

9/28/2023

FOR YOUR INFORMATION

2023-152/3-10

2030812

To: Airbus Industries

Info: FAA (AVP-1, AVP-200, AFS-200, AFS-100, AFS-260, AIR-720, AIR-360, SEA-AEG),
A4A, ALPA, AOPA, APA, ASAP, ATSAP, ATSG, CAPA, IAM, AMFA, IBT, IATA, ICAO,
ICASS, IFALPA, IPA, NATCA, NBAA, NTSB, RAA

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

Re: EC145 Weather Radar Anomalies

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 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.



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



ACN 2030812

DATE / TIME

Date of Occurrence	202308
Local Time Of Day	1801 to 2400

PLACE

Locale	ZZZZ.Airport
State	FO
Altitude - MSL	9000

ENVIRONMENT

Flight Conditions	IMC
Weather	Icing
Weather	Rain
Weather	Turbulence

AIRCRAFT / EQUIPMENT X

Make Model Name	EC145
Operating Under FAR Part	91

COMPONENT 1

Aircraft Component	Weather Radar
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PERSON 1

Function - Flight Crew	Captain
Function - Flight Crew	Pilot Flying
Function - Flight Crew	Single Pilot
ASRS Report Number	2030812

EVENTS

Anomaly	Aircraft Equipment Problem - Less Severe
Detector - Person	Flight Crew
Result - Flight Crew	Overcame Equipment Problem

NARRATIVE 1

AIRBUS AHD H145 D3 Weather Radar Shadowing and signal failures. Airbus helicopters certified an unworthy radar system to its H145d2d3 series with RDR2000 and Helionix panel configuration. The system is failing and showing unworthy shadows. H145 D2/D3 with RDR2000 and Helionix. Radar shows "WXR FAIL" messages that is thought to be "latency issue" between hardware/software of radar and avionics. Software and hardware incompatibility. The event will cause a major incident or accident with this type of aircraft because its not a single serial number issue, its the model/fleet issue and its recognized by manufacturer to be so.

ANAC/CENIPA (Aeronautical Accidents Investigation and Prevention Center/Brazilian Civilian Aviation Agency) Brazilian aviation and safety authorities are working with Helibras on this matter, but the Airbus H145 D3 comes certified with billateral relationship between ANAC and European Union Aviation Safety Agency (EASA) and the matter should go to EASA to take actions with Company. H145 D3 was brought being updated from Bo105/Bk117 certification and received a avionics update called Helionix, that came up with shadowing phenomena and WXR FAIL message coming up intermittently on MFD (Multifunction Flight Display). Tried to work with the OEM (original equipment manufacturer) to solve the problem but AHD blames EASA for certification

bureaucracy and issues to come up with a solution/update on the radar system to solve the shadowing/failure problem occurring with many serial numbers.

Already registered safety issue claims on EASA/ (European Co-ordination centre for Accident and Incident Reporting Systems) ECCAIRS2/ANAC/ CENIPA etc but no feedback yet. This radar system will cause accidents on the Brazilian fleet at least, because it is an issue occurring on many serial numbers and we don't have radar coverage in Brazil such as XMWX or NEXRAD. We need to rely solely on aircraft equipment and satellite images. Please notify the manufacturer AHD to explain why the system was certified with a failing radar software communication with avionics.

SYNOPSIS

EC145 pilot reported encountering issues with the helicopter's on board weather radar system and suggests these issues are common within the entire fleet.