olympic A Boundaries...........................................3-5
3.4.2 Olympic B Boundaries...........................................3-5

3.5 FILING PROCEDURES..............................................3-5

3.6 REAL-TIME COORDINATION......................................3-6

3.7 MOA OPERATING PROCEDURES.....................................3-6

3.8 CROP DUSTING ACTIVITY..........................................3-8

3.9 FLARE DROPS......................................................3-8

3.10 WHIDBEY ISLAND SURVIVAL AREA..............................3-8
3.10.1 Point of Contact/Scheduling................................3-9
3.10.2 Altitude Assignment...........................................3-9

3.11 CRESCENT HARBOR NAVAL OPERATIONS AREA................3-9
3.11.1 Point of Contact/Scheduling................................3-9
3.11.2 Procedures for Ordnance Use...............................3-9

3.12 NAVY EXCHANGE (NEX) LZ/DZ.................................3-9
3.12.1 Point of Contact/Scheduling................................3-9

3.13 CHINOOK A AND B MOAs.........................................3-10
3.13.1 Chinook A Boundaries..........................................3-10
3.13.2 Chinook B Boundaries..........................................3-10

3-14 RESTRICTED AREA R-6701, ADMIRALTY INLET BOUNDARIES.....3-10

3-15 ALERT AREA A-680, OLF COUPEVILLE BOUNDARIES.............3-10

CHAPTER 4 - DARRINGTON OPERATING AREA............................4-1

4.1 GENERAL..........................................................4-1
4.1.1 Description.....................................................4-1
4.1.2 Scheduling.....................................................4-1
4.1.3 Communications...............................................4-1

4.2 AREA BOUNDARIES..................................................4-1
4.2.1 Darrington West Boundaries..................................4-1
4.2.2 Darrington East Boundaries..................................4-1

4.3 OPERATING PROCEDURES..........................................4-2
CHAPTER 5 – WASHINGTON COASTAL WARNING AREAS......................... 5-1

5.1 GENERAL............................................................... 5-1
5.1.1 Description...................................................... 5-1
5.1.2 Operating Hours.................................................. 5-1
5.1.3 Scheduling....................................................... 5-1
5.1.4 Communications.................................................. 5-1

5.2 AIRSPACE BOUNDARIES.............................................. 5-2
5.2.1 Warning Area W-237A Low/High.............................. 5-2
5.2.2 Warning Area W-237B Low/High.............................. 5-2
5.2.3 Warning Area W-237C.......................................... 5-2
5.2.4 Warning Area W-237D.......................................... 5-3
5.2.5 Warning Area W-237E.......................................... 5-3
5.2.6 Warning Area W-237F.......................................... 5-3
5.2.7 Warning Area W-237G.......................................... 5-3
5.2.8 Warning Area W-237H.......................................... 5-4
5.2.9 Warning Area W-237J.......................................... 5-4

5.3 OLYMPIC COAST NATIONAL MARINE SANCTUARY (OCNMS)........ 5-4
5.3.1 OCNMS Boundaries............................................. 5-5
5.3.2 OCNMS Authorized Activities................................ 5-5
5.3.3 OCNMS Restrictions........................................... 5-5

5.4 USE OF ORDNANCE.................................................... 5-6
5.4.1 Authorized Ordnance............................................ 5-6
5.4.2 Ordnance Scheduling Procedures............................ 5-6
5.4.3 Notice to Mariners (NOTEMARS)............................. 5-6
5.4.4 Preferential Drop Zones....................................... 5-7
5.4.4.1 DZ 1..................................................... 5-7
5.4.4.2 DZ 2..................................................... 5-7
5.4.4.3 DZ 3..................................................... 5-8
5.4.4.4 DZ 4..................................................... 5-8
5.4.4.5 DZ 5..................................................... 5-8
5.4.4.6 DZ 6..................................................... 5-8
5.4.4.7 DZ Identification......................................... 5-8
5.4.5 Preferential Routings.......................................... 5-8

5.5 REAL-TIME COORDINATION........................................ 5-10

5.6 OPERATING PROCEDURES............................................. 5-10

5.7 ELECTRONIC COUNTERMEASURES (ECM)............................ 5-12

5.8 CANADIAN MARITIME PACIFIC (MAR PAC) COORDINATION........... 5-12

5.9 HELICOPTER SERVICES............................................... 5-12

5.10 POST OVERHAUL REQUIREMENTS................................... 5-12
5.11 SHIP - SHORE COMMUNICATIONS............................. 5-13

CHAPTER 6 - MILITARY TRAINING ROUTES (MTRs)................. 6-1

6.1 GENERAL...................................................... 6-1
6.1.1 Preflight Planning......................................... 6-2
6.1.2 Operating Procedures...................................... 6-2

CHAPTER 7 - CVN OPERATING PROCEDURES........................... 7-1

7.1 GENERAL...................................................... 7-1

7.2 COORDINATION................................................. 7-1
7.2.1 Planning Conference....................................... 7-1
7.2.2 ATC Briefs/Liaison Ship riders............................ 7-2

7.3 PRE-SAIL COORDINATION MESSAGES.............................. 7-2
7.3.1 Summary of Operations................................... 7-2
7.3.2 Divert Alerts................................................ 7-3
7.3.3 OPAREA Requests.......................................... 7-3
7.3.4 ALTRV Requests............................................. 7-3
7.3.5 IFF Requests............................................... 7-3

7.4 FLIGHT PLANNING.............................................. 7-3
7.4.1 OPAREA Modifications..................................... 7-3
7.4.2 Daily Air Plan.............................................. 7-3
7.4.3 Flight Information Messages.............................. 7-4
7.4.4 Flight Plans............................................... 7-4
7.4.5 Overhead Messages........................................ 7-4

7.5 AT-SEA COORDINATION........................................ 7-4

7.6 COMMUNICATIONS.............................................. 7-5
7.6.1 Landline Communications................................ 7-5
7.6.2 Ship-to-Shore Radio Communications...................... 7-5
7.6.3 Air-to-Ground Communications............................ 7-6

7.7 BINGO/DIVERTS TO SHORE FACILITIES........................ 7-6
7.7.1 Bingo........................................................ 7-6
7.7.2 Diverts..................................................... 7-7

7.8 CONDUCT OF FLIGHT........................................... 7-7
7.8.1 W-237 Complex Operations............................... 7-7
7.8.2 Strait of Juan De Fuca/Puget Sound Operations........... 7-7

7.9 STRAIT OF JUAN DE FUCA (SOJDF) CARRIER OPERATIONS...... 7-7
7.9.1 General Special Use Airspace.............................. 7-7
7.9.2 Aircraft Carrier (CVN) use of SOJDF...................... 7-7
CHAPTER 8 – NAVAL WEAPONS SYSTEM TRAINING FACILITY
BOARDMAN, OREGON.................................8-1

8.1 DESCRIPTION................................................8-1
8.1.1 Operating Hours........................................8-1
8.1.2 Boardman MOA and ATCAA Boundaries.............8-1
8.1.3 Boardman Restricted Area 5701 Area (a)...........8-2
8.1.4 Boardman Restricted Area 5706 Area (b)...........8-2
8.1.5 Boardman Restricted Area 5701 Area (c)...........8-2
8.1.6 Boardman Restricted Area 5701 Area (d)...........8-2
8.1.7 Boardman Restricted Area 5701 Area (e)...........8-2
8.1.8 Boardman Restricted Area 5706........................8-3

8.2 OPERATING PROCEDURES.................................8-3
8.2.1 General..............................................8-3
8.2.2 Entering Boardman Range.............................8-3
8.2.3 Departing Boardman Range.............................8-3

8.3 MAIN TARGET............................................8-4
8.3.1 Target (1)............................................8-4
8.3.2 Navigation Check Point................................8-4

8.4 STRAFING PIT..............................................8-4

8.5 RANGE PRIORITY..........................................8-5

8.6 TYPE EXERCISE/ORDNANCE..............................8-5

8.7 PATTERNS................................................8-6

8.8 EXIT PROCEDURES.........................................8-6

8.9 AN/UPQ-8 (V) THREAT EMITTER SIMULATORS........8-6

LIST OF ILLUSTRATIONS
1. OKANOGAN/ROOSEVELT MOAs/ATCAAs, REPUBLIC, MOLSON ATCAAs
2. OLYMPIC MOAs/ATCAAs, W-237, and OLYMPIC COAST NATIONAL MARINE SANCTUARY
3. BOARDMAN MOA, ATCAA, and RESTRICTED AREAS
4. DARRINGTON AREA
5. PREFERENTIAL DROP ZONES
6. CASE I OPAREA
7. SURVIVAL AREA, CRESCENT HARBOR RESTRICTED AREA, NEX LZ
8. NWSTF BOARDMAN TARGET DESCRIPTION
9. SAFE HAVEN AREAS
LIST OF ABBREVIATIONS/ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>Anti Aircraft</td>
</tr>
<tr>
<td>ACM</td>
<td>Air Combat Maneuver</td>
</tr>
<tr>
<td>ADIZ</td>
<td>Air Defense Identification Zone</td>
</tr>
<tr>
<td>AIROPS</td>
<td>Air Operations</td>
</tr>
<tr>
<td>AR</td>
<td>Air Refueling Route</td>
</tr>
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<td>Air Route Traffic Control Center</td>
</tr>
<tr>
<td>ASW</td>
<td>Anti Submarine Warfare</td>
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<tr>
<td>ATA</td>
<td>Advance Tactical Assessment</td>
</tr>
<tr>
<td>ATC</td>
<td>Air Traffic Control</td>
</tr>
<tr>
<td>ATCAA</td>
<td>Air Traffic Control Assigned Airspace</td>
</tr>
<tr>
<td>CADIZ</td>
<td>Canadian Air Defense Identification Zone</td>
</tr>
<tr>
<td>CATCC</td>
<td>Carrier Air Traffic Control Center</td>
</tr>
<tr>
<td>CCA</td>
<td>Carrier Controlled Approach</td>
</tr>
<tr>
<td>CIWS</td>
<td>Close in Weapons System</td>
</tr>
<tr>
<td>CNI</td>
<td>Communications, Navigation and Identification equipment</td>
</tr>
<tr>
<td>CV1</td>
<td>CV-1 TACAN Approach</td>
</tr>
<tr>
<td>DACM</td>
<td>Defensive Air Combat Maneuvers</td>
</tr>
<tr>
<td>DU</td>
<td>Depleted Uranium Ammunition</td>
</tr>
<tr>
<td>ECM</td>
<td>Electronic Counter Measures</td>
</tr>
<tr>
<td>FCLP</td>
<td>Fleet Carrier Landing Practice</td>
</tr>
<tr>
<td>FCF</td>
<td>Functional Check Flight</td>
</tr>
<tr>
<td>FLEETEX</td>
<td>Fleet Exercise</td>
</tr>
<tr>
<td>FLIP</td>
<td>Flight Information Publication</td>
</tr>
<tr>
<td>IAF</td>
<td>Initial Approach Fix</td>
</tr>
<tr>
<td>IAS</td>
<td>Indicated Air Speed</td>
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<td>Instrument flight rules</td>
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<td>Instrument Flight Rules Military Training Route</td>
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</tbody>
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M

<table>
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<th>FULL FORM</th>
</tr>
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</tr>
<tr>
<td>MARSA</td>
<td>Military Assumes Responsibility for Separation of Aircraft</td>
</tr>
<tr>
<td>MOA</td>
<td>Military Operations Area</td>
</tr>
<tr>
<td>MTR</td>
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</tr>
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</table>

N

<table>
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<th>FULL FORM</th>
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</tr>
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<td>Notice to Airman</td>
</tr>
<tr>
<td>NOTMAR</td>
<td>Notice to Mariners</td>
</tr>
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<td>North American Air Defense Command</td>
</tr>
<tr>
<td>NWSTF</td>
<td>Naval Weapons System Training Facility</td>
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<td>NVD</td>
<td>Night Vision Device</td>
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<tr>
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<td>Outlying Landing Field</td>
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<tr>
<td>OPAREA</td>
<td>Operation Area</td>
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<td>Operational Readiness Exercise</td>
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<td>Operational Readiness Inspection</td>
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<td>Pacific North West Training Range Complex Manual Operation Area</td>
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<tr>
<td>UNICOM</td>
<td>Universal Integrated Communications</td>
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</table>
V

VFR  Visual Flight Rules
VR   Visual Flight Rules Military Training Route

W

WADS  Western Air Defense Sector
1.1 GENERAL

1. Per reference (a), NAS Whidbey Island is assigned scheduling responsibility to manage offshore and inland operating areas dedicated for military use by surface and air platforms. This manual contains a comprehensive listing of all PACNORWEST TRCM OPAREAs. Chapters 2 through 7 include detailed descriptions of these areas.

2. All military training (to the maximum extent possible) should be conducted within the established OPAREAs.

1.2 NOISE ABATEMENT POLICY. It is Commanding Officer, Naval Air Station Whidbey Island policy to conduct required training and operational flights with a minimum impact on surrounding communities. The importance of maintaining continued good relations with the public and other federal agencies dictate strict compliance with the provisions contained in reference (b) and this instruction. Each aircrew shall be familiar with the noise profiles of their aircraft and shall be committed to minimizing noise impacts without compromising operational and safety requirements.

1.3 DEFINITIONS

1.3.1 Air Combat Maneuvering (ACM). Flight of two or more aircraft involved in abrupt changes in flight path/altitude-scheduled as an exclusive operation.

1.3.2 Air Traffic Control Assigned Airspace (ATCAA). ATCAA of defined vertical/lateral limits are established by ATC for the purpose of separating military training activities from other IFR traffic. ATCAA is designed and established in controlled airspace normally above 18,000 feet Mean Sea Level (MSL) to accommodate daily training missions and planned exercises.

1.3.3 Exclusive Use. OPAREA scheduling term, which indicates an area, is reserved for the unit, which scheduled the area. Non-participants are prohibited from entering the area.

1.3.4 Co-Usage. Concurrent use of an area by two or more units. Implies that units are able to conduct the operation safely even though other units are operating or transiting the area. Co-use of an area requires approval of the scheduling unit.
1.3.5 Cold Area. OPAREA wherein no hazardous operations are being conducted.

1.3.6 Hot Area. Air or surface OPAREA wherein ordnance is being fired/dropped or other operations are being conducted that presents a hazard to non-participants.

1.3.7 Notice to Airman (NOTAM). A broadcast or published flight advisory to disseminate information affecting safety of flight, issued on a temporary basis.

1.3.8 Notice to Mariners (NOTMARS). A broadcast or published navigation advisory to disseminate information affecting navigation within a limited geographic area.

1.3.9 Practice Bomb. Inert ordnance.

1.3.10 Restricted Area. An area in which special restricted measures are employed to prevent non-participants from entering the area.

