

Buzzard wins over the Alps



When the civil unrest in Bosnia escalated into a civil war in 1992, and especially European diplomacy had pitifully failed, the UN security council took resolution 781, banning military air operations in theater up to the present day. Several NATO-members provided air assets, but once again it was up to the U. S. Air Force to provide the back-bone, as it deployed on a few days notice the 86th Fighter Wing from Ramstein AB, Germany to Aviano, Italy for operation "Deny Flight". This brought an end to the calm days in northern Italy, and laid the foundation for the 31st Fighter Wing's operations today.

Today's mission and a proud tradition

Since its activation in Aviano on April 1st, 1994 the 31st Fighter Wing is the only USAFE unit permanently based south of the Alps. The core of the wing is formed by the 510th fighter squadron "Buzzards" and the 555th fighter squadron "Triple Nickel", with the first playing host to the author's visit. Both conduct offensive and defensive tasks under the command of NATO or the Supreme Allied Commander Europe. Further units are the 603rd Air Control Squadron, providing air surveillance, control and communications, the 502nd Aviation Regiment, providing air base support and disaster relief on request by Italy. In autumn 1997 they



The wing was originally established in 1940 as the 31st Pursuit Group by the U.S. Army Air Force, and soon deployed to the Mediterranean area. From 1942 to the summer of 1944 it was one of the few American units equipped with the British Supermarine Spitfire Mk. V, until superseded by the North American P-51 Mustang. After the World War II further highlights in the unit's history were the first transatlantic ferry flight by a jet fighter, using a Republic F-84F "Thunderstreak" in 1950, and deployment to Homestead AFB, Florida, to support the deterrence during the Cuban Missile Crisis in 1962. The wing stayed at Homestead for thirty-two years except for a Vietnam tour. When Hurricane "Andrew" destroyed much of Florida in 1992, it did not miss Homestead AFB, but the wing's aircraft could be relocated in time to other bases throughout the southeastern U. S. Facing the destruction of more than 80% of the bases assets, it was slated for closure and the wing's flag was rolled on March 31st, 1994 and traveled to its new home in northern Italy, to carry on the proud tradition as important part of USAFE.



As the wing itself the 555th Fighter Squadron can look back on a history of great achievement, highlighted by the downing of forty enemy aircraft during the Vietnam War. In 1966 the "Triple Nickel" had the distinction of becoming the U.S.A.F. first "ace" squadron with six confirmed kills after just one week of operation. In 1974 they received the very first McDonnell-Douglas F-15A

"Eagle"s at Luke AFB, Arizona.

After establishment in 1943 and operations from England against Nazi-Germany, the 510th squadron disestablished in autumn 1945, to be reactivated in 1952 flying the Republic F-84 "Thunderjets". After transitioning to the North American F-100 "Super Sabre" the unit moved to Bien Hoa Air Base, Republic of Vietnam, from where it flew more than 27.000 combat missions. The squadron deactivated on November 15th, 1969 until being reestablished as the second squadron equipped with the U.S.A.F. then new ground attack aircraft in 1978. The "Buzzards" were long associated with their Fairchild A-10A



"Thunderbolt II", serving with distinction at RAF Bentwaters with the 81st Fighter Wing, and later with the 52nd Fighter Wing, Spangdahlem AFB, Germany. Deploying to Incirlik AB, Turkey in 1990, they supported Operations "Desert Shield" and "Desert Storm". The Lockheed F-16C/D's they fly today, were taken over from the 512th and 526th Fighter Squadron, having been part of the 86th Fighter Wing from Ramstein AFB, Germany, deployed for Operation "Deny Flight".



Aviano Air Base is located about 35 miles northeast of beautiful Venice at the foot of the Italian pre-alps, and can only be called a true cradle of Italian military aviation. Already back in 1911 Italian aviator trainees flew their first traffic patterns there, and during World War 1 it was an important base for operations against Austro-Hungary. During World War II Aviano was used as an operational base by both Italian Air Force and the German Luftwaffe, resulting in the base being heavily bombed by the advancing Allied forces. Damages to the field took years to repair, until in December 1955 the first Republic F-84F "Thunderstreak" landed for temporary deployment. During the following thirteen years as a U. S. forward operating location Aviano was used by both TAC and SAC, with the latter also deploying Boeing B-47 "Stratojets" there.

Once you win, once you loose

Since the day air operations in fulfillment of operation "Deny Flight" started, first the 86th Fighter Wing and later the 31st Fighter Wing made numerous headlines with their successes and once with a mishap, drawing world attention.

