BYE-69330-66
Copy 1

MEMORANDUM FOR: Chairman, HEXAGON Sensor Subsystem Source Selection Board

SUBJECT : Report of Management, Production and Logistics Evaluation Group

REFERENCE : SSB Memorandum, BYE-1680-66, dated 14 July 1966

1. Pursuant to your referenced memorandum, the Management, Production and Logistics Evaluation Group and its Advisors have conducted an evaluation and analysis of the Itek Proposal No. 9409-66-012 as supplemented by 9409-66-019, dated 22 July and 16 August 1966 respectively and Perkin-Elmer Proposal No. TR-66-300-2 and AH-66-1446, dated 21 July and 12 August 1966 respectively. These proposals were submitted in response to the Government request for Proposal No. HX-0001-66, dated 23 May 1966 and our letter request of 9 and 11 August 1966 for supplemental information to Perkin-Elmer and Itek. In addition to an analysis and review of the proposals, the evaluation was supplemented by visits of the above group to Perkin-Elmer and Itek on 8-9 and 10-11 August 1966 respectively.

2. The Evaluation Group investigated the following major elements and categories under each of the Contractor's proposals:

a. Management -

I. Past Performance
II. Management Organization
III. Master Planning and Scheduling
IV. Financial Capability and Accounting Policies

b. Capability and Resources -

V. Production Capability and Subcontracting
VI. Facilities, Special Tooling and Government Furnished Equipment
VII. Manpower
VIII. Interference With Other Programs
IX. Quality Assurance

3. The findings and results of the Evaluation Group are set forth in attachments hereto. In arriving at the ratings for each of the categories, a numerical rating from 0-9 was established as follows:

0	-	no data
0	-	unsatisfactory
1 2	-	poor
3 4	-	average
5 6 7	-	good
8 9	-	excellent

4. The Evaluation Group in assigning the ratings gave full consideration to the relative importance of one rating category with respect to another. However, it is recognized that the Source Selection Board will further weight the major elements.

5. The members of the Evaluation Group are available to the Source Selection for briefings or any clarification required of the summaries and ratings submitted herewith.

JAMES H. MCDONALD
Chairman
Management, Production and
Logistics Evaluation Group

[redacted]
SPECIAL HANDLING

ATTACHMENTS -

A. Numerical Rating Worksheet - Itek

B. Numerical Rating Worksheet - Perkin-Elmer

C. Summary of Management, Production and Logistics Evaluation Group

Exhibit A to Attachment C -

Part 1 - Subject: HEXAGON Sensor Subsystem Proposal Evaluation

Part 2 - Letter from [redacted] Wright Patterson AFB

Part 3 - Subject: Itek Corporation Past Performance

Part 4 - Memo for the Record from [redacted] 21 Jul 66

Part 5 - Memo for the Record from [redacted] 22 Jul 66

0936

[redacted]
SPECIAL HANDLING

HANDLE VIA BYEMAN
CONTROL SYSTEM ONLY

[redacted]

ATTACHMENT A

Numerical Rating Worksheet BYE-69330-66

ITEK

	Rating Category	Rating (EWG)	Weight (SSB)	Score (SSB)
I.	Past Performance	7		
II.	Management and Organization	7		
III.	Master Planning Scheduling	7.1		
IV.	Financial Capability and Accounting Policies	5.7		
V.	Production Capability and Sub-contracting	6.3		
VI.	Facilities, Special Tooling and Government Furnished Property	4.3		
VII.	Manpower	5.3		
VIII.	Interference With Other Programs	4		
IX.	Quality Assurance	6		

The Evaluation Working Group in assigning the above ratings gave full consideration to the relative importance of one rating category with respect to another and therefore have been weighted accordingly.

Col. Frank Buzard

Mr. Donald Patterson

[redacted]

James H. McDonald

[redacted]

HANDLE VIA BYEMAN CONTROL SYSTEM ONLY

~~BYE 169 SECRET~~
SPECIAL HANDLING

ATTACHMENT B

Numerical Rating Worksheet BYE-69330-66
Perkin-Elmer

	Rating Category	Rating (EWG)	Weight (SSB)	Score (SSB)
I.	Past Performance	5		
II.	Management and Organization	6.1		
III.	Master Planning Scheduling	5.7		
IV.	Financial Capability and Accounting Policies	7.3		
V.	Production Capability and Sub-contracting	4.7		
VI.	Facilities, Special Tooling and Government Furnished Property	3.7		
VII.	Manpower	5		
VIII.	Interference With Other Programs	7		
IX.	Quality Assurance	4		

The Evaluation Working Group in assigning the above ratings gave full consideration to the relative importance of one rating category with respect to another and therefore have been weighted accordingly.

Col. Frank Buzard

Mr. Donald Patterson

James H. McDonald

098

~~BYE 169 SECRET~~
SPECIAL HANDLING

HANDLE VIA BYEMAN
CONTROL SYSTEM ONLY

ATTACHMENT C

BYE-69330-66

I. Past Performance

An analysis of the Itek and Perkin-Elmer past performance record on previous programs and contracts was conducted on the basis of their written and oral presentations. In addition, information was supplied by responsible persons from other components of the Government and through the personal knowledge of the Evaluator and his advisors. The sources and examples of information furnished are attached hereto as Exhibit "A".

A summary of the companies' past performance with respect to program management, cost reliability, meeting schedules and contract requirements, overloading management and plant capacity, purchasing and subcontracting policy, implementing changes, accounting policy, and contractors' ability to cooperate with customers and associate contractors is set forth below.

Particular emphasis was placed on each contractor's performance under past and current reconnaissance programs. In addition, where possible, evaluations were made or solicited from responsible persons on the Contractors' system/equipment performance, reliability and quality records.

ITEK

Program Management

Itek has demonstrated a higher than average history of managing reconnaissance and related programs since its inception in 1957. The program managers and key project personnel who have been assigned to these various programs have shown a keen awareness of the necessity of designing high quality equipment, meeting performance requirements, achieving schedules and controlling costs. They have demonstrated a capability to organize and conduct a program, establish necessary authorities and responsibilities within the program office, provide for suitable control mechanisms for cost and scheduling, and carry out the program in a timely manner at a reasonable cost. Itek's program managers and their project personnel are generally responsive to direction and criticism from the customer. In addition Itek programs have enjoyed the support of good top management. Indicative of this is the phenomenal growth experienced by this company since its formation. Yearly sales in the Government Systems Division have increased from two million dollars in 1957 to the present level of 40 million dollars. Another bench mark of good program control and management is evidenced by the low employee turnover rate of less than 2%.

Cost Reliability

Itek's cost estimating reliability is about average. On an overall basis, they have an average cost overrun experience of about 2%; however, in several instances certain contracts have varied as much as + 50% from original estimates. Characteristically, they tend to underestimate development contracts and overestimate production or follow-on effort. When given an incentive contract, they generally have performed the work below original estimates. However, some of these savings can be attributed to over pricing which is one of their worst habits. This factor was particularly demonstrated in the CORONA and KEDLOCK follow-on Programs.

Meeting Program Schedules and Other Contract Requirements

Itek has demonstrated a better than average performance record to meet the schedule requirements of the CORONA, IDEALIST and KEDLOCK Programs, particularly in the follow-on procurements. In the initial development contracts there is evidence of tardiness; however, it had little effect upon overall program schedules since the sensor system was not the pacing item. On smaller development contracts or small production efforts there is evidence of only average and in some cases of below average performance. The latter is particularly true of their GAMMA I and II Rectifier program for the Army. This

can generally be attributed to the quotation of overly optimistic schedules in the beginning in order to "sell" the effort and the subsequent realization that the work is considerably more difficult than contemplated.