1.3.11 Scheduling Authority. Exercises administrative control of OPAREAS and coordinates and schedules usage.

1.3.12 Special Use Airspace. Airspace wherein activities must be confined because of their nature, and/or wherein limitations are imposed on non-participating aircraft includes MOAs, Warning Areas, Alert Areas, and Restricted Areas.

1.3.13 Warning Area. A specified area over international waters where hazardous activities may occur.

1.3.14 Military Training Route (MTR). Designated airspace for military low altitude, high-speed navigation and tactics to be flown in excess of 250 KIAS below 10,000 feet Mean Sea Level (MSL).

1.3.15 Military Operations Area (MOA). An airspace area designated for non-hazardous military activity to segregate non-participating IFR aircraft from participating military operations and to inform the VFR pilot when such activity is being conducted.

1.4 WARNINGS, CAUTIONS, AND NOTES. The following definitions apply to "WARNINGS," "CAUTIONS," and "Notes" found throughout this manual.
a. **Warning.** An operating procedure, practice or condition, etc., that may result in injury or death if not carefully observed or followed.

b. **Caution.** An operating procedure, practice or condition that may result in damage to equipment if not carefully observed or followed.

c. **Note.** An operating procedure, practice or condition that must be emphasized.

1.5 **GENERAL PRUDENTIAL RULES**

1. This manual has been prepared per references (a) and (b). It shall not be construed as modifying or superseding directives issued by higher authority.

2. OPAREA users shall comply with this manual and are expected to exercise their best judgment when encountering conditions not covered.

1.6 **USER RESPONSIBILITIES.** The primary purposes of OPAREAs are to support the needs of the user. To permit effective utilization of all areas, the user also has certain responsibilities.

1. Unless otherwise directed by higher authority, users shall comply with procedures, weather minimums, and ordnance employment restrictions contained in this manual.

2. Schedule proposed activities within NAS Whidbey Island PACNORWEST TRCM OPAREAs directly with NAS Whidbey Island, Range Schedules Division.

3. Provide a minimum of 60 days prior notice for large-scale (i.e., Feet Exercise (FLEETEX), Readiness Exercise (READEX), Operational Readiness Inspection/Exercise, Advanced Tactical Assessment (ORI/ORE, ATA)) events.

1.7 **NAS WHIDBAY ISLAND, RANGE SCHEDULES DIVISION**

1. Responsible for overall management of the PACNORWEST TRCM OPAREA airspace described in this manual. Establish, enforce, and publish procedures for effective safe utilization of assigned OPAREAs.

2. Approving authority for all matters relating to the scheduling and use of these areas. De-conflict and assign priority to airspace usage.
3. Provide briefings concerning scheduling and use of NAS Whidbey Island PACNORWEST TRCM OPAREAs.

4. Coordinate services, ensure issuance of NOTAMS/NOTMARS, issue schedules, and prescribe additional regulations as necessary.

5. Submit usage reports per references (a), (c), and (d).


7. Schedule Hot Pit periods at NAS Whidbey Island.


1.8 SAFETY PRECAUTIONS

1.8.1 General. The purpose of safety precautions and regulations are to prevent personnel injury or property damage that might result from ships or aircraft training within the PACNORWEST TRCM OPAREAs. These safety precautions and range regulations are not intended to conflict with, or to reduce, the full exercise by any command of responsibilities assigned by competent authority. In any situation, the commanding officer or senior aviator in the flight shall use proper discretion to implement measures, which will achieve maximum safety.

1.8.2 Scope. This chapter sets forth the safety precautions and range regulations applicable to NAS Whidbey Island PACNORWEST TRCM OPAREAs. Those safety precautions and range regulations, which apply only to specific operating areas or targets, are included in the appropriate chapter of this manual.

1.9 REGULATIONS APPLICABLE TO BOTH AIR AND SURFACE UNITS

1.9.1 Clear Range. The operational commander conducting an exercise shall be satisfied that the range is clear prior to beginning the exercise. Procedures to ensure a clear range may be established based on visual and/or radar surveillance. The Officer Conducting Exercise (OCE) shall take into consideration all applicable factors in arriving at the final decision, such as urgency of the mission, density of air and surface traffic, local visibility, distance offshore, type and expected
reliability of the ordnance and the availability, accuracy, reliability, and completeness of radar coverage. When surveillance of the range is conducted partially or solely by radar, surface and/or airborne, commanders shall ensure that the radar is operated and monitored by well-trained and competent personnel. Regardless of what surveillance method is used, there must be assurance that the **RANGE IS CLEAR.** Surface or air firing exercises shall be suspended at any time visual or radar warning indicates the presence of any vessel or aircraft within firing range.

1.9.2 **Firing with Cloud Cover.** No ordnance shall be expended through overcast or over an under-cast, or when there is more than 3/10 cloud coverage in the area, unless the criteria established in reference (b) are met.

1.9.3 **Firing Areas.** Firing exercises are permitted only within the NWSTF Boardman/R-5701 and the offshore warning areas. Live fire in the offshore warning areas must be per COMNAVSURFPACINST 3120.8F in coordination with Commander, Naval Surface Force, U.S. Pacific Fleet (COMNAVSURFPAC), San Diego, CA and scheduled no less than two weeks prior to date of event. Exercises must be within the area/target assigned.

1.9.3.1 **Firing Exercises near commercial shipping lanes**

1. As far as is safe and practicable for prevailing condition and mission requirements, all units involved in live firing exercises within W237E, should to the maximum extent possible, conduct firing operations well clear of the vessel shipping lanes to avoid impacting navigation safety of commercial shipping in the Tofino Traffic Area of Operations. This area is defined as north of 48N latitude and east of 127W longitude and within 50 NM of Vancouver Island.

2. All units, surface and air, engaged in live firing exercises within the Tofino Traffic Area of Operations shall ensure communications are established and maintained with “Tofino Traffic” on Channel 74 VHF-FM. The following notifications shall be made:

   a. Prior to the commencement of any live firing exercise, contact Tofino Traffic to ensure a safe firing position.

   b. Provide Tofino Traffic with the danger radius, firing bearing (if known), expected commencement time, and during of the exercise.

   c. Notify Tofino Traffic of completion of the exercise.
1.10 ADDITIONAL SAFETY PRECAUTIONS FOR FIRING EXERCISES BY SURFACE UNITS

1.10.1 Responsibility. The commanding officer of each ship or unit is responsible for compliance with these safety precautions and range regulations.

1.10.2 Lookouts. A sufficient number of qualified lookouts shall be posted during all firing exercises.

1.10.3 Observers. A fully qualified check sight safety observer must be stationed at each firing turret or mount.

1.10.4 Sight Setters. Sights will be set continuously in elevation and deflection during all firing exercises.

1.10.5 Bravo Flag. The Bravo Flag shall be displayed close-up during all firing exercises.

1.10.6 Cease Fire. All firing will be secured when cease-fire orders are received from competent authority or when the line of fire is endangering any object other than the designated target.

1.11 SURFACE GUNNERY EXERCISES

1.11.1 Clear Range. The range must be clear to the extreme range of the gun.

1.11.2 Safety Bearings. The safety bearings established by FXP-3E shall be observed.

1.11.3 Communications. During surface gunnery exercises involving a towed target, two-way communications must be maintained between the firing unit and the towing vessel.

1.12 ANTI-AIRCRAFT (AA) GUNNERY

1.12.1 Restrictions. No heavy AA firing (3 inch or larger) shall be conducted when the projectile would pass closer than 1,000 yards to the towing or controlling planes or other non-target aircraft.

1.12.2 Communications. AA firing exercises involving a towed target or a target aircraft may be conducted only while two-way communications between the firing unit and the towing or controlling aircraft are maintained.
1.13 ANTI-SUBMARINE WARFARE EXERCISES. ASW exercises must be per COMNAVSURFPACINST 3120.8F. No live depth charges or other live underwater ordnance shall be dropped for exercise purposes except as authorized by COMNAVSURFPAC, San Diego, CA.

1.14 ADDITIONAL SAFETY PRECAUTIONS AND RANGE REGULATIONS FOR AIR UNITS

1.14.1 Responsibility. The responsibility for compliance with these safety precautions is vested in the commanding officer of each user squadron or unit.

1.14.2 Visual Inspection. Pilots shall visually inspect ordnance equipment and armament loading prior to take-off.

1.14.3 Ordnance Jettison. Live ordnance may be jettisoned "safe" in the target area. The pilot is responsible for clearing the target area prior to any ordnance deliveries. Planned ordnance drops in offshore warning areas must be coordinated with COMNAVSURFPAC, San Diego, CA, per COMNAVSURFPACINST 3120.8F, and scheduled no less than two weeks prior to the event.

1.14.4 Hung Ordnance. Detailed instructions for hung ordnance at NAS Whidbey Island are contained in the Air Operations Manual, NASWHIDBEYINST 3710.1W.

1.14.5 Air Separation. Users shall be responsible for separation of their units from other air units, both military and civilian.

1.14.6 Target Identification. Positive identification of the target by each participating pilot must be attained by making an identification pass over the intended target prior to dropping or firing ordnance. The only exceptions to this will be observed competitive exercises.

1.14.7 Cease Fire for Safety. When any doubt exists as to the safety of continued firing or bombing, any member of the flight so in doubt shall call "Cease Fire" and indicate the reason the range is foul. In the event of such a call, all firing or bombing shall cease until any doubt to safety is removed.

1.14.8 Runs on Submarines. Aircraft runs on friendly submarines are prohibited unless joint aircraft-submarine exercises are specifically scheduled.
1.14.9 Clearance from Helicopters. Aircraft flying below 700 feet should maintain a minimum lateral clearance of at least one-half mile from all helicopters over water.

1.14.10 Disturbance of Wildlife. When it is necessary to fly over known habitat of wild fowl, an altitude of at least 3,000 feet shall be maintained, conditions permitting.

1.14.11 Reporting Danger to Life or Property. It is mandatory that a report be made as soon as possible to NAS Whidbey Island Operations Duty Officer, DSN 820-2681/2682 or COMM (360) 257-2681 by any pilot who:

a. Drops a bomb, a drop tank, fires a gun, fires a rocket, or any other missile outside the limits of a regularly scheduled impact area.

b. Upon return from flight, finds that bombs, rockets, or any other missiles have been unaccountably expended.

c. Considers that any ammunition expended or any flight maneuvers employed may have endangered the life or property of another person, or who considers that such other person may reasonably believe that their life or property had been endangered.

1.15 AIR-TO-AIR GUNNERY EXERCISES. Minimum Range from Shore: Minimum firing range from the shoreline for air-to-air over water gunnery at any altitude shall be 10 miles outbound and 15 miles inbound within the assigned air area.

1.15.1 Armament Switch. The master armament switch shall be in the “SAFE” position except, after proper clearance, for a live (HOT) run.

1.15.2 Range Clear. The range shall be clear before each firing run is started.

1.15.3 Target Safety Cone. No firing may be done within the 15-degree safety cone of the target or if the firing aircraft is below the level of the tow plane.

1.15.4 Break-aways. All break-aways shall be up and over the target line of flight. On losing sight of target, a break-away shall be executed immediately.

1.15.5 Visibility. Pilots must maintain visual contact with the target and other aircraft in the formation, and the flight path must permit safe break-away at all times during a run.
1.16 AIR-TO-SURFACE EXERCISES

1.16.1 Characteristics of Ordnance. Pilots will be fully cognizant of the safety precautions applicable to the ordnance carried including the installed fuses.

1.16.2 Populated Areas. Aircraft carrying service or practice ordnance shall avoid passing over ships or populated areas.

1.16.3 Armament Switch. The master armament switch shall be in the "SAFE" position except, after proper clearance, for a live (HOT) run.

1.16.4 Direction of Runs. All runs shall be made in the direction specified by the target observer, and no runs may be made at an angle of less than 30 degrees with the course of a towed surface target.

1.17 AIR-TO-AIR EXERCISES. Air-to-air missiles may be expended within the offshore operating areas. Because of the varying characteristics of missiles used, varying safety precautions and attack methods must be adhered to. Each mission shall be specifically briefed and necessary safety precautions applied. No missile shall be fired when there is any possibility that it will not fall in a safe area within the assigned operating area. No missile will be fired when the possibility exists that it may be locked on anything other than the assigned target. When head-on runs are used, both the target and firing aircraft shall be under the positive control of a qualified Air Intercept Controller.

1.18 OTHER MISSILE EXERCISES. Surface-to-Air and Surface-to-Surface missiles may be expended within offshore OPAREAs. Because of the varying characteristics of the missiles used by the Navy, varying safety precautions and attack methods must be used. Each mission or exercise shall be briefed and the necessary safety precautions applied. No missile shall be fired when there is a chance it will not fall in a safe area within the OPAREA.

1.19 DEPLETED URANIUM (DU) AMMUNITION. DU policy, per DODD 4715.11P, paragraph 5.4.9, Commanders will minimize the use of munitions that contain submunitions or DU to that required to support national security objectives.
CHAPTER 2

SCHEDULING PROCEDURES

2.1 GENERAL. When scheduling OPAREAs, users shall request only as much area, airspace, and time necessary to complete the mission.

2.2 SCHEDULING

2.2.1 NAS Whidbey Island Range Schedules Division. All users of NAS Whidbey Island administered areas shall schedule their proposed activities with NAS Whidbey Island Range Schedules Division. Range Schedules is the sole approving authority for OPAREAs and MTRs contained in this manual. Airspace may be scheduled via the following medium:

Mail: Commanding Officer
NAS Whidbey Island
3730 N. Charles Porter Ave
Oak Harbor, WA 98278-5300

Message: NAS WHIDBEY ISLAND
WA/N3/N33/N331/

FAX: DSN: 820-1283
COMM: (360) 257-1283

Telephone: DSN: 820-2877
COMM: (360) 257-2877

E-mail: WHDB_Range_Schedules_All_Hands@navy.mil

2.2.2 Hours of Operations. Range Schedules Division hours of operation are 0700-1600 local, Monday through Friday except holidays. Schedulers are located in the NAS Whidbey Island Operations Building (BLDG 385).

2.2.3 Scheduling Times. Scheduling requests shall be made no later than 1600 local the day prior to desired usage and not later than 1600 local on Friday for weekends/Mondays. In order to prevent scheduling conflicts, requests will be accepted from designated Scheduling Officers or the Operations Officer only.

2.2.4 Notice to Mariners (NOTMARS). Requests for offshore Warning Areas requiring a NOTMAR must be received at least 1 week in advance. The using agency is responsible for sending all NOTMARS.
2.3 CHANGES AND CANCELLATIONS

2.3.1 Times. Users of SUA/MTRs shall notify Range Schedules Division of all requested changes and/or cancellations as soon as they occur.

2.3.2 Notices to Airman (NOTAM). Change, including additions, to scheduled SUA times shall be requested a minimum of 2 1/2 hours (4 hrs for W-237H/J) prior to desired usage to allow for issuance of necessary NOTAMs.

