Dr. McM handcarried original only to Mr. Vance. There was no one in SAF-SS to control it, so I put a little slip on face of memo "BYEMAN." Have made copies for Mr. McNamara; also there's a copy for Dr. Fubini, if he should get one; two for Gen Stewart's file. —MK—
MEMORANDUM FOR THE DEPUTY SECRETARY OF DEFENSE

March 5, 1965

This memorandum summarizes the status of four matters in connection with the management and operation of CORONA that have been discussed in the past at ExCom or with you.

**Systems Engineering**

As you recall, at the ExCom meeting of August 11, 1964, it was agreed that a contract for general systems engineering and technical direction on the CORONA system would be established with Aerospace Corporation, that the CIA contracts on CORONA would be amended to recognize the role of Aerospace, that systems engineering contract SE 1928 with Lockheed (LMSC) would be allowed to run out, and that General Greer would substitute for it a contract with LMSC for systems integration.

At the present time, the status of actions on these matters is as follows:

a. A contract with Aerospace Corporation for general systems engineering and technical direction is in force.

b. The required changes have been made in one CIA contract, that with ITT.

c. CIA contracts with LMSC and with General Electric have not been changed.

d. SE 1928 with LMSC has expired.

e. General Greer has negotiated a systems integration contract with LMSC, to continue that part of the effort previously covered by SE 1928 which is required for detailed systems integration.
f. The CIA has directed LMSC not to sign the systems integration contract with General Greer, and this contract is not signed.

As a consequence of this situation, LMSC is not under contract to perform necessary engineering functions, and Aerospace Corporation has on many occasions been explicitly denied technical information developed under CIA contracts, or pertaining to work on those contracts, that is necessary to the task of general systems engineering.

Security

At the time of directing LMSC not to sign the systems integration contract noted above, the CIA stated an objection to the security practices called for in that contract. At your direction, I established a committee, including a CIA security expert, to review the problem. The committee found that the security practices followed by LMSC under their contracts to the CIA did not meet the standards imposed upon the NRO by the CIA security guide under which the NRO is obliged to operate.

The committee unanimously recommended that the security procedures followed by the LMSC on their CIA contracts be brought up to the standard of the CIA security guide. In a memorandum of November 16, 1964, General Carter agreed to this change. The change has not yet been effected.

Orbital Operations

As you know, during orbital operations all commands to the vehicle and payload are issued to the tracking stations, for relay to the vehicle, from the Air Force Satellite Test Center (STC) at Sunnyvale, California. Telemetry reports from the vehicle are reported in from the tracking stations to the STC, either by direct real-time relay, or in summarized form during or immediately after contact of the tracking station with the vehicle. In the past, representatives of the CIA who were knowledgeable of the camera and other payload items covered by CIA contracts, have regularly been present at the STC during
operations, and have had with them all data necessary to decode and interpret the telemetry pertaining to the payload and payload section of the vehicle. These people supplied their data to and participated in all analyses of vehicle condition, and contributed their recommendations to decisions made about the operation or the health of the orbital system.

Since last August, this practice has gradually been discontinued, to the point that on mission 1015, in December, I felt compelled to direct that a representative of the CIA organization be physically present at the STC during the mission. This was complied with on that mission.

On mission 1016, in January, a CIA representative was present at the STC part of the time. On the current mission, 1017, the CIA has been represented at the STC only during periods when the vehicle was over the U. S. and test operations were being performed.

On missions 1015, 1016, and 1017, the CIA explicitly refused to release to the NRO CORONA Program Officer, who by delegation from me is in charge of mission control at the STC, any of the calibration data or decoding information that would permit him independently to decode or interpret the telemetry that pertains to the payload or payload section of the vehicle.

On missions 1016 and 1017, the CIA has denied this NRO Program Officer any decoded telemetry data pertaining to the payload or to the payload section of the vehicle. The only information they will release to him is their summary judgment, whether the payload is in good health or not.

As a result of this denial of information, the officer to whom I delegate responsibility for insuring the health of the system on orbit, and for protecting the intelligence already gathered should the status of the vehicle indicate the need for an early recovery, is without the full information necessary to discharge his duties.
Camera Commands

Standard operating procedures on CORONA call for transmission of camera instructions from the NRO Operations Center to the covert CIA-Lockheed facility at Sunnyvale. Prior to last August, there was also a teletype terminal at the STC, in a CIA controlled area, which brought a hard copy of these instructions into the STC. These instructions are converted, by a CIA representative or contractor employee, into "vehicle language," and given to a CORONA program office representative who conveys them to the vehicle controllers for relay to the appropriate tracking and control station.

Since August, the CIA has discontinued use of their teletype terminal at the STC. At present, they relay commands to the STC by commercial telephone from their covert location. In December, after observing this practice in connection with mission 1015, I directed that a secure teletype channel be installed to permit these commands to be relayed by a communication of record. The CIA has refused to allow the necessary teletype equipment to be installed in their covert facility.

As a result of the last two matters mentioned, I am presently without communications of record to verify the instructions given my delegated representative at the STC, and without the calibration data at the STC which permits an independent check that the commands to the vehicle are valid translations of those requested by the NRO Operations Center. The possibilities of human error are increased, and the possibility of assigning responsibility is negated.

Sincerely,

Brockway McMillan
Director
National Reconnaissance Office