

CALLBACK

From NASA's Aviation Safety Reporting System



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AVIATION MAINTENANCE HEROES

Aviation Maintenance Technicians (AMTs) are unsung heroes in the aviation world. Charged with keeping the fleet safe, they assume enormous responsibility in maintaining our aircraft to demanding airworthiness standards. Frequently unnoticed or underappreciated, AMTs display tenacity and a work ethic that should earn the respect of every aviator.

AMTs often reveal unusual or emerging hazards. Inquisitive, they dig deep for detail and accuracy in records and technical data. Creative, they resolve problems, both routine and critical, while standing firmly on procedures. In so doing, many threats and hazards are eliminated before they become the incidents or accidents that crews might experience.

This month, *CALLBACK* offers reports that reveal courage in the AMT character, bold actions, and results that motivate. Contemplate the actions, recognize the commitment, and respect the results. Appreciate those special talents and qualities displayed by each AMT, and thank your Aviation Maintenance Hero the next time you fly.

Part 91 – Eureka!

While inspecting a low wing, single-engine turboprop aircraft, this contracted AMT discovered an unusual discrepancy and provided a creative, temporary fix.

■ *During annual inspection, performing cockpit area inspection, found a large wire/cable very close to instrument panel “shelf/structure” with signs of chafing. Further inspection following the cable run, found another area of chafing on the instrument panel structure/shelf. This chafing was worse than the other area, with very little clearance from structure, if any at all. I was unable to reposition or reroute the cable due to the area and the size and stiffness of the cable. A piece of Teflon was installed on the cable to stop the chafing. However, I feel this is only a temporary remedy, as there is no clearance between the cable and metal structure. Owner has been advised and the manufacturer as well. The aircraft will be flown to...for further evaluation and final repair. I’m writing this report due to the seriousness of what I found: a 150-amp power cable chafing on metal structure behind the instrument panel. I don’t know if this is a one-off, or if there are other...aircraft with similar condition. The wire/cable runs from the MCR (Master*

Control Unit) through the firewall center of instrument panel, down below the aforementioned shelf, back up above the shelf over pilot’s right rudder pedal, and outboard and down and aft to aux junction box under the floor. This is a new aircraft, with only 200 hours on it.

Part 135 – Standing Firm

This AMT raises a question about unsubstantiated documentation that conflicted with the Maintenance Manual.

■ *L/H (Left Hand) engine oil level was found to be low and required servicing. L/H engine oil was serviced with 1.5 quarts of oil. After maintenance tasks were completed on aircraft and paperwork sent to RTS (Return to Service) for review, a new write-up was created stating that the L/H engine was overserviced and needed to be drained and serviced to the 1-quart low mark. Per Honeywell Light Maintenance Manual (LMM) says to service oil tank of the AGB (Accessory Gearbox) until the oil is in the “FULL” band on the sight glass. There is also a note within the LMM...that states, “There is approximately 1.6-quart (1.51 L) difference between the “NO-DISPATCH” and the “FULL” bands on the sight gage.” With that note saying that, I feel it is perfectly acceptable to service an engine with 1.5 quarts of oil. After maintenance manual review, we performed an engine run for approximately 10 minutes and after engine shutdown, waited 10 minutes for oil to collect in AGB tank and verified oil level to be in the correct range on oil sight glass. Nowhere in the Honeywell LMM can I find that says it is acceptable to service the engine to the 1-quart low mark. I did find that it is acceptable to have an engine oil consumption of .01 gallons per hour or 1 quart of oil per 25 hours of operation. I tried to get information on the last time it was serviced and how many hours of operation since last service but never got an answer. Suggestions: Follow LMM or create work card that is approved/acceptable to service engine to 1-quart low mark on sight gage.*

Part 121 – The Parts Professional

Professionalism and attention to detail motivated this AMT to research and clarify confusing language in an Illustrated Parts Catalog (IPC). Applicability, pedigree, and traceability were discussed when substituting one part for another.