Overloading Management and Plant Capacity

Partially due to the rapid growth of Itek and at other times competing Government Agencies, there have been several occasions when the workload at Itek exceeded its capacity both from a manpower and optical manufacturing standpoint. The most recent illustration of this point was during the period the S-2 and FULCRUM systems were in joint competition at Itek. These instances have caused substantial pertubations in the overhead rates and schedule slippages. However, they have exhibited good management techniques to take corrective action as soon as possible to alleviate such situations. Another problem contributing to the above is the difficulty of realistically projecting the amount of expected Government work they will be awarded in any given year. A current example of this is the recent award of twenty-four aerial cameras for a drone system which was a relatively unexpected surprise. This type of situation makes advanced planning for manpower and facility requirements tenuous at best.

Implementing Changes

Itek has demonstrated a quick reaction capability to incorporate engineering changes to its reconnaissance equipment. This includes Government as well as Contractor generated changes. Retrofits in the field have been made on an expedited basis with little interruptions in schedules. In some instances, the documentation covering these changes has lagged; however, this factor is outweighed by their ability to accomplish the work in the minimum time and at the least cost.

Purchasing and Subcontract Policy

Itek purchasing and subcontracting policies conform to approved Government procedures. However, its practice of implementing subcontracting leaves something to be desired on occasion. There are many indications both in the past and in the present proposal that consideration is given first in any "make or buy" decision, to the possibility of making the item in house without regard to cost or schedule. Generally this has resulted in poor planning and resulted in locating qualified vendors at the last possible moment. Fortunately, this practice has not adversely affected schedules or cost to a very large degree. With respect to subcontracting of the engineering design of a particular assembly or subassembly, one known instance in the CORONA program has resulted in

considerable difficulty and affected cost and schedules. The primary cause of this situation was that inadequate specifications were furnished the vendor at the outset and poor engineering liaison accomplished during performance.

Accounting Policy

Itek Corporation accounting policies, in general, conform to accepted procedures for cost charging and allocations against Government contracts. One major exception is the policy of charging as many elements of cost as direct charges to a contract as possible. This includes such elements as secretarial, clerical, administrative and related categories of labor, which under normal accounting practice would be considered as overhead or G&A expense elements.

This has resulted in higher costs to some of the larger Programs. Under this technique, the contractor controls its overhead and manpower allocations by the amount a particular contract budget or price will absorb. Personnel are not removed from a program, even though their productiveness is low, until such time as the contract cost or incentive features will no longer support them. Exceptions to this are made if new business materializes which will absorb them or the Government's indicated willingness to fund an overrun.

In the early years at Itek this practice was excusable because the covert nature of programs and special clearances required the assignment of individuals by name. However, for the past several years this could no longer be considered a valid reason since the majority of Itek's personnel hold covert type clearances from either CIA or Air Force and there is a large enough pool to draw from even though it is still on a by name basis.

Itek has also demonstrated a consistent reluctance to incorporate into or modify its accounting system in accordance with suggestions made by the cognizant Government auditor and has been on the verge of a dispute case on at least one occasion because of this policy.

On a number of occasions in the past, Itek has not cooperated with the resident auditor when making accounting changes. Itek would notify the resident auditor, after the fact, that an accounting change had taken place. This was done without giving the resident auditor an opportunity to study the effect of this change and what impact it had on current contracts.

Ability to Cooperate with Customers and Associate Contractors

Itek's past history of performance in this category has only been average. There have been instances under the CORONA Program, particularly with its one time prime and now associate contractor, LMSC, that considerable friction was generated which required the Government Program Office to intervene and smooth things out by effecting a written agreement between both companies as to their respective responsibilities. The IDEALIST program technical representative also reported that Itek had encountered difficulties with its subcontractors and associates.

In addition to the above, Itek management withdrew from the FULCRUM Program being conducted by CIA because of alleged incompatibility with the CIA Program Office direction.

System/Equipment Performance, Reliability and Quality Record

An evaluation of Itek's contribution to the reconnaissance system listed below was conducted on the basis of information and comments received from cognizant technical and operational personnel knowledgeable of these programs.

1. CORONA (C, Cl, Clll, M, J-l)
2. E-5/LANYARD
3. IDEALIST (DELTA II and III)
4. KEDLOCK

The following is a subjective rating based upon the comments received:

System	Performance	Reliability	Quality
C	Fair	Fair	Fair
Cl	Fair	Good	Fair
CIII	Good	Good	Good
M	Good	Good	Good
J-1	Good	Good	Good
E-5	Poor	Poor	Poor
LANYARD	Fair	Fair	Fair
IDEALIST	Good	Good	Good
KEDLOCK	Good	Good	Good

PERKIN-ELMER

Program Management

Perkin-Elmer has demonstrated an average past performance record in the managing of reconnaissance and related programs. The program managers and key project personnel which have been assigned to these various programs have shown an extreme awareness and understanding of the necessity for designing high quality equipment and have carried this through to completion. However, they have displayed on several occasions difficulty in organizing, and establishing mechanisms for program control, particularly in the freezing of a design. They have a decided tendency to "overdesign" in an effort to obtain the last possible ounce of performance from a system. This has resulted in several overruns in programs and schedule slippages. The foregoing is generally applicable only to initial development contracts such as in the [redacted] IDEALIST and OXCART Programs. The follow-on procurements to these programs were successfully managed and carried out in a timely manner and a reasonable cost. Perkin-Elmer management has historically been conservative by nature and its growth has been steady and gradual and largely centered in the design development and production of reconnaissance systems and complex scientific optical instruments and equipment. Perkin-Elmer enjoys an excellent reputation in the latter field and its volume of business continues to increase in this area.

Cost Reliability

Perkin-Elmer's cost estimating reliability has been about average. They have experienced large overruns on the original development contracts but have been generally under the estimated cost or price for follow-on procurements. Incentive type contracts appear to provide the best inducement to reduce costs as evidenced by the Navy [redacted] Program. Perkin-Elmer maintains that out of 107 current contracts they are underrunning about 95 of these contracts.

Meeting Program Schedules and Other Contract Requirements

In reconnaissance programs Perkin-Elmer has demonstrated average performance record to meet development schedules. They have encountered delays in delivery of prototype or first article deliveries on several occasions. This can generally be attributed to (1) getting the program organized,

and (2) difficulties in development, i.e. state-of-the-art advances or freezing the design. Follow-on procurements are generally ahead of schedule as in the case of the [redacted] and OXCART Programs. In the case of the [redacted] Program they are approximately 5 months ahead of schedule.

Overloading Management and Plant Capacity

There are no known instances of this occurring at Perkin-Elmer. This can probably be attributed to the conservatism of their management, a well planned subcontract program, and the stability of their workload.

Implementing Changes

Perkin-Elmer is better than average with respect to incorporating changes into its equipment. This includes Government as well as Contractor generated changes. They responded quite well to Technical Direction and have incorporated retrofits or "fixes" in the field in a very timely manner. Documentation covering changes has been furnished concurrently with the change.

Purchasing and Subcontracting Policy

Perkin-Elmer purchasing and subcontracting policies conform to Government approved procedures. This Contractor has been quick to recognize its capabilities and this influences its "make or buy" decisions. It is their policy to subcontract as much work as is technically and productively possible. However, they normally perform all basic design effort in-house and subcontract only detail design and fabrication.

Accounting Policy

Perkin-Elmer's accounting policy with respect to cost charging and allocations against Government is generally in accordance with approved and accepted Government Audit procedures. The rate of cost disallowances is no greater than the industry average. The Contractor is readily amenable to incorporating changes to its accounting system as may be suggested by the cognizant Audit Agency.

Ability to Cooperate with Customers and Associate Contractors

Perkin-Elmer's past record of performance in this area is generally above average. They have demonstrated a willingness to accept Technical Direction from the Customer and work closely with associate contractors on interface and installation problems. The above has been particularly true of the IDEALIST and [redacted] Programs.

System/Equipment Performance, Reliability and Quality Record

An evaluation of Perkin-Elmer's contribution to the reconnaissance systems listed below was conducted on the basis of information and comments received from cognizant technical and operational personnel knowledgeable of these programs.

