

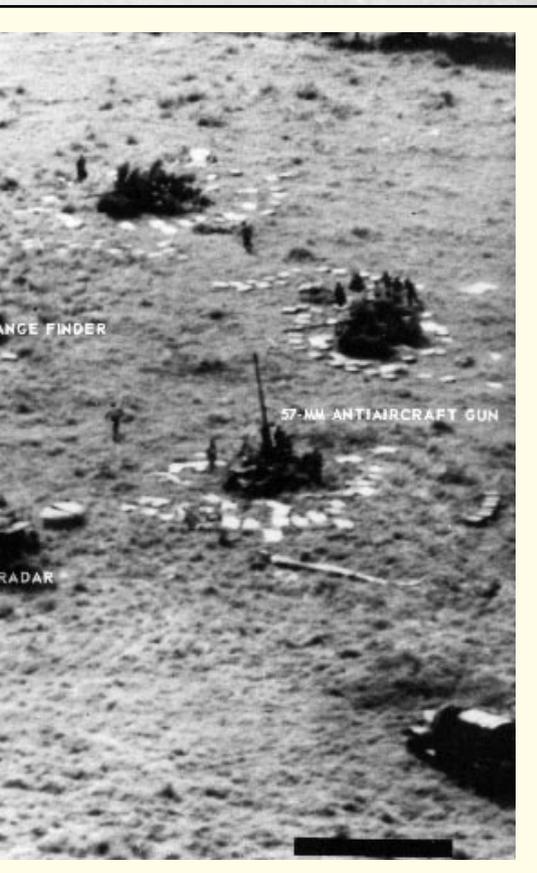
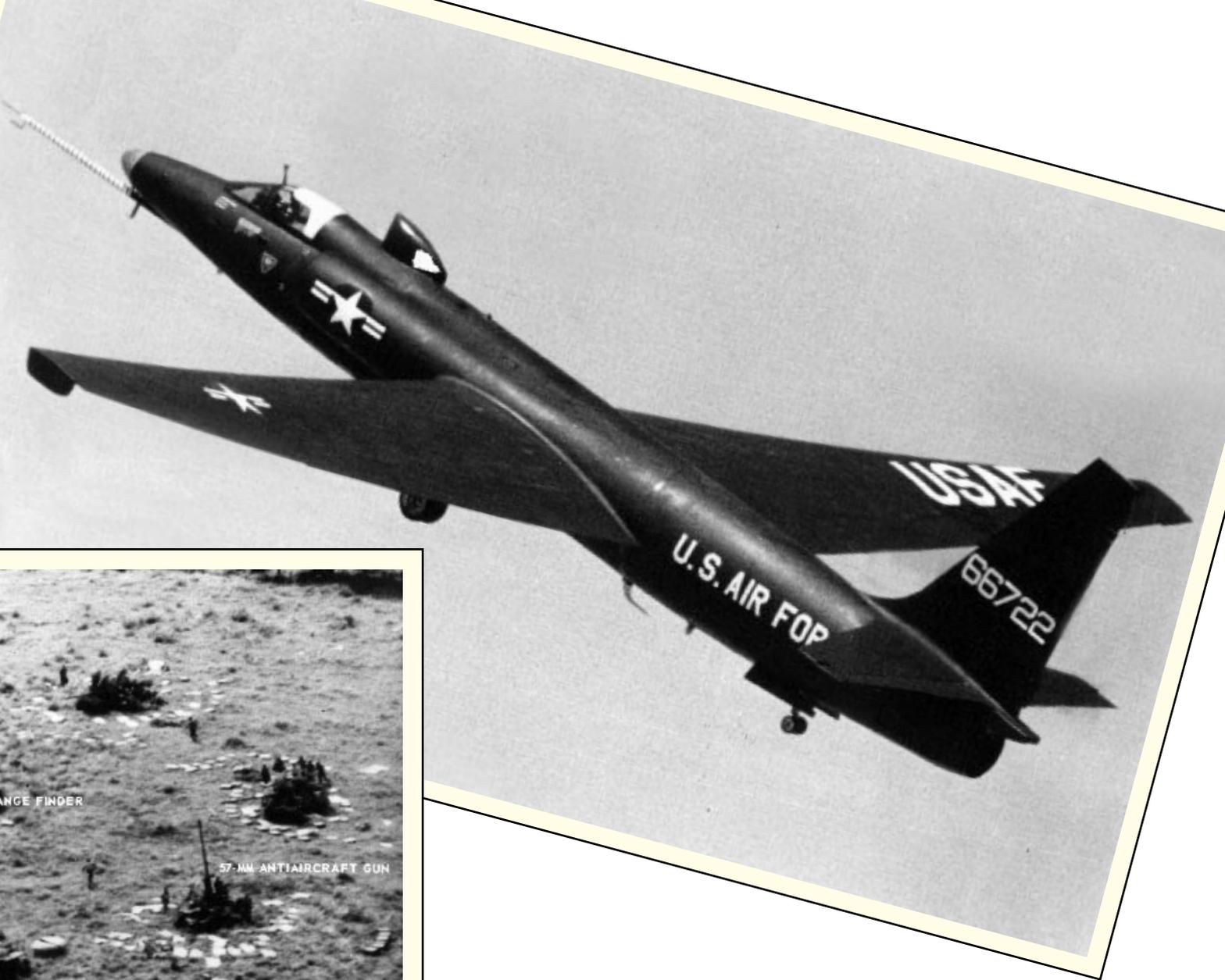


