06-Jan-67

The seventh F-105 RTU Class 67ER graduated at McConnell AFB KS. The class started on 22 August 1966 with 16 pilots. It was named "The Orphans" since it was assigned to three different fighter squadrons in the 23 TFW. It consisted of 1 Lt Col, 6 Majors, and 9 Captains. The class deployed 16 F-105s for conventional weapons delivery training to George AFB CA between 2 - 17 December 1966 with the 563 TFS, which had been reformed on 3 November 1966. The squadron commander was Lt Col Joe Pickett. The class completed required training on 16 December 66 but delayed graduation until 6 January 1967 due to the holidays.

The class pilots and their SEA squadron assignments were:

Lt Col Obadiah A. Dugan - 357 TFS

Maj Donald F. Fryauf - 34 TFS

Maj Wray C. Lasswell - 13 TFS

Maj Albert J. Lenski - 333 TFS

Maj James N. McClelland - 34 TFS

Maj Dewey Lee Smith - 34 TFS

Maj John R. Whaley - 34 TFS

Capt James E. Chambers - 421 TFS

Capt David H. Coats - 13 TFS

Capt Tony A. Cox -?

Capt David W. Forgan - 34 TFS via Ryan's Raider training at Yokota

Capt Jackie E. Moothart - 13 TFS

Capt David L. Nichols - 357 TFS

Capt Robert B. Piper - 421 TFS

Capt Robert Allan Stewart - 34 TFS via Ryan's Raider training at Yokota

Capt Thomas T. Walker - 34 TFS via Ryan's Raider training at Yokota

23 TFW History, Jul - Dec 66, USAF microfilm MO554.

31-Jan-67 6296

Capt Charles C. "Clint" Murphy, 469 TFS, 388 TFW, led an F-105 flight into RP-1, North Vietnam. The lineup was:

#1 - Capt Murphy flying 59-1759 for 2:15 on his 57th mission.

#2 - Maj Robert W. MacDonald

#3 - Capt Winfield Scott Harpe

#4 - Capt David W. Forgan

"This was to be Major MacDonald's and Forgan's first mission, so the Operations Officer wanted me to give them a thorough briefing. We briefed for about two hours before the flight. It was scheduled to be a Combat Proof in southern Laos. However, when we got there the weather was clear, so we were sent to work with a FAC. When we got to his location, he already had a flight of F-105s working. They were bombing a sand bar in the middle of the river. The FAC said it looked as if it might be used as a ford across the river. When he finished with them, he called us in on a large clump of trees between two villages. The FAC said that a small road disappeared into the clump, so there might be a truck inside. I spotted what he wanted us to hit, but the rest of the flight didn't have it in sight. I instructed them to stay high while I bombed it to point it out for them. After I bombed it, the others put their bombs directly into the trees. Number 4 didn't hold his pickle button down long enough to allow all his bombs to release, so he had to jettison the ones left about one mile north of the target. The FAC said that 75% of the ordnance had hit where he wanted it, but there wasn't anything there."

Clint Murphy, combat log.

04-Mar-67 924

In an attempt to meet the success of the Navy's A-6 aircraft with their superior radar, HQ PACAF "tasked the 41st Air Division [41 AD] at Yokota Air Base, Japan, to develop a training program for twenty-five F-105 pilots, which would qualify them to fly all-weather combat missions in North Vietnam."

The missions would be flown by the 388 TFW from Korat, RTAFB, Thailand. Upon their arrival at Korat on 24 April 1967, the planes and crews would be assigned to the 34 TFS and then, on 1 June 1967, to the 13 TFS. Once assigned to the 13 TFS, the Ryan's Raider dual-pilot crews were replaced by Wild Weasel crews and the Ryan's Raider pilots were released to fly strike missions in F-105Ds.

Under project "Northscope", technicians of the 441 Armament and Electronics (A&E) Maintenance Squadron at Yokota began modifying four F-105F aircraft. "Within a hectic three days, the unit planners at Yokota developed a plan and initiated ground training on 7 March. The first ten students were instructor pilots assigned to the 41st [Air Division] who had previously volunteered for SEA duty. These pilots completed the training on 17 March in time to serve as the front seat pilots for eight F-105 replacement strike pilots that had been diverted from their assignments to Korat and Takhli in Thailand." ("A Special Report on 'Ryan's Raiders', by Maj Albert L. Michael for Project Corona Harvest, Jan 1970, pgs 3 - 4.)

