

## 146 AIR REFUELING SQUADRON



### MISSION

### LINEAGE

345 Fighter Squadron activated, 1 Oct 1942

Inactivated 7 Nov 1945

Reconstituted and redesignated 146 Fighter Squadron and allotted to PA NG, 24 May 1946

146 Fighter Squadron (SE) extended Federal Recognition, 18 Jun 1948

Redesignated 146 Fighter-Bomber Squadron, 1 Nov 1950

Redesignated 146 Fighter Interceptor Squadron, 1 Oct 1952

Redesignated 146 Fighter-Bomber Squadron, 1 Dec 1952

Redesignated 146 Fighter Interceptor Squadron, 1 Jul 1955

Redesignated 146 Tactical Fighter Squadron, 12 Apr 1975

Redesignated 146 Air Refueling Squadron, 16 Oct 1991

### STATIONS

Bushey Hall, England, 1 Oct 1942

Duxford, England, Oct 1942 (ground echelon, which was formed in US, was at Harding Field, LA, until 2 Nov 1942)

Casablanca, French Morocco, 19 Nov 1942

Oujda, French Morocco, 6 Jan 1943

La Senia, Algeria, 14 Feb 1943

Maison Blanche, Algeria, 16 May 1943

Bone, Algeria, 28 Jun 1943

Rerhaia, Algeria, 17 Jul 1943

Sardinia, 18 Nov 1943 (operated from Corsica, 6 Feb-12 Mar 1944)

Pomigliano, Italy, 1 Jun 1944

Tarquinia, Italy, 25 Jun 1944  
Pisa, Italy, 3 Dec 1944-14 Jul 1945  
Seymour Johnson Field, NC, 25 Aug-7 Nov 1945  
Pittsburg, PA

## **ASSIGNMENTS**

350 Fighter Group

## **WEAPON SYSTEMS**

### **Mission Aircraft**

P-39, 1942  
P-400, 1942  
P-38, 1943  
P-47, 1944  
F-47  
F-51, 1951  
F-84, 1954  
F-86, 1957  
F-102, 1961  
TF-102  
A-7, 1975  
KC-135, 1991

### **Support Aircraft**

## **COMMANDERS**

LTC William Shomo  
Maj Albert Starr  
LTC James Hendrickson  
LTC John Pfalzgraf  
LTC Richard Westerhoff  
Maj Jere McKee  
LTC Richard Law  
Maj Wallace Green, Jr.  
LTC John Aranyos  
Maj Edward Slavin  
Maj George McCrory  
Cpt Frank Connelly  
Cpt Ivan Allen, Jr.  
Maj Percy Lewis

## **HONORS**

### **Service Streamers**

## **Campaign Streamers**

Tunisia  
Sicily  
Naples-Foggia  
Rome-Arno  
Southern France  
North Apennines  
Po Valley  
Air Combat, EAME Theater

## **Armed Forces Expeditionary Streamers**

## **Decorations**

Distinguished Unit Citations  
Italy, 6 Apr 1944

## **EMBLEM**



## **MOTTO**

## **NICKNAME**

## **OPERATIONS**

Combat in MTO, Jan 1943-2 May 1945.

Although authority had been received to organize units in the Pittsburgh area effective 17 Jun 1947, the primary prerequisite for federal recognition, in addition to manpower, was adequate facilities to conduct training and to maintain and store equipment. Pittsburgh was not able to satisfy the Chief, National Guard Bureau with adequate facilities until 1948.

With the organization of the 146<sup>th</sup> Fighter Squadron, LTC William A. Shomo was appointed

Commander. In September, Lt Col George J. Ola was assigned Air Instructor for all Pittsburgh units. With the assistance of Col Ola and Mr. Clifford Ball, President of the Aero Club of Pittsburgh, Col Shomo conducted an intensive recruiting campaign during the years '46 and '47. As officers and airmen signed on, regular training meetings were conducted at the Air Force Reserve facilities.

With no facilities at the Coraopolis Airport, it became necessary for the State of Pennsylvania with the assistance of the Aero Club of Pittsburgh and Mr. Clifford Ball, to negotiate a twenty-five year lease with the County of Allegheny for the construction of permanent facilities. A lease for 70 acres on the southeast portion of the Greater Pittsburgh Airport was completed in 1948.

