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CENTRAL INTELLIGENCE AGENCY  
WASHINGTON, D.C. 20505

BYE-2936-64

Cy 3

10 JUL 1964

MEMORANDUM FOR: Director, ~~(S)~~National Reconnaissance Office

SUBJECT : CIA/NRO Fiscal Year 1966 Budget

1. In accordance with your request contained in BYE-22587-64, dated 10 April 1964, attached is the CIA/NRO Fiscal Year 1966 Budget.

2. The attachments to this memorandum are as follows: Tab A is the summary of the Fiscal Year 1966 Budget; Tab B (with Attachments I, II, III, and IV) is the funding required by project for the Fiscal Year 1966 and includes justification of applicable items. Additionally, all program costs are on an obligational basis.

3. As you will recall, our operational concepts for Fiscal Year 1966 were included under Tab A and B of our Fiscal Year 1965 Budget; therefore, they are not included in this submission.

4. Inasmuch as the Fiscal Year 1966 Budget Estimate is subject to less precise justification than Fiscal Year 1965, it is necessarily open to speculation. Accordingly, I consider it necessary in deliberations on the attached budget that I or a representative from my staff take part.

[[Signed]] Jack C. Ledford

JACK C. LEDFORD  
Colonel USAF  
Director, Program B, ~~(S)~~NRO

Attachments: As Stated Above

OXCART/KEDLOCK/  
ISINGLASS/STSPIN/IDEALIST/  
FULCRUM/ZOSTER/AKINDLE/

GROUP 1  
Excluded from automatic  
downgrading and  
declassification

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Handle via BYEMAN  
Control System

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TAB A

SUMMARY - CIA/NRO 1966 BUDGET

(In Thousands of Dollars)

<u>PROJECT</u>	<u>ESTIMATE FY 1966</u>
I. AIRCRAFT:	
OX CART	194,147
<del>KEDLOCK</del>	<del>16,996</del>
IDEALIST	37,028* <del>X</del>
STSPIN	4,050
AIRBORNE COLL./COUNT.	12,450
ISINGLASS	8,000 ?
II. SATELLITES:	
FULCRUM	156,900
ZOSTER	59,500
III. BALLOONS:	
ELINT (AKINDLE)	7,000
PHOTO	6,400
IV. GENERAL:	
PHOTO MATERIEL AND	
PROCESSING	18,500
EKC R&D	2,600
ADVANCE R&D	7,000
TOTAL	

\*If decision is made to convert SAC A/C rather than buy U-2L's, the IDEALIST budget will be reduced as reflected on page 18A and B.

OX CART/KEDLOCK/  
ISINGLASS/STSPIN/IDEALIST/  
FULCRUM/ZOSTER/AKINDLE/

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TAB B

AIRCRAFT (ATTACH I)

(In Thousands of Dollars)

OX CART	194,147
KEDLOCK	16,996
IDEALIST	37,028*
STSPIN	4,050
AIRBORNE COLL/COUNT	12,450
ISINGLASS	<u>8,000</u>
TOTAL	272,671

\*If decision is made to convert SAC/A/C rather than buy U-2L's, the IDEALIST budget will be reduced as reflected on page 18A and B.

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ISINGLASS/STSPIN/IDEALIST/  
FULCRUM/ZOSTER/AKINDLE/

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ATTACH I

(In Thousands of Dollars)

OXCART

Airframe Support		57,951
Engines:		
R&D	80,000	
Support	<u>23,936</u>	103,936
Cameras:		
Perkin Elmer	3,600	
Eastman Kodak	1,500	
Hycon	<u>2,100</u>	7,200
Radar		1,000
Guidance:		
INS	2,800	
Auto Pilot	<u>1,000</u>	3,800
Construction		1,600
Operations & Maintenance		6,500
Airborne Elect Equipment		1,945
Other		<u>10,215</u>
TOTAL		<u><u>194,147</u></u>

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ATTACH I

(In Thousands of Dollars)

1. OX CART SERVICE CONTRACTS 57,951

## a. Base Support (CA-20) 2,945

This includes instrumentation calibration, operation of base support shops, maintenance of ground support equipment, tool crib/operation, maintenance of chase and administrative aircraft, material handling, inspection test and repair of GFE, Investigative and Safety Engineering Services, Telephone and TWX services and accommodation sales.

