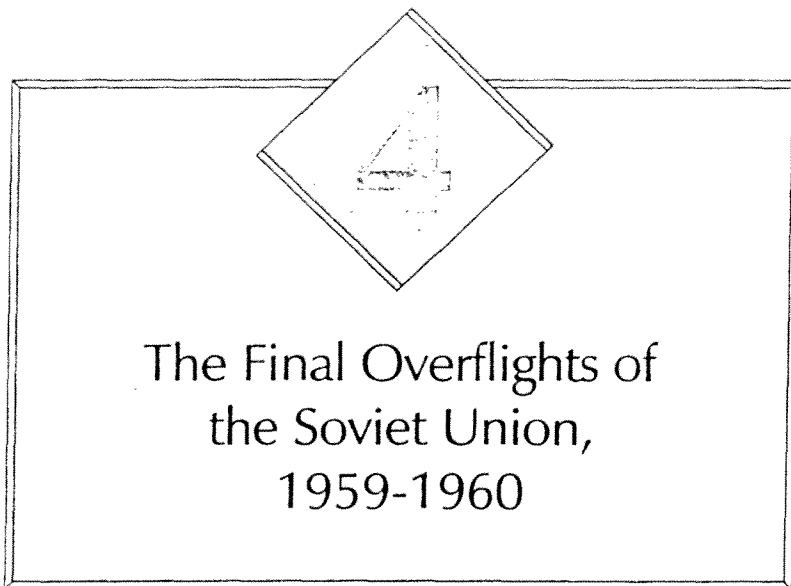


~~Secret NOFORN~~

Chapter 4

159



#### THE U-2 AND THE "MISSILE-GAP" DEBATE

Despite President Eisenhower's reluctance to send U-2s over the Soviet Bloc, he once again authorized overflights in the summer of 1959, after a pause of more than a year. The overriding factor in his decision was the growing "missile-gap" controversy, which had its roots in a series of dramatic Soviet announcements during the second half of 1957. The first announcement revealed the successful test of an intercontinental ballistic missile in August. Then in October, the Soviets announced the successful orbiting of the world's first artificial earth satellite, Sputnik. One month later the Soviets orbited a second satellite containing a dog and a television camera. To many Americans, including some influential members of Congress, the Soviet Union's space successes seemed to indicate that its missile program was ahead of that of the United States. By the spring of 1958, after the United States had successfully launched several satellites, fears of a space technology gap between the two superpowers had eased. By the end of the year, however, new concerns arose that the Soviet Union was producing a missile arsenal that would be much larger than that of the United States. This was the famous missile gap that received widespread publicity beginning in early 1959.<sup>1</sup>

The missile-gap controversy was fueled by Soviet boasts about the success of their missile program. On 4 December 1958, a Soviet delegate to the Geneva Conference on Surprise Attack stated: "Soviet ICBMs are at present in mass production." Five days later, Soviet

---

<sup>1</sup> For an overview of the controversy, see Roy E. Licklider, "The Missile Gap Controversy," *Political Science Quarterly* 85 (1970):600-615.

~~Secret~~

---

~~Secret NOFORN~~

---

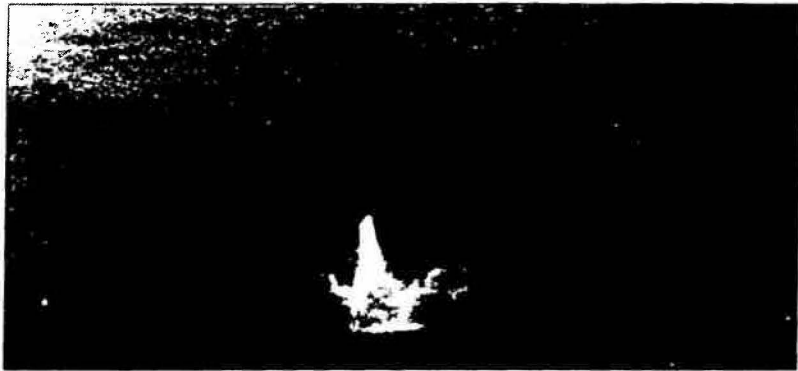
Chapter 4

---

160

---

Launch of Sputnik,  
4 October 1957



Premier Nikita Khrushchev asserted that the Soviet Union had an ICBM capable of carrying a 5-megaton nuclear warhead 8,000 miles. These statements seemed all the more ominous because, during this same month of December, the first attempt to launch the new US Titan ICBM failed. In reality, all of the Soviet statements were sheer propaganda; they had encountered difficulties with the SS-6 ICBM, and the program was at a standstill. As a result, there were no ICBM launches from Tyuratam between 29 May 1958 and 17 February 1959, a space of almost nine months.<sup>2</sup>

To conceal the difficulties in their missile program, Soviet leaders continued to praise its alleged successes. At the beginning of February 1959, Khrushchev opened the Soviet Communist Party Congress in Moscow by claiming that "serial production of intercontinental ballistic rockets has been organized." Several months later Soviet Defense Minister Rodion Malinovsky stated that these missiles were capable of hitting "precisely any point" and added, "Our army is equipped with a whole series of intercontinental, continental and other rockets of long, medium and short range." When asked at a press conference to comment on Malinovsky's statement, President Eisenhower replied, "They also said that they invented the flying machine and the automobile and the telephone and other things. . . . Why should you be so respectful of this statement this morning, if you are not so respectful of the other three?"<sup>3</sup> Nevertheless, the Soviet statements were taken at face value by most Americans, including many members of the intelligence community.

---

<sup>2</sup> Lawrence Freedman, *US Intelligence and the Soviet Strategic Threat*, 2nd. ed. (Princeton: Princeton University Press, 1986), pp. 69-70.

<sup>3</sup> Ford Eastman, "Defense Officials Concede Missile Lag," *Aviation Week*, 9 February 1959, pp. 26-27.

---

~~Secret~~

---

~~Secret NOFORN~~

Chapter 4

161

As concern about Soviet missile progress increased, even the interruption in Soviet ICBM testing was seen as evidence of a Soviet advantage. Although the CIA correctly reasoned that the Soviets were experiencing difficulties in developing an operational ICBM, the Air Force assumed that the Soviets had halted testing because the missile was ready for deployment.<sup>4</sup>

The controversy intensified early in February 1959, when Secretary of Defense Neil H. McElroy testified before the Senate Preparedness Investigating Committee on Soviet missile capabilities for the next few years. McElroy told the Senators that in the early 1960s the Soviet Union might have a 3 to 1 advantage over the United States in operational ICBMs. McElroy stressed that the gap would be temporary and that at its end the United States would enjoy a technological advantage because it was concentrating on developing the more advanced solid-fueled missiles rather than increasing the number of obsolescent liquid-fueled missiles, but it was his mention of a 3 to 1 missile gap that made the headlines. Administration critics such as Senator Stuart Symington quickly charged that the actual gap would eventually be even larger.<sup>5</sup>

Faced with rising public and Congressional concern about the missile gap, Defense Department officials pressed President Eisenhower to authorize renewed overflights to gather up-to-date information about the status of the Soviet missile program. Following a National Security Council meeting on 12 February, Chairman of the Joint Chiefs of Staff Twining, Secretary of Defense McElroy, and Deputy Secretary of Defense Quarles stayed behind to talk to the President about overflights. They hoped that the need to refute criticism of the missile gap from Symington and other Democratic Senators would persuade the President to loosen his policy on the use of the U-2. McElroy pointed out that no matter how often Allen Dulles briefed these critics, they would not believe his reassurances about the absence of a missile gap without positive proof such as photographs. More overflights would be needed to obtain the kinds of photographs required.

The President was not swayed by these arguments. Noting that the reconnaissance satellite project was "coming along nicely," he stated that U-2 flights should be "held to a minimum pending the

---

<sup>4</sup> Freedman, *US Intelligence*, p. 70.

<sup>5</sup> "What About the Missile Gap?" *Time*, 9 February 1959, pp. 11-13.

---

~~Secret~~

---

~~Secret NOFORN~~

---

Chapter 4

---

162

availability of this new equipment." Quarles objected that the satellites would not be ready for up to two years, but the President replied that this did not matter because the Soviets would not be able to build a first-strike force of ICBMs in the near future. President Eisenhower finally conceded that "one or two flights might possibly be permissible," but he ruled out "an extensive program." In light of the "crisis which is impending over Berlin" he did not want to be provocative.<sup>6</sup>

As the missile-gap controversy raged, President Eisenhower stuck to his refusal to permit overflights of the Soviet Union, although the Soviet Union's resumption of ICBM testing almost persuaded him to change his mind. On 10 April 1959, the President tentatively approved several overflights, but, on the following day, he called in McElroy and Bissell to inform them that he was withdrawing his authorization, explaining that "there seems no hope for the future unless we can make some progress in negotiation." Eisenhower remained worried by "the terrible propaganda impact that would be occasioned if a reconnaissance plane were to fail." Although he agreed that new information was necessary, especially in light of the "distortions several senators are making of our military position relative to the Soviets," Eisenhower believed that such information would not be worth "the political costs."<sup>7</sup>

The President remained willing to consider flights that did not overfly Soviet territory, and in June he authorized two electronic intelligence collection missions along the Soviet-Iranian border. The two missions of Operation HOT SHOP took place on 9 and 18 June 1959. The first of these missions was noteworthy because it involved both an Agency U-2 and an Air Force RB-57D Canberra. The two aircraft cruised along the Soviet border and made the first telemetry intercept ever from a Soviet ICBM during first-stage flight, 80 seconds after launch.<sup>8</sup>

Efforts to persuade the President to authorize penetration missions continued. On 7 July 1959, Allen Dulles and Richard Bissell met with Eisenhower to discuss the possibility of a penetration flight

---

<sup>6</sup> Andrew J. Goodpaster, Memorandum for the Record, 12 February 1959, WHOSS Alpha, DDEL (TS); Ambrose, *Eisenhower: The President*, pp. 513-514; Beschloss, *Mayday*, p. 173.

<sup>7</sup> Quoted in Ambrose, *Eisenhower: The President*, pp. 514-515; Beschloss, *Mayday*, p. 176.

<sup>8</sup> Mission folders 4120 (9 June 1959) and 4121 (18 June 1959), OSA records, job 67-B-972, boxes 10 and 11 (TS Codeword).