This "smoking gun" reconnaissance photo of San Cristobal, Cuba (above), revealed the presence of Soviet medium-range ballistic missiles. It was obtained by a high-flying U-2 spyplane such as the one at far right. A low-flying Air Force RF-101 or Navy RF-8 snapped the close-up at right of anti-aircraft artillery and radars being erected near the missile sites.



Airpower and the Cuban Missi

The Russians hoped to have their missiles in operation before the Americans discovered them. They almost made it.



le Crisis

By John T. Correll

IN THE summer of 1962, a conspicuous military buildup was under way in Cuba. US aerial surveillance in July reported an exceptional number of Soviet ships moving toward the island. They rode high in the water, suggesting military cargo—such as missiles, which occupied considerable space in relation to their weight.

In August, US intelligence received reports of sightings by ground observers of Russian-built MiG-21 fighters and Il-28 light bombers.

CIA U-2 spyplanes overflew Cuba twice a month. On Aug. 29, they found SA-2 surface-to-air missile sites at eight different locations. That was of interest but of no great concern. SAMs were defensive weapons.

The U-2s also found MiG-21s, confirming the earlier sighting reports. Possibly, though, these aircraft were

simply upgrades from the older MiGs the Cubans already possessed.

CIA director John A. McCone was suspicious. In an Aug. 10 memo to President Kennedy, he guessed that Russia was about to introduce ballistic missiles into Cuba. Why, he asked, would they be deploying SAMs, except to protect something important, like offensive missile sites?

For Kennedy, the question had political as well as military implications.

In late August, Sen. Kenneth B. Keating (R-N.Y.)—whose sources were probably Cuban exiles in Florida—said there was evidence of Soviet “rocket installations” in Cuba and urged Kennedy to act. Others, notably Sen. Homer E. Capehart (R-Ind.), joined in the call for action.

Strangely, U-2 flights ceased for more than a month, from Sept. 5 to



Maj. Rudolf Anderson Jr. was shot down while piloting a U-2A like this one. The U-2 Cuba mission had been passed from the CIA to the Air Force. Kennedy didn't want another Gary Powers-like flap if a CIA airplane went down.

Oct. 14. One reason was bad weather, but another was anxiety on part of the President's advisors, who worried about the consequences of a U-2 shootdown.

To the dismay of the CIA, the Air Force took over the U-2 missions when they resumed. The first flight was by Maj. Richard S. Heyser on Oct. 14.

When CIA analysts on the next day pored over Heyser's reconnaissance film, they found SS-4 medium-range ballistic missiles. Senior Administration officials were told that night. The President was notified early on the morning of Oct. 16.

The Cuban missile crisis had begun. By the time the public was informed one week later, the U-2s had also discovered an SS-5 intermediate-range ballistic missile site and Il-28 bombers.

President Kennedy spoke to the nation on television Oct. 22 and announced "unmistakable evidence" of Russian missiles in Cuba. He declared a naval "quarantine" and said any missile fired from Cuba would be treated as a Soviet attack on America.

On Oct. 27, a Russian SAM crew shot down a U-2, killing the pilot, Air Force Maj. Rudolf Anderson Jr. The White House decided not to retaliate.

