

20th INTELLIGENCE SQUADRON



MISSION

The mission of the 20th is to provide prompt, precise intelligence enabling warfighters to safely engage and achieve global objectives. The 20th processes and analyzes raw electronic intelligence data, and prepares both operational and technical ELINT reports and studies.

The 20th is organized into three flights:

The Target Material Flight produces precise coordinated measurements and mission-support materials for Air Force bomber, fighter and other airborne platforms engaged in exercise, training or actual combat operations. It provides graphics, coordinated measurements and aim point selection assistance supporting nuclear, conventional and humanitarian relief operations. It also performs distribution of maps and charts supporting short-notice mission planning and flying requirements Air Force wide.

The Combat Applications Flight activities entail providing direct application support for specified combat customers. This includes an AIA node for operational dissemination of near-real time imagery to Air Force and Department of Defense users worldwide; and is Air Combat Command's point of contact for pre-mission survivability and threat assessments, target analysis, weaponeering support and post-mission combat assessments for the Conventional Air Launched Cruise Missile program. Additionally, it performs modeling and simulation survivability analysis studies for requesting customers and is the executive manager for the Integrated Air Defense systems efforts.

The Operations Flight provides the day-to-day operating support to the other flights within the 20th. These activities are dispersed through branches who perform the activities of planning, requirements management, systems maintenance, logistics support and resource management.

LINEAGE¹

20th Photographic Mapping Squadron constituted 14 Jul 1942
Activated, 23 Jul 1942
Redesignated 20th Photographic Squadron (Heavy), 6 Feb 1943
Redesignated 20th Combat Mapping Squadron, 11 Aug 1943
Redesignated 20th Reconnaissance Squadron (Long Range, Photographic-RCM), 10 May 1945
Inactivated, 20 Jun 1946
Redesignated 20th Reconnaissance Squadron (Night Photographic), 11 Mar 1947
Activated in the reserve, 25 Jul 1947
Redesignated 20th Strategic Reconnaissance Squadron (Photographic Mapping), 27 Jun 1949
Ordered to active service, 1 May 1951
Inactivated, 16 May 1951
Redesignated 20th Tactical Reconnaissance Squadron (Photographic), 14 Jan 1954
Activated, 18 Mar 1954
Inactivated, 12 Nov 1965
Redesignated 20th Air Intelligence Squadron and activated, 1 Oct 1992
Redesignated 20th Intelligence Squadron, 1 Oct 1993

STATIONS

Colorado Springs, CO, 23 Jul 1942-7 Sep 1943
Sydney, Australia, 10 Oct 1943 (air echelon at Colorado Springs, CO, to 12 Oct 1943, and at Will Rogers Field, OK, 14 Oct 1943-26 Jan 1944)
Brisbane, Australia, 23 Nov-1 Dec 1943
Port Moresby, New Guinea, 10 Dec 1943
Nadzab, New Guinea, 14 Feb 1944 (operated primarily from Biak after 7 Aug 1944)
Biak, 3 Sep 1944
Dulag, Leyte, 15 Nov 1944 (operated from Biak to 22 Jan 1945, from Tacloban, Leyte, 25 Jan-23 Feb 1945, and from San Jose, Mindoro, 24 Feb-16 May 1945)
Clark Field, Luzon, 17 May 1945
Okinawa, 4 Aug 1945
Yokota, Japan, 27 Oct 1945-20 Jun 1946 (operated from Tachikawa, Japan, Dec 1945-Apr 1946, and Johnson AB, Japan, Apr-20 Jun 1946)
Newark AAB, NJ, 25 Jul 1947
Forbes AFB, KA, 21 Jul 1949

¹ Air Force Historical Research Agency. U.S. Air Force. Maxwell AFB, AL.

The Institute of Heraldry. U.S. Army. Fort Belvoir, VA.

Air Force News. Air Force Public Affairs Agency.

Unit yearbook. *Shaw AFB, SC, 1956*. Army and Navy Publishing Company of Louisiana. Baton Rouge, LA. 1956.

