The working papers that document the planning, construction, equipping, and operation of a laboratory facility dedicated to educational research and development (R&D) are organized into three volumes. Volume I sets forth the technical substance of the 12 working papers. This volume, Volume III, contains the technical attachments for Working Papers 6-12 stated in Volume I. There are 73 technical attachments in this volume. Some of the nine attachments for Working Paper 6 include an analysis of aspects of audit contrary to GAO standards, a summary of analyses of auditors' draft report, and an "acceptable" audit report. Working Paper 7 has 10 attachments. Some of them include the contracting officer's preliminary findings, the final decision of contracting officer, and HEW Grant Appeals Board Rules. The three attachments for Working Paper 8 are the proposal from the moving company, the housing questionnaire, and the guidelines for reimbursement of moving expenses. The single attachment for Working Paper 10 is the bidding documents for custodial and maintenance services. Three of the fifteen attachments for Working Paper 12 are functional specifications for components of an R&D equipment system, a budget summary for R&D equipment, and the contract for procurement of an R&D equipment system. (SK)
A LABORATORY FACILITY DEDICATED TO EDUCATIONAL R&D VOLUME III
Technical Attachments for Papers 6-12, Volume I

SWRI Working Papers: 1975
A LABORATORY FACILITY DEDICATED TO EDUCATIONAL R&D Volume III
Technical Attachments for Papers 6 - 12, Volume I

Edited by William H. Hein, Jr.

SWRL EDUCATIONAL RESEARCH AND DEVELOPMENT
4665 Lampson Avenue, Los Alamitos, California 90720

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The Working Papers documenting the planning, constructing, equipping, and operating of a laboratory facility dedicated to educational R&D are organized into three volumes. Volume I sets forth the technical substance of the 12 Working Papers; Volumes II and III contain the technical attachments to which reference is made throughout Volume I.

Volume III includes the technical attachments for Working Papers 6-12 in Volume I. Working Papers 6 and 7 indicate the nature of documentation that should be prepared by the grantee of an experimental construction project in order to insure a fair and accurate compliance Federal audit and the procedures to be followed in obtaining reviews of final reports of compliance audits. SWRL's documented experience in consolidating and moving its operations to the new facility is contained in Working Paper 8. The planning and activities for the building dedication ceremonies is described in Working Paper 9.

Working Paper 10 describes the operations studies in the area of custodial and grounds maintenance services. The results of operations studies conducted in order to refine the procedures associated with installing programmatic research and development activity in a new facility are reported in Working Paper 11. Working Paper 12 sets forth the procedure followed in the planning, procurement, installation and maintenance of the R&D equipment and equipment systems acquired under the construction grant.
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MEMORANDUM

TO: Dr. John ottina
Deputy Commissioner for Planning,
Evaluation and Management

FROM: Ronald L. Filipy
Director, Contracts and Grants Division

SUBJECT: Construction of laboratory facility,
Southwest Regional Laboratory,
Los Alamitos, California

1. The facts concerning construction of subject facility, as we perceive them, are as follows:

a. A construction grant for $4,266,000 was awarded to SWRL on June 30, 1970. The construction schedule contemplated completion by July 1, 1972.

b. In August 1970, the SWRL Board of Directors, in cooperation with Mr. Fremouw, the Director of EICA, agreed that this project would use the "fast-tracking" approach to construction management—a new approach that was expected to reduce total cost and shorten the construction period.

c. Fiscal reporting and controls incorporated into the grant were designed for orthodox construction management techniques, and were not compatible with the "fast-tracking".

d. SWRL included a television production studio in the new facility with related equipment costs of $260,000. OE approved acquisition of the T.V. equipment, but in the same letter required the Unbudgeted Reserve of $250,000 to be left intact, although these decisions may have been mutually incompatible. In a conservative mood, SWRL deferred operating expenditures in the fall of 1971 to cover the possibility that OE might need some/all of the $250,000 unbudgeted reserve to help fund...
construction of other facilities; and might then approve use of funds from the operations contract to pay for the TV equipment.

e. Annual negotiation of the operations contract in November 1971 found SWRL with a reserve of $260,000 of Fiscal Year 1971 funds, which was carried forward into the new contract year against the contingency that this sum may be needed to pay for the TV equipment. No decision was made on source of funds for the TV equipment, since SWRL did not specifically identify this reservation of funds.

f. SWRL staff together with the architect, construction manager, and the regional engineer (FEC) met in Washington, D.C. on February 23, 1972 at the joint request of the Project Officer and the Grants Officer. The FEC representative indicated he had reviewed all construction contracts and change orders, and had found no questionable item.