## b. Flight Test (FT-21) 23,539

This covers flight test operations crews for A-12, design engineer support, B-6 shop support, repair, overhaul and modification of airplane parts and B-6 material handling.

## c. ECO/ECP and Spares (CT-22) 24,940

ECO/ECP	12,900
Spares	12,040

## d. Technical Representatives (SC-23) 6,527

## e. Following represents TAGBOARD Share of above Contracts (not included above):

CA-20	481
FT-21	3,940
CT-22	4,060
SC-23	450
	<u>8,931</u>

OX CART/KEDLOCK/ [ ]  
 ISINGLASS/STSPIN/IDEALIST/  
 FULCRUM/ZOSTER/AKINDLE/

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ATTACH I

(In Thousands of Dollars)

2. ENGINE RESEARCH AND DEVELOPMENT

80,000

This estimated amount is to support the test stand operation for improvement in performance and durability. This test stand activity further supports the flight test program by surfacing, defining, and resolving high Mach number problems plus confirming feasibility of fixes. P&W experience confirms that R&D programs minimize overhaul and retrofit costs plus insuring immediate response to arising problems, thereby precluding lengthy groundings.

ATTACH I

(In Thousands of Dollars)

3. ENGINE SUPPORT

23,936

## a. Spares, GSE

17,850

This item covers profit-bearing spares and GSE for the OXCART program only. As in previous years, this is based on the currently estimated consumption rate and ECO/ECP use.

## b. Overhaul

4,305

The ratio of four overhauls per month should continue through FY-66, with a total of about 50 overhauls necessary during the year. This amount is for OXCART only.

## c. Tech Reps

1,781

This figure is for OXCART only.

## d. TAGBOARD share of total Pratt &amp; Whitney costs is as follows:

Spares	3,060
Overhaul	738
Tech Reps	289
	<u>4,087</u>

These figures are for information only and are not included in the total above.

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ATTACH I

(In Thousands of Dollars)

4.	<u>OX CART CAMERAS</u>	7,200
a.	Perkin Elmer Type I	3,600
	Complete cameras number seven and eight	300
	Tech Reps	1,300
	High level technical support	300
	Maintenance and Over- haul	1,100
	Spares and other equip- ment	600
b.	Eastman Kodak Type II	1,500
	Tech Reps	400
	Maintenance and Over- haul	500
	Spares and other equip- ment	600
c.	Hycon Type IV	2,100
	Maintenance and Over- haul	400
	Spares	200
	Tech Reps	300
	New Systems (3)	1,200

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ATTACH I

(In Thousands of Dollars)

5. OX CART RADAR

1,000

Covers maintenance and field support  
of the side looking radar program.

OX CART/KEDLOCK/[REDACTED]/  
ISINGLASS/STSPIN/IDEALIST/  
FULCRUM/ZOSTER/AKINDLE/

ATTACH I

(In Thousands of Dollars)

6. OX CART GUIDANCE

3,800

## a. INS

2,800

Technical Representa-  
tives

700

Overhaul and Repair of  
Systems

1,000

Spares

1,100

## b. Auto Pilot

1,000

Technical Representa-  
tives

300

Spares

400

Overhaul and Repair of  
Systems

300

OX CART/KEDLOCK/  
ISINGLASS/STSPIN/IDEALIST/  
FULCRUM/ZOSTER/AKINDLE/

ATTACH I

(In Thousands of Dollars)

7. OX CART CONSTRUCTION

1,600

Construction contemplated is additional lab space, replacement of trailers with BOQ type facilities, small warehouse, additional fuel storage tank, expansion of utilities distribution lines, paving of additional roads and streets, expansion of REECO maintenance shops, new theater building, new control tower, and runway rehabilitation. Also included in this amount is \$100 for Fairhall A & E.

