

ORDER: 8300.10

APPENDIX: 4

BULLETIN TYPE: Flight Standards Information
Bulletin for Airworthiness (FSAW)

BULLETIN NUMBER: FSAW 98-04D (Amended)

BULLETIN TITLE: Guidance for Performing Field Approvals of
Traffic Collision Alerting Device (TCAD),
Traffic Advisory Systems (TAS), and Traffic
Alert and Collision Avoidance Systems I
(TCAS I)

EFFECTIVE DATE: 02-26-98

AMENDED DATE: 05-30-06

TRACKING NUMBER: N/A

APPLICABILITY:

M/M	ATA Code	14 CFR	PTRS
NA	NA	91, 125, and 135	5414 and 5416

NOTE: THIS BULLETIN REQUIRES PTRS INPUT. SEE PARAGRAPH 5.

1. PURPOSE. This bulletin provides guidance to supplement handbook instructions for a qualified aviation safety inspector (ASI) to perform field approvals for installation and operational use of certain makes and models of Traffic Collision Alerting Device (TCAD), Traffic Advisory Systems (TAS), as well as Traffic Alert and Collision Avoidance Systems I (TCAS I), within aircraft operated under Title 14 of the Code of Federal Regulations (14 CFR) part 91, 91 subpart K, 125, or 135.

2. BACKGROUND.

A. The following TCAD and TAS models have been awarded Supplemental Type Certificates (STC) in various makes and models of aircraft:

- Avidyne Safety Systems Group, formerly Ryan International Corporation, models ATS-7000, -8000, -8800, -9000, and -9900 series, as well as the TAS 600, TAS 610 and TAS 620 systems

- L-3 Communications (BFGoodrich) SkyWatch SKY497, TCAS791, and TCAS791A

- Honeywell (Bendix/King) KTA 810, KTA 870, and CAS 66A

B. Approved data developed for STC issuance can be used to substantiate "follow-on" field approval for the alteration using Federal Aviation Administration (FAA) Form 337, Major Repair and Alteration. The same conditions and requirements would apply to approving installation and operational use of other makes and models of TCAD, TAS, or TCAS I not intended to meet or be substituted for TCAS II, when required for use under 14 CFR part 121 and by some part 125 operators.

C. For the purpose of piston-powered airplanes operated under 14 CFR part 125, § 125.224, no model of TCAD or TAS, mentioned above, meets the performance qualifications to substitute for TCAS I or satisfy the criteria for "...equivalent to TSO-C118...", as noted in the "Collision Avoidance Systems" table in § 125.224. Likewise, for the purpose of turbine-powered airplane with a passenger-seat configuration, excluding any pilot seat, of 10-30 seats operated under 14 CFR part 129, § 129.18, no model of TCAD or TAS equipment, mentioned above, meets the performance qualifications to substitute for TCAS I or satisfy the criteria for "...equivalent to excluding any TSO-C118...", as noted in the "Collision Avoidance Systems" table in § 129.18.

3. ACTION. Using previously approved descriptive and substantiating data, an ASI can perform a field approval of the installation and operation of the above systems and equipment, as well as the appropriate Airplane Flight Manual Supplement (AFMS), Supplemental Aircraft Flight Manual (SAFM), or Rotorcraft Flight Manual Supplement (RFMS). The AFMS, SAFM or RFMS must contain limitations, emergency or abnormal operating procedures, normal operating procedures, and performance conditions that are consistent with the format of the basic Aircraft Flight Manual (AFM) and applicable to the specific installation configuration for the installed equipment and systems. The AFMS, SAFM, or RFMS must state that the TCAD, TAS, or TCAS I must be operated as a means supplemental to "see and avoid" procedures.

NOTE: The Avidyne/Ryan models TAS 600 and TAS 610 are designed with specific maximum altitude limitations. While these systems may be installed into aircraft with certificated service ceilings higher than 18,500 feet and 25,000 feet respectively, an ASI authorized to perform field approvals must coordinate

with their geographic Aircraft Certification Office (ACO) to facilitate review and approval of the proposed AFMS, SAFM, or RFMS, as appropriate.

4. PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ENTRY. Use PTRS codes 5414 and 5416. Avionics ASIs responsible for reviewing data for all future TCAS I installations are requested to fill out the "National Use" block by inserting the letters "TCAS I," "TCAD," or "TAS" (as applicable), and a brief description of the type of activity accomplished in the "Comment Text" column.

5. INQUIRIES. This bulletin has been developed by the Airmen and Avionics Branch, AFS-350. Any questions regarding this information should be directed to Terry Pearsall, AFS-350, at (202) 267-3042.

6. EXPIRATION. This bulletin will remain in effect until further notice.

ORIGINAL SIGNED BY
Ricardo Domingo for

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For Reference Only