SWRL explained in some detail the incurrence of cost and recording of obligations under the "fast-tracking" system, which differs from a traditional system; provided assurances that the facility would be completed ahead of schedule and at less than the amount of the grant; agreed to furnish an updated expenditure report against the cost categories in the grant; provided a listing of all change orders then in effect; and inquired whether the $260,000 cost of the TV equipment should be charged against the funds then in the construction contract or against those reserved from FY 1971 funds in the operations contract. Dr. McVitty personally deferred response to this question until a later date.

g. No site visits were made by OE program or contract staff during the actual construction.

h. The contracting officer notified SWRL by telegram on March 23, 1972 that the TV equipment ($261,985.) should be charged to the construction grant, which in effect was OE approval to use some of the unbudgeted reserve.
i. The facility is expected to be completed by May 1, 1972, occupied during the month of May, and the dedication is scheduled for June 2, 1972. Total cost is expected to be $140,000, less than the amount of the construction grant (including the unbudgeted reserve).

j. DH&H Audit Agency has scheduled an on-site audit of both the operations contract and the construction grant to begin in late April 1972. The FBCA resident engineer is reviewing all construction contracts and change orders and will submit his report.

2. Our comment on program correspondence is as follows:

a. Draft letter prepared by Mr. Larry Kressen for signature by Mr. Jacob Maimone and dated April 5, 1972 has been outdistanced by events, makes argumentative statements which would reduce chances for an amicable settlement without affording any offsetting advantage; arbitrarily denies any cost that was not approved in advance by the Grant Officer, and needlessly restates terms and conditions in the original grant.

It would not be in the best interest of the Office to release this letter, especially since virtually all obligations have already been incurred and construction is within two weeks of completion, and audit has been scheduled.

b. Memorandum from Dr. McVity to Deputy Commissioners Davies and Ottina dated April 14, 1972 cites "substantial overrun in construction costs." This is debatable, since the total costs, including the TV equipment, will be about $132,000, lower than the grant total. The several OE concerns (Item 7) which the meeting of "February 23 failed to allay" are not clar. Positive indications and assurances were furnished at that meeting by SWRL, the architect,
the construction manager, and the Government's regional engineer. An opportunity to approve
the TV equipment cost under the construction
grant and, in exchange, recover a like amount
from the operations contract was lost at the
February 23 meeting when OS refused to discuss
this possibility. Recovery of funds from the
operating contract will, as stated in the April
14 memorandum, be less easily negotiated now.

The financial liability of SWRL pegged in
this memorandum at $210,000. (Item 10) is not
understood, and this liability should not yet
be considered as the OE "position". (Item 11).

3. Proposed Action Items:
   a. Invite NCERD to explain its rationale for
      assigning a financial responsibility of
      $210,000 to SWRL.
   b. Plan for prompt review of audit and engineering
      reports (including site visits if necessary) to
      resolve any outstanding cost questions under
      the construction grant and the operations con-
      tract.
   c. Open negotiations promptly with the SWRL to
      recover all or some part of the $260,000
      reserved in November 1971 from operating
      funds but not now needed by SWRL. Since pay-
      ment for the TV equipment has been allowed
      under the construction grant, need to consider
      disposition of any proceeds; return to Treasury
      as F.Y. 1971 funds recovered, or make available
      for obligation until June 30, 1972 as F.Y. 1972
      funds.
   d. Consider positive ways to improve administration
      of construction grants and coordination between
      program and contract and grant staffs.

   cc: Mr. Michelsen
      Mr. Kaseman
      Mr. Walsh

R. L. Filipi

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Attachment 37. Analysis of Aspects of Audit Contrary to CAO Standards
SUMMARY OF LABORATORY'S RESPONSES

The Laboratory disagrees with this part of the audit report for the following reasons:

1. The audit report violates Chapter 3 entitled Independence of GAO's published Standards for Audit of Governmental Organization, Programs, Activities and Functions which is governing in the present audit. The specific violations arise out of that practice of the local HEW audit office described to the Laboratory in a meeting held on September 12, 1972, to avoid finding any fault with HEW employees. To the Laboratory this can only mean that the audit report will assign responsibility to SWRL for all actions of NGERD.

