

At the dawn of the Cold War, air surveillance missions over “denied areas” could—and did—get pretty sporty.

The Early Overflights

By Walter J. Boyne

WHEN the Cold War dawned in the late 1940s, the United States realized that it had virtually no information with which to plan a bombing campaign against the Soviet Union. Captured German maps provided some data for the western portions of the USSR, but virtually everything else was a blank slate. Entire cities were cloaked in secrecy, with no hint of their true location or, in some cases, even their existence.

This dearth of knowledge would soon become critical. The Soviet Union detonated an atomic weapon in 1949. By October 1951, there were signs that a Soviet Tu-4 bomber had dropped a nuclear weapon in an air-burst test. This was followed by news of the detonation of a thermonuclear weapon in 1953. Early intelligence estimates projected that, in 1952, the Kremlin might have as many as 600 Tu-4 bombers in service and up to 100 atomic bombs in the stockpile, raising fears of a Soviet strike.

For American and British leaders,

the situation was intolerable. Washington and London needed information on Soviet strategic military capabilities and on any preparations for a surprise attack on the Western alliance. It needed to develop a list of targets for either pre-emption or retaliation.

As early as 1946, the Western powers attempted to gain military information by staging flights near Soviet and satellite territories. These flights were part of the Peacetime Airborne Reconnaissance Program, or PARPRO. Such flights on the periphery of the USSR were perfectly legal and could be undertaken on the authority of the theater commander. The Soviet Union vigorously defended its airspace, however, and many PARPRO aircraft were shot down. A few strayed over Soviet territory, while all of the others were shot down over international waters.

The PARPRO flights, though useful, were not sufficiently numerous or detailed. Truly vital intelligence



Post World War II Soviet weapons development led to surveillance overflights such as this RF-86F mission in April 1954 over Khorol airfield, north of Vladivostok in the Soviet Far East.

Historian Cargill Hall offered a definition of an “overflight” that fits the facts. He stated, “In using the term ‘overflight,’ I mean a flight by a government aircraft that, expressly on the direction of the head of state, traverses the territory of another state in peacetime without that other state’s permission.”

The distinction is important because it highlights just how critical and dangerous the highly classified overflight mission was. All of the flights were conducted in great secrecy, at a level of security which was maintained until very recently, when, at last, the missions and imagery were declassified and the men who flew the missions could finally talk about them. Curiously, this secrecy was enhanced indirectly by the Soviet Union. It never blew the whistle on the flights, for it refused to admit to its people and to the world that it could not prevent US aircraft from overflying its national territory.

The military overflights employed the unsophisticated reconnaissance aircraft then available for use. These ranged from piston-engine aircraft like the RB-50 to the early jets. The latter category included RF-80As, slowed by huge tip tanks necessary for range, an F-84, RF-86s, RF-100s, and RB-45s, RB-57s, and B- and RB-47s. All of these aircraft led the way to the later specialized U-2 and SR-71 aircraft and ultimately to satellites.

The mission was dangerous for reasons ranging from overloaded take-offs to MiG cannon fire. The long ranges taxed the pilot’s ingenuity in stretching his fuel supply. The missions required an enormous amount of initiative and persistence. Even in the face of certain interception, the pilots had to press on from one target to the next to get the mission done.

Tight Lips

Despite the invaluable nature of the work, the missions sometimes

concerning what was going on deep inside the territory of a potential adversary could be acquired only by overflying the Soviet Union and its allies. This was serious business, essentially an act of war, for during peacetime such an overflight violated Soviet national sovereignty.

Deja Vu All Over Again

The Soviet Union was especially sensitive to such overflights because it had experienced roughly similar operations just prior to Germany’s invasion on June 22, 1941. Luftwaffe Col. Theo Rowehl’s special reconnaissance unit had conducted almost 500 long-range overflights, pinpointing most of the major Soviet airfields. At that time, Stalin was trying desperately to avoid war with Hitler and so he failed to object or take action. Moscow would not make the same mistake again.

Such was the gravity of the Cold War overflights, however, that they could be authorized only by the Presi-

dent. At a recent Defense Intelligence Agency symposium on the early overflights, several speakers went to some lengths to establish the difference between a Presidentially authorized overflight and the more common PARPRO missions.