On 1 Apr 1949, the first Federal Recognition Inspection was conducted at Pittsburgh. The 146th Fighter Squadron, with an assigned strength of ten officers and twelve airmen, had been participating in non-pay drills since 1946. Under the command of Maj Albert B. Starr, the 146th Fighter Squadron was granted federal recognition retroactive to 18 June 1948.

Federal recognition was also extended to the Utility Flight, 146th Fighter Squadron and Detachment A, 212th Air Service Group on 22 April 1949. With the inactivation of 11th Air Force, all administrative and training responsibilities were assigned to 1st Air Force.

Construction of a home to house the 112th Fighter Group and assigned units began in early 1949 prior to federal recognition. Top priority was given to the completion of the 146th hangar. Construction was also started on the Administration Building, Base Supply Warehouse and Motor Vehicle Building. It was a first for the National Guard Bureau to construct a total installation at a cost of 2.5 million dollars with Guard Bureau funds.

The first UE aircraft, F-47N began to arrive. With the arrival of aircraft, the only activities conducted at the base were flying and maintenance. In the beginning, parking ramp and taxiways were the grassy areas surrounding the 70 acres. Tents, wooden shacks and truck units served as operations/ maintenance offices, storage areas, lunch rooms etc. Aircraft maintenance was accomplished under many handicaps imposed by the lack of facilities and equipment. With no hangars, most aircraft maintenance was done out in the open air in grassy parking areas which became mud puddles with every rain. When hangar space was available, aircraft maintenance was performed using the Air Force Reserve facilities.

During the early phases of operation, Unit Training Assemblies were held at the National Guard Armory at Coraopolis, Pennsylvania, which proved inadequate for efficient training of an organization the size of the Fighter Group and supporting units. Unit Training in those days consisted of two hours of "drill each Wednesday evening.

The first annual training for the Group and assigned units was conducted on 13-28 August 1949 at Dover Air Force Base, Delaware. The fighter squadron arrived at Dover with twelve F-47N's, two T-6's, one C-47 and one B-26. A Wing total of 1799 officers and airmen attended annual training. Of this total, 51 percent were World War II veterans. Throughout the

encampment, primary emphasis was placed on aircrew training and qualification. Flying was done from sunrise to sunset in order to permit the fullest possible use of available aircraft. Flying included air-to-air gunnery, air-to-ground dive bombing, rocketry, night and formation flying. All training was considered satisfactory for the units' first deployment.

The period between summer encampments was utilized to bring the units to full strength and to increase the proficiency of its members. Flying and ground training progressed as rapidly as possible with all personnel making the best of limited facilities even to the point of mechanics bringing their own tools from home to effect the maintenance of the aircraft. Flying hours steadily increased and various types of flying training were introduced.

In February 1950, the Pittsburgh units underwent their first Annual Federal Inspection resulting in an overall Satisfactory rating

146th hangar was completed and occupied to a limited degree for office, training and storage space, along with maintenance facilities. was at this time that all training which was being conducted at the Coraopolis Armory would be relocated to Greater Pittsburgh Airport. This allowed all the personnel of the 112th Fighter Group to meet at the same time. This in itself, was a marked improvement in training. With personnel now working around aircraft, whether mechanics, clerks, cooks or supply personnel, all now had a sense of belonging to an air unit and all could feel a sense of pride every time the aircraft would taxi out to complete a mission.

In June 1951 the 146th and 147th Fighter Squadron converted Unit Equipped aircraft from the F-47N to the F-51H. The unit mission, defense of eastern US, remained the same.

With the third annual field training encampment scheduled for 11-25 August, much work was necessary to prepare both pilots and maintenance personnel to satisfactorily perform with the newly-assigned aircraft. The Pittsburgh based units arrived at a new permanent training site, Spaatz Field, Reading, Pa., with their new F-51's, T-6's, and C-47's. All training during this period was scheduled to conform to Continental Air Command (CONAC) Training Directives. Flying training was concentrated on aerial gunnery being fired at the Ocean City Range, and Ground Controlled Interceptor missions. A total of 44 aircraft were stationed at Spaatz Field thirty-three F-51H's; four C-47's and seven T-6G's. With the newly assigned F-51's, the 146th flew 370 hours and the 147th flew 395 hours.

