



United Arab Emirates AF F-16F serial 3002 during a developmental test sortie out of Holloman. The Desert Falcon Test Team has three such aircraft on strength, which rotate back and forth between Holloman and the Lockheed Martin plant at Fort Worth.

is the integration of the ALQ-165 electronic countermeasures system, also known as the Airborne Self Protection Jammer (ASPJ). Providing active and passive jamming is the newly-designed Falcon Edge Integrated Electronic Warfare Suite (IEWS).

With the 'Desert Falcon' selected, the UAE purchased US\$2bn of sophisticated armament, as well as a complete development, test and validation program for the F-16E/F. Apart from the airframe-related evaluations, precision ground collision avoidance and weapon systems testing were also scheduled.

As the US government is not involved and supersonic and weapons testing cannot be performed out of the Lockheed Martin facilities at Fort Worth or Marietta, this program also had to be run commercially. A competition was run between the different USAF test ranges and, based on time, infrastructure and cost, Lockheed Martin announced in February 2004 that Holloman AFB with its adjacent White Sands Missile Range was to become the principal site for developmental testing of the 'Desert Falcon'. In a separate agreement, the USAF provides air refueling support on a commercial basis.

For the 'Desert Falcon' test program, standard production aircraft are used in the form of the first three production F-16Fs. All three are in common test configuration with Lockheed Martin's own instrumentation equipment installed. These jets rotate back and forth to Fort Worth on a regular basis for upgrades or the installation of test-specific instrumentation equipment. All three also have been fitted with the emergency

spin/departure recovery system for the high angle-of-attack test and evaluation element.

The capabilities of the Block 60 F-16 are being enhanced through successive Standards, each of which is developed and tested at Holloman. Standard 0 was the initial release, only including, for instance, the basic air-to-air and air-to-ground radar modes of the APG-80 radar. Its testing started in mid-2004 and ended at the start of 2005. Standard 1 is the full hardware configuration and provides capabilities basically equivalent to the Block 50/52 F-16. The following Standards are mainly software upgrades, concluding with full operational capability in Standard 3.

Operating from Holloman's north ramp, the Desert Falcon Flight Test Team involves some 34 people, pilots not included. The contract with Lockheed Martin stipulates provision of buildings and general support, but also that the 586th FLTIS is the Participating Test Organization (PTO) for the Block 60 tests. The 586th has official responsibility for the program's security, safety review and risk management boards, thereby fulfilling the governmental

requirement that allows Lockheed Martin to test the 'Desert Falcon' at the WSMR.

However, Lockheed Martin also has its own telemetry ground station for real-time time-synchronized data collection, and this data is not shared with the USAF. Being fully independent, Lockheed Martin does not require any other support from the USAF like chase aircraft.

Upon completion of the test schedule in the USA, all three aircraft will be handed over to the UAE AF with the test instrumentation still installed. The gun pack, which is currently replaced by instrumentation, will be delivered in a box for installation if required.

## GERMAN TORNADOS

The German AF has a presence at Holloman courtesy of the Tornados operated by the Fliegerische Ausbildungszentrum der Luftwaffe (flight training center, FigAusbZLw), which handles aircrew and instructor training. Around 42 aircraft are on FigAusbZLw strength at any given time, with Tornados being rotated from the German-based wings. The Luftwaffe has been training its aircrew members in the USA since 1958.

right: Both Luftwaffe fighter-bomber wings send Tornados to Holloman to form the inventory of the Fliegerische Ausbildungszentrum der Luftwaffe (flight training centre, FigAusbZLw). This one from JBG33 is carrying a Litening laser designator pod.

(Jeff Stoerner)