At this symposium, held at Bolling AFB, Washington, D.C., each speaker emphasized that USAF Gen. Curtis E. LeMay, the commander in chief of Strategic Air Command, never, under any circumstances, ordered such a flight without Presidential authorization. They were adamant on this point because some journalists have portrayed LeMay as a stubborn warmonger out to start World War III on his own. According to those who were there, LeMay was dedicated to having SAC ready for war and was prepared to take the war into the heart of enemy territory, but he was first and foremost an airman who obeyed his Commander in Chief. He knew there was a line, and he never crossed it.

National Reconnaissance Office



This RB-45C, a special version of the B-45 Tornado bomber, had five camera stations for its charting, mapping, and photoreconnaissance missions, which were carried out at high and low altitudes, day and night.

hampered the careers of those flying them. It was not unusual for a pilot selected to fly overflight missions to be unable to tell his boss, or his boss's boss, exactly what it was he was doing during the entire time of service. This was not a good way to achieve a top officer efficiency report.

Implicit in all missions was the understanding that any aircraft forced down by enemy fire or mechanical problem would be formally disavowed by the US, with "navigation error" being the favored excuse. At that point, every pilot knew, he would be on his own. There would be no rescue flights. Walking out of Siberia or Manchuria was out of the question. Some gave serious study to a MiG-15 pilot manual, staking survival on the very slim chance of stealing a MiG-15 and flying back to safety.

Secrecy was so tight that even individuals assigned to the same overflight units would not discuss their missions with each other. What would have been valuable bits of information on the position of anti-aircraft batteries, enemy airfields, and so on were not shared. Each man had to go out and learn for himself.

The first recorded USAF overflight was flown by then-1st Lt. Bryce Poe II. On May 10, 1949, Poe took his RF-80A, burdened with special long-range tip tanks, on a flight over the Kuril Islands in the extreme Soviet Far East. Later he made flights over the Soviet mainland, including one on March 10, 1950, over the closed

Soviet city of Vladivostok. After North Korea invaded South Korea on June 25, 1950, Poe flew many reconnaissance missions but avoided penetrating Chinese airspace. He would fly his RF-80A along the Yalu River, banking to take oblique photos across the border in Chinese territory.

However, Poe was soon tasked with another mission that would take him over the Soviet Union again. This was "legal" now because the Soviet Union was seen by Washington as an unannounced "co-belligerent" in the Korean War. Flying out of Misawa AB, Japan, Poe covered familiar territory in the Kurils, Sakhalin, and Vladivostok. Soviet defenders tried to intercept him with piston-engine aircraft, but they failed.

Poe continued his periodic flights over the Soviet Union until he rotated home in January 1951. Unlike his successors in the overflight business, Poe interpreted the developed photos and personally briefed the theater commander in chief, Gen. Douglas MacArthur, and Far Eastern Air Forces commander, Lt. Gen. George E. Stratemeyer.

Watching China

Washington officials decided early in the Korean War to regularly overfly Chinese coastal areas, particularly mainland ports opposite Taiwan. In addition, the US began planning for flights over western areas of the Soviet Union.

Three RB-45Cs were sent to Japan in September 1950 and immediately began operations. Though fast compared to a B-29, the RB-45C was no match for MiG-15s and was roughly handled. One was lost in combat on Dec. 4, 1950. Another was badly shot up on April 9, 1951.

Fighter escorts were laid on, but a third aircraft was almost shot down Nov. 9, 1951. As a result RB-45s were withdrawn from daylight operations.

Nighttime RB-45 operations over Manchuria and the Soviet Far East encountered fewer difficulties. On the night of Dec. 17-18, 1952, USAF Capt. Howard S. Myers, veteran of 200 Berlin Airlift missions, flew a black RB-45C from Yokota AB, Japan, to the Manchurian city of Harbin, collecting radarscope photos of airfields and other military installations. Maj. Stacy Naftel flew similar missions and was targeted, without success, by anti-aircraft gunners. The RB-45C pilots continued to conduct overflight missions until April 1953.

China's intervention in Korea in November 1950 generated repercussions not only in the theater but around the world. Full war between the US and China seemed possible. Britain, still weakened by the exertions of World War II, feared that a Sino-American conflict would tempt the Soviet Union to take advantage of the situation and seize large chunks of central and western Europe.

