1. The NRO has been assigned responsibility for the Advanced Reconnaissance System. We have been directed (Enclosure 1) to submit to the NRO, by 17 January 1956, a development plan for that portion of the S-5 program required to place one or more vehicles in an orbit in the International Geophysical Year (July 1957 — Dec 1958) or shortly thereafter. As a basis for planning, it has been decided that the program will consist of the firing of one vehicle at a rate of roughly one per month beginning in August 1958 and ending in mid-1959. The overall S-5 vehicle is expected to be essentially an S-5-65C with a new powered third (or 2nd and 3rd) stage replacing the normal nose cone.

2. It is requested that NRO prepare an estimate of facility requirements and cost of these facilities, and examine the feasibility of meeting the desired launch schedule. It is anticipated that the launching will involve a cooperative effort between Convair and the S-5 prime contractor, similar to nacelle tests on the H-1 program.

3. The differences in launch requirements between the S-5-65C and the S-5 involve the following essential elements:
   a. The S-5 nacelle will be slightly longer than standard (although it is hoped that it will clear the standard gantry area nacelle) and will require additional servicing platforms.
   b. Propellant servicing lines must be added to permit servicing the nacelle in place.
   c. Means must be provided for hoisting the nacelle and mounting on the S-5 after the latter has been erected.
   d. Electrical space must be provided for additional nacelle support equipment (the S-5 nacelle section is expected to be more complex than the standard cone).

4. It is desired that the estimate cover only that portion of the facilities at Patrick required to permit Convair to attain the additional launching capacity, not the facilities required to receive, checkout service or track the nacelle itself.
5. No estimate of contractor's plant facilities is requested.

6. It is requested that the estimate be available by 0800 Friday, 13 January 1956.

SIGNED

R. C. Truax
Commander, USN

CC: Colonel Glasser