

Copy [REDACTED]



5 March 1959

**MEMORANDUM FOR THE RECORD**

**SUBJECT: IR U-2 Use in Discoverer Project**

1. A meeting was held on 4 March 1959 with [REDACTED] at ARDC Headquarters. The purpose was to determine Air Force planning regarding utilization of an IR equipped U-2 for assistance during recovery operations of the Discoverer series. Persons in attendance were [REDACTED] ARDC, Col. Murphy and [REDACTED]

2. At BMD's request, ARDC Headquarters is making available one IR equipped U-2 which is presently located at Edwards North Base. The plan is for the U-2, at approximate time of launch of the Discoverer vehicle, to be dispatched to Hickam AFB; to participate in the recovery operations; and to return as soon as possible to Edwards. As it was necessary to remove the sextant from the U-2 to accommodate the IR gear, ARDC plans to use an RC-121 to assist the U-2 in navigation to Hawaii. Because of the classification of the IR gear, ARDC plans that the U-2 be housed in a secure hangar at Hickam and access thereto be denied to other than persons directly involved with the U-2 or its gear.

3. It is planned that the U-2 will be on station in the recovery area approximately one hour prior to re-entry. In order to increase position accuracy of the U-2, it will have IFF which can be interrogated by the RC-121. The IR gear has the capability to read elevation and azimuth in relation to the heading and attitude of the U-2. An operational procedure will be worked out between the ARDC U-2 Project officer and Col. Ahola regarding command control and communications procedures.

This document contains information  
referring to Project DISCOVERER



4. The story being given to the U-2 people is that this involvement is merely an extension of [redacted] They will only know that they are participating in IR tracking of re-entry of the Discoverer [redacted] and, of course, no knowledge of CIA involvement is planned or at all necessary. As far as the rest of the recovery force is concerned, the U-2 involvement will be explained as being to assist in recovery by use of special electronics gear. The security of the U-2 while in Hawaii will be explained by a statement that some of the special electronics gear is classified. This cover story has not yet been made official, but [redacted] felt that it would suffice and will advise us when it has been adopted. The other point on security which was emphasized to [redacted] and on which he will advise us is the altitude at which the U-2 is to operate. Since the RC-121 will undoubtedly have a capability to see the U-2 and determine its altitude, we stated the desirability that it be flown at 55,000 feet or below. He thought this was acceptable, but he would check it and advise.

5. As a measure of reliability to be expected from this system the operations of [redacted] to date are summarized below. These are based on a total of fifteen missions wherein it was considered theoretically that the missile should have been detectable. Of these fifteen missions, nine were successfully detected and six were unsuccessful due to the following causes:

|                                       |   |
|---------------------------------------|---|
| IR gear out                           | 2 |
| IR gear failed in flight              | 1 |
| Air-to-ground comms failed            | 1 |
| Altitude calibration incorrect        | 1 |
| Sun and cloud reflection interference | 1 |

6. It is believed that at least in the early Discoverer shots the use of the IR equipment in the U-2 should be very beneficial and should be continued until such time as re-entry prediction accuracy is more certain. As planned by ARDC, there appears to be no insuperable security or cover problems involving either CORONA or [redacted] providing an altitude of 55,000 feet can be used. Follow-up on the latter point will be made.



Lt. Col., USAF  
Deputy Chief Operations