1. IDEALIST (C and Tracker I & II)
2. OXCART (Type I)
3. [redacted]

A subjective rating of the above systems based upon comments received is as follows:

System	Performance	Reliability	Quality
C	Fair	Poor	Fair
Tracker I	Good	Fair	Good
Tracker II	Good	Good	Good
Type I	Good	Average	Good
[redacted]	Good	Good	Good

~~SECRET~~
~~HEXAGON~~

HANDLE VIA BYEMAN
CONTROL SYSTEM

BYE-2679-66
Copy 1

19 August 66

MEMORANDUM FOR : Chairman Management, Production and Logistics Evaluation Group

THROUGH : Deputy Director of Special Activities

SUBJECT : HEXAGON Sensor Subsystem Proposal Evaluation

REFERENCE : Memorandum from Chairman, Management, Production and Logistics Evaluation Group to DD/SA, Chief, CD/OSA, Same Subject, dated 15 August 1966, (BYE-69298-66)

1. Past Performance ITEK:

A. Program management has in general been strong, with cost overruns usually attributed to unforeseen field service requirements. The Delta series cameras have been improved more through evolution than through brilliant design engineering. Program schedules have been met. Contractor does not usually subcontract any engineering and has more than normal amo nt of friction with associate contractors and subs. Contractor operates on a project team basis so the selected team should be screened very carefully to insure top technical results.

B. The Operational Objective Cameras for the SR-71 have been delivered on schedule and are meeting specifications. The target cost for the R&D Program was overrun due to unforeseen interface and environmental problems. Target price for production units was underrun due to excellence of project team selected for the R&D program. Contractor cooperated fully with associate Contractors and Program Managers. Over-all program (R&D and Production) is being accomplished within budget projection.

HANDLE VIA BYEMAN
CONTROL SYSTEM

~~HEXAGON~~
~~SECRET~~

107

~~SECRET~~
~~HEXAGON~~

HANDLE VIA BYEMAN
CONTROL SYSTEM

BYE-2679-66

2. Quality Assurance ITEK:

This contractor has an excellent history of maintaining tight quality control procedures both in plant and from sub-contractors. Records are complete and accurate with sufficient failure history being maintained to predict mean time to failure.

3. Past Performance Perkin Elmer:

This contractor has in the past produced state-of-the-art cameras and deliveries have been on time except in cases where the ground rules were changed, that is, different operational environment and different types of missions than were considered in the design criteria. Field service has not been as good as that of other contractors. Contractor has on occasion over-complicated the system by trying to obtain the ultimate in camera performance. Contractor takes direction from project management readily and generally gets along well with associate and sub-contractors. This company does not sub-contract engineering but generally maintains close liaison with sub-contractors. Technical management tends to be conservative on performance estimates. More research and development oriented than production oriented.

4. Quality Assurance Perkin Elmer:

Contractor has a good quality control program, maintains adequate records and material review procedures. Inspection procedures are considered adequate although this depends to a large extent on which part of the company you are dealing with. Again extreme care should be taken in selecting the production staff for a major project to insure that the technical excellence introduced into the development article is carried through the production effort.

Sensor Systems Division
Special Activities

CONCUR:

Deputy Director of Special Activities

HANDLE VIA BYEMAN
CONTROL SYSTEM

~~HEXAGON~~
~~SECRET~~

108

Dear Jim: (McDonald)

As you are aware, the Itek Corporation is just about finished with the second of two contracts to build high quality cameras for the EARNING program. In general, I, personally, and the SPO have been very pleased with the performance of the corporation. To touch on some specific points:

a. Program Management - Itek furnished a team consisting of a well qualified program manager, a very competent chief engineer, and an excellent group of specialist engineers. The team worked on this one camera alone, and were not faced with carrying out any other jobs in the company at the same time. I found the engineers receptive to command and criticism, and quick to adjust to the requirements of our Using Command. In no instance did the program manager or his people fail to heed the requirements of the program, regardless whether they were imposed by the SPO, the air vehicle contractor, or the Using Command.

Program management also showed skill in the manner in which the program schedules were set up and followed. Due to the complex nature of the system which was to be built, there were occasional slips of the schedule, but these were almost always foreseen and reported to the SPO in advance of their occurrences.

The physical aspect of program management was quite commendable. Although the cameras would finally wind up costing more than had originally been contracted, the total cost was not greatly different from that which the contractor had originally estimated.

Management of Plant and Facility - As noted above, the contractor established a team to do our work - to assist the team, I also established a new facility which made it possible for the team to work unimpeded by any other work. The facility, as originally obtained, proved to be quite adequate for the task that was set out for it. The private facility housed the entire engineering staff, configuration management staff, assembly and test operations, and program management. The only facets of the program which were done outside of the private facility were the optical fabrication, the heavy manufacturing, and the dynamic resolution testing.

Changes - As noted above the team was receptive to the changes and made a practice of implementing changes as rapidly as they were requested or as they were seen to become necessary. When the cameras went into service the contractor established a system of configuration, tracking and change control which has been quite commendable. As a point of information, many other procedures which Itek developed have been levied on the other contractors in the EARNING program. Any changes which have become necessary in the field have been made as expeditiously as possible, using company generated data and kits, and with company people or blue suitors to do the work. In no case has there been need to redo any of the changes.

Performance - The cameras have performed in a highly commendable manner. We originally had hoped to achieve approximately two feet resolution under dynamic conditions; under certain conditions we have even had as small as a one foot resolution - we consider this to be quite good. The camera is quite complex because it has its complete environmental control system built internal to the unit, plus the complete operating control. Despite this, the camera has shown a high order of reliability. We had less than a 1% malfunction rate during the flight test program, both Category I and Category II. Admittedly, the camera has been maintained either by, or under the close supervision, of Itek field service people which has undoubtedly helped to keep the system going. On the other hand, though, we have not yet had a similar complaint from the field on the maintainability and reliability aspects of the camera.

One point I should like to make, in regard to the AGE. From the outset, Itek had planned to have a launch console which would be the heart of all maintenance operations. At first the console appeared to be overly complex, as compared with the test gear for other cameras; it has turned out that the test console was so well thought out that there has been no need to buy additional AGE, while the test gear for the other camera has been augmented several times and has started to approach the complexity and size of the Itek console. This is actually representative of the Itek program as a whole - they thought things out in the beginning.

I don't know of anything that I could add at this time, although if you have specific questions I might be able to fill you in with some more information.

Regards,

[redacted]
SR-71 WSPO
Wright Patterson Air Force Base,
Ohio

110

~~TOP SECRET~~

COR-4067
Copy 1 of 9

17 August 1966

MEMORANDUM FOR: Chairman of Management, Production, and Logistics Evaluation Group. HEXAGON Evaluation Board

SUBJECT: Itek Corporation Past Performance Reconnaissance System Development

Pursuant to your request of the 16th, the following represents a recapitulation of Itek Corporation's contract performance during the period 1960 through 1966.

This Corporation, during the aforementioned period, was under three major contracts with this Agency, the first of which, BB-450, required the delivery of 27 Convergent Stereoscopic Camera Systems with a single recovery capability, commonly referred to as the "M" configuration. Subsequent, program reduction required that only systems 1 through 22 were to be delivered in the originally conceived configuration. Contractor delivered all 22 instruments on the dates indicated under the contract, + or - one working week. The apparent slippages of up to one week which occurred were attributable primarily to the formal buy-off which was set at the convenience of the Government, and therefore would not constitute strict schedule slippage. The remaining 5 instruments produced under this contract were produced on schedule and returned to the Contractor as GFE for reconfiguration to the new "J" system configuration. The performance called for under the specifications was expressed as 90 l/mm at an average orbital height between the predicted apogee and perigee of the instruments in its operational mode. The 90 l/mm expressed were to be measured at nadir. The 90 l/mm, in conjunction with the height, scale factors, etc., of the predicted operational altitude of this system, would equate to an approximate resolution requirement of 15 feet on the ground at nadir. Indications are that, of the 22 instruments which were flown, performance of all but one (instrument 19) of the system was between 12 feet to 15 feet ground resolution at nadir. (The payload in which camera system 19 was housed failed to achieve orbit.)