On Oct. 28, the Russians bowed to overwhelming US strategic power and agreed to withdraw their missiles.

It was as close as the Cold War ever came to World War III.

Khrushchev's Gambit

As Soviet leader Nikita Khrushchev

told it later, the crisis began the previous April.

"It was during my visit to Bulgaria that I had the idea of installing missiles with nuclear warheads in Cuba without letting the United States find out they were there until it was too late to do anything about them," he said in *Khrushchev Remembers*, published in 1970.

He was reacting, superficially at least, to the Jupiter intermediate-range ballistic missiles the United States had recently installed in Turkey. More important, though, Khrushchev wanted to compensate for Russia's strategic disadvantage in long-range missiles.

"In addition to protecting Cuba," he acknowledged in his memoirs, "our missiles would have equalized what the West likes to call 'the balance of power.'"

Protecting Cuba had little to do with it. Khrushchev saw the possibility of an instant strategic adjustment. IRBMs based in Cuba could reach US targets as easily—and faster—as ICBMs from launch sites in the Soviet Union.

Missiles had recently taken center stage in the Cold War. Ironically, one of Kennedy's issues in the 1960 election was an alleged "missile gap," with the Russians ahead. There was indeed a missile gap, but it was in favor of the United States.

The Russians had only four ICBMs in 1961. By the time of the Cuban missile crisis, they probably had several dozen, although some estimates went as high as 75. What the Russians did have was

medium-range ballistic missiles, about 700 of them.

The United States had 170 ICBMs, and the number was rising rapidly. It also had eight ballistic missile submarines with 128 Polaris missiles. To make matters worse for Khrushchev, the Soviet missiles were of inferior quality.

Khrushchev had added to the perception of a missile gap by his loud and untruthful boasting that the USSR was turning out missiles "like sausages" and his claims of long-range missile capabilities he was nowhere close to having.

The US Air Force had deployed Thor and Jupiter intermediate-range missiles to Europe as a direct counter to Soviet MRBMs and IRBMs. The Jupiters had been operational in Turkey since April 1962.

Fidel Castro agreed readily to accept the Soviet missiles in his country. He did not see a need for them for Cuba's defense, but he was eager to be part of the communist team, the point man in the Western Hemisphere.

The ill-fated Bay of Pigs invasion in 1961 had failed to oust Castro, but he remained on Washington's hit list. "Operation Mongoose," a scheme to undercut the Castro regime, was still running.

Castro welcomed the installation of the Russian missiles as an opportunity to stick it to the Yanquis.

A survey team, led by Marshal Sergei Biryuzov, chief of the Soviet Rocket Forces, visited Cuba prior to the deployments. Upon his return, Biryuzov assured Khrushchev that the missiles would be concealed and camouflaged by the palm trees. Khrushchev believed him.

The force proposed for Cuba included 24 MRBM launchers and 16 IRBM launchers. There were two missiles (one as a spare) and one nuclear warhead for each launcher. There would also be four combat regiments, 24 SA-2 batteries, 42 MiG-21 interceptors, and 42 Il-28 bombers.

The ships began moving from the Black Sea in the middle of July. The first MRBMs arrived at the Cuban port of Mariel aboard *Poltava* on Sept. 15.

"Soon, hell will break loose," Khrushchev told an aide at the end of September.

The U-2

The state of the art in aerial photo intelligence was the Lockheed U-2.

Reconnaissance satellites were coming along, but the technology was not yet fully mature.

The U-2 was developed in the 1950s by the fabled Lockheed Skunk Works under the direction of the equally fabled Clarence L. “Kelly” Johnson. The prime customer was the CIA, but the Air Force was also offered a share of the program.

At first, according to a declassified CIA history of the U-2, Gen. Curtis E. LeMay, commander in chief of Strategic Air Command, said that “if he wanted high-altitude photographs, he would put cameras in his B-36 bombers and added that he was not interested in a plane that had no wheels or guns.”

The Air Force bought some U-2s anyway. They were assigned to SAC’s 4080th Bomb Wing at Laughlin Air Force Base, near Del Rio, Tex. The aircraft began arriving in June 1957. Mostly, the Air Force U-2 pilots flew missions around the Soviet periphery and in the Far East.

The U-2 was built to go high and far. The wingspan was 80 feet, almost twice the length of the body of the aircraft, which was not quite 50 feet. It flew at 72,500 feet, more than 13 miles high.

