



# Starfighter

## IN VIETNAM

by  
Warren E. Thompson

**The arrival of the F-104 in Vietnam was bad news for the enemy MiG pilots...**

Lockheed's 'Skunk Works' designed and built a manned rocket known as the F-104 Starfighter. With its blinding speed of Mach 2+ and its stubby wingspan, it became the focus of public interest, fueled by media coverage of its record setting performances. There was no doubt in the minds of any potential adversary; the F-104 was the interceptor to beat. It quickly achieved the role as the USAF's primary air superiority fighter.

During the long Cold War era, it became necessary for the US and Europe to project an image of strength and readiness that discouraged aggression, primarily from the direction of the Soviet Union. A new aircraft's speed, range, ordnance loads, etc., all became part of the game. The 'faster the better' created a buffer that could keep future adversaries at bay and prevent a nuclear confrontation. The

F-104 was one of those new weapons that represented the free world. Its capabilities were taken seriously by those on the opposite side of the Iron Curtain.

By 1964, the Starfighter had earned a reputation, through its performance statistics and mock air-to-air exploits, of being the fastest operational interceptor in the world. This led to the fact that the F-104C could deploy quickly to any hot spot in the world where air

superiority was a must. One of the first of these 'opportunities' developed in Southeast Asia in 1965...

### Rising Star

When the 'Rolling Thunder' bombing strikes against North Vietnam began in early 1965, the war heated up rapidly. As a result of some unforeseen successes by enemy MiGs against US fighter





opposite left: The F-104 provided valuable protection for EC-121 operations out over the Gulf of Tonkin. These escort missions usually involved three flights of four with refueling support from two KC-135s. The duration of these missions was usually between two and five hours. (Robert Craine)

above: An F-104 operating out of DaNang AB is parked next to 509th TFS's F-102s. The 'Deuces' were deployed around several airbases in South Vietnam and Thailand for air defense purposes. (Bob Donaldson)

below: The F-104 fighter force proved to be very versatile in Vietnam. Although it was labeled as a high mach fighter interceptor, it was capable of delivering a variety of ordnance. This impressive array is pictured at George AFB sometime in 1963. (Ray Holt)

bombers, the need for a fast interceptor escalated.

The MiG pilots were directed in by their ground control intercept (GCI) system and hit without warning. As a result of this, the US sent over its EC-121s to improve its own coverage and to alert a striking force that enemy aircraft were in close proximity. At the same time, Tactical Air Command (TAC) was asked to send F-104s into Southeast Asia to provide a 'MiG screen' to protect the vulnerable and extremely valuable EC-121s.

It was the 479th TFW, based at George AFB, California, that got the call to deploy to the Far East. Kung Kuan AB on Taiwan was designated as the main operating base for the F-104s and they

would rotate in and out of Danang AB in South Vietnam. Twenty-four aircraft from the 476th Tactical Fighter Squadron made the flight to Taiwan and out of this total 14 would be maintained at Danang by rotation every 10 days.

Captain Tom Delashaw, one of the 476th Squadron pilots that flew numerous combat missions states: 'The effect of the F-104 on North Vietnam's MiG operations was immediate and dramatic. They avoided contact with our fighter bombers that were being covered by us and they also gave the EC-121s a wide berth. Much to our frustration, during the entire deployment of the 476th, only two fleeting encounters between the F-104 and MiGs occurred. Many of the MiGs







were based on Hainan Island (Peoples Republic of China).'

The Starfighters got right into the action and they kept up a steady pace because of the demands put upon the squadron. With the GCI system provided by the Soviets, the North Vietnamese were well aware of the F-104's presence in theater. Lockheed Technical Representative, Ben McAvoy stated in one of his reports: 'A seven day work schedule has enabled the squadron to fly 12 aircraft as many as 90 hours a day in

support of the mission. Crew Chiefs, maintenance and munitions personnel work in shifts around the clock. When ground temperatures reach 106 degrees on the flightline at DaNang, these dedicated troops take a break in the only shade there is — under the wing of an F-104. During the 476th squadron's tenure in Vietnam, they maintained an outstanding in-service rate of 94.7%. The credit for this achievement went to the maintenance troops.'

