

~~TOP SECRET~~

Copy #5

7 July 1960



FUTURE OF THE AGENCY'S U-2 CAPABILITY

1. Elements of the Problem: The problem is whether the Agency should continue to maintain a U-2 capability and, if so, for what purpose, on what scale, and where deployed. A firm decision has been made that, at least for the next seven months, no effort will be made to conduct reconnaissance with these aircraft over the USSR. It is assumed that this decision will remain firm and this is not a proposal seeking any amendment to that decision. However, it is further assumed that, if a drastic change should occur in the world situation, the decision would automatically be re-examined, and that it may in any event be reconsidered eight months hence. This contingency should be provided for even though a drastic change in the world situation is not anticipated. Accordingly, resolution of the problem would appear to depend on the answers to the following questions:

- a. If the existing capability in the hands of the CIA were deactivated, could it be promptly reconstituted in the event of need?
- b. Are there firm, probable, or contingent requirements which could be satisfied through use of the U-2 during the period immediately ahead within the limits of existing policy?
- c. Must the vulnerability of the U-2 be presumed to be too great to permit consideration of its use at some future time over the USSR?
- d. Is the operation of the U-2 dependent on the use of bases located on allied territory, and, if so, will such bases be available?

~~TOP SECRET~~

~~SECRET~~

(1) Reconnaissance overflights of the European satellites;

(2) Reconnaissance overflights of Communist China;

(3) Reconnaissance overflights of neutral areas such as the Middle East and Indonesia when special circumstances have justified;

(4) Peripheral intelligence collection missions of various types along the borders of Communist Bloc (including oblique photography, Elint collection and the recording of telemetry from the Soviet missile ranges). Some of these involve overflight of friendly or neutral countries.

It should be noted that missions in the third and fourth categories have not been "make work" activities. Rather, they are those which require, for example, either the privacy which the U-2 gives by virtue of its superior altitude as is the case of Middle East flights, or the technical capabilities provided by no other vehicle, as in the case of peripheral flights to obtain pre-burn-out telemetry of ICBM launchings.

b. It is assumed that the decision to discontinue reconnaissance over the USSR applies (at least for the present) to the European satellites as well.



~~TOP SECRET~~

e. If maintenance (or employment) of a U-2 capability appears warranted, is there any reason for maintaining it in Agency hands rather than in the USAF?

2. Reactivation:

a. If the existing U-2 capability in the hands of the CIA were completely liquidated, it could not be reconstituted without three to six months delay. Equipment (which would be transferred to SAC) could of course be reassembled much more quickly, but ground facilities would have to be obtained and Agency, Air Force, and contractor personnel (including pilots) reassembled or recruited and trained anew. Even with advance planning to permit the greatest possible use of experienced personnel, only part of the need could be met in this way.

b. There is of course an existing U-2 capability in SAC. If it were desired to reconstitute a civilian sponsored unit, some personnel could be drafted from SAC but there are important categories that could not be filled from this source.

c. Considerations bearing on the continued need for a U-2 capability in nonmilitary hands are discussed below.

3. Requirements:

a. During the past four years the U-2 has been employed not only for infrequent reconnaissance missions over the USSR, but also for the following purposes, which are arranged in order of political and military hazard.



~~TOP SECRET~~

c. There is an urgent and high priority requirement for additional photographic reconnaissance of Communist China. Although a few U-2 missions have been flown over this area, it has been the agreed policy of the Central Intelligence Agency and the Air Force that the U-2 should not be exposed on such missions as long as there was a reasonable likelihood that it could be employed against much higher priority targets in the USSR. Now that this opportunity is no longer open and the vehicle is exposed, it is strongly believed that an appropriate way should be found to use the U-2 to complete the coverage of primary targets in China before air defenses there have been further improved.



d. There is at the present time no pressing requirement for continuing flights over neutral areas. On the other hand, specific requirements arise from time to time, most or all of which can be satisfied with minimum risk. Such requirements must be anticipated in the Middle East, possibly areas in Southeast Asia and the Caribbean.

e. Useful intelligence collection can be performed by the U-2 in peripheral missions with extremely low risk of either inadvertent penetration of the Soviet border or of embarrassment due to loss of the aircraft.



4. Vulnerability: The vulnerability of the U-2 to the Soviet air defense system has been exhaustively studied by CIA and the Air Force jointly in the light of the May Day incident. Early conclusions concerning that event and previous estimates of Soviet interception capabilities have been substantially reaffirmed to the effect that:

a. It is possible but unlikely that the cause of the loss of the aircraft was actual damage inflicted at cruising altitude by a Soviet ground-to-air missile (or conceivably other enemy action). What probably happened, however, was that the aircraft was forced by a malfunction (or a fear of a malfunction) to descend to approximately 60,000 feet where it suffered either damage from a ground-to-air missile or an engine flameout. The analysis does not, therefore, change the estimate that has been considered valid for over a year that the Soviet ground-to-air missile has a high kill probability up to 55,000 and a diminishing one above that altitude with a low kill probability at 70,000 feet.

b. What is known of interception attempts by Soviet aircraft on recent U-2 missions also supports the previous estimate that present operational Soviet aircraft weapons systems have an even lower probability of inflicting damage on the U-2 at 70,000 feet than does the ground-to-air missile.

c. The conclusions drawn from these estimates are: First, that any missions which might in the future be authorized over the USSR should avoid flying directly over known or suspected Sam sites, and, second, that if this practice were followed the probability of successful interception would remain extremely low.

d. It should be pointed out that the above applies to the USSR. It is believed that the Soviets or their allies have deployed an equivalent intercept capability in certain locations in the European satellites but that, as yet, the Chinese have not deployed the same or an equivalently effective ground-to-air missile.

e. Certain modifications to reduce vulnerability could be made in the U-2 with some sacrifice in range. These include the following:

(1) Pyrophoric ignition which permits an engine relight at or close to full cruising altitude in the event of a flameout not due to a basic malfunction.