On February 28th, 1994 a U. S. Air Force Boeing E-3A "Sentry" detected six targets departing from Banja Luka, in then Bosnian- Serbian controlled territory, violating the UN-No-Fly zone. After call by the "Sentry"s mission controllers on the international emergency frequency to land immediately or leave the airspace of Bosnia-Herzegovina, the six aircraft, later as SOKO "Super Galebs" identified, turned to make their bombing run on their assigned bridge target. Following this violation they were engaged by two F-16's of

the 555th FS, which downed three targets on first try using AIM-9 "Sidewinder" and AIM-120 AMRAAM, with a fourth aircraft killed by a following two-ship formation with an AIM-120. The remaining two "Super Galebs" vacated Bosnian airspace in low level heading for safe Serbia. These were not only further victories for the renowned squadron, but also the first live engagement of NATO-forces in their history.



On request by UNPROFOR ground forces two F-16's of the 31st FW attacked ground targets in the Sarajevo area on April 10th, 1994, followed by the participation in the by then largest air assault by NATO forces against the Serb-controlled airfield at Udbina in Northwest Bosnia. From there Bosnian-Serb forces had repeatedly launched air raids against targets in the UN-safe heaven of Gorazde. 48 aircraft of

the multinational forces took part in the attack, which made the airfield unusable until being taken over by Croatian forces in 1995. This year saw the most intense air strikes Europe had seen since the end of World War II with the 31st FW carrying out most of the missions. The "Triple Nickel" alone accounted for 209 missions, dropping 128 laser-guided bombs with the highest accuracy of all participating units. This military success led to an armistice and the Dayton peace agreement. The signing ended Operation "Deny Flight" and Operation "Decisive Edge" began, whose air component is known as Operation "Deliberate Guard".

The worst day in the recent history of the 31st FW was June 2nd, 1995, when Cpt. Scott O'Grady of the 555th FS was downed on a routine mission by a Serb SA-6 SAM. As a safe ejection could not be confirmed, due to his aircraft disappearing in a cloud layer, the largest Combat Search and Rescue operation of the whole conflict started. After six days he could be retrieved as he had successfully evaded captivity. A lazy mission planning was identified as primary cause for the loss, as NATO air forces always used the same two entry and exit points agreed with neighbouring Croatia for their policing missions over Bosnia. So the Serbs just waited for a cloudy day, which would hide the exhaust plume of the launching missile, to make evasive maneuvers as difficult as possible for the attacked aircraft.

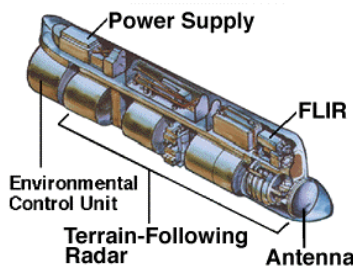
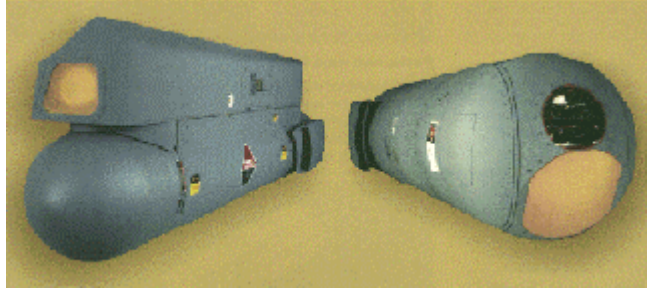
Daily routine between missions with live ordnance and regular training operations

Both squadrons have eighteen F-16s, with the two squadrons changing monthly responsibility for "Deliberate Guard" missions, for which twelve aircraft are made available daily. The others are available for regular training missions, but can be prepared for live missions on very short notice.

Training covers the whole spectrum of mission the "Fighting Falcon" is able to fulfill, and the mix between ground-attack and air-to-air combat keeps eyes sharp and skills honed. The majority of squadron pilots is aged between twenty-five and thirty-two, which contrasts sharply with the usual F-15E "Strike Eagle" communities having a higher average pilot age. Air-to-air combat training sessions are conducted also against other units in the area, and when deploying to Decicommanu, Sardinia are flown against whoever is available there. There crews of the "Buzzards" flew a number of sorties against German MIG-29 "Fulcrum"s from JG73 from Laage with notable results. When denied the use of their radars by the requirement to VID the opponent, the F-16 jocks found themselves easy preys for the helmet-mounted sights ("evil look") of the Germans, who nevertheless had to admit, that without the need for visual identification they were locked on by the Americans shortly after their own departure.