The second major Agency contract was BB-550, which required the Contractor to deliver 26 Convergent Stereoscopic Camera Systems in the "J" configuration. No schedule slippage

~~TOP SECRET~~

was experienced in the deliveries of instruments 1 through 14, of the total of 26 required. However, beginning with instrument 15 through 26, due to increased backlog of reserve systems at the integration contractor's plant, the deliveries were essentially delayed by one month. There were two partial operational failures of the total of 26 systems delivered and flown. One-half of each of the two systems involved failed to operate, due to an undefined power failure. The balance of the 24 main cameras delivered worked as required. The specification outlined in this, essentially follow-on contract, was expressed as ground resolution of 12 feet or better at nadir with the average altitude predicted for this system in operation. Indications are that the instruments performed and produced an average ground resolution at nadir in an operational mode of between 10 feet and 12 feet.

The third Agency contract, which again was essentially a follow-on procurement, required the Contractor to deliver 2[illegible] convergent Stereoscopic Camera Systems in the "J" configuration. All of the deliveries effected under this contract were within + or - two weeks of the contract delivery date. Of the instruments flown to date, no failures of the main camera systems have been experienced. The predicted performance of the camera expressed in the contract specifications was a ground resolution of 12 feet or better under the conditions outlined above, and indications are that the instruments operated in such a manner as to provide 10 feet to 12 feet ground resolution at nadir.

As a part of the above CORONA Camera Systems, the Contractor was to design, develop, and fabricate an indexing camera as an auxiliary device for each system. The Contractor originally designed a terrain index camera which had a very poor reliability and did not provide stellar imagery for exact geodetic location. The Contractor was authorized to redesign his camera to incorporate both a stellar and terrain photographic capability. Again difficulty was incurred, and the reliability experienced with this unit was not particularly good. Contractor has gradually improved the operational reliability of the system, but even as of this date, occasional reliability problems are incurred in the shutter

mechanisms. However, since this device was not considered as being a part of the primary payload, it has not been detrimental to the intelligence mission of the CORONA system.

Contractor's financial performance on each of these contracts was such as to enable its earning maximum profit under the incentive provisions of contract BB-450, and a substantial portion of achievable incentive on BB-550 and BB-650. This also resulted in major cost savings to the Government.

[redacted]

Chief, Contracts Branch
Office of Special Projects

21 July 1966

FOR THE RECORD

[illegible] of the performance of Itek and Perkin-Elmer on SAFSP R&D contracts and on SAFSP contracts covering optical work are as follows:

1. [illegible]

a. CPFF Contract 18(600)-2105 Period of Performance: 18 Nov 63 thru [illegible]

(1) The total CPFF of this contract is $6,468,612. Numerous changes have been made to the contract during its life. It was written as the first contract for S-2 work. The original task called for [illegible] study, a parametric study, and preliminary design. The S-2 [illegible] modified and added to several times by contract modification. [illegible] additional work, such as the original balloon program and S-2A was incorporated by modification.

(2) A composite of the feelings of the various Air Force Project [illegible] concerning Itek's performance on the different projects covered by Contract 2105 is as follows:

(a) Primary objectives were accomplished in a very satisfactory manner.

(b) The Contractor's response to technical direction and to changes in emphasis was excellent.

(c) All aspects of Contractor management were very good.

(d) Certain secondary objectives were not prosecuted to the extent originally planned. However, in each case, the AF Project Officer agreed to the decrease in level of effort.

b. CPFF Contract AF 18(600)-2813 Period of Performance: 1 Jul 65 thru 30 Jun 66

(1) Price negotiations were as follows:

	Proposed	Negotiated	% Reduction
Estimated Cost	$2,854,709	$1,865,129	35
Fixed Fee	242,650(8.5%)	149,210(8%)	39
CPFF	$3,097,359	$2,014,339	35

(2) This is the yearly advanced technology contract. The tasks to be performed fall under such headings as optical design and technology, [illegible] and image characteristics, auxiliary equipment, and system studies.

11.1

a. CPFF Contract AF 18(600)-2829 Period of Performance: 9 Aug 65 thru 8 [illegible] 67

(1) Price negotiations were as follows:

	Proposed	Negotiated	% Reduction
Estimated Cost	$2,066,087	$1,551,993	25
Fixed Fee	175,618(8.5%)	112,519(7.25%)	36
CPFF	$2,241,705	$1,664,512	26

(2) A contract change was issued which resulted in an increase in estimated cost of $87,625 and an increase in fixed fee of $6,572.

(3) The contract is for Phase I of a five phase program to procure a [illegible] satellite system. The Phase I effort is for a feasibility study, and [illegible] and fabrication of the optics for the system.

(4) The feasibility study has been received and is considered to be very good. All aspects of performance on this contract is considered to have been, up to this point, very satisfactory. Lens fabrication will not be completed until February of 1967, however every indication is for satisfactory completion.

b. CPFF Contract AF 18(600)-2869 Period of Performance: 17 Nov 65 thru 26 Jul 66

(1) Price negotiations were as follows:

	Proposed	Negotiated	% Reduction
Estimated Cost	$532,345	$482,115	9
Fixed Fee	61,222(11.5%)	38,585(8%)	37
CPFF	$593,567	$520,700	12

(2) A contract change was issued which resulted in an increase in estimated cost of $20,495 and an increase in fixed fee of $1,639.

(3) The contract was for a study in connection with a proposed reconnaissance system.

(4) Work done by Itek under this contract was comprehensive and [illegible] Reporting and management coordination with the AF Project Officer was outstanding.

c. Gordin-Elmer

a. CPFF Contract AF 18(600)-2814 Period of Performance: 1 Jul 65 thru 1 Jul 67

(1) Price negotiations were as follows:

	Proposed		
Estimated Cost	$50[illegible]	[illegible]	[illegible]
Fixed Fee	[illegible]	[illegible]	[illegible]
CPFF	$56[illegible]	[illegible]	[illegible]

(2) The contract requires P-E to conduct a research and experimentation program to determine the applicability of an ion beam polishing technique to the figuring of large, high quality optical components.

(3) Work under the contract up to this point has been essentially investigation and study. The Contractor has established a test laboratory. The experimental portion of the program is just being initiated. The study effort was in depth and was considered to be a thorough job. P-E is managing the program financially in an excellent manner. Reporting by the Contactor has been satisfactory but not as good as hoped for.

b. FFP Contract AF 18(600)-2870 Period of Performance: 21 Oct 65 thru 5 May 66

(1) P-E proposed a price of $310,246 and subsequently agreed to $284,000 for a reduction of 8%. The contract includes a provision requiring the Contractor to utilize a minimum number of engineering man-hours in performance of the work.

(2) The work required was a study in connection with a proposed reconnaissance system.

(3) In the performance of this contract P-E seemed to have little interest in maintaining liaison with the AF Project Officer. They performed the study and submitted a report in a minimum satisfactory manner. They failed to utilize the minimum engineering man-hours required by the contract. The AF and P-E are still trying to negotiate a solution to this problem.

