

ALERT BULLETIN

AB 2021:4/11-2

3/26/2021

1787859

TO: Boeing Commercial Airplane Company

INFO: FAA (AVP-1, AVP-200, AFS-200, AFS-280, AFS-400, AFS-800, AFS-100, SEA-AEG, ANM-100, AIR-720, AIR-780, AQS-230), A4A, ALPA, AMFA, ASAP, ATSG, CAPA, IAM, IATA, IBT, ICAO, ICASS, NTSB, PAMA, SWAPA, TWU

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

SUBJ: B767 Weather Radar Presents Hazard to Ground Personnel

We recently received ASRS reports 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 following:

ASRS received a report from a B767 FO expressing concern about ground personnel safety related to a known anomaly involving weather radar operation at the gate. Reporter stated that the radar has been known to power up upon ground power transfer operations with no input from the flight crew, presenting a health hazard to ground personnel. Reporter further stated this has been a known issue for some years and there does not seem to be plan in place for a timely fix.

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.



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



ACN 1787859

DATE / TIME

Date of Occurrence 202102
Local Time Of Day 0601 to 1200

PLACE

Locale ZZZ.Airport
State US
Altitude - AGL 0

ENVIRONMENT

Flight Conditions VMC

AIRCRAFT / EQUIPMENT X

Make Model Name B767-300 and 300 ER
Operating Under FAR Part 121

COMPONENT 1

Aircraft Component Weather Radar

PERSON 1

Function - Flight Crew First Officer
Function - Flight Crew Pilot Not Flying
ASRS Report Number 1787859

EVENTS

Anomaly Aircraft Equipment Problem - Less Severe
Anomaly Deviation / Discrepancy - Procedural - Published
Material / Policy
Anomaly Ground Event / Encounter - Other / Unknown
Detector - Person Flight Crew
Result - General None Reported / Taken

NARRATIVE 1

During the preflight brief by the Captain, specially as he completed the "T" Brief, I observed the CYAN WX-A on his nav display, indicating that his radar was on. I quickly looked to see if my radar was on also, it was not. I know for certain his radar was not on prior to this as I cross checked altimeters and field elevation during my cockpit preflight and glanced at his Nav Display. I am constantly looking to assure that the CYN WX-A is not displayed on the NDs this issue a big pet peeve of mine. I believe this event occurred during the power transfer from GPU to APU as it occurred shortly prior to push and shortly after starting the APU and is a well known anomaly on the LDS (large display system) 767. Further, on this day, the airplane had a bird strike on the nose cone which I noticed on the preflight. The mechanic was working directly in front of the nose cone. I'm glad that the radar didn't power on while he was inspecting the nose cone. I have no reasonable assurance that a scenario like that can't happen as the radar powers on at various times when there is a power transfer. As a matter of fact and ironically, I had that exact thought earlier as I completed my preflight and saw the mechanic on a ladder in front of the nose cone. I can't tell you how relieved I am to know that the radar didn't power on with the mechanic in front of it.

A known anomaly on the LDS Boeing 767 [is] the radar powers on at various times, which the technician believes is predominately tied to power transfers. Further, the issue appears to be tied to whether or not the parking brake is set or not. The design assumption of the radar assumes the parking brake is going to be set at

the gate. If the brake is set, supposedly the radar will not power on. However, at my company, that is not the case as we release the parking brake once the airplane chocks are in place. There is a belief by those in Flight Management that the Flight Manual has addressed this issue with a change to the Interior Safety Check and Power Application. The change in the flight manual was a note stating that this power on anomaly can occur and the Captains should be looking for it. However, the problem with that is that the radar powers on at various times. I have seen it occur with a simple power transfer from GPU to APU, when the IRS selectors are moved from Off to Align with the APU already running and no power transfer occurring by the flight crew and I've seen the issue occur during a pushback following a pneumatic ground start as the generators come online. I've also seen the Cyan WX-A displayed on one ND and not the other, and sometimes it is displayed on both NDs. Further and a separate issue entirely, I'm not entirely certain the WXR button location isn't an issue itself. It is a very easy button to toggle on/off. The location is also very poor and is in a position that could be accidentally bumped by those installing the sun shades in the summer, those cleaning the windshields and by someone getting into or out of the seat.

This anomaly needs to be corrected as soon as possible. I've been on the 767 for nearly X years and this issue has been on going. I have had discussions regarding this issue with many people over the course of several years; Standards, LCAs and most recently Fleet Captains. There is a fix, LDS Software Update, which will correct the issue. However, unfortunately, they are looking at a need to do a wiring change and at present time it appears that that will take 2 years to complete. To make matters worse however, I have noticed this phenomenon is occurring on brand new 767s that we have just taken from the factory, like [another] aircraft which is a very new airplane. It is unacceptable that we are taking new airplanes from the factory with this issue, knowing that the fix will not take place until Heavy Checks. I feel this is irresponsible to all people on the ramp who are exposed to a radar in operation while parked at a gate. We have pilots, crew bus drivers, ramp load teams, mechanics, fuelers, caterers, lavatory service techs all being exposed to an operating radar when this event occurs. I can't tell you how frustrating it is to complete the walk around, sit down in my seat and see the radar has been on because the Captain missed it or it occurred at sometime that he wasn't aware of. This needs to be fixed quicker than a few years and some sort of procedure needs to be established soon to provide a safe/healthy work environment to all those I previously listed. This really is not OK.

SYNOPSIS

First Officer reported concerns with radar operation on the ground causing injury to personnel.