"Power Falcon" - the Lockheed F-16C/D Block 40

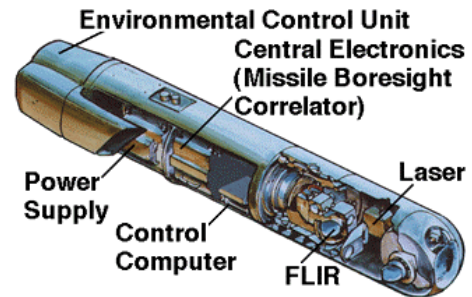
Equipped with the General Electric F-110-GE-100 turbofan these F-16s have an awesome power available. This engine permits departure for a standard air combat patrol mission with full internal fuel, two 2271l (600 US gallons) auxiliary fuel tanks, two AIM-9P Sidewinder missiles and two AIM-120 AMRAAM missiles and still having a power to weight ratio of above unity. This makes departure to a thrilling experience; like pushed by a giant fist one is rushed down the runway. From brake release acceleration never ends or even reduces, and a few seconds after commencing take-off roll, the nose goes up, once airborne, gear is retracted and one suddenly hangs half inverted at 7.000 feet with the aircraft flying downwind heading. Things simply don't get much better.



Navigation Pod AN/AAQ-13	
Weight	430 lb (195 kg)
Height	21.5 in (54.6 cm)
Width	14.0 in (35.5 cm)
Length	78.2 in (198.5 cm)

the terrain ahead, as well as having the ability to look into a turn. Once a suitable target is detected, the pilot switches to the designating infra-red sensor, which is integrated into the laser target marker in the AN/AAQ-14 pod on the right side of the intake. This shows remarkable

Our mission was to train "buddy-lase" with the second aircraft identifying and marking the target, and the leading aircraft picking up the laser reflection to guide the bomb to a direct hit. The wide angle infra-red sensor mounted on the left side of the jet-intake in the AN/AAQ-13 offers a good resolution of



Targeting Pod AN/AAQ-14	
Weight	540 lb (245 kg)
Width	15.0 in (38.1 cm)
Length	98.5 in (250 cm)



detail, down to persons, small vehicles and even window frames. The pilot marks the target with a crosshair controlled by a ball on the throttle lever, and when activating the laser, the precise GPS-based target coordinates and elevation above sea-level is displayed on the display. This feat is achieved by the navigation and weapon control system calculating the slant range with the precise coordinates of the aircrafts three-dimensional position. How well the system works, when there are less then four satellite signals available, is open, as a question on the topic are answered by the crews with comments on national security.

A demonstration of the terrain-following radar was not included in the mission, with the pilots pointing out its ability to safely guide the aircraft at altitudes down to 100ft AGL. This would make for very effective terrain-masking flight, and due to ist all weather-capability

gives unprecedented abilities for an aircraft the size of an F-16. Presently the aircraft of the 31st FW undergo an important upgrade through the fitting of NVG-compatible cockpit-lighting, as the previous displays were too bright, rendering the NVGs ineffective. In an attempt to overcome the problem temporarily the crews used illuminating sticks, which proved unusable, as they were not fixed in the cockpit and after brief flight illuminated everything but the cockpit displays.

The next important upgrade step is LANTIRN 2000, which will permit the marking and tracking of moving targets on the ground and in the air also over longer distances by using a stronger laser, thus providing the "Falcon"-pilot with similar capabilities to a helmet mounted sight, and thus narrowing the gap to last generation Russian fighters.

For their missions over Bosnia the aircraft are usually equipped with two AIM-120 AMRAAM on the wingtip-launchers, two AIM-9P Sidewinder on the outer underwing stations, either two GBU-12 laser guided bombs on the center underwing stations, or one GBU-12 beneath one wing and an unguided rocket-pod for target marking under the other, and two 22711 (600 US Gal) auxiliary fuel tank on the inner underwing stations. The centerline pylon either stays clean or in times of intensifying tensions is equipped with an ALQ-131 jamming pod for self-protection.

The biggest part of the conventional forces cutbacks seem to have passed, and further are rather unlikely, as this would seriously reduce the ability for rapid global power projection.



This is evident as one tours Aviano Air Base as there is a lot of building work going on, and a number of buildings have just recently been refurbished.

The future of the 31st Fighter Wing thus looks bright, and they seem very much determined to continue their motto: "Return with honor".