2.3.3 Extensions. Flights shall not extend beyond the scheduled period without approval from Seattle ARTCC. Requests will normally be approved provided there is not a conflict with succeeding flights or release of airspace to Seattle ARTCC. Otherwise, aircraft must vacate when instructed to do so or at the expiration of scheduled time.

2.3.4 Military Training Routes (MTRs). In the interest of flight safety, and to allow Flight Service Stations sufficient time to disseminate advisory information, MTR entry times are firm; slides are not authorized. MTR requests must be scheduled before 1600 the day prior to being flown. Same-day scheduling may be accomplished 0700–1130 local for entry times after 1400 local. Actual IR entry times must be within 5 minutes of scheduled time. Actual VR entry times must be within 3 minutes of scheduled time.

2.4 PRIORITIES. NAS Whidbey Island will normally schedule OPAREAs and services as requested. Accordingly, the following priority system is established for initial scheduling. It is not intended to be all-inclusive and is used for planning purposes only. Exceptions can be made for special mission requirements.

   a. PRI 1: Major exercises or special circumstance
   b. PRI 2: Seattle ARTCC, WADS, CVWP, and EAWS.
   c. PRI 3: VAQ-129 (until 1200 the day prior)
   d. PRI 4: NAS Whidbey Island-based fleet squadrons in order of nearest deployment dates
   e. PRI 5: Other U.S. Navy units and other U.S. forces
   f. PRI 6: Foreign military forces
   g. PRI 7: All other authorized users
2.4.1 Conflict Resolution. When a scheduling conflict occurs, Range Schedules Division will determine priority of use and make every effort within operational guidelines to coordinate adjustments to areas, times, altitudes, etc., to resolve the conflict. Units that do not receive their requested times will be notified and offered other available airspace or time periods.

2.4.2 Scheduling. In order to prevent scheduling conflicts, requests will be accepted from designated Scheduling Officers or the Operations Officer only. Fleet Replacement Squadron (VAQ-129) has scheduling priority (per Paragraph 2.4c) until 1200 local the day prior for all MTRs, Olympic MOA, Okanogan MOA, and the Boardman Complex. After 1200 local the day prior, these areas are scheduled on a first-come-first-served basis. All other areas including Roosevelt MOA and all offshore Warning Areas are reserved on a first-come-first-served basis. Airspace for special exercises or events shall be reserved 14 days in advance. All times will be submitted in Zulu.

2.5 REQUESTS VIA MESSAGE

2.5.1 Message Format

1. Requests for OPAREAs generally should be UNCLASSIFIED and shall be in the following format (omit non-applicable items):

   a. Requesting Unit (ship/unit or squadron name) and number of participants.

   b. Type exercise.

   c. Exclusive or co-usage (exclusive for hazardous operations).

   d. Area or target requested, include desired altitudes.

   e. Date and COMEX/FINEX of each period.

   f. Weapon information.

   g. Type of weapon or aircraft.

   h. Type of ordnance to be used.

   i. For ships: Max ordinate and range of weapon. For aircraft: Max operating altitudes or max ordnance altitude.
j. Type target.

k. Acceptable alternate area(s), date(s), or time(s) and amplifying remarks.

l. TACP/TAC (A) requirements.

m. Remarks and/or services requested to include a point of contact and phone number.

2. Requests for multiple exercises/areas should be submitted in the same message using the format described above.

2.6 ELECTRONIC COUNTERMEASURES (ECM) AND CHAFF REQUESTS

2.6.1 ECM Area. The Continental United States ECM Area extends to the outer boundaries of the coastal Air Defense Identification Zone (ADIZ) or a perimeter 150 Nautical Miles (NM) seaward from the coastal states, whichever is farther, except where this infringes on territorial limits of other nations/states. ECM procedures can be found in CJCSM 3212.02, (Performing Electronic Attack in the United States and Canada for Tests, Training, and Exercises.)

2.6.2 ECM Coordination. All ECM activity (including chaff) shall be coordinated by the unit planning the ECM mission with the FAA Frequency Management Office (425)-227-2637 and the NAS Whidbey Island Frequency Manager (360) 257-2181. Reference (d) applies. In addition, use of chaff requires coordination with Western Air Defense Sector, DQM/AST; telephone DSN 382-4604.
CHAPTER 3

MILITARY OPERATIONS AREAS (MOAs)/AIR TRAFFIC CONTROL ASSIGNED AIRSPACE (ATCAA)

3.1 GENERAL

3.1.1 Description. The Okanogan, Roosevelt, Boardman, and Olympic MOAs are designated for the purpose of conducting special military training operations, such as combat tactics, aerobatics, intercepts, instrument training, aerial refueling, and formation flight training. Nonparticipating IFR traffic will be provided separation from operations within the MOAs by Seattle ARTCC. Nonparticipating VFR traffic is urged to remain clear of the area. Should it become necessary to transit Okanogan or Roosevelt when training activities are being conducted, exercise extreme caution.

3.1.2 Operating Hours. All MOAs are published "continuous by NOTAM" and are available 24 hours each day. A minimum of 2 1/2 hours-prior notice is required to allow sufficient time to disseminate the NOTAMs.

3.1.3 Scheduling. Missions or exercises involving multiple units/commands that extend two or more days shall be coordinated at least 30 days in advance to comply with Seattle ARTCC requirements. Refer to Chapter 2 paragraph 2.4.2 for additional scheduling procedures. ATCAA is available above FL180 and may be requested with at least 30 minutes prior notice.

3.1.4 Communications. Communications in MOAs shall be maintained with the designated controlling agency, additionally the Okanogan, Roosevelt and Olympic MOAs have assigned UNICOM frequencies for military aircraft that all pilots will monitor while in the respective MOA (Table 1).

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<th>AREA</th>
<th>AGENCY</th>
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<th>FREQUENCY</th>
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<td>Seattle ARTCC</td>
<td>Seattle Center</td>
<td>291.6 MHZ</td>
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<td>Olympic</td>
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</table>

Table 1
3.2 OKANOGAN MOA/ATCAA. Illustration (1)

3.2.1 Okanogan A Boundaries.
Beginning at:
49° 00' 00"N 119° 45' 04"W to
49° 00' 00"N 119° 20' 04"W to
49° 00' 00"N 119° 00' 04"W to
48° 03' 30"N 119° 00' 04"W to
48° 05' 00"N 120° 20' 04"W to
48° 06' 30"N 119° 45' 04"W to
48° 08' 29"N 120° 27' 34"W to
48° 54' 40"N 120° 03' 04"W to
48° 54' 40"N 119° 45' 04"W to
the point of beginning.

1. Altitudes: 9,000 feet MSL to, but not including, FL180. ATCAA: FL180 to, but not including, FL240.

3.2.2 Okanogan B Boundaries.
Beginning at:
48° 08' 29"N 120° 27' 34"W to
48° 54' 40"N 120° 03' 04"W to
48° 54' 40"N 119° 45' 04"W to
48° 06' 30"N 119° 45' 04"W to
the point of beginning.

1. Altitudes: 300 feet AGL to, but not including, 9,000 feet MSL, excluding that airspace 1,500 feet and below within a 3NM radius of the following airports: Twisp Municipal Airport, WA and the Methow Valley State Airport, Winthrop, WA. (Underlies Western portion of Okanogan A.)

3.2.3 Okanogan C Boundaries.
Beginning at:
48° 05' 00"N 119° 20' 04"W to
49° 00' 00"N 119° 20' 04"W to
49° 00' 00"N 119° 00' 04"W to
48° 03' 30"N 119° 00' 04"W to
the point of beginning.

1. Altitudes: 300 feet AGL to, but not including, 9,000 feet MSL. (Underlies eastern portion of Okanogan A.)
3.3 ROOSEVELT A MOA/ATCAA. Illustration (1)

3.3.1 Roosevelt A Boundaries

Beginning at:
49° 00' 00"N 119° 00' 04"W to
49° 00' 00"N 117° 23' 04"W to
49° 00' 00"N 116° 48' 04"W to
48° 22' 00"N 116° 48' 04"W to
48° 22' 00"N 115° 06' 04"W to
48° 19' 30"N 118° 14' 34"W to
48° 03' 30"N 119° 00' 04"W to
the point of beginning.

1. MOA Altitudes: 9,000 feet MSL to, but not including, FL180.

WARNING

VFR civil traffic is authorized in this MOA. Military aircrew must be alert for civilian controlled traffic.
2. **ATCAA**: FL180 to, but not including, FL240.

### 3.3.2 Roosevelt B Boundaries

**Beginning at:**

48° 03' 30"N 119° 00' 04"W to
49° 00' 00"N 119° 00' 04"W to
49° 00' 00"N 117° 23' 04"W then
via a line parallel to and 2 NM west of the west bank of the Pend Oreille River, WA to
48° 38' 00"N 117° 25' 04"W to
48° 38' 00"N 118° 10' 34"W then
via a line parallel to and 2 NM west of the west bank of the Columbia River, WA to the point of beginning.

1. Altitudes: 300 feet AGL to, but not including, 9,000 feet MSL. Excluding the airspace 1,500 feet and below within a 3 NM radius of the Ferry County Airport, Republic, WA. (Underlies a portion of Roosevelt A.)

### 3.3.3 Republic ATCAA. Illustration (1)

1. **REPUBLIC ATCAA**

**Beginning at:**

49°00'00"N/119°00'04"W to
48°09'00"N/119°00'00"W to
48°06'30"N/118°51'30"W to
48°19'30"N/118°14'34"W to
48°22'00"N/118°06'04"W to
48°22'04"N/117°28'04"W to
49°00'00"N/116°48'04"W to
49°00'00"N/117°23'04"W to
the point of beginning

**Altitudes:** FL240 to and including FL500.

### WARNING

**VFR civil traffic is authorized in this MOA. Military aircrew must be alert for civilian air traffic.**

### 3.4 OLYMPIC A MOA/ATCAA. Illustration (2)
3.4.1 Olympic A Boundaries
Beginning at:
47° 41' 29"N 124° 33' 05"W to
47° 41' 29"N 123° 43' 35"W to
47° 37' 59"N 123° 40' 05"W to
47° 14' 59"N 123° 40' 05"W to
47° 05' 59"N 124° 14' 53"W then
northbound 3 miles parallel to the shoreline, to the point of beginning.

1. Altitudes: 6,000 feet MSL to, but not including, FL180, excluding that airspace below 1,200 feet AGL.
2. ATCAA: FL180 up to and including FL350.

3.4.2 Olympic B Boundaries
Beginning at:
48° 08' 59"N 124° 48' 05"W to
48° 08' 59"N 124° 30' 35"W to
47° 59' 59"N 124° 07' 05"W to
47° 41' 29"N 123° 43' 35"W to
47° 41' 29"N 124° 14' 53"W then
northbound 3 miles parallel to the point of beginning.

1. Altitudes: 6,000 feet MSL to, but not including, FL180, excluding that airspace below 1,200 feet AGL.
2. ATCAA: FL180 up to and including FL350.

WARNING

VFR civil traffic is authorized in this MOA. Military aircrew must be alert for civil/uncontrolled traffic.

3.5 FILING PROCEDURES. For Okanogan MOA/ATCAA file via FAIROPS (Whidbey Island-based units) or to EPH 320/055 and indicate MOA delay time.

1. For Roosevelt MOA/ATCAA file via FAIROPS (Whidbey Island-base units) or to EPH 005/060 and indicate MOA delay.

2. For Olympic A IVIOA/ATCAA file via FAIROPS (Whidbey Island-based units) or to HQM 327/033 and indicate MOA delay.

3. For Olympic B MOA/ATCAA file via FAIROPS (Whidbey Island-based units) or HQM 335/066 and indicate MOA delay.
4. For aerial refueling operations, receiver aircraft flight plans shall include, in the remarks section, the call sign(s) of tanker aircraft and a statement that MARSA will be applied.

3.6 REAL-TIME COORDINATION. Seattle ARTCC releases SUA on a real-time basis and requires a 30-minute notice prior to entering any MOA so the area can be cleared of IFR traffic. For coordination purposes, it is the responsibility of the mission commander to ensure that Whidbey Clearance Delivery or Seattle ARTCC is notified at least 30 minutes prior to scheduled MOA entry time.

3.7 MOA OPERATING PROCEDURES. MARSA is a condition, which applies to those aircraft operating within the MOAs/ATCAAs. If more than one unit is scheduled to operate within a MOA/ATCAA, each unit will be briefed on the vertical and/or lateral assignments of the other units by the NAS Whidbey Island Range Schedules Division.

1. All operations within the MOAs are subject to a Letter of Agreement between NAS Whidbey Island and Seattle ARTCC. Controlling agency is Seattle ARTCC. Using/scheduling agency is NAS Whidbey Island. No military operations are permitted within these MOAs without prior approval.

2. Aircrews shall not expect to enter MOAs/ATCAAs before their scheduled entry time. Seattle ARTCC will not issue entry clearance for early arrivals if the MOA/ATCAA is in use.

3. All aircraft shall have operable communications, navigation, and identification (CNI) equipment on all flights. A malfunction on CNI equipment is cause to cancel/abort missions.

4. Upon check-in with Seattle ARTCC, provide call sign and event number of aircraft to operate in MOA/ATCAA (include each aircraft within a formation), area(s) scheduled and altitudes required.

5. Aircraft shall monitor Seattle ARTCC frequency while operating within the MOA/ATCAA unless otherwise approved. If change to tactical/MOA Universal Integrated Communication (UNICOM) frequency is authorized, monitor Guard 243.0 MHZ.

6. Pilots cleared to operate within the MOAs/ATCAAs are responsible for remaining within the vertical and lateral confines of the MOA/ATCAA as specified in the ATC clearance.
NOTE

Seattle ARTCC is equipped with error detection software to ascertain when spill outs occur. Seattle ARTCC may file Pilot deviation reports when spill outs are detected.

7. Clearance to operate in the MOA/ATCAA shall be considered similar to holding instructions, not a cancellation of IFR, further clearance is required prior to departing the MOA/ATCAA.

8. Aircraft that must continuously transit FL180 shall use the local altimeter setting as authorized in FAR Exemption 2861A.

9. Aircraft operating within any SUA shall squawk the Mode 3 code assigned by Air Traffic Control. Aircraft not previously assigned a Mode III discrete code shall squawk 4000.

10. Supersonic flights are not normally conducted in NAS Whidbey MOAs/ATCAAs. When required, supersonic operations shall be conducted per OPNAVINST 3710.7 and applicable Air Force Regulations.

11. Unless safety of flight dictates, no aircraft shall depart assigned MOAs/ATCAAs until ATC clearance is received from Seattle ARTCC. Under normal circumstances, aircraft should provide Seattle ARTCC at least 5 minutes advance notice of intent to depart. This provides needed time for flight data processing and coordination when required.

