Subj: Requirements for NRL Satelite Program

1. To fill the operati[redacted]uirements of Op-92 for an "L" band unit as a follow up for Tranait 2[redacted] following technical items will be required:

An experiment which would be a logical continuation of the Solar Radiation unit carried in 2A. A new "L" band antenna and filter system capable of giving the operational sensitivity and other characteristics required for the Data System. A minimum of three flight models which have passed the temperature and environmental conditions. The estimated cost of these items are as follows:

New Solar Radiation Experiment	200K
New Data System	250K
Operational Flight Models	620K
TOTAL	1070K

This new package will require an additional 10 to 15 pounds weight to cover the added magnets on the Solar Experiment and the extra weight of the crystal filter hardware at "L" band.

2. To fulfil the Op-92 requirement for a replacement of the 2A transit before termination of its life would require work immediately following that outlined in paragraph 1. A new Solar Radiation experiment of the type in the existing series would be required. The data system should be a combination of the two previous units in the same package. Completely new flight models would be required for the new configuration.

The estimated costs for the above items would be as follows:

New Solar Radiation Experiment	200K
Combined Data System	150K
Operational Flight Models	720K
TOTAL	1070K

This new package will probably require some additional 5 to 10 pounds of additional weight over the unit described above to cover a more complex Solar experiment and the added weight of the combined RF hardware.

TOP SECRET [redacted]

HANDLE VIA BYEMAN
CONTROL SYSTEM ONLY

3. With the advent of these experimental units going operational, additional requirements for detailed measurements will be manditory. The research to cover this planning should be conducted concurrent with the above developments. It is estimated 200K will be required to cover those.

These items will all require FY 1961 money to cover the program.

TOP SECRET

TOP SECRET

HANDLE VIA BYEMAN
CONTROL SYSTEM ONLY