In December 1950, Prime Minister Clement R. Attlee came to Washington to discuss the situation with President Truman. That discussion apparently resulted in a decision to conduct joint US Air Force and Royal Air Force reconnaissance missions over the Soviet Union and its satellites. In addition, the two sides evidently agreed to begin photoreconnaissance operations over China.

The Asian portion of this multinational operation got under way Jan. 16, 1951, when RAF Flight Lt. Edward "Ted" C. Powles flew his Supermarine Spitfire Mk 19 photoreconnaissance aircraft on the first of 107 missions over China. Powles's Spitfire was equipped with two F.52 36-inch vertical cameras. He would fly the aircraft at the very edge of its flight envelope, attaining an altitude of about 50,000 feet, with his air-speed indicating 120 knots and the

outside air temperature stable at minus 70 degrees Celsius.

Powles's missions ranged about 600 miles up and down China's coast. At times he penetrated Chinese airspace by as much as 100 miles. He was never intercepted, but he stretched the range of his aircraft to its limits, sometimes having to dead-stick in to his home base.

Cover Story

Meanwhile, on the other side of the Eurasian land mass, overflights were about to begin in earnest. The US and Britain devised a ludicrously simple and completely transparent cover story for the first overflights from UK bases. USAF was to provide four RB-45Cs to the RAF, which was to paint them in RAF colors and use American-trained RAF crews to fly them. If one was forced down in the Soviet Union, the US would point to the British insignia and disclaim all knowledge, while the British would make it clear that they owned no RB-45s, so it could not be theirs. Fortunately, the ruse was not put to the test.

RAF Squadron Leader John Crampton led a secret RAF special duty flight that initially trained at Barksdale AFB, La., before returning to RAF Sculthorpe in fall 1951. A SAC detachment, commanded by Lt. Col. Marion C. Mixson, flew out of Sculthorpe. Crampton's flight was attached to it. Mixson, Crampton, and his navigator, Flt. Lt. Rex Sanders, received their first overflight ap-

proval from Winston Churchill, newly returned as Prime Minister.

After a March practice mission, the first clandestine RB-45C overflight took place on the night of April 17–18, 1952. The three Tornados, all beautifully done up in RAF markings, flew separate routes to their targets, which were principally the operating bases of the Soviet long-range air forces. One crossed the Baltic states, the second penetrated Byelorussia, while the third—with Crampton, Sanders, and copilot Sgt. Bill Lindsay on board—went to the Ukraine.

Despite heavy responses of the surprisingly large Soviet radar defense, none of the aircraft were intercepted, and vital information on Soviet bases was acquired.

Western officials were concerned about the threat posed by Tu-4 bombers. In the spring of 1952, intelligence agents reported that the big Tupolev bombers had been sent to Siberian forward bases from which over-the-pole attacks could be launched. The Air Force and Navy established a joint program in which a special Navy P2V-3W Neptune would work in concert with an RB-50 in overflights of the Kamchatka Peninsula, the Bering Strait, and Wrangel Island off the northern Siberian coast.

The twin-engine, unpressurized P2V-3W was an unlikely formation mate for the larger, pressurized four-engine B-50. The Neptune flew at about 15,000 feet and identified ra-

dar and radio signals that would indicate radar sites and airfields. The pressurized RB-50 flew much higher and well behind the Neptune. Crews on these flights maintained complete radio silence, so everything depended upon timing, as the RB-50 was to photograph the areas the Neptune identified.

“Pearl Harbor Complex”

The joint Neptune–RB-50 flights were so successful that a new program, designated Project 52 AFR-18 was put into motion.

Project 52 AFR-18 originally envisioned using two modified B-47Bs from the 306th Bomb Wing, MacDill AFB, Fla., to make deep penetrations over Siberia via widely different routes. Two top crews were selected for the mission and were briefed by LeMay personally. The primary crew was led by Col. Donald E. Hillman, deputy commander of the 306th, with Maj. Lester E. Gunter as copilot and Maj. Edward A. Timmins as navigator. The backup crew was led by Col. Patrick D. Fleming. His crew consisted of Maj. Lloyd F. Fields as copilot and William J. Reilly as navigator.