The first four Ryan's Raider crews, all pilots, were:
Capt Donald Lester Heiliger with Maj Benjamin Marksbury Pollard
Capt Nicholas J. Donelson with Capt David W. Forgan
Capt Peter Potter Pitman with Capt Robert Allan Stewart
Capt David Burney with Capt Aquilla Friend Britt

The program was originally called "Project Northscope", then "Operation Commando Probe" and finally "Commando Nail". Initial crews, however, referred to the program as "Ryan's Raiders".

Capt Lawrence E. Huggins and Capt Paul W. Hansen from Yokota's 35 TFS were two of the instructor pilots picked to train the initial Ryan's Raider crews at Yokota. Other instructor pilots came from the 80 TFS. Larry Huggins recalled, "PACAF directed the program to be started at Yokota [which] made sense since the other [PACAF F-105] unit was at Kadena and could not fly local TA/CM [Terrain Avoidance/Contour Mapping] sorties of any length. Wing Intel was involved before the 35th and 80th squadrons ... Maj Ken Furth, Ops Officer from the 35th was ops OIC.

"I was one of [the] pilots selected to 'set up and teach a night bombing program for SEA in the F-105F'. ... Don Heliger (80th), Nick Donelson (35th), Pete Pitman (35th), and Dave Burney (80th) were the other IPs. ... We were all IPs and were the guys with the best radar bomb scores. Our primary mission at the time was SIOP. Three or four F-105Fs from the 80th and 35th were locally modified with what became known as the Yokota Mod, and we flew them using the TA/CM mods through the local mountains ending up on our bombing target in Tokyo Bay (R-112). ... The Yokota mod birds were restricted from nuc alert since the radar mods had been done at Yokota by our radar techs. These F's were transferred to Korat right after the program ended at Yokota and still had the no nuc restriction carried in their 781s when we flew them at Korat a year later."

The aircraft were modified "... specifically for a night/all-weather radar bombing mission. ... The aircraft chosen for the mission ... had [already] been modified for ... Wild Weasel III ... with ER-142 and APR25/26 RHAW equipment. In addition ... the ... aircraft had their R-14A radars modified to allow an expanded scope picture and a faster sector sweep, ... (giving) a much greater duration to the radar return, resulting in a finer target definition on the scope. Additionally, the ... pilot's weapons release switch was wired in parallel to a rear cockpit weapons release switch" The ER-142 radar warning receiver was located in the rear cockpit in the space normally used by the vertical tape altimeter and

the airspeed indicator.

At Korat, the aircraft were repainted in an all-around camouflage scheme with tan and green replacing the gray on the bottom of the planes. The colors were applied to the wings and fuel tanks as well.

"The training program was designed to give the rear seat pilot maximum exposure to radar bombing techniques. After a ten-hour refresher course on the R-14A radar, the toss bomb computer (TBC), and radar interpretation techniques, the crews were given twelve flights within a short twenty hours flying time. Each sortie was planned as a radar navigation exercise with simulated bomb runs along the route. The missions were planned at medium altitudes between 10,000 to 15,000 feet above the terrain. The simulated targets were industrial complexes and other prominent cultural radar returns used by Yokota based pilots training for nuclear delivery. The program was indorsed by PACAF with one significant exception -- training missions at the medium altitudes were to be changed to low profiles at 500 to 2,000 feet." (Ryan's Raiders Corona Harvest Report, pgs 4 - 5.)

Major Ben M. Pollard was the senior officer appointed to the program. He had completed F-105 pilot training at McConnell AFB, Kansas, on 13 February 1967 in RTU Class 67FR, followed by jungle survival school at Clark AB in the Philippines. He was told to report to Yokota instead of Korat. "In the first briefing [I] was told, 'The Navy is over North Vietnam in the deep packages ... V and VI at night with the A-6, and the Air Force had no airplane that could do it. Politically, the Air Force was looking bad, and therefore, three-fingered Jack Ryan, (the PACAF) commander, ... said that he wanted us to do the job. He had looked into the B-58s and said we couldn't afford to lose a B-58; we couldn't afford to lose a B-52, and so we were going to have the F-105 do it at night against Package V and VI, single-ship, night, low-level, terrain-avoidance bombing"

The group began calling themselves Ryan's Raiders. "We started practicing these missions all over Japan We couldn't hit the broad side of a barn; the terrain avoidance wouldn't work, we weren't trained for this; nobody, even in the States, would ... fly this mission, ... and we were going to go over and check it out the first time in combat!"

