

Legend  
D. Wrone

4/5/78

Item

1. Oleg Penkovskiy. (pp. 40, 47, 278) The Penkovskiy Papers (1965) have been thoroughly described by Victor Zorza, Washington Post, 11/15,16/65, as a CIA black book and his attack and estimate seem fair. Epstein's reference to OP ignore the serious problem with factual elements etc.
2. Mrs. Teofil (Anna) Meller (pp. 169-170, 189, 191, 198, 200) mentioned and utilized re Oswald's relationship to the Dallas community but selectively and insidiously ignores Whitewash II, 50, "Oswald was all right," said the FBI when Anna turned him in as a possible radical.
3. By isolating a subject such as Oswald's relation to the U-2 in Japan and turning all interviews, text, etc., around merely this Epstein can avoid the larger picture and still maintain a semblance of scholarship to those of little awareness. Sanche de Gramont's The Secret War (1962) describes some of the U-2 activity and publicity in Japan and suggests a more common awareness of the plane, particulars of it, pictures, etc., than Epstein would have us know.
4. On Powers' deplanning over Soviet Russia (p.118) Epstein is disingenuous on what happened to the U-2 to cause it to come down. Since his argument on Oswald's defection rests on radar and apparently other information regarding the U-2 reaching the Soviets to enable them knock down Powers and change the course of history he must say the Soviets shot Powers down. He does not. We infer, ie. the readers, that this is what happened, but Epstein says something different.

It could be a normal flame-out, a CIA deliberate sabotage of the U-2 to block detente, which is the Angleton faction. The U-2 downing certainly worked to thwart US-USSR detente, but whether that was sabotage I know not.

5. The physical objects mentioned with respect to Oswald's stay in New Orleans are consistently given inadequate spacial relations and provided with only the minimum information for textual flow. Many are almost intentionally it seems separate from each other in the text to scatter attention.
  - A. The post office box was in the sub-station where it shared a common lobby (but had its own doors) with federal offices and was across the yard from 544 Camp/531 Lafayette.
  - B. Jones Printing Co., was not in "downtown" New Orleans which is a rather meaningless term for orientation in that unusual city, but was across the street from the backdoor of the coffee company.
  - C. Alba's Crescent City Garage serviced the FBI/Secret Service automobiles and was next door to the coffee company.
  - D. I do not know what purpose was served with the line on Oswald renting the 544 Camp room for one month. Newman the landlord told HW it did not rent to Oswald. And for Epstein to put Oswald there puts him in the building with the rightwing Cubans/CIA/ONI and the cafe below where Harpies hatched eggs. Why should he not have left this out? 544 Camp/the postal substation/ 531 Lafayette are a block from the coffee company



September 1959, Colonel Popov was arrested by Soviet counterintelligence; thus, no further information on the nature of the Soviet intelligence he alluded to would be forthcoming.

Before this flight Powers was aware that only one other U-2 overflight had been made over the Soviet Union since October 1959—a flight on April 9, 1960, for which he was the backup pilot—but he did not know why the flights were being limited during this period. He had not been told about the sabotage attempt made against his plane in Pakistan on the eve of its departure, which was foiled by American counterintelligence. Nor did he know that a trained Marine Corps radar operator with access to U-2 and radar-measuring equipment at Atsugi had defected to the Soviet Union and offered, on October 31, 1959, to turn over to the Russians all classified information he possessed which might be of “special interest.”

The clouds were now disappearing. Across the snow-capped Ural Mountains, which had traditionally divided the Asian steppes from the European portions of the Soviet Union, he could see green fields and clear weather ahead in Russia. Over Sverdlovsk, an industrial center which had never before been overflown by a U-2, he again switched on his cameras.

Suddenly he felt a “dull thump” push him forward. The cockpit was illuminated by the orange flash of an explosion behind the plane. Pulling back on the wheel, he realized that he had no control over the U-2. It began slowly spinning with the nose pointed toward the sky. He opened the canopy and tried to crawl out as the plane plummeted down. At about 30,000 feet the centrifugal force flung him into the air. A moment later he opened his parachute.

Three days later in Burbank, California, C. L. “Kelly” Johnson learned from Richard Bissell that the plane he had designed for Lockheed had been shot down by a Soviet anti-aircraft missile. As chief research engineer for Lockheed for more than twenty years he had designed such planes as the Hudson bomber, Constellation transport, P-38 fighter-bomber, and the double-sonic F-104 starfighter, but none of these creations had

intr  
inte

fiel  
fra  
car  
shi  
sel  
hee  
nin  
Un

pie  
the  
do  
me  
co  
me  
jar  
co

we  
us  
ex  
te  
re  
St  
ab

sa  
qu  
in  
hi  
sr  
m



In 1956, Powers decided to leave the Air Force and his \$700 a month first lieutenantcy and try something else. He and Barbara wanted to settle down and open a filing station, but they lacked the capital. Powers tried to get a pilot's job with commercial airlines, but they told him that at twenty-seven he was too old.

