



## NOTICE TO ALL CONCERNED

**SUBJECT: CASE NO. 14-ANM-21NR**

PROPOSAL TO MODIFY & EXPAND  
SPECIAL USE AIRSPACE  
JUNIPER & HART MILITARY OPERATIONS AREAS  
OREGON/NEVADA

**SUMMARY:** The Federal Aviation Administration (FAA) is considering a proposal from the United States Air Force (USAF) to modify and expand Special Use Airspace in Central Oregon and Northern Nevada. The USAF, 173d Fighter Wing (FW), is seeking to modify and expand the JUNIPER/HART Military Operations Areas (MOAs) to increase efficiencies in Air National Guard and USAF realistic mission-oriented training.

**BACKGROUND:**

Historically, the Juniper/Hart MOAs, and their associated ATCAAs, have accommodated high altitude supersonic Beyond Visual Range mission set-up ranges. However, due to the increased long range capabilities of the F-15C, and similar emerging threat capabilities of adversary aircraft, existing space within the JUNIPER/HART MOAs has been inefficient within recent years to provide realistic mission-oriented training. The USAF's F-15C training syllabus requires approximately 40% of the training missions to be Beyond Visual Range. Half of these missions require setup ranges in excess of 80 nautical miles (NM).

In 2003, the 173 FW flew eight aircraft in the morning and six aircraft in the afternoon, with approximately 3,800 programmed flying hours and 2,800 sorties. In 2005, the 173 FW's aircraft inventory increased from 18 primary assigned aircraft to 21 assigned. With this increase came an increase in student training and associated flying hours. In 2008, the 173 FW became the sole F-15C Formal Training Unit in the US, and has nearly doubled its student production in the past five years. In 2013, it flew a schedule of 10 aircraft in the morning and 8 in the afternoon and executed 4,700 hours and 3,800 sorties; a 23% increase in flying hours and a 35% increase in sorties. As of 2014, to meet Combat Air Force student production throughput, programmed flying training requires 12 aircraft to fly in the morning and 10 aircraft flying in the afternoon with an occasional flex to a 14 morning/10 afternoon operation. The 173 FW is poised to



increase student production even more pending approval from the Air Force, which will add additional aircraft and flying hours. Under current flying hour programming, the 173 FW has been authorized up to 6,200 flying hours as required to meet current and potential student throughput. This is not possible within the current airspace configuration without staggering takeoff times; significantly increasing the total amount of time the airspace is activated.

In addition to the 173 FW mission, the 142 FW uses the JUNIPER/HART Complex, including JUNIPER LOW MOA, as a primary airspace when accomplishing over land Low Altitude Step-down Training. Further, it is used as back-up airspace during winter months when there's significant weather or sea states are out of limits under its primary airspace, W-570. For these periods, the 142 FW is routinely scheduled/NOTAM'd to use the JUNIPER/HART Complex 45 minutes prior to 173 FW mission start time and historically activates the airspace 30% of the time for this purpose.

Under the Proposed Action, the eastern boundary of the existing JUNIPER/HART airspace complex would be extended approximately 20 miles to the east and the southern boundary would be extended approximately 20 miles to the south. Once established, the existing and proposed airspace segments would be renamed alphabetically to include: JUNIPER A through D MOAs and HART A through E MOAs. Expansion of the existing JUNIPER LOW MOA would include the proposed JUNIPER EAST LOW MOA located directly underneath the proposed JUNIPER C MOA and a majority of the proposed JUNIPER D MOA. The proposed JUNIPER EAST LOW MOA would be established from 500 feet above ground level (AGL) to 10,999 feet MSL. In addition, the Proposed Action would include raising the floor of the existing JUNIPER LOW MOA from 300 feet AGL to 500 feet AGL. The proposed new airspace segments would be activated on an as-needed basis as a whole or individually. 173 FW training activity within the existing portions of the JUNIPER/HART MOA Complex would decrease given that the distribution of total airspace usage would now be spread out to include operations within the newly expanded JUNIPER/HART MOA Complex. Training missions would spend the majority of the time within the overall JUNIPER/HART MOA Complex above 11,000 feet MSL. By segmenting the proposed MOAs, the 173 FW will be able to activate the required airspace to meet the mission objectives during any specific training exercise. In previous years, the JUNIPER/HART MOA Complex has been expanded to similar lateral dimensions on a temporary basis to support the ANG's largest air-to-air combat exercise, Exercise SENTRY EAGLE, which typically includes multiple units from across the country.

