

Software Reliability at Hypersonic Speeds



Challenge:

GMV needed an automated software test solution for the Intermediate eXperimental Vehicle (IXV) program that would identify, solve, and prevent code issues and enable them to provide evidence for ECSS-E-ST-40C and DO-178 certification.

Solution:

In order to meet ECSS-E-ST-40C and DO-178 standards and provide high quality software for the IXV program, GMV selected the VectorCAST automated test platform. GMV engineers use VectorCAST/C++ and VectorCAST/Cover to perform software testing and structural coverage analysis.

Details:

The Intermediate eXperimental Vehicle (IXV) is a European Space Agency (ESA) program for developing critical systems for manned and unmanned missions. The IXV program will test atmospheric re-entry technologies during hypersonic and supersonic flight phases. Since the launch of the program, GMV has played a key role in the development of the IXV's onboard software, which plays an important role in guidance, navigation and control functions.

GMV