2. The audit team included an NGERD employee, as technical advisor, who has no technical expertise and who is not impartial toward SWRL. This violates the above GAO standards.

3. The SWRL project was completed ahead of schedule and below budget with resulting multi-million dollar savings of public funds. SWRL has never requested nor required funds in excess of the construction total delivered to the Project Officer in May, 1971.

4. Cost information submitted by SWRL, and meeting the stated requirements of the Grants Officer and FECA, has been awaiting action of NGERD for a year. NGERD has not stated any requirements that SWRL has not met. The audit report adopts NGERD's viewpoint to the total exclusion of every technically qualified person connected with the project.

5. Provisions of two sets of guidelines governing allowability of costs are ignored. For example, one set of guidelines prohibits the assignment of pre-grant expenses to the grant by the audit report. Another set authorizes the assignment of expenditures described by the grant as "construction-related" to the program contract.

6. The audit report utilizes a unique phrase, namely "construction-related" to justify its assignment of certain expenditures to the grant. Such expenditures are, in fact, "program-operations-related" and should be assigned to the program operations contract under the applicable guidelines. For example, there is no dispute over the fact that the program equipment systems purchased under the grant could have been purchased under the program operating contract. Indeed, SWRL was offered the option of doing so by the Grants Officer. Therefore, it makes no sense to limit expenditures for consultation with relation thereto to the grant merely because SWRL elected to purchase the equipment from such source.
7. The audit report attempts to assign blame to the Laboratory for NCERD's failure to grant timely approvals. For example, the NCERD's approval procedures took seven months to complete for the architect's agreement. If SWRL had waited for approval, it would have breached other provisions of the grant and wasted over $1,000,000 in program operating funds. Also, SWRL has waited almost a year for NCERD to act on a request to adjust budget lines within the construction total given to NCERD in May, 1971. If work had stopped until the approval were received, an additional $1,500,000 in program operating funds would have been wasted.
The schedule of costs incurred and reported in Exhibit A is erroneous in many respects. For example, the schedule is based on an interim budget which explicitly states, on its face, that laboratory cost information submitted almost a year ago has not yet been considered. A second example is that without any supporting authority in law, regulation or guideline, program-operations-related-costs are relabeled as "construction-related-costs" and assigned to the construction grant. This creates a false impression of overspending. A third example is that SWRL is assigned blame for NCERD's year-long failure to act on SWRL's timely requests for budget-line-item adjustments. During the past year, SWRL has been repeatedly notified by PECA and the Grants Officer that no further information is needed for NCERD action. Throughout this period, however, NCERD has continued to claim that "further information is needed" although it has been unable to specify any information requirements that have not been met several times and is many different formats. The schedule of costs in this Exhibit incorporates intact the NCERD view to the total exclusion of all other interested parties including those Federal Officials with technical qualifications.
APPENDIX I

SWRL'S DETAILED ANALYSIS OF AUDIT REPORT

SWRL's detailed analysis of the audit report is keyed to the major subheadings of such report.

PART I - GENERAL

Introduction

The contention in the second paragraph of this section that NCERD established a ceiling of $4,036,000 is without basis in fact and contrary to the latest Grants Officer's writing. By December 1971, SWRL was able to give NCERD full and complete information concerning distribution of costs among budget lines within the budget total delivered to the Project Officer six months earlier. The Grants Officer has acknowledged in writing that this information has never been considered by NCERD in any adjustment of the budget lines. Until a final budget is issued, it is impossible to audit against it.

Summary of Results of Audit

The second and third paragraphs of this section are erroneous and based on unsupportable contentions. For example, there is no basis for the assumption that there is any finalized budget for the project against which an audit can be made. A second example is the relabeling of program-operations-related-costs as "construction-related costs" with subsequent assignment to the construction grant. A third example is the assignment
to SWRL of responsibility for NCERD's year-long failure to consider cost information for adjustments in its budget line items. SWRL has been repeatedly advised by technically-qualified Federal Officials, namely ROPES and the Grants Officer (the last time being on May 9, 1972), that SWRL's cost information is complete, and no more information on this matter from SWRL is needed.

Organization and Operations

No response.

Scope of Audit

No response.

Accounting System

No response.

PART II

FINDINGS AND RECOMMENDATIONS

CONSTRUCTION COST CONTROLS

The contents of the introductory paragraph of this part are redundant with the contents of the Summary in Part I. Our comments for that section are therefore applicable here also.