The first training class consisted of five crews who initially operated as a provisional squadron under Maj Pollard as the senior officer. Capt Larry Huggins and Capt Paul Hansen were initially classroom instructors at Yokota. "Paul and I did not fly with any of these first class guys; we were making strip maps and teaching academics. We started flying after these guys left for Korat."

Maj Pollard continued, "We flew down to Kadena, Okinawa, to check out on bombing accuracy. I was flying [in the rear seat] with Don Heiliger. ... We got there, and they wanted us to immediately go out on this bombing range and check the accuracy of this new radar. ... We got a briefing, and we took off ... in a four-ship, ... two from Ryan's Raiders and two from Okinawa to lead us around the range and area. ... We dropped about three bombs, and then the weather just went to nothing. ... Lightning, pouring down rain We floundered around, broke up into singles and finally got on the ground.

"... We flew three missions the next day. We were doing a little bit better. We were dropping ... 700-foot bombs. We had more ... right to left accuracy than with the normal bombing system, but all of our worst fears in terms of the terrain avoidance system ... we were still having.

"Then we flew back to Yokota and continued our training."

"The initial reliability of the radars was so poor on the heretofore unused systems that very little actual low level radar navigation or bombing was accomplished. In fact, some of the training had to be completed in Korea when bad weather over Japan prevented VFR flying. However, the first four crews were certified to have achieved sufficient radar bombing proficiency to deploy, on schedule, in late April." (Ryan's Raiders Corona Harvest Report, pgs 5 - 6.)

WarbirdTECH Vol 18 Republic F-105 Thunderchief, pg 46 & 388 TFW history Apr - Dec 67, USAF microfilm NO 583 frame 1617 & Air Force Academy Oral Interview with Col Ben M. Pollard, 5 Nov 92, pgs 13 -15 & Larry Huggins, e-mails 13 and 15 Dec 2004.

22-Apr-67 926

The Ryan's Raiders crews, led by Maj Ben Pollard, in F-105F training at Yokota AB, Japan, were alerted for deployment to Korat RTAFB, Thailand. Ben Pollard recalled, "... in late April, ... we got the word that we were going south. ... We were going to go to war and there was no warning."

"We flew down to Kadena that next morning ... before we jumped off to Thailand." The crews remained at Kadena overnight.

"The next morning (24 April 1967) we had four flyable airplanes. We had eight Ryan's Raiders aircraft, but only four of them were ready to go, and so four aircraft leaped out the next morning to fly with a tanker across from Okinawa to Korat. ... We were out about ... an hour or two. Number three or number four airplane got a hydraulic leak in their flight control system -- you always flew as pairs over the water -- so ... both of those airplanes turned back, and the other two of us pressed on. We flew on in, flew just south of the DMZ over Da Nang and let down and landed in Korat. We got there about dark."

The four dual-pilot crews were:

Capt Donald Lester Heiliger with Maj Benjamin Marksbury Pollard

Capt Nicholas J. Donelson with Capt David W. Forgan

Capt Peter Potter Pitman with Capt Robert Allan Stewart

Capt David Burney with Capt Aquilla Friend Britt

Air Force Academy Oral Interview with Col Ben M. Pollard, 5 Nov 92, pg 18.

24-Apr-67

1276

The first four Ryan's Raiders crews arrived at the 388 TFW, Korat RTAFB, Thailand. They had been training on radar bombing at Yokota since March. These first crews, all F-105 pilots, were:

Capt Donald Heiliger with Maj Ben Pollard,

Capt Nicholas J. Donelson with Capt David W. Forgan,

Capt Peter P. Pitman with Capt Robert A. Stewart,

Capt Dave Burney with Capt Aquilla Friend Britt.

