THE MYSTERE-FALCON

A LOOK AT THE JET THAT INSPIRED MANY NEW BELL & ROSS DESIGNS. | BY JAN TEGLER







FIFTY YEARS HAVE PASSED SINCE Dassault Aviation first flew its "Mystery" jet. Over the five decades that have followed the Mystere-Falcon has become one of the most successful and influential commercial aircraft ever produced, simultaneously popularizing the executive or business jet concept along with contemporaries like the Learjet while expanding its capabilities to fill roles as di-

verse as air cargo, maritime patrol and air ambulance missions.

First flown on May 4, 1963, the Mystere, (French for "mystery") 20 was initially intended as a liaison aircraft for the French military. The prototype derived from a twin-jet swept wing design known as the Méditerranée, first drafted in the 1950s, incorporating advancements from Dassault's Ouragan and Mystere IV fighter aircraft. Marcel Dassault himself gave the go-ahead for the type's development, bolstered by the prospect of sales in the substantial American market for private business aircraft.

Pan American World Airlines (Pan Am) was the first customer for the airplane, ordering forty in 1963 with an option for 120 more for its business jet division. To meet Pan Am's needs, and those of the market, Dassault reengineered the Mystere with larger wings for greater range, advanced aerodynamics including conical wing cambers like those used on its Mirage fighters, and employed improved production processes.

Renamed the Fan Jet Falcon by Pan Am under the Dassault/Pan Am joint venture known as Falcon Jet Corp, the airplane was hence forth known as the Falcon and, from 1975, produced in Little Rock, Arkansas, concurrent with French production.

U.S. CONNECTIONS

THAT PRODUCTION FACILITY wasn't the only U.S. connection to the success of the jet. The United States also played a central role in the blossoming of the Falcon as cargo aircraft.

When Fred Smith, the founder of Federal Express, sought a small jet to launch his pioneering express air cargo business, he turned to the Falcon. It was a fast (535 mph cruise) aircraft, and small enough to reduce the risk of carrying uneconomical loads dur-

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ing the initial period when the new airline risked its entire future. Modified with a large cargo door and strengthened floors, the FedEx Type 20 series Falcons represented a milestone in commercial aviation, helping to create new category of airline.

With a great reputation for safety, speed and comfort, Dassault Falcons were selling well by the mid-1970s when company answered the U.S. Coast Guard's requirement for a modern Medium Range Surveillance aircraft. Dassault modified its Falcon 20G with in-cabin rescue equipment, an air-launched radio beacon, camera installations, extra tanks, avionics adapted to U.S. military standards and three external load hardpoints.

The resulting airplane, designated the HU-25A Guardian by the Coast Guard, has been in service since 1982 with upgraded B and C models. In addition, the French Navy operated a version known as the Gardian and Insurance giant Europ Assistance adapted the Falcon for air ambulance services. Through the 1970s, 1980s and 1990s, Dessault introduced new Falcon models, including the tri-jet Falcon 50.