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## AIRWORTHINESS DIRECTIVE

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For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.1 (1) of CAR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

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### Radio Communication and Navigation Equipment

**AD/RAD/74**

**Garmin GNS 430**

**2/2002**

Applicability: Garmin International GNS 430 Comm/Nav/GPS unit Part Number 011-00280-00 with the following Serial Numbers:

96300001, 96300002, 96300017, 96300028, 96300034, 96300040, 96300068, 96300104, 96300108, 96300122, 96300125, 96300130, 96300142, 96300149, 96300161, 96300165, 96300218, 96300222, 96300232, 96300269, 96300272, 96300308, 96300333, 96300340, 96300348, 96300354, 96300369, 96300372, 96300382, 96300394, 96300411, 96300413, 96300429, 96300437, 96300451, 96300484, 96300485, 96300489, 96300504, 96300506, 96300513, 96300522, 96300549, 96300563, 96300585, 96300587, 96300618, 96300621, 96300624, 96300628, 96300641, 96300653, 96300664, 96300713, 96300734, 96300756, 96300766, 96300781, 96300785, 96300786, 96300808, 96300831, 96300837, 96300842, 96300846, 96300866, 96300870, 96300872, 96300899, 96300916, 96300923, 96300925, 96300929, 96300941, 96300961, 96300984, 96300987, 96301021, 96301108, 96301130, 96301280, and 96301296 through 96303200

*Note 1: These GNS 430 units are known to be installed in, but not limited to, the following aeroplanes:*

<b><i>Manufacturer</i></b>	<b><i>Model</i></b>
<i>Cessna Aircraft Company</i>	<i>172, 182, 206, 208, 210, 401, 402, 404, 406, 411, 414, 414A, 421A, 421B, 421C, 425, 441, 500, 550, S550, 552, 560, 560XL, 501, 525, and 551.</i>
<i>Mooney Aircraft</i>	<i>M20, M20A, M20B, M20C, M20D, M20E, M20F, M20G, M20J, M20K, M20L, M20M, M20R, M20S, and M22.</i>
<i>Raytheon Aircraft Company</i>	<i>Beech Models E33, F33, G33, E33A, F33A, E33C, F33C, 35, 35R, A35, B35, B35TC, C35, D35, E35, F35, G35, H35, J35, K35, M35, N35, P35, S35, V35, V35TC, V35A, V35A-TC, V35B, V35B-TC, 36, A36, A36TC, 50, B50, C50, D50, D50A, D50B, D50C, D50E, E50, F50, G50, H50, J50, 60, A60, B60, 65-90, 65-A90, B90, C90, C90A, C90B, E90, F90, 100, A100, B100, 95-55, 95-A55, 95-B55, 95-C55, D-55, E55, 58, 58P, and 58TC.</i>

## Radio Communication and Navigation Equipment

AD/RAD/74 (continued)

*Socata*

*TBM 700*

*The New Piper Aircraft Inc*

*J3C-40, J3C-50, J3C-50S (Army L-4, L-4B, L-4H, and L-4J), J3C-65 (Navy NE-1 and NE-2), J3C-65S, J3F-50, J3F-50S, J3F-60, J3F-60S, J3F-65 (Army L-4D), J3F-65S, J3L, J3L-S, J3L-65 (Army L-4C), J3L-65S, J4, J4A, J4A-S, J4E (Army L-4E), J5A (Army L-4F), J5A-80, J5B (Army L-4G), J5C, AE-1, HE-1, PA-11, PA-11S, PA-12, PA-12S, PA-14, PA-15, PA-16, PA-16S, PA-17, PA-18, PA-18A, PA-18A (Restricted), PA-18S, PA-18-"105" (Special), PA-18S-"105" (Special), PA-18-"125" (Army L-21A), PA-18AS-"125", PA-18S-"125", PA-18-"135" (Army L-21B), PA-18A-"135", PA-18A-"135" (Restricted), PA-18AS-"135", PA-18S-"135", PA-18-"150", PA-18A-"150", PA-18A-"150" (Restricted), PA-18AS-"150", PA-18S-"150", PA-19 (Army L-18C), PA-19S, PA-20, P-20S, PA-20-"115", PA-20S-"115", PA-20-"135", PA-20S-"135", PA-22, PA-22-108, PA-22-135, PA-22S-135, PA-22-150, PA-22S-150, PA-22-160, PA-22S-160, PA-24, PA-24-250, PA-24-260, PA-24-400, PA-25, PA-25-235, PA-25-260, PA-28-140, PA-28-150, PA-28-151, PA-28-160, PA-28-161, PA-28-180, PA-28-235, PA-28S-160, PA-28R-180, PA-28S-180, PA-28-181, PA-28R-200, PA-28R-201, PA-28R-201T, PA-28RT-201, PA-28RT-201T, PA-28-201T, PA28-236, PA-32R-301 (SP), PA-32R-301 (HP), PA-32R-301T, PA-32-301, PA-32-301T, PA-36-285, PA-36-300, PA-36-375, PA-38-112, PA-46-310P and PA-46-350P.*

- Requirement:
1. Modify the deviation and flag output circuitry in accordance with the Modification Instructions section of Garmin Service Bulletin No 9905, Revision A, dated 17 September 1999.
  2. GNS 430 units, with the serial numbers listed in the Applicability Statement, may not be installed on any aeroplane unless modified in accordance with Requirement 1.

*Note 2: FAA AD 2001-23-17 Amdt 39-12516 refers.*

Compliance: For Requirement 1 - Within six months after the effective date of this Directive.

## Radio Communication and Navigation Equipment

AD/RAD/74 (continued)

For Requirement 2 - As of the effective date of this Directive.

This Airworthiness Directive becomes effective on 21 February 2002.

**Background:** The United States Federal Aviation Administration has received reports of inaccurate course deviations caused by external electrical noise to the GNS 430 unit's course deviation indicator (CDI). Such displays could result in the pilot making decisions that put the aircraft in unsafe flight conditions. This Directive requires the modification of the unit to incorporate circuitry changes to the GNS 430 unit's deviation and flag outputs to prevent external noise from causing inaccurate course deviation displays in the GNS 430 unit's CDI or horizontal situation indicator (HSI).



Eugene Paul Holzapfel  
Delegate of the Civil Aviation Safety Authority

14 January 2002