OX CART/KEDLOCK/  
ISINGLASS/STSPIN/IDEALIST/  
FULCRUM/ZOSTER/AKINDLE/

ATTACH I

(In Thousands of Dollars)

8. OX CART OPERATIONS AND MAINTENANCE

6,500

The FY-66 M&O Budget is based on supporting an average Area 51 population of 1650 people. Approximately \$300 will be allocated to pay for cost of operation of the C-47 shuttle aircraft on the Las Vegas - Area 51 shuttle run.

OX CART/KEDLOCK/  
ISINGLASS/STSPIN/IDEALIST/  
FULCRUM/ZOSTER/AKINDLE/

ATTACH I

(In Thousands of Dollars)

9.	<u>OX CART AIRBORNE ELECTRONIC EQUIPMENT</u>	1,945
a.	Equipment modification	825
b.	Field Support	1,120

OX CART/KEDLOCK/  
ISINGLASS/STSPIN/IDEALIST/  
FULCRUM/ZOSTER/AKINDLE/

ATTACH I

(In Thousands of Dollars)

10. OX CART OTHER

8,000

10,215

## a. ITEK Processor

700 ✓ 1

This cost covers field service representatives, minimal spares provisioning, plus costs associated with the flight test program at Area 51. Three or four field technical representatives are planned for FY-66.

## b. Air Transportation

1,650 ✓ 1,450

Our estimate for this item is that costs will approximate those for FY-65. This covers the maintenance and operation of three constellations the Burbank - Area 51 shuttle run, plus on-call utilization of a Lockheed Jetstar for test and other transport use.

## c. E. G. &amp; G.

3,000 - 380

As in FY-65, our estimates cover four basic areas of overall effort: Operations, System Growth, Research and Applied Physics and Planning and Management. The major portion of the program, "Operations", covers the cost of operating the model and flight ranges at Area 51, plus modifications to the systems as required.

## d. Firewel

1,140 ✓

The emphasis on improvement of pilot comfort and equipment reliability will require a fairly constant effort in this regard, and this amount represents a reasonable estimate of costs associated with this item. Also included in this amount is the cost of the five technical representatives at Area 51.

ATTACH I

(In Thousands of Dollars)

e. 

445 ✓

This included funds for suit overhaul, spares support and tech reps at Area 51.

f. Staging Equipment

870 -125

Equipment which will be purchased includes GSE and items peculiar to staging operations

g. Sub-Systems R&amp;D

1,500 0.5

This will provide money for modifications of equipment and for general sub-systems developmental work.

h. Pilot Salaries

500 ✓

i. Survival Equipment

30 ✓

j. NARMCO Anti-Radar

380 ✓

Level of effort to continue approximately the same basis as in FY-65.

OXCARD/KEDLOCK   
 ISINGLASS/STSPIN/IDEALIST/  
 FULCRUM/ZOSTER/AKINDLE/

ATTACH I

(In Thousands of Dollars)

KEDLOCK

16,996

Airframes Support 11,160

Engine Support 5,697

## Guidance:

INS  
A/PNone  
139

139

OX CART/KEDLOCK/  
ISINGLASS/STSPIN/IDEALIST/  
FULCRUM/ZOSTER/AKINDLE/



ATTACH I

(In Thousands of Dollars)

1.	<u>KEDLOCK SERVICE CONTRACTS</u>	11,160
a.	Base Support (CA-20)	900
b.	Flight Test (FT-21)	2,460
c.	ECO/ECP and Spares (CT-22)	6,000
	ECO/ECP	3,000
	Spares	3,000
d.	Technical Representatives (SC-23)	1,800
2.	<u>KEDLOCK ENGINE SUPPORT</u>	5,697
a.	Spares, GSE	4,590
b.	Overhaul	1,107
3.	<u>KEDLOCK GUIDANCE</u>	139
a.	INS	None
b.	Auto Pilot:	
	Tech Reps	40
	Factory Support and Liaison	71
	Spares	28

OX CART/KEDLOCK/  
 ISINGLASS/STSPIN/IDEALIST/  
 FULCRUM/ZOSTER/AKINDLE/

(In Thousands of Dollars)

IDEALIST (U-2L)

Tech Reps	3,806
T.M and Spares	8,000
Cameras	4,800
Airborne Electronics	4,242
Aircraft Procurement	6,300
Engine Procurement	7,280
Improved Aero-Med Equipment	1,500
Construction	500
Operations and Maintenance	160
Salaries	<u>440</u>
TOTAL	<u><u>37,028*</u></u>

\*See page 18 A and B for supplemental IDEALIST budget.