---

~~Secret~~

---

~~Secret NOFORN~~

Chapter 4

163

to gather intelligence on the Soviet missile program. Discussions continued the following day with the addition of Secretary of State Herter, who stated in support of the CIA proposal that "the intelligence objective outweighs the danger of getting trapped." The strong backing of the proposed overflight by both CIA and the State Department finally convinced President Eisenhower to approve the mission.<sup>9</sup>

On 9 July 1959, more than 16 months after the previous overflight of the Soviet Union, a U-2 equipped with a B camera left Peshawar, Pakistan, flew over the Urals, and then crossed the missile test range at Tyuratam. This mission, known as Operation TOUCHDOWN, produced excellent results. Its photography revealed that the Soviets were expanding the launch facilities at Tyuratam. While this overflight was under way, another U-2 flew a diversionary mission along the Soviet-Iranian border.<sup>10</sup>

Despite its success, this overflight remained an isolated incident. President Eisenhower was unwilling to authorize additional overflights of the Soviet Union, in part because he did not wish to increase tension before Premier Khrushchev's visit to the United States scheduled for 15-27 September 1959. Nevertheless, the President still wanted as much intelligence on the Soviet missile program as possible. Because the Soviets were conducting an extensive program of missile tests in mid-1959, Eisenhower authorized a steady stream of the less provocative electronic intelligence (ELINT)-gathering missions (14 in all) along the Soviet border during the remainder of the year.<sup>11</sup>

Within the United States, concern about the Soviet missile program continued to grow. On 12 September 1959 the Soviets scored another space success when their Luna 2 rocket reached the moon, and Khrushchev stressed this success when he arrived in the United States three days later. He also boasted of Soviet missile progress in private conversations with President Eisenhower, while making no

---

<sup>9</sup> Andrew J. Goodpaster, Memorandum for the Record, 7 July 1959 (TS); idem, Memorandum of Conference with the President, 8 July 1959, WHOSS, Alpha, DDEL (TS).

<sup>10</sup> Mission folder 4125 (9 July 1959), OSA records (TS Codeword).

<sup>11</sup> *OSA History*, chap. 19, annex 120, pp. 12-14 (TS Codeword).

---

~~Secret~~

---

~~Secret NOFORN~~

---

Chapter 4

---

164

mention of overflights by the United States. After the trip was over, Khrushchev and other leading Soviet officials continued to make exaggerated claims about the extent of their missile force, adding to the confusion and concern within the US intelligence community. Thus in November 1959, Soviet Premier Khrushchev told a conference of journalists, "Now we have such a stock of rockets, such an amount of atomic and hydrogen weapons, that if they attack us, we could wipe our potential enemies off the face of the earth." He then added that "in one year, 250 rockets with hydrogen warheads came off the assembly line in the factory we visited."<sup>12</sup> Because the Soviet Union had been launching at least one missile per week since early fall, US policymakers placed great weight on his remarks.

Despite the intelligence community's intense interest in the Soviet Union's nuclear and missile programs, President Eisenhower did not authorize any more overflights of the Soviet Union during the remainder of the year. On the other hand, he raised no objections to (and probably welcomed) the first British overflight of the Soviet Union in December 1959. For almost a year, the RAF pilots of Detachment B had been ready to fly over the Soviet Union, but Prime Minister Harold Macmillan had not previously authorized any such missions because of his own visit to the Soviet Union, several international meetings, and other state visits. As a result, British U-2 missions had been confined to the Middle East. Now that the Prime Minister's approval had been obtained, Detachment B conducted Operation HIGH WIRE with an RAF pilot. Squadron leader Robert Robinson left Peshawar on 6 December and overflew Kuybyshev, Saratov Engels Airfield, and the Kapustin Yar Missile Test Range before landing at Adana. The mission photography was excellent, but it did not provide intelligence on Soviet ICBMs, which were tested at Tyuratam, not Kapustin Yar.<sup>13</sup>

Because there had been so few overflights in 1958 and 1959, many questions about the Soviet missile program remained unanswered. Within the intelligence community there was still considerable disagreement over the size of the Soviet missile force. Thus, during testimony before the US Senate in January 1960, DCI Allen Dulles, Secretary of Defense Thomas Gates, and Air Force Chief of

---

<sup>12</sup> William E. Burrows, *Deep Black: Space Espionage and National Security* (New York: Random House, 1987), p. 101.

<sup>13</sup> *OSA History*, chap. 11, p. 33 (TS Codeword); Mission folder 8005 (6 December 1959), OSA records, job 67-B-972, box 13 (TS Codeword).

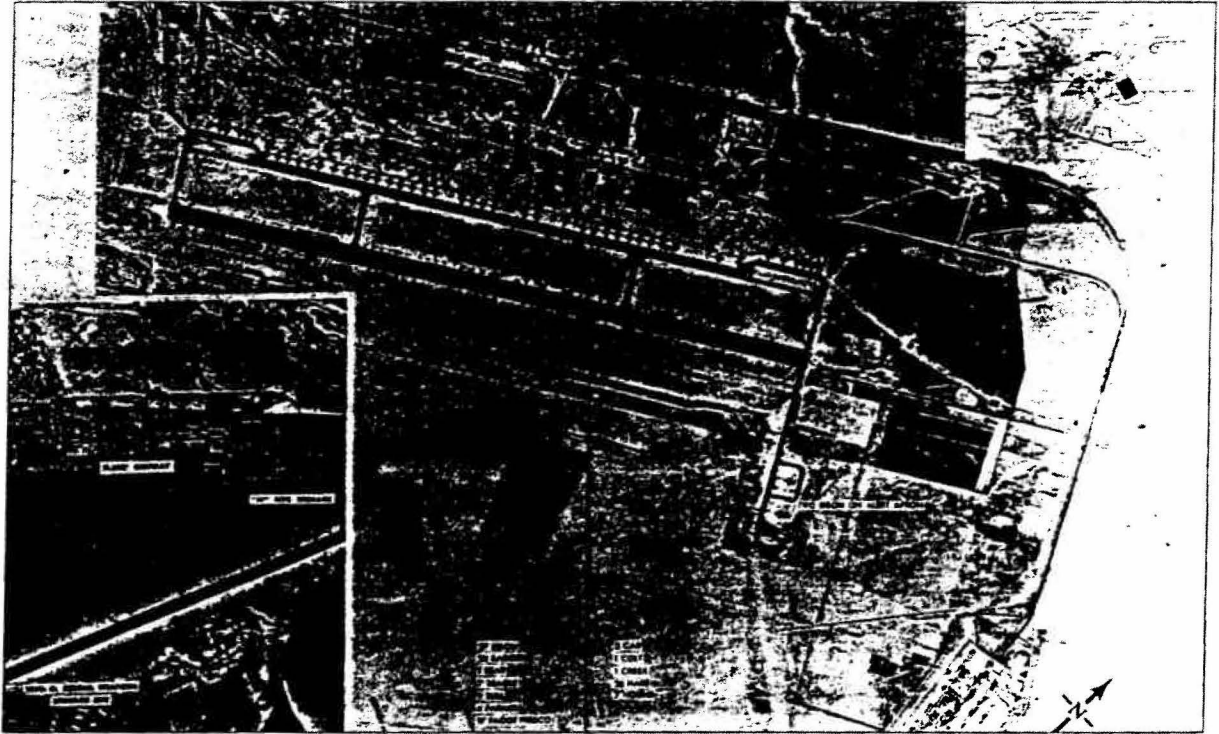
---

~~Secret~~

~~Secret NOFORN~~

Chapter 4

165



Staff Nathan Twining each gave different figures for the number of deployed Soviet missiles. Although the CIA figures were based on evidence gained from overflights, Dulles could not reveal this fact to the Senate and, therefore, faced very sharp questioning.<sup>14</sup>

Saratov Engels Airfield,  
6 December 1959

As a result of these Senate hearings, Dulles was determined to obtain permission for more overflights in order to settle the missile-gap question once and for all and end the debate within the intelligence community. To accomplish this, Dulles proposed photographing the most likely areas for the deployment of Soviet missiles. At this time there was still no evidence of SS-6 ICBM deployment outside the Tyuratam missile test range. Because the SS-6 was extremely large and liquid fueled, analysts believed these missiles could only be deployed near railroads. Existing U-2 photography showed railroad tracks going right to the launching pad at the test site. Dulles, therefore argued that SS-6 installations could easily be located by flying along railroad lines. Dulles was supported by members of the

<sup>14</sup> Licklider, "Missile Gap Controversy," pp. 608-609.

~~Secret~~





---

~~Secret NOFORN~~

Chapter 4

167

President's Board of Consultants on Foreign Intelligence Activities. At a meeting of the board on 2 February 1960, Gen. James Doolittle urged President Eisenhower to use overflights of the Soviet Union to the maximum degree possible. The President's response, as summarized in General Goodpaster's notes of the meeting, showed that the upcoming summit meeting was already an important factor in his attitude toward U-2 flights: "The President said that he has one tremendous asset in a summit meeting, as regards effect in the free world. That is his reputation for honesty. If one of these aircraft were lost when we are engaged in apparently sincere deliberations, it could be put on display in Moscow and ruin the President's effectiveness."<sup>15</sup>

A few days later, another U-2 took to the sky on a mission over the Soviet Union. As in December, the pilot was British, and the mission had been ordered by Prime Minister Macmillan. On 5 February 1960, a Detachment B U-2C with squadron leader John MacArthur at the controls left Peshawar, Pakistan, to conduct Operation KNIFE EDGE. The plane overflew the Tyuratam Missile Test Range, headed northwest to Kazan', and then turned south, photographing long stretches of the Soviet rail network. The excellent photography from this mission did not reveal a single missile site, but analysts did discover a new Soviet bomber, dubbed the BACKFIN, at Kazan'.<sup>16</sup>

Despite the outcome of this mission, the missile-gap debate continued. The Air Force still insisted that the Soviets had deployed as many as 100 missiles. The Army, Navy, and CIA, however, doubted that any had been deployed, because none could be found. Additional U-2 photography was needed to settle the debate. In mid-February, President Eisenhower reviewed plans for four additional U-2 missions. The success of the two British missions, along with the absence of Soviet protests, made the President more willing to consider a resumption of US overflights, and he agreed to allow one mission to be flown during the month of March. The President's continued restrictions upon the use of the U-2 disturbed DCI Dulles, who sent a memorandum to the National Security Council on 1 March 1960 asserting that the cardinal objective of obtaining information on Soviet missile deployment could be better achieved if the U-2 were given freer rein.<sup>17</sup>

---

<sup>15</sup> Ambrose, *Eisenhower: The President*, p. 568; Beschloss, *Mayday*, p. 233.

<sup>16</sup> Mission folder 8009 (5 February 1960), OSA records, job 67-B-972, box 13 (TS Codeword); *OSA Chronology*, p. 25 (TS Codeword).

<sup>17</sup> *OSA Chronology*, p. 25 (TS Codeword); Philip K. Edwards, "The President's Board: 1956-60," *Studies in Intelligence* 13 (Summer 1969):118 (S).