The approved route took the B-47s from Eielson AFB, Alaska, north to a refueling point near Point Barrow, then west past Wrangel Island to a point near Ambarchik. It then turned southeast, to parallel the length of the Chukotskiy peninsula to Provideniya, thence east to return to Eielson.

The two B-47s took off on Oct. 15, 1952, following the two KC-97 tankers assigned to them for support. After refueling, Fleming flew to an area over the Chukchi Sea, taking up a racetrack pattern.

The mission proceeded as briefed, with Hillman flying at 40,000 feet at 480 knots true airspeed, presenting a difficult target to intercept. The Soviet air force, however, was ready, and after two targets had been photographed, the Americans became aware that they were being tracked by MiGs. Hillman broke radio silence to alert Fleming of the possibility of an attack. Gunter turned his seat 180 degrees to prepare his rear turret for firing, but the MiGs were unable to get into position and the rest of the mission went off without incident.

The flight lasted nearly eight hours



RB-50s worked successfully with the Navy P2V-3W Neptune to help evaluate 1952 intelligence reports that Soviet Tupolev bombers had been sent to forward bases in Siberia, from which they could launch over-the-pole attacks.

and covered roughly 3,500 miles, 800 of them in Soviet territory. The photographs revealed that the Soviet air force was not massing their Tu-4s for an attack.

Project 52 AFR-18 was embraced by newly inaugurated President Eisenhower, who was so deeply convinced of the need for reconnaissance some said he had a “Pearl Harbor complex.” In any event, he took great political risks to back long-range reconnaissance, including the development of specialized aircraft for the role. Eisenhower was quite good at photo interpretation and often would inspect intelligence photos himself, magnifying glass in hand.

In 1954, Western leaders became concerned that the Soviet air force might station the new M-4 Bison jet bomber on the Kola Peninsula. A flight of three RB-47Es was dispatched to RAF Fairford. The three aircraft were to fly in radio silence to a point near the Kola Peninsula. Two were instructed to turn back; the third, unknown to the other two, was going to proceed into Soviet territory, flying from Murmansk south to Arkhangelsk then southwest to Onega. It would then fly due west to neutral territory over Scandinavia.

The degree of security involved in the overflight missions can be illustrated by the fact that the three RB-47Es took off on May 8, 1954, unaware that the RAF had flown

the last RB-45C mission just one week earlier. The lead RB-47E was commanded by Capt. Harold Austin, with Capt. Carl Holt as copilot and Maj. Vance Heavilin as navigator.

Over Murmansk

At the designated point, two of the RB-47Es turned back. To the amazement of their crews, Austin kept on going, crossing the Kola Peninsula at Murmansk, at 40,000 feet and 440 knots true airspeed. Austin’s aircraft was quickly picked up by a flight of three MiG-15s over Murmansk, but they did not attack. As they approached Arkhangelsk, six hostile

MiGs began attacking. The MiGs flew in echelon, with the lead airplane firing then sliding off to be replaced by a wingman. Fortunately for Austin, their aim was poor, with cannon shells flashing above and below his aircraft.

As Austin covered the last of his targets and was about to pass over Finland, one of the MiGs’ 23 mm cannon put multiple holes in the left wing and near the forward fuel tank, knocking out the intercom and damaging the UHF radio so that only the command post frequency was available. One MiG flew in very close and appeared to be threatening to ram the B-47, then banked away.



Capt. Harold Austin's RB-47E is chased by one of the MiGs that attacked his reconnaissance flight (top). Austin nevertheless covered his targets, including this MiG fighter base south of Murmansk (above). He made it back to RAF Fairford, UK, with holes in the left wing of his aircraft.

Copilot Holt had fired his tail guns, but they had jammed. Still, the threat kept the MiGs at bay until the RB-47 was in neutral airspace, and Austin returned to Fairford.

At the debriefing, LeMay asked Austin, “Why didn’t they shoot you down?” Austin, striving for the right answer, said “They did not want to fly up our tail pipe because of the rear gun.” To which LeMay replied “I’m firmly convinced that all fighter pilots are cowards.”