Background

This section contains several errors of fact. For example, there is no factual support for the contention that any final determination has been made as to the "Total Development Cost." Under the Grant, the U.S.
Commissioner of Education (or his designee, presumably the Grants Officer) can reduce the grant total only after a finding that the "Total Development Cost" is less than the amount of the grant. The Grants Officer is on record, in writing, that SWRL's year-old cost information has never been considered. Therefore, there has been no reduction of grant total in compliance with the grant terms.

Another correction should be made in the interests of accuracy. The Grants Officer reserved the $250,000 only for the period of Fiscal 1972. Upon the advice of the Grants Officer and Project Officer, SWRL then encumbered Fiscal 1971 program operating funds for the television system ($260,000+) in the event that the $250,000 were removed from the SWRL grant. This encumbrance against the program operating contract was reported to NCERD in financial statements. Following a February 1972 meeting, the Grants Officer gave SWRL the option of purchasing the television system from grant or program operations. SWRL selected the grant with the understanding that the revised construction budget would reflect the necessary budget line adjustments. Contrary to assurances by USOE Contract Officials that this would be done, NCERD has never acted on year-old cost informations.

**Restricted Funds**

The statements set forth in this section are incomplete and consequently misleading and unfair. As such they violate Part V, Chapter 3 of the GAO Audit Standards. Of particular interest in this connection is the fact that the Project Officer removed the asterisks, and presumably the restrictions on expenditures of the undistributed reserve in the budgets of
February 23, 1971 and May 12, 1971. To present an accurate factual
presentation, it must be pointed out in this section that SWRL has made
numerous requests, together with detailed cost information over the
past year, for NCERD to readjust its budget lines within the construction
total delivered to the Project Officer in May, 1971. Each time NCERD
would assert that SWRL's submittal did not satisfy NCERD's requirements,
which requirements have always remained unspecified.

Finally in February 1972, SWRL and its consultants met with NCERD,
FECA and the Grants Officer. At this meeting, SWRL was assured by the
Grants Officer that resubmittal of the information previously submitted,
but rearrayed into a different form, would satisfy USOE requirements
and budget line item adjustments would be made. SWRL confirmed this
understanding of all parties in writing to the Grants Officer. The
rearrayed cost information was then resubmitted in March, as per agree-
ment, but no action has yet been taken by NCERD. Indeed, SWRL has received
only vague and evasive answers from NCERD in response to numerous
inquiries as to why budget line item adjustments have never been made.

Another example of the failure to present facts in proper perspective
is found in the second paragraph regarding architectural fee. The
paragraph is inaccurate and misleading in that it states that the $25,000
was a "contingency allowance to cover any increased architectural costs
for work resulting from extraordinary Federal requirements." The May 12,
1971 budget line item distribution contains no reference to any "contingency,
etc." Rather it contains a lump sum of $266,500 for architectural fees.
The Project Officer's accompanying analysis of this May 12 cost item is as follows:

**b. Architectural Fees**

*Skidmore Fees*

- Basic: $191,000
- Additional: 25,000
- Reimbursable: 13,000

It was not until three months after receipt of the May 12 document that SWRL was advised of the necessity for the Grants Officer approval. The practice, followed throughout the project, was for the Project Officer to obtain all necessary Grants Officer approvals. SWRL had made a full presentation to NCERD resulting in the inclusion of the additional amount in the May 12, 1971 budget. (This is the same budget which removed restrictions on expenditures of the undistributed reserve.) NCERD, then, was delinquent in not following its established practice in passing the facts on to the Grants Officer and preparing for him the necessary authorization.

**Line Item Limitations**

Here again in this section the audit report assigns responsibility to SWRL for NCERD's year-long delay in adjusting budget line item distributions within the total construction cost submitted to the Project Officer in May 1971. For example, SWRL cannot be blamed because of NCERD's lack of knowledge of construction management budgeting. Nor can NCERD's year-long failure to make adjustments in its budget lines be imputed to SWRL if an accurate factual presentation is desirable. SWRL
would have violated other grant provisions by stopping work on the project until NCERD acted, and the delays would have produced a huge waste of public funds. The situation is further distorted by the assertion that SWRL substantially increased the cost of the project by issuing change orders; when in fact the cost of the project was less than the NCERD approved final cost estimate. It was explained to SWRL in the meeting of September 12, 1972, by the Auditors' team that their practice is not to go against HEW employees. This practice clearly violates CAO's Standards of Audit and can only result in an audit report as is the case here, that assigns responsibility for agency deficiencies to the grantee.

