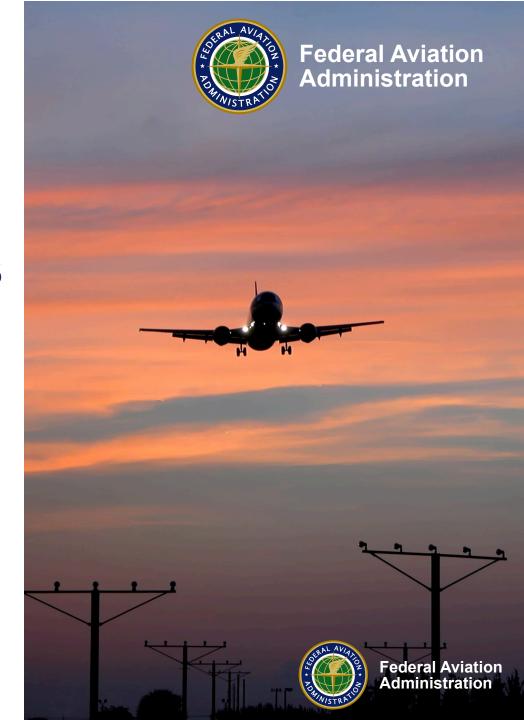
# GBAS Procedures and Environmental Review Process

Presented to: SFO Technical Working Group

By: Federal Aviation Administration

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# FAA's Role in SFO GBAS

- GBAS is currently being implemented in the National Airspace System as a non-Federal navigation aid.
- While non-federal navigation aids may be purchased and maintained by airports, cities, and/or private entities for either private or public use, the FAA retains the power to approve or not approve these non-Fed systems and perform annual inspections.

# FAA's Role in SFO GBAS

- From the FAA's perspective, the installation of GBAS and the development of CAT-1 approaches offers redundancy for properly equipped aircraft, if instrument landing system (ILS) approaches are not available.
- While GBAS may enable steeper approaches, changes to approach angles can lead to both noise increases and decreases. FAA research in this area is ongoing, and will continue to assess opportunities for noise abatement.

# **GBAS Environmental Review**

- Current proposed GBAS procedures at SFO are overlays (both vertically and laterally) of the RNAV procedures, and are not expected to change how aircraft fly today.
- Environmental review for overlays is ongoing and should be completed by the end of May 2021.
- Public comment period is not anticipated for the GBAS overlay procedures.

### **Procedure Environmental Review Process**

- The National Environmental Policy Act (NEPA)
  requires the FAA to address the impacts of
  major federal actions on the human
  environment. This includes noise,
  socioeconomics, land uses, air quality, and
  water quality, among others.
  - If an action is not subject to NEPA—no further environmental action required.
  - NEPA analyses can differ—dependent upon the context and potential impacts.
  - There are three levels of NEPA review.

# **NEPA Review**

### Three Levels of NEPA Review

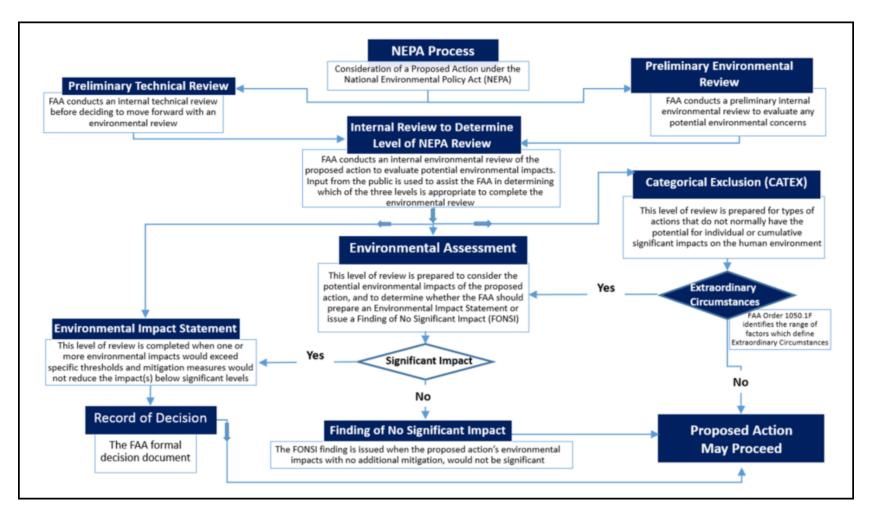
- Categorical Exclusion (CATEX) established list of actions that do not, individually or cumulatively, have a significant impact.
- Environmental Assessment (EA) analysis of action and reasonable alternatives that could result in preparation of an Environmental Impact Statement or Find of No Significant Impact.
- Environmental Impact Statement (EIS) detailed analysis of environmental consequences and alternatives, cumulative impacts, and mitigation actions.



## **Public Comment under NEPA**

- The FAA does not anticipate any public comments initiative under NEPA for the currently proposed GBAS (overlay) approaches.
- For future proposals, public comments requirement under NEPA would be determined by the scope of the proposals.
  - The FAA recommends industry partners coordinate public engagement initiatives prior to submitting the proposed designs.

# **Environmental Review Flow Chart**



# Conclusion

- Current GBAS procedures are overlays (both vertically and laterally) of the RNAV procedures and are not expected to change how aircraft fly today.
- Environmental review on overlays will be is scheduled to be completed by the end of May 2021.
- The FAA recommends industry partners coordinate public engagement initiatives prior to submitting the proposed designs.



# **Questions**