

## Tactical Audio Solution for the Cessna Grand Caravan C208B

North American Surveillance Systems, Inc (NASS) based in Titusville, FL is pleased to present the new Tactical Audio Solution for Special Mission Cessna Grand Caravan C208B EX aircraft. This new modification is certified for use in the factory installed G1000 cockpits with software level 13.10 as well as the new NXi software.

The Cessna Grand Caravan C208B EX aircraft is delivered with the Garmin G1000 Flight Deck. The factory installed audio system is comprised of one GMA-1347 audio panel, or with the Yingling Aviation STC for the installation of the second GMA-1347. The GMA-1347 is an integral part of the flight deck and by removing the audio panel from the system, it causes failures within the flight deck and causes the flight deck to give erroneous information. Even with the addition of the second audio panel, the aircraft is limited to five transceivers for the pilot/copilot (flight crew) only. In special mission configured Caravan aircraft, there is a requirement for at least one operator in the cabin. This has been the longstanding problem for special mission operators. As a workaround to this problem, integrators and operators have required a tradeoff scenario where the operator and flight crew are unable to communicate on the same radios or the flight crew must use a separate audio system to communicate on the tactical radios.

NASS, in conjunction with Becker Avionics, have developed a true tactical audio solution for the special mission enabled Caravan aircraft. The modification is Federal Aviation Administration Supplemental Type Certificate (FAA STC) approved and allows the GMA-1347 audio panel to be removed from the flight deck without causing the G1000 to fail. This is accomplished with a new enablement card that has been developed and sold exclusively to NASS from Garmin International. There is a stand-alone PS Engineering MB-10 marker beacon, dual display reversion switches, a new Mid-Continent Standby Attitude Module (SAM), and the Becker Avionics DVCS-6100 audio system.

The Becker Avionics DVCS-6100 system can be configured with up to six audio panels in the current configuration and allows up to eight transceivers to be operated by all members of the aircraft. Through the software configuration of the system, each audio panel installation can be configured differently from the other locations. The Becker DVCS can be expanded, if required, to allow for up to 15 audio locations. The expansion can be accomplished by adding an IC-6100 expansion module to the aircraft and issue an FAA Form 337 to allow for the deviation of the STC.

The Mid-Continent SAM replaces the analog standby gauges with a digital display that is fully certified for use in the Caravan.

NASS, in partnership with Becker Avionics, has worked diligently to acquire the STC and looks forward to supporting the Special Mission Caravans deployed around the world.