**above:** A replacement F-104 is shown here mixed in with three F-5 Freedom Fighters as they form up under a KC-135. The flight was en route from the states over to SEA in January 1967. The camouflage paint scheme was standard on most fighters serving in theater. (Ed Barnes)

**below left:** The F-104 was known for its 'short legs', but with tanker presence, it could range out and be very effective on any mission it was assigned. This 435th TFS Starfighter is refueling from a KC-135 somewhere over the Pacific Ocean en route to Southeast Asia. (Morgan Lilly)

## Multi-talented

With the threat of MiGs greatly diminished by the presence of the F-104, PACAF was busy in its efforts to find other ways to utilize the aircraft's talents. With the air superiority tasking 'out the window', the pilots from the 476th TFS began ranging out into the weather reconnaissance and ground attack roles. These occurred toward the end of the squadron's deployment obligation and it was its replacement squadron (436th) that became well versed in the new roles. Captain Delashaw continues: 'Weather recce missions normally involved two F-104s, which flew near enough to target areas in North Vietnam to determine the pre-strike weather conditions without revealing the target's identity. These missions were always supported by the tanker force.'

'Before the 476th finished their tour they had flown 21 strike and Triple-A suppression sorties against targets in North Vietnam, but the majority of their







left: The first major deployment of F-104s to Southeast Asia ended in December 1965. This shot was taken at Clark AB in the Philippines in December on the return flight back to the states. These Starfighters were assigned to the 435th TFS. (Darrell Hatcher)

ground attack sorties were in-country close air support (CAS) missions that were under the control of airborne forward air controllers. This brief period opened some eyes in that this pure-bred air superiority type earned high marks for its ability to put ordnance in on specific targets with pinpoint accuracy.

The 436th TFS officially relieved the 476th on 11 July 1965 and although it flew a limited number of MiG CAPs, its role was centered on that of close air support. Within three weeks of settling in at DaNang AB, the squadron was ordered to keep four Starfighters on 15min alert, which allowed it to provide quick reaction close support for any friendly ground forces that needed it.

This commitment lasted until the latter part of September when the escort missions again became the priority. The

436th also became involved in Interdiction and ResCAP missions over North Vietnam. When the squadron's deployment ended, records show that of the F-104 combat sorties flown during this period, 56% were of the ground attack type. It should also be noted that for the length of its deployment, the 436th did not encounter any of the Chinese or North Vietnamese MiGs. This, again, was proof that the enemy had great respect for the F-104 and avoided direct contact.

The 435th TFS arrived at DaNang AB on 11 October to relieve the 436th and once again there was a shift in types of

below: The heat and humidity at Danang and Udorn was hard on the maintenance crews as they struggled to keep all of their F-104s on the in-service list. Ground temperatures often hit 106 degrees. This portable 'umbrella' kept the cockpit cool and with its rollers, it could be moved to accommodate any portion of the aircraft that was being serviced. This shot was taken at Udorn in 1967. (Roger Wichers)

bottom: The main operating base for F-104 operations in Vietnam was Kung Kuan AB in Taiwan. These 435th TFS Starfighters are lined up on the ramp in January 1966. (Darrell Hatcher)