---

~~Secret~~

---

~~Secret NOFORN~~

---

Chapter 4

---

168

In authorizing another overflight of the Soviet Union, President Eisenhower directed that it be conducted before 30 March. Because of complications in getting permission from Pakistan to use the airfield at Peshawar, however, the mission could not be staged in March, and the President agreed to extend his deadline until 10 April 1960. One day before the expiration of this deadline, a U-2 equipped with a B-camera took off from Peshawar on the last successful overflight of the Soviet Union, Operation SQUARE DEAL. As had been the case during the previous two overflights, a second U-2 flew a diversionary mission along the Soviet-Iranian border. After leaving Peshawar, mission 4155 headed first for Saryshagan, where it obtained the first pictures of two new Soviet radars, the HEN HOUSE and HEN ROOST installations. The U-2 then flew to the nuclear testing site at Semipalatinsk. Returning to the Saryshagan area, it crisscrossed the railroad network there and then proceeded to Tyuratam, where it photographed a new two-pad, road-served launch area that suggested a new Soviet missile was in the offing.<sup>18</sup>

In his memoirs Nikita Khrushchev remarked that this U-2 should have been shot down, "but our antiaircraft batteries were caught napping and didn't open fire soon enough." Khrushchev explained that Soviet missile designers had developed a high-altitude antiaircraft missile and batteries of this missile had been deployed near known targets of the U-2.<sup>19</sup>

The CIA already had strong indications of improvements in the Soviet air defense system, and early in 1960 the Development Projects Division had asked Air Force experts at the Air Technical Intelligence Center (ATIC) for a frank assessment of Soviet capabilities against the U-2. On 14 March 1960, Col. William Burke, acting chief of the DPD, relayed the ATIC assessment to Richard Bissell:

*The greatest threat to the U-2 is the Soviet SAM. Although the ATIC analysis concedes a remote possibility that the SAM may be less effective than estimated, their present evaluation is that the SAM (Guideline) has a high probability of successful intercept at 70,000 feet providing that detection is made in sufficient time to alert the site.<sup>20</sup>*

---

<sup>18</sup> Mission folder 4155, 9 April 1960, OSA records, job 67-B-328, box 6 (TS Codeword).

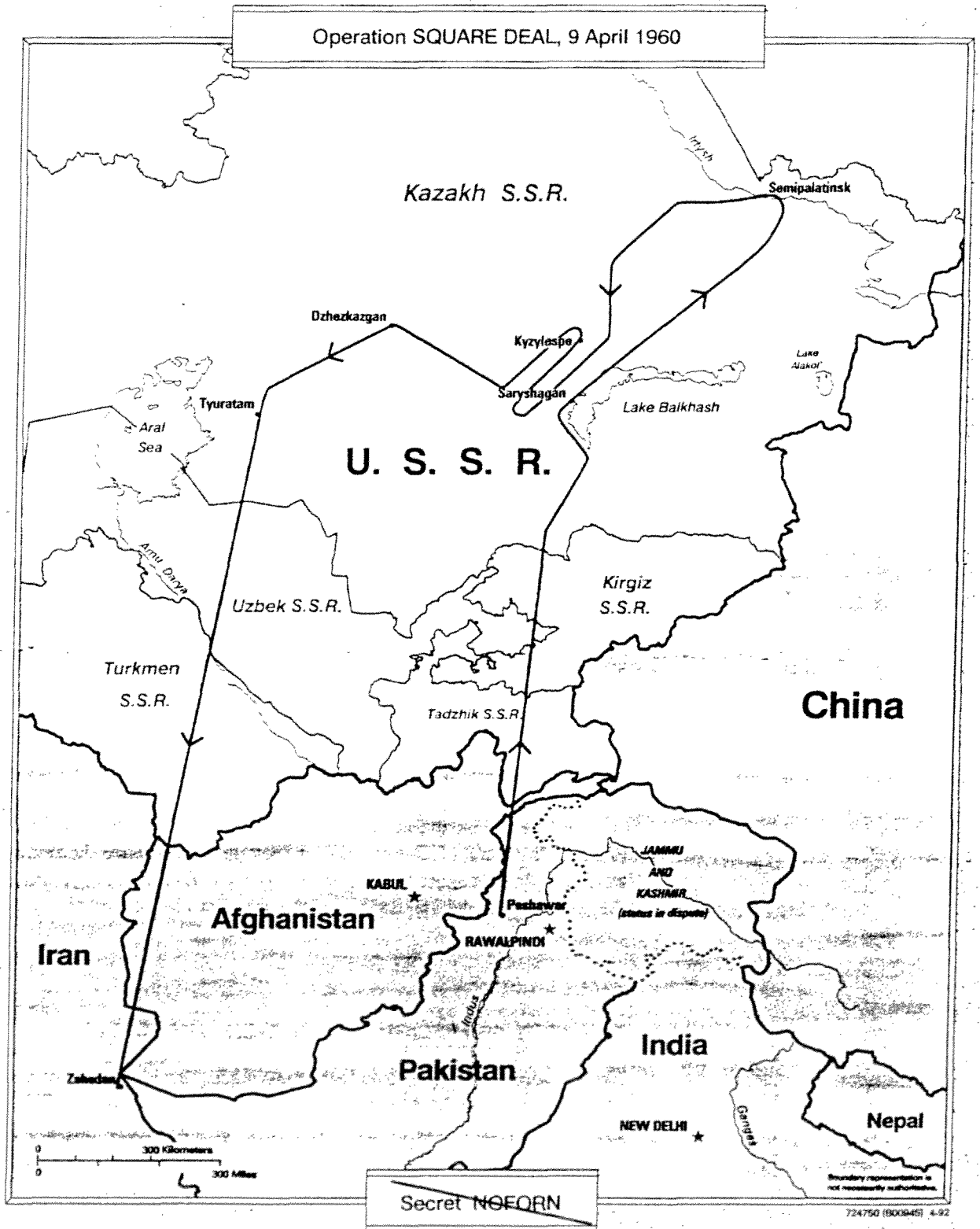
<sup>19</sup> Nikita S. Khrushchev, *Khrushchev Remembers: The Last Testament* (Boston: Little, Brown, & Co., 1974), pp. 443-444.

<sup>20</sup> Memorandum for Richard M. Bissell, Deputy Director (Plans), from Col. William Burke, Acting Chief, DPD, "Evaluation of Proposed CHALICE Operations," 14 March 1960, IC Staff, COMIREX records, job 33-T-123A, box 10, "CHALICE (General)" (TS Codeword).

---

~~Secret~~

169



---

~~Secret NOFORN~~

---

Chapter 4

---

170

One of the reasons why Operation SQUARE DEAL had been selected for the 9 April flight was that mission planners believed that penetration from the Pakistan/Afghanistan area offered the greatest chance of escaping detection by the Soviet air defense system. Colonel Burke's 14 March letter recommending SQUARE DEAL as the preferred route for the next overflight had stated, "There is a reasonable chance of completing this operation without detection." Escaping detection had become important because, if the Soviet SAMs received sufficient advanced warning, they posed a major threat to the U-2.

CIA hopes that flights from Pakistan or Afghanistan might go undetected proved false. On the 9 April overflight, the U-2's ELINT-collection unit (System VI) indicated Soviet tracking at a very early stage of the mission. Although the Soviets failed to intercept the U-2, their success at tracking it should have served as a warning against future overflights from Pakistan (or anywhere else, for that matter). On 26 April 1960, Colonel Burke informed Richard Bissell that "experience gained as a result of Operation SQUARE DEAL indicates that penetration without detection from the Pakistan/Afghanistan area may not be as easy in the future as heretofore."<sup>21</sup> Unfortunately, neither Colonel Burke nor Richard Bissell took the logical step of recommending the cessation of overflights now that the risks had increased substantially. The lure of the prospective intelligence gain from each mission was too strong, and the Soviets' lack of success at interception to date had probably made the project staff overconfident. Furthermore, both DCI Allen Dulles and the President's Board of Consultants on Foreign Intelligence Activities were pressing for more photos of the Soviet Union in order to settle the missile-gap debate raging in the intelligence community and Congress.

#### THE LAST OVERFLIGHT: OPERATION GRAND SLAM

Even before the 9 April overflight took place, President Eisenhower had consented on 28 March to an additional overflight during the month of April. His willingness to allow yet another overflight was

---

<sup>21</sup> Memorandum for Richard M. Bissell, Deputy Director (Plans), from Colonel Burke, Acting Chief, DPD, "Operational Priority of Proposed CHALICE Missions," 26 April 1960, IC Staff, COMIREX records, job 33-T-123A, box 10, "CHALICE (General)" (TS Codeword).

---

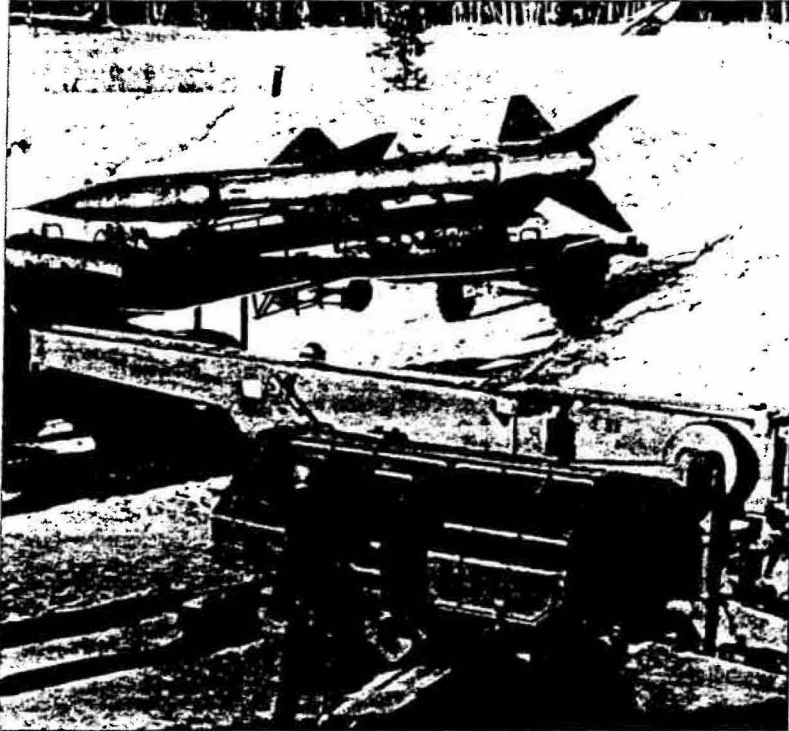
~~Secret~~

---

~~Secret NOFORN~~

Chapter 4

171



---

*SA-2 surface-to-air missile*

strengthened when the Soviet Union did not protest the 9 April mission. As Presidential science adviser George Kistiakowsky later remarked about the lack of protest, "This was virtually inviting us to repeat the sortie."<sup>22</sup>

Although President Eisenhower had authorized another overflight for April, he left the designation of its targets up to the experts at the CIA. Of the three missions that remained under consideration, one—Operation SUN SPOT—would overfly southern targets, Tyuratam and Vladimirovka, while the other two would cover railroad networks in the north-central portion of the Soviet Union. The intelligence community had been interested in this area ever since late 1959, when there were indications that the Soviets were building an SS-6 launch facility there. This was the first indication that SS-6s might be located anywhere other than Tyuratam testing facility, where the missiles were launched from a general purpose launching pad. The intelligence community was anxious to obtain photography of a

---

<sup>22</sup> George B. Kistiakowsky, *A Scientist at the White House* (Cambridge: Harvard University Press, 1976), p. 328.

---

~~Secret~~

---

~~Secret NOFORN~~

---

Chapter 4

172

deployed SS-6 site because it could provide exemplars for photointerpreters to use in searching subsequent overhead photography for similar installations.<sup>23</sup>

The two proposed overflights that would cover the northern railroad lines received the strongest consideration. Both plans contained new features. Operation TIME STEP called for a U-2 to take off from the USAF base at Thule, Greenland, which would be the first overflight staged from this base. The aircraft would then fly over Novaya Zemlya on its way to cover the railroad lines from the Polyarnyy Ural Mountains to Kotlas. The return flight would be over Murmansk with the landing to take place at either Bodo or Andoya on Norway's northeast coast. The other proposed overflight, Operation GRAND SLAM, was the first U-2 mission planned to transit the Soviet Union; all previous missions had penetrated not more than halfway and then left in the general direction from which they came. GRAND SLAM proposed to fly across the Soviet Union from south to north, departing from Peshawar, Pakistan, and landing at Bodo, Norway. The mission would overfly Tyuratam, Sverdlovsk, Kirov, Kotlas, Severodvinsk, and Murmansk.

