

Task Force Meeting #3

Southern Departure Procedure Task Force

Date: April 28, 2022

Time: 9 a.m. – noon

Location: The Wort Hotel – Jackson Room – 50 Glenwood St. Jackson, WY

Agenda

- Introductions and Purpose of the Meeting
- Overview of Existing Southern Departure Procedures
- Review of Terrain and Procedure Constraints
- Presentation of Preliminary new Southern Departure Procedure Concepts
- Facilitated Discussion

Meeting Summary:

Valerie Brown, Task Force Chairwoman and representative of the Airport Board, explained the purpose of the meeting: to review six Southern Departure Flight Procedure Concepts (Concepts) from Jackson Hole Airport. Bill Kane, facilitator, then outlined general meeting objectives and Task Force ground rules:

- The Study will not propose shifting noise from one sensitive area (i.e., residential neighborhoods, Elk Wildlife Refuge, Grand Teton National Park, or public lands) to another;



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- The Task Force will discuss pros and cons of the Concepts, and will suggest any potential revisions needed for the six preliminary Concepts. The Task Force will not vote on Concepts;
 - The Task Force will identify any Concepts that are “nonstarters” and will be screened out from further design analysis or noise modeling;
 - The Task Force will work to identify the Concepts that offer the most promise and will review detailed design and noise analyses at the next meeting in June.

Alec Seybold then reviewed existing procedures and considerations that are required when developing concepts (i.e., terrain, climb requirements, and Air Traffic Control considerations like final destination). For example, aircraft cannot initiate any turns prior to 500' AGL (above ground level), which limits the ability to change the flight path within (approximately) the first mile from the end of the runway. Procedures have to be designed to the lowest performing aircraft.

Alec then reviewed the six Concepts that were developed to explore potential options for noise mitigation. These Concepts include a range of possibilities from west to east of the runway.

The floor was then opened up for Task Force members to provide comments on the Concepts and suggestions for moving forward with the noise analysis. A summary of these points is included below.

Concept Discussion Summary:

- Because the JAC tower is a federal contract tower, it doesn't have access to a radar feed, which would make Concept #6 challenging.
- Concepts 1, 2, and 3 are able to be implemented now. Concepts 4, 5 and 6 require more advanced technology, but could be implemented in the future. There is a potential opportunity for a hierarchy of procedures – where a more easily implementable concept could be recommended



now, and in the future the airport could implement a different procedure as the technology improves.

- Any shift to the east would result in the same issue as the KICNE ONE - a shift of noise over newly affected houses. Any eastern shift would not alleviate noise over Moulton Loop.
- Some of the Concepts would require a greater than 15 degree turn from the runway, which is likely to be a limiting factor for the FAA. Note that the 15-degree limits were based on the waypoint FAA was using; the new designs would use different waypoints that would allow for greater than 15 degree turns.
- Concept 2 (west shift) would solve some issues for the Golf and Tennis area, but would shift noise over homes farther to the west.
- For Concept 4 (ZIPET concept), it was requested to analyze noise as it relates to the ridge to see if the shift would alleviate noise on the ridge (and over communities).
- The Task Force is interested in seeing the noise analysis for Concepts 5 and 6, as it seems like they would fly over newly affected residences with the eastern turn.
- Discussion on if there would be a benefit to a summer only procedure.
- Training might be needed for some advanced procedures.. This might be challenging for airlines to require training; alternatively, certain general aviation operators would not require training necessary to fly an advanced procedure.
- Neighbors are generally more sensitive to noise when outdoors (i.e., in backyards) during the summer. During summer, aircraft take longer to climb and get to 500' AGL (due to hotter temperatures). Task Force commented that it would be helpful to prioritize elk in the winter and the "back porch" issue in the summer.
- There was a discussion on whether it would be possible to have lighter GA aircraft use a different procedure than other aircraft. The project team explained that it would be challenging for Air Traffic Control to



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- have specific departures used only by specific aircraft types. There is this idea of a “complexity budget,” meaning, the more factors that Air Traffic has to consider, the more complex it would be for them to manage. For instance, if there is a seasonal filter and an aircraft type filter, it would be very complicated to manage from an air traffic control perspective.
- It was noted that elk are not the only species using the Refuge, and all wildlife should be considered.
 - Shifting noise should be considered as it relates to neighborhoods, as well as public lands. Concept 6 would shift noise over public lands to the east.
 - It should be taken into account that there are federal protections for portions of the Gros Ventre River that are designated as a Wild and Scenic.
 - Multiple Task Force members commented that Concept #6 would impact the Elk Refuge, as well as other public lands. The combination of existing approach procedures and the Concept #6 departure procedure would mean that all sides of the Park would be "encircled" by arriving and departing aircraft. Existing conditions at Gros Ventre Canyon are devoid of highway and aircraft noise. It is a concern that noise could be concentrated over several areas of public land.
 - The east shift would fly over Bridger-Teton National Forest, Teton Wilderness Area, and Snow King, which are all heavily utilized by recreation users. It will be important to look at the terrain and areas of higher elevation (i.e., Snow King) to evaluate how the departing aircraft would impact these areas.
 - Concepts #1 and #5 would shift noise over public lands.
 - It is difficult for southern departure procedures to avoid neighborhoods given the land use constraints (i.e., terrain).
 - KICNE ONE would shift noise from one area to another.



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- It was requested that for the next meeting AGL be provided for various points for each of the concepts to identify aircraft elevation within the Park, Elk Refuge, Snow King, the Town, and Kelly.
 - A question was asked whether there could there be a secondary waypoint for the ZIPET One to reduce vectoring off to final destination until after the Elk Refuge and Town. The project team will review this.
 - It was noted that NEPA will still have to be completed for any procedure submitted to FAA.

Next Steps:

Any Concepts that go through the noise analysis would be submitted to the Board approval, which is required before submittal to FAA. The next meeting (June 29th) will focus on the noise analysis, followed by a meeting on August 16th to discuss which, if any, Concepts should be submitted to the Board.

As always, questions pertinent to the Southern Departure Procedure process will be summarized and included in the FAQ periodically during the process.