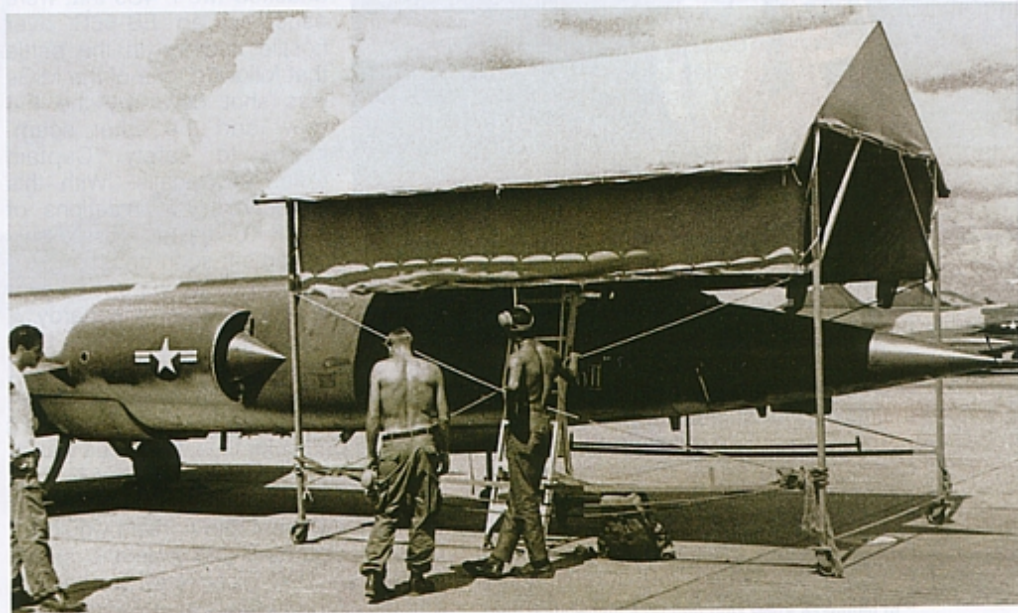
missions flown by the F-104. Although only 12 close air support missions were flown, the unit flew 407 combat sorties in the escort or MiG CAP role. Basically, there were two types of aircraft that depended heavily on escort from the Starfighters — the EC-121s and C-130Es. The EC-121s required an

#### Maj M.M. 'Duke' Harris Maintenance Officer 435th TFS

'As we began combat operations out of Udorn AB escorting the heavily loaded F-105 into North Vietnam, another serious problem impacted our mission capability and that was the SAM defense system. Everyone knew they were under construction and that missiles had been delivered, but it was politically unacceptable to strike at these installations until Intelligence could assure that no foreign nationals were present. It was a serious mistake! Both the F-105s and F-4Cs provided some degree of protection to us because they were equipped with ECM pods that could negate the SAM guidance capability. The F-104 had not been seriously considered for this capability because no one was sure how we would carry it.'

The F-4s and F-105s could load these pods on their ordnance MERS and TERS without sacrificing much of their mission capability, but the Starfighter did not have a bomb rack designed for it. In a sense, it put our crews at much greater risk to SAMs than the other squadrons conducting air ops over North Vietnam.

We were re-tasked from escort duties to that of the air-to-ground mission. The F-104 was a very short-legged aircraft without much air-to-ground capability. It could be configured with either 500lb GP bombs or two (19 each) 2.75in rocket pods in addition to 1,500 rounds of 20mm ammunition. Its short legs could be rectified by a quick turnaround capability. The Starfighter, although available in very limited numbers in SEA, did a credible job and its pilots were some of the best in the USAF!







escort of flights of four that rotated in and out from the tankers to the areas where they were operating. The C-130Es did not require as much protection (a flight of two F-104s rotating). This coverage was maintained for at least 10 hours per day.

The 435th TFS's duties in SEA ended rather abruptly when it was ordered to return to the main base at Kung Kuan on 21 November. From there, it would prepare to return stateside. It had been decided that the TDY squadrons would be replaced by units that were permanently based in South Vietnam or Thailand. An example of this was when the 390th TFS (F-4Cs) took over the escort duties from the 435th out of DaNang AB. Once again, the F-104s were sent back home to George AFB where they had been prior to the initial deployment. The last of their equipment and personnel arrived back home on 25 December which was the start of the 1965 Christmas bombing halt over North Vietnam.

### The beginning of the end

During the early months of 1966, MiG activity once again began to show a marked increase. This time, the bar had been moved up a notch when the MiG-21s began to be seen flying over



North Vietnam on 23 April and two days later the inevitable happened; two MiG-21s attacked two F-4Cs that were escorting an EB-66C over hostile territory. In the battle that followed, one of the MiGs was shot down by the F-4 crew and the other scampered to safety. Captain Delashaw recalls: 'With this encounter, the limitations of the F-4C and its missile-only armament soon caused great

concern to the 7th AF. Air superiority over Southeast Asia was again in jeopardy. A few days later, a request for more F-104s was approved and on 6 June, eight Starfighters from the 435th TFS landed at Udorn AB in Thailand.'