The two preferred missions both required the use of the airfield at Bodo, which had been authorized by senior Norwegian intelligence and military officers. Because the Bodo airfield was involved in NATO maneuvers taking place in the Barents Sea area, Bissell informed the White House that neither mission could be flown before 19 April. Once the maneuvers ended, bad weather over the Soviet Union kept the mission from taking place when it was originally scheduled. Richard Bissell, therefore, asked President Eisenhower for more time, and, on 25 April, General Goodpaster relayed the President's instructions to Bissell that "one additional operation may be undertaken, provided it is carried out prior to May 1. No operation is to be carried out after May 1."<sup>24</sup> The President did not want to fly missions any later than that because the Paris Summit was scheduled to begin on 16 May 1960.

By this time, CIA planners were concentrating on Operation GRAND SLAM as the most likely route for the proposed mission because it offered the best chance of photographing suspected locations

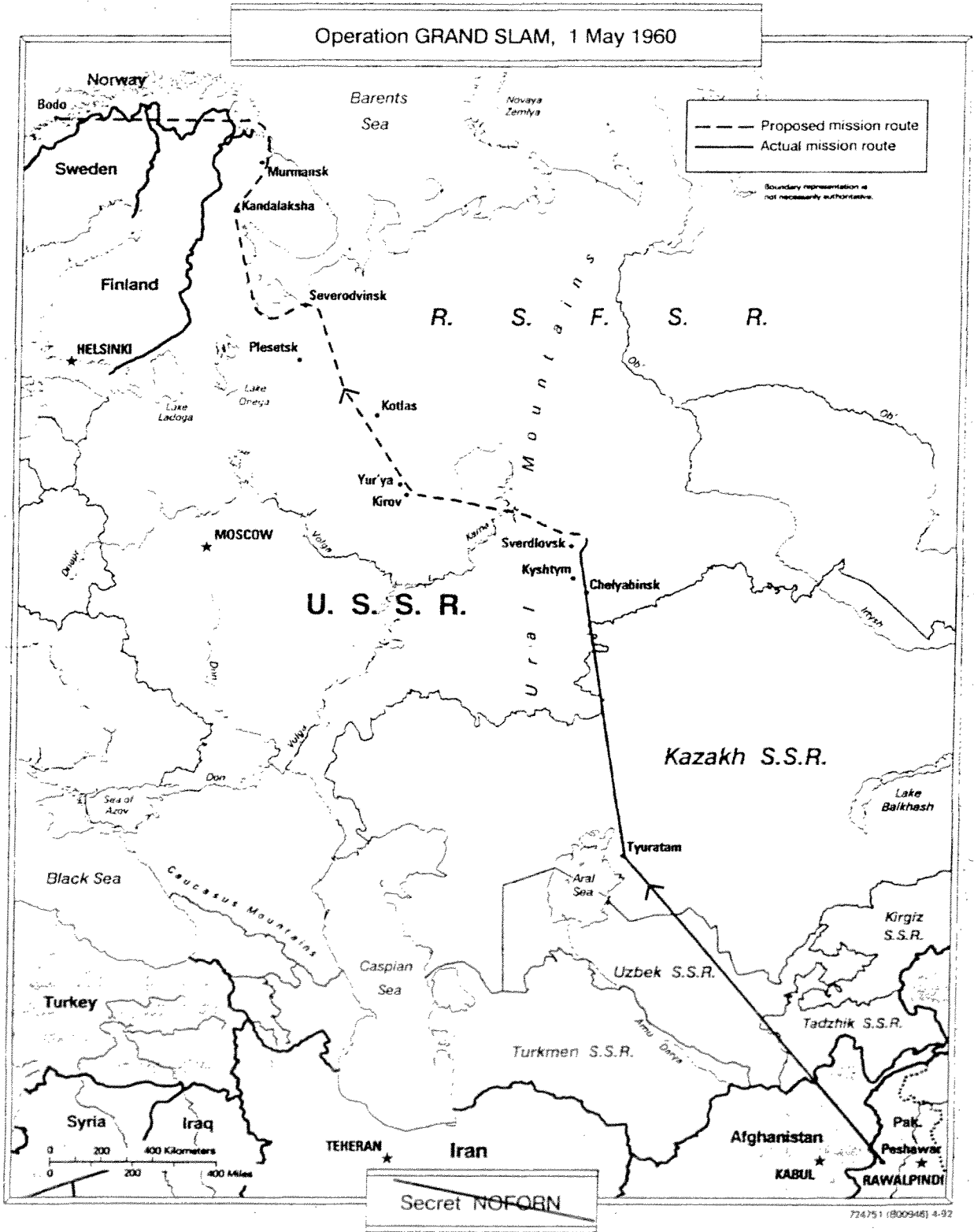
---

<sup>23</sup> *OSA History*, chap. 12, pp. 35-36 (TS Codeword).

<sup>24</sup> Ambrose, *Eisenhower: The President*, p. 569; Beschloss, *Mayday*, p. 10.

---

~~Secret~~



---

~~Secret NOFORN~~

---

Chapter 4

174

of Soviet ICBM sites. The other proposed overflight, Operation TIME STEP out of Greenland, was more likely to run into bad weather (which would affect both navigation and photography) because the flightpath would remain above 60° north latitude during the entire mission. Furthermore, mission planners opposed this route because of its greater risk. In his letter to Richard Bissell on 14 March 1960, Colonel Burke stated:

*Operation "TIME STEP" is our last choice because we can assume, with a 90 percent probability of being correct, that we will be detected on entry, tracked accurately throughout the period in denied territory (approximately four hours), and will evoke a strong PVO [Soviet Air Defense] reaction. This flight plan would permit alerting of SAM sites, and pre-positioning of missile equipped fighters in the Murmansk area (point of exit) thus enhancing the possibility of successful intercept. In addition, we must assume that even were the Soviets unable to physically interfere with such an incursion, sufficient evidence will be available to permit them to document a diplomatic protest should they desire to do so.<sup>25</sup>*

The concerns raised by Colonel Burke about TIME STEP should also have been raised about Operation GRAND SLAM, which would be the most adventuresome overflight to date because it proposed covering so much of the Soviet Union. If the Soviets could track the U-2 early in the mission, they would have plenty of time to prepare to intercept the aircraft.

The pilot selected for Operation GRAND SLAM was Francis Gary Powers, the most experienced U-2 pilot in the program. Powers had joined the project in May 1956 and had flown 27 operational missions in the U-2, including one each over the Soviet Union and China as well as six along the Soviet border.

To prevent the U-2 from being seen at Peshawar, project managers decided to ferry the aircraft from Adana to Pakistan the night before the scheduled flight. Once the plane was refueled and its camera was loaded, it would take off at daybreak, with little if any exposure to local residents because of darkness and its short stay—less than six

---

<sup>25</sup> Memorandum for Richard M. Bissell, Deputy Director (Plans), from Col. William Burke, Acting Chief, DPD, "Evaluation of Proposed CHALICE Operations," 14 March 1960, IC Staff, COMIREX records, job 33-T-123A, box 10, "CHALICE (General)" (TS Codeword).

---

~~Secret~~



---

~~Secret NOFORN~~

---

Chapter 4

---

175

hours on the ground. Originally scheduled for Thursday, 28 April, GRAND SLAM was canceled because of bad weather over the northern Soviet Union. This had been the case for the past several weeks. When this flight was canceled, the U-2 returned to Adana before sunrise. That evening the U-2 flew back to Peshawar for another attempt to stage the mission early on the 29th, but bad weather again forced cancellation of the mission, and the U-2 returned to Adana. Because of continued bad weather over the target areas, no mission was planned for Saturday, 30 April.<sup>26</sup>

Meanwhile, the plane ferried to Peshawar on 27 and 28 April had accumulated so many hours of flight time that it had to be removed from service for periodic maintenance. A different aircraft was, therefore, ferried to Peshawar on Saturday night, 30 April. This aircraft, article 360, had made a crash landing in Japan during the previous September (see chapter 5). Although it had been refurbished by Lockheed and now had the more powerful J75 engine that would give it greater altitude, pilots did not completely trust this aircraft and considered it a "hangar queen." As Powers noted in his memoirs, "Its current idiosyncrasy was one of the fuel tanks, which wouldn't feed all its fuel."<sup>27</sup> The aircraft was equipped with a B-model camera, a System-VI electronic intelligence unit, and a System-IXB device, which generated false-angle information in response to the radar pulses used by some Soviet airborne-missile fire-control systems.

Operation GRAND SLAM, mission 4154 and the 24th deep-penetration overflight of the Soviet Union, began almost 30 minutes late on Sunday, 1 May 1960, a delay due to difficulty in getting takeoff approval from Washington. This delay was caused by communications problems that are typical at sunrise and sunset during spring and autumn, when the ionosphere will not support reliable communications. In attempting to relay the authorization message, the radio operator in Adana was unable to reach the base in Peshawar, whose codename was HBJARGON. Realizing that neither the prearranged nighttime nor daytime frequencies were working, the operator began sending a message in the clear, using one of the guard frequencies in the transition area between the daytime and nighttime frequencies. The radio operators at Peshawar kept hearing the Morse

---

<sup>26</sup> Mission folder 4154 (1 May 1960), OSA records (TS Codeword).

<sup>27</sup> Powers, *Operation Overflight*, p. 76.

---

~~Secret~~

---

~~Secret NOFORN~~

---

Chapter 4

---

176

code letters JGOHB, JGOHB as they tuned from one prearranged frequency to the other. Then one of the Peshawar operators decided to tune in the guard frequency where the Morse transmission was strongest. He was able to discern a break in the letters, making the message read "HBJGO HBJGO." The Peshawar operators realized this stood for "HBJARGON Go." The detachment chief, Col. William Shelton, who had been waiting anxiously inside the radio van for a "Go" or "No Go" message, leaped from the van and ran across the field to give the signal for takeoff to Powers, who was sitting in the U-2C at the end of the runway.<sup>28</sup>

Powers started his takeoff roll at 0159Z on 1 May 1960. Once airborne, Powers guided his aircraft toward Afghanistan. Following standard operating procedure, Powers clicked his radio switch when he reached penetration altitude of 66,000 feet, which signaled the operations unit at Peshawar that everything aboard the aircraft was working and the mission would proceed as planned. Aside from this simple signal, Powers and all U-2 pilots maintained strict radio silence during penetration missions.

Powers' first target was the Tyuratam Missile Test Range after which he headed for Chelyabinsk, just south of Sverdlovsk. The planned route would take him over Kyshtym, Sverdlovsk, northwest to Kirov, north over Yur'ya and Plesetsk, then to Severodvinsk, northwest to Kandalaksha, north to Murmansk, and, finally, west to Bodo, Norway.

