Northrop Grumman began developing the GQM-163A Supersonic Sea-Skimming Target (SSST) in June of 2000 under a $34 million and Manufacturing Development (EMD) contract. Applying Northrop Grumman’s design philosophy of maximizing residual missile assets and off-the-shelf hardware and technology, proven on Northrop Grumman’s Theater Missile Defense (TMD) and National Missile Defense (NMD) ballistic missiles programs, to cruise missile targets provides the U.S. Navy with the best value, lowest risk, and highest performance target system.

The GQM-163A MK 70 Booster/Ducted Rocket Sustainer configuration makes judicious use of residual Standard Missile assets and the $80 million U.S. Government investment in solid-fueled ducted rocket/ramjets. The GQM-163A Ducted Rocket Sustainer is based on technology developed by major subcontractor Aerojet (formerly ARC) under the U.S. Air Force’s Variable Flow Ducted Rocket (VFDR) program. The GQM-163A avionics design is based on the Northrop Grumman’s multi-program Modular Avionics Control Hardware (MACH) system. The MACH flight computer boasts a modern Power PC core hosting a real-time operating system and a flight proven software architecture based on the company’s common object oriented C++ application framework.

Following the EMD phase of the GQM-163A program Northrop Grumman received follow-on Full Rate Production (FRP) contracts in excess of 100 production targets, with newer targets being produced with the Northrop Grumman designed Front End Subsystem (FES), which introduced several robust technology updates to address obsolescence of the older targets. Under the GQM-163A contract, Northrop Grumman has successfully launched approximately 50 Coyote targets to date and included a successful demonstration of a High Diver capability, the Northrop Grumman designed FES, and the Northrop Grumman designed Target Support Test Set (TSTS). For user flexibility, the GQM-163A target is now operationally capable of launching from four different launch sites around the world. GQM-163A launches have been conducted for foreign customers that include France, Australia, and other allied navies.

**Facts At A Glance**

**Customer**
Program Executive Office for Unmanned Aviation and Strike Weapons, PEO (U&W); Aerial Target and Decoy Systems Program Office (PMA-208)

**Objectives**
Provide a Cost-Effective Target to Simulate both Supersonic Sea Skimming and other emerging Supersonic Anti-Ship Cruise Missile (ASCM) Threats
Support RDT&E of Ship Defense Systems and Support Fleet Training Exercises

**Operational**
October 2005

**Prime Contractor**
Northrop Grumman

**Major Subcontractor**
Aerojet – Camden, Arkansas
(Solid Fuel Ducted Rocket Subsystem)
Representative GQM-163A Mission Profile and System Performance

More Information
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