12. Lost communications shall be as outlined in DOD FLIP.

13. UNICOM/SAFE HAVEN procedures are as follows:

   a. All aircraft entering a MOA/ATCAA will contact Seattle ARTCC on appropriate frequency (Table 1) for entry using call sign and appropriate event number. Event numbers will be assigned by Range Schedules Division at (360) 257-2877. If multiple aircraft are scheduled for the same event or co-use of the area is approved, aircraft entering a MOA/ATCAA will check in via the appropriate UNICOM frequency with call sign and event number. If no communication can be established aircraft will proceed to SAFE HAVEN which is described by a lateral area extending from the border of the MOA/ATCAA to 3 NM into the MOA/ATCAA (Illustration 9). Additionally altitudes for each SAFE HAVEN area are described in Illustration 9. Once established in the SAFE HAVEN area aircraft will continue to try and contact playmates or co-use aircraft and, if still no communication can be established, then aircraft will coordinate exiting the MOA/ATCAA with Seattle ARTCC.
b. When ready to exit the MOA/ATCAA aircraft will coordinate with Seattle ARTCC on appropriate frequency (Table 1) prior to leaving the MOA/ATCAA assigned. If multiple aircraft for the same event are in the MOA/ATCAA, the last aircraft departing the MOA/ATCAA shall advise Seattle ARTCC, i.e. “SEATTLE CENTER PUGET52 EVENT 30001 LAST AIRCRAFT OUT.” Upon reporting last aircraft out, Seattle ARTCC will close the event number and the airspace will be deactivated.

3.8 CROP DUSTING ACTIVITY. Extensive crop dusting occurs in the agricultural lands of the Columbia River Basin. Aircrew using MTRs originating or terminating in the Boardman Range Complex should be aware that crop dusting activity occurs in non-Navy land areas that lie beneath R-5701/5706. Uncharted airfields in the vicinity of the Boardman Range from which crop dusters originate include:

1. Taggares Farms Airport, OR approximately 10NM west of the Boardman Bull at 45°45.1’N/119°36.4’W.

2. Eastern Oregon Farms Airport, at 45°41.4’N/118°50.3’W

3. Patterson Airport, WA at 45°57.4’N/119°37.2’W

3.9 FLARE DROPS. The dispensing of self-protection flares is authorized in all MOAs with the following limitations:

1. Planned use shall be coordinated with Range Schedules Division.

2. Minimum altitude for dispensing is 500’ AGL for fixed wing and 700’ AGL for helicopters.

3. Use of illumination flares is not authorized.

3.10 WHIDBEEY ISLAND SURVIVAL AREA (Illustration 7)

Beginning at:

48° 17' 56.47"N 122° 35' 30.00" W to
48° 18' 06.91"N 122° 35' 31.00" W to
48° 18' 26.00"N 122° 34' 50.60" W to
48° 18' 25.80"N 122° 33' 21.15" W to
48° 16' 50.50"N 122° 33' 21.20" W to
48° 16' 44.50"N 122° 33' 33.00" W to
48° 16' 45.90"N 122° 33' 35.75" W

then north along shoreline to point of origin.

1. This area can be used for, but is not limited to, small amphibious landings, LCAC training, helicopter training, small
unit training (under 2000 people), ground training and survival training.

3.10.1 Point of Contact/Scheduling. Scheduling will be done through Range Schedules Division at (360) 257-2877.

3.10.2 Altitude Assignment. Altitudes are not specifically defined; however, Whidbey Approach Control may assign a maximum altitude.

NOTE
This area underlies NAS Whidbey Class C Airspace. Review all Aeronautical Charts and procedures before operating aircraft in this area. Concerns shall be directed to (360) 257-2681, the NAS Whidbey Island Operations Duty Officer.

3.11 CRESCENT HARBOR NAVAL OPERATIONS AREA (Illustration 7). Located in Crescent Harbor, Saratoga Passage, Oak Harbor, WA. The site is in waters adjacent to the NAS Whidbey Island Seaplane Base. The area is drawn from the Polnell Point Light (48° 16' 22"N 122° 33' 30"W) west-southwest to a point in central Crescent Harbor (48° 16' 00"N 122° 36' 00"W) and then due north to a point along Crescent Harbor’s shoreline on Whidbey Island (48° 17' 55"N 122° 36' 00"W.)

1. Exercises can only occur when all non-participating vessels and persons are clear of the area.

2. Effective times are by NOTAM/NOTMAR and available 24 hours a day.

3.11.1 Point of Contact/Scheduling. Scheduling will be done through Range Schedules Division at (360) 257-2877.

3.11.2 Procedures for Ordnance Use. Procedures for ordnance use can be found in COMNAVSURFPACINST 3120.8D (PROCEDURES FOR DISPOSAL OF EXPLOSIVES AT SEA/FIRING OF DEPTH CHARGES AND OTHER UNDERWATER ORDNANCE).

3.12 NAVY EXCHANGE (NEX) LZ/DZ (Illustration 7). Located on the NAS Whidbey Island Seaplane Base. The LZ encompasses all of the parking area north of the NEX. Units using this LZ will be required to provide their own physical security, as well as fire/rescue requirements and comply with all federal laws, state laws, local laws, and air traffic control procedures.

3.12.1 Point of Contact/Scheduling. Coordination must be made at least 30 days in advance to use this LZ/DZ (except local tenant units.)
Scheduling will be done through Range Schedules Division at (360) 257-2877. For use of this area Range Schedules Division will coordinate with Navy Region Northwest Deputy Director for Range Support at (360) 257-3315. Navy Region Northwest Deputy Director for Range Support will assist in the coordination with a multitude of agencies for use of this area. The Range Schedules Division will schedule this only after prior coordination with all parties involved has been accomplished.

NOTE
This area underlies NAS Whidbey Island Class C Airspace. Review all Aeronautical Charts and procedures before operating aircraft in this area. Concerns shall be directed to (360) 257-2681, the NAS Whidbey Island Operations Duty Officer.

3.13 CHINOOK A AND B MOAs

3.13.1 Chinook A Boundaries. A north/south corridor 2 NM wide, 1 NM either side of a line beginning at the hood canal Bridge, port Gamble, WA (lat 47° 52’14”N., long. 122° 38’05”W.), extending on a bearing of 000 T to Restricted Area R-6701.

1. Altitudes: 300 feet MSL to 5000 feet MSL.

3.13.2 Chinook B Boundaries. An east/west corridor 2 NM wide, 1 NM either side of the line beginning at lat. 48° 13’59”N., long. 123° 04’35”W., extending on a bearing of 110 T until reaching R-6701.

1. Altitudes: 300 feet MSL to 5000 feet MSL.

3.14 Restricted Area R-6701, Admiralty Inlet Boundaries.
Beginning at:
48° 09° 59"N 122° 34' 53"W to
48° 05' 44"N 122° 31' 35"W to
48° 06' 05"N 122° 41' 17"W to
48° 09' 59"N 122° 41' 01"W to
the point of beginning.

1. Altitudes: Surface to 5,000 feet MSL.

3.15 Alert Area A-680, OLF Coupeville Boundaries. 3 NM radius of 48° 10’ 59”N 122° 38’ 05”W.

1. Altitudes: Surface to and including 3,000 feet MSL.
CHAPTER 4
DARRINGTON OPERATING AREA

4.1 GENERAL

4.1.1 Description. The Darrington Area is a block of airspace established by Letter of Agreement with Seattle ARTCC for ESM, ECM, DECM and functional check flight missions. This area is not a designated MOA and is for use by NAS Whidbey Island-based units only. See Illustration (4).

4.1.2 Scheduling. All scheduling is controlled through Seattle ARTCC on a "first-come-first-served" basis. The route to Darrington is defined by the NUW-Darrington FAIROPS route in reference (e).

4.1.3 Communications
1. Whidbey Approach: 270.8 MHZ
2. Seattle ARTCC: 270.3 MHZ

4.2 AREA BOUNDARIES (Illustration 4)

4.2.1 Darrington West Boundaries.
Beginning at:
48° 46' 00"N 122° 09' 00"W to
48° 45' 55"N 122° 00' 45"W to
48° 38' 30"N 121° 58' 00"W to
48° 15' 11"N 121° 58' 00"W to
48° 15' 00"N 122° 33' 00"W to
48° 21' 00"N 122° 44' 00"W to
48° 38' 00"N 122° 15' 00"W to
48° 54' 40"N 120° 03' 04"W to
the point of beginning.

1. Altitudes: Not specifically defined, however minimum altitude assignment by Seattle ARTCC will not be lower than 10,000 feet MSL.

4.2.2 Darrington East Boundaries
Beginning at:
48° 45' 55"N 122° 00' 45"W to
48° 45' 00"N 120° 42' 00"W to
48° 15' 00"N 120° 42' 00"W to
48° 15' 11"N 121° 58' 00"W to
48° 38' 30"N 121° 58' 00"W to
point of beginning.
1. Altitudes: Not specifically defined, however altitude assignments by Seattle ARTCC will not be lower than 13,000 feet MSL.

The Darrington Area is not special use airspace. Military aircrew must be alert for civil/uncontrolled traffic.

4.3 OPERATING PROCEDURES

1. Electronic countermeasures training and EA6/EA18/P3/EP3 functional check flights (FCFs) only.

2. VFR on-top operations, aerobatics, ACM/DACM, and aerial refueling/practice plugs are not authorized.

3. Seattle ARTCC reserves the right to limit the number of aircraft that can operate in the area at any given time.

4. Maximum number of aircraft in formation flight is two. Aircrew shall ensure that each aircraft has filed an IFR flight plan for individual flight in the Darrington Area if flight break-up is planned.

5. IFR procedures are mandatory. Aircraft shall remain on Seattle ARTCC frequency when operating in the area, unless otherwise coordinated.

6. Aircraft cleared to operate in Darrington Area shall remain within the lateral and vertical limits of the area as assigned by Seattle ARTCC.

7. Lost communications shall be as outlined in DOD FLIP.

Supersonic flight is NOT authorized in the Darrington Operating Area.
CHAPTER 5

WASHINGTON COASTAL WARNING AREAS

5.1 GENERAL

5.1.1 Description. The W-237 complex includes Warning Areas W-237A through W-237J. They are offshore areas used for joint air/surface operations such as missile firings, air-to-surface bombing, air-to-air firing, combat tactics, intercepts, aerial refueling, instrument training, aerobatics, and formation flight training. The W-237 complex is also a designated ASW range for coordinated ASW operations, sonobuoys, practice depth charges, and smoke markers. See Illustration (2).

5.1.2 Operating Hours. W-237 areas are published intermittently by NOTAM, and are available 24 hours a day. For areas A through G, a minimum of 2 1/2 hours prior notice is required to allow sufficient time to disseminate NOTAMs. A minimum of 4 1/2 hours prior notice is required if areas H or J are scheduled.

5.1.3 Scheduling. Missions or exercises involving multiple units/commands (i.e., Advanced Training Assessment (ATA), Operational Readiness Inspections/Evaluations (ORI/ORE), etc.) that extend two or more days shall be coordinated at least 60 days in advance. Refer to Chapter 2, paragraph 2.4.2 for additional scheduling procedures.

5.1.4 Communications

1. Seattle ARTCC
   Radio: 319.2/125.1 MHZ (North)
   Radio: 269.0/128.3 MHZ (South)
   Telephone: DSN 891-1241
   Telephone: COMM (253) 351-3523

2. Western Air Defense Sector (Bigfoot)
   Radio: 364.3 MHZ
   Telephone: DSN 382-4352
   Telephone: COMM (253) 984-4604

3. Canadian Air Defense Sector (Sidecar)
   Radio: 364.2 MHZ
   Telephone: DSN 319-628-6701
   Telephone: COMM (705) 494-2011
   Telephone: (ID Section)
   Telephone: DSN 382-4604
   Telephone: DSN 319-628-6419 (MCC)

4. UNICOM: 227.5 MHZ
5.2 AIRSPACE BOUNDARIES

5.2.1 Warning Area W-237A Low/High

1. Beginning at:
   47° 31' 59"N 125° 41' 05"W to
   47° 41' 29"N 124° 33' 05"W then
   southbound 3 NM parallel to the shoreline ending at
   47° 05' 59"N 124° 14' 53"W to
   47° 00' 29"N 124° 30' 05"W to
   46° 49' 59"N 126° 24' 05"W to
   the point of beginning.

2. Altitudes:
   a. W-237A Low - Surface to, but not including, FL230.
   b. W-237A High - FL230 to, but not including, FL500.

5.2.2 Warning Area W-237B Low/High

1. Beginning at:
   48° 08' 59"N 125° 56' 05"W to
   48° 08' 59"N 124° 48' 05"W then
   southbound 3 NM parallel to the shoreline ending at
   47° 41' 29"N 124° 33' 05"W to
   47° 31' 59"N 126° 24' 05"W to
   the point of beginning.

2. Altitudes:
   a. W-237B Low - Surface to, but not including, FL230.
   b. W-237B High - FL230 up to, but not including, FL500.

5.2.3 Warning Area W-237C

1. Beginning at:
   48° 08' 59"N 125° 56' 05"W to
   47° 00' 00"N 125° 28' 03"W to
   47° 00' 00"N 126° 15' 00"W to
   48° 08' 59"N 126° 15' 00"W to
   the point of beginning.

2. Altitudes: Surface to unlimited
5.2.4 Warning Area W-237D

1. Beginning at:
47° 00' 00"N 125° 28' 03"W to
46° 53' 24"N 125° 06' 47"W to
46° 32' 00"N 125° 18' 00"W to
46° 06' 00"N 126° 15' 00"W to
47° 00' 00"N 126° 15' 00"W to
the point of beginning.

2. Altitudes: Surface to unlimited

5.2.5 Warning Area W-237E

1. Beginning at:
48° 29' 37"N 125° 09' 01"W to
48° 08' 59"N 127° 54' 44"W to
48° 20' 00"N 128° 00' 00"W to
the point of beginning.

2. Altitudes: Surface to FL270.

5.2.6 Warning Area W-237F

1. Beginning at:
48° 08' 59"N 126° 15' 00"W to
47° 00' 00"N 127° 22' 26"W to
48° 08' 59"N 127° 54' 44"W to
the point of beginning.

2. Altitudes: Surface to unlimited

5.2.7 Warning Area W-237G

1. Beginning at:
47° 00' 00"N 126° 15' 00"W to
46° 06' 00"N 126° 15' 00"W to
45° 48' 35"N 126° 50' 49"W to
47° 00' 00"N 127° 22' 26"W to
the point of beginning.

2. Altitudes: Surface to unlimited
5.2.8 Warning Area W-237H

1. Beginning at:
48° 20' 00"N 128° 00' 00"W to
47° 00' 00"N 127° 22' 26"W to
47° 00' 00"N 129° 00' 00"W to
48° 21' 02"N 130° 00' 00"W to
the point of beginning.

