



AIRWORTHINESS DIRECTIVE

2022-03-15 Various Airplanes: Amendment 39-21932; Docket No. FAA-2021-0715; Project Identifier AD-2021-00259-A.

(a) Effective Date

This airworthiness directive (AD) is effective March 21, 2022.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all serial numbers of the airplane models listed in table 1 to paragraph (c), certificated in any category, that are either:

(1) Modified with a Garmin G3X Touch Electronic Flight Instrument System under Supplemental Type Certificate (STC) No. SA01899WI, installed in accordance with Master Drawing List (MDL) Document No. 005-01320-00, Revision 9 or earlier, interfaced with a Garmin Engine Adapter GEA 24 connected to resistive fuel probes; or

(2) Modified with a Garmin GI 275 Multi-Function Display under STC No. SA02658SE, installed in accordance with MDL Revision 9 or earlier, interfaced with a Garmin Engine Adapter GEA 24 connected to resistive fuel probes.

Note 1 to paragraph (c): Garmin Mandatory STC Service Bulletin No. 2134, Revision A, and Garmin Mandatory STC Service Bulletin No. 2135, Revision A, both dated April 23, 2021, contain information for how to determine if your airplane has a resistive probe interface.

Table 1 to Paragraph (c)—*Affected Airplanes*

Type Certificate Holder	Airplane Model
Aermacchi S.p.A.	F.260, F.260B, F.260C, F.260D, F.260E, F.260F, S.205-18/F, S.205-18/R, S.205-20/F, S.205-20/R, S.205-22/R, S.208, and S.208A
Aeronautica Macchi S.p.A./Aerfer-Industrie Aerospaziali Meridionali S.p.A.	AM-3
Aerostar Aircraft Corporation	PA-60-600 (Aerostar 600), PA-60-601 (Aerostar 601), PA-60-601P (Aerostar 601P), and PA-60-602P (Aerostar 602P)
Air Tractor, Inc.	AT-401
Alexandria Aircraft, LLC	14-19, 14-19-2, 14-19-3, 14-19-3A, 17-30, 17-30A, 17-31, 17-31A, 17-31ATC, and 17-31TC
Alpha Aviation Concept Limited	R2160
American Champion Aircraft Corp.	402, 7EC, 7ECA, 7FC, 7GC, 7GCA, 7GCAA, 7GCB, 7GCBA, 7GCBC, 7KCAB, 8GCBC, and 8KCAB
Aviat Aircraft Inc.	A-1, A-1A, A-1B, A-1C-180, A-1C-200, S-1S, S-1T, S-2, S-2A, S-2B, S-2C, and S-2S
Bellanca Aircraft Corporation	14-13, 14-13-2, 14-13-3, and 14-13-3W
B-N Group Ltd.	BN-2 and BN-2A
CEAPR (type certificate previously held by APEX Aircraft)	R3000/160
Cirrus Design Corporation	SR20, SR22, and SR22T
Commander Aircraft Corporation	112, 112B, 112TC, 112TCA, 114, 114A, 114B, and 114TC
Cougar Aircraft Corporation	GA-7
Cub Crafters, Inc.	CC19-180
De Havilland Support Limited	B.121 Series 1, B.121 Series 2, and B.121 Series 3
Diamond Aircraft Industries Inc.	DA20-A1, DA20-C1, DA 40, DA 40 F, and DA 40 NG
Discovery Aviation, Inc.	XL-2

