January 21, 2025

Alex Thomas, Planning and Programs Manager Tony Beach, State Airports Manager Oregon Department of Aviation Brandy Steffen, JLA Oregon Department of Aviation 3040 25th Ste SE Salem, OR 97602 Alex.R.Thomas@odav.oregon.gov

Re: Aurora State Airport Master Plan process FAA approved documents Clarify that 500-foot Runway Extension is to meet safety needs of current C-II aircraft, not for larger aircraft

Mr. Thomas, Mr. Beach, and Ms. Steffen:

During the December 10, 2024 meeting during my attendance as the HTS representative, FAA staff Tim House stated that the proposed 500-foot runway extension was to allow larger aircraft to operate at the airport on a more regular basis, per the transcript below:

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[Tim House - FAA] 18:21:11
So what you're asking us to do, you've already exceeded
the standards of C-II.
[Tim House - FAA] 18:21:16
you are operating at C-II.
[Tim House - FAA] 18:21:19
and you're asking for a further extension.
[Tim House - FAA] 18:21:22
to allow larger aircraft
[Tim House - FAA] 18:21:24
to operate on a more regular basis.
[Aron Faegre representing HTS] 18:21:27
No, I don't think they are.
[Tim House - FAA] 18:21:27
So that's why we have, what's the extra 500 foot doing?
[Aron Faegre representing HTS] 18:21:32
It's safety.
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It is important to refer back to the prior Master Plan chapters that discussed the need for the 500-foot runway. Nowhere in the FAA approved text is there

Aurora State Airport Master Plan Purpose of Runway Extension January 21, 2025
Page 2

consideration of the runway extension as "allowing larger aircraft to operate on a more regular basis."

The reason for the runway extension is simply to comply with the FAA's runway safety standards for a C-II airport — which Aurora Airport has been so designated by FAA for 12 years. The FAA approved Chapter 4 Airport Facility Requirements, and the conclusion of the discussion about required runway length, on page 4-16, states:

Based on local conditions, the standard methodology outlined above and in *AC 150-5325-4B*, and in coordination with FAA-SEA ADO, a runway length of 5,500 feet is identified to accommodate 100% of large airplanes (60,000 pounds or less maximum gross takeoff weight) at 60% useful load for the current 20-year planning period.

FACILITY REQUIREMENT. Consistent with FAA planning methodologies a runway length of 5,500 feet at the Aurora State Airport defines the justified runway length for the planning and analyses to be performed in Chapter 5 – Development Alternatives.

It is important recognize that the length established is not extravagant or excessive. It does not even allow the design aircraft to take off with a full load, as the assumption used in FAA Table 3-2 in AC 150-5325-4B is that on even moderately hot days (83 degrees¹) the aircraft can take off with only 60% of its full load. If the goal was to really allow all aircraft to take off at 83 degrees with closer to a full load, the analysis would have used the other half of FAA's Table 3-2 in AC 150-5325-4B where 90% of load is assumed needed. That would have prescribed a proposed runway length at Aurora Airport of approximately 7,700 feet length. The 5,500 foot length is modest by comparison.

Also, Table 3-2 does not consider the need for "balanced field" takeoff requirements of FAR Part 135 operations which must also comply with Part 25, of which there are many of the same C-II aircraft that use Aurora Airport. These requirements are regulated and required by the FAA Flight Standards District Offices which is in charge of flight operations, as opposed to the FAA Airports District and Division Offices (ADO) which is in charge of airport design. Applying the FAA's requirements for balanced field safety standards would at these same

¹ Recent summer average high temperatures of 88°F with peak highs of 104°F, may indicate that the 83°F used in Table 3-2 is low given climate change.

Aurora State Airport Master Plan Purpose of Runway Extension January 21, 2025 Page 3

temperatures, in conjunction with differing environmental conditions, generally prescribe an even longer runway length.

The additional 500 feet of runway length proposed in the master plan is modest, is designed to generally cover only 60% of C-II aircraft load capacity, and clearly is an FAA safety standard, and not an attempt to encourage or even allow the operation of larger aircraft to use Aurora Airport. Both FAA Headquarters and the Seattle ADO have already acknowledged this distinction in their approval of the Chapter 4 language quoted above.

Respectfully submitted,

Aron Faegre, AIA, PE

Aron Faegre Airport Planning and Design