On the other side of the world, the US Air Force’s 15th Tactical Reconnaissance Squadron in Korea, part of the 67th Tactical Reconnaissance Wing, had operated RF-80s at first but had made a transition to the RF-86. Most of the RF-86s were custom-built aircraft, the 15th TRS making camera installations themselves. Capt. Laverne H. Griffin,



RB-47s carried out some of the most difficult overflights. In 1956, they flew out of Thule, Greenland, and covered some 3,500 miles of the Soviet Union's Arctic coastline.

the operations officer, personally selected all of the pilots for the RF-86 missions.

One of his squadron mates was Capt. Mele Vojvodich Jr., who flew 125 combat missions, including a flight over Vladivostok in an RF-86. At first, the RF-86Fs flew in pairs, with two F-86 fighters as escorts. Vojvodich pressed for solo missions and got his way. He conducted one of the longest RF-86 overflights of the war, a three-hour, 15-minute mission that took him from Kimpo AB near Seoul to Shenyang to Harbin and back. He crossed the Yalu at Antung, trailed by 24 MiGs, and dead-sticked into K-14 (Kimpo), overdue by one hour. His photos recorded details of 10 airfields, five of them previously unknown, and with Ilyushin Il-28s parked on some of them.

Most missions were relatively shallow penetrations, but the 15th TRS had specially equipped RF-86s. These had been stripped of their guns and fitted with two 200-gallon drop tanks in addition to the two 120-gallon tanks they had been carrying. Two cameras were mounted either side of the pilot's seat, enabling the pilot to take overlapping photos. Mounted vertically was a third, wide-area camera.

Telltale Contrails

Normally the flights were a quick loop, overflying targets near Vladivostok and Sakhalin in the Soviet

Far East. Between April 1954 and February 1955, USAF pilots conducted nine missions, usually comprising four aircraft flying at altitudes from 45,000 to 48,000 feet. They knew they would be tracked by Soviet radar but of greatest concern were the aircraft contrails that pinpointed their location.

On Feb. 19, 1955, the 15th TRS commander, Maj. Robert E. Morrison, flew alone all the way to Khabarovsk, well within the Soviet Union, on the Amur River near the Manchurian border. Although one drop tank did not jettison when he released it, he pressed on, homing in on the Khabarovsk radio station. Just as he turned in over his target (an airfield), his last drop tank finally released, plunging down toward the city below. Morrison photographed the airfield, then, short on fuel, he flew a direct course to Chitose AB, Japan, on Hokkaido. His engine flamed out as he turned off the runway.

The largest and by far the most arduous of the overflight operations began at Thule, Greenland, and operated between March 21 and May 10, 1956. During this period, 16 RB-47Es of the 10th Strategic Reconnaissance Squadron, Lockbourne

AFB, Ohio, flew with five RB-47Hs from the 343rd Reconnaissance Squadron, Forbes AFB, Kan. They were supported by 28 KC-97 tankers.

Thule is located 690 miles north of the Arctic Circle, where the cold can be indescribable, and in winter darkness prevails nearly 24 hours a day. Work on the flight line was conducted under survival conditions, and airmen worked miracles as 156 missions went off flawlessly.

The missions covered the entire Arctic coastline of the Soviet Union, a 3,500-mile rim that ran on an arc from the Kola Peninsula in the west to the Bering Strait in the far east. Operating off ice-covered runways and using grid navigation to fly in the polar areas, the missions were conducted in radio silence. Miraculously, there were no aborts, no accidents, and no losses to Soviet military action.

Normal missions called for two RB-47s, working in tandem, to fly through their sectors, with two KC-97 tankers for in-flight refueling. On one famous mission, on May 6-7, 1956, six RB-47Es conducted a "mass flight," entering the Soviet Union at Ambarchik and flying east to Anadyr.

The American overflights were of course a terrible affront to the Soviet Union, which protested bitterly. The US gave a standard reply, noting that "if" there had been "an" overflight, it was caused by navigational error and was deeply regretted. For political reasons, Eisenhower would turn the overflight role over to the Central Intelligence Agency, with USAF supporting the operations. The CIA used highly specialized high-altitude aircraft such as the U-2s, which would, in turn be complemented by satellites.

These early penetrations of the Soviet Union paved the way for future operations. There were many other overflight operations, including those by "Slick Chick" RF-100s, "lightweight" RB-57As, and highly classified Sea Lion missions by the RB-57Ds. All were characterized by the deepest secrecy and by the utmost bravery of the crews. ■

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