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ATTACH I

(In Thousands of Dollars)

IDEALIST (U-2L)

The costs listed below represent the funds required during FY-66 to phase-out the U-2 and phase-in the U-2L to an operating force level of nine aircraft:

1. Tech Reps 3,806

Of the \$3,806, \$2,806 represents technical support on both the U-2 during phase-out and the U-2L. The \$1,000 remaining is for restraining Tech Reps and additional Tech Reps required during transition.

2. T.M and Spares 8,000

\$6,000 is for spares required to support the nine aircraft force level of U-2L's and \$2,000 will be required during phase-out of U-2.

3. Cameras 4,800

\$3,200 of the \$4,800 is for the purchase of eight additional Delta II's or comparable camera for the U-2L. The remaining \$1,600 is for product improvement and new camera systems, i.e., I.R., color, etc.

4. Airborne Electronics 4,242

Included in the \$4,242 is \$3,432 for purchase of nine Electronic Collection packages (at approx. \$220 ea.) plus 30% spares. The remaining \$810 is for mods to present equipment plus general support.

5. Aircraft Procurement 6,300

The \$6,300 represents the final cost for airframes (on a buy order of 25 aircraft). Agency aircraft requirements for next five years will be a total of 18 to maintain a nine aircraft operational force level. Total Agency airframe costs (18 at \$1,100 each) are \$19,800 (\$13,500 in FY-65).

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ATTACH I

(In Thousands of Dollars)

6. Engine Procurement

\*7,280

The \$7,280 is to procure twenty-six J-75 engines (at \$280 each) to meet IDEALIST requirements during next five-year period.

7. Improved Aero-Med Protective Equip.

\*1,500

Of the \$1,500, \$175 is development costs for bigger chutes and integrated harness, \$125 is to test above, \$150 for R&D to reduce size and weight of oxygen system plus the procurement of 14 sets of equipment produced at \$75 each.

\* When the U-2L Program is approved, portions of these cost will have to be advanced to FY-65 in order to initiate production and R&D of the respective projects.

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ATTACH I

(In Thousands of Dollars)

IDEALIST (Convert SAC A/C)

Tech Reps	2,806
T. M. and Spares	7,500
Cameras	4,800
Airborne Electronics	4,242
Construction	500
Operations & Maintenance	160
Salaries	<u>440</u>
TOTAL	20,448

18A

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FULCRUM/ZOSTER/AKINDLE/~~TOP SECRET~~  
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## ATTACH I

(In Thousands of Dollars)

## IDEALIST (Convert SAC A/C)

1. Tech Reps 2,806

The 2,806 represents normal technical support for a 9 A/C force level and includes provisions for new systems support in FY 1966.

2. T. M. & Spares 7,500

Represents normal spares support for 9 A/C force level plus two conversions.

3. Cameras (Same as U-2L) 4,800

4. Airborne Electronics (Same as U-2L) 4,242

18B

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(In Thousands of Dollars)

STSPIN

Aircraft Procurement	3,500
Aircraft Modification	<u>550</u>
TOTAL	<u><u>4,050</u></u>

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ISINGLASS/STSPIN/IDEALIST/  
FULCRUM/ZOSTER/AKINDLE/  
19

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ATTACH I

(In Thousands of Dollars)

STSPIN1. Aircraft Procurement 3,500

This represents the fourth aircraft in the program. It will be racked and wired for use on operational missions when other aircraft are in IRAN, undergoing modifications or the loss of an aircraft. In addition, it is to be used as a training vehicle. \$2,600 is for aircraft procurement, and \$900 is for 100% spares and initial outfitting.