Disputed Claims

The information in this section is no longer current and should be brought up to date. Both claims have been settled far below the amount claimed.

Operating Program Funds

This section is inaccurate and misleading in numerous respects. For example, there is no requirement in the operating program contract or any other authority, for NCERD approval of the expenditures described. Another example is that there is no limitation for eligible off-site improvements in the construction grant or any of the three grant amendments issued by the Grants Officer. A third example is the re-description of program-operation-related-costs as "constructed-related-costs." This disregards contractual statements of work and applicable cost reimbursement guidelines. It also violates, in part, the specific provisions of BOB Circular A-21 which is controlling as to cost allowances on the construction grant.
Total Construction Costs

This section embodies all of the errors in the audit report to which more detailed responses are made above. SWRL has therefore, summarized its responses as follows.

The SWRL project was finished ahead of schedule, below budget, and has resulted in multi-million dollar savings of public funds. In order to effect these savings, and to insure the success of the project, SWRL protected NCERD throughout the project from the adverse consequences of that agency's inability to make decisions following timely submittals of cost and other information. For example, seven months were taken to approve the architect's agreement. By the time approval was received, the final plans and specifications had been finished, and the construction manager was preparing to take bids. If taken literally, the audit report would require SWRL to have ceased work for over 19 months pending NCERD's approval of relatively routine matters. This would have resulted in huge losses of public funds. SWRL has requested in writing the application of GAO's Standards of Audit in order to insure a fair and impartial audit report. No response to this request has been received. Moreover, in the pre-exit conference of September 12, 1972, SWRL was informed by the audit team that one of the bases for the differences in view between the parties as to the report was auditors' practice "not to go against HEW employees" in the reporting of audit. SWRL feels that the protection it afforded NCERD throughout the experimental project was more than adequate, thus relieving the necessity to provide even further protection in the audit report.
Recommendations

GAO's Standards of Audit (Part V, Chapter 3) require that recommendations in an audit report be possible to accomplish. The first two recommendations are that SWRL "obtain" approvals from NCERD. SWRL only has the power to submit timely requests together with supporting data which it has on countless occasions. NCERD has repeatedly disregarded the advice of FECA and Contract Officials that the SWRL information is complete and has continually refused to respond to SWRL's submittal. The only recommendations that would comply with the GAO's standards are that SWRL "request" approvals. This, of course, would be inappropriate since SWRL's requests for approvals began eighteen months ago.

There is no basis in law, regulation, guideline, or contractual provision for the third recommendation. This is discussed in detail in other places in this report.

Construction Cost Reporting

The conclusions set forth in the introduction to this part of the report are based on incomplete facts and consequently are erroneous and misleading. For example, the conclusion that "NCERD's management of the project was impeded" does not take into consideration Section VIII A of NCERD's written guidelines, the written delegation of authority to FECA by the Secretary of HEW, the Institutional Support Policy followed by NCERD, and Section 9A of the Grant. A second example is the use of such terms as "increased construction costs" and "additional construction." The inaccuracy resulting from the use of such terms would become readily apparent if facts were included covering the experimental nature of the
construction management project rather than treating it as if it were a general contract being conducted in the traditional linear fashion. The words "construction management" are not to be found anywhere in the report, which ignores completely the August 1970 agreement between HEN, USOE, and SWRL.

**Background**

No response.

**Technical Program Reports**

Again the use of terms and remarks such as "significant amounts of additional work," "increased costs," "costs had been increased" and "additional costs," actually constitutes brief and erroneous conclusions based on incomplete presentations of facts in the report. Some examples of important facts, which have been omitted and about which there can be no dispute, are the experimental nature of the project; completion of the project below budget; review of all change orders by ROFEC; and absence of any grant, guideline, or NCERD requirements as to report contents. Failure to state and consider pertinent facts clearly violates GAO's Standards for Governmental Audit and more specifically Part V, Chapter 3, thereof.

**Financial Statement Reports**

Violations of Part V, Chapter 3, of GAO's Standards of Audit also occur in this section. The same deficiencies exist in this section as in the one immediately preceding, and new ones are added. Examples are the assignment of responsibility to SWRL for NCERD's failure to take action on year-old cost information, the arbitrary classification of operating...
program-related-work as "construction-related-work" without the necessary legal or other known authority for such action, and the assumption that NCERD's approval was necessary for the operating-program-related-work.