On 1 October, the 112th Fighter Group and attached squadrons, the 146th and 147th, was redesignated Fighter Interceptor Group and Squadrons, with no change in mission. This action was premature and was brought about by a mix-up in signals. On 1 December, all units were again redesignated Fighter-Bomber.

The beginning of 1953 saw the Pittsburgh-based fighter units depart for a warmer climate and better flying weather. The redesignation of the 146th and 147th from Interceptor to Bomber required all aircrew members to now become proficient in use of bombs. The training

conducted at Eglin AFB, Florida, in February 1953, included the use of bombs, rockets and .50 calibre ammunition for both air-to-air and air-to-ground firing. Upon completion of training, both units returned to Pittsburgh. A fourth Annual Federal Inspection was conducted and again yielded an overall "Sat."

Conversion to the jet age began in November, 1953, with the arrival of one T-33A for each unit. Since none of the assigned pilots or mechanics had any previous jet fighter experience, everyone started from ground zero, but with great enthusiasm.

In July 1955, the unit mission was officially changed to Fighter Interceptor and placed under the 26th Air Division, Air Defense Command, for operational control of training. Operating with the ADC Ground Control Stations and air-to-air gunnery training was primary.

December 1957, the Base activity increased above its normal pace preparing for the pending dual conversion. The 146's transition the F-86L was of even greater proportions and its teething experience into jet aircraft. The pilots were being introduced into the all-weather operation with an afterburning engine, controlled by the magic of an Integrated Electronic fuel Control (IEC) system, and radar-equipped re control system, capable of releasing twenty-four rockets at an unseen target. To accomplish that on instruments was mind-boggling to a day fighter pilot. There was an immediate noticeable interest in instrument flying procedures.

There were mixed feelings among the pilots concerning the move from the F-84F to the F-86L. The mechanics and specialists were quick to recognize that they, too, had a long row to hoe. The most glaring challenge in the maintenance field was the fire control system and the rather complicated engine fuel control.

The overall conversion was well supported by higher headquarters. An Air Force Field Training Detachment (FTD) was provided in a timely manner. Well-qualified technical representatives of the manufacturer were in place early on to assist in engine and radar training for ground and aircrews. Additional operating space was sorely needed to accommodate new functions; funding was not available. Self-help projects effectively modified the existing facilities, even though some areas were extremely confined. The ADC 42nd Fighter Group stationed on base was inactivated concurrent with our conversion. Most of their aircraft and support equipment was merely moved across the runways to the ANG area. The Air Force Reserve moved into the 42nd area with cargo aircraft and had no requirements for several buildings which were made available to the ANG. By lease arrangement, the Guard had the sole use of the simulator, rocket storage and test building, and the four alert hangars. Daily commuting around the airport perimeter was an inconvenience; all unit functions could now properly support the mission.

Two highly experienced F-86L Instructor Pilots were detached from the 42nd for a ninety-day period. Initial maintenance cross-training was also provided by 42nd maintenance personnel. The 146th pilot transition was in progress by mid-December. The maintenance

guys were going full bore in their learning process. special note must be made of two specific areas, i.e. radar and engine. The total base experience with electronics at that time would barely fill a thimble. It consisted of some civilian night courses, and the experience gained by the rather simple radar ranging device for the F-84F gun-sight. Sgt Matthew Blatnik, currently a member of the 171st, was then the chief of the FTD radar section. Off-base courses were not available, so he conducted a class of Guardsmen interested in cross-training to the electronics field. Even though this was very time-consuming, they all persevered, with most of the personnel who completed the course forming the backbone of the radar section.

The engine specialists, and especially the IEC troops, followed a similar routine. An engine test stand was required to run and trim the engine, but funding was not in sight. Undeterred, the engine guys designed and constructed a portable engine test stand by locally fabrication and mounting an engine stand with an enclosed control cab on a forty-foot flat-bed trailer. Their device had all the capabilities of a fixed Air Force test stand, with the additional dimension of being portable, to support annual training deployments. This was a first. One more Noteworthy item which illustrated individual initiative was the modification of the newly acquired F-86D simulator to that of the L model cockpit configuration. ADC had recently completed an extensive cockpit modification of all D models. This mod had rearranged the instrumentation, as well as added several new gauges and controls. To have pilots practice in an obsolete cockpit configuration, under simulated conditions designed to improve pilot familiarization, defeated the original purpose of simulator training and was counterproductive. Funding for upgrading the equipment was out of the question. Therefore, the ANG simulator troops, assisted by the civilian tech rep, designed a rewiring scheme, and, with thirty dollars for electronic parts, modified the simulator to the L configuration exactly duplicating factory-modified equipment.