May Day turned out to be a bad time to overfly the Soviet Union. On this major holiday, there was much less Soviet military air traffic than usual, so Soviet radars could easily identify and track Powers' U-2. In addition, the Soviets responded to the intrusion by ordering a ban on civilian air traffic in a large portion of the Soviet Union. Soviet radar began tracking the U-2 when it was still 15 miles south of the Soviet-Afghan border and continued to do so as the aircraft flew across the Central Asian republics. When Powers reached the Tashkent area, as many as 13 Soviet interceptor aircraft scrambled in an unsuccessful attempt to intercept his plane.

Powers never made it past Sverdlovsk. Four and a half hours into the mission, an SA-2 surface-to-air missile detonated close to and just behind his aircraft and disabled it 70,500 feet above the Sverdlovsk

---

<sup>28</sup> Richard K. Pero, "Message Received—Unfortunately," *Studies in Intelligence* 27 (Winter 1983):29 (S).

---

~~Secret~~

---

~~Secret NOFORN~~

Chapter 4

177

area. The plane began spiraling down toward the ground and Powers looked for a way out. Unable to use the ejection seat because centrifugal force had thrown him against the canopy, he released the canopy and prepared to bail out, waiting to arm the destruction device at the last minute, so that it would not go off while he was still in the plane. When he released his seatbelt, however, he was immediately sucked out of the aircraft and found himself dangling by his oxygen hose, unable to reach the destruction switches. Finally, the hose broke and he flew away from the falling aircraft. After he fell several thousand feet, his parachute opened automatically, and he drifted to earth where he was quickly surrounded by farmers and then by Soviet officials.<sup>29</sup> His aircraft had not been destroyed by the crash, and the Soviets were able to identify much of its equipment when they put it on display 10 days later. Even if Powers had been able to activate the destruction device, however, it would not have destroyed the aircraft. The small explosive charge was only designed to wreck the camera.

How had the Soviets succeeded in downing the U-2? Although some CIA project officials initially wondered if Powers had been flying too low through an error or mechanical malfunction, he maintained that he had been flying at his assigned altitude and had been brought down by a near miss of a Soviet surface-to-air missile. This turned out to be the case, for in March 1963, the US air attache in Moscow learned that the Sverdlovsk SA-2 battery had fired a three-missile salvo that, in addition to disabling Powers' plane, also scored a direct hit on a Soviet fighter aircraft sent aloft to intercept the U-2.<sup>30</sup> Mission planners had not known about this SAM site before the mission because they always laid out flight plans to avoid known SAM sites.

## THE AFTERMATH OF THE U-2 DOWNING

The first indication that something was wrong with Powers' mission came even before he was overdue at Bodo, Norway. The CIA Operations Center learned on 1 May at 0330 hours Washington time

---

<sup>29</sup> Powers, *Operation Overflight*, pp. 82-84; Beschloss, *Mayday*, pp. 26-28; Transcript of Debriefing Tapes of Francis Gary Powers, 13 February 1962, Board of Inquiry on the Conduct of Francis Gary Powers, Operations MUDLARK files, OSA records, job 74-B-605, box 6 (S).

<sup>30</sup> Cunningham interview, 4 October 1983 (TS Codeword); *OSA History*, chap. 14, p. 55 (TS Codeword).

---

~~Secret~~

---

~~Secret NOFORN~~

---

Chapter 4

---

178

that the Soviets had discontinued radar tracking of the flight's progress two hours earlier (0529Z), southwest of Sverdlovsk. Although there was no word from the Soviet Union concerning the missing U-2, key project personnel assembled in the Agency control center that morning (with the exception of Bissell, who was out of town and did not arrive until 1530) to analyze the latest information and discuss courses of action. They quickly established a new project, known as Operation MUDLARK, to gather and evaluate all available information about the downed U-2.<sup>11</sup>

Bissell and the other project officials did not know whether Powers was dead or if the plane and camera had been destroyed, but they believed that there was no way that a pilot could survive a crash from an altitude above 70,000 feet. They, therefore, decided to stick with the standard cover story for U-2 flights: that they were weather flights staged by the National Aeronautics and Space Administration (NASA)—originally the National Advisory Committee for Aeronautics, renamed in 1958. This cover story had been approved by the President in 1956.

By the end of the day, the Operation MUDLARK officials had prepared a statement based on the standard cover story but modified to fit the available information on Powers' flight and to show Adana as the aircraft's base in order to conceal Pakistan's role in the mission. This revised cover story, along with a mission flight plan consistent with it, was sent to the field commander at Adana, to Air Force Europe headquarters, [redacted] to replace the cover story that had been prepared and distributed in advance of the mission. The first announcement of the new cover story came late on 2 May by the Adana base commander, but it did not appear in print until the following day. On Tuesday, 3 May, NASA released a statement about a high-altitude weather plane that was missing on a flight inside Turkey. The statement had been designed to provide an explanation for the presence of wreckage inside the Soviet Union by noting that "the pilot reported over the emergency frequency that he was experiencing oxygen difficulties."<sup>12</sup> Thus, if the Soviets protested and pointed to wreckage inside their borders, NASA could claim that the pilot had lost consciousness and the aircraft had then flown into the Soviet Union before crashing.

---

<sup>11</sup> Geary interview (S).

<sup>12</sup> Beschloss, *Mayday*, p. 39.

---

~~Secret~~

---

~~Secret NOFORN~~

Chapter 4

179

This statement had been prepared for a "best case" scenario, that is to say, one in which neither the pilot nor the plane and film survived. However, pilots had bailed out from extremely high altitudes and survived, and there was even evidence from previous U-2 crashes that much of the aircraft itself could be salvaged. The small destructive charge aboard the U-2 was not sufficient to destroy much more than the camera. The tightly rolled film, which could reveal the exact purpose of the mission even if the pilot and aircraft did not survive, was very hard to destroy. Kelly Johnson later conducted an experiment that revealed film taken out of a completely burned-out aircraft could still provide usable imagery.<sup>33</sup> After almost four years of successful U-2 missions, Richard Bissell and the rest of the Development Projects Division had become overconfident and were not prepared for the "worst case" scenario that actually occurred in May 1960. This failure played directly into the hands of Soviet Premier Nikita Khrushchev, who shrewdly decided to release information about the downed U-2 a little at a time, thereby encouraging the United States to stick with its vulnerable cover story too long. As he later wrote, "Our intention here was to confuse the government circles of the United States. As long as the Americans thought the pilot was dead, they would keep putting out the story that perhaps the plane had accidentally strayed off course and been shot down in the mountains on the Soviet side of the border."<sup>34</sup> The first word from the Soviet Union came on Thursday, 5 May, when Premier Khrushchev announced to a meeting of the Supreme Soviet that a US "spyplane" had been downed near Sverdlovsk. He made no mention of the fate of its pilot.

Khrushchev's announcement aroused considerable interest in the media in the United States, and that same day the State Department and NASA issued another statement that continued the "weather plane" cover story, adding that the pilot became lost during a routine mission near the Caucasus Mountains. Soon afterward, the US Ambassador to Moscow cabled a report to the State Department indicating that the pilot might be alive after all. Two days later, on 7 May 1960, Khrushchev confirmed this report by revealing that the U-2 pilot was alive and had admitted his mission of spying on the Soviet Union.

---

<sup>33</sup> Geary interview.

<sup>34</sup> Khrushchev, *Khrushchev Remembers: The Last Testament*, p. 507.

---

~~Secret~~

---

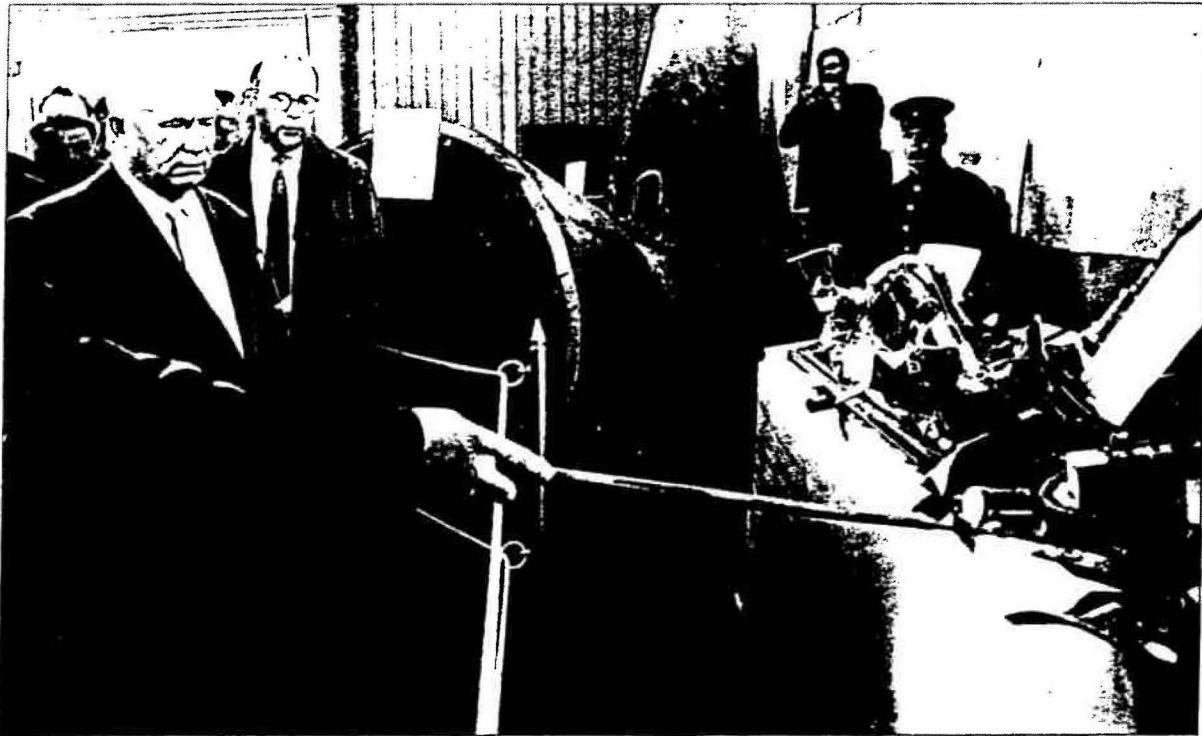
~~Secret NOFORN~~

---

Chapter 4

---

180



---

*Khrushchev and the U-2 wreckage*

This revelation completely demolished the US cover story, and senior administration officials then debated what the appropriate course of action should be. Allen Dulles offered to take responsibility for the overflight and resign, but President Eisenhower did not want to give the world the impression that he was not in control of his administration. On Wednesday, 11 May, the President read a statement to the press in which he assumed full responsibility for the U-2 mission but left open the question of future overflights, even though four days earlier he had approved the recommendation of his key foreign policy advisers to terminate all provocative intelligence operations against the Soviet Union.<sup>15</sup>

The U-2 affair had its greatest consequences when the long-awaited summit meeting in Paris began less than a week later on 16 May. Soviet Premier Khrushchev insisted on being the first speaker and read a long protest about the overflight, ending with a demand for an apology from President Eisenhower. In his reply

---

<sup>15</sup> *OSA History*, chap. 14, pp. 14-16 (TS Codeword); Beschloss, *Mayday*, pp. 43-66, 243-258.