2. Aircraft Modification 550

Costs for racking, wiring and other mods less major flight testing of SIGINT equipment.

20

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FULCRUM/ZOSTER/AKINDLE/

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ATTACH I

(In Thousands of Dollars)

AIRBORNE COLLECTION/COUNTERMEASURES

1. Aircraft Systems Dev.	
a. ECM Eq.	5.000
b. R&D Defense Techniques	2.500
c. ELINT Eq. Augmentation	1.500
d. Field Test Support	.700
2. Parameter Measurement and Stimelint	
a. Signal Measurement	1.250
b. Subsonic ELINT Probe	.500
3. Supporting ELINT R&D	<u>1.000</u>
TOTAL	12.450

21

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ATTACH I

(In Thousands of Dollars)

AIRBORNE COLLECTION/COUNTERMEASURES1. Aircraft Systems Developmenta. ECM Equipment Development

5,000

(1.) The capability of the False Target Jammer will be increased to cope with 40 [ ] type radars simultaneously. There are areas such as Leningrad where the present jamming capacity of 15 [ ] type radars is not adequate. Additional development is required to enable the equipment to accommodate the full threat. This equipment is part of the OXCART collection of defensive gear.

(2.) Development of a missile fuze jammer will be initiated following a feasibility study to be conducted in FY 1965. It is contingent upon having obtained some basic fuze parameters, i.e., frequency band and fuze type, on which to base a design. Two basic designs may be required, one to work against the SAM fuze, the other to work against an air-to-air fuze. The development will support either OXCART or IDEALIST (SAM fuze), or STPOLLY/STSPIN (air-to-air fuze).

(3.) Defensive equipment for the U2 will be updated. A study will be made of the threat to be faced by the U2. Prototype ECM gear will be built to deal effectively with an environment which includes the SAM and air-to-air threat. Existing techniques will be used if they are effective over the required time frame. Common signal handling or processing circuitry in the ELINT equipment, i.e., antennas and receivers will be used to minimize the weight and size of the defensive gear. The best candidate for SAM defense is a repeater type jammer with improved

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(In Thousands of Dollars)

AIRBORNE COLLECTION/COUNTERMEASURES 1(3.) Continued

immunity to spoofing. For air-to-air defense an inverse gain repeater with a high power output, i.e., greater than 10 watts is promising.

b. R&D Defense Techniques

2,500

In the period through 1970 the electronic defensive capability of the Soviet, Chinese and other Satellite government forces will improve. This increased capability can include the use of CW, frequency diversified, wide-band frequency dispersed, and laser type radars, with improved ECCM capabilities. Further it is anticipated that the SAM guidance and control systems will be alerted and improved to reduce their vulnerability to jamming or spoofing. During this same period there will be increased requirements to maintain closer track and control of overflight aircraft. In order to meet these challenges the effort now being applied and those programmed for FY 65 will have to be supplemented by better track and control systems to meet the demands for tighter control of overflight aircraft.

c. ELINT Equipment Augmentation

1,500

By the beginning of FY 1966 a number of advances in the Soviet radar state of the art is expected. These advances may include the use of CW, frequency diversified, inter-pulse modulated, and nanasecond pulse radars. Continued development of better ELINT systems including high sensitivity, large dynamic ranges, wide band receivers with fine grain frequency measuring capabilities, exotic signal recognition circuitry, and wide band detection recorders will be needed.

ATTACH I

(In Thousands of Dollars)

d. Field Test Support

700

Field test support will be provided to test and evaluate the defensive systems and techniques developed. Included will be Field Test support and performance evaluation related to the False Target Jammer, Missile Range Jammer and U-2 defensive equipment. Field Test support will also be provided for evaluation and training related to the new defensive equipments as developed.