The four modified F-105Fs that they flew from Yokota were: 63-8269, 63-8312, 63-8345, and 63-8269.

The front seat pilots had been instructor pilots from the 35 TFS and 80 TFS at Yokota. Two of the IPs from the 35th, Capt Paul W. Hansen and Capt Lawrence E. Huggins, remained at Yokota. Larry Huggins explained why. "Paul Hansen did not deploy since he had already flown 100 missions over the north. I was not allowed to deploy because I had just finished revising the 5th AF SIOP target set and had a 'special' TS clearance." (Larry Huggins, e-mail 15 Dec 04.)

The rear seat pilots were recent graduates from McConnell's F-105 RTU. Captains Stewart and Forgan had graduated from F-105 RTU class 67ER on 6 January 1967. Maj Pollard and Capt Britt had graduated from F-105 RTU class 67FR on 13 February 1967.

Eleven other Ryan's Raider aircrew members arrived in May 1967.

The group was initially assigned to the 34 TFS under the command of Lt Col Alan G. Nelson, but later operated as a provisional unit within the 13 TFS commanded by Lt Col Gerald F. "Jerry" Fitzgerald. On 1 June 1967, it was integrated as a separate operation of the 13 TFS when Lt Col Jim McInerney took over the squadron. The Ryan's Raiders were guided by Maj Ralph Kuster from the 469 TFS. Jim

McInerney explained Maj Kuster's role: "... He was [388 TFW Commander] Colonel Chairsell's 'helper' having served under him at Spang."

Maj Frank L. Yow, Jr., the 388 TFW Weapons Officer, also helped the Raiders. "Maj Ralph Kuster and I worked with them and helped plan the missions although I disagreed with the way there were doing it."

"Because of changes in mission and compromise, the name of the project was changed from the original Project Northscope to Operation Commando Probe to Operation Commando Nail."

Before they had left Yokota, Capt Donelson recalled, "The crews called it Ryan's Raiders and created a special patch showing an F-105F with a golden screw through the rear cockpit. This represented the dissatisfaction of the pilots that had to occupy the rear cockpit." (Nicholas J. Donelson in River Rats Vol III, pgs 52 - 53.)

The 388 TFW history for the period October - December 1967 described the technical and operational problems encountered by the Raiders. "Several difficulties, some of which are not yet resolved, have complicated the operation of the Raiders. Chief among these was the challenge of electronics. Modifications were made to the R-14 radar. An expanded scope now provides an improved presentation. A fast sweep in the center of the scope allows the operation to have a fast constant paint of the target. New test equipment obtained from Yokota AFB have greatly improved the terrain avoidance and contour mapping capabilities. Still to come are replacement of the rear seat scope by a Cathode Ray Tube and the addition of a radar absolute altimeter. Daily improvements reflect the success of the efforts of our Armament and Electronics Squadron and our maintenance in general. Other difficulties encountered include incomplete maps and charts of North Vietnam, (a problem partly resolved by radar photography of these areas), and lack of experience in Raider operations and techniques, which necessitated exchange of information with the A-6 Intruder pilots of the Bonhomme Richard. Daily crew meetings under the inspiring leadership of Major Ralph L. Kuster, his knowledge and experience in the airplane, and devotion to duty, have been most successful in advancing the

388 TFW history, Jan - Dec 67, USAF microfilm NO583, frames 1449 and 1582 & Corona Harvest Chronology of Significant Airpower Events in Southeast Asia, 1954 - 1967, pg 133 & Frank Yow letter dated Sept 1, 1986 to Bauke Jan Douma.

26-Apr-67 5118

In a secret message to CINCPACAF (General Ryan), Hq 5th Air Force defined the daily reports that they would submit on the progress of crew training for the F-105F "Radar Level Bombing Training" under project "North Scope". The message reflected General Ryan's interest in the details of this program.

The crews were training at Yokota and Kadena and the message identified the "integrated crews" (all pilots) that had formed to date at each location.

At the 41 Air Division, Yokota:

Crew Alpha - Heiliger/Pollard Crew Bravo - Donelson/Forgan

Crew Charlie - Burney/Britt

Crew Delta - Pitman/Stewart

Crew Golf - Rehm/Markwood

Crew Hotel - Bogert/Annapu

Crew India - Koelm/Esser

Crew Juliett - Henry/Wright

The message reported that "Crews Alpha, Bravo, Charlie, and Delta have deployed to Korat" (where they were assigned to the 34 TFS).