---

~~Secret~~

---

~~Secret NOFORN~~

Chapter 4

181

Eisenhower stated that overflights had been suspended and would not be resumed, but he refused to make a formal apology. At that point the summit ended, as did all hopes for a visit to the Soviet Union by President Eisenhower.

### **THE WITHDRAWAL OF THE OVERSEAS DETACHMENTS**

---

The loss of Powers' U-2 ultimately resulted in the end of Detachment B in Turkey. As soon as the Development Projects Division learned that Powers was alive in Soviet hands, it immediately evacuated the British pilots from Adana to protect the secret of their involvement in the project. Project officials hoped that flights might eventually resume from Adana, but President Eisenhower's order ending overflights of the Soviet Union made this very unlikely. Less than four weeks later, a coup ousted the government of Turkish Premier Adnan Menderes on the night of 27 May 1960. Because the new government had not been briefed on the U-2, Project Headquarters refused to allow any U-2 flights from Adana, even those necessary for maintaining the aircraft's airworthiness. As a result, no more U-2s flew out of Adana. Instead of being ferried home, three of the four remaining U-2s were disassembled and loaded aboard C-124 cargo planes for the return trip to the United States.<sup>16</sup>

The fourth U-2 remained inside a hangar at Incirlik airbase for several years, looked after by a skeleton crew, in case the Adana installation needed to be reactivated. Finally the decision was made to close down the Adana U-2 facility. During Detachment B's 44 months of active existence, 21 pilots had flown its aircraft, including four RAF pilots and three pilots transferred from the deactivated Detachment A. Fourteen Detachment B pilots were later assigned to other U-2 detachments, but the closing down of Detachment B marked the end of Britain's direct involvement in U-2 operational overflights. A four-man unit of RAF U-2 pilots was stationed at Detachment G, Edwards AFB, until the end of the CIA U-2 program in 1974, but RAF pilots never again conducted an overflight in an Agency U-2.

The loss of Powers' U-2, the resultant failure of the Paris Summit, and the end of U-2 operations in Turkey were just the first in a series of setbacks for the U-2 program. On 8 July 1960, the

---

<sup>16</sup> *OSA History*, chap. 12, pp. 46-47 (TS Codeword).

---

~~Secret~~

---

~~Secret NOFORN~~

---

Chapter 4

---

182

Japanese Government, faced with growing anti-American sentiment and complaints in the press about the presence of "spyplanes" on Japanese territory, asked the United States to remove the U-2s. The very next day the CIA closed Detachment C; its U-2s were dismantled and returned to the United States aboard C-124s.<sup>37</sup>

In the midst of the furor in Japan, on 1 July 1960, just six weeks after the Paris Summit, Soviet fighter aircraft shot down an Air Force RB-47 on an electronic intelligence collection mission over international waters near the Soviet Union's Kola Peninsula. Two survivors were captured. The Soviet Union claimed that the aircraft had violated its airspace, while the United States denounced the Soviets for downing the plane over international waters. The acrimony exacerbated an already tense international atmosphere.<sup>38</sup>

One additional blow to the U-2 program came in the summer of 1960. NASA, concerned about the damage to its reputation from its involvement in the U-2 affair and hoping to obtain international cooperation for its space program, decided to end its support of the cover story that U-2s were conducting weather research under its auspices.<sup>39</sup>

These developments resulted in a complete halt to all U-2 operations from overseas bases for more than six months. Pilots and aircraft from Detachments B and C were consolidated into Detachment G at Edwards Air Force Base, California, the unit formed after the CIA had vacated the Nevada testing site in 1957 as a result of AEC nuclear testing. Detachment G now comprised eight pilots from Detachment B and three pilots from Detachment C. Because Powers' capture had compromised Project CHALICE, the Agency assigned a new cryptonym to the U-2 effort; henceforth, it was called Project IDEALIST.<sup>40</sup>

---

<sup>37</sup> *OSA Chronology*, p. 28 (TS Codeword).

<sup>38</sup> "Mystery of the RB-47," *Newsweek*, 25 July 1960, pp. 36-37; "Nikita and the RB-47," *Time*, 25 July 1960, pp. 30-31.

<sup>39</sup> At a meeting of high-level CIA, NASA, and State Department officials on 31 May 1960, NASA was willing to continue its association with U-2 flights for the time being, but the Administrator of NASA, Dr. Keith Glennan, believed that his agency "would be well advised to disengage from the U-2 program as rapidly as possible." James A. Cunningham, Memorandum for the Record, "Telephone Conversation with Dr. Hugh Dryden, Deputy Director, NASA," 1 June 1960, DPD chrono file #4553-60, OSA records (S).

<sup>40</sup> *OSA History*, chap. 12, pp. 47-49; chap. 16, p. 10 (TS Codeword).

---

~~Secret~~



---

~~Secret NOFORN~~

Chapter 4

183

---

## THE FATE OF FRANCIS GARY POWERS

---

Downed U-2 pilot Francis Gary Powers underwent extensive interrogation at the hands of the Soviets. His instructions from the CIA on what to do in the event of capture were meager, and he had been told that he might as well tell the Soviets whatever they wanted to know because they could get the information from his aircraft anyway. Nevertheless, Powers tried to conceal as much classified information as possible while giving the appearance of cooperating with his captors. To extract the maximum propaganda value from the U-2 Affair, the Soviets prepared an elaborate show trial for Powers, which began on 17 August 1960. Powers continued to conceal as much information as possible, but, on the advice of his Soviet defense counsel, he stated that he was sorry for his actions. The Soviet court sentenced him to 10 years' "deprivation of liberty," with the first three to be spent in prison.<sup>41</sup>

During the next 18 months, confidential negotiations to obtain the release of Powers took place as the United States explored the possibility of trading convicted Soviet master spy Rudolf Abel for Powers. These negotiations were conducted by Abel's court-appointed defense counsel, former OSS lawyer James Donovan, in correspondence with Abel's "wife" (probably his Soviet control) in East Germany. In November 1961, Acting DCI Pearre Cabell wrote to Secretary of State Dean Rusk supporting such a trade, and on 10 February 1962 the actual exchange took place in the middle of the Glienecke Bridge connecting East and West Berlin. As part of the deal, American graduate student Frederick Pryor, who had been jailed in East Germany for espionage, was released at another location.

After Powers returned to the United States, he underwent extensive debriefing, for many questions about his mission remained unanswered. To conduct the debriefing, the Agency immediately reconvened the Damage Assessment Team that had met for two months in the summer of 1960 to estimate what Powers knew about the overflight program and could have told Soviet interrogators. Given Powers' long involvement with the U-2 program, the team had concluded in 1960 that his knowledge was extensive and he had probably revealed most of it to the Soviets. After two weeks of debriefing Powers in February 1962, however, the team found that the damage was much less than had been estimated, and they were quite satisfied

---

<sup>41</sup> Powers, *Operation Overflight*, pp. 160-192; Beschloss, *Mayday*, pp. 331-335.

---

~~Secret~~

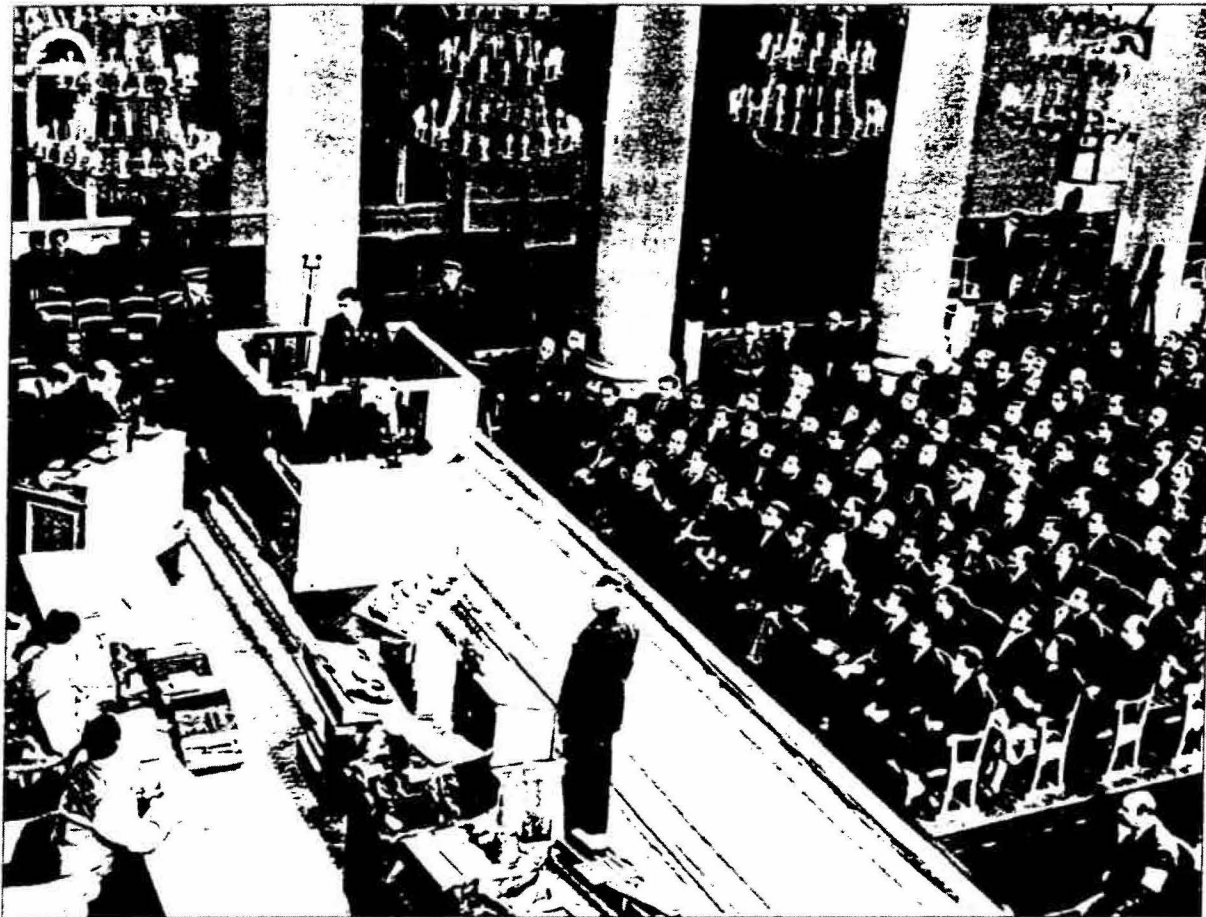
---

~~Secret NOFORN~~

---

Chapter 4

184



---

*Trial of Francis Gary Powers*

with Powers' behavior.<sup>42</sup> After reading the debriefing reports, Allen Dulles expressed support of Powers' actions and told Powers, "We are proud of what you have done," but Dulles had already resigned as DCI in November 1961.<sup>43</sup> The new DCI, John A. McCone, demanded a closer look at Powers' actions and set up a Board of Inquiry headed by retired Federal Judge E. Barrett Prettyman. After eight days of hearings and deliberation, the board reported on 27 February that Powers had acted in accordance with his instructions and had "complied with his obligations as an American citizen during this period." The board, therefore, recommended that he receive his back pay.

