

Service Information Letter



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SUBJECT: POTENTIAL COMPLETE LOSS OF FMS WHEN USING NON-COLLOCATED VORTAC STATION DATA FROM A TACAN RECEIVER

APPLICABILITY

This Service Information Letter (SIL) applies to aircraft operators using the following CMC Electronics Inc. (CMC) Flight Management System (FMS) products/versions:

CMA-3000 FMS Hardware P/N: 100-601951-XXX (All variations)
Operational Software P/N: 169-614000-007, -008, -009

CMA-9000 FMS Hardware P/N: 100-601951-XXX (All variations)
Operational Software P/N: 169-614876-XXX (All versions)
Operational Software P/N: 169-616414-XXX (All versions)

Problem applies to those installations where the FMS is physically interfaced with either of the following two TACAN receivers:

- L3 TACAN+
- Thompson NC12B

This variant of the Service Information Letter is intended for operators with CMC equipment (see Applicability above) loaded with CMC navigation database produced with aeronautical data from Jeppesen GmbH.

PURPOSE

This SIL intends to inform CMC equipment operators about a potential FMS timeout that may occur when the FMS is physically interfaced with a TACAN receiver, and processes non-collocated VORTAC radio station data received from the TACAN receiver, for the purpose of positioning calculations.

PROBLEM DESCRIPTION

When the FMS is physically interfaced with a TACAN receiver, and processes non-collocated VORTAC radio stations, for the purpose of positioning calculations, a complete loss of FMS may occur as all Flight Management Units may experience the same operational software timeout related to a software exception in the TACAN navigation mode.

It should be noted that this issue exists only when the FMS is interfaced with an actual TACAN receiver. The issue does not exist when the FMS is interfaced with VOR and/or DME receivers and uses the data from the very same radio facilities.

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CORRECTIVE ACTION

Immediate Measure – Effective Immediately – All Operators

- All operators, for which their FMS installation is consistent with the Applicability section above, are required to not manually tune any of the VORTAC stations listed in Appendix A.

Immediate Measure – Effective Immediately – Operators with CMA-9000 FMS SW-070

- In addition to the above measure, operators, for which their FMS installation is consistent with the Applicability section above and specifically use CMA-9000 with Operational Software 169-614876-070, are required to manually deselect all the affected VORTAC stations, as listed in Appendix A, by following the procedure in Appendix B.
- The manual deselection will prevent the FMS from processing non-collocated VORTAC radio station data received from the TACAN receiver, for the purpose of positioning calculations.
- **This manual deselection procedure must be repeated before every flight or each time that FMS performs a power-up on the ground.**

CMC is working on an alternative solution and will communicate it when available via a revision to this SIL.

This immediate measure remains in effect until CMC makes available an alternative solution.

CUSTOMER SUPPORT

Please contact CMC Customer Support for any information concerning this Service Information Letter.

To send a request by email, complete our customer support request form at:

<http://www.cmcelectronics.ca/customer-support/technical-support/>

By telephone:

North America
+1-888-827-2881

Worldwide
+1-514-748-3050

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APPENDIX A

List of non-collocated VORTAC stations

AIRAC Cycle: 2409

Navigation Data Supplier: Jeppesen GmbH.

AREA Code	VHF Ident	ICAO Code	VHF Frequency	TACAN Channel	TACAN Coordinates (Lat/Long)
EUR	AAL	EK	116.70	114X	N57061416 E009593411
EUR	CIV	EB	113.20	79X	N50342044 E003491839
EUR	EVX	LF	112.40	71X	N49014271 E001125060
EUR	KOK	EB	114.50	92X	N51055670 E002391980
EUR	ROE	EK	112.00	57X	N55034274 E014452107

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APPENDIX B

Procedure to manually deselect VHF stations on CMA-9000 FMS SW-070

VHF NAV DESELECT



Page Access

1. Press [INIT/REF]
2. Select <NAV STATUS>
3. Select <VOR/DME/TCN>
4. Select <VOR DESEL>

Procedure to add nav aids to the DESELECTION list

1. Press the [CLR] key until scratchpad is empty
2. Type VORTAC identifier into the scratchpad
3. Select the appropriate LEFT line select key, ie. where ID is equal to " - - - - "

Repeat above steps until all necessary identifiers are listed.