Barksdale AFB, LA, 10 Oct 1949-16 May 1951
Shaw AFB, SC, 18 Mar 1954 (operated from MacDill Field, FL, 21 Oct-30 Nov 1962)
Offutt AFB, NE, 1 Oct 1992

ASSIGNMENTS

4th Photographic (later Photographic Reconnaissance and Mapping; Photographic) Group, 23 Jul 1942
6th Photographic (later Reconnaissance) Group, 5 Dec 1943
91st Reconnaissance Wing, 10 Nov 1945
V Bomber Command, 1 Dec 1945
314th Composite Wing, 31 May-20 Jun 1946
66th Reconnaissance Group, 25 Jul 1947
Tenth Air Force, 27 Jun 1949
311th Air Division, 21 Jul 1949
Second Air Force, 1 Nov 1949-16 May 1951
432nd Tactical Reconnaissance Group, 18 Mar 1954
432nd Tactical Reconnaissance Wing, 8 Feb 1958
363rd Tactical Reconnaissance Wing, 18 May 1959
National Air Intelligence Center, 1 October 1992
480th Intelligence Group, 1 Oct 1995
Air Combat Command Targeting and Intelligence Group, 1 June 2008[3]

ATTACHMENTS

6th Photographic Reconnaissance and Mapping [later Photographic Reconnaissance; Photographic] Group, from 17 Jun 1943
363rd Tactical Reconnaissance Wing, 8 Apr-17 May 1959

WEAPON SYSTEMS

B-25, 1942
B-17, 1942-1943
B-24, 1943
RF-80, 1954-1955
RF-84, 1955-1958
RF-101, 1957

COMMANDERS

Maj James E. Fritsch

HONORS

Service Streamers

American Theater

Campaign Streamers

Air Offensive, Japan

China Defensive
New Guinea
Bismarck Archipelago
Western Pacific
Leyte
Luzon
Southern Philippines
Ryukyus
China Offensive
Air Combat, Asiatic-Pacific Theater

Armed Forces Expeditionary Streamers

Decorations

Distinguished Unit Citation
Philippine Islands, 18-25 Sep 1944

Air Force Outstanding Unit Award
23 Oct-24 Nov 1962

Philippine Presidential Unit Citation

EMBLEM



20th Photo Mapping Squadron
4th Photo Group

20th Photo Mapping Squadron



On a silver-gray disc, a white cloud formation, surmounted by a standing figure of the Warner Brothers cartoon character "Yosemite Sam," peering through a gray rimmed magnifying glass at a green and white map which he holds in gray gloved hands, his eyes, nose, ears, and gun protruding from holster, all white, his face and long, divided mustache red, dressed in cowboy hat, riding boots, belt, and holster, all brown, his goggles attached to hat brim, riding breeches, shirt and neckerchief, all green; standing on the cloud beside Sam a black camera on a tripod, details white; piercing the top of Sam's hat, a red lightning bolt in horizontal position; outlines and details black throughout. "Yosemite Sam" represents squadron personnel carrying on the activities of the unit, map reading, target location and visual reconnaissance. Sam's gun is symbolic of target-making weapons and devices, and the camera system indicates photographic reconnaissance. The lightning bolt represents direct destruction from the air, artillery adjustment and fighter strikes. (Approved, 7 Jul 1958)

MOTTO

OPERATIONS

23 Jul 1942 Activated: 20th Photographic Mapping Squadron (20th PMS) at Colorado Springs AAB, Colorado Springs, Colorado Initial strength: two officers and one enlisted man: 2nd Lts. Bernard Smith and Harold Hefflinger, and Pvt. James Ford

1 Sep 1943 Squadron strength: 62 officers, 3 flying officers (F/O), 1 Warrant Officer and 383 enlisted men

7 Sep 1943 Squadron ground echelon separated from air echelon (which remained at Peterson), in preparation for transfer overseas

25 Sep 1943 Ground echelon departed Camp Stoneman, California for Australia aboard USS Westpoint

1 Oct 1943 Ground echelon strength: 10 officers, 1 Warrant Officer, and 268 enlisted men

2 Oct 1943 Air echelon reassigned from Peterson Field, Colorado Springs, Colorado, to Will Rogers Field, Oklahoma City, Oklahoma, Third Air Force.

10 Oct 1943 Ground echelon arrived Sydney, Australia

11 Oct 1943 Ground echelon arrived Warwick Farms, Australia

22 Nov 1943 Ground echelon departed Warwick Farms, Australia

23 Nov 1943 Ground echelon arrived Doomben, Queensland, Australia

1 Dec 1943 Ground echelon departed Doomben, Australia for Port Moresby, New Guinea

aboard USS White

4 December 1943

F-7 42-40494, on a night cross-country flight to Reading, Pennsylvania, crashed near Elverson, Pennsylvania. Sgt. John F. Gillespie, AM gunner, was thrown clear and survived.