In November 1957, the Annual CONAC Inspection visit was satisfactorily completed. The unit was also alerted to another aircraft change. The 146th was being converted to the F-86L allweather fighter while the 147th was to convert to a later model F-84F. As it turned out, the change in the 84F models was short-lived. In March 1958, the last "Hogs" departed for other ANG fighter units and the 147th was also equipped with the F-86L.

In the Fall of 1960, the 146th was overwhelmed with the good news that the F-102 was to be the next aircraft. After working in the ADC mission area for three years, the unit was ready, and certainly capable of, taking on the Deuce.

The 146th, being the last of the ANG units to enter the conversion, was found wanting in both aircraft and its support equipment. A severe shortage of support equipment was generated when seven ANG units were equipped with the assets of five Air Force squadrons. Several years passed before all critical equipment shortages were satisfied. The aircraft received were in need of extensive modifications and alterations to the fire control systems before they could become fully operational.

The first full year operating the aircraft was 1961, and was largely devoted to upgrade training and

establishing operating procedures tailored to ADC standards. The last aircraft arrived in March. The NGB funded numerous depot level aircraft modifications including a paint program greatly enhancing the appearance of the fleet. No F-102 simulator was available and therefore all pilots were required to complete their initial and refresher training at Air Force simulators in Wisconsin and North Carolina, a time-consuming and expensive exercise. This was also the first year of annual training being conducted at home station.

On 15 May 1961, all ANG units disengaged from all official activities with Continental Air Command and now were gained by specific major commands. This was a progressive and positive step. Air Defense Command (ADC) now was responsible for supervising the training of the 112th and also for inspecting the unit for proper compliance with their standards.

In August, the first inspection by ADC was satisfactorily completed and the 146th again started the runway alert program armed only with the 2.75 inch rockets. Suitable missile storage space, plus late arrival of missile checkout equipment, delayed the unit missile training phase; therefore, live missile loading was temporarily postponed. The unit was reported operationally ready on 1 September 1961.

The initial reaction by many of the interceptor pilots of news of the conversion from the F-102 to the C-119 was one of gloom and doom. Several requested transfers to the 146th and continued in the ADC mission. A number of pilots actually terminated their affiliation with the unit on the basis that the added time required to qualify as a multi-engine pilot would excessively conflict with their civilian careers. Certainly a most difficult decision. After a period of reflection, the majority of the pilots cinched up the saddle and attacked this new challenge with the same zeal exhibited entering the jet age.

The conversion training program was rather simple and straightforward. Mobile Training Detachments for the C-119 were non-existent. The initial cadre of three pilots and three aircraft mechanics, now designated Flight Mechanics, attended ground training and simulator courses with the ANG's 167th ATS at Martinsburg, W VA. Aircrew checkout instruction was provided by the 140th ATS at Olmsted AFB, PA. The aircraft maintenance personnel were provided three weeks of familiarization training working with 140th maintenance people. Upon completion of eight transition flights at Olmsted, this handful of aircrews ferried the original eight aircraft to Pittsburgh. In the meantime, the ADC runway alert commitment was terminated on 1 May and the 86 drivers were having their last fling ferrying the 86L's to the aircraft storage site in Arizona.

Shortly after 10 o'clock, they set aside pencils, stowed wrenches, drifted to the flight line. And beyond the stately row of black-tailed Deuces, above the now empty alert hangars, with the hard whine of a new turbofan engine, Pittsburgh's first A-7D appeared, escorted by two F-102s.

Squadron pilots had also begun conversion training. A few were already flying the A-7, having entered a three-month course at Myrtle Beach AFB, SC, at the end of January, with

one slated to remain for Instructor Pilot training. But most pilots went to England AFB, Louisiana, for a new Air Force advisor and two active duty IPs were in place and home station training began in earnest. Thirteen pilots were selected for accelerated checkouts, so the unit could achieve Limited Combat Capability as quickly as possible.

At ranges as far as New Jersey, New York, Michigan and Indiana, they were introduced to bombing and strafing, both with the old manual "iron sight" and the new computer. And along the way they learned air-to-air "dogfight" maneuvering and the even more terrifying art of aerial refueling with the Pittsburgh tankers.