2. Altitudes: Surface to FL270

5.2.9 Warning Area W-237J

1. Beginning at:
47° 00' 00"N 127° 22' 26"W to
45° 48' 35"N 126° 50' 49"W to
45° 50' 00"N 128° 10' 00"W to
47° 00' 00"N 129° 00' 00"W to
the point of beginning.

2. Altitudes: Surface to FL270

CAUTION

VFR civil traffic is authorized in the Warning Areas. Military aircrews must be alert for civil/uncontrolled traffic.

5.3 OLYMPIC COAST NATIONAL MARINE SANCTUARY (OCNMS). The OCNMS was established off the coast of Washington in 1994 as part of the Marine Mammal Protection Act. The OCNMS underlies the western portion of the OLYMPIC A&B MOA and the eastern parts of W-237 A&B. Bombing is prohibited within the OCNMS boundaries. Live firing of guns, missiles, torpedoes, and chaff and Anti-submarine warfare operations are permitted (15CFR §922.152(d)(1)(i)(B) and (D)). All Department of Defense military activities shall be carried out in a manner that avoids, to the maximum extent practicable, any adverse impacts on Sanctuary resources and qualities (15CFR §922.152(d)(1)). OCNMS Rules (15CFR §922 Subpart O) do not apply to non-U.S. military activities in international waters and airspace (beyond the 3 NM national boundary limit).
5.3.1 OCNMS Boundaries. The following coordinates define the sanctuary:

1. Beginning at:
   47° 07' 45"N 124° 11' 02"W to
   47° 07' 45"N 124° 58' 12"W to
   47° 35' 05"N 125° 05' 00"W to
   47° 40' 05"N 125° 09' 44"W to
   47° 50' 01"N 125° 09' 42"W to
   47° 57' 13"N 125° 29' 13"W to
   48° 07' 33"N 125° 38' 20"W to
   48° 15' 40"N 125° 40' 05"W to
   48° 18' 21"N 125° 30' 02"W to
   48° 20' 15"N 125° 22' 52"W to
   48° 29' 59"N 125° 04' 13"W to
   48° 26' 46"N 125° 09' 16"W to
   48° 27' 09"N 125° 08' 29"W to
   48° 28' 08"N 125° 05' 52"W to
   48° 29' 43"N 125° 00' 11"W to
   48° 29' 56"N 125° 59' 19"W to
   48° 30' 13"N 124° 54' 57"W to
   48° 30' 21"N 124° 50' 26"W to
   48° 30' 10"N 124° 47' 18"W to
   48° 29' 36"N 124° 43' 38"W to
   48° 28' 08"N 124° 38' 13"W to
   48° 23' 17"N 124° 38' 13"W

5.3.2 OCNMS Authorized Activities. The following activities are authorized within the listed boundaries of the OCNMS:

1. Live firing of guns, missiles, and chaff.

2. ASW operations, including inert torpedoes, ASW targets, sonobuoys, markers, inert mines, and SUS.

3. Activities associated with the Quinault Range including in water testing of non-explosive torpedoes.

4. Hull integrity tests and other deep-water tests.

5.3.3 OCNMS Restrictions

1. No live ordnance.

2. No bombing, live or inert.

3. No flying less than 2000 feet MSL within 1 NM of the Flattery Rocks, Quillayute Needles, or Copalis National Wildlife Refuge.
4. No flying less than 2000 feet MSL within 1 NM of the coastal boundary (Shoreline to 1 NM seaward).

5.4 USE OF ORDNANCE

5.4.1 Authorized Ordnance

1. Conventional or inert ordnance flares, and photo flash cartridges may be used except as noted under OCNMS, paragraphs 5.3.2 and 5.3.3.

2. Use of chaff requires compliance with applicable instructions and coordination with Western Air Defense Sector.

5.4.2 Ordnance Scheduling Procedures

1. All exercises involving use of ordnance must be approved by NAS Whidbey Island Range Schedules Division with concurrence from COMSUBPAC, Pearl Harbor, HI (CTG 34.33), COMM (808) 473-3794 CTG 34.33 plans water (surface) management 2 weeks prior and issues area assignment the week prior to becoming effective. Area requests should be transmitted with sufficient lead-time to be factored into water management. CTG 34.33 prefers drops in W-237A vice W-237B due to shipping and land restrictions.

2. Area requests, which involve use of ordnance, must be submitted via message using the format in paragraph 2.5.1. Item (J) remarks shall include the weight of each weapon and depth of weapon detonation. Message addees should be as follows:

To:     NAS WHIDBEY ISLAND WA//N3/N331//
Info:   CTG 34.3.3
        CCGD THIRTEEN SEATTLE WA//JJJ//

5.4.3 Notice to Mariners (NOTMARS)

1. Appropriate NOTMARS must be transmitted to warn of hazardous activity or ordnance usage. User activities shall send a message at least 1 week prior to the event:

To:     CCGD THIRTEEN SEATTLE WA//OLE/O/OAN//
Info:   COGARD AIRSTA ASTORIA OR//OPS//
        COMSUBPAC PEARL HARBOR HI//JJJ//
        COMSUBTRAGRU PACNORWEST BANGOR WA//N3//
        NAS WHIDBEY ISLAND WA//N3/N331//
        FAA SEATTLE ARTCC AUBURN SEATTLE WA/1MOS//
        WESTERN AIR DEF SX MCCCHORD AFB WA//DO/DOO/SD/ICS//
        (any other addees(s) deemed appropriate by user activity)
2. Example of message narrative as follows:

**SUBJ: REQ ISSUANCE OF A NOTICE TO MARINERS TO WARN OF (i.e. GUNNERY EXERCISE/HAZARDOUS FLT ACTIVITY/ETC)**

A. [Include applicable ref]
1. UNIT CONDUCTING EXERCISE (i.e. USCGC xxxx, USS xxxx)
2. AREA TO BE USED (i.e. W237-E)
3. TYPE OF ORDNANCE: M-240B (7.62MM), M16 (5.56MM)/SURFIREX.
4. PRIMARY DATES: COMEX AT 000000Z JAN 10 and FINEX AT 000000 JAN.
5. POC: LT/LTJG/ENS xxxxx OPS CELL (xxx) xxx-xxxx
   COMM (xxx) xxx-xxxx
   EMAIL: xxxxx
6. COMMUNICATIONS (as applicable):
   (1) PRIMARY: 16A VHF-FM.
   (2) SECONDARY: 13A VHF-FM.
   (3) TERTIARY: MCTS TOFINO CH-74 VHF-FM.
7. USCGC xxxx, USS xxxx WILL BE CONDUCTING A LIVE FIRE EXERCISE IN APPROXIMATE POSITION xx-xx.xx N xx-xx.xx W. DANGER AREA WILL BE PLUS OR MINUS 15 DEGREES OF THE FIRING BEARING OUT TO A RANGE OF xxxx YARDS.
8. PRIOR TO COMMENCING EXERCISE UNIT WILL MAKE A SECURITY BROADCAST VIA VHF-FM CH 16 AND NOTIFY TOFINO MCTS VIA VHF-FM CH-74 OF EXERCISE LOCATION, FIRING BEARING AND DANGER RANGE (as applicable).
9. UPON COMPLETION OF EXERCISE UNIT WILL NOTIFY TOFINO MCTS THAT LIVE FIRE EXERCISE IS COMPLETE (as applicable).
10. FOR CCGD13 SEATTLE WA: REQ BROADCAST NOTICE TO MARINERS.

5.4.4 Preferential Drop Zones. Six drop zones have been established to expedite and simplify drop coordination efforts. These zones are located outside of the OCNMS and have been pre-coordinated with COMSUBPAC as preferential areas. (See Illustration 5)

5.4.4.1 DZ 1. Beginning at:
47° 32' N, 125° 40' W to
47° 35' N, 125° 16' W to
47° 17' N, 125° 16' W to
47° 17' N, 125° 35' W to
beginning

5.4.4.2 DZ 2. Beginning at:
47° 49' N, 125° 40.9' W to
47° 49' N, 125° 22.5' W to
47° 35' N, 125° 16.0' W to
47° 32' N, 125° 42.0' W to
beginning
5.4.4.3 DZ 3. Beginning at:
47º 22'-50 N, 126º 35' W to
47º 22.50 N, 126º 15' W to
47º 00'00 N, 126º 15' W to
47º 00'00 N, 126º 35' W to
beginning

5.4.4.4 DZ 4. Beginning at:
47º 22'.50 N, 125º 55' W to
47º 22'.50 N, 126º 15' W to
47º 00'00 N, 126º 15' W to
47º 00'00 N, 125º 55' W to
beginning

5.4.4.5 DZ 5. Beginning at:
47º 00'00 N, 126º 35' W to
47º 00'00 N, 126º 15' W to
46º 37'00 N, 126º 15' W to
46º 37'.50 N, 126º 35' W to
beginning

5.4.4.6 DZ 6. Beginning at:
47º 00'00 N, 126º 15' W to
47º 00'00 N, 125º 55' W to
46º 37'.50 N, 125º 55' W to
46º 37'.50 N, 126º 15' W to
beginning

5.4.4.7 DZ Identification. These drop zones may be identified as "DZ 1," "DZ 2," DZ 3," etc., in applicable message traffic. DZ 3 through DZ 6 when scheduled together comprises a grid area of approximately 25 NM by 35 NM.

NOTE
Using activities may request any drop area outside of the OCNMS; however, use of preferential drop zones is preferred.

5.4.5 Preferential Routings

1. From NUW to W-237A:
NUW 228020 ELMAA HQM HQM291019. Altitude FL190. (BOAT5)

2. From NUW to W-237B:
NUW NUW228020 NUW227035 TOU TOU200020. Altitude FL190. (BOAT3)

3. From W-237A or W-237G/J to NUW:
W-XXXX HQM291019 HQM HQM046017 NUW200030 NUW. Altitude FL200. (BOAT6)
4. From W-237B to NUW:
W-237B TOU200020 TOU NUW200030 NUW. Altitude FL200. (BOAT4)

5. From W-237 to:
   a. NLC:  W-XXXX HQM UBG LKV J5 TIOGA FRA NLC140040 NLC.  
      (Request NLC237)
   b. NKX:  W-XXXX HQM UBG LKV J5 LAX OCN (IAF) NKX.  
      (Request NKX237)
   c. NZY:  W-XXXX HQM UBG LKV J5 LAX J1 MZB (IAF) NZY.  
      (Request NZY237)

6. From W-570 to:
   a. NUW:  W-570 HQM NUW200030 NUW.  (Request NUW570)
   b. NLC:  W-570 ONP OED RBL J65 EHF J5 TIOGA FRA NLC140040 NLC.  
      (Request NLC570)
   c. NKX:  W-570 ONP OED RBL J65 EHF J5 LAX OCN (IAF) NKX.  
      (Request NKX570)
   d. NZY:  W-570 ONP OED RBL J65 EHF J5 LAX J1 MZB (IAF) NZY.  
      (Request NZY570)

7. From W-93 to:
   a. NUW:  W-93 ONP HQM NUW200030 NUW.  (Request NUW93)
   b. NLC:  W-93 OTH RBL J65 EHF J5 TIOGA FRA NLC140040 NLC.  
      (Request NLC93)
   c. NKX:  W-93 OTH RBL J65 EHF J5 LAX OCN (IAF) NKX.  
      (Request NKX93)
   d. NZY:  W-93 OTH RBL J65 EHF J5 LAX J1 MZB (IAF) NZY.  
      (Request NZY93)

**NOTE**
If (IAF) is not applicable, route filed will be from last fix direct destination airport.

**CAUTION**

PADRA (Pass to Air Defense Radar) must appear in the remarks section of the DD-175.
5.5 REAL-TIME COORDINATION. Seattle ARTCC releases SUA on a real-time basis and requires a 30-minute notice prior to entering any Warning Area so the area can be cleared of IFR traffic. For coordination purposes, it is the responsibility of the mission commander to ensure that Whidbey Clearance Delivery or Seattle ARTCC is notified at least 30 minutes prior to scheduled Warning Area entry time.

5.6 OPERATING PROCEDURES

1. MARSA is a condition that applies to those aircraft operating within the Warning Areas. If more than one unit is scheduled to operate within a Warning Area, each unit will be briefed on the vertical and/or lateral assignments of the other units by the Range Schedules Division.

2. All operations within W-237 are subject to a Letter of Agreement between NAS Whidbey Island, Seattle ARTCC, and Oakland ARTCC. Using and scheduling agency is NAS Whidbey Island. No military operations are permitted within these warning areas without prior approval.

3. Aircrews shall not expect to enter Warning Areas before their scheduled entry time. Seattle ARTCC will not issue entry clearance for early arrivals if the Warning Area is in use.

4. All aircraft shall have operable CNI equipment on all flights. A malfunction of CNI equipment is cause to cancel/abort missions.

5. Pilots cleared to operate within the Warning Areas are responsible for remaining within the vertical and lateral confines of the Warning Area as specified in the ATC clearance.

CAUTION

During coordinated surface-air events, movements and/or location of surface units shall not cause air units to "SPILLOUT" of assigned OPAREA(S).

NOTE

Seattle ARTCC is equipped with error detection software to ascertain when spillouts occur. Pilot deviation reports will be filed when spillouts are detected.

6. Aircraft operating in Warning Areas and ATCAAs shall squawk Modes II and IV, as directed by higher authority, and shall
squelch the Mode III discrete code as assigned by ATC. If aircraft do not have Mode IV capability, advise Bigfoot prior to launch of OPAREA scheduled time. Airborne Mode IV checks are available from Bigfoot on 364.3 MHZ.

7. Carrier operations that involve aircraft flight operations within W-237 must obtain Mode III discrete codes from NAS Whidbey Island Air Traffic Control. Requests for a block of Mode III discrete codes shall be made via message and formatted per paragraph 2.5.1.

8. Gunnery or live ordnance exercises shall not be conducted within 10 NM of the coastline.

9. Aircrews are responsible for ensuring that surface area of impact zones is clear.

10. Aircraft operating within W-237 must file for ADIZ penetration unless operating under positive control of Bigfoot or Seattle ARTCC. Communications within the western segment of W-237 with Bigfoot is marginal. HF communications are available from McClellan Airways.

11. Unless safety of flight dictates, no aircraft shall depart assigned Warning Areas until an ATC clearance is received from Seattle ARTCC. Under normal circumstances, aircraft should provide Seattle ARTCC at least 5 minutes advance notice of intent to depart assigned warning areas. This provides needed time for flight data processing and coordination when required.