2nd Lt. George W. Wimsatt, pilot

2nd Lt. Allan B. Hamilton, copilot

2nd Lt. Martin Queenth, navigator

T/Sgt. Walter G. Kellbach, crew chief

T/Sgt. Rufus Mobley, engineer

S/Sgt. Vincent B. McNally, AM gunner

S/Sgt. Joseph R. Guay, radio operator

Sgt. Robert E. Hawkins, gunner

Sgt. Vern A. Vandelin, gunner

2nd Lt. George E. O'Brien, passenger on leave

10 Dec 1943 Squadron ground echelon arrived APO 923. Temporarily quartered at Pleasant Valley, Port Moresby, New Guinea

15 Dec 1943 Ground echelon moved to squadron area at Port Moresby, New Guinea

10 Jan 1944 Air echelon ordered to move from Will Rogers Field, Oklahoma City, Oklahoma to Hunter Field, Savannah, Georgia for staging to the Pacific.

13 Feb 1944 Ground echelon departed Port Moresby, New Guinea and arrived at Nadzab, New Guinea, APO 713

23 Feb 1944 At 2300 hours, this date, first crew and aircraft (Lt. Wooten's in F-7A 42-64047) of the 20th Combat Mapping Squadron air echelon departed Fairfield, California for New Guinea

7 Mar 1944 42-73053 (F-7A) Aircraft destroyed at Nandi, Fiji, en-route to Nadzab, New Guinea. No deaths.

16 Mar 1944 The first crew and aircraft (Lt. Wilson's in F-7A 42-64051) of the 20th Combat Mapping Squadron air echelon arrived Nadzab, New Guinea

29 March 1944

Reserve aircraft F-7A 42-64056, ferried by an Air Transport Command (ATC) crew, crashed into the Pacific an hour after departing Fairfield-Suisun, California for Hickam Field, Hawaii en route to New Guinea. Two members of the squadron--Sgt. Joseph J. Kuchinski, sheet metal worker, and 1st Lt. Willard F. Tidyman, assistant lab commander--parachuted to safety. There were no other survivors.

Four (4) unidentified ATC personnel

Four (4) 20th CMS ground personnel:

Sgt. Jack B. Bierman, draftsman
Sgt. Arnold I. Bernstein, administrative NCO
Sgt. Warren V. Burns, draftsman
S/Sgt. Guy C. Turner, photo lab technician

5 Apr 1944 First combat mission flown by the 20th Combat Mapping Squadron: Hollandia, New Guinea by Rives' crew in F-7A 42-64200 and JH Wooten's crew in F-7A 42-64047

16 Apr 1944 42-73042 (F-7A) Destroyed landing at Saidor, New Guinea. No deaths.

22 May 1944

F-7A 42-73052 crashed near the peak of Mt. Wilhelm, New Guinea, in early morning darkness. It was en-route to a mission over Padaidori Island. There were no survivors.

1st Lt. Loren G. Barstow, pilot
2nd Lt. Jack S. Connor, copilot
2nd Lt. Douglas E. Puck, navigator
S/Sgt. Harold M. Valentine, radio operator
S/Sgt. Edwin R. Maille, engineer
S/Sgt. Leonard Diamond, photographer
Sgt. John W. Schmitt, gunner
Sgt. George M. Harvey, gunner
Sgt. Stephen J. Boudreaux, gunner
S/Sgt. Luis Degallado, gunner
S/Sgt. George Dick, gunner

9 June 1944

F-7A 42-73044 blew the right tire landing at Saidor, New Guinea. This crew was one of three scheduled to stage from Saidor the next day for a mission to the Geelvink Bay area. Two crew members survived.

1st Lt. Roy A. Hunt, pilot
2nd Lt. Barry C. Conway, copilot
Sgt. Ernest Rushing, engineer
S/Sgt. William S. Willison, photographer
S/Sgt. Lawrence J. Winkel, radio operator
S/Sgt. Cecil Pearson, gunner
Sgt. James F. Whitmore, gunner
S/Sgt. Francis J. Reilly, gunner

After 17 Jun 1944 42-64048 (F-7A) Last combat mission was flown to Wewak on 18 June 1944. This is unsubstantiated: destroyed landing at Nadzab, New Guinea on ferry mission.