(2) Single side-band radio which would permit recall of a mission in the event of evidence of dangerous attempts at interception.

(3) Possibly a provision for improved electronic countermeasures which would interfere with enemy missile guidance and thus reduce risk.



5. Bases:

a. It is assumed that the U-2 will not be permitted to operate within the foreseeable future against the USSR from bases located on the territory of allies which are contiguous to the USSR. Even if, say, the Turkish Government should itself offer no objection, there is doubt as to whether it would be in the interest of the United States to expose such allies to the risks of Soviet counter action. It is not believed, however, that this limitation applies either to over-flights of Communist China or to peripheral missions which do not penetrate Soviet air space.



b. Recognizing this limitation, it is proposed to equip a few U-2's for in-flight refueling so as to relieve them from dependence on bases close to sensitive target areas (provided the policy decision is made to maintain a U-2 capability in order to meet the requirements stated in paragraph 3 preceding). With in-flight refueling, and having in mind the necessity to avoid concentrations of Soviet ground-to-air missile sites, the most promising missions that could be planned against the USSR itself could be flown from or (if available) from British or bases. Another technically feasible possibility would be to launch a U-2 from a carrier, refuel close to the target area, and land after completion of the mission at one of the bases listed above.

6. Sponsorship and Cover:

a. The U-2 program has involved from its inception the employment of these aircraft ostensibly (and actually) to perform certain tasks which were not in fact their primary mission and, under this cover, to carry out that top secret primary mission. In other words they have been engaged in clandestine operations. It was for this basic reason that the capability was organized jointly by the Agency and the Air Force but within CIA's administrative framework and line of command. A strongly reinforcing and corollary reason for Agency sponsorship was the desire that, in the event of compromise, the activity be identified as a form of civilian espionage not under military control and with the fewest possible military overtones.



b. If the U-2 capability is maintained and employed for the purposes set forth in paragraph 3 above, this will still constitute in the above sense a clandestine operation. With respect to overflights of China, the true nature of the mission and certainly U. S. Governmental support thereof will be SECRET. The same will apply in lesser degree to reconnaissance of neutral areas. Only with regard to peripheral missions along Soviet borders, will secrecy be of secondary importance. It would appear, therefore, that the same considerations (set forth in subparagraph 6a above)

that have in the past seemed to favor civilian sponsorship would apply in the future.

c. It has been argued that mere continuation of previous deployment and cover arrangements would fail to accomplish the purpose of concealing the US Governmental sponsorship of these U-2 missions the true character of which could not be freely and openly revealed. The argument is that the present cover is blown and that if present arrangements would continue unchanged, true sponsorship and mission will likewise be assumed to be unchanged. It is believed that this very real danger can be dealt with as follows:

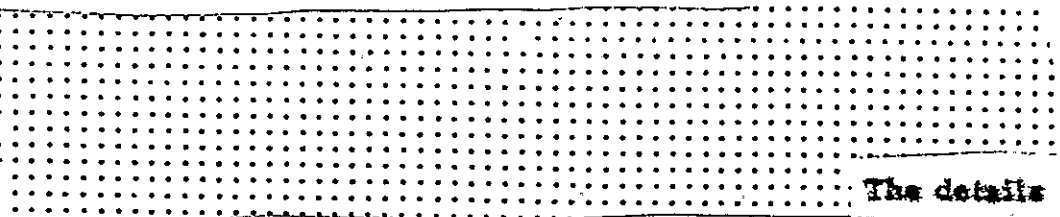
(1) As proposed below, the U-2's presently stationed in the Far East would be returned to the ZI:

(2) With respect to U-2's remaining at Adana, Turkey, for the next several months these would be ostensibly and for the most part actually engaged only in weather reconnaissance flights and their activity would be explained as the final phase of the NASA program. It would be made known (as it has been in all statements following the May Day incident) that this was a real and valid scientific program from which aircraft had from time to time been "borrowed" for overflights. It is believed



that continuation under this cover for several more months, during which time no Bloc penetration flights would be attempted, would tend if anything to buttress the story to which we are already committed.

(3) Since it is assumed as stated in paragraph 5 above that operational missions against the USSR and the satellites (if and when authorized) could not take off from a Turkish base, it will clearly be desirable after a few months to redeploy any U-2's that are to be stationed in Europe. This would be the logical time to place them under new cover,



The details of such revised cover have not yet been worked out but could be submitted in due course.



7. Proposals:

- a. The CIA will maintain a greatly reduced and redeployed U-2 capability.
- b. Of the five U-2's now in Turkey, two will immediately be returned to the U. S. The remaining three will stay in Adana under their present cover ostensibly completing a NASA program for approximately four months. Thereafter they will be returned to the U. S. and two or three will be redeployed under new cover to a different European or Near Eastern base.

~~TOP SECRET~~
~~TOP SECRET~~

- 11 -

c. The U-2's now stationed in Japan will be brought home as rapidly as possible, except that one may remain until late August to carry out a meteorological program in conjunction with the Japanese Meteorologic Society.



d.

e. Up to five U-2's will be modified for in-flight refueling and with the other modifications discussed above in paragraph 4c.

f. As soon as modifications are carried out, approximately half of the Agency's present inventory of 12 U-2's will become surplus. As rapidly as possible these and associated equipments will be turned over to the Air Force for use by SAC and ARDC.

~~TOP SECRET~~