

3/10/2021

**FOR YOUR INFORMATION**

2021-29/6-3

To: Airport Manager, Washington Dulles International Airport (IAD), VA, FAA (AAS-1) 1781538

Info: FAA (Director of Air Traffic Operations ESA North, ATM IAD Tower, AAS-300, AVP-1, AVP-200, AEA-600, AFS-280, AFS-200, AJI-144, Runway Safety Team), A4A, AAEE, ALPA, AOPA, APA, ASAP, ATSAP, ATSG, CAPA, IATA, ICASS, IFALPA, IPA, NATCA, NBAA, NTSB, RAA, SWAPA

From: Becky L. Hooey, Director  
NASA Aviation Safety Reporting System

Re: IAD ASDE-X False Alerts

We recently received an ASRS report describing a safety concern that may involve your area of operational responsibility. We do not have sufficient details to assess either the factual accuracy or possible gravity of the report. It is our policy to relay the reported information to the appropriate authority for evaluation and any necessary follow-up. We feel you should be aware of the enclosed deidentified report.

To properly assess the usefulness of our alert message service, we would appreciate it if you would take the time to give us your feedback on the value of the information that we have provided. Please contact Dr. Becky Hooey at (408) 541-2854 or email at [becky.l.hooey@nasa.gov](mailto:becky.l.hooey@nasa.gov).



Aviation Safety Reporting System  
P.O. Box 189 | Moffett Field, CA | 94035-0189



## ACN 1781538

### DATE / TIME

Date of Occurrence	202101
Local Time Of Day	1801 to 2400

### PLACE

Locale	IAD.Tower
State	DC

### AIRCRAFT / EQUIPMENT X

ATC / Advisory - Tower	IAD
Make Model Name	Commercial Fixed Wing
Operating Under FAR Part	91

### AIRCRAFT / EQUIPMENT Y

ATC / Advisory - Tower	IAD
Make Model Name	Commercial Fixed Wing
Operating Under FAR Part	121

### PERSON 1

Function - Air Traffic Control	Local
ASRS Report Number	1781538

### EVENTS

Anomaly	ATC Issue - All Types
Anomaly	Conflict - Airborne Conflict
Anomaly	Deviation - Track / Heading - All Types
Anomaly	Deviation / Discrepancy - Procedural - Clearance
Anomaly	Deviation / Discrepancy - Procedural - Published Material / Policy
Detector - Person	Air Traffic Control
Result - Flight Crew	Executed Go Around / Missed Approach
Result - Flight Crew	Returned To Departure Airport
Result - Air Traffic Control	Provided Assistance

### NARRATIVE 1

Aircraft X departed Runway 30 on an assigned 270 heading. Shortly after switching the aircraft to departure, I scanned the radar and saw Aircraft X turning through a 270 heading and continuing a left turn to the east directly into the arrival corridor for aircraft landing Runways 1L and 1C. At that moment, a controller at PCT, I think Departure Control contacted me. My initial thought was that Aircraft X had misunderstood my assigned heading and had not switched to Departure Control and was still on my frequency. While the controller was speaking to me other aircraft were talking on the frequency. The cross-talk prevented me from clearly understanding the information that was being relayed in the coordination. I heard the controller say climb the aircraft to 3,000 ft., and turn him to the west immediately.

Because I did not clearly hear the call sign of the aircraft he was referencing my mind jumped to Aircraft X as the aircraft needing the instructions. I immediately issued a climb and turn to Aircraft X and began issuing traffic alerts. Midway through issuing the traffic alerts I recognized that Aircraft X was descending and turning to join final for Runway 1L. In that instance I recognized what Departure Control was trying to coordinate and I sent Flight Number X around and vectored him away from Aircraft X and issued a traffic alert.

Aircraft X checked onto my frequency on a mile final. I cleared him to land. Immediately after clearing him to land, the ASDE-X alerted with a taxiway proximity alert. It appeared to me that Aircraft X was correcting back toward Runway 1L. I asked the pilot if they requested priority handling. The pilot said no. The aircraft appeared aligned with the runway and the pilot confirmed they were, but because he was not a priority. I sent the plane around as required by the 7110.65.

Coordination would have been easier and clearer had the radar data tag scratchpad entry for Aircraft X been changed to "01L" which would have indicated that he was inbound to land. The scratchpad showed the SID he filed, which contributed to my initial thinking that he was off course and not a priority. Additionally, had Departure Control requested priority handling in the coordination, I believe I would have immediately keyed onto the fact that Aircraft X was returning.

The Airport Surface Detection Equipment (ASDE-X) ASDE Taxiway Arrival Prediction Software (ATAP) has had five alerts since its implementation on Date. In every case, the aircraft have been properly aligned with the runway and the alerts have been the result of poorly designed taxiway capture zones. The ATAP enhancement should be temporarily disabled and a full review of the ATAP system should occur.

## **SYNOPSIS**

A Tower Local Controller reported a departure deviated from its clearance and turned back to the airport to land and into conflict with an arrival on final approach.

The Tower received an alert from an automated system (ASDE X ATAP) warning that the aircraft was aligned with a taxiway and not the runway although the aircraft had corrected back to course. The reporter states that false alerts from the ASDE X ATAP (Airport Surface Detection Equipment Taxiway Arrival Prediction Software) is a recurring issue.