## Honeywell

# FALCON 900'S VIP PASSENGERS ENJOY THE "BEST INTERNET IN THE SKY"

Honeywell JetWave™ technology connects to the world's first worldwide Ka-band network

<sup>66</sup>Our new JetWave system is up and running and the performance has been fantastic. We benefit from 'on-the-ground' speeds while operating around the globe, without having to access a patchwork of service providers.<sup>??</sup>

Seamus Muzzulin, director of maintenance



#### Overview

When a private business jet operator bought a previously-owned Falcon 900EX, its director of maintenance worked with StandardAero to select a connectivity system that would deliver the "best Internet in the sky" for passengers. Honeywell's JetWave was found to be its ideal solution.

### **Quick Facts**

#### Honeywell Solution

- JetWave
- Jet ConneX

#### StandardAero Solution

• Global MRO services

#### **Customer Results**

- Passengers enjoying high speed broadband
- Fantastic performance around the globe
- On-the-ground speeds during flight
- Ability to stream videos and use FaceTime

#### Why Honeywell

- VIP passengers required "best Internet in the sky" connectivity
- JetWave was selected as the best available option on the market
- Global coverage avoids the need to access a patchwork of service providers

#### Customer

- Name: Private operator
- Location: United States of America

## **Background:**

The Dassault Falcon 900EX business jet first entered service more than 20 years ago. With the ability to carry up to 19 passengers and a maximum range of 5,180 miles (4,501nm), including the Falcon 900EX EASy model, more than 250 aircraft were delivered.

Most of the aircraft remain in service today but, as technology has advanced, many operators are now finding the need to upgrade the cabin with systems that are able to deliver high-speed broadband connectivity.

This was the case when a North American business jet operator recently added a Falcon 900EX to its fleet.

## **Business Need:**

The aircraft is based in North Eastern United States of America and is used to carry passengers on private and business travel, mainly across the US but also to destinations in the British Virgin Islands and Europe.

"We were interested in obtaining a global high-speed broadband connectivity solution," said Seamus Muzzulin, the operator's director of maintenance. "We wanted the best Internet in sky technology to enhance connectivity for our passengers.

"We needed to ensure there would be no gaps in service across our domestic and international flights."

Muzzulin turned to StandardAero, one of the world's largest independent maintenance, repair and overhaul (MRO) providers.

StandardAero, which serves a diverse array of customers in business and general aviation, airline, military, helicopter, components, energy and VIP completions markets, has achieved supplemental type certificates (STCs) for Honeywell's JetWave system.



"Working with StandardAero's maintenance and avionics experts we selected Honeywell's JetWave Ka-band system as the best available option on the market today," added Muzzulin.

"We preferred to have the installation covered with an STC and we were confident in StandardAero's Organizational Designation Authorization (ODA) and engineering capabilities to complete the job quickly. This made it easy to move forward with the decision and investment."

StandardAero upgraded the Falcon 900EX at its maintenance facility in Augusta, Georgia in the USA.

## Solution:

Inmarsat's Jet ConneX service, also available through Honeywell, provides the fastest broadband service in the sky for business aviation.

It's the first worldwide Ka-band network available for aircraft operators from a single operator and offers passengers the highest speed and most extensive coverage of flight routes available to the market.

Providing a consistent high-speed, reliable broadband service covering all parts of the globe except the Polar regions, Jet ConneX delivers data speeds that sufficiently cater for cabin passengers' business and entertainment needs.

The service enables passengers to watch live TV or make video conference calls, transfer large files, surf the web or stream videos.

Jet ConneX operates over the Inmarsat Global Xpress network. Each of the network's three Inmarsat-5 (I-5) satellites operates 89 highly efficient Ka-band spot beams.

Capacity can be supplemented by each satellite's unique steerable beams, which direct additional capacity three times as powerful as the spot beams to busy airspace during high traffic periods. Inmarsat's Global Xpress network is supported by a fully redundant ground infrastructure, providing network availability of at least 95%. Each satellite has two ground stations to guarantee reliable communication to the satellites.

Honeywell's JetWave hardware is the only system that enables business aviation aircraft to connect to the Jet ConneX network.

The JetWave hardware consists of four major components: an antenna controller to accurately point the antenna to the satellite, an RF unit to blast the data through space, a modem to process the incoming and outgoing data and a tail mounted antenna to direct the data to and from the satellite.

JetWave is the only aircraft terminal to include dual receivers, enabling critical "make before break" handoffs between satellite spot beams.

Other solutions have built-in outages every time a terminal needs to be "handed off" between satellites, adding significant service interruption and downtime for users.

In addition, JetWave delivers full performance across Inmarsat's global coverage footprint, including northern and southern latitudes up to approximately 78-degrees, where competing terminals see substantial performance deterioration and even service outages.



## **Benefits:**

"StandardAero quickly responded to our needs with nearly zero lead-time to prepare for the installation," said Muzzulin.

"Because this was a very complex and multiple party program, tight management of every detail was required, along with concurrent efforts to achieve the FAA approved STC.

"During the process, StandardAero navigated through obstacles and hurdles with great success every step of the way. Workmanship and customer care at the company's Augusta, Georgia, maintenance facility were outstanding, resulting in a great overall experience.

"Our new JetWave system is up and running and the performance has been fantastic in our Falcon 900EX.

"Passengers have enjoyed using FaceTime, streaming movies from Netflix and the reliability and performance of high speed Internet access. We benefit from 'on-the-ground' speeds while operating around the globe, without having to access a patchwork of service providers.

"Honeywell's technology along with StandardAero's performance with a project of this magnitude was just outstanding."

Honeywell Aerospace

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