



Above: The 586th FLTG has been very busy supporting the F/A-22 programme, providing chase and target functions. A typical mission is flying chase on weapon tests and recording them. The photo shows a recent supersonic JDAM drop, recorded from a 'Redrummers' AF-38B.

Below: As well as airborne chase, the 46th Test Group also has a complex suite of ground recording equipment for weapons tests. These images capture a live JASSM trial.



is no longer on the books of the 586th, it will continue to be used by the 586th FTS.

As Lieutenant Colonel Dantlop explains: "A sharing agreement with the 46th at Eglin is now being worked out, orchestrating the use of this particular airplane and thus determining what particular test is done when. With this single aircraft, the 586th is providing essential support to a significant number of test programmes of the Air-to-Air Wing, Air-to-Ground Wing, Operational Flight Program Combined Test Force (OFP-CITF), Edwards Test Wing, US Navy at Point Mugu, US Army at Fort Bliss, F-35 Program Office, Joint Forces Command, 746th Test Squadron, Air Force Test Pilot School and Air Force Research Laboratory. Not to forget that the F-15 Eagle is an ideal aircraft for high-speed, high-altitude and long-endurance chase, something the 586th Talons cannot do."

Test programmes

No other range in the USA has so much test work going on from the different branches of the US armed forces as the White Sands Missile Range. The US Army, for instance, is very active with Patriot Advanced Capabilities tests. The US Navy has its in-ground Desert Ship on the range and the US Air Force does the majority of its overland testing on WSMR. With its current mission providing agile, responsive, expeditionary flight test for the development of weapons and sensors, the 586th test work is extremely diverse. As well as being involved in the big 'time-light' test programmes, the unit is also very much part of the many smaller developmental test programmes as they potentially may grow into something significant as well.

Being the only Flight Test Squadron at Holloman, the 586th is in a unique position not only able to support the different branches of the armed forces and their test activities on WSMR, but more specifically has the capability to provide these branches with test capabilities to support new-branch initiatives, joint service testing, and multi-service command and control testing. As Dantlop explains: "From June 2004 to June 2005, we supported 800 sorties for a total of 82 different test programmes of the Air Force, Army, Navy, Marines, Missile Defense Agency and the FAA, in which we either were the Responsible Test Organization (RTO) or the Participating Test Organization (PTO).

"Looking at the history of the unit, over the years the squadron mission and scope have grown significantly beyond the initial charter of the 586th Flight Test Squadron. The increasing and diverse demands of simultaneous flight test, programme management, joint programme test support, UAV development, commercial liaison to WSMR, and research and development needs to get back in balance with the squadron's manning and resources. We need to better align our mission within the Air Force and Air Armament Center guidelines to then tailor our resources and manning to best meet those objectives."

As the flight test squadron has become more integrated into the test process, the need to have a larger cohort of qualified test pilots has grown as well, as it is the skill of a test pilot which allows proper understanding of the developmental test process and then mitigate the risks and evaluate the test. Better understanding of the test itself will result in a better interaction with the owner of the test, resulting in better coordination regarding the

actual requirements versus the performance of the platform.

Being part of the 46th Test Wing, the 586th in principal is a developmental flight test unit, however a lot of support is provided to Operational Testing (OT) taking place at WSMR, which can be weapon support, ECM support, control room support and range recovery for these operational tests. Some examples of this OT involvement are the F-15 avionics development (currently Suite 3), JASSM chase and recovery (F-16, B-52, B-1) and providing support for the F/A-22 FOT&E missile shoots at WSMR.

The flight test squadron typically acts as a PTO, providing weapons and photos chase, and range recovery in support of Eglin's based Air-to-Ground Wing, which undertakes a significant part of its operational tests at WSMR, testing the Direct Attack, Area Attack and Long Range Attack systems such as the Joint Direct Attack Munition (JDAM), Joint Air-to-Surface Standoff Missile (JASSM), Small Diameter Bomb (SDB), Joint Standoff Weapon (JSOW), Sensor Fused Weapon (SFW), Wild Carded Munitions Dispenser (WCMD) and many other specialised programmes. In the same sense, the 586th supports the AMRAAM operational test and evaluation shoots at WSMR of the Air-to-Air Wing.

Development Test roles

On the developmental test side, the unit participates in classified programmes like Bright Eyes, Big Safari, HEL-LATTS and QWIP Quick Climb Joint Development programmes supported by the 586th are, for example, the Complementary Low Altitude Weapon System (CLAWS) and Counter Rocket, Artillery, and Mortar (C-RAM). Tested by the US Marines Tactical Systems Support Activity at WSMR, CLAWS is a mobile, rapidly deployable, high-flooper, all-weather, stand-off air defence system aimed to extend the Marine Air-Ground Task Force (MAGTF) commander's 3-D defences against attacks by cruise missiles, fixed and rotary-wing aircraft, and unarmoured aerial vehicles. For these tests the AT-38s typically mimic incoming cruise missiles.

Developing a capability to defeat rockets, artillery, and mortars, C-RAM must successfully identify, track, and engage the incoming threat munitions and is being developed by the US Army's Air Defense Artillery branch working with the Field Artillery School. The 586th provides target support simulating incoming rocket profiles.

Last but not least, the 586th is involved in Roving Sands, Global Strike Exercises, Homeland Defence Exercises and the recently held Weapon System Evaluation Program (WSEP). In the latter case, it was the first time in approximately 20 years that the 53rd Weapons Evaluation Group conducted an off-station WSEP, and in the period between 25 April until 6 May 2005, the 586th hosted Combat Archer 05-10, supporting the deployment of 18 aircraft and a total of 300 personnel to Holloman AFB.

The flight test squadron planned, managed and executed 21 air-to-air missile shoots at the WSMR, providing the Combat Air Forces with many 'live-over' shot profiles accomplished with operational aircraft and aircrews. The data gained from the missile firings will provide invaluable information regarding weapons systems performance, in turn enabling the 53rd WEG to document weapons systems performance in an over-land environment as opposed to the normal over-seas tests.