2. Parameter Measurement and Stimelinta. Signal Measurement

1,250

Absolute measurements of the power antenna patterns and other characteristics of Soviet radars are essential in obtaining the necessary design parameters for defensive studies, ECM development, etc. The present efforts in this area [ ] ect.) are not adequate to provide information on as timely a basis as is necessary. Accordingly, a modest build-up on this effort is planned in order to improve this situation. The level of effort anticipates the deployment of new radars.

b. Subsonic ELINT Probe

500

While some radars may be measured during their normal operation, standard operating practice of the Soviets is to keep other critical radars in a non-radiating condition. To obtain vital data on these radars the defenses must be stimulated into action. [ ] techniques will continue to be exploited but the necessity for using flight vehicles cannot be avoided in all cases, especially in obtaining fusing data. This budget item provides for initial studies and the development of a subsonic, unmanned vehicle suitable for stimulated parameter measurement programs.

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ATTACH I

(In Thousands of Dollars)

3. Supporting ELINT R&D

1,000

Long lead development is critical to the timely realization of specific hardware required in FY 1966 and beyond programs. The requirements here include improved packaging, environment tolerance as well as the development of totally new techniques capable of providing indications of laser intercept, etc.

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25

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(In Thousands of Dollars)

ISINGLASS

Airframe and Engine Design and Mockup	5,000
Sensor and Subsystem Development	<u>3,000</u>
TOTAL	<u><u>8,000</u></u>

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FULCRUM/ZOSTER/AKINDLE/

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(In Thousands of Dollars)

ISINGLASS

1. Airframe and Engine Design and Mockup 5,000

FY 65 funding will provide for initial design only, and it is therefore envisaged that final design work, mockup and limited testing of both airframe and engine will be accomplished in FY 66.

2. Sensor and Subsystems Development 3,000

This includes developmental work on navigation equipment, sensors, communications gear, etc.

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(In Thousands of Dollars)

SATELLITES (ATTACH II)

FULCRUM

156,900

ZOSTER

59,500

TOTAL

OX CART/KEDLOCK/  
ISINGLASS/STSPIN/IDEALIST/  
FULCRUM/ZOSTER/AKINDLE/

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ATTACH II

(In Thousands of Dollars)

FULCRUM

CAMERA	23,400
SPACECRAFT	67,500
BOOSTER	45,200
RECOVERY VEHICLE	10,000
LAUNCH FAC.	7,000
ASSEMBLY INTER. & CHECKOUT	2,800
FILM	<u>1,000</u>
	<u>156,900*</u>

\*This represents total project cost estimates. Moneys for booster, launch facilities and recovery vehicle may already appear in other DOD budget forecasts.

(In Thousands of Dollars)

FULCRUM (See footnote, page 29 re items 3, 4, and 5)1. CAMERA 23,400

Design and development for the camera system on a two-year schedule beginning in FY 1965. 600

Complete procurement costs for one qualified camera and three test cameras. 10,000

Procurement of long lead items 9,700

Labor Costs 3,100

2. SPACECRAFT 67,500

Complete design and development of six spacecraft; one for environmental testing, one for functional testing, three for test launches and one back-up. 38,000

Complete facilities and construction. 2,500

Complete production procurement of six operational spacecraft. 27,000

3. BOOSTER 45,200

Titan II modification/design costs. 5,600

Production and procurement for three test launches. 15,600

Production and procurement of six operational vehicles. 24,000

4. RECOVERY VEHICLE 10,000

Complete development program to include three vehicles for test launches, plus necessary environmental and quality tests. 6,000

Production for the operational program will commence in Sept. '65.

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(In Thousands of Dollars)

Costs are estimated at \$500/  
vehicle. 4,000

5. LAUNCH FACILITIES 7,000

Construction, equipping and  
necessary modification for the  
launch complex.

6. ASSEMBLY INTER. & CHECKOUT 2,800

Provides for centralized  
assembly, intergration and check-  
out engineering (60 engineers).

7. FILM 1,000

Development and procurement  
of 7-inch film and associated  
chemicals.

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ATTACH II

(In Thousands of Dollars)

ZOSTER

Design Confirmation and Mockup	7,000
Primary System Development	15,000
Sub-System Development	10,000
Primary and Sub-System Test	10,000
Commitments for Long Lead Items	<u>17,500</u>
TOTAL	<u>59,500</u>

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FULCRUM/ZOSTER/AKINDLE/

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(In Thousands of Dollars)

ZOSTER

59,500

1. Design Confirmation and Mockup 7,000

Completion of final systems design of Indications Satellite System and construction of space vehicle mockups.