Monthly A/C Construction Reports

As in the previous two sections, the objectionable use of unfounded terms leads to unfounded conclusions. Expressions such as "additional work," "construction-cost increases," "increases in construction costs," "cumulative-project-cost increase," and "lack of disclosure" again result in a distorted presentation of facts. The use of such terms is possible only because important facts are omitted. This practice violates GAO Standards for Audit. It also results in the distortion of an experimental project, successfully utilizing construction-management and fast-tracking for the first time and resulting in multi-million dollar savings of public funds, into the baseless image of a conventional construction project the cost of which exceeded "budget."

Recommendations

No response.
SUMMARY OF FACTS

A response that reacts only to the contents of the audit report cannot convey SWRL's position regarding the report, because its fragmentary nature and lack of continuity precludes an accurate presentation. Moreover, when responding in such a manner, SWRL is unavoidably cast as a negative and defensive institution when, in fact, the contrary is true. For this reason, the following statement of facts on the project is presented.

SWRL received a Construction Grant dated June 30, 1970, in the amount of $4,286,000 to plan and construct a research facility in accordance with its "Application for Educational Research Facilities Program Grant with Patterns and Exhibits." The Grant specified two options of acquiring the facility. Subsequently, SWRL selected Option B, because of the obvious savings in public funds that could be effected by the use of federally-owned land, which was made available to SWRL through the efforts of FECA.

In August 1970, USOE, FECA, and the SWRL Board of Directors agreed to test new construction techniques known as construction management and fast-tracking on the SWRL project. The outstanding success of these techniques on the SWRL project has received national attention among professionally-qualified persons in the areas of design and construction of federally-financed facilities.

The reasons for this success are set forth in SWRL TN 1-72 entitled Fast-Tracking Federally-Supported Construction of Educational Research and Development Facilities which was delivered to the auditors. The savings computed by FECA and confirmed by OMB are described in a FECA document, Cost Avoidance on Southwest Regional Laboratory.
All parties realized in August 1970, that the Grant had been written under the presumption of a general contract for construction as contrasted with a construction management project. SWRL could have requested, at the time, that the Grant be rewritten to incorporate a decision-flow that could accommodate construction management (see decision-flow described in TN 1-72-04 cited above). However, the time required for NCERD to rewrite the Grant could have delayed the project indefinitely since NCERD had no USOE precedents for grants of projects involving construction management. The loss of time in effecting modifications in the grant conditions would have outweighed all potential savings before the project started. Therefore, SWRL took the more difficult alternative of complying with a Grant written for a general contract and at the same time giving the new techniques a fair trial.

The success of the experiment is well demonstrated by the fact that design and construction were completed 16 to 27 months sooner than the other six institutions receiving grants. Also, FECA has estimated savings of public funds of $15,041,000 resulting from the use of new techniques as well as federally-owned land in the project. The success of the project with its resulting savings is a direct result of SWRL's compliance with Grant provisions requiring sufficient progress to eliminate avoidable losses. For example, NCERD delayed action on the A/E's agreement and budget matters for nineteen months. If SWRL had stopped work for just this nineteen month period, the direct costs of the project would have exceeded the grant funds. There are many other examples of delays in decisions which would have added to the losses and probably made project completion impossible.
In August '71, NCERD changed Project Officers, and soon thereafter allegations of misunderstandings were made to SWRL with regard to the budget line item distributions. This confusion can be traced to the fact that one of the differences between the type of construction management used on the SWRL project and a general contract project is in the budgeting procedure for construction costs. The differences are explained in detail in SWRL TN 1-72-06, entitled *Budgeting In Federally-Supported Construction Management Projects*, which is part of the audit file. In May 1971, SWRL had presented the Project Officer with an estimated construction total based on the construction manager's estimate of costs verified by the architect. As explained in TN 1-72-06, this is the accepted manner of determining a project budget for a construction management project where the construction manager does not contractually guarantee a maximum total project cost. Since May 1971, NCERD has refused to recognize the existence of this principle and has arbitrarily issued budget-line item distributions based on the unanalyzed bids from 50 contractors. Since that time, SWRL has repeatedly attempted to have NCERD adjust its budget line distributions within the May 1971 construction budget total. NCERD was notified in June 1971 that SWRL was operating within the May 1971 construction total. In December 1971, detailed cost information was submitted to NCERD which permitted the line-item adjustments. No action was taken; and finally in February 1972, a meeting was held in Washington. At that meeting USOE officials promised that line-item adjustments would be made if the cost information submitted the previous year were "rearrayed" into the form required by NCERD. As stated by these officials, this would clear up any potential problems.
that could arise on audit resulting from the use of construction management. This was done by SWRL; however, the promised adjustments were never made by NCERD despite numerous assurances it would be done "in a few days." Indeed the line-item distribution which was finally received from the Grants Officer in May 1972 specifically stated that the information provided by SWRL had not been considered.