12. Lost communications shall be as outlined in DOD FLIP.

13. UNICOM/SAFE HAVEN procedures are as follows:

   a. All aircraft entering a W-237 area will contact Seattle ARTCC on appropriate frequency (see Table 1 or 5.1.4) for entry using call sign and appropriate event number. Event numbers will be assigned by Range Schedules Division at (360) 257-2877. If multiple aircraft are scheduled for the same event, or co-use of the area is approved, upon entering W-237 aircraft will check in via the appropriate UNICOM frequency with call sign and event number. If no communications with other aircraft can be established aircraft will proceed to SAFE HAVEN described by a lateral area extending from the border of the W-237 to 3 NM into the Warning Area assigned (Illustration 9). Additionally altitudes for each SAFE HAVEN area are described in Illustration 9. Once established in the SAFE HAVEN area aircraft will continue to try and contact playmates or co-use aircraft if still no communications can be established with other aircraft then aircraft will coordinate exiting W-237 with Seattle ARTCC.
b. When ready to exit W-237 aircraft will coordinate with Seattle ARTCC on appropriate frequency (see 5.1.4) prior to leaving assigned area. If multiple aircraft for the same event are in W-237 the last aircraft departing the Warning Area shall advise Seattle ARTCC, i.e. "SEATTLE CENTER PUGET52 EVENT 30001 LAST AIRCRAFT OUT." Upon reporting last aircraft out, Seattle ARTCC will close the event number and the airspace will be deactivated.

5.7 ELECTRONIC COUNTERMEASURES (ECM)

1. The Continental United States ECM Area extends to the outer boundaries of the coastal ADIZ or a perimeter 150 NM seaward from the coastal states, whichever is farther out, except where this infringes on territorial limits of other nations/states.

2. Procedures for conducting ECM, including method of request and required limitations, are set forth in OPNAVINST 3430.9 (series), AFR 55-44, and applicable COMVAQWINGPAC instructions.

3. West-to-east (towards coastline) ECM runs should not be made due to potential interference with FAA Radars/NAVAIDS.

4. In addition, use of chaff requires coordination with Western Air Defense Sector DQM/AST; telephone DSN 382-4342; COMM (253) 982-4342.

5.8 CANADIAN MARITIME PACIFIC (MARPAC) COORDINATION

1. Coordination with Canadian MARPAC Headquarters at Esquimalt Naval Base, Victoria, B.C., is recommended for any operations within the Canadian ADIZ.

2. PLAD: MARPACHQ ESQUIMALT CAN


5.9 HELICOPTER SERVICES. Helicopter services in the PACNORWEST TRCM OPAREAS are limited. Units desiring services shall submit requests to NAS WHIDBEY ISLAND WA//N3/N331//, info COMNAVAIRPAC SAN DIEGO CA//N3/N7// and COMNAVREGNW SEATTLE WA//N3/N00P// for validation and approval 14 days prior to desired services.

5.10 POST OVERHAUL REQUIREMENTS. Surface units completing an availability/overhaul at Puget Sound Naval Shipyard (PSNS) shall coordinate airspace requirements/aircraft services with the PSNS Combat Systems Branch (Code 290) at DSN 439-7106, COMM (360) 476-7106 for aircraft tracking, CIWS tracking and Link 4/11 testing events.
5.11 SHIP - SHORE COMMUNICATIONS. Dedicated (continuously guarded) HF assets are not available at NAS Whidbey Island. One method of establishing communication is via the HF Global system. This system provides HF radio communications for passing command and control information. The system/individual stations are not dedicated to any service, command or activity, but support authorized users on a traffic precedence basis. McClellan AFB, CA is the nearest Global station; frequencies are listed in the DOD FLIP Flight Information Handbook (FIH). Call sign is McClellan Airways. Facilities for providing phone patch service are available through all Global stations. Phone patch service is expedited if destination DSN or commercial phone numbers are provided at the time of request. The NAS Whidbey Island ODO can be reached at DSN 820-2681/2682 or COMM (360) 257-2681/2682.
CHAPTER 6

MILITARY TRAINING ROUTES (MTRs)

6.1 GENERAL

1. NAS Whidbey Island MTRs accommodate high speed, low level tactical training in excess of 250 KIAS. Operations shall be conducted at the minimum airspeed compatible with the intent of the mission. Specific route information is contained in the FLIP AP/1 B (Military Training Routes).

2. NAS Whidbey Island is the scheduling activity for the following Military Training Routes.

<table>
<thead>
<tr>
<th>Military Training Routes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>VR-1350</td>
<td>IR-341</td>
</tr>
<tr>
<td>VR-1351</td>
<td>IR-342</td>
</tr>
<tr>
<td>VR-1352</td>
<td>IR-343</td>
</tr>
<tr>
<td>VR-1353</td>
<td>IR-344</td>
</tr>
<tr>
<td>VR-1354</td>
<td>IR-346</td>
</tr>
<tr>
<td>VR-1355</td>
<td>IR-348</td>
</tr>
</tbody>
</table>

Table 2

NOTE

AR-626 and AR-717A refueling routes are contained within existing SUA. Refer to FLIP AP-1 for coordinates. Routes are scheduled concurrently with associated SUA.

NOTE

Units may schedule IR-348 without concurrently scheduling the Okanogan and Roosevelt MOAs. Altitude restrictions apply and approval is required from NAS Whidbey Island Range Schedules Division.

3. Routes shall not be used unless scheduled with NAS Whidbey Island Range Schedules Division. VRs are scheduled at 10-minute intervals (H + 00, H + 10, H + 20, H + 30, H + 40, H + 50); and IRs are scheduled at 20-minute intervals (H + 00, H + 20, H + 40). If alternate entry/exit points are desired, they must be scheduled. Refer to Chapter 2 paragraph 2.4.2 for additional scheduling procedures.

4. All routes are one way. Flight operations conducted along these routes or segments of these routes shall conform to the direction of traffic flow indicated in the route description.
5. FAIROPS Stereo Flight Plans have been developed for NAS Whidbey Island-based units to incorporate IR/VR routes into the local flight plan system. Refer to reference (e).

6.1.1 Preflight Planning. Low-level flying requires extensive preflight planning to ensure flight safety and maximum training from each sortie. Familiarity with FLIP AP/1 B and temporary route advisories is essential.

6.1.2 Operating Procedures

1. Unless otherwise delineated in a route's special operating procedures, avoid charted, uncontrolled airports by 3 NM or below 1,500 feet AGL when practicable.

2. Avoid Class B, C, and D, airspace and Minimize disturbance to persons and property on the ground.

3. All "IR" operations shall be conducted on IFR flight plans.

4. Flight Plan requirements for VR route use:

   a. Pilots departing on IFR clearances to fly VRs are required to file to the fix/radial/distance of their entry/alternate entry point of the route.

   b. Pilots transitioning to IFR upon exiting the VR are required to have an IFR flight plan on file with the appropriate fix/radial/distance of their exit point.

   NOTE

   FAIROPS Stereo type flight plans provide this operational benefit for NAS Whidbey Island units.

5. Operations on VR routes shall be flown only when the ceiling is at or above 3000 feet AGL and Flight visibility is 5 statute miles or greater.

6. All route entries are authorized at published entry/alternate entry points only. Specific entry times for MTRs are required to provide safe separation from other Whidbey Island-scheduled routes. MTR schedules are provided to general/agriculture aviation interests and are predicated on adherence to scheduled entry times. Aircraft shall not enter these routes at any time other than those obtained from NAS Whidbey Island Range Schedules Division. Entry times will be adhered to within plus or minus 3 minutes for VRs and plus or minus 5 minutes for IRs.
CHAPTER 7

CVN OPERATING PROCEDURES

7.1 GENERAL. To standardize procedures for PACNORWEST TRCM CVN air and surface operations, this chapter outlines procedures that shall be utilized when conducting flight operations within the W-237 complex, CYA102, CYR109 and Strait of Juan De Fuca. The following procedures have been coordinated with the FAA and are designed to reduce the disruption of CVN training while providing a safe flying environment for both military and civil air traffic. CVN operations, which involve flights to shore stations, are to be conducted per appropriate air traffic control directives and procedures outlined herein to preclude air traffic control problems with the FAA, military ATC Facilities and the WADS. Adherence to these procedures will alleviate many potential problem areas, enhance training, and provide the following:

1. Standardization of flight information messages for relay of flight plan information, ADIZ penetration coordination, Altitude Reservation Airspace (ALTRV) usage, and ATCAA/warning area/restricted area scheduling and usage.

2. Communications with shore facilities, surface/air platforms, WADS and FAA Seattle ARTCC.

3. Adequate lead-times for altitude/airspace reservations.

4. Timely clearance for aircraft entering the National Airspace System, Class B and C airspace, warning areas, ATCAA, or ALTRV.

7.2 COORDINATION

7.2.1 Planning Conference. Prior to any underway period involving flight operations, a face-to-face meeting shall be held at least 3 working days in advance to discuss operations. Air Operations, Strike Operations, and air wing personnel will meet with NAS Whidbey Island Operations Department to discuss the following items of interest:

1. Planned PACNORWEST TRCM exercises and flight operations.

2. Coordinate OPAREA/airspace planning briefs.

3. Confirm OPAREA reservations, obtain ALTRV/MOAs/ATCAAs as required.

4. Use of Canadian airspace.
5. IFF assignments.


7. Flight operations in the Strait of Juan De Fuca.

8. Communications/coordination.

9. Unusual hours of operation.

10. Other items of interest.

7.2.2 ATC briefs/liaison Shipriders. Upon request, NAS Whidbey Island will furnish orientation teams capable of briefing AIROPS/CATCC/AIRWING personnel on OPAREA procedures and interfacing with the National Airspace System. In addition, ATC personnel are available to serve as onboard liaison during at-sea periods. Requests for orientation briefs/ship riders can be arranged by contacting ATC (Code N33) at DSN 820-2132, COMM (360) 257-2132.

7.3 PRE-SAIL COORDINATION MESSAGES

7.3.1 Summary of Operations. No less than 48 hours prior to commencement of AIROPS, the carrier shall send a summary of intended air operations by message to NAS Whidbey Island, concerned FAA facilities, NORAD, Canadian military/ATC and other appropriate facilities. Anticipated AIROPS for the entire period shall be listed. This message does not rescind or supersede airspace request procedures found in other sections of this manual, or replace divert alert/Notice of Intent/IFF messages as required by higher authority.

The following example is provided:

FM: (CVN)
TO: NAS WHIDBEY ISLAND WA/N3/N33/N331//
FAA SEATTLE ARTCC AUBURN SEATTLE WA/MOS//
WESTERN AIR DEF SX MCCCHORD AFB WA/IS/SOCC/DOOS//
MOC ESQUIMALT//N36-1//
WOC COMOX//
INFO: (Other addees as required)
(UNCLAS/CONFIDENTIAL)//N03120//
SUBJ: SUMMARY OF INTENDED AIR OPERATION
MSGID: GENADMIN/(ORIGINATOR)://
RMKS: 1. Read in four (4) columns:

<table>
<thead>
<tr>
<th>DATE</th>
<th>TIME</th>
<th>EVENT</th>
<th>OPAREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 FEB</td>
<td>1830-2100Z</td>
<td>CYCLIC OPS</td>
<td>W-237 A,B</td>
</tr>
<tr>
<td>22 FEB</td>
<td>2000-2200Z</td>
<td>CQ</td>
<td>SOJDF</td>
</tr>
<tr>
<td>24 FEB</td>
<td>1900-2100Z</td>
<td>HELO OPS</td>
<td>CYA-102</td>
</tr>
</tbody>
</table>

7.3.2 Divert Alerts. Divert Alert requests shall be submitted per higher authority instructions. NAS Whidbey Island is a 24-hour airfield; however, additional personnel are required to support CVN divert/bingo operations. Accuracy of divert alert periods is essential to ensure support of CVN contingencies.

7.3.3 OPAREA Requests. Users shall submit OPAREA requirements to NAS Whidbey Island Range Schedules Division per chapter 2 of this manual. Due to rapidly changing sea conditions, short fuse requests or changes will be accepted by phone/e-mail or airborne relay.

7.3.4 ALTRV Requests. CVNs shall submit ALTRV requirements for domestic airspace to FAA CARF Washington DC, info FAA SEATTLE ARTCC AUBURN WA/MOS// and WESTERN AIR DEF SX MCCCHORD AFB WA//IS/SOCC/DOOS//. Requests shall be made per Special Military Operations FAA Handbook 7610.4, part 3 (OPNAVINST 3722.33) no less than 6 days prior to COMEX of flight OPS to ensure approval and NOTAM promulgation to users of Special Use Airspace.

7.3.5 IFF Requests. A request for IFF code assignment shall be received NLT 3 days prior to at-sea period. In lieu of message, IFF codes may be assigned at the pre-sail conference.

7.4 FLIGHT PLANNING

7.4.1 OPAREA Modifications. To ensure airspace availability, users shall submit OPAREA modification requests no later than 1500L the day prior. Submit ALTRV/ATCAA modification requests as soon as practicable to ensure ARTCC ability to coordinate requested modification. Verification of receipt of critical messages (i.e. short notice OPAREA modifications, change of flight operations, incident, mishaps, etc.) by phone communications, when practical, is recommended.

7.4.2 Daily Air Plan. To permit NAS Whidbey Island and other appropriate agencies to prepare for upcoming flight operations, the CVN shall include NAS Whidbey Island and other appropriate agencies as an addee on the daily Air Plan.
7.4.3 Flight Information Messages. In order to recognize and identify naval aircraft operating in the Pacific Coast ADIZ, CADIZ, flight information (flight advisories, launch advisories, flight plans) shall be passed to NORAD (WESTERN AIR DEF SX MCCORD AFB WA) include NAS Whidbey Island, FAA Seattle ARTCC and cognizant area commanders as info addees.

7.4.4 Flight Plans. Navy and FAA facilities must be kept informed of all aircraft that will enter the National Airspace System. To ensure timely filing, flight plans should be sent to NAS Whidbey Island listing all action addees above. Every effort should be made to use Stereo Routes contained in Appendix 1.

1. A minimum lead-time of 2 hours is required if filing Stereo Routes, and 4 hours for non-stereo routes. With ample notification via phone relay or relay from airborne platform, unscheduled flights will be handled on a case-by-case basis.

2. Once filed, flight plans are valid for 30 minutes prior to and 2 hours after proposed launch time.

3. Aircraft may enter the National Airspace System as singles, sections, or waves, but individual call signs/squawks (although in standby) are required for each aircraft in the event of emergencies, IMC, or separation of the flight. Filed call signs will be retained throughout the flight. Use of other than filed call signs for the mission can cause confusion with ATC agencies and possibly result in a delay in obtaining clearance or assistance, use of tactical call signs is permitted.

4. NAS Whidbey Island Base Operations will file all CVN flight plans.

7.4.5 Overhead Messages. To ensure aircrews receive CVN overhead times, include NAS WHIDBEY ISLAND WA/N3/N33/N331// as an addee on all overhead messages. A copy will be retained at the NAS Whidbey Island ODO desk for reference.