2. Primary System Development 15,000

Development of the total data handling system, from the observing lens to the Washington data display.

3. Sub-System Development 10,000

Development of the orbital vehicle, guidance, power, control, etc., sub-systems.

4. Primary and Sub-System Test 10,000

Ground qualification testing of components, systems and sub-systems.

5. Commitments for Long Lead Items 17,500

Commitments for long lead items, such as lenses, boosters, auxiliary propulsion systems and data link components.

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FULCRUM/ZOSTER/AKINDLE/

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BALLOONS (ATTACH III)

(In Thousands of Dollars)

ELINT	7,000
PHOTO	<u>6,400</u>
TOTAL	<u><u>13,400</u></u>

OX CART/KEDLOCK/[REDACTED]  
ISINGLASS/STSPIN/IDEALIST/  
FULCRUM/ZOSTER/AKINDLE/

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ATTACH III

(In Thousands of Dollars)

BALLOONS (PHOTO)

6,400

- |  |       |
|--|-------|
| 1. Development of Low Radar cross-section cameras and ancillary equipment. | 1,200 |
| 2. Radar cross-section measurement and analysis.                           | 300   |
| 3. Maneuverable balloon development.                                       | 500   |
| 4. Launch technique development.   | 500   |
| 5. Operational analysis.   | 200   |
| 6. Ground support equipment.   | 1,000 |
| 7. Development and operational costs.                                      | 500   |
| 8. Developmental flights, ZI (3 with one flight test system).              | 400   |
| 9. Operational flights system (6).   | 1,800 |

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 OXCART/KEDLOC/  
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GENERAL (ATTACH IV)

(In Thousands of Dollars)

PHOTO MATERIAL & PROCESSING	18,500
EKC R&D	2,600
ADVANCED R&D	<u>7,000</u>
TOTAL	<u><u>28,100</u></u>

ATTACH IV

(In Thousands of Dollars)

PHOTO MATERIAL AND PROCESSING

Eastman Kodak

Film and Chemicals

I-HF-47

3,500

FP-1500

5,500

Processing - PO-1800

7,000

Processing and Duplicating  
Equipment

EG-400

2,500

TOTAL18,500

} 7,800

4,200

2,500  
16,6002,600  
19,200

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(In Thousands of Dollars)

PHOTO MATERIALS AND PROCESSING

1. I-KF-47 3,500

Estimate based on same level of effort as FY-65.

2. FP-1500 5,500

a. Same level of effort as FY-65 in Satellite area.

b. Increase to thirty operational OXCART missions requires approximately \$900 additional.

c. No allowance is made for color film increase; therefore, if color film is utilized, additional funds will be required.

3. PO-1800 7,000

Increase to \$7,000 in FY-66 is to estimate cover processing and duplicating of OXCART operational missions.

4. EG-400 2,500

Increase represents fund to purchase equipment developed under EB-1492 during FY-65 and FY-66.

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ATTACH IV

(In Thousands of Dollars)

EKC

EB-1492 (R&amp;D)

2,600

Same level of effort as FY-65. (Does not include procurement which is being funded under EG-400). This estimate may fluctuate considerably depending on CCB recommendations.

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ATTACH IV

(In Thousands of Dollars)

ADVANCED R&D

Research and Development (General)	5,000
Vulnerability Studies	<u>2,000</u>
TOTAL	<u><u>7,000</u></u>

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(In Thousands of Dollars)

ADVANCED R&D

1. Research and Development (General) 5,000

This includes general research and development in the areas of aircraft, satellites and sensors. Utilization of this item will be largely dependent upon results of FY-65 R&D efforts.

2. Vulnerability Studies 2,000

Development of tracking sensors and data analysis studies on vulnerability of indications satellite, balloon borne systems, and advanced aircraft systems. Also studies on vulnerability of communications systems associated with indications satellite.

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