The complete omission of the above facts in the audit report produces a thoroughly distorted representation of what actually occurred. For example, neither the term construction management nor fast-tracking are even mentioned in the report. There appear to be two reasons for this selective reporting. One is the practice of local auditors of "never going against HEW employees," as described to SWRL in a pre-exit meeting on September 12, 1972. Up until that time, SWRL had been assured that the audit was to be an impartial attempt to determine and report complete facts. Another reason is that no member of the audit team had any experience with general construction let alone construction management or educational research and development. The absence of a fair and impartial fact statement has resulted in a report that states erroneous conclusions and recommendations without adequate bases.
A copy of the draft report is attached (Attachment A) in which I have numbered the sentences. A sentence-by-sentence analysis follows together with a proposed response to the Auditor based on the more detailed analysis.

**Title of Report - Program Reporting**

The title of the report itself is indicative of the posture taken by the Auditors, namely that the entire management and control of the project rested in "Program" (presumably NCERD) and that FECA's participation and technical input in the experimental project is to be ignored in the audit. This position clearly violates Section VIII A of the Guidelines and Application Procedures for the Educational Research Facilities Program dated November 1967. This paragraph is as follows (emphasis has been added).

"The Regional Engineer of the Office of Education in the Health, Education, and Welfare Region serving your area will be responsible for all phases of project development after an application for financial assistance has been approved. Following notice of final project approval by the Bureau of Research, the Regional Engineer will be in contact with the applicant to provide guidance on Office of Education requirements and procedures in the preconstruction and construction phases of project development."

It may be noted that the Laboratory was directed to follow these Guidelines in a letter from Norm Boyan dated May 22, 1969.

**Sentence 1.** The Southwest Regional Laboratory provided the Office of Education with inaccurate and incomplete construction progress reports.

This is a totally erroneous conclusion based on inaccurate and incomplete findings of facts as set forth in the remainder of this report.
Sentence 2. As a result, OE was unable to exercise complete management control over the construction project.

The suggestion that OE should exercise "complete management control over the construction project" violates the explicit terms of Section VIII A of the Guidelines and Application Procedures for the Educational Research Facilities Program dated November 1969, Section 9A of the Grant, entitled Scope of Work and the Institutional Support Policy presently being utilized by NCERD. In addition, it is clearly contrary to elementary principles of good grant management which require that only technically-qualified persons be involved in the decision flow. This is treated in depth in TN.1-72-04 entitled Fast-Tracking Federally-Supported Construction of Educational Research and Development Facilities which was previously delivered to the Auditors.

Sentence 3. This occurred because the Laboratory (i) did not report the execution of change orders in the quarterly technical progress reports, and (ii) did not always submit an accurate Quarterly Financial Statement.

The Grant contains no requirement that change orders be reported in either the technical or financial reports. Section B(1)(b) of the Grant states only that a technical progress shall be submitted to the Project Officer 30 days after the end of each calendar quarter. Section B(1)(a) of the Grant required a report of expenditures to be prepared by the budget categories. Cannon and Grant's reports went beyond the Grant requirements and included information regarding encumbrances in addition to that of expenditures, by budget categories. Since there is no basis for this statement, it is a totally erroneous conclusion based on Auditor-imposed requirements beyond the Grant terms.

Sentence 4. This condition also occurred because OE received inaccurate monthly Architect and Engineer Construction Reports which stated that change orders had not been issued for additional construction work.

This is a totally erroneous conclusion based on inaccurate and incomplete findings as set forth in the remainder of this report.
Sentences 5 and 6.

There are no changes suggested for these sentences.

Sentence 7. The construction budget established the limits for Federal participation in the construction of the facility, subject to possible adjustments based on the required financial statements and technical progress reports.