### **ADDITIONAL INFORMATION**

Since 2010, as a measure for better airspace stewardship, the 173 FW moved to a NOTAM and airspace activation process that has reduced the total NOTAM'd airspace time and more accurately aligns airspace NOTAM time with airspace activation time. In addition, 173 FW tracks utilization (actual time in the MOA) as a percentage of activation time. On average, the airspace is utilized 80% of the time it is activated. Currently, the 173 FW makes schedule requests to NOTAM JUNIPER/HART Complex (0900-1200 PST) and (1300-1600 PST). The first 45 minutes of each block are to accommodate the 142 FW if they need to activate the airspace as a back-up option. On a normal day, without slips in takeoff times, the 173 FW is done with missions in the Complex at 1130 and 1530 PST and returns the airspace back to Seattle Air Route Traffic Control Center. Without an increase in the airspace requested in this

proposal, there will be continued increases in activation time, and larger blocks of requested NOTAM times during times when long range Beyond Visual Range training peaks.

Activities expected in the airspace are tactical combat training maneuvering by fighter fixed wing aircraft involving abrupt, unpredictable changes in altitude, attitude and direction of flight. The employment of flares will be authorized above 5,000 feet AGL will be authorized. Supersonic flight operations will only be conducted above FL 300 in an associated ATCAA.

Areas underneath the proposed JUNIPER/HART MOAs where there are underlying private or public use airfields will be provided reasonable and timely aerial access to such land. Deconfliction and avoidance will be accomplished by a combination of Seattle ARTCC advisories to VFR aircraft in the confines of the MOA, F-15 own-ship radars and visual separation at a minimum of 1000 feet.



## AIRSPACE PROPOSAL

**\*\*AIRSPACE MODIFICATIONS:** The below airspace description make modifications to existing airspace. There are no modifications being made to the boundaries of the airspace. Changes are depicted in *Red/italics*.

### JUNIPER NORTH MOA:

*\*\*Change JUNIPER North MOA to JUNIPER A MOA*

**Boundaries:** Beginning at latitude 43°55'59"N, longitude 120°44'04"W;  
to latitude 43°57'05"N, longitude 120°26'24"W;  
to latitude 43°50'30"N, longitude 120°07'48"W.;  
to latitude 43°21'00"N, longitude 120°31'48"W.;  
thence to the point of beginning.

**Altitudes:** 11,000 feet up to but not including FL 180

**Times of Use:** *Intermittent by NOTAM*

**Controlling Agency:** FAA, Seattle Air Route Traffic Control Center

**Using Agency:** *USAF, Air National Guard, 173 FW, Kingsley Field, OR*

### JUNIPER SOUTH MOA:

*\*\*Change JUNIPER SOUTH MOA to JUNIPER B MOA*

**Boundaries:** Beginning at latitude 43°21'00"N, longitude 120°31'48"W;  
to latitude 43°50'30"N, longitude 120°07'48"W;  
to latitude 43°38'00"N, longitude 119°34'00"W;  
to latitude 42°40'00"N, longitude 119°10'04"W;  
to latitude 42°40'00"N, longitude 120°18'04"W;  
thence to the point of beginning.