To get range, altitude, and endurance, the Skunk Works had traded off everything else. The U-2 was not very fast. Cruise speed was 460 mph.

“One unusual design feature was the tail assembly, which—to save weight—was attached to the main body with just three tension bolts,” the CIA history said. “The wings were also unique. Unlike conventional aircraft, whose main wing spar passes through the fuselage to give the wings continuity and strength, the U-2 had two separate wing panels, which were attached to the fuselage sides with tension bolts.

“The fragility of the wings and tail section, which were only bolted to the fuselage, forced Kelly Johnson to look for a way to protect the aircraft from gusts of wind at altitudes below 35,000 feet, which otherwise might cause the aircraft to disintegrate. ... The U-2 remained a very fragile aircraft that required great skill and concentration from its pilots.”

Flying the U-2 at altitude also demanded precision.

“The air was so thin it could barely support the weight of the plane, and the difference between maximum and minimum speeds was a scant six knots (seven mph),” a *Washington Post* re-

porter wrote after interviewing Air Force pilot Heyser. “If he flew too fast, the fragile [aircraft] would fall apart. If he flew too slow, the engine would stall, and he would nose-dive.”

At the end of each wing of the U-2 was a “pogo,” an outrigger with a wheel on it, to keep the wingtips from dragging on takeoff. When the aircraft broke ground, the pogos dropped away. The wingtips had skids for landing.

USAF Takes the Flights

The U-2 cameras carried 5,000 feet of film. Had it all been spooled on the same side of the camera, the weight of the film—about 300 pounds—would have thrown the airplane out of balance. Thus the film was divided into two strips, each nine inches wide, feeding from opposite directions. It would be recombined in the laboratory to produce images 18 inches square.

Each U-2 mission took about 4,000 pictures.

The U-2’s free run of crossing Soviet territory came to an end on May 1, 1960, when CIA pilot Francis Gary Powers, flying out of Pakistan, was shot down over Sverdlovsk by a Russian SA-2 SAM and captured.

There was great political uproar, both in the United States and abroad. President Eisenhower, who had detailed knowledge of the overflights and who approved the missions, denied his involvement and canceled the overflights of Russia.

The CIA U-2s continued to fly other reconnaissance missions, including the

semimonthly passes over Cuba in the summer of 1962. At that point, two events, neither of them the doing of the CIA, intervened.

On Aug. 30, a SAC U-2 on a mission unrelated to Cuba overflowed Sakhalin Island in the Far East by mistake. The Soviets protested and the US apologized. On Sept. 9, a Taiwanese U-2 was lost, probably to a SAM, over western China. Taiwan had bought its own U-2s from Lockheed.

Secretary of State Dean Rusk and National Security Advisor McGeorge Bundy became concerned that one of the SAMs in Cuba might shoot down a U-2, setting off an international controversy. So—just as the missile shipments were approaching port in Cuba—the U-2 missions stopped. There were no overflights from Sept. 5 to Oct. 14, although the CIA was allowed to fly peripheral runs, taking pictures from slant range, 15 miles offshore.

On Sept. 28, Navy reconnaissance aircraft photographed large crates on the deck of the Soviet ship *Kasimov*, on its way to Cuba. The size and shape of the crates indicated that they contained Il-28 light bombers, which was later confirmed.

On Oct. 12, the Administration transferred responsibility for U-2 overflights of Cuba to the Air Force. Various reasons were given, but the real explanation was that the Administration did not want another CIA U-2 flap and believed that it would be easier to concoct a cover story if the missions over Cuba were flown by the Air Force.



Anatomy of a crisis: At the top are the SS-5 missiles, housed in long tents. At the center is a launch control building, surrounded by service roads, missile erectors, and camouflage netting.

There is also some indication that the Department of Defense and the Air Force pressed hard to get the mission. McCone was away when it happened.

According to the CIA history, "The acting DCI [director of central intelligence], Lt. Gen. Marshall S. Carter, US Army, reacted strongly to the Air Force takeover of a major CIA operation. At one point, he remarked, 'I think it's a hell of a way to run a railroad. It's perfectly obviously a geared operation to get SAC in the act.'"

Dino A. Brugioni, whose book *Eye-ball to Eyeball* is a detailed remembrance from inside the CIA, said Carter was surprised to learn that McCone had previously mentioned to the President "that the U-2 missions were getting progressively hazardous and he might want to consider a transfer of the responsibilities to the military."