Dynac Aerospace Corporation	Aero Commander Model 100, Aero Commander Model 100-180, Aero Commander Model 100A, Volaire Model 10, and Volaire Model 10A
EADS-PZL Warszawa-Okecie S.A.	PZL-104M Wilga 2000, PZL-104MA Wilga 2000, PZL-KOLIBER 150A, and PZL-KOLIBER 160A
Extra Flugzeugproduktions- und Vertriebs-GmbH	EA-300, EA-300/200, EA-300/L, EA 300/LC, and EA-300/S
FLS Aerospace (Lovaux) Ltd.	OA7 Optica Series 300
Found Brothers Aviation Limited	FBA Centennial 100
Frakes Aviation	G-44 (Army OA-14, Navy J4F-2) (including SCAN Type 30) and G-44A
FS 2003 Corporation	PA-12 and PA-12S
Fuji Heavy Industries, Ltd.	FA-200-160, FA-200-180, and FA-200-180AO
GA8 Airvan (Pty) Ltd.	GA8 and GA8-TC 320
Gomolzig Flugzeug- und Maschinenbau GmbH	AS 202/15 BRAVO, AS 202/18A BRAVO, and AS 202/18A4 BRAVO
GROB Aircraft SE	G 115, G 115A, G 115B, G 115C, G 115C2, G 115D, and G 115D2
Helio Aircraft Corporation	15A and 20
Helio Alaska, Inc.	H-250, H-295 (USAF U10D), H-391 (USAF YL-24), H-391B, H-395 (USAF L-28A or U-10B), H-395A, H-700, and HT-295
Interceptor Aircraft Inc.	200, 200A, 200B, 200C, 200D, and 400
The King's Engineering Fellowship	44 Angel, 4500-300, and 4500-300 Series II
Legend Aviation & Marine, LLC	UC-1
Luscombe Aircraft Corporation	8, 8A, 8B, 8C, 8D, 8E, 8F, and T-8F
Maule Aerospace Technology, Inc.	Bee Dee M-4, M-4, M-4-180C, M-4-180S, M-4-180T, M-4-180V, M-4-210, M-4-210C, M-4-210S, M-4-210T, M-4-220, M-4-220C, M-4-220S, M-4-220T, M-4C, M-4S, M-4T, M-5-180C, M-5-200, M-5-210C, M-5-210TC, M-5-220C, M-5-235C, M-6-180, M-6-235, M-7-235, M-7-235A, M-7-235B, M-7-235C, M-7-260, M-7-260C, M-

	7-420A, M-7-420AC, M-8-235, M-9-235, MT-7-235, MT-7-260, MT-7-420, MX-7-160, MX-7-160C, MX-7-180, MX-7-180A, MX-7-180AC, MX-7-180B, MX-7-180C, MX-7-235, MX-7-420, MXT-7-160, MXT-7-180, and MXT-7-180A
Micco Aircraft Company, Inc.	MAC-125C, MAC-145, MAC-145A, and MAC-145B
Mooney Aircraft Corporation	M22
Mooney International Corporation	M20, M20A, M20B, M20C, M20D, M20E, M20F, M20G, M20J, M20K, M20L, M20M, M20R, M20S, and M20TN
Nardi S.A.	FN-333
Pacific Aerospace Ltd.	FBA-2C, FBA-2C1, FBA-2C2, and FBA-2C3
Piaggio & C.	P.136-L and P.136-L1
Pilatus Aircraft Limited	PC-6, PC-6/350, PC-6/350-H1, PC-6/350-H2, PC-6-H1, and PC-6-H2
Piper Aircraft, Inc.	PA-16, PA-16S, PA-18, PA-18-105 (Special), PA-18-125 (Army L-21A), PA-18-135, PA-18-150, PA-18A, PA-18A-135, PA-18A-150, PA-18AS-125, PA-18AS-135, PA-18AS-150, PA-18S, PA-18S-105 (Special), PA-18S-125, PA-18S-135, PA-18S-150, PA-19 (Army L-18C), PA-19S, PA-20, PA-20-115, PA-20-135, PA-20S, PA-20S-115, PA-20S-135, PA-22, PA-22-108, PA-22-135, PA-22-150, PA-22-160, PA-22S-135, PA-22S-150, PA-22S-160, PA-23, PA-23-160, PA-23-235, PA-23-250, PA-23-250 (Navy UO-1), PA-24, PA-24-250, PA-24-260, PA-24-400, PA-28-140, PA-28-150, PA-28-151, PA-28-160, PA-28-161, PA-28-180, PA-28-181, PA-28-201T, PA-28-235, PA-28-236, PA-28R-180, PA-28R-200, PA-28R-201, PA-28R-201T, PA-28RT-201, PA-28RT-201T, PA-28S-160, PA-28S-180, PA-30, PA-31-300, PA-32-260, PA-32-300, PA-32-301, PA-32-301FT, PA-32-301T, PA-32-301XTC, PA-32R-300, PA-32R-301 (HP), PA-32R-301 (SP), PA-32R-301T, PA-32RT-300, PA-32RT-300T, PA-32S-300, PA-34-200,