**Altitudes:** 11,000 feet MSL up to but not including FL 180

**Times of Use:** *Intermittent by NOTAM*

**Controlling Agency:** FAA, Seattle Air Route Traffic Control Center

**Using Agency:** *USAF, Air National Guard, 173 FW, Kingsley Field, OR*

### JUNIPER LOW MOA:

**Boundaries:** Beginning at latitude 43°55'59"N, longitude 120°44'04"W;  
to latitude 43°57'05"N, longitude 120°26'24"W;

to latitude 43°38'00"N, longitude 119°34'04"W;  
to latitude 42°46'00"N, longitude 119°12'27"W;  
to latitude 42°46'00"N, longitude 120°20'01"W;  
to the point of beginning.

**Altitudes:** 500 feet AGL to but not including 11,000 feet MSL. Excluding the airspace 1,500 feet AGL and below within a 3NM radius of the center of the Alkali Lake State and Wagontire Airports, Oregon.

**Times of use:** By NOTAM 2 hours and 30 minutes in advance, during daylight hours. (NOTE: not to exceed 317 hours per year.)  
*Intermittent by NOTAM*

**Controlling agency:** FAA, Seattle Air Route Traffic Control Center

**Using agency** *USAF, Air National Guard, 173 FW, Kingsley Field, OR*

**HART NORTH MOA:**

*\*\*Change HART NORTH MOA to HART A MOA*

**Boundaries:** Beginning at latitude 45°06'00"N, longitude 121°01'00"W;  
to latitude 45°00'00"N, longitude 120°24'00"W;  
to latitude 44°35'00"N, longitude 119°19'00"W;  
to latitude 44°25'00"N, longitude 119°09'00"W;  
to latitude 44°27'00"N, longitude 121°01'00"W;  
to the point of beginning.

**Altitudes:** 11,000 feet MSL up to but not including FL 180

**Times of use:** *Intermittent by NOTAM*

**Controlling agency:** FAA, Seattle Air Route Traffic Control Center

**Using agency** *USAF, Air National Guard, 173 FW, Kingsley Field, OR*

**HART SOUTH MOA:**

*\*\*Change HART SOUTH MOA to HART B MOA*

**Boundaries:** Beginning at latitude 45°06'00"N, longitude 121°01'00"W;  
to latitude 45°00'00"N, longitude 120°24'00"W;  
to latitude 44°35'00"N, longitude 119°19'00"W;  
to latitude 44°25'00"N, longitude 119°09'00"W;  
to latitude 44°27'00"N, longitude 121°01'00"W;  
to the point of beginning.

**Altitudes:** 11,000 feet MSL up to but not including FL 180

**Times of use:** *Intermittent by NOTAM*

**Controlling agency:** FAA, Seattle Air Route Traffic Control Center

**Using agency** *USAF, Air National Guard, 173 FW, Kingsley Field, OR*

**\*\*NEW AIRSPACE PROPOSALS:** The follow are new/modified airspaces proposed by the USAF.

**JUNIPER EAST LOW MOA:**

**Boundaries:** Beginning at latitude 43°38'00"N, longitude 119°34'04"W;  
to latitude 43°33'19"N, longitude 119°20'17"W;  
to latitude 43°26'41"N, longitude 119°09'26"W;  
to latitude 43°04'20"N, longitude 118°55'21"W;  
to latitude 42°46'00"N, longitude 118°55'21"W;  
to latitude 42°46'00"N, longitude 119°12'27"W;  
to the point of beginning.

**Altitudes:** 500 feet AGL up to but not including 11,000 MSL

**Times of use:** Intermittent by NOTAM

**Controlling agency:** FAA, Seattle Air Route Traffic Control Center

**Using agency** USAF, Air National Guard, 173 FW, Kingsley Field, OR

**JUNIPER C MOA:**

**Boundaries:** Beginning at latitude 43°38'00"N, longitude 119°34'04"W;  
to latitude 43°33'19"N, longitude 119°20'17"W;  
to latitude 43°26'41"N, longitude 119°09'26"W;  
to latitude 43°10'08"N, longitude 118°59'03"W;  
to latitude 43°10'08"N, longitude 119°22'26"W;  
to the point of beginning.