---

<sup>42</sup> James J. White, "Francis Gary Powers—The Unmaking of a Hero, 1960-1965," (draft), CIA History Staff, 1974, p. 19 (S).

<sup>43</sup> Powers, *Operation Overflight*, p. 307.

---

~~Secret~~

---

~~Secret NOFORN~~

---

Chapter 4

185

The Prettyman Board's finding was based on a large body of evidence indicating that Powers was telling the truth about the events of 1 May 1960: the testimony of the experts who had debriefed Powers after his return; a thorough investigation of Powers' background with testimony by doctors, psychiatrists, former Air Force colleagues, and his commander at Adana; Powers' own testimony before the board; the results of a polygraph examination that he had volunteered to undergo; and the evidence provided by photographs of the wreckage of his aircraft, which Kelly Johnson had analyzed and found consistent with Powers' story. Nevertheless, DCI McCone remained skeptical. He asked the Air Force to convene its own panel of experts to check Johnson's assessment of the photographs of the U-2. The Air Force quickly complied, and the panel supported Johnson's findings. McCone then seized upon the one piece of evidence that contradicted Powers' testimony—a report by the National Security Agency (NSA) that suggested that Powers may have descended to a lower altitude and turned back in a broad curve toward Sverdlovsk before being downed—and ordered the Prettyman Board to reconvene on 1 March for another look at this evidence. The board remained unconvinced by NSA's thin evidence and stuck to its original findings. A few days later, on 6 March 1962, Powers appeared before the Senate Armed Services Committee, which commended his actions. The Senate Foreign Relations Committee also held brief hearings on the U-2 Affair, with DCI McCone representing the CIA.<sup>44</sup>

Although all of these inquiries found Powers to have acted properly, they did not release many of their favorable findings to the public, which had received a very negative image of Powers' behavior from sensational press reports and statements by public figures who were not aware of (or chose to ignore) the truth about Powers' actions while in captivity. One member of the Senate Foreign Relations Committee, Senator John J. Williams, expressed concern about the impact of this silence on Powers' reputation in a question to DCI McCone on 6 March 1962: "Don't you think he is being left with just a little bit of a cloud hanging over him? If he did everything he is supposed to do, why leave it hanging?"<sup>45</sup> Doubts about Powers did remain in the public mind because he received no public recognition for his efforts to withhold information from the Soviets. He was also

---

<sup>44</sup> Beschloss, *Mayday*, p. 352-354; Thomas Powers, *Man Who Kept the Secrets*, p. 328; Prettyman Board, DCI records (S).

<sup>45</sup> United States Congress, Senate, Foreign Relations Committee, *Executive Sessions of the Senate Foreign Relations Committee (Historical Series)*, vol. 12, 86th Congress, Second Session, "Report on the U-2 Incident," 6 March 1962, p. 263 (declassified 1982).

---

~~Secret~~

---

~~Secret NOFORN~~

---

Chapter 4

---

186

snubbed by President Kennedy, who one year earlier had warmly welcomed two Air Force RB-47 fliers released by the Soviet Union. McCone remained hostile to Powers, and in April 1963 he awarded the Intelligence Star to all of the U-2 pilots except Powers. Finally on 25 April 1965, just two days before McCone's resignation became effective, Powers received the Star (which was dated 1963 on the back) from DDCI Marshall S. Carter.<sup>46</sup>

Powers' return from captivity raised the question of what his future employment should be. This issue had already been discussed one year earlier by John N. McMahon, executive officer of the DPD, who noted that he and Col. Leo P. Geary (the Air Force project officer) were concerned about a major dilemma for the CIA and the US Government: "On the one hand we have gone to considerable lengths to prove that the U-2 program was a civilian undertaking and not military aggression; on the other hand there is on file a document that assures Francis Gary Powers that if he so desires he may be *reinstated* into the USAF." On 21 March 1961 McMahon wrote:

*If we grant him [Powers] the right that is now his, namely reinstatement in the Air Force, then we would be subjecting ourselves to probable adverse propaganda by the USSR. Admitting little appreciation for the finer points of political and psychological warfare, should Francis Gary Powers return to the USAF I suspect that the Soviets would have a "PP" field day illustrating our big lie. The question then, since we cannot permit Powers to return to the USAF, is what do we do with him.*<sup>47</sup>

Despite this negative recommendation, the Air Force agreed on 4 April 1962 to reinstate Powers effective 1 July, a decision that was approved by the Agency, State Department, and White House. Then Powers' divorce proceedings began, and the Air Force, concerned about adverse publicity, postponed reinstatement until the end of the proceedings. In the meantime Powers began working for Lockheed as a U-2 pilot. In March 1963, he met with Colonel Geary to discuss his future plans and decided to stay with Lockheed.<sup>48</sup> Powers remained at Lockheed until U-2 testing ceased in September 1969. Earlier in the year, he had published an account of his experiences on

---

<sup>46</sup> *OSA History*, chap. 14, p. 54 (TS Codeword); Beschloss, *Mayday*, p. 397.

<sup>47</sup> John N. McMahon to Chief, Cover Staff, DPD, 21 March 1961, Operation MUDLARK files, OSA records, job 74-B-605, box 6 (S).

<sup>48</sup> *OSA History*, chap. 14, p. 52 (TS Codeword).

---

~~Secret~~

---

~~Secret NOFORN~~

Chapter 4

187

the U-2 project under the title *Operation Overflight*. Later he flew a light plane as a traffic reporter for a Los Angeles radio station and then a helicopter for a television station. On 1 August 1977, he and a cameraman from the station died when his helicopter crashed on the way to an assignment.<sup>49</sup>

### **CHANGES IN OVERFLIGHT PROCEDURES AFTER MAY 1960**

---

One of the most important changes in the overflight program after the loss of Francis Gary Powers' U-2 was the institution of more formal procedures for the approval of U-2 missions. During the first four years of U-2 activity, very few members of the Eisenhower administration had been involved in making decisions concerning the overflight program. The President personally authorized all flights over the Soviet Union and was consulted by Richard Bissell and either the DCI or the DDCI about each such proposed mission. In addition to CIA officials, the President's discussions of individual U-2 missions or of the program as a whole generally included the Secretary of State or his Under Secretary, the Chairman of the Joint Chiefs of Staff, the Secretary of Defense or his deputy, and the President's secretary, Colonel (later General) Goodpaster.

The approval process under President Eisenhower was thus very unstructured. There was no formal approval body charged with reviewing overflight proposals; the President kept this authority in his hands and simply consulted with selected cabinet officials and advisers before reaching a decision. In 1959 the U-2 program had gained a second approval authority when British Prime Minister Harold Macmillan became the approval authority for missions conducted by the RAF pilots in Detachment B.

The loss of Powers' U-2 in May 1960 led to major changes in the approval process. For all practical purposes, Prime Minister Macmillan ceased to be a source of approval because the RAF pilots who remained in the U-2 program did not conduct any more operational missions (although the use of British pilots was considered on several occasions). In the United States the approval process

---

<sup>49</sup> Beschloss, *Mayday*, pp. 396-401. Beschloss claims that Powers was fired by Lockheed for criticizing the Agency in his memoirs (which he had shown to the Agency in draft form), but Kelly Johnson's "U-2R Log" records on 25 September 1969: "We have no flight test activity at all. I must let Gary Powers go. Have protected him for about seven years, but he doesn't have an ATR (Air Transport Rating), so we have no other job for him—not even flying the Beechcraft."

---

~~Secret~~

---

~~Secret NOFORN~~

---

Chapter 4

188

became more formal as the National Security Council became involved. Henceforth, proposed missions had to be submitted to the National Security Council (NSC) Special Group for approval. In the early 1960s, the Special Group consisted of the DCI, the Deputy Secretary of Defense, the Under Secretary of State, and the Military Adviser to the President. After the Military Adviser, Gen. Maxwell Taylor, became Chairman of the Joint Chiefs of Staff in 1962, his place on the Special Group was taken by McGeorge Bundy, the President's Special Assistant for National Security Affairs.<sup>50</sup>

Before requesting permission from the Special Group for a U-2 mission over denied territory, the CIA prepared a detailed submission giving justification for the proposed mission and maps showing the targets to be photographed, flight times, and emergency landing sites. Such submissions came to be known as "black books" because they were placed in black, looseleaf binders. The decision of the Special Group was generally final, although on occasion controversial issues were presented to the President for his decision.

This approval process did not come into play immediately after May 1960 because there was a long pause in U-2 operations as the detachments returned from overseas. It was not until late October 1960 that the next U-2 operation occurred, this time over Cuba. By this time the full approval procedure had been established, and the Special Group approved the mission (see chapter 5).

The approval process was not the only part of the U-2 program that changed after May 1960. The process for establishing requirements for overhead reconnaissance missions also became more formal. In August 1960 the US Intelligence Board took over the Ad Hoc Requirements Committee and merged it with the Satellite Intelligence Requirements Committee to form the Committee on Overhead Reconnaissance. DCI Directive 2/7 tasked COMOR with the "coordinated development of foreign intelligence requirements for overhead-reconnaissance projects over denied areas." The DCID defined "overhead reconnaissance" to include "all reconnaissance for foreign-intelligence purposes by satellite, or by any vehicle over

---

<sup>50</sup> The Special Group, which had been created by NSC Intelligence Document 5412/2 in 1955 to oversee covert activities, was originally known as the 5412 Committee. Later the Special Group became known as the 303 Committee and then the 40 Committee. United States Congress, Senate, Select Committee to Study Governmental Operations with Respect to Intelligence Activities, *Foreign and Military Intelligence*, book 1, (Washington, DC: US Government Printing Office, 1976), pp. 48-53

---

~~Secret~~

---

~~Secret NOFORN~~

---

Chapter 4

189

denied areas, whether by photographic, ELINT, COMINT, infrared, RADINT, or other means." The only exception to COMOR's area of responsibility was "reconnaissance and aerial surveillance in direct support of actively combatant forces."<sup>51</sup>

By this time the Air Force had developed a large overhead reconnaissance program of its own, including a fleet of U-2s, and, occasionally, there were conflicts between the areas of responsibility of COMOR and the military services for collection requirements. The Air Force had already won a major victory in 1958, when it claimed that the White House had given responsibility for peripheral reconnaissance of the Soviet Union to the military. DCI Dulles, who was always reluctant to become involved in matters that seemed to lie in the military's area of responsibility, did not resist this claim, and the Ad Hoc Requirements Committee stopped preparing requirements for peripheral flights. This ended a major requirements committee study, which sought to estimate what could be gained from U-2 oblique photography along the entire border of the Soviet Union.<sup>52</sup> The last CIA U-2 mission along the Soviet Union's coasts occurred on 22 June 1958; thereafter, the only peripheral missions conducted by the CIA were those along the Soviet Union's southern border with Iran and Afghanistan from bases in Pakistan and Turkey under covert arrangements with the host governments.

