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23 March 1962

MEMORANDUM FOR DR. CHARYK

SUBJECT: NRP Status

The following is a concise statement of the status of the NRP (satellite) projects as of 22 March:

a. Project 101B. The last of the scheduled launches for 101B was accomplished on 7 March 1962. Launch and on-orbit operation was very close to nominal. Telemetry indicates that approximately six thousand feet of film was exposed during the first day's operation. All of the programmed and commanded functions, with the exception of recovery, were accomplished according to plan. The vehicle was not recovered due to a malfunction of the vehicle timer (sub-system H - command and control). All of the vehicle on-orbit and reorientation functions were performed except the pitch-down and retro thrust firing sequence. Another attempt at re-entry was made 24 hours later by use of the back-up programmer, with all functions being accomplished except pitch-down and spin-up. This failure was due to depletion of control gas. The vehicle entered a new orbit and is estimated to decay in Novemb er 1962. The heat shield is attached and the batteries are dead; therefore the capsule could re-enter intact. The parachute will not deploy. An impact will damage but probably not destroy the capsule.

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c. Project 201. The first 201 flight vehicle (2401) has completed the initial ready run and has been mated to the payload vehicle. The first flight payload is mated with the payload vehicle and undergoing tests at Vandenberg. The flight test vehicle (2401) is progressing toward an April flight readiness date which will not be earlier than 9 April. Mated tests of the flight vehicle, Agena, and payload have revealed some

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electrical incompatibility which shows up as noise in the system, resulting in erroneous commands being accepted by the payload programmer. Action is underway to identify and isolate the source of the noise. The second flight vehicle (2402) has completed Air Force acceptance and arrived at VAFB. The payload vehicle is now scheduled for delivery from G. E. on 15 April. This results in a late May launch date. The two new stations, [redacted] and Annette, are completed and will be operational for the first launch.

d. Project 35. P-35 pre-launch activities will be conducted in a secure fashion. A post-launch release will announce the launch of a satellite vehicle carrying classified test components. No additional information will be released, and the answer to all queries will be "No comment." All payload data will remain in a secure channel throughout the entire operation. There are four launches planned in this program. The operational limitations have been identified as: (a) sun-to-sensor angle; (b) power variation versus sun angle; (c) ground illumination versus launch time; and (d) orbital plane precession. P-35 will satisfy the program objectives of daily cloud cover of the area of interest for 90-120 days. It is possible that the May or June JTF-8 exercise could affect the payload. Recently, there was a structural failure during the vibration test; however, a fix has been determined. The first P-35 launch is scheduled for 11 May 1962, with the possibility of slippage due to

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slippage of the [redacted] launch which precedes P-35.

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f. ARGON. There are two ARGON payloads in a R-19 day status. A-5 has been moved up from September 1962 to May 1962, replacing a previously scheduled CORONA-M flight, in accordance with USIB recommendations. A total of 4 ARGON vehicles are scheduled with 2 spare payloads available for possible later utilization. The Autometrics data handling equipment is being transferred to the Army Map Service in order to accomplish the exploitation of the product in a government facility.

g. CORONA. The CORONA M-1 flight launched in February of 1962 resulted in a satisfactory mission. However, the auxiliary frame camera did not operate. The failure was due to the film drying out as a result of the nitrogen-purging of the vehicle payload section at R-2 days. This resulted in film tension increasing from 2 lbs to 10 lbs preventing the rachet release of the film transport system. Intermittent activation of the release mechanism for M-2 and subsequent will remove this

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problem. The last sub-assemblies for M-16 are nearing completion. Dismissal of Itek assembly personnel will begin on 1 April with the last system (M-16) being delivered about the end of June. (Payload deliveries are at the rate of one every ten days.) This will complete the CORONA program. Additional payloads, if required, should be ordered prior to 1 April. M-2 is scheduled for 17 April 1962 and M-3 scheduled 25 April 1962.

h. [redacted] (Omitted here since covered in detail in memo for the President.)

i. LANYARD. There are five cameras in various stages of assembly that will be used with a THORAD/AGENA D to provide coverage of specific targets at resolutions of from 4.5 to 5.5 feet at altitudes of from 110-130 N.M. The first of these payloads is scheduled for launch in January 1963 with all five to be launched by June 1963. If additional LANYARD payloads are desired, it is necessary to order the glass by 1 April 1962 for a July 1963 launch. The specifications for this system have been agreed to by the associate contractors, and there is high confidence that the January 1963 date will be met.

j. POPPY. The two successful POPPY satellites have provided a considerable quantity of ELINT information in the S [redacted] frequency bands. The payload which was launched in January as part of the composite payload satellite launched at AMR failed to achieve orbit. The next launch

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is currently planned for 21 April on a Scout booster from PMR as the Navy solar radiation flight, SR-4. At the present time a launch pad availability conflict exists between the SR-4 flight and the planned P-35 flight.

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