	PA-34-200T, PA-34-220T, PA-38-112, PA-39, PA-40, PA-44-180, PA-44-180T, PA-46-310P, PA-46-350P, PA-46R-350T, and PA-E23-250
Polskie Zaklady Lotnicze Spolka zo.o	PZL M26 01
Revo, Incorporated	Colonial Model C-1, Colonial Model C-2, Lake Model 250, Lake Model LA-4, and Lake Model LA-4-200
Robert E. Rust, Jr.	DHC-1 Chipmunk Mk 21, DHC-1 Chipmunk Mk 22, and DHC-1 Chipmunk Mk 22A
RUAG Aerospace Services GmbH	Do 27 Q-6, Do 28 A-1, and Do 28 B-1
Sierra Hotel Aero, Inc.	Navion (Army L-17A), Navion A (Army L-17B and L-17C), Navion B, Navion D, Navion E, Navion F, Navion G, and Navion H
Sky Enterprises, Inc.	RC-3
Slingsby Aviation Ltd.	T67M260
SOCATA (type certificate currently held by Daher)	MS 880B, MS 885, MS 892A-150, MS 892E-150, MS 893A, MS 893E, MS 894A, MS 894E, Rallye 100S, Rallye 150 ST, Rallye 150 T, Rallye 235C, Rallye 235 E, TB9, TB 10, TB 20, TB 21, and TB 200
Spartan Aircraft Company	7W (Army UC-71)
Swift Museum Foundation, Inc.	GC-1A and GC-1B
Symphony Aircraft Industries Inc.	OMF-100-160 and SA 160
Textron Aviation Inc.	19A, 23, 35, 36, 50, 58, 76, 77, 95, 120, 140, 140A, 150, 150A, 150B, 150C, 150D, 150E, 150F, 150G, 150H, 150J, 150K, 150L, 150M, 152, 170, 170A, 170B, 172, 172A, 172B, 172C, 172D, 172E, 172F (USAF T-41A), 172G, 172H (USAF T-41A), 172I, 172K, 172L, 172M, 172N, 172P, 172Q, 172R, 172RG, 172S, 175, 175A, 175B, 175C, 177, 177A, 177B, 177RG, 180, 180A, 180B, 180C, 180D, 180E, 180F, 180G, 180H, 180J, 180K, 182, 182A, 182B, 182C, 182D, 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M, 182N, 182P, 182Q, 182R, 182S, 182T, 185, 185A, 185B, 185C, 185D, 185E, 190, 195,

195A, 195B, 206, 206H, 207, 207A, 210, 210-5 (205), 210-5A (205A), 210A, 210B, 210C, 210D, 210E, 210F, 210G, 210H, 210J, 210K, 210L, 210M, 210N, 210R, 310, 310A, 310B, 310C, 310D, 310E, 310F, 310G, 310H, 310I, 310J, 310J-1, 310K, 310L, 310N, 310P, 310Q, 310R, 320, 320-1, 320A, 320B, 320C, 320D, 320E, 320F, 335, 336, 337, 337A, 337B, 337C, 337D, 337E, 337F, 337G, 337H, 340, 340A, 35-33, 35-A33, 35-B33, 35-C33, 35-C33A, 35R, 45 (Military YT-34), 56TC, 58A, 58PA, 58TCA, 95-55, 95-A55, 95-B55, 95-B55A, 95-B55B, 95-C55, 95-C55A, A150K, A150L, A150M, A152, A185E, A185F, A23, A23-19, A23-24, A23A, A24, A24R, A35, A36, A36TC, A45 (Military T-34A, B-45), A56TC, B19, B23, B24R, B35, B36TC, B50, B95, B95A, C23, C24R, C35, C50, D17S, D35, D45 (Military T-34B), D50E-5990, D55, D55A, D95A, E310H, E310J, E33, E33A, E33C, E35, E55, E55A, E95, F150F, F150G, F150H, F150J, F150K, F150L, F150M, F152, F172D, F172E, F172F, F172G, F172H, F172K, F172L, F172M, F172N, F172P, F177RG, F182P, F182Q, F33, F33A, F33C, F337E, F337F, F337G, F337H, F35, FA150K, FA150L, FA150M, FA152, FP172D, FR172E, FR172F, FR172G, FR172H, FR172J, FR172K, FR182, FRA150L, FRA150M, FT337E, FT337F, FT337GP, FT337HP, G33, G35, G36, G58, H35, J35, K35, LC40-550FG, LC41-550FG, LC42-550FG, M19A, M337B, M35, N35, P172D, P206, P206A, P206B, P206C, P206D, P206E, P210N, P210R, P337H, P35, R172E, R172F, R172G, R172H, R172J, R172K, R182, S35, SD17S, T182, T182T, T206H, T207, T207A, T210F, T210G, T210H, T210J, T210K, T210L, T210M, T210N, T210R, T240, T303, T310P, T310Q, T310R, T337B, T337C, T337D, T337E, T337F, T337G, T337H, T337H-SP, TP206A, TP206B, TP206C, TP206D, TP206E, TR182, TU206A, TU206B,