Until the spring of 1961, there was virtually no coordination of military reconnaissance activities, even within the individual services. Each commander of a Theater or a Unified and Specified Command conducted his own independent reconnaissance activities. To meet the growing need for overall coordination of these activities at the national level, the Joint Chiefs of Staff (JCS) established the Joint Reconnaissance Center (JRC) under the J-3 (Operations) of the Joint Staff. The JRC immediately began to coordinate and obtain approval for approximately 500 missions per month, assigning each a risk factor of Critical, Sensitive, Unique, or Routine. The JRC then prepared a monthly Activities Book giving details of the proposed missions and briefed the Joint Chiefs of Staff on the more risky missions. The CIA received a copy of the Activities Book.

---

<sup>51</sup> DCID 2/7, effective 9 August 1960 (S).

<sup>52</sup> Memorandum for DCI McCone from James Q. Reber, Chairman, COMOR, "Proposed Procedures for Approval of Critical Reconnaissance," 21 March 1962, COMIREX records (TS Codeword).

---

~~Secret~~

---

~~Secret NOFORN~~

---

Chapter 4

---

190

Most military reconnaissance missions were approved or disapproved at the JCS level, but the most sensitive missions were submitted through the Secretary of Defense to the Special Group for approval. In addition to this Department of Defense approval path, the military services could also submit requirements through the DCI using their representatives on COMOR. As a result, the military services had two channels for submitting reconnaissance missions to the Special Group. The Agency had only one—COMOR.<sup>53</sup>

The main conflicts between the requirements committee and the military services arose over missions in the Far East. In the early 1960s, North Vietnam had not been designated a denied area by the US Intelligence Board (USIB), so the military services could plan missions there without consulting COMOR. Such missions, however, came very close to China, which was a denied area and, therefore, came under COMOR's area of responsibility. Once the war in Southeast Asia escalated in 1964, the military services received responsibility for the entire area (see chapter 5).

To reduce the number of disputes between the competing CIA and Air Force reconnaissance programs and to manage the growing satellite program, the two agencies worked out an agreement to provide overall coordination for reconnaissance activities at the national level. The first such interagency agreement came in the fall of 1961, and it was followed by three additional agreements during the next four years.<sup>54</sup>

Interest in coordinating the reconnaissance efforts of the military services and the CIA also affected the field of photographic interpretation. In the wake of the loss of Francis Gary Powers' U-2 on 1 May 1960, the President's Board of Consultants on Foreign Intelligence Activities (PFIAB) had urged the establishment of an interagency group to study ways to improve the entire US intelligence community. Formed on 6 May 1960, the Joint Study Group on Foreign Intelligence Activities met for the next seven months under the leadership of Lyman Kirkpatrick, CIA Inspector General. One of the study group's key recommendations in the report it issued in December 1960 was the creation of a national photointerpretation

---

<sup>53</sup> Ibid (TS Codeword).

<sup>54</sup> Problems of classification prevent a more detailed discussion of this aspect of the reconnaissance program, which will be covered in a future history of satellite reconnaissance at a higher level of classification.

---

~~Secret~~



---

~~Secret NOFORN~~

---

Chapter 4

191

center that would bring together photointerpreters from the Agency and the military services. The report further recommended that the CIA be placed in charge of the new center. Ignoring Air Force claims that it should head such a center, President Eisenhower approved the report's recommendation, and, on 18 January 1961, National Security Council Intelligence Directive (NSCID) No. 8 established the National Photographic Interpretation Center (NPIC). Henceforth, the director of NPIC would be designated by the DCI and approved by the Secretary of Defense, and the deputy director would come from one of the military services. The first director of NPIC was Arthur S. Lundahl, head of the CIA's Photo-Intelligence Division.<sup>55</sup>

One additional major change in the U-2 program in the years immediately following the May Day incident—although not directly related to the loss of Powers' U-2—was the departure of Richard Bissell from the CIA and the subsequent reorganization of the Agency's reconnaissance and scientific activities. The roots of Bissell's downfall went back to 1 January 1959, when he became Deputy Director for Plans and decided to place all Agency air assets in the DDP in order to maintain control of his overhead reconnaissance projects (the U-2 and its two proposed successors, the OXCART aircraft and the reconnaissance satellite). The previously independent Development Projects Staff became the Development Projects Division (DPD) of the DDP and now controlled all Agency air operations, including air support for covert operations. As a result, U-2s were occasionally employed for gathering intelligence to support DDP operations in addition to their primary mission of gathering strategic and tactical intelligence.

Although the reorganization made sense in terms of increasing the efficiency of Agency air operations, the use of the U-2 to support covert action disturbed Bissell's backers among the scientists advising Presidents Eisenhower and Kennedy, especially James Killian and Edwin Land. They were concerned that Bissell was becoming too involved in covert action and was not able to devote sufficient time to the overhead reconnaissance program. Then came the disastrous Bay of Pigs invasion in April 1961, which discredited Bissell with the Kennedy administration in general and the two scientists in particular. Later that year, Bissell lost another important source of support when Allen Dulles resigned as DCI in November 1961. During his final

---

<sup>55</sup> Lundahl and Brugioni interview (TS Codeword).

---

~~Secret~~

---

~~Secret NOFORN~~

---

Chapter 4

---

192

months as the Deputy Director for Plans, Bissell found himself involved in a major struggle with Killian and Land, who were serving on President Kennedy's Foreign Intelligence Advisory Board (successor to the Eisenhower administration's President's Board of Consultants on Foreign Intelligence Activities). These two influential Presidential advisers strongly advocated removing the Agency's overhead reconnaissance programs from the DDP and placing them in a new, science-oriented directorate, but Bissell resisted this proposal. With his position in the Agency becoming increasingly untenable, Bissell resigned on 17 February 1962, after turning down an offer from the new DCI, John A. McCone, to become the CIA's first Deputy Director for Research.<sup>56</sup>

Two days after Bissell's departure, the new Directorate came into existence, and it absorbed all of the Development Projects Division's special reconnaissance projects. Only conventional air support for the Clandestine Services remained with the DDP in the new Special Operations Division. The U-2 program was no longer connected with covert operations.

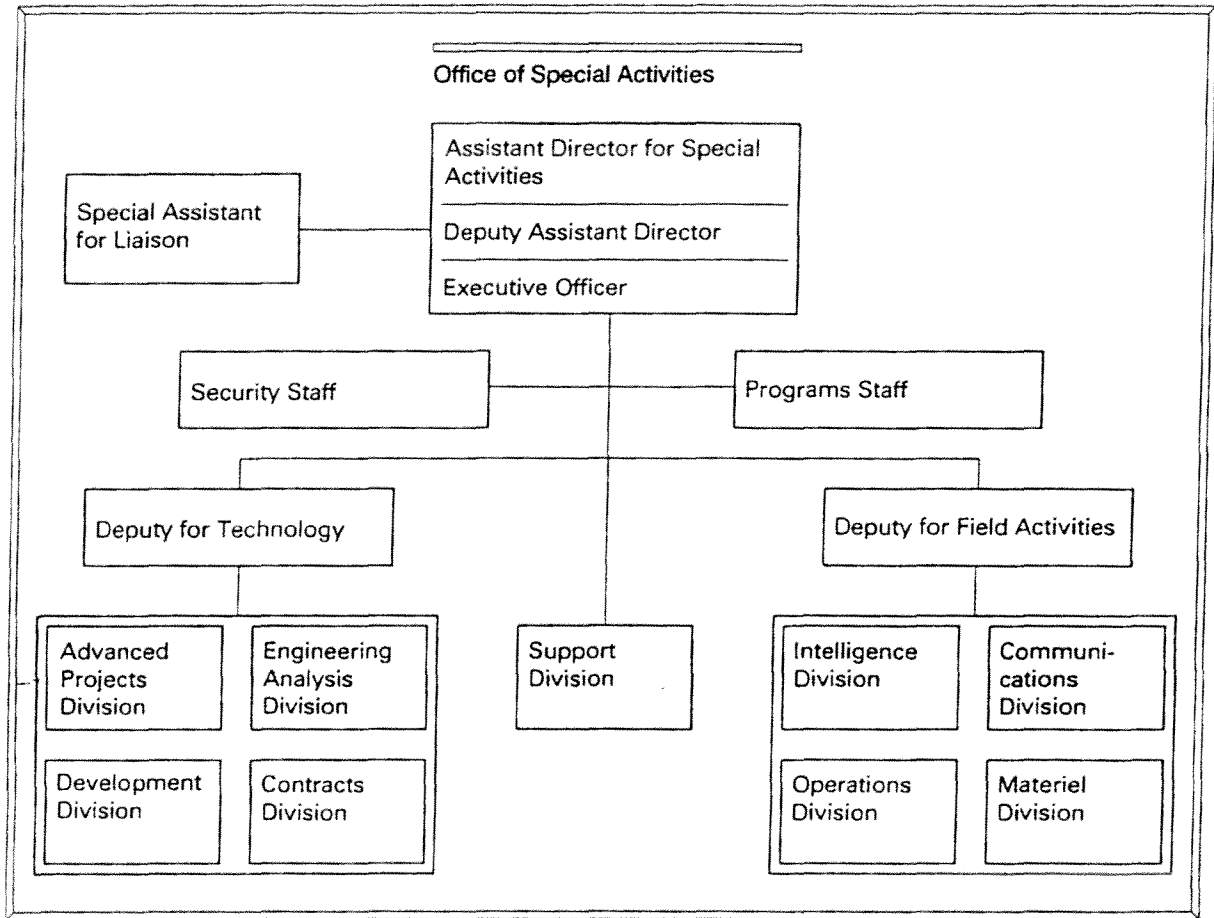
The first half of 1962 was a confusing period for the Development Projects Division. After losing the individual who had created and supervised it for seven years, the DPD also lost its feeling of autonomy when it was transferred from its own building to the new CIA Headquarters at Langley. Soon afterward, Col. Stanley W. Beerli, who had headed the DPD since 1960, returned to the Air Force. Then on 30 July 1962, the overhead reconnaissance projects underwent a major reorganization with the formation of the new Office of Special Activities (OSA) to replace the DPD. The original organization of OSA with 10 division or staff heads reporting directly to the director of the office (at that time known as the Assistant Director for Special Activities) proved too cumbersome, and, on 30 September 1962, a reorganization divided most of these offices between two major subordinates, the Deputy for Technology and the Deputy for Field Activities (see chart, page 193). The Office of Special Activities (OSA) continued to control reconnaissance activities and related research and development after the Directorate of Research was enlarged and renamed the Deputy Directorate for Science and Technology (DDS&T) on 5 August 1963 (along with the other

---

<sup>56</sup> Killian interview (S); Land interview (TS Codeword); Richard M. Bissell to John A. McCone, 7 February 1962, DCI records, job 80-B-1676R, box 18, folder 10 (S).

---

~~Secret~~



Directorates, DDS&T dropped the "Deputy" from its title in 1965 and became known as the Directorate of Science and Technology). In 1965 the head of OSA received a new title, Director of Special Activities. The Office of Special Activities remained in control of the CIA's overhead reconnaissance activities until 1974, when the Agency ended its involvement with manned reconnaissance aircraft.<sup>57</sup>

<sup>57</sup> OSA Chronology, pp. 34-35 (TS Codeword).

194

Blank