R. TURNER

117

3. Perkin-Elmer

a. Form 189

(1) Ability to estimate and meet realistic delivery schedules: 10 contracts rated, 2 Very Good, 1 Average, 3 Poor, 2 Unsatisfactory

(2) Timely submission of progress and final reports: 10 contracts rated, 1 Very Good, 5 Average, 3 Poor, 1 Unsatisfactory

(3) Ability to initially estimate realistic costs: 8 contracts rated, 7 Average, 1 Poor

(4) Overrun tendencies: 7 contracts rated, 2 Very Good, 5 Average

(5) Business management: 10 contracts rated, 6 Average, 4 Poor

b. Form 189A

(1) Ability to understand scope of contract and soundness of approach to the problem: 11 contracts rated, 2 Excellent, 7 Very Good, 2 Poor

(2) Compliance with contract requirements, quality and reliability of end product or service: 11 contracts rated, 6 Very Good, 4 Average, 1 Poor

(3) Evidence of unusual ingenuity: 10 contracts rated, 1 Excellent, 4 Very Good, 4 Average, 1 Poor

(4) Success in meeting schedules, including submission of reports: 11 contracts rated, 2 Very Good, 6 Average, 3 Poor

(5) Performance of contractor personnel assigned to project: 11 contracts rated, 1 Excellent, 5 Very Good, 5 Average

(6) Special or unusual equipment developed by the contractor for the contract and the effects of utilizing this special equipment: 6 contracts rated, 1 Excellent, 3 Very Good, 2 Average

c. Itek and Perkin-Elmer: Following is the percentages of the various grades received by Itek and P-E. These are the grades that are spelled out in more detail in Paragraphs 1 and 2 above.

Form 189

	ITEK				P-E				
	VG	A	P	U	E	VG	A	P	U
3%	5%	70%	23%	5%	0%	12%	56%	25%	7%

[redacted]

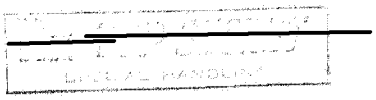
[redacted]

[redacted]					PE				
	VG	A	P	U	E	VG	A	P	U
[redacted]	39%	38%	17%	2%	8%	49%	39%	8%	0%

FORMS 189 & 189A COMBINED

[redacted]					PE				
E	VG	A	P	U	E	VG	A	P	U
8%	19%	51%	19%	3%	5%	31%	46%	15%	3%

[redacted]



II. Management and Organization

The contractors' proposed management and organization plans to implement and conduct the HEXAGON Program were evaluated to establish such factors as organizational structure, delegations of authority and responsibility, relation of the program office to corporate management, key personnel assignments, extent of management pledge to support the program, etc.

The sections which follow contain brief summaries of the evaluation of various specific items. As general comments on the subject of Management and Organization, both companies have pledged top management support at the highest level, both have the program directors reporting at a vice presidential level, and both plan to consolidate all program functions directly under the control of the program manager. While superficially there are some differences in organizational structure, the two program offices, in fact, would function almost identically.

[redacted]

ITEK

Organization

A HEXAGON Sensor Subsystem Program Office will be established under J. A. Wolfe, Vice President of the Systems Development Division. Mr. Wolfe reports through W. J. Levison, Vice President for Government Systems to Mr. F. A. Lindsay, President. Mr. C. Morser has been assigned as Program Manager.

The Program Office is a single commodity organization (sensor subsystem), and has assigned under direct control all functions required to develop and produce the sensor subsystem. The organization of the Program Office is conventional with the Program Manager's office retaining administrative functions and overseeing functional divisions of Engineering, Optics, Operations and Quality Assurance. The Program Manager maintains visibility and directs the program through his administrative staff. Each functional division manager is responsible for the work assigned to his office.

Aspects of the program organization considered to be favorable are:

1. A completely separate organization has been established which contains all the resources necessary to carry out the program.

2. The Program Office is under the management of a single individual who reports to the corporate management at the vice president level.

3. The Director of Quality Assurance reports directly to the Program Manager thus assuring the proper consideration of the importance of this function.

4. The Manager for Reliability is a staff position reporting to the Systems Engineering Manager but maintains a staff relationship with the Director of Engineering.

Aspects of the program organization considered to be unfavorable:

1. The Program Manager may be overloaded in his efforts to coordinate the development of the program through all of the functional divisions. While his administrative staff informs him on schedule, cost and other problems related

1252

[redacted]
SPECIAL HANDLING

HANDLE VIA BYEMAN
CONTROL SYSTEM ONLY

[redacted]

with end item development, he is the person who must take all the action. This is not considered to be a serious problem especially if good coordination is maintained between the functional divisions.

Configuration Management Plan

As indicated in the comments on Specification Management, Itek proposes to follow the requirements of AFSCM-375-1. The plan presented by Itek for end item identification (designation numbers), part numbering, drawing numbering, serialization, drawing practices, and engineering data control is considered adequate. Procedures for these practices are in being in the company. However, these practices do not reflect AFSCM-375-1 or the RFP requirements in the area of CCB (Configuration Control Board) control of engineering changes or recognize differences in documentation and approval requirements associated with program milestones such as PDR, CDR, and FACI.

Discussions with Itek personnel during the facility survey resulted in the conclusion that the procedures for project office control of configuration changes had not been implemented in the company. The contractor proposed to use a three man configuration management staff to perform the specification and configuration management functions. The contractor's draft of his proposed configuration management manual reflects the requirements of AFSCM-375-1 in a philosophical sense but does not relate the requirements to Itek functional organizations or project offices.

Placement of the configuration management functions under the engineering department raises questions about dominance of engineering in the CCB function. The latter is more significant in the post FACI time period where there is normally a tendancy to make questionable product improvement design changes. (See comments on Specification Management).

The Itek proposal was downgraded because of the fact that the contractor's internal practices were not currently consistent with the plan presented in the proposal; the organizational placement of the configuration management function; the limited manpower envisioned by Itek to operate the configuration management system; and the lack of previous experience in performing configuration management functions per the RFP or AFSCM-375-1.

[redacted]

[redacted]

Specification Plan

The Proposal was responsive to the RFP requirements for a specification management plan including a specification tree, a specification completion/delivery schedule for specifications depicted on the tree, and a relatively detailed description of the contractor's proposed specification control procedures. However, the following deficiencies and descrepancies were noted:

1. The section describing the Specification Management Plan specified that the deliverable specifications would be in accordance with AFSCM-375-1. The discussion reflected a good understanding of the AFSCM-375-1 requirements. The presentation implied that, since the AFSCM-375-1 requirements are more rigorous than that required by the RFP, the proposed methodology would be well received by the customer. However, this section of the Proposal was not completely consistent with the sections covering the specification tree and specification delivery schedule. That is, the identification of CEI specifications in the specification tree and schedule did not conform to the requirements of either AFSCM-375-1 or the RFP. For example, AGE end item specifications were lumped together as a single AGE "identification CEI specification", which does not reflect the development status of major items of AGE ("identification specifications" per AFSCM-375-1 do not satisfy the requirements of the RFP for contractor developed items - see 2. below). Further, during the facility survey it was determined that the AFSCM-375-1 methods and procedures had not been implemented within the company but that a manual was nearly ready for release. Examination of the manual revealed that, although it described the AFSCM-375-1 concept, major revision of company operating directives would be required to implement it.

2. The contractor's specification plan does not recognize the RFP requirements for performance specifications for end items of AGE (or Part I, specification of AFSCM-375-1), AGE CEI specifications (or Part II, specification of AFSCM-375-1), AGE CDR's or AGE FACI's.

3. The contractor configuration management organization, located in the engineering organization, will be responsible for both specification and configuration control. As discussed in the assessment of the contractor's configuration control plan, the dominance of engineering in the specification control

[redacted]

HANDLE VIA BYEMAN CONTROL SYSTEM ONLY

[redacted]

[illegible] and the limited manloading (1 man-cycle) of the configuration management organization raise questions as to the contractor's understanding of the purpose of AFSCM-375-1 and the work load involved. (See Configuration Management Plan).

The Proposal was downgraded because the contractor 1) could not back up his proposed plan with operating procedures, and 2) had had no previous experience with the methods described (extracted and condensed from AFSCM-375-1).

Program Control

Program control at Itek will be maintained through a detailed work breakdown structure. The work breakdown is made along functional lines, i.e., camera, electronics, hardware, AGE, etc. Assignments of work packages are made to the functional areas.

The Program Manager maintains an administrative staff which monitors and reports to the Manager on progress and costs. The Manager controls the program through the heads of the functional divisions.

PERT time will be kept and reported using electronic computer processing. Cost will also be accounted by ADP equipment and costs will be correlated with accomplishment by work package as well as CEI or other breakdowns.