No matter how Carter and the CIA felt about it, the Air Force had the job, and the missions would be flown in the best models of the U-2, which the CIA had and the Air Force didn't.

In 1962, the most experienced pilots at Laughlin were Heyser, of Apalachicola, Fla., and Anderson, of Greenville, S.C. They went to Edwards AFB, Calif., for familiarization in the U-2Cs and to bring back two of them, which the Air Force was borrowing from the CIA. The U-2C could fly 5,000 feet higher than the Air Force's U-2As.

Finding Missile Sites

It is sometimes reported that An-

derson flew the first Air Force mission over Cuba, the one that found the missiles, or that he and Heyser both flew that day. That was a public relations maneuver instigated by the Pentagon after Anderson was shot down. The fact is, Heyser flew the first mission alone, from Edwards. Anderson was the backup.

Heyser took off from California in the middle of the night on a schedule that would put him over Cuba an hour after sunrise on Sunday, Oct. 14.

It took five hours for him to reach the Gulf of Mexico. He swung wide around the western end of Cuba and approached the island from the south. He crossed the Isle of Pines at 7:31 a.m. and turned on the cameras.

Heyser flew north, across San Cristobal, west of Havana. San Julian airfield was off to his left. He exited Cuban airspace at 7:43 a.m. He landed at McCoy Air Force Base at Orlando, Fla., where an airplane was waiting to take the film to Washington, D.C. At the debriefing, Heyser described the mission as "a milk run."

The film was delivered to the CIA's National Photographic Interpretation Center. Analysis on Oct. 15 revealed components of SS-4 missile batteries at San Cristobal and Il-28 bombers at San Julian. No nuclear warheads were seen. That evening, Administration officials were tracked down and notified.

President Kennedy was informed at 8:45 a.m. on Oct. 16. On his orders, the Air Force U-2s began flying as many as six missions a day over Cuba. "Ex-

Com," an executive committee of the National Security Council, was formed to work the crisis.

On Oct. 17, the U-2s found an SS-5 IRBM site (the first of three to be identified). The range of the SS-5 was 2,531 miles, double that of the SS-4. It could reach any point in the United States except for the Pacific Northwest. (Although the sites were under construction, no SS-5s reached Cuba. They were on ships that turned back.)

By Oct. 19, US intelligence had discovered 16 operational SS-4 launchers, 22 Il-28 bombers, 24 SA-2 SAM sites, and a nuclear warhead storage bunker.

In his memoirs, Khrushchev blustered, "We hadn't had time to deliver all our shipments to Cuba, but we had installed enough missiles already to destroy New York, Chicago, and the other huge industrial cities, not to mention the little village of Washington."

Some Administration advisors agonized that Cuba was within its rights as a sovereign nation in permitting an ally to install nuclear missiles. Kennedy understood, however, that a nuclear missile threat 90 miles off the Florida coast could not be tolerated.

Showdown

The public learned of the crisis when President Kennedy spoke to the nation on television. He said that the United States would "regard any nuclear missile launched from Cuba against any nation in the Western Hemisphere as an attack by the Soviet Union on the United States, requiring a full retaliatory response against the Soviet Union."

He also announced a naval "quarantine" of Cuba, avoiding the term "blockade," which is an act of war. The Organization of American States supported the quarantine.

For the first time in history, Strategic Air Command went to DEFCON 2, one step short of general war. Up to a third of the B-52s were on airborne alert, and the rest of the fleet was ready to take off in 15 minutes. The North American Air Defense Command moved fighter-interceptors and Hawk and Nike Hercules anti-aircraft battalions to the southeastern United States.

While the U-2s continued to work at high altitude, other Air Force and Navy aircraft flew photo missions over Cuba at lower altitudes. The Air Force RF-101 used six cameras that could photograph the missile sites from treetop level.

AP photo by Marty Ledehandler



Castro (left) knew the missiles might provoke a US invasion of his country, but he was anxious to be a player on the world stage. Khrushchev (right) believed the missiles could be installed and hidden before the US knew what was happening.



President Kennedy (right) and his brother Robert, the attorney general, confer during the 1962 crisis. Kennedy recognized the courageous efforts of the reconnaissance pilots and crews for helping resolve the crisis.

