Background on Military Landing Procedures at PDX

Oregon Air National Guard will expand use of a special landing procedure at Portland International Airport during a six-month trial period beginning May 1. Here’s some background on military landing procedures, and the development of the continuous descent overhead approach at PDX.

**The Overhead Break military landing procedure**

An “overhead break” is a landing procedure used by military pilots to expedite landings in potentially hostile areas. Unlike a traditional “straight-in” arrival where the aircraft lines up on final approach from 8-10 miles out and gradually descends to the runway, a traditional overhead break circles the runway under low power before landing.

Ongoing practice of the overhead-break procedure is required training for military pilots. It is also a preferred arrival procedure as it maximizes efficiency, reducing flight time, fuel-burn, air emissions, and noise. The overhead approach reduces noise exposure for communities below the traditional arrival path – those communities along the final approach – because the aircraft remain higher and faster reducing both the noise level and time overhead.
The Continuous Descent Overhead Approach is quieter than the Overhead Break

In 1993 and in 2003, ORANG tested the use of overhead breaks at PDX and in 2008, ORANG modified the procedure to meet their training requirements while reducing community noise. The new Continuous Descent Overhead Approach crosses the runway at 2,500 feet (1,000 feet higher than the conventional overhead) before circling the airfield to land. During the approach, the aircraft continuously descends using a low power setting, reducing noise and emissions. The Continuous Descent Overhead Approach was discussed with the PDX Citizen Noise Advisory Committee, who advised testing the procedure. At a Community Fly Day event, residents learned more about the approach and observed it first-hand. Prior concern of noise associated with the procedure were alleviated when most attendees noted the new landing procedure was extremely quiet. Over 18 months of testing, few concerns were received and committee ultimately supported its use at PDX. Since then, ORANG routinely flies the landing procedure when conditions permit.

ORANG proposed changes to landing procedure guidelines

In late 2016, ORANG proposed adding flexibility in using the landing procedure. This included expanding the hours when the procedure can be flown from 9 a.m.-5 p.m. weekdays to sunrise to sunset daily, including weekends. ORANG also proposed use of both the east and west ends of both primary runways, rather than just the east ends; allowing participation by up to four aircraft simultaneously, rather than just two; and allowing visiting military pilots to use the procedure when training with ORANG.

An estimated 65% of the approaches would be performed where they have been since 2008.
2017 test period

After analyzing ORANG’s proposal, the Port noise office recommended adopting the changes following a 6-month trial period to validate that the noise impacts are comparable with the 2008 results. The Citizen Noise Advisory Committee reviewed the recommendation and advised that ORANG proceed with the trial. The test is from May 1 to Oct. 31, 2017. Following the test period, the Port will work with ORANG and the committee to review the data (community input, noise data, operational data, etc.), and make a recommendation regarding updates to the policy.

ORANG supports the PDX noise program

The Oregon Air National Guard 142nd Fighter Wing operates F-15 Eagle aircraft based at Portland International Airport to protect Western U.S. airspace between Canada and Northern California. While serving our region and the nation, ORANG recognizes their noise impacts to local communities. Despite this, F-15s are designed with fighter performance, and not noise reduction in mind. ORANG pilots minimize noise impacts with operating procedures that keep the aircraft as quiet as possible and by minimizing nighttime and weekend operations. Often, complaints related to military operations are caused by visiting military pilots unaffiliated with ORANG.

For more information about the continuous descent overhead approach, please contact:

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