**Altitudes:** 11,000 feet MSL up to but not including FL 180

**Times of use:** Intermittent by NOTAM

**Controlling agency:** FAA, Seattle Air Route Traffic Control Center

**Using agency** USAF, Air National Guard, 173 FW, Kingsley Field, OR

**JUNIPER D MOA:**

**Boundaries:** Beginning at latitude 43°10'08"N, longitude 119°22'26"W;



to latitude 43°10'08"N, longitude 118°59'03"W;  
to latitude 42°46'00"N, longitude 118°43'53"W;  
to latitude 42°40'00"N, longitude 118°43'53"W;  
to latitude 42°40'00"N, longitude 119°10'04"W;  
to the point of beginning.

**Altitudes:** 11,000 feet MSL up to but not including FL 180  
**Times of use:** Intermittent by NOTAM  
**Controlling agency:** FAA, Seattle Air Route Traffic Control Center  
**Using agency** USAF, Air National Guard, 173 FW, Kingsley Field, OR

**HART C MOA:**

**Boundaries:** Beginning at latitude 42°40'00"N, longitude 119°10'04"W;  
to latitude 42°40'00"N, longitude 118°43'53"W;  
to latitude 42°26'00"N, longitude 118°43'53"W;  
to latitude 42°26'00"N, longitude 119°13'34"W;  
to the point of beginning.

**Altitudes:** 11,000 feet MSL up to but not including FL 180  
**Times of use:** Intermittent by NOTAM  
**Controlling agency:** FAA, Seattle Air Route Traffic Control Center  
**Using agency** USAF, Air National Guard, 173 FW, Kingsley Field, OR

**HART D MOA:**

**Boundaries:** Beginning at latitude 42°26'00"N, longitude 119°13'34"W;  
to latitude 42°26'00"N, longitude 118°43'53"W;  
to latitude 42°22'34"N, longitude 118°43'53"W;  
to latitude 41°52'44"N, longitude 118°52'07"W;  
to latitude 41°30'00"N, longitude 119°18'36"W;  
to latitude 41°30'00"N, longitude 119°27'04"W;  
to the point of beginning.

**Altitudes:** 11,000 feet MSL up to but not including FL 180  
**Times of use:** Intermittent by NOTAM  
**Controlling agency:** FAA, Seattle Air Route Traffic Control Center  
**Using agency** USAF, Air National Guard, 173 FW, Kingsley Field, OR

**HART E MOA:**

**Boundaries:** Beginning at latitude 41°30'00"N, longitude 119°55'04"W;  
to latitude 41°30'00"N, longitude 119°27'04"W;  
to latitude 41°30'00"N, longitude 119°18'36"W;  
to latitude 41°10'00"N, longitude 119°41'40"W;  
to latitude 41°10'00"N, longitude 119°47'30"W;  
to latitude 45°00'00"N, longitude 120°24'00"W;  
to the point of beginning.

**Altitudes:** 11,000 feet MSL up to but not including FL 180

**Times of use:** Intermittent by NOTAM

**Controlling agency:** FAA, Seattle Air Route Traffic Control Center

**Using agency** USAF, Air National Guard, 173 FW, Kingsley Field, OR

**HART F MOA:**

**Boundaries:** Beginning at latitude 41°52'44"N, longitude 118°52'07"W;  
to latitude 41°30'00"N, longitude 118°58'19"W;  
to latitude 41°10'00"N, longitude 119°23'36"W;  
to latitude 41°10'00"N, longitude 119°41'40"W;  
to latitude 41°30'00"N, longitude 119°18'36"W;  
to the point of beginning.