7.5 AT-SEA COORDINATION. Pre-sail coordination is the best method to articulate user requirements. However, it is understood that various events can and will effect planned evolutions. At-sea, to ensure receipt of special requests, airspace coordination, or flight plans, message traffic with proper lead times is the preferred method of communication. When time precludes use of message traffic, phone conversation or airborne relay is an acceptable substitute. Use of e-mail messages is encouraged; however, e-mail notification cannot be considered complete unless response e-mail is received from NAS Whidbey Island confirming the action or responding to a request. Some examples of at-sea coordination:
1. Notification of secured flight operations (cold deck notification required)

2. Short fused flight plans.

3. Warning area airspace changes.

4. Coordination to move to Strait of Juan De Fuca due to W-237 weather/sea states.

5. Extensions of divert alert periods.

7.6 COMMUNICATIONS

7.6.1 Landline Communications

1. When required for immediate coordination, NAS Whidbey Island phone numbers listed in Table 3 shall be used:

<table>
<thead>
<tr>
<th>Agency</th>
<th>Number</th>
<th>Operating Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATC Facility</td>
<td>(360) 257-2887</td>
<td>24 Hours</td>
</tr>
<tr>
<td>Range Schedules</td>
<td>(360) 257-2877</td>
<td>0700-1600</td>
</tr>
<tr>
<td></td>
<td>(360) 257-1283</td>
<td>FAX</td>
</tr>
<tr>
<td>OPS Duty Officer</td>
<td>(360) 257-2681</td>
<td>24 Hours</td>
</tr>
<tr>
<td>Flight Planning</td>
<td>(360) 257-1601</td>
<td>24 hours</td>
</tr>
<tr>
<td>NAS OPS</td>
<td>(360) 257-2120</td>
<td>0730-1600</td>
</tr>
</tbody>
</table>

Table 3
(Phone numbers are COMM and DSN prefix is 820)

2. Should a need arise to contact FAA Seattle ARTCC; the phone numbers in Table 4 should be used.

<table>
<thead>
<tr>
<th>Agency</th>
<th>Number</th>
<th>Operating Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military Ops</td>
<td>(253) 351-3523</td>
<td>0700-2300</td>
</tr>
<tr>
<td>TRFC Mgmt</td>
<td>(253) 351-3520</td>
<td>24 hours</td>
</tr>
<tr>
<td>Area Sup</td>
<td>(253) 351-3505</td>
<td>24 hours</td>
</tr>
</tbody>
</table>

Table 4

7.6.2 Ship-to-Shore Communications. Ship-to-shore radio communications are extremely limited and may only be effective when the CVN is in local waters/Strait of Juan De Fuca and within 15/20 miles of NAS Whidbey Island. There are no ship-to-
shore communications in the W-237 complex. Radio frequencies are contained in Table 5.

**NAS WHIDBEY ISLAND RADIO FREQUENCIES**

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>FREQ (UHF/VHF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approach CTL (CVN Sector)</td>
<td>266.8 or L/L</td>
</tr>
<tr>
<td>Approach Control</td>
<td>285.65/118.2</td>
</tr>
<tr>
<td>Control Tower</td>
<td>340.2/127.9</td>
</tr>
<tr>
<td>Base OPS/ODO</td>
<td>350.0</td>
</tr>
</tbody>
</table>

Table 5

**7.6.3 Air-to-Ground Communications.** Aircraft operating within 100 miles of NAS Whidbey Island should experience good air-ground communications with NAS Whidbey Island ATC on the frequencies listed in Table 5. Aircraft operating in the W-237 complex should be able to maintain adequate communications with FAA SEATTLE ARTCC (319.2/125.1), except at lower altitudes. Flight leader or communications relay aircraft shall contact SEATTLE ARTCC at least 5 minutes prior to obtain clearances and to alleviate any enroute delays. This will also permit flight participants to continue with their mission while the clearance is being obtained. All aircraft operating within the W-237 complex are required to contact Seattle Center for entry/exit approval. This may be accomplished by individual aircraft commanders or through the designated communications aircraft.

**7.7 BINGO/DIVERTS TO SHORE FACILITIES**

**7.7.1 Bingo.** A bingo aircraft inbound to a shore facility is an emergency and will be assimilated into the National Airspace System as expeditiously as possible. However, FAA publications do not define the term bingo as an emergency, nor is it indicative to FAA personnel that an aircraft is experiencing difficulties. To ensure priority handling, aircrew shall declare an emergency, stating the nature of the emergency, i.e., "EMERGENCY LOW FUEL," "PORT ENGINE OUT," etc. Once an emergency has been declared, if not already selected, IFF transponder will be set to the appropriate emergency code. Remain on that code until directed by ATC.

**WARNING**

Aircraft unable to contact ATC shall not enter Positive Controlled Airspace unless squawking the appropriate emergency code.
7.7.2 Diverts

1. An aircraft inbound to a shore facility without an emergency is simply a divert. No special handling should be expected by the divert aircraft. If fuel state becomes a concern, aircrew shall state "Minimum Fuel" to the ATC facility when the aircraft reaches minimum fuel state as defined by NATOPS.

2. When diverts involve multiple aircraft, advance announcement of the divert to the controlling agency by the lead aircraft (or airborne relay) will greatly assist ATC and reduce aircraft delays. At a minimum, the number of aircraft inbound and destination should be provided.

7.8 CONDUCT OF FLIGHT

7.8.1 W-237 Complex Operations. All flights operating within the W-237 complex are required to remain in "due regard" status per OPNAVINST 3770.4 (series) until radar contact is established by FAA Center.

7.8.2 Strait of Juan de Fuca/Puget Sound Operations. The Strait of Juan de Fuca and the Puget Sound are not SUA, and as such, Federal Air Regulations and standard air traffic control procedures are applicable. "Due Regard" is not authorized within the Puget Sound/Strait of Juan de Fuca. All aircraft, not on an IFR flight plan, shall follow standard VFR procedures. Specific procedures for operating within this airspace are contained in Paragraph 7.9.

7.9 STRAIT OF JUAN DE FUCA (SOJDF) CARRIER OPERATIONS

7.9.1 GENERAL SPECIAL USE AIRSPACE. Specifically a warning area is designated as an operational area for potentially hazardous military air and surface activity. The SOJDF, however, has not been designated as SUA, and safety precautions normally exercised in association for flight within warning areas are not present. Therefore, to enhance safety with the SOJDF, local procedures have been developed to permit CVNs to conduct limited flight operations in close proximity to civilian users.

7.9.2 CVN use of SOJDF. CVNs are strongly encouraged to use W-237 complex for flight operations. When missions or W-237 weather/sea conditions restrict use of the Warning Areas, the SOJDF may be used for limited flight operations. Scheduling and use of SOJDF is controlled and must be pre-coordinated at a pre-sail conference. The following restrictions apply:

1. Day time, Case 1 only.
2. Limit six aircraft in CVN pattern.

3. All aircraft must monitor Whidbey Approach Control Frequency in addition to CVN L/L.

4. All aircraft must be on discrete beacon codes.

5. Minimum of 2 1/2 hour lead-time is required for NOTAM broadcast.

6. When able, a radio or phone communication link shall be maintained between CVN CATCC and Whidbey Approach.

7. CVN is responsible for scheduling Canadian OPAREAS.

8. Participating aircrew shall attend brief on SOJDF operations.

7.9.3 SOJDF Airspace for CVN Use

1. A portion of airspace within the SOJDF has been locally designated for CVN flight operations (Illustration 6). This airspace is of sufficient size for both aircraft operations and surface navigation purposes and should be used by CVNs to the maximum extent practical due to added safety benefits, specifically, ship-to-shore/air-to-ground communications and ATC RADAR coverage. In this designated area, all CVN aircraft will be provided RADAR traffic advisories by NAS Whidbey Approach Control on a discrete frequency or on the CVN land launch button.

2. Aircraft operations in the Strait of Juan De Fuca involve many different types of aircraft from seaplanes to air carriers. A high mid-air collision potential exists. Additionally, many of the air carrier aircraft that transit the SOJDF each day are equipped with TCAS equipment. A TCAS incident can be avoided when both military and civil aircraft are receiving traffic advisories from a controlling agency. Use of the designated OPAREA and compliance with local operating procedures are key to deconflicting civil and military traffic that operate within the SOJDF.

CAUTION

High intensity civil non-participating military VFR/IFR traffic will be encountered in the Puget Sound and Strait of Juan De Fuca. Military aircrew must be alert for both controlled and uncontrolled aircraft.
STRAIT OF JUAN DE FUCA CVN OAREA
48° 17'.3N/122° 43'.7W
48° 10'.0N/122° 51'.7W
48° 12'.0N/123° 14'.5W
48° 12'.0N/123° 20'.0W
48° 20'.0N/123° 22'.0W
48° 25'.5N/123° 07'.0W
48° 22'.4N/122° 46'.6W
CHAPTER 8

NAVAL WEAPONS SYSTEM TRAINING FACILITY BOARDMAN, OREGON

8.1 DESCRIPTION. Illustration (3). The Boardman Naval Weapons System Training Facility (NWSTF) complex consists of R-5701, R-5706, Boardman MOA, and ATCAA. This complex is used for basic air maneuvering, electronic threat simulations, air-to-ground weapons delivery, small arms, and various ground training exercises. Services provided by NWSTF are very limited. There are no Range Clearance personnel, moving targets, or any type of scoring systems available.

8.1.1 Operating Hours. Monday through Friday, 0730 – 1600. Air-to-ground or mobile emitter events will normally be scheduled during these hours. Air-to-ground or emitter events outside these times will be coordinated via the NAS Whidbey Island Operations Officer at least 72 hours in advance. This does NOT apply to normal operations in the airspace above the Boardman range.

8.1.2 Boardman MOA and ATCAA Boundaries

Boundaries:
Beginning at:
45 52’59N/119 31’04W to
45 46’49N/119 31’04W to
45 47’44N/119 23’29W to
45 46’59N/119 22’29W to
45 45’09N/119 22’34W to
45 43’29N/119 23’54W to
45 42’14N/119 25’04W to
45 39’59N/119 27’14W to
45 36’09N/119 45’44W to
45 38’59N/120 09’04W to
45 45’29N/120 09’04W
proceed along the south shore of the Columbia river to
45 50’49N/119 48/44W to
45 50’49N/119 45’04W to
45 50’19N/119 45’04W to
45 50’19N/119 42/34W to
45 50’59N/119 42’34W then
along the south shore of the Columbia River to
45 51’09N/119 40’04W to
the point of beginning, excluding that airspace within a 5 NM radius of a point located at 45 43’35N/119 41’07W; and excluding that airspace within R5701 and R5706 when active.
MOA: 4,000 feet MSL to, but not including, FL180.

ATCAA: FL180 to, and including, FL200.

8.1.3 Boardman Restricted Area 5701 area (a).
BOARDMAN, OR to FL200
Cir rad 5 NM cntr on N45°43'35.00" W119°41'07.00" to
Description as per the AP/1B

8.1.4 Boardman Restricted Area 5701 area (b).
BOARDMAN, OR to 10000 feet MSL
N45°46'19.00" W119°35'09.00" to
N45°47'00.00" W119°31'30.00" to
N45°42'00.00" W119°30'45.00" to
N45°41'28.00" W119°34'39.00" then
CCW along the arc of a cir rad 5 NM cntr on N45°43'35.00"
W119°41'07.00" to beginning. Description as per the AP/1B

8.1.5 Boardman Restricted Area 5701 area (c).
BOARDMAN, OR to 6000 feet MSL
N45°47'00.00" W119°31'30.00" to
N45°47'30.00" W119°21'30.00" to
N45°45'45.00" W119°21'30.00" 1 NM W of and parl to Butter Creek
to N45°42'00.00" W119°30'45.00" to beginning. Description as per the AP/1B

8.1.6 Boardman Restricted Area 5701 area (d).
BOARDMAN, OR to 10000 feet MSL
N45°46'47.00" W119°46'37.00" then
CCW along the arc of a cir rad 5 NM cntr on N45°43'35.00"
W119°41'07.00" to
N45°38'53.00" W119°43'34.00" to
N45°37'15.00" W119°46'45.00" to
N45°41'30.00" W119°51'00.00" to
N45°47'00.00" W119°51'00.00" to beginning. Description as per the AP/1B

8.1.7 Boardman Restricted Area 5701 area (e).
BOARDMAN, OR to 6000 feet MSL
N45°47'00.00" W119°51'00.00" to
N45°41'30.00" W119°51'00.00" to
N45°37'15.00" W119°46'45.00" to
N45°36'15.00" W119°49'00.00" to
N45°36'30.00" W119°51'00.00" to
N45°40'15.00" W119°55'00.00" to
N45°41'00.00" W119°54'30.00" to
N45°41'00.00" W120°02'30.00" to
N45°47'00.00" W120°02'30.00" to beginning. Description as per the AP/1B
8.1.8 Boardman Restricted Area 5706

BOARDMAN, OR 3500 feet MSL to 10000 feet MSL
N45°40'33.00" W120°02'32.00" to
N45°40'39.00" W120°09'04.00" to
N45°45'29.00" W120°09'04.00" thence E along the S shore of the
Columbia River to
N45°51'09.00" W119°40'04.00" to
N45°52'59.00" W119°31'04.00" to
N45°46'34.00" W119°31'04.00" to
N45°46'12.00" W119°35'02.00" then
CCW along the arc of a cir rad 5 NM cntr on N45°43'35.00"
W119°41'07.00" to
N45°46'35.00" W119°46'50.00" to
N45°46'33.00" W120°02'32.00" to beginning. Description as per
the AP/1B

Altitudes: 3,500 feet MSL to 10,000 feet MSL.

8.2 OPERATING PROCEDURES

8.2.1. General. NWSTF Boardman is currently an uncontrolled
range. The following standard operating procedures will be
adhered to unless other arrangements are made in writing with
the NAS Whidbey Island Operations Officer (i.e., providing your
own qualified range controllers, etc.)

8.2.2. Entering Boardman Range. All aircraft will broadcast in
the blind, intentions, commencing operations, and completing
operations. A reply from Boardman personnel is not required in
order to commence operations, as this is an uncontrolled range.
Visual inspection by the aircraft commander of the range is
required to ensure the range is clear.

Call Sign: “BOARDMAN RANGE”

UHF: 305.8 MHZ OR Secondary 243.0 MHZ Guard

VHF: 134.1 MHZ OR Secondary 121.5 MHZ Guard

Aircraft shall make “INBOUND” or “IN TARGET HOT” and “OFF SAFE”
transmissions in the blind.