A coding system has been established for accumulating time and cost information by work package, and for providing readouts in the various forms desired by different levels and offices of the Company.

The program control plan is an extension of program control now in use on existing programs; however, because of the program magnitude and the organization of the Company to undertake the program, several changes from present operating methods will be made.

From the program plans presented in the Proposal, and [illegible] information obtained during the facility visit, it is clear that Itek has well-thought-out plans for program control. It was also apparent that there were still many details to be worked out before putting the plans in operation. The program control plans are considered to be adequate and proper to perform this function.

Overall rating of Itek in the category of Management and Organization - very good.

[redacted]
SPECIAL HANDLING

HANDLE VIA BYEMAN CONTROL SYSTEM ONLY

[redacted]

PERKIN-ELMER

Organization

A HEXAGON Project Office will be established as a new division under the Optical Group. The new Optical Technology Division will be managed by W. R. Werner who reports directly to R. H. Sorensen, Senior Vice President. At the present time, Mr. Werner, as Manager of the Optical Technology Division also serves as HEXAGON Program Director. He is also responsible for one other small related project. While it is not anticipated at the present time, the Division has been structured so that it could take on other projects at a later date.

The Program Office is structured along both functional and product lines. There are four functional Directors heading up the offices of Administration, Operations, Product Assurance and Contract Administration and Purchasing. Project engineers are assigned to each product end item and operate across all functional Directorates on all matters pertaining to the items for which they are responsible.

All functions relating to the Project will be assigned to the management control of the General Manager, Optical Technology Division, and as quickly as facilities are available will be housed in Project facilities. The Optical Manufacturing Section will remain in the Electro-Optical Division but will retain a direct line reporting relationship to the General Manager, Optical Technology Division.

The favorable aspects of the Perkin-Elmer organization are:

1. The HEXAGON Program Manager reports directly to the Senior Vice President, Optical Group who in turn reports directly to the President, thus assuring top management response.

2. The Project Engineers form a check and balance for all the functional offices, and maintain visibility and direct control for the Program Director and Director of Operations of all phases of each Contract End Item.

3. The control of the development of each end item is the responsibility of a single individual.

[redacted]

[redacted]

d. Product Assurance is established at the first level below the Program Director which should assure proper recognition of the Product Assurance functions.

Considered as unfavorable aspects of the organization are:

1. The addition of other projects to the Optical Technology Division could have a serious impact on the HEXAGON Program unless suitable agreements could be reached concerning the allocation of resources.

2. Reliability is assigned to the Reliability Engineering Section of the Engineering Department of the Director of Operations. It is felt that the present position of reliability does not permit the direct access to the Director of Operations and Project Manager which a function of this importance should have. A possible solution would be a staff office for reliability to review and approve reliability practices of all departments, develop reliability procedures and policies, and assure proper use and recognition of the functions performed by the reliability staff.

The organization is considered to be conventional but represents the first attempt by Perkin-Elmer to organize a program along these lines. There appears to be no reason why this organization plan would not be successful in carrying out the project objectives.

Configuration Management

The Proposal did not include a configuration management plan as such, i.e., it iterated the requirements of the RFP but did not describe how the requirements would be implemented. The Proposal did identify a configuration management staff, reporting through the Program Coordination Department to the Director of Operations. (The latter has responsibility for engineering, manufacturing, and project planning/coordination and customer liaison). The Proposal indicated that the methods and procedures would be included in the Detailed Program Plan required 45 days after contract award.

It was determined during the facility survey that existing Perkin-Elmer internal operations directives covering end item identification, part numbering, drawing numbering, standardization, drawing practices, and engineering data control are adequate. However, these practices do not reflect the RFP

[redacted]

HANDLE VIA BYEMAN CONTROL SYSTEM ONLY

requirement in the area of Configuration Control Board control of engineering changes or recognize differences in documentation and approval requirements associated with program milestones such as PDR, CDR, and FACI. Perkin-Elmer is in the process of preparing an internal configuration management manual for this program. Perkin-Elmer, as a company, has had no experience in operating a configuration management system as required by the RFP (or AFSCM-375-1). However, the key personnel who presented the configuration management plan to the facilities survey team appeared quite knowledgeable on the subject.

Perkin-Elmer was downgraded for not including a more detailed configuration management plan in the Proposal (such as presented verbally to the survey team), lack of internal implementing procedures, and lack of experience in operating such a system.

Specification Plan

The Proposal did not include a specification plan as such, i.e., it did not present the contractor preliminary specification tree, present a schedule of delivery of specifications, or describe methods for approving specifications and changes thereto. The Proposal did identify a specification management function with the configuration management organization in the project organizational structure. The Proposal acknowledged requirements for the above as set forth in the RFP statement of work and indicated that the specification plan would be included in the Detailed Program Plan required 45 days after Contract award.

As a result of the facility survey, it was determined that 1) the contractor understands the basic requirements of the RFP with respect to specifications but had not performed the detailed planning necessary to identify the system elements in terms of end item oriented Performance Specifications and CI specifications, and 2) preparation of an internal procedures manual and associated operating directives to support the requirements of the RFP had only recently been initiated. However, it appears that the key personnel recognize the need for the specifications and specification control methods and are knowledgeable in procedural aspects of specification control by Project Management.

The Proposal was downgraded because of general non-responsiveness to the RFP instructions for preparation of

HANDLE VIA BYEMAN CONTROL SYSTEM ONLY

[redacted]

Phase II, Preliminary Program Plan, with respect to his proposed specification, milestone plan, lack of internal specification submittal procedures, and lack of experience in managing large programs including the types of specifications required by this program. The rating would have been substantially lower except for the oral presentation of the contractor's specification and configuration management plan during the facility survey.

Program Control

Work is assigned according to a detailed work breakdown structure. The cost and schedule of each work package is negotiated by the Project Engineer with the functional divisions in accordance with a master cost and schedule plan. Work packages are broken down on the basis of Contract End Items. PERT time networks are maintained on each work package and the work package networks are combined to provide CPI networks and an overall program network. Costs are maintained on each work package and costs are tied to accomplishment. The Project Engineer is responsible for monitoring the cost vs progress of all work packages assigned to his CPI and to take or recommend action to keep costs in line with progress. He is also responsible to see that progress is on schedule and that the technical approach is sound. Management receives PERT time reports, cost analyses, and Project Engineer reports; and holds periodic and special meetings to review program status and progress.

Electronic computers will be used for PERT time and cost networking with correlation of progress with cost performed [illegible]. Numbering of work packages to identify them for [illegible] time accumulation has been established.

While considerable thought is being given to the area of program control and reporting, it is evident in the proposal and from discussions with persons responsible for program control that the plan for this program is new to the company and there are many details yet to be worked out.

Considering the time over which Perkin-Elmer has had knowledge of the magnitude and requirements of the program, the status of the development of their program control plans is poor. The general plans appear to be satisfactory for this type of program; however, they should be developed to a much greater detail if they are to avoid mass confusion at program go-ahead.

[redacted]

[redacted]

Overall rating of Perkin-Elmer in the Management and Organization category - good.

[redacted]

HANDLE VIA BYEMAN CONTROL SYSTEM ONLY 130

COPIED FROM NEARLY ILLEGIBLE ORIGINAL

[redacted]

ITEK

Design and Development Plan

The RFP required the contractor to describe his technical approach for each subtask under the Design and Development Task of the RFP Statement of Work including the following:

Planned investigations, studies and experiments
Engineering model tests
Master test matrix
Flow diagram and schedule

The Design and Development plan presented by the contractor covered in reasonable detail all of the above areas.

The contractor proposes to utilize a 40-inch focal length f/2 engineering model to complete basic design and performance studies related to the design of the 48-inch focal length f/2 camera he actually proposes in response to the RFP. The former, in its present form, represents two years of parametric study, breadboarding, and engineering model testing. The contractor's proposal indicates that the engineering model of the 40-inch focal length camera had demonstrated the feasability of his proposed system. The system, however, has not been exposed to [illegible] and vacuum environments to date.