How quickly did they learn? Most of the unit's 20 A-7s were transferred to Pittsburgh around June. In August the 112th deployed to Phelps-Collins Field, the ANG training site near Alpena, Michigan, for two weeks of summer camp. There the 146th TFS swept a "Turkey Shoot" bombing and strafing competition hosted by the 121TFW for its A-7 and F-100 squadrons.

The difficult conversion process continued throughout the fall and winter, hampered by distant ranges, engine problems, icy weather and associated hydraulic failures in aircraft which had never before faced northeastern cold.

The squadron returned to England AFB on 4 April 1976 for weapons training, both ground school and the first airborne deliveries of heavyweight munitions, in this case concrete-filled 500-pound Mark-82 bombs.

In July of 1978, most of the unit again deployed to Alpena for summer camp. At the same time, four pilots, three A-7s and six crew chiefs augmented South Carolina's 169th Tactical Fighter Group on another overseas trip, Operation Coronet Teal to Wittering Royal Air Force Base, United Kingdom.

1980 began with "Snowbird East," a winter deployment to Patrick AFB, Florida, near Cape Canaveral. Fourteen A-7s, 25 officers and 102 enlisted personnel flew south on 19 January for two weeks of exercises supporting the FACs of the 549 TASTS.

Coronet Cove rolled round once more, as the squadron deployed to Panama 14 March-12 April 1981. This time Pittsburgh pilots were augmented by three 127TFW crews from Selfridge ANGB and supported by 11 tons of cargo. Annual training was conducted at now-familiar Alpena from 8 to 21 August. Exercises during the year included Sentry Castle 81, a joint services maneuver 11-22 July which featured close air support at Fort Drum, plus aerial refueling and DACT over Lake Ontario, and an October Turkey Shoot, hosted by the Rickenbacker wing for all A-7 squadrons.

By the summer of 1981, flying had been cut back considerably as a consequence of a strike by FAA controllers. Night flying ended and weekday flights were slashed in half. Fewer restrictions were placed on weekend sorties, which were increased to 20 a day to take up the slack. Long delays were common, as aircraft lined up for the few take-off slots available.

Gradually, the situation would improve, until normal operations were possible many months later.

Long frustrated by the long flights needed to reach available bombing ranges, the 112th began as early as 1977 to search for a closer target. In 1978 a fulltime technician position was established to develop an air-to-surface range on the Army National Guard reservation at Indiantown Gap. The first practice bomb was air delivered two years later. Coupled with a low level training route much wider than most, over terrain similar to central Europe, the new facility quickly became invaluable.

The squadron had continued to evolve, with a new generation of pilots coming onboard. The fall of 1982 saw a major local checkout and upgrade program for new flight leads and instructor pilots. DACT checkouts began with F-4 units from Fort Wayne and Wright-Patterson AFB.

In the spring of 1983, word came that the 112th would be among the first to receive the new two-seat version of the SLUF the A-7K. The "K" was designed to increase training efficiency, but retained full combat capability.

In exercises, aggressor pilots had noted that the green camouflaged A-7s were tough to find from above, but when they were cranked into high bank turns for ridgeline crossing or mutual support, the SLUF's white belly highlighted its position. Over the years the paint job went to "wraparound lizard" and then to a non-glossy mottled design to reduce sun-sparkle.

For the unit, 1972 was a relatively quiet year. Personnel were disappointed at having to perform their fifteen days annual training at home station due to the closure of Otis for training. Those with wanderlust had the chance to participate in several deployments to Langley AFB, Virginia, and Tyndall AFB, Florida.

On October 1, 1993, the 112th ARG was deactivated resulting in the loss of 305 military and 65 civilian positions. This resulted in the 146th once again reuniting with the 147th under the same flag.

The 146th FS was established at Pittsburgh Airport with P-47Ns on 18 June 1948. It became the 146th FBS in 1950 and equipped with F-51Fs in 1951. It received four F-86As for a short period in 1954 before receiving F-84Fs. In 1955 it became the 146th FIS and converted to F-86Ls in 1957. F-102s were received in 1960 and in April 1975 the Corsair was acquired and the squadron was redesignated the 146th TFS. The A-7D/Ks were replaced by KC-135Es in 1991.

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USAF Unit Histories  
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Sources

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