Telephone: COMM (541) 481-2565, FAX 2567

8.2.3. Departing Boardman Range. For IFR flight, aircraft will
obtain IFR clearance directly from Seattle ARTCC:

Call Sign: SEATTLE CENTER
UHF: 269.35 MHZ
VHF: 132.6 MHZ
Telephone: DSN 891-1241 or COMM: (206) 351-3593

For VR Routes, aircraft will enter at scheduled entry time/point and contact Flight Service:

Call Sign: SEATTLE RADIO or MCMINNVILLE RADIO 255.4 MHZ

8.3 MAIN TARGET. Usable targets are listed in Table (1) with associated photographs (taken December 2007) for reference.

8.3.1 Target (1). General Description. The main target is a T-60 Tank. There are four concentric circles around the bull at 100, 500, 1000, and 1500 feet. There is a 6000-foot square centered on the bull. At 650 feet MSL there are two offset reflectors to support the main bull, Target #2 and Target #3.

8.3.2 Navigation Check Point. Carty Coal Plant, 45 41.608N/119 48.430W, 1352 feet MSL (top of stacks).

8.4 STRAFING PIT. Located south-southwest of the Main Bull at 45 42.545N/119 41.939W. Strafing procedures are:

a. Upon entering Restricted Area R-5701 make a radio call in the blind to “BOARDMAN RANGE” stating: aircraft call sign, position relative to intended target (e.g., “entering R-5701, 8 NM Southwest of Strafe Pit”), altitude (e.g. “Angels X”), number and type weapons to be released (e.g. “900 Rounds PGU-27 TP & TP-t”) and number of passes on target including initial clearing pass and direction of turns for multiple runs (e.g. “5 passes, left turns”).

b. High and low angle strafing is approved.

c. A “GUNS COLD” initial clearing pass over the strafe pit will be accomplished to ensure a clear range before commencing strafing runs.

d. A “BOARDMAN RANGE, [call sign], strafe pit, hot guns” call will be made in the blind each pass.

e. The “Foul Line” is 2000 feet short of the strafe pit target.
f. Tracer rounds are authorized between 1 October and 31 May or at other times upon written approval of the NAS Whidbey Island Operations Officer (e.g. should unit scheduling provide its own wildfire suppression personnel and equipment onsite during strafe operations consideration will be made to permit tracer rounds use outside the normal “low fire danger” season). Notify “Boardman Range” of “possible wildfire” immediately if it appears brush near the strafe pit has caught fire.

g. Cease firing any time “[Call Sign], BOARDMAN RANGE, CEASE FIRE, CEASE FIRE, CEASE FIRE” is called over Boardman Range frequency or on UHF Guard.

h. Runaway guns procedure is to fly strafe run-in heading (028’ Magnetic) until ammunition is expended then notify “BOARDMAN RANGE” with call sign and state “RUNAWAY GUNS.”

i. After the last pass on target call in the blind to “BOARDMAN RANGE” stating “[call sign], off-target, GUNS COLD, [number and type munitions expended].”

j. Runs will be made from South to North only (028 magnetic). Runs from the North are not authorized.

Any questions, please call the NAS Whidbey Island Operations Officer at (360) 257-2120 or Navy Region Northwest Range Support at (360) 257-3315.

8.5 RANGE PRIORITY. Priority for aircraft will be assigned as follows:

a. PRI 1: Scheduled Condon IP aircraft for initial run.

b. PRI 2: Scheduled Arlington IP Aircraft for initial run.

c. PRI 3: Regularly scheduled aircraft already established in the pattern.

d. PRI 4: High Pattern dive-bombing attacks.

e. PRI 5: Aircraft performing test flights.

f. PRI 6: Scheduled windows for other-than-Navy forces.

NOTE
Refer to chapter 2 for scheduling priority

8.6 TYPE EXERCISE/ORDNANCE. Air-to-ground high, intermediate and low altitude bombing, loft bombing and rockets. MK-76, BDU-48,
LGTRs or other inert ordnance not to exceed 25 pounds may be used on all targets (with exception of #2 and #3 radar reflectors). Inert 2.75 FFAR Rockets are authorized on any metal tactical target. Five-inch practice Zuni rockets or inert ordnance up to 1000 pounds may be expended on the LGB and offset bull. Flares or other incendiary devices are specifically prohibited. Any items brought to the Boardman Range must be taken off the range when the unit departs. This includes, but is not limited to, any HAZMAT, spent brass or anything else brought aboard the range.

8.7 PATTERNS. Flight profiles will normally adhere to a left hand pattern or as directed by the flight lead. When more than one flight is scheduled in the range at the same time, flight leads must have completed a face-to-face brief to include, altitude, patterns, and lost sight/abort procedures.

8.8 EXIT PROCEDURES. Unless safety of flight dictates, no aircraft intending IFR flight shall depart the Boardman Complex until an ATC clearance is received from Seattle ARTCC. Under normal circumstances, aircraft should provide Seattle ARTCC at least 5 minute advance notice of intent to depart. This provides needed time for flight data processing and coordination when required.

8.9 AN/UPQ-8 (V) THREAT EMITTER SIMULATORS. Two AN/UPQ-8 (V) Threat Emitter Simulators are available in NWSTF Boardman. They are designated Emitter Alpha and Emitter Bravo. These two Emitters radiate in the I BAND frequency spectrum. They are for basic level training; however, schedule and frequencies can be modified for more advanced training needs. Operation of these units is Tuesday through Thursday 0800 to 1600. Any other time or special training needs will require a minimum of 48 hours, prior to the training event, scheduling. Unless otherwise scheduled the Emitters will radiate from the following locations in the following established directions:
a. Every Tuesday from Location 1 - 45°48.315N 119°46.742W, Emitter Alpha will radiate 360° and Emitter Bravo will radiate 050°.
b. Every Wednesday from Location 2 - 45º39.542N 119º43.373W, Emitter Alpha will radiate 350° and Emitter Bravo will radiate 040°.
c. Every Thursday from Location 3 - 45°46.208N 119° 41.161W, Emitter Alpha will radiate 345° and Emitter Bravo will radiate 045°.
OKANOGAN AND ROOSEVELT MOAs
ATCAAs FL180 to, but not including, FL240

MOLSON NORTH
MOLSON SOUTH
HIGH-LOW
MOLSON AND REPUBLIC
ATCAAs
FL240 to FL500

MOLSON SOUTH LOW
ATCAA
FL240 to, but not including, FL290

MOLSON SOUTH HIGH
ATCAA
FL290 to FL500
(5 DAYS ADVANCE COORDINATION REQUIRED)
FOR SCHEDULING MOLSON SOUTH HIGH)
OLYMPIC MOAS, W-237 AND OLYMPIC COAST NATIONAL MARINE SANCTUARY

W-237A
SFC to FL 270

W-237B
Low SFC to but not including FL230
High FL230 to but not including FL500

W-237C
SFC to UNLIMITED

W-237D
SFC to UNLIMITED

W-237E
SFC to FL 270

Low SFC to but not including FL230
High FL230 to but not including FL500

W-237F
SFC to UNLIMITED

W-237G
SFC to UNLIMITED

W-237H
SFC to FL 270

Low SFC to but not including FL230
High FL230 to but not including FL500

OLYMPIC MOAS, W-237 AND OLYMPIC COAST NATIONAL MARINE SANCTUARY

OLYMPIC COAST NATIONAL MARINE SANCTUARY
Boardman MOA/ATCAA/R5701/R5706

- **R5701**: SFC-FL200
- **R5706**: 3500 TO 10000
- **R5701**: TO 6000
- **R5706**: 3500 TO 10000
- **Boardman MOA**: 4000 TO BUT NOT INCLUDING FL 180
- **ATCAA**: FL180 – FL200

Illustration 3
ILLUSTRATION 4
<table>
<thead>
<tr>
<th>TARGET IDENTIFICATION</th>
<th>LOCATION</th>
<th>LAT/LONG</th>
</tr>
</thead>
<tbody>
<tr>
<td>TGT 1 MAIN BULL</td>
<td>CENTER</td>
<td>45 43.589N/119 41.124W</td>
</tr>
<tr>
<td>TGT 2 REFLECTORS (DO NOT HIT)</td>
<td>CENTER</td>
<td>45 44.248N/119 41.125W</td>
</tr>
<tr>
<td>TGT 3 REFLECTORS (DO NOT HIT)</td>
<td>CENTER</td>
<td>45 42.124N/119 41.929W</td>
</tr>
<tr>
<td>TGT 4 AAA GUN</td>
<td>CENTER</td>
<td>45 43.931N/119 41.029W</td>
</tr>
<tr>
<td>TGT 5 AAA GUN</td>
<td>CENTER</td>
<td>45 43.873N/119 41.029W</td>
</tr>
<tr>
<td>TGT 6 AAA GUN</td>
<td>CENTER</td>
<td>45 43.826N/119 40.973W</td>
</tr>
<tr>
<td>TGT 7 SAM CONTROL VAN</td>
<td>CENTER</td>
<td>45 43.801N/119 41.177W</td>
</tr>
<tr>
<td>TGT 8 SAMS</td>
<td>CENTER</td>
<td>45 43.912N/119 41.497W</td>
</tr>
<tr>
<td>TGT 9 SAMS</td>
<td>CENTER</td>
<td>45 43.860N/119 41.561W</td>
</tr>
<tr>
<td>TGT 10 SAMS</td>
<td>CENTER</td>
<td>45 43.787N/119 41.617W</td>
</tr>
<tr>
<td>TGT 11 SAMS</td>
<td>CENTER</td>
<td>45 43.700N/119 41.640W</td>
</tr>
<tr>
<td>TGT 12 SAMS</td>
<td>CENTER</td>
<td>45 43.267N/119 41.328W</td>
</tr>
<tr>
<td>TGT 13 SAMS</td>
<td>CENTER</td>
<td>45 43.170N/119 41.366W</td>
</tr>
<tr>
<td>TGT 14 M-60 TANK</td>
<td>CENTER</td>
<td>45 42.931N/119 41.425W</td>
</tr>
<tr>
<td>TGT 15 M-60 TANK</td>
<td>CENTER</td>
<td>45 43.072N/119 41.153W</td>
</tr>
<tr>
<td>TGT 16 MOBILE SCUD</td>
<td>CENTER</td>
<td>45 43.114N/119 41.244W</td>
</tr>
<tr>
<td>TGT 17 MOBILE SCUD</td>
<td>CENTER</td>
<td>45 43.058N/119 41.241W</td>
</tr>
<tr>
<td>TGT 18 VAN/REFLECTORS</td>
<td>CENTER</td>
<td>45 43.488N/119 40.804W</td>
</tr>
<tr>
<td>TGT 19 M-60 TANK</td>
<td>CENTER</td>
<td>45 43.013N/119 41.313W</td>
</tr>
<tr>
<td>TGT 20 M-60 TANK</td>
<td>CENTER</td>
<td>45 42.993N/119 41.337W</td>
</tr>
<tr>
<td>TGT 21 TRUCK</td>
<td>CENTER</td>
<td>45 43.010N/119 41.436W</td>
</tr>
<tr>
<td>TGT 22 JEEP</td>
<td>CENTER</td>
<td>45 43.004N/119 41.490W</td>
</tr>
<tr>
<td>TGT 23 M-60 TANK</td>
<td>CENTER</td>
<td>45 43.003N/119 41.583W</td>
</tr>
<tr>
<td>TGT 24 DUMP TRUCK</td>
<td>CENTER</td>
<td>45 43.037N/119 41.269W</td>
</tr>
<tr>
<td>TGT 25 LGB (BUS)</td>
<td>OFFSET</td>
<td>45 43.476N/119 41.523W</td>
</tr>
<tr>
<td>TGT 26 OFFSET BULL</td>
<td>OFFSET</td>
<td>45 43.353N/119 41.455W</td>
</tr>
</tbody>
</table>

Table (1)
TGT 1 MAIN BULL
45 43.589N / 119 41.124W
TGT 3 REFLECTORS (DO NOT HIT)
45 42.124N / 119 41.929W
<table>
<thead>
<tr>
<th>Target</th>
<th>Coordinates</th>
</tr>
</thead>
<tbody>
<tr>
<td>TGT 4 AAA GUN</td>
<td>45 43.931N/119 41.029W</td>
</tr>
<tr>
<td>TGT 5 AAA GUN</td>
<td>45 43.873N/119 41.029W</td>
</tr>
<tr>
<td>TGT 6 AAA GUN</td>
<td>45 43.826N/119 40.973W</td>
</tr>
</tbody>
</table>
TGT 7 SAM CONTROL VAN
45 43.801N / 119 41.177W
| TGT 8 SAMS  | 45 43.912N/119 41.497W |
| TGT 9 SAMS  | 45 43.860N/119 41.561W |
| TGT 10 SAMS | 45 43.787N/119 41.617W |
TGT 11 SAMS
45 43.700N / 119 41.640W
<table>
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<tr>
<th>Pair</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
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<td>45 43.267N/119 41.328W</td>
</tr>
<tr>
<td>TGT 13 SAMS</td>
<td>45 43.170N/119 41.366W</td>
</tr>
</tbody>
</table>
TGT 15 M-60 TANK
45 43.072N / 119 41.153W
TGT 16 MOBILE SCUD
45 43.114N / 119 41.244W
TGT 17 MOBILE SCUD
45 43.058N / 119 41.241W
TGT 22 JEEP
45 43.004N / 119 41.490W
TGT 23 M-60 TANK
45 43.003N / 119 41.583W
Note that the center of the secondary bull is not where the target is located.

TGT 25 LGB BUS
45 43.476N / 119 41.523W
SOUTH-SOUTH WEST VIEW

NORTH-NORTH EAST VIEW

STRAFING TARGET
45 42.545N / 119 41.939W
SAFE HAVEN AREAS, 3 NM in from the outer boarder

For Okanogan MOA A, B, C 15,000 ft to 17,000 ft
For Okanogan ATCAA FL210 to FL230
For Molson ATCAA FL270 to FL290

For Roosevelt MOA A, B 15,000 ft to 17,000 ft
For Roosevelt ATCAA FL210-FL230
For Republic ATCAA FL270-FL290

UNICOM 252.5
UNICOM 258.5
SAFE HAVEN AREAS, 3 NM in from the outer boarder

For Olympic MOA B 15,000 ft to 17,000 ft
For Olympic B ATCAA FL210 to FL230

UNICOM 234.55

For Olympic MOA A 15,000 ft to 17,000 ft
For Olympic A ATCAA FL210 to FL230

UNICOM 234.55
SAFE HAVEN AREAS, 3 NM in from the outer boarder
UNICOM, 227.5 MHZ

W237 H
FL200 to FL220

W237 F
FL200 to FL220

W237 E
FL200 to FL220

W237 B
LOW FL200 to FL230
HIGH FL FL270 to FL290

W237 C
FL200 to FL220

W237 A
LOW FL200 to FL220
HIGH FL FL270 to FL290

W237 J
FL200 to FL220

W237 D
FL200 to FL220