At the 18 TFW, Kadena:

Crew Echo - Beresik/Reece (Reece was identified as a Radar Navigator)

Crew Foxtrot - Fullam/Scheer

The message listed the flying experience of the crews training at Kadena.

	Total	F-105	Out Country
	Time	Time	Missions
Maj Eugene P. Beresik	3189:10	555:40	0
Capt H. M. Reece	3534:30	18:50	0
Maj Wayne E. Fullam	3398	1133	19
Capt Roger P. Scheer	2263	1250	14

The message provided detailed results of each training sortie in radar-modified North Scope F-105Fs by the crews at Kadena. For example, on 18 April 1967, the crew of Beresik/Reece flew two daylight sorties each at 2000 feet and 500 knots on land range R-178 using the plane's timer and Toss Bomb Computer (TBC) on each sortie. They had made two timer drops and four TBC drops of BDU-33 practice bombs. Their CEA for the timer drops on sortie 1 was 195' and on sortie 2 was 275'. The CEAs for their TBC drops were 982' and 862' for their first and second sortie, respectively.

On 20 April 1967, the crew of Fullam/Scheer made one sortie under the same conditions flying six TBC drops of BDU-33/Bs. Their CEA was 930'.

5AF/CC TWX 261015Z Apr 67 to CINCPACAF in PACAF DO Read File for 25 - 26 April 67, AFHRA Call # K717.312, IRIS # 00518453.

25-May-67 5133

The 34 TFS Ryan's Raider crew of Capt Nicholas J. Donelson and Capt David W. Forgan flew a night North Scope mission in F-105F 63-8363 using call sign "Delight". They dropped six 750-pound bombs on target 195, the Dong Cuong Railroad Yard. "Normal calibration and refueling. Descended to 1000 feet AGL as we passed Channel 97. Continued to target. Drop looked good on radar. Penetrated line of thunderstorms 30 NM from target." They also encountered "... several 1 to $\frac{1}{2}$ ring Firecans, all of short duration."

388 TFW TWX 240705Z May 67 to 7 AF in PACAF DO Read File for 24 - 25 May 67, AFHRA Call # K717.312, IRIS # 00518471.

27-May-67 5135

The 34 TFS Ryan's Raider crew of Capt Nicholas J. Donelson and Capt David W. Forgan flew a night North Scope mission in F-105F 63-8353 using call sign "Simmer". Their primary was target JCS 47.13, the Tai Xuoan Ammunition Depot SE in RP 5, but they dropped six 750-pound bombs on target 1463, Mu Gia Pass. "Unable to calibrate TA/CM due to reverse video. Aborted 47.13 and made routine drop on Mu Gia Pass."

388 TFW TWX 270323Z May 67 to 7 AF in PACAF DO Read File for 27 - 29 May 67, AFHRA Call # K717.312, IRIS # 00518474.

15-Jan-68 2353

(Appproxmate date). F-105 Pilots Honored at Washington Ceremony -- "Twenty Thunderchief fighter-bomber pilots received (Republic) certificates for completing 100 missions over North Vietnam last month." The pilots were:

Col Marvin Taylor Maj Bob Johnson

Col Jacksel M. Broughton Lt Col Obadiah A. Dugan Lt Col William C. Norris Lt Col Richard F. B. Gimmi, Jr. Maj Harry E. "Hank" Higgins Maj David W. Forgan Maj Jack C. Spillers Maj Wray C. Lasswell Maj Ralph Lloyd Kuster, Jr.
Maj Ronald G. Strack
Maj Floyd E. Henzig
Maj Francis D. "Don" Leonard, Jr.
Maj Kenneth H. Bell
Maj James N. McClelland
Maj George A. Miklos

"Four members of the 355 TFW were recently awarded Air Medals." They were:

Col Thomas H. Curtis Maj Robert W. Kennedy Maj Leonard R. Scotty Maj James D. Suver

Maj Marlin R. Blake Maj Gale B. Anstine Maj John A. Graff

Thunderchief World Wide Report, Vol III, No 6, February, 1968.