



MASS

**Selected by Boeing for the
767 Global Tanker Transport Aircraft**

Software upgrade to the TCAS 2000 or T²CAS™

Enhanced surveillance volume

Supports clustering of up to 50 aircraft

Designed to comply with ATC guidelines

**Higher resolution ranges for
close-in operations**

**Complete surveillance solution—TCAS,
TAWS and Mode S/IFF products**

**Unrestricted formation/rendezvous
capabilities within civil airspace
(No platform, clustering or altitude restrictions)**

The Flexible Solution

ACSS has developed a military-specific application from our commercial surveillance system that addresses unique requirements of the military. This set of technologies is known as Military Airborne Surveillance System (MASS™) and is based on commercial Automatic Dependent Surveillance-Broadcast (ADS-B) technology. The ACSS Cooperative Member functionality, a subset of MASS, is a software change to the TCAS 2000 or T²CAS™ computer and the Mode S/IFF Transponder that provides a system capable of supporting unique military flight requirements such as formation flight and rendezvous operations in commercial airspace.

The use of ADS-B and adaptive power level interrogation techniques will prevent interference with the civil ATC environment. The system will include cooperative member identification using Flight ID and Mode S address, unique cockpit display characteristics for cooperative members, and the ability to select an aircraft for display of specific aircraft data.

In addition to standard TCAS modes, the MASS product provides military operational modes that support operation in cooperative flight situations such as large formation or rendezvous operations. When Cooperative Flight Mode is not selected, the system will perform normally as a TCAS/ACAS II collision avoidance system.

MASS™ ... The Flexible Solution



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TCAS R/T

Physical

Dimensions (W x H x D) 4.9 x 7.6 x 15.2 in.
Weight 14.7 lbs.
Power 28 Vdc or 115 Vac

Environmental

Temperature (Operating) -55 to +70° C
Altitude 55,000 Ft.
Cooling *No Cooling Required*
Environment ARINC DO-160C
Shock, Vibration MIL 810
EMI MIL 461

KS950SI Mode S/IFF Transponder

Physical

Dimensions (W x H x D) 4.9 x 7.6 x 15.2 in.
Weight 11.5 lbs.
Power 28 Vdc or 115 Vac

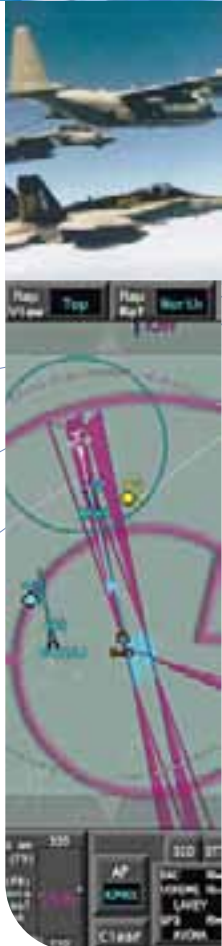
Environmental

Temperature (Operating) -55° to +70° C
Altitude 55,000 Ft.
Cooling Per ARINC 600
Environment ARINC DO-160D
Shock, Vibration MIL 810
EMI MIL 461

Optional CDTI Display

Physical

Bezel Dimensions 4.815 in. x 6.25 in.
Image Size 5.1 in. (W) x 3.8 in. (H), 6.3 in. diag.
Case Size ARINC 708A
Weight 6.5 lbs.



19810 N. 7th Avenue
Phoenix, AZ 85027-4400
Telephone: (623) 445-7000
Fax: (623) 445-7001
www.l-3com.com/acss

Worldwide Customer Service & Support

ACSS products are based on proven technology to provide you exceptionally high reliability and simplified maintenance. Support for engineering, logistics, commercial and repair support are available through our worldwide network of Customer Support Managers and Support Centers.

Customer Support Services are provided to aircraft manufacturers and operators. On-site assistance is available to support system integration, troubleshooting, analysis, rework, retrofit and repair of ACSS equipment. Services include AOG/Emergency Services, Repairs, Maintenance Agreements, Technical Support, Publications, Training, and Database Service.

Interfaces

TCAS	ARINC 429/735
TAWS	ARINC 762/453
FMS	ARINC 702 (growth)
DME	ARINC 568 (growth)
INS	ARINC 561 (growth)
Weather Radar	ARINC 708A, Collins WRX-700X, Honeywell RDR-4A/RDR-4B55,000 Ft.

Aviation Communication & Surveillance Systems

ACSS, an L-3 Communications & Thales Company, is a leader in safety avionics systems. ACSS products include the TCAS 2000 and TCAS 1500 traffic alert and collision avoidance systems, a family of Mode S transponders, the T²CAS™, a combined traffic and terrain collision avoidance system, and MASS™, an enhanced TCAS system for military operations. More than 9,000 units of ACSS's TCAS products are operating in commercial, corporate and military aircraft.