**Altitudes:** 11,000 feet MSL up to but not including FL 180

**Times of use:** Intermittent by NOTAM

**Controlling agency:** FAA, Seattle Air Route Traffic Control Center

**Using agency** USAF, Air National Guard, 173 FW, Kingsley Field, OR



**MISCELLANEOUS:**

No restrictions will be imposed on nonparticipating Visual Flight Rules (VFR) aircraft. VFR pilots are expected to exercise vigilance while transiting the MOAs. They are strongly encouraged to contact the nearest flight service station and request the latest NOTAM information, or contact Seattle ARTCC to ascertain the status of the airspace.

This public notice is part of the USAF's Oregon Airspace Initiative. Two additional public notices have been released in conjunction with this notice detail additional airspace proposals. **Case # 14-ANM-13NR** details the 142 FW's proposal to modify the configuration and vertical limits of Warning Area 570 and convert the Bass/Bass South ATCAAs into Warning Areas. Additionally, the 142 FW is seeking to create a MOA beneath the current EEL ATCAA **Case # 14-ANM-25NR** details the 142 FW's proposal to establish the REDHAWK MOA in North/Central Oregon. Those persons wanting information on these public notices should contact (425) 203-4562 or email your request to [7-ANM-OSG-Public-Notice-Inbox@faa.gov](mailto:7-ANM-OSG-Public-Notice-Inbox@faa.gov).

**ENVIRONMENTAL/LAND USE ASPECTS:** For questions or comments on the environmental and land use aspects of the proposal please contact:

Kevin Marek, NGB/A7AM  
Shepperd Hall  
3501 Fetchet Avenue  
Joint Base Andrews MD 20762-5157  
[usaf.jbanafw.ngb-a7.mbx.a7a-nepa-comments@mail.mil](mailto:usaf.jbanafw.ngb-a7.mbx.a7a-nepa-comments@mail.mil)

**COMMENTS INVITED:** The purpose of this notice is to invite interested persons to submit in writing any comments they may have regarding the overall aeronautical aspects of the proposal presented in this notice. To be eligible for consideration, comments must be relevant to the effect the proposal will have upon the efficient and navigable use of airspace. Persons wishing to comment should submit correspondence to the address or email listed below setting forth valid aeronautical reasons.

Department of Transportation  
Federal Aviation Administration  
Operations Support Group, Western Service Center  
Attn: Michele Cruz  
1601 Lind Ave S.W.  
Renton, WA 98057

[7-ANM-OSG-Public-Notice-Inbox@faa.gov](mailto:7-ANM-OSG-Public-Notice-Inbox@faa.gov)

NOV 25 2015

Replies received no later than \_\_\_\_\_ will be considered before final action is taken on this proposal. In your reply, please refer to the Aeronautical Study Number: **14-ANM-21NR**.

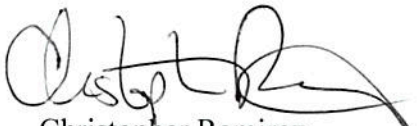
**NOTICE DISTRIBUTION:** Persons interested in being placed on a mailing list for future notices should submit such requests to the Federal Aviation Administration at the address listed above.

**FOR FURTHER INFORMATION, CONTACT:**

Department of Transportation  
Federal Aviation Administration  
Operations Support Group, Western Service Center  
Attn: Michele Cruz  
1601 Lind Ave S.W.  
Renton, WA 98057  
(425) 203-4562

An electronic copy of this notice can be obtained by contacting (425) 203-4562 or emailing your request to [7-ANM-OSG-Public-Notice-Inbox@faa.gov](mailto:7-ANM-OSG-Public-Notice-Inbox@faa.gov)

Issued in Seattle, Washington on: October 2, 2015



Christopher Ramirez  
Manager, Operations Support Group  
Western Service Center, AJV-W2

Attachment: JUNIPER/HART MOA Graphics

cc: AJV-W2, ANM-910, ANM-920, ANM-930, ZSE, ZLC, CA State Aviation Director, OR State Aviation Director, NV State Aviation Director; SEE DISTRIBUTION LIST