At the time Powers was shopping around for a new job, the Lockheed people in Burbank, California, were shopping around for pilots in connection with a new program. The program was the brainchild of C. L. Johnson, Lockheed's chief engineer.

In 1954, Johnson had wanted to test airplane engines and electrical systems at high altitudes. He also wanted to gather data for Lockheed's prize fighter plane, the F-104 Starfighter. To carry out this program, he designed a plane that could stay at high altitudes for long periods of time. He called the plane the "Utility 2," or U-2. Like the man who invented the magnifying glass because he wanted to be able to see the bars on pepper grains, Johnson designed the U-2 for a completely different purpose than the one which brought it notoriety.

The U-2 is essentially a glider or sailplane with a turbojet engine. Thanks to its long wings, light frame, and special fuel, it is able to reach altitudes close to 100,000 feet and cruise along for hours at 70,000 feet at a speed of 500 miles per hour. The plane is so light that its wings flap like a giant insect's when it is close to the ground. The main landing gear is no more than a strut with two wheels. The U-2 was a costly plane to build; special attention had to be paid to joints and riveting to insure a smooth surface and keep friction down at high altitudes.

The first models, tested in early 1955 and hand-built in Lockheed's experimental department, weighed 17,720 pounds, including fuel tanks with a thousand-gallon capacity, and had a wingspan of eighty feet. The range of these early models, with extra fuel tanks under the wings, was about 2,600 miles.

The U-2 was powered by a single Pratt and Whitney turbojet engine and used a specially refined kerosene fuel. This fuel, outrageously expensive to distill, has a boiling point of 330° Fahrenheit, about twice that of normal jet fuels. The high boiling point is essential for long flights at high altitudes, for it keeps evaporation losses at a minimum.

Equipped with these special features, the plane could continue to

#### Clipped Wings for the U-2 247

climb until the air grew so thin it could no longer sustain the giant wings. This combination of thin air that slows the plane down and increasing drag of the critical Mach number\* (the closest the plane can get to Mach 1, at which point it breaks the sound barrier) is known as the "coffin corner." Another danger at high altitude is the flame-out, as Powers was to learn. The thinner the air, the likelier the turbojet engine is to stall, because it is not getting an adequate supply of oxygen. Flame-outs were not infrequent at 90,000 feet when the U-2 was being tested, and the pilot would have to glide to a lower altitude to restart the engine. The disadvantage of the special U-2 fuel, known under the designation of MIL-F-255524A, is poor altitude restart. In case of a flame-out, the pilot had to drop 30,000 or 40,000 feet before he could start the engine. This turned out to be the U-2's major hazard.

When the Lockheed people saw how successful the high-flying jet glider was, they told the Air Force about it, and the Air Force bought several U-2s in the summer of 1955 for joint research it was carrying out with the Atomic Energy Commission. In August, 1955, the Air Force released photographs of golf links taken at 50,000 feet, probably from a U-2; on one link, two golf balls could clearly be seen.

In 1955, President Eisenhower came back from the Geneva Conference discouraged by the rejection of his "open skies" policy. The data over foreign countries. The plan was offered as a kind of inspection system that could lead to disarmament and further the cause of world peace. But the Russians would have none of it, reasoning that they had nothing to gain by it. They could get data from their spies on location and had been well supplied over the years with aerial photographs of military installations and key industrial and urban centers. The open skies plan would have been a boon to the United States, which has a much tougher job of collecting data in the Russian police state, 40 per cent of which is closed to foreigners, and many parts of which are off limit even to Soviet citizens.

The Joint Chiefs of Staff were like three blind men when it came to Soviet targets. If a war broke out they would not know what to bomb, other than the large cities, and even there, they had little

\* Mach numbers relate to the speed of sound under various conditions; Mach 1 is rated at 759 mph at sea level, but in thinner atmosphere it is somewhat less than that.



planes had been on mission over Soviet territory and that the note was a plot to hinder the improvement of international relations. The writer of an article in *Soviet Sky Pilot*, one of the Russian Defense Ministry's two daily newspapers, was grieved because "these flagrant violations coincided with General Twining's stay in West Berlin."