	TU206C, TU206D, TU206E, TU206F, TU206G, U206, U206A, U206B, U206C, U206D, U206E, U206F, U206G, V35, V35A, and V35B
Topcub Aircraft, Inc.	CC18-180 and CC18-180A
True Flight Holdings LLC	AA-1, AA-1A, AA-1B, AA-1C, AA-5, AA-5A, AA-5B, and AG-5B
Twin Commander Aircraft LLC	500, 500-A, 520, 560, and 560-A
Univair Aircraft Corporation	108, 108-1, 108-2, 108-3, 108-5, 415-C, 415-CD, 415-D, A-2, A2-A, E, F-1, F-1A, G, and M10
Viking Air Limited	DHC-2 Mk.I, DHC-2 Mk.II, DHC-2 Mk.III, and TR-1
Vulcanair S.p.A.	P.68, P.68 "Observer," P.68B, P.68C, P.68C-TC, P.68R, P.68 Observer 2, P.68TC Observer, and Vulcanair V1.0
WACO Classic Aircraft Corporation	2T-1A, 2T-1A-1, and 2T-1A-2
WSK PZL Mielec and OBR SK Mielec	PZL M20 03
W.Z.D. Enterprises Inc	11A and 11E
Zenair Ltd.	CH2000
Zlin Aircraft a.s.	Z-143L, Z-242L, and Zlin 526L

(d) Subject

Joint Aircraft System Component (JASC) Code 2841, Fuel Quantity Indicator.

(e) Unsafe Condition

This AD was prompted by reports of fuel quantity disparities between the amount of fuel indicated and the actual amount of fuel. The FAA is issuing this AD to ensure that the amount of fuel indicated is the amount of fuel available. The unsafe condition, if not addressed, could result in fuel starvation and engine shutdown which could result in the inability to arrive at the destination airport or a suitable alternative airport.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Action

Within 100 hours time-in-service after the effective date of this AD or within 12 months after the effective date of this AD, whichever occurs first, modify the fuel probe interface by following the Modification Instructions in Garmin Mandatory STC Service Bulletin 2134, Revision A, or Garmin Mandatory STC Service Bulletin 2135, Revision A, both dated April 23, 2021, whichever is applicable.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Wichita ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (i) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(i) Related Information

For more information about this AD, contact Kevin Marks, Aviation Safety Engineer, Wichita ACO Branch, FAA, 1801 Airport Road, Wichita, KS 67209; phone: (316) 946-4153; email: kevin.marks@faa.gov or Wichita-COS@faa.gov.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Garmin Mandatory STC Service Bulletin 2134, Revision A, dated April 23, 2021.

(ii) Garmin Mandatory STC Service Bulletin 2135, Revision A, dated April 23, 2021.

(3) For service information identified in this AD, contact Garmin International, Garmin Aviation Support, 1200 E 151st Street, Olathe, KS 66062; phone: (866) 739-5687; email: avionics@garmin.com; website: <https://fly.garmin.com/fly-garmin/support/>.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fr.inspection@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on January 25, 2022.

Lance T. Gant,

Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2022-03000 Filed 2-11-22; 8:45 am]