At this particular time, the F-104 was in the process of being phased out by TAC in favor of the F-4 Phantoms, so with this deployment, the 435th fighters would be based at Udorn AB and under the control of the 8th TFW. Their first assignment

above: Capt Mike Korte's final combat mission is being celebrated by members of the squadron. On the left is Col Ed Gaines. This was taken at Udorn RTAB in Thailand in 1966. (Norm Lockard)

left: Ben McAvoy was the Lockheed Technical Representative that served with the Starfighter Squadrons both at DaNang and Udorn. His problem solving talents and his meticulous records played a big part in the F-104's success in Southeast Asia. (Mike Korte)

below: Captain Mike Korte, one of the F-104 pilots that logged numerous hours of cockpit time in SEA, poses in the cockpit of his fighter at DaNang. This was in late summer of 1966 during the Starfighter's second combat deployment. With these supersonic fighters patrolling on a CAP, enemy fighters made no effort to interfere into their patrol areas. (via Mike Korte)

involved sharing escort duties for the F-105s, with the 8th TFW's F-4Cs, over North Vietnam. This brought about another threat to the F-104s in the form of surface-to-air missiles (SAMs) as the new escorts were not equipped with RHAWS.







### Capt Tom 'Sharkbait' Delashaw Pilot F-104 Vietnam

'During their second deployment to SEA, the F-104s of the 435th TFS had flown a total of 5,306 combat sorties for a total of 14,393 combat flight hours. Due to a shortage of parts and the unrelenting sortie rates, the aircraft in-commission rate dropped from a high of 85% to a low of 62%. Nevertheless, despite their tired birds, the 435th maintained the reputation of the F-104 among the warriors in SEA. If the F-104C is judged against other aircraft types for its ability to sustain battle damage, to deliver large bomb loads or to conduct operations in bad weather, the Starfighter rates as an also-ran! If, however, the '104' is judged for its ability to deter MiGs, to ensure the safety of the aircraft entrusted to its escort or to outperform any aircraft in existence at the time, the 'Zip4' is unrivaled. The F-104 had a mission in SEA; air superiority... a mission it performed brilliantly!

(Radar Homing and Warner) gear that gave early warning of a SAM launch. However, the F-105 was so equipped and could provide this warning to the F-104s.

This tasking was to be short lived when two F-104s were shot down by SAMs, all within an hour of each other. This led to a

re-evaluation that the 'Thud' escort tasking was unnecessary because of the absence of a serious MiG threat and this was attributed to the altitudes and speeds with which the 'Thuds' executed their mission. Thus, the Starfighters were withdrawn from escort duties.

Immediately following this decision, the F-104s were assigned to a primary ground attack mission that would keep them within the confines of the lower Route Pack numbers (South Vietnam and Laos). Between this date in late August through 20 October, the Starfighter pilots suffered some grim setbacks. They lost three pilots and aircraft over Laos. Two of these losses were to Triple-A and the other was to a surface-to-air missile. This raised questions about the vulnerability of the F-104 in the ground attack role. In early December, they were moved back into the escort mission.

Late in the month, all of the F-104s in theater received the APR-25/26 RHAW gear. This enabled them to fly deep into North Vietnam and on 2 January 1967, 16 Starfighters participated in the well known Operation 'Bolo'. However, these little supersonic fighters were not utilized to intimidate and engage the MiGs, but, instead, they positioned themselves to protect the strike force (F-4s) as they egressed from their target areas. These missions continued until mid-July 1967, when the Starfighter force was pulled out of SEA and returned Stateside. From here the aircraft was phased out of active USAF service.

The pilots that flew the Starfighter remember it as one of the hottest fighters they ever strapped on. If it had been involved in an all out war that required numerous air-to-air battles, the Starfighter would have established itself as the fighter to beat! □

left: A thirsty Starfighter takes on fuel from a KC-135 somewhere over Vietnam. (Roger Wichers)

below: During the final few months of the 435th Squadron's deployment to Udorn, some of their field maintenance technicians were assigned to the host 432nd TRW. This group picture is what was left of the squadron at the time.

(Duke Harris)