Khrushchev echoed this grief in a speech at the Czechoslovak Embassy on May 9, 1960. He said that "when Twining was here, we welcomed him as a guest, and wined and dined him. He left our country by air and next day sent a plane flying over our country at a great altitude. This plane flew as far as Kiev." Khrushchev then gave vent to the type of scatological jest he seems to favor. "All that Twining may be compared to is an animal that does its dirty doings right where it eats," he said.

Thus, the Russians knew almost from the start of the U-2 program that their air space was being violated, but did not connect the overflights with the weather planes until two years later. A May 1958 article in the Soviet Air Force Newspaper, *Soviet Aviation*, indicated that the GRU was looking into the operations of the U-2 because the plane "lacks all identification marks indicating its mission." The article suggested that strategic reconnaissance was included in the versatile plane's mission.

There was a healthy curiosity about the planes in countries where they were based. In England, *Flight Magazine* published an alleged photograph of the mystery plane in 1956 which was no more than a black blob with wings traveling through the sky. The Japanese were luckier and it was a Japanese editor who "broke" the story of the U-2.

In March, 1958, the Japanese magazine *Air Review* published photographs of U-2s landing in Japan, reportedly taken by a sixteen-year-old aviation bug who was standing at the end of the runway and escaped the security check. And in September, 1959, some members of a Japanese glider club unwittingly became part of the secret. They were photographing landings at Fugisawa field, a light-plane strip forty miles south of Tokyo, when an unmarked black turbojet made an emergency belly-landing only a foot away from them. They approached the plane, shutters clicking, but the pilot instead of emerging pulled the cockpit shut. Fifteen minutes later, a Navy helicopter full of civilians landed at the field. The pilot opened his canopy and got out,

saying, "I'm O.K." The Japanese noticed that he had no markings on his uniform and wore a pistol at his waist. The civilians who had arrived in the helicopter surrounded the plane and ordered the glider club members away at gunpoint.

The following day, Eitichiro Sekigawa, editor of *Air Review*, was given a description of the crash landing and put U-2 and U-12 together. He noted in an article that the plane probably had a far greater range than that indicated by its fuel supply, since it seemed to be able to coast for miles like a glider.

There were six U-2s based in Japan and daily flights were reported. The Japanese expressed gratitude at the valuable weather data the U-2s were producing in tracking hurricanes. Other flights, unmentioned in official dispatches, went north into the Sea of Okhotsk and to the eastern seaboard of the Soviet Union and south to the Yellow Sea and over Red China, whose radar installations are primitive in comparison with the Soviet Union's. Only five months before Powers crashed near Sverdlovsk, another article in *Soviet Aviation* gave design details of the U-2 and said flatly that they were being used for strategic reconnaissance.

Getting back to Powers, after two interviews in May, 1956, he had filled out a questionnaire to the satisfaction of the CIA and signed a two-year contract in which he pledged to keep his enlistment secret, even from his wife. In the routine security clause of the contract, he was warned that divulging any information about the CIA and its activities could lead to ten years' imprisonment and/or a \$10,000 fine. He was told that once he was sent on missions, his salary would be \$2,500 a month, with \$1,000 held back until successful completion of the mission. His main job, as he understood it, would be to fly U-2s along the Soviet border to pick up radar and radio information. If all went well, he might get other duties.

Once he had signed the contract, Powers was sent to the Watertown Strip base in Nevada for high-altitude flight training. He was given a special flight suit that had been tested in an altitude chamber. For two and a half months, registered under the cover name of Palmer, he flew a U-2, studying its special equipment for intercepting radio and radar signals. In August, 1956, after having flown the U-2 successfully over California and Texas, Powers was sent to the Logik base

4/7/78

Dear Dave,

Your notes on Legend (4/5/78) and especially the excerpts from Sanche de Gramont's "The Secret War," are significant in questioning (if not destroying) one of the basic and entirely unproven allegations in "Legend," that whatever Oswald could have known about the U-2 was not known to other countries.

The publication in the USSR and Japan demolish any conjecture about secrecy. The visible design alone said very high altitude if the USSR had no other knowledge.

I recall the flameout story as the first the CIA and others put out. I have no idea of what really downed Powers.

However, for the Cuba missile crisis period the USSR did have accurate high-altitude rockets. I presume they did not get developed overnight. I'm inclined to believe that in order to use them the USSR had to have coinciding electronic capabilities, regardless of what Epstein, without even a smell of proof, says.

Very good.

If one of the students wants to undertake a research project on this, such US pubs as Aviation Week might disclose more.

The waste of time with CBS does make a good record.

Best,