Last Production A-6 Flies Into History
The last production A-6 Intruder -- the 205th A-6E -- was formally accepted by the U.S. Navy on January 31 in Calverton, Long Island, bringing to an end the production of one of the most rugged, respected, and long-lived combat aircraft of all time.

"This weapons delivery system is unprecedented as a carrier or short-field attack aircraft," said Grumman President Jake Swirbul at the Intruder's May 1960 rollout ceremony in Calverton. "We feel that the aircraft is suitable for a variety of missions vital to the country's current and future defense preparations."

Those words proved to be prophetic. Not sleek, never beautiful, the A-6 would soon prove itself to be a masterpiece of aeronautical engineering. Equipped with its innovative Digital Integrated Attack Navigation Equipment (DIANE), the A-6 became the Navy's workhorse bomber and the Marines' primary ground support aircraft in Vietnam about a year after development and testing were completed. It would prove its amazing versatility there as well.

**A Distinguished Combat Record**

Attack Squadron 75 arrived in the Gulf of Tonkin with new A-6A's (capable of carrying up to 18,000 lbs. of armament -- bombs, mines, and missiles) aboard the USS *Independence* in 1965. The A-6 remained an important factor until America's air involvement ended early in 1973. "On almost every type of strike mission or requirement, the A-6 could do the job better than other aircraft in Vietnam," retired A-6 squadron commander Milton Beach told the *Navy Times* recently.

Special versions of the A-6 were developed for the Vietnam conflict. Beginning in 1967, the A-6B defense suppression aircraft arrived on the scene. With most of the attack systems removed, the A-6B detected and eliminated radar that controlled surface-to-air missiles. In 1970, A-6C's began operations off the USS *Enterprise*, Equipped with the Trails-Roads Interdiction Multi-sensor (TRIM), they detected, tracked, and attacked vehicles operating clandestinely at night on the Ho Chi Minh Trail -- North Vietnam's supply line into the south.

In 1971, the KA-6D refueling aircraft joined the fray. As with the A-6B, most specialized attack systems had been removed, but the KA-6D retained a secondary visual bombing capability while fulfilling its primary mission of
increasing the loiter time and mission radius of other A-6s. An electronic
jamming version of the A-6 -- the EA-6A -- was developed for the marines in
1963, and the excellent service it provided in Vietnam led to the development
of the four-seat EA-6B, which had its maiden flight in 1968.

In 1983, the A-6 flew combat sorties over Grenada and Lebanon. Operating in
the Gulf of Sidra, in 1986, A-6s participated in retaliatory strikes against Libya,
sinking a missile patrol boat and striking barracks in Tripoli.

And last winter, almost 20 years after Vietnam, the latest version of the
Intruder -- the A-6E -- again carried the bulk of the Navy's workload. The A-6
got top marks from the Chief of Naval Operations when that office issued a
report card on naval aviation's performance during Desert Storm. The Intruder
and Prowler also helped the Marines provide support that kept ground
casualties to a minimum.

The Intruder has upheld Grumman's Iron Works reputation in the fleet. "Thank
you very much for building an airplane that can withstand serious punishment
and still allow the aircrew to return home safely," wrote Lt. Mark F. Eddy to
his friends at Grumman. Despite being heavily damaged by an exploding
surface-to-air missile, Eddy's A-6 got him and his pilot safely back on the
ground.

More Than 700 Built
Over the A-6's extraordinary 32-year history, Grumman has built more than
700 Intruders. "When we won the contract, we thought that it would be
successful if we could sell 100 Intruders," Larry Mead told Plane News in 1980
on the occasion of the sale of the 600th Intruder. "We thought that we would be
building them for five or ten years."

Mead headed the Grumman team that submitted the winning design to replace
the Douglas AD Skyraider. Both Navy and Marine Corps were looking for an
all-weather, day or night attack aircraft -- something they lacked during the
Korean conflict. The Grumman design was chosen over 10 others. "One reason
was our side-by-side seating, which made it easier for the pilot and bombarding-
navigator to work together," said Mead.

The first Intruder, called A2F-1 at the time, had its first flight on April 19, 1960.
Grumman test pilot Bill Smyth later commented that the flight was uneventful --
the only problem was the need to adjust a switch that controlled the landing
gear. The plane was formally accepted by the Navy at a rollout ceremony in
Calverton a few weeks later.

The A-6E -- the current Intruder's model designation -- first flew in February of 1970 and incorporated an improved computer and a multi-role radar, replacing the A-6A's separate track and search systems. Although it retains the same model designation, the A-6E has undergone many improvements over the years. Improvements have included a better navigation system and a Target Recognition Attack Multi-sensor (TRAM) system turret (housing the Forward Looking InfraRed (FLIR) subsystem and a laser receiver/transmitter). The latest A-6E configuration, known as SWIP (Systems/Weapon Improvement Program),
was first developed in 1987. It incorporated improved self-protection, a cockpit upgrade, and the capability of firing many of the newer missiles, such as the Sidewinder, Maverick, Harpoon, and HARM. In 1990, the original-design aluminum wing was replaced by one made largely of composite materials to extend the airframe's operational service life.

The A-6F, a major upgrade, was developed but never produced (nor was a scaled-back version, the A-6G) because Congress believed the attack version of the F/A-18 was a better interim investment while the Intruder's replacement -- the Advanced Tactical Aircraft, or A-12 -- was being developed. Just over one year ago, Secretary of Defense Dick Cheney canceled that program when it was discovered to be behind schedule and over budget.