There was some talk of a “surgical strike” to take the missiles out, but with the capabilities and bombing accuracies of the day, that was not to be. The Air Force told the President that it would take hundreds of sorties to be sure of getting 90 percent of the missiles.

That was a no go.

Meanwhile, Castro—who had been steadily ignored by both the Russians and the Americans—was growing impatient. He had anti-aircraft guns of his own scattered around the island, and he ordered the Cuban gunners to shoot down the American airplanes. The Soviet ambassador tried to persuade Castro to cancel his order, but he refused.

That was the situation on the morning of Oct. 27, when Anderson took off from McCoy Air Force Base in a U-2. He crossed the northern coastline of Cuba at 9:15 a.m., flew south, over Guantanamo Bay, and then back northward. The SAM site at Banes, on the northeastern coast, picked him up about 10 a.m.

The Cuban gunners couldn’t reach Anderson at the altitude he was flying, so the Soviet SAM crewmen at Banes decided they ought to help their allies. The overall Soviet commander, Gen. Issa Pliyev, could not be found at that critical moment. The SAM battery fired three rockets, two of which hit Anderson’s U-2 and knocked it out of the sky.

There were mild reprimands from Moscow and orders not to shoot down any more U-2s. Khrushchev lied about it, of course. “Castro gave an order to

open fire, and the Cubans shot down an American U-2 reconnaissance plane,” he said in his memoirs.

ExCom had decided earlier that if a U-2 were shot down, the SAM site would be attacked and destroyed. Accordingly, the Air Force prepared an F-100 strike on Banes, but President Kennedy would not allow it.

A week after the shootdown, the Cubans turned over Anderson’s body to a United Nations representative. Kennedy personally ordered the Air Force to award posthumously to Anderson the Air Force Cross—the first ever presented.

End Game

On Oct. 27, the same day Anderson was shot down, the Air Force put its first 10 Minuteman I missiles on alert at Malmstrom AFB, Mont. It was another reminder to Khrushchev that he was years away from achieving strategic parity with the United States, and he knew it.

“We could see that we had to reorient our position swiftly,” he said in *Khrushchev Remembers*, claiming fear that Kennedy would not be able to control the warlike US military leaders. He notified Kennedy, “We agree to remove our missiles and bombers on the condition that the President give us his assurance that there would be no invasion of Cuba.”

Khrushchev pulled back from the confrontation in a Radio Moscow broadcast Oct. 28, declaring that he had ordered “the dismantling of the weapons which you describe as ‘offensive,’ and their crating, and return to the Soviet Union.”

“Eyeball to eyeball, they blinked first,” Secretary of State Dean Rusk told a reporter. That was so, but the United States also made a concession, which was not announced. The Jupiter missiles would be pulled out of Turkey.

Attorney General Robert F. Kennedy told Soviet ambassador Anatoly Dobrynin, back-channel, that “within a short time after this crisis was over, those missiles would be gone.” It was no great loss to the United States or NATO. The Jupiters were obsolete, and the mission they were performing was taken over by Polaris nuclear submarines.

Photoreconnaissance on Nov. 1 confirmed that the MRBM sites had been bulldozed. Ships began taking missiles and other equipment back to the Soviet Union on Nov. 5. SAC went back to its normal alert posture on Nov. 20, and the naval quarantine ended.

Khrushchev was removed from power in 1964. The reasons were mostly domestic, but the Cuban missile fiasco had cost him support.

Years later, it was revealed that, in addition to the missiles, there had been 40,000 Soviet troops in Cuba, many more than the US had estimated. There were also about 20 nuclear warheads in Cuba, although none of them had been mounted on the missiles.

On Nov. 26, at Homestead AFB, Fla., Kennedy presented the Presidential Unit Citation to the 4080th Strategic Wing and the 363rd Tactical Reconnaissance Wing. He also visited and thanked Navy fliers at Key West, Fla.

“I may say, gentlemen, that you take excellent pictures and I have seen a good many of them, beginning with the photographs which were taken on the weekend in the middle of October which gave us the conclusive proof of the buildup of offensive weapons in Cuba,” Kennedy said to the U-2 crews.

“The 4080th contributed as much to the security of the United States as any unit in our history and any group of men in our history.” ■

John T. Correll was editor in chief of Air Force Magazine for 18 years and is now a contributing editor. His most recent article, “How the Air Force Got the ICBM,” appeared in the July issue.