



**COMMISSION
AGENDA MEMORANDUM**

Item No. 6h

ACTION ITEM

Date of Meeting July 24, 2018

DATE: July 3, 2018
TO: Stephen P. Metruck, Executive Director
FROM: Mike Ehl, Director, Airport Operations
SUBJECT: Memorandum of Agreement (MOA) between the Port of Seattle and the Federal Aviation Administration (FAA) for a Foreign Object Debris (FOD) study.

ACTION REQUESTED

Request Commission authorization for the Executive Director to enter into an agreement with the Federal Aviation Administration for a Foreign Object Debris study at Seattle-Tacoma International Airport. There is no funding associated with the request.

EXECUTIVE SUMMARY

This agreement between the FAA and the Port of Seattle (Port) will establish a mechanism for studying, researching, and evaluating advanced concepts and technologies (automated FOD detection systems) in support of the U.S. National Air Transportation System; with emphasis on operational safety at airports, and in particular, mitigating the risks to aircraft and personnel from FOD hazards.

JUSTIFICATION

This agreement will help promote operational safety on airports. This agreement supports the 2018 Aviation Division priority to improve the Airfield Composite Safety Score.

The FAA states that “The presence of FOD on airport runways, taxiways, aprons and ramps poses a significant threat to the safety of air travel. FOD has the potential to damage aircraft during critical phases of flight, which can lead to catastrophic loss of life and airframe, and increased maintenance and operating costs. FOD hazards can be reduced, by the use of FOD detection equipment.”¹ Probably the most known FOD event was on July 25, 2000, when the Concorde ran over FOD while on departure, resulting in a crash and the loss of life for all on-board.

The FAA published guidance on the procurement and standards of automated FOD detection equipment in 2009. The Airport used the FAA guidance for procuring and installing our

¹ FAA Advisory Circular 150/5220-24; Airport Foreign Object Debris (FOD) Detection Equipment.

Meeting Date: July 24, 2018

automated FOD detection system, on runway 16C/34C, during the runway reconstruction, in 2015.

DETAILS

The Airport will collect FOD-related data and submit it to the FAA.

Specific goals and objectives to be accomplished:

- (1) Establish a suitable agreement that accommodates mutual interests of the parties for the advancement of airport operational safety
- (2) Cooperate in the evaluation work including data collection and analysis that enables the FAA to quantify the safety benefits of utilizing FOD Detection Systems in airport environments.

Scope of Work

- (1) FOD Reporting: Draft a data collection procedures document that will be used to compare the amount and type of FOD collected on a runway equipped with a FOD detection system (test runway), to the amount found on a second runway without a FOD detection system (baseline runway).
- (2) Maintenance and Operations Report: The airport will submit a report on the operation and maintenance of the FOD Detection system.
- (3) End of Project Report-Out: At the end of the 12-month reporting period, the airport will meet with FAA to brief out the results of the initial program.

Schedule

Activity

Agreement Executed	2018 Quarter 3
Data Collection Procedures Drafted	2018 Quarter 3
Maintenance and Operations Report Submitted	2019 Quarter 2
End of Project Report-Out	2019 Quarter 4

Cost Breakdown

Port Staff time will be used to support this study. It is not anticipated that any overtime or additional costs will be incurred. Much of the anticipated data is already gathered, so actual staff time spent on the study is anticipated to be minimal.

Meeting Date: July 24, 2018

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Do not enter into Agreement with the FAA.

Cost Implications: There are no anticipated cost implications.

Pros:

- (1) Saves port staff time, allowing staff to focus on their regular responsibilities.

Cons:

- (1) Does not support the FAA’s goal of promoting aviation safety.
- (2) Does not support the Aviation Division’s Priority of improving airfield safety.

This is not the recommended alternative.

Alternative 2 – Enter into an Agreement with the FAA for a FOD study.

Cost Implications: None anticipated.

Pros:

- (1) Supports the FAA’s goal of promoting aviation safety.
- (2) Supports the Aviation Division’s Priority of improving airfield safety.

Cons:

- (1) The study will consume some amount of staff time.

This is the recommended alternative.

FINANCIAL IMPLICATIONS

Port staff time will be used to support this study. It is not anticipated that any overtime or additional costs will be incurred. Much of the anticipated data is already gathered, so actual staff time spent on the study is anticipated to be minimal.

Annual Budget Status and Source of Funds

Port staff time to support the study is included in the department’s 2018 operating budget.

ATTACHMENTS TO THIS REQUEST

- (1) Memorandum of agreement
- (2) Attachment A to the agreement

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

On February 25, 2014, the Commission authorized executing a contract for a FOD detection.