Concurrently with continued testing and development of the 40-inch system, the contractor proposes to "scale-up" the design to meet the RFP performance requirements. The contractor proposes to fabricate and test engineering models including a figure of merit properties model, a thermal model, and a prototype system to verify the 48-inch design. In addition, he proposes to fabricate and test engineering models of each subassembly as the designs are completed. It was further stated that the engineering model subassemblies will be progressively assembled into major assemblies and finally assembled and tested as an integrated system.

The principal areas of risk include:

Optical element fabrication
Focus Sensor
Camera structure and thermal control

132

[redacted]

HANDLE VIA BYEMAN CONTROL SYSTEM ONLY

COPIED
FROM
NEARLY
ILLEGIBLE
ORIGINAL

COPIED FROM
NEARLY
ILLEGIBLE
ORIGINAL

Since this approach requires detailed analysis of the impact of this concept upon contractor costs and overall program costs, no conclusions were reached.

Because of the level of detail provided, the contractor's plan could be evaluated in substantial detail and the resulting conclusion was that the contractor's plan was better than average.

Documentation Plan

The statement of work task (Task 8 - Documentation) requires the contractor to:

1. Prepare and deliver documents set forth in the Contractor Data Requirements List (CDRL) negotiated into the contract.

2. Develop controls for data preparation and delivery as necessary to prevent duplication of effort and to designate a single point of contact for coordination of all matters relative to the management of deliverable data.

The RFP instructions for the preparation of the Documentation Plan required the contractor to submit an expanded list of the more significant data (based upon the preliminary CDRL included in the RFP) he proposes to prepare, maintain and/or deliver to the procuring agency.

The contractor's response to 1) above was inadequate in that he simply reproduced the preliminary CDRL furnished in the RFP as a part of his proposal detailed statement of work.

The contractor did outline his plan for establishing a staff of technical publishing personnel under the directives of a documentation manager and mentioned the use of a document identification and control system. His proposal identified twelve deliverable technical manuals:

Camera Operation and Maintenance
S/S Photo/Opt. Test Simulator
Photo Optical Test Chamber
Test and Checkout Console
Film Handling Dolly
SRA Erecting Dolly
Static Resolution Tester
Launch Support Console
Dynamic Instrumentation Console
Target Drive Assembly
Camera Test Stand
LTP Tester

COPIED FROM
NEARLY
ILLEGIBLE
ORIGINAL

[redacted]

Equipment Availability

The contractor has sufficient equipment available to support the early phase of the program and with projected procurements and new facilities will be capable of supporting the complete program. An exception is the environmental facilities required during the first 18 months of the program. During this period the Thermal Model test will be conducted. The contractor proposes using GE as a sub-contractor for the conduct of this test and has received a quote on the thermal vacuum chamber rental.

Contractor is rated below average in this area.

Logistics (Spares Support)

The contractor has identified spares as a deliverable but did not present any plan for acceptance and delivery. It is noted that the RFP did not request a spares provisioning plan.

[redacted]

[redacted]

Subcontracting

[redacted] Structure

The Perkin-Elmer proposal must be rated below average in this area. Although a cursory review of the proposal would lead one to think they had responded adequately, a detailed analysis showed that no real analysis had been made. Information was not available to support any decisions documented in the proposal. In addition, discussions during the plant survey indicated that the Director of Operations had overruled the Make-or-Buy Committee and there was no evidence that the required trade-offs were considered.

[redacted] Dollar Value

The proposal is considered well-above average in this area. About 33% of all work is planned to be performed by vendors. This reflects good planning on the part of management in view of the excessive facilities requested. In addition, the facilities-type items are of a type which would normally be done by a vendor. In fact, the allocation to vendors could be considered a little low if Perkin-Elmer's current capabilities are considered.

[redacted] Selection of Potential Subcontractors

The Perkin-Elmer proposal was well above average in this area. It reveals an extraordinary amount of pre-contract negotiation with potential vendors. Most of the critical components which required subcontracting had been evaluated and adequate vendors selected. In several instances competitive vendors had committed themselves to perform work which could cut down lead-times in critical areas. The only real criticism in this area is that the vendor selection was not properly documented; no firm basis was listed for some of the selections.

[redacted] Contract Management

The contractor appeared to be marginal in this area. They demonstrated a lack of experience by the size of the [redacted] they intend to use to control the vendors. It has been grossly over-proposed, which indicated a lack of understanding of the task requirements. In addition, a review of selected procurement files indicates a definite lack of control over who selects a vendor and lack of a standard procedure to insure that all factors are considered prior to selection of a vendor.

[redacted]

[redacted]

Overall it was agreed that reconditioning represented a strong point in the Perkin-Elmer proposal and should be rated well above average.

The evaluation group agreed that the Perkin-Elmer proposal in the combined Production Capability and Sub-contracting category should be considered slightly above average.

[redacted]

Special Tooling and Government Furnished Property

A review of the Subject categories was made by the [illegible] Group and Advisors from other Government and [illegible] agencies. It was based on the following [illegible]:

a. Facilities Plan

This review consisted of:

a. An evaluation of the contractor's response to the RFP statements that the government expected the contractor to furnish facilities.

b. Analysis of total facilities currently available compared to total required.

c. Analysis of delivery schedule on new facilities required.

d. Facilities layout.

b. Special Tooling

Detailed review was made of planning for special [illegible] and equipment and availability thereof to support [illegible] plan.

c. Other Government Furnished Property

Detailed analysis was made of items required and [illegible] thereof.

The scope of review consisted of evaluation of all data contained in the contractors' proposals, briefings and discussions with corporate officials, and a limited survey of presently available facilities. A summary of the results of the review follows.

[redacted]
[illegible] DEADLINE

HANDLE VIA [illegible] CONTROL SYSTEM ONLY

ITEK

[illegible] Plan

[illegible] Itek proposal must be rated only slightly better [illegible] average in this area for the following reasons:

1. Itek did not respond as expected to the Government's request that the contractor provide needed facilities. At first glance it appeared that minimal facilities were being requested. However, a review of Itek furnished [illegible]ings revealed that additional facilities would be [illegible]sed on a rental basis that would amortize costs at a [illegible] higher than normally allowed by Internal Revenue. [illegible] is an accepted practice under government contracts, [illegible]ever, and only a minor penalty can be assessed in this [illegible]. In addition, a detailed review of the Special Tooling/ [illegible] Test Equipment (ST/STE) indicated that an estimated [illegible] of $3.4 million of facilities items were included [illegible] proposal under ST/STE. When this figure is added to [illegible] facilities request we arrive at a figure which is [illegible]rably in excess of what we should expect to provide [illegible] program of this size. Contractor does intend to [illegible] about 38% of the space required, however, for the [illegible] year and other commercial and Government work will [illegible] about 30% of the lease costs outlined above. Itek [illegible] adequately justify why they should not provide the [illegible] facilities.

2. Itek facilities currently available are adequate to conduct the program for the first 12-15 months. In addition, the present optical facilities are adequate for the entire initial program. It should be noted, though, that the equipment needed in the optical area will be adequate only in a really successful program and any set-backs in the polishing area could cause a program delay.

3. Delivery schedules on additional equipment needed are optimistic and subject to becoming a pacing program item.

4. The facilities layout is about average. Although the requirements were well thought-out, it is apparent that the usage of multiple buildings of various sizes will present some inefficiency in the assembly, fabrication, and test area. In addition, the decision to utilize present optic facilities, unless a follow-on is awarded, will

[redacted]

[illegible] problems by its being located at a [illegible]. The degree of interference will be [illegible] proportional to the distance between the two [illegible]. That distance has not been determined at this [illegible]. It should also be noted that the photo test area [illegible] the shaker system and this could be trouble- [illegible] area is located as far away as conveniently [illegible].

