

June 4, 1969



SYSTEM ENGINEERING
CONSULTANT SERVICES - PROJECT Z.

A. Scope

The System Engineering Consultant will provide engineering services to the Customer to assist in system definition, contractor selection, contractor monitoring and design review pertaining to an Electro-Optical Imaging Satellite System, Project Z. As initial tasks through August 30 the System Engineering Consultant will perform the following services.

Task 1 - Transducer Evaluation Facility

The consultant will develop a work statement and requirements document to be used in an RFP package that will define the performance of an optical Transducer Evaluation Facility. The RFP package shall be adequate to task a contractor for the design, fabrication and test of the Transducer Evaluation Facility. The consultant will also assist the customer in briefing bidders and in evaluating contractor proposals for the Transducer Evaluation Facility.

Task 2 - Processing Facility

The Consultant will assist in the development of a work statement and requirements document to be used in an RFP package for the definition of a Processing Facility. The Processing Facility will include equipment for the reception, format conversion, recording and display of target image data, and also for the interchange

of command and telemetry data with the satellites. The RFP package will also define requirements for breadboard and test of key critical items in the Processing Facility. The Consultant will also assist in the briefing of bidders and evaluation of proposals for the Processing Facility.

Task 3 - Relay Satellites

The Consultant will perform a requirements study to be used in developing an RFP package for relay satellite definition. The relay satellites shall facilitate transmission of target image video from the imaging satellite to the ground station or to another relay satellite. The relay satellite shall also permit interchange of telemetry, tracking and control data between the imaging satellite and other relay satellites and/or the ground station.

Task 4 - Imaging Satellite

The Consultant will assist in the development of a work statement and requirements document to be used in an RFP package for definition of an imaging satellite. The imaging satellite shall include the optics, transducers and electronics required for the collection, formatting and transmission of target image video. This RFP package shall also include ground station antennas, transmitters and receivers comprising the baseband terminals of the communication links to the satellites.

B. Deliverables

Deliverable items will include:

1. Monthly status reports