25 Jul 1944 First combat mission flown in an F-7B (44-40199) by the 20th Combat Mapping

Squadron: to Wewak area, Maj. Davis, pilot

30 September 1944

F-7B 44-40422 lost returning from mission 274Z-3 to Leyte, Philippine Islands.

1st Lt. Royce E. Harms, pilot

2nd Lt. Thomas Rafael, copilot

1st Lt. Gerald P. Smith, navigator

T/Sgt. Stephen H. Laichak, engineer

T/Sgt. James R. Reynolds, Jr., radio operator

S/Sgt. Melvin J. West, photographer

Sgt. Harold E. Amos, gunner

Sgt. Herbert G. Julian, gunner

Sgt. Boyd D. Berg, gunner

Sgt. Samuel T. Catlin, gunner

Sgt. Raymond T. Weld, gunner

4 Oct 1944 44-40423 (F-7B) Destroyed landing Biak, after damaging nose gear taking off. Pilot, Rives. No deaths.

15 Nov 1944 Ground echelon at Dulag, Leyte. Air echelon remained at Biak

25 Jan 1945 Air echelon, based at Dulag, Leyte, but operating from Tacloban, Leyte

25 Nov 1944 44-40895 (F-7B) Destroyed on ground by air raid, Morotai.

11 January 1945

F-7B 44-40961 lost returning from mission 11D-3 to Southeast Luzon.

2nd Lt. Francis N. Riley, pilot

2nd Lt. Charles E. Steinsberger, copilot

2nd Lt. Howard (NMI) Flagg, Jr., navigator

S/Sgt. Ralph O. Schadewald, engineer

S/Sgt. Casimir W. Szczawinski, radio operator

Cpl. Clement A. McHale, photographer

Sgt. James A. Seeley, gunner

Sgt. William S. Sheyon, gunner

Sgt. Joseph F. Phillips, gunner

Sgt. Marvin H. Normington, gunner

T/Sgt. Julian C. Langdon, gunner

29 January 1945

A C-46 taking off from Tacloban, Leyte crashed into F-7B 44-40659 and another C-46 parked along side it. The three aircraft exploded.

2nd Lt. Richard I. Tubbs, pilot

2nd Lt. Paul J. Vivian, copilot

T/Sgt. Leland L. Lane, engineer

24 Feb 1945 Air echelon operating from San Jose, Mindoro

2 Apr 1945 44-40199 (F-7B) Destroyed while taxiing at McGuire Strip, Mindoro. Ran into a ditch while avoiding another aircraft. No injuries.

21 Apr 1945 44-40198 (F-7B) Crashed on test flight over water, N.W. of San Theresa Village, Mindoro. Number 2 engine caught fire. The three (3) crewmembers parachuted to safety. Picked up in water (no life vests or rafts) one hour later.

8 May 1945 44-42026 (F-7B) Destroyed taking off from McGuire Strip, Mindoro. Nose gear collapsed. No deaths.

10 May 1945 42-64180 (F-7A) Destroyed on ground by 44-41322 of the 319BS landing at McGuire Strip, Mindoro. No deaths.

13 May 1945 44-40847 (F-7B) severely damaged landing McGuire Strip, Mindoro. No deaths.

25 May 1945

F-7A 42-73047, destroyed landing at Boroke Strip, Biak.

2nd Lt. John D. Pelham, copilot

31 Aug 1945 Last recorded combat mission for the squadron in WW II: Mission number 243Z-1, 14 hr 10 min to Tokyo area by F-7B 44-42028 (Lt. Eisele), F-7B 44-42031 (Lt. Warren), F-7B 44-42135 (Lt. French), F-7B 44-42239 (Lt. Leeder), #269 (Lt. Essig), and F-7B 44-42350 (Capt. Gessner)

In mid-June 1945 the squadron primary mission was changed from combat mapping to photographic and radar reconnaissance. As a result, the 20th Combat Mapping Squadron was redesignated as the 20th Reconnaissance Squadron, Long Range, Photo-RCM. To execute the RCM (Radar Countermeasures) mission the squadron received four B-24J: Ferrets #10, #11, #12, and #13. Ferret #13 came from prior service with the 308th BG, Fourteenth Air Force, in China. Ferret #12 previously served with the 7th BG, Tenth Air Force, in India. Ferrets #10 and #11 operated in the SWPA before being assigned to the 20th.