[illegible] (ST) - and Special Test Equipment (STE)

[illegible] proposal can be rated slightly above average [illegible]. Listings of ST/STE were quite complete and [illegible] that a detailed analysis of program requirements [illegible] made by personnel who were obviously qualified to [illegible] the analysis. This portion of the proposal would [illegible] rated well above average if it were not for the [illegible] the contractor did not comply with the RFP by [illegible] ST/STE in accordance with ASPR definition. [illegible] contractor did, however, amend his proposal by sub- [illegible] a revised list.

[illegible] delivery dates for ST/STE are very optimistic [illegible] not consistent with known current delivery schedules. [illegible] could seriously impact the overall program.

Government Furnished Property

[illegible] is rated slightly above average in this area. [illegible] complied with specific requests of the RFP. In [illegible], it should be noted that they outlined both the [illegible] dates and the specific need for the GFP film. This [illegible] allow the government to provide this particular item [illegible] economically. One discrepant area noted was a request for clean-room facilities at the ACF without adequate justification.

[illegible] factors outlined above resulted in the lower [illegible] of a "good" rating.

[illegible] summary of the proposed plan for facilities and [illegible] is included as Attachment A.

[redacted]

HANDLE [illegible]
CONTROL SYSTEM ONLY

[illegible]

[illegible] 57/5[illegible]

[illegible] Facilities (Bldgs.)	1[illegible] Sq. Ft.
New Construction	17[illegible] Sq. Ft.
Total	273,000 Sq. Ft.

[illegible]

[illegible] Bearing (Revised)		[illegible],71[illegible],0[illegible]
[illegible] Bearing		
[illegible]	$2,850,000	
[illegible]/STZ	7,4[illegible]7,377	10,2[illegible]8,277
Total		$17,[illegible]17,324

1[illegible]

COPIED FROM
NEARLY
ILLEGIBLE
ORIGINAL

COPIED FROM
NEARLY
ILLEGIBLE
ORIGINAL

Attachment "A"

[illegible] and ST/STZ

[illegible] Facilities (Bldgs)	60,000 Sq. Ft.	
[illegible] Construction	170,000 Sq. Ft.	
Total	230,000 Sq. Ft.	

[illegible]

[illegible] Per Drawing

Construction Cost Bldgs.	3,871,000	
Special Construction	6,490,000	
[illegible]	1,709,000	
Sub Total		$12,070,000

[illegible] Drawing

[illegible] - 2 sets	4,530,000	
Proposed ST/STZ	4,200,000	
Adjustment to ST/STZ per review	2,250,000	
Sub Total		$10,980,000
Total	$24,800,000	$23,050,000

[illegible]

[illegible]

[redacted]

ITEK

... manpower proposed by Itek for the Develop-
... the ...GON Program is 22,156 man-months
... shown in Attachment A. An analysis of this
... leads to the following basic conclusions:

... The total direct manpower proposed for this effort
... to be approximately 25% high when compared to other
... programs of a similar nature.

... Overall distribution of manpower for the Develop-
... seems to be in consonance with hardware delivery
... specified in the RFP.

... The proposed build-up in direct manpower from 133
... people currently assigned to the program to 724
... by December of this year appears somewhat un-
... in that the requirement for certain critical skills
... ably exceeds the direct labor capacity of the
...

... respect to the availability of these critical
... the Itek Personnel Summary reflects six such skills
... manpower requirements for this program exceed the
...tor's direct labor capacity. The specific skills
... projected shortage for December 1966 are as follows:

1. Designers and Draftsmen - 47

... Design Engineers - 35

... Aero/Structural/Thermal Engineers - 35

... Photo Optical Engineers - 22

... Optical Assembly and Test Technicians - 21

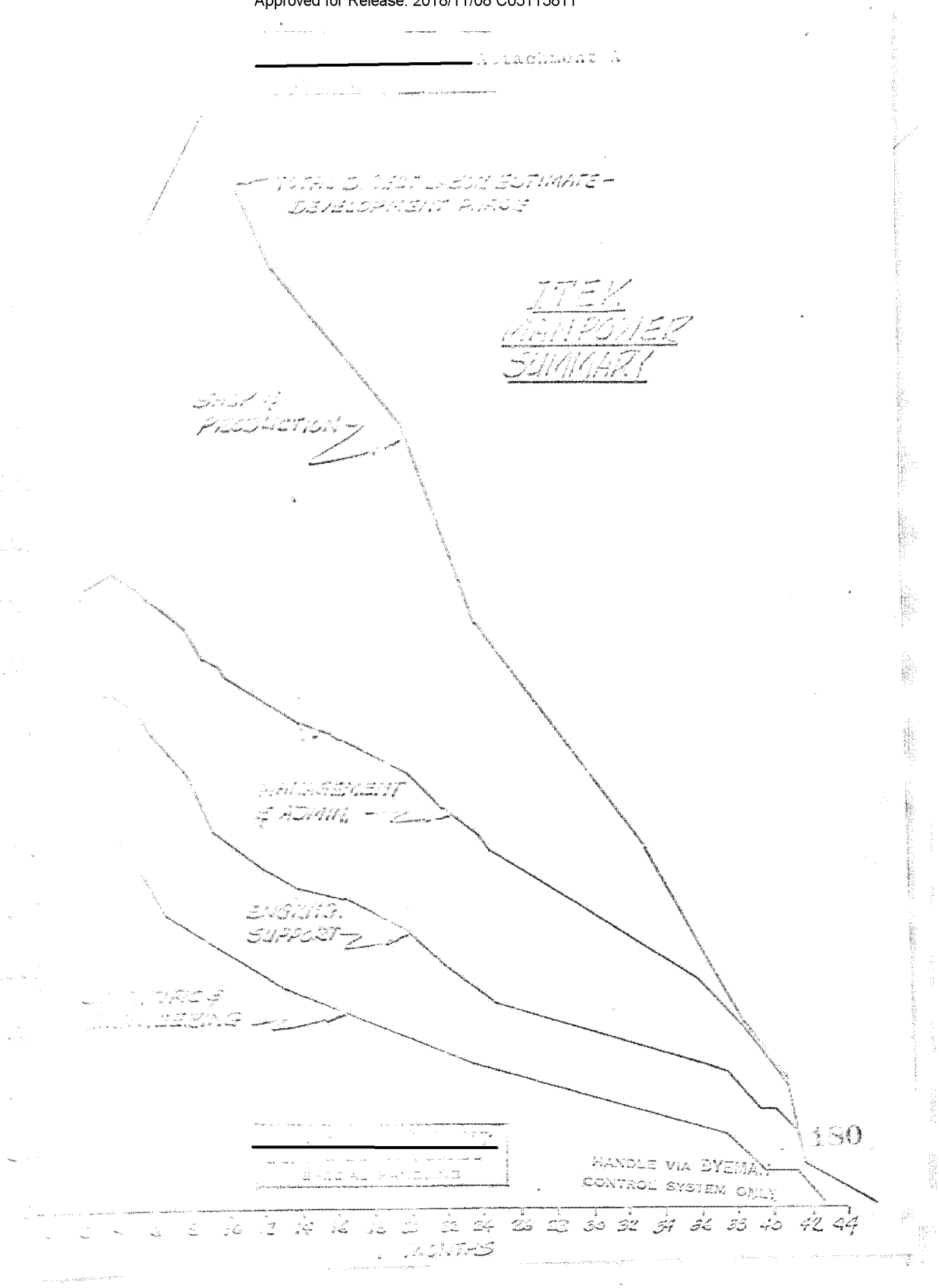
... Other Technicians - 8

This projection represents a total shortage of 168
...alent men by the end of this calendar year if the
...tractor's current direct labor capacity remains the same.
...ering the actual rate of manpower growth which Itek
... experienced during recent years, this projected shortage
... reduced to approximately 50 equivalent men. The contractor
proposes to overcome this deficit by use of approximately
...% overtime during the first four months of operation.

178

[redacted]
... SPECIAL HANDLING

HANDLE ...
CONTROL SYSTEM ...



COPIED FROM
NEARLY
ILLEGIBLE
ORIGINAL