Thirty years on, USAF's A-10 units are going strong, moving out with new weapons, targeting pods, avionics, and training.

## 21st Century Wartho

Photography by Guy Aceto and Paul Kennedy

On the flight line at Pope AFB, N.C., a brace of A-10 Warthog attack aircraft are readied for a training mission. The A-10 is famed for a nose-mounted 30 mm Gatling gun and great ruggedness. Also notable is a new feature—the Litening II laser targeting pod—seen on these aircraft.



The A-10A Thunderbolt II, known to all as the Warthog, began as a down-and-dirty killer of Soviet tanks. Today it employs a wide variety of munitions and is no longer just a flying gun platform. New generation weapons make it more accurate and deadly. Enhanced navigation capabilities, the Low-Altitude Safety and Targeting Enhancement (LASTE) system, a night vision gogglecompatible cockpit, and other improvements have made the A-10 effective for combat in the 21st century.





The first production A-10 arrived at Davis-Monthan AFB, Ariz., in October 1975, nearly three decades ago. Today, the 23rd Fighter Group at Pope AFB, N.C., and the 355th Wing at Davis-Monthan fly operational A-10s and train active duty, Guard, and Reserve pilots. Above, a Davis-Monthan pilot saddles up for a training sortie in Arizona airspace as the crew chief stands by.

At Davis-Monthan, the 355th Wing operates three training squadrons and an operational squadron. The 355th Training Squadron provides formal academic instruction to more than 400 students a year—more than one-quarter of them in A-10 operations—while the 357th and 358th Fighter Squadrons train the A-10 pilots in the air. The wing also has an operational A-10 combat unit, the 354th Fighter Squadron.

At left, airmen at Davis-Monthan go through the preflight checklist.

Warthog units are expert in close air support. They work closely with Army ground forces and USAF battlefield airmen. The A-10's "slow and low" flight, long loiter time, and accurate CAS fire make it a welcome sight to ground forces. The A-10's seven-barrel, 30 mm Gatling gun can fire 3,900 armor-piercing rounds per minute. The Warthog made its combat debut in the 1991 Gulf War, where it won rave reviews.

At right, a Davis-Monthan crew chief signals for the pilot to start his engines.

Of the 713 A-10s produced, 357 remain in service in active, Guard, and Reserve units. Of these, 236 have received forward air control capability. Their OA-10 designation refers more to the ordnance carried and the forward air control qualifications of the pilot than to any difference in the aircraft. For FAC missions, OA-10s bring along 2.75-inch target marking rockets.



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In the top photo, SrA. Rodney Groom of the 357th Fighter Squadron at Davis-Monthan brings an AGM-65 Maverick missile out of its container for a weapons-load demonstration. Photo above shows a TVguided Maverick installed on a wing pylon.

While the A-10 is upgrading its armament, it has lost none of its legendary ruggedness. Recent events have shown that the aircraft can survive direct hits from armorpiercing and high-explosive projectiles. The Warthogs have self-sealing fuel cells, protected with foam both inside and out. Should a direct hit knock out the A-10's hydraulic flight controls, a pilot can switch to manual systems and still control the airplane.





In the photo above, SrA. David Hink (left), SSgt. David Hinds (middle), and Groom, all of the 357th FS, work a 2,000-pound GBU-10 laser guided bomb into position. At left, Groom attaches the laser-seeker head to the body of the precision weapon.

After 400-flight-hour intervals, each A-10 is inspected for flaws and damage. This "phase inspection" comes as close to depot-level maintenance as is possible without the aircraft actually leaving their home base. During phase maintenance, every panel on the fighter is opened and systems inside inspected. It is important that the maintainers have a keen eye for detail.

At right, Davis-Monthan maintainers work around fighters from the 355th Wing as they go through their phase inspection.





At left, SSgt. Julie Jewett, with the 355th Component Maintenance Squadron at Davis-Monthan, replaces an auxiliary power unit filter. The vise holds the APU casing.

Below, SSgt. James Kutlik, dock chief in charge of maintenance for the 23rd Fighter Group at Pope, reviews his technical manual as the A-10 behind him goes through extensive phase work.



Above, the nose section of a Pope A-10 goes through phase inspection. The Warthog's Gatling gun is massive; its huge ammunition drum holds 1,174 rounds of 30 mm projectiles.





Airmen of the 23rd FG at Pope install a Litening II pod. Above, SrA. Mark Fesperman drives a "Jammer," while SrA. Daniel Galloway (kneeling) and A1C Robert Perry work the pod into position. At right, Fesperman and Galloway raise the pod onto the wing's hardpoint.

The Litening II targeting and navigation pod has been valuable. It offers imagery much sharper than that provided by earlier systems and allows an A-10 to "buddy lase" targets for other aircraft. Previously, Warthog drivers could light up only their own targets.

Litening II enhances the pilot's ability to perform missions other than CAS. In recent years, A-10s have conducted missions such as combat search and rescue support, interdiction, and armed reconnaissance. The A-10 also escorted transport aircraft into air bases in Afghanistan.





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At left, airmen complete the installation of the pod while, at right, the A-10 taxis onto the apron. USAF plans to further upgrade its Warthog fleet to the precision engagement A-10C configuration. These "Hogs," now under development, will have digital cockpits and a wider weapons selection.



At right, Capt. Cameron Curry, assigned to the 23rd FG's 74th Fighter Squadron, "flies" the A-10 simulator at Pope. After arriving at Pope, a pilot such as Curry must complete a specified number of training sorties before being deemed combat ready. Some of these missions are performed in the simulator.

Flight simulation makes clear to the trainee the sequence of events needed to effectively use the information from the Litening II pod. In effect, it becomes second nature. Imagery from the pod appears in the multifunction display (MFD), seen glowing in the upper right of the instrument panel. The same MFD can also display images imported through the TV window of a Maverick missile.





At left, life support technicians of the 74th FS ready a pair of night vision goggles for use. A1C David Leftdwrige inspects the goggles as his supervisor, SSgt. Alfred Shells, goes through the checklist.

A recent upgrade adapted the A-10 cockpit so that a pilot could fly it while wearing NVGs in a "lights out" operation. NVGs are attached to flight helmets. Pilots use handheld lights or laser pointers to illumine the cockpit.



Above and at right, airmen at Pope are kept busy with a full slate of training sorties.





Above, Capt. Jason Erb, a 23rd FG pilot, finishes off his training sortie with a handshake for his crew chief, A1C Michael Bell. Earlier this year, the 74th FS was preparing to deploy to Afghanistan.

The 23rd Fighter Group carries on the traditions of the famed World War II "Flying Tigers," in part by using the Tigers' distinctive shark-mouth nose art. Today's Warthogs are effective, rugged fighters operating in remote parts of the world, as were the P-40-equipped Flying Tigers in China some 60 years ago.





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USAF's A-10s are simple, deadly, and tough. Given the scope of planned structural and performance improvements, the A-10 will be an indispensable supporter of ground troops for decades to come.