The 20th's ferret missions were flown to detect Japanese radar installations, pinpoint locations and determine intercepted radar characteristics (transmitter frequency, pulse repetition frequency, and pulse width). This intelligence could then be used to find and destroy, or to jam, those same sites.

Ferret modifications to B-24's were similar to those of F-7's in that bombing equipment was removed, auxiliary fuel tanks were installed in the front bomb bay, and the rear bomb bay was converted into equipment space. Entries in the ferret flight Final Mission Reports indicate these aircraft carried sufficient gear to scan the radio spectrum from .55-6000 Mc/s (MHz). Specific

equipment identified, due to failure of it, included: AN/APR-5A (Radar Search Receiver, 1000-6000 Mc/s), AN/APA-11 (Radar Pulse Analyzer), and SCR-717C (10-cm Air-to-Surface Vessel radar, used for navigation).

Of the 12 ferret sorties flown before war's end, two were the squadron's longest: 15 hours 45 minutes, and 15 hours 20 minutes (to Formosa and Hong Kong). Ten of the 12 sorties were flown directly from Clark Field, Luzon. The remaining two, to islands between Okinawa and Kyushu, were staged from Yontan Strip, Okinawa, to maximize available time over target.

Flew RF-101C's over Cuba during Cuban Missile Crisis in the fall of 1962

Flew RF-101C's over North Vietnam, 1965-1967

Combat in Southwest Pacific and Western Pacific, 5 Apr 1944-18 Aug 1945. Photo-mapping of Japan, 15 Dec 1945-17 Jun 1946.

On Feb. 8, 1960, the 20th TRS began the year by sending six RF-101 aircraft on a non-stop flight to Moron AB, Spain, on "Operation Quick Span" a goodwill deployment to the ENTO nations for the purpose of providing aerial demonstrations and static displays. The itinerary included stops at Incirlik AB, Turkey; Tehran, Iran; and Karachi, Pakistan.

RF-101 attrition

56-040 RF-101C Marv Lindsey (TDY@15th TRS) 20th TRS AAA NVN KIA 29 Jun 65

56-079 RF-101C Ray Lowery (TDY @ 15th TRS) 20th TRS Rudder Lock Recover Ubon 1 Jul 65 Destroyed

56-186 RF-101C Fred Mellor (TDY @ 15th TRS) 20th TRS AAA NVN KIA 13 Aug 65

56-174 RF-101C Norm Huggins (TDY@45th TRS) 20th TRS Gunfire NVN Rescued/HU-16 1 Nov 65 33rd ARSq

56-084 RF-101C W.N. Grubb 20th TRS Gunfire NVN POW 26 Jan 66 died in captivity

56-218 RF-101C Al Runyan 20th TRS Gunfire NVN POW 29 Apr 66

56-226 RF-101C Dave Burroughs 20th TRS Gunfire NVN POW 31 Jul 66

56-064 RF-101C Paul Curtis 20th TRS Ground impact NVN Rescued 7 Aug 66 Jolly Green

56-056 RF-101C Blair Wrye 20th TRS AAA NVN KIA 12 Aug 66

56-093 RF-101C Vince Connelly 20th TRS SAM NVN KIA 4 Nov 66

56-165 RF-101C Art Warren 20th TRS Gunfire NVN KIA 5 Dec-66

56-063 RF-101C Donald Miller 20th TRS Pitchup Thailand Rescued 15 Mar 67

56-120 RF-101C Notley Maddox 20th TRS AAA NVN KIA 20 May 67

56-085 RF-101C Bob Patterson 20th TRS SAM NVN Rescued 21 Jun 67

56-207 RF-101C Charles Winston 20th TRS SAM NVN KIA 1 Aug 67

56-180 RF-101C Bob Bagley 20th TRS Mig 21 NVN POW 16 Sep 67 Atoll

56-181 RF-101C Bob Patterson 20th TRS MiG NVN Rescued 17 Sep 67

56-212 RF-101C Nick Pishvanov 20th TRS Gunfire Laos Rescued 18 Oct 67 Jolly Green

Squadron flew F-101 Reconnaissance missions for more than 19 months with 7,100 sorties and 10,000 combat flying hours to its credit. 30 Oct 1967