■ ZZZ Maintenance Person A called parts personnel that they are replacing the left ADIRU (Air Data Inertial Reference Unit) to resolve an issue. They removed P/N HG2050BC06 and they have P/N HG2050BC04 on hand. He asked if it is OK to install the P/N they have on hand since IPC (Illustrated Parts Catalogue) 34-21-01-01 is confusing. IPC states “HG2050BC06 can replace or be replaced by HG2050BC04 with 2015 MAGVAR (Magnetic Variation) activated or requires incorporation of SB (Service Bulletin) 737-34-4248 (activates 2025 MAGVAR)” Note that the aircraft has less than 1 hour left to departure to ZZZ1, and after doing some research, I determined that we made a change on the 737NGs per EA (Engineering Authorization) ...to upgrade from the 2005 to 2015 MAGVAR. Also, SB 737-34-4248 is not applicable to this aircraft since this SB was incorporated at production, which would make us Post SB. With how the IPC is worded, that means that yes, we can use HG2050BC06 or HG2050BC04 and there are no intermixability restrictions. Hence, I advised ZZZ Maintenance that it is OK to install P/N HG2050BC04 per IPC 34-21-01-01. I kept researching and later found when the aircraft was in the air and on its way from ZZZ to ZZZ1 that since SB 737-34-4248 was incorporated at production, we cannot use HG2050BC04. This is because ADIRU P/N HG2050BC04 only has the 2005 and 2015 MAGVAR Tables and P/N HG2050BC06 only has 2015 and 2025 MAGVAR Tables. This means that if the A/C had HG2050BC06 installed but was pre-SB 737-34-4248, then both P/Ns HG2050BC04 and HG2050BC06 are interchangeable and intermixable. The current wording in the IPC is misleading. While the aircraft was in the air from ZZZ to ZZZ1, I called Maintenance Control and advised them of what occurred and asked them to stop the aircraft in ZZZ1 and have the left ADIRU replaced with P/N HG2050BC06 prior to further flight.

Part 121 – The Repeat Write-up

This air carrier AMT discovered the root cause of a dangerous issue that plagued a B767-300 for several years.

■ No. 4 Wheel Assembly (ASSY) was found flat spotted on arrival...[on] day 0. On investigation the wheel had been changed recently. On further investigation the wheel ASSY had been changed 6 times. After initial troubleshooting, the antiskid module was ordered and was due to arrive... on...day 1. The oncoming day shift carried out the normal antiskid function test again to confirm fault before replacement of module. During function test, it was noticed the actual brake releasing during the test was the opposite wheel assembly. So, wheel test for No. 3 released No. 4 and vice versa. We proceeded with hydraulic line inspections and found that the forward brake hydraulic lines for Brakes 3 &

4 had been cross-fitted causing the wrong brake to release during normal antiskid operation. The R/H Main Landing Gear Bogie has had over 2 years of high brake temp issues, & No. 4 Wheel has been changed 8 times in total.

Part 121 – Ever Vigilant

This AMT observed an unsafe practice near an obvious hazard during an A320 block-in. Ever vigilant, the AMT made a heart-felt plea to mitigate the hazard.

■ Aircraft X arrived in ZZZ. ... Earlier in the day, we deferred the APU generator under MEL XX-XX-XXX. This MEL requires that an engine be left operating until ground AC power is connected and established at the gate. When the aircraft came to a stop, one ramp employee began entering the red safety area in the vicinity of the still operating engine. My colleague immediately gained this individual's attention and informed him that the engine was still operating. The ramp crews in ZZZ have been experiencing an ongoing high employee turnover rate. Coincident with the constant staffing changes, I have noticed a trend of “lack of respect” for running aircraft engines. While not appearing malicious in nature, it appears that a significant percentage of ramp personnel simply do not appreciate the dangerous environment within which they operate on a daily basis. On multiple occasions, I have observed ramp personnel placing cones and walking in front of engines which had been shut down less than just 2- or 3- seconds prior. Even though the engines were technically shut down in these instances, they had hardly even begun to spool down by this point. I have brought this fact to the attention of the individuals in question each time. However, it has always been a different individual on every occurrence. Again, while I don't feel the actions I've witnessed were committed with any ill intent, I do feel they exhibit a lack of awareness and a normalization of deviance. Also of note, inoperative APUs and inoperative APU generators result in a change from routine operating procedures. Engines may be running longer than anticipated, or they may need to be started out of the usual sequence. When able, at a minimum, a shift briefing or group huddle to discuss any specific issues should occur prior to the arrival and/or departure of aircraft which fall into this category. ... a dedicated training module highlighting these particular threats is warranted before the next deviation claims a victim. Perhaps providing case studies of engine ingestion and jet blast events may drive the point home.

The reports featured in CALLBACK are offered in the spirit of stimulating thought and discussion. While NASA ASRS does not verify or validate reports, we encourage you, our readers, to explore them and draw your own conclusions.

ASRS Alerts Issued in March 2026	
Subject of Alert	No. of Alerts
Aircraft or Aircraft Equipment	4
Airport Facility or Procedure	8
ATC Equipment or Procedure	26
Maintenance Procedure	2
Hazard to Flight	2
Other	2
TOTAL	44

556
 A Monthly Safety
 Newsletter from
 The NASA
 Aviation Safety
 Reporting System
 P.O. Box 189
 Moffett Field, CA
 94035-0189
<https://asrs.arc.nasa.gov>

March 2026 Report Intake	
Air Carrier/Air Taxi Pilots	5,584
Flight Attendants	1,709
General Aviation Pilots	1,675
Military/Other	835
Controllers	380
Mechanics	272
Dispatchers	256
TOTAL	10,711