Memorandum

Date: April 15, 2020

To: Memorandum for Record

From: Mark Steinbicker, Manager, Flight Technologies and Procedures Division

Subject: Operational Safety Review of Proposed Extension of Instrument Flight Procedure Periodic Inspection Requirement

Purpose:

The purpose of this Operational Safety Review (OSR) was to identify potential hazards and evaluate risks associated with a proposed temporary extension to instrument procedure periodic inspection requirements. The panel proposes a 180-day extension to the normal periodic inspection window and a 90-day window to restore compliance once COVID-19 travel restrictions lift.

Summary and Background:

A panel of Flight Standards and Flight Program Operations (AJF) subject matter experts (SMEs) conducted an OSR of a proposed extension to the periodic inspection requirement.

COVID-19 presents unique challenges to accomplishing periodic inspections on special instrument flight procedure Required Navigation Performance (RNP) procedures. For example, Non-FAA service providers often use commercial travel to landing locations and some utilize operator aircraft to conduct inspections. The majority of the impacted procedures are vital helicopter air ambulance (HAA) instrument flight procedures.

1 FAA Order 8260.19 Flight Procedures and Airspace, defines service providers as any organization, company, or person who develops and/or maintains instrument flight procedures.
2 National Airspace System has over 1200 helicopter air ambulance procedures. The majority maintained by non-FAA service providers.
FAA Order 8200.1, United States Standard Flight Inspection Manual, Table 4-1 Basic Schedule for Periodic Flight Inspection (ATCH), establishes the periodic flight inspection interval of 540 days (+/- 60-day window). In addition, guidance allows a 30-day extension.3

Discussion:

During the course of deliberations, the panel identified undiscovered man-made obstacles existing for a longer period of time as a potential new hazard.

Service providers protect procedure obstacle clearance surfaces by continuously monitoring notices of proposed construction4 through the FAA’s Obstacle Evaluation/Airport Airspace Analysis (OE/AAA) program. The periodic inspection provides a visual verification of automated obstacle monitoring. Therefore, the potential hazard is the presence of undiscovered man-made obstacles penetrating the instrument flight procedure’s obstacle clearance surface not present at the time of the last periodic inspection and not identified in OE/AAA.

The existing risk mitigation for man-made obstacles are described below:

- Obstacle monitoring (OE/AAA)
- Periodic inspection (extended)
- Operator issued guidance to report new construction that may adversely affect the procedure5

As additional risk mitigations to the proposed 180-day extension to instrument procedure periodic inspection requirements, the panel recommends the following:

- Notify affected operators, via AFS-420 memo sent to FAA Principal Operations Inspectors (POIs), of procedures impacted by periodic inspection extensions.
- Instruct affected operators to report new man-made obstacles near final and missed-approach segments of the procedure to the responsible non-FAA service provider.
- Operators, working with their POI, can apply informed risk based decision-making (RBDM).

Operators, working with their POI, should assess the risk of any special instrument procedure with an overdue periodic inspection. As a minimum, if the operator discovers any previously unidentified man-made obstacle, that could create a hazard, it must be reported without delay to both the service provider and the POI.

Rationale for not requiring further SRM analyses:

The panel believes after additional POI/operator awareness and RBDM no additional SRM analysis is needed.

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3 The periodic flight inspection window for all SIAP(s) may be extended an additional thirty (30) calendar days provided the procedure is reviewed, no known environmental changes, and appropriate approval.

4 14 CFR Part 77 Safe, Efficient Use, and Preservation of Navigable Airspace defines notice requirements.

5 FAA FORM 8260-7B Special Instrument Procedure Authorization, documents procedure specific operator requirements.
OSR Panel Members:

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<th>Name</th>
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Attachment:
Table 4-1