This statement is somewhat misleading and should be clarified. The limit for Federal participation is set forth in Section 9(B)(2), Special Conditions, as follows:

"The grantee shall be paid a total sum not to exceed the amount shown in Block 4, Notification of Grant Award ($4,286,000)."

Section (B)(2) of the Special Conditions is the pertinent provision on adjustments. It specifies that adjustments can be made only after a finding by the Commissioner or his designee that the "Total Development Cost" has changed.

Sentences 8 through 15.

There are no changes suggested for these sentences.

Sentence 16. The Laboratory did not report the executed change orders for significant amounts of additional work in the technical progress reports furnished to OE.

This statement is totally erroneous and misleading and is based on inaccurate and incomplete facts. See responses to Sentence 3 above and 18 below.

Sentence 17. The seven progress reports provided to OE indicated that the project continued to remain ahead of schedule and was within the budget for the project period ending March 31, 1972.

This project was, in fact, within the budget and ahead of schedule throughout construction to completion; therefore, all progress reports must make these statements in order to be accurate.
Sentence 18. However, the progress reports were incomplete because they did not provide OE with information relative to the issuance of Change Orders and the effect that these changes may have had on the construction status of the project.

This is a totally erroneous statement based on inaccurate and incomplete findings of fact. See response to Sentence 3 above. FECA, designated as the responsible Federal Agency in the Guidelines, received a copy of each change order as it was issued. That agency properly raised no objection to any change since the scope and function of the project has never been changed substantially and the cost thereof has always been under budget.

Sentence 19. As a result, OE's management of the project had been impeded because it had not been appraised as to the technical construction status of the project.

See response to Sentence 2 above. The fact that OE's "management was impeded" probably explains why the project was completed ahead of schedule, below total budget and in compliance with all requirements of the Grant, Regulations and Guidelines.

Sentences 20 through 30.

No changes suggested in these sentences.

Sentence 31. Since additional work was necessary in order to complete the project, the Laboratory should have informed OE regarding the justification required and the necessity of additional funding.

It would be obvious to anyone with a knowledge of construction management that the work performed by the Curtainwall Contractor was required by the approved plans and specifications and California State law (See Section 2.05 of Grant General Terms and Conditions). The project was completed under the Grant budget; therefore, there was no necessity to obtain approval of the change order. The Laboratory would have been in violation of Sections 2.05 and 3.02 of the Grant if it had not approved the change.

Sentence 32. The Laboratory provided OE with inaccurate Quarterly Construction Financial Statements.

This is a totally erroneous conclusion based on inaccurate and incomplete findings of facts. See remarks under Sentence 3.
Sentences 33 and 34:

No change necessary.

Sentence 35. The budget categories for movable initial equipment and unbudgeted reserve were identified as restricted items by the Grant.

The use of the term "unbudgeted reserve" by the Auditors instead of "undistributed reserve" violates the explicit terms of the Grant and Seften Boyer's ruling of June 23 that the Grant terms in this respect were to govern.

Sentence 36. These required specific approval before any Federal funds were committed.

The Grant terms require approval of asterisked items in the Facility Budget only "as specified elsewhere in the terms and conditions of the grant**". There are no approvals specified anywhere in the Grant relating to undistributed reserve. Therefore, no approval is necessary.

Sentence 37. The grant also required written approval by OE for project costs in excess of two percent of any line item.

This sentence is an incomplete and misleading statement of fact. In order to be completely accurate it should be pointed out that prior approval is unnecessary. Moreover, in view of remarks under Sentences 35 and 36 above, "any line item" would include undistributed reserve. And finally, the use of the term "project" in the sentence constitutes a misquotation of the Grant terms and infers that each budget line is a "project."

Sentence 38. In addition, OE also instructed the Laboratory that it should not assume that the unbudgeted reserve funds would be available during the project.

The use of the term "unbudgeted reserve" violates the Grant and Seften Boyer ruling (see Sentence 35 above). In addition, the sentence is only partially true since OE instructed the Laboratory that it should not assume that $250,000 would be available. The Laboratory followed this instruction to the letter.
Dr. Richard E. Schutz  
July 24, 1972  
Page 6

Sentence 39. Our review of the construction records and financial statements disclosed that the Laboratory did not obtain the required written approval from OE for costs in excess of two percent of any budgeted category.

There is no Grant requirement for prior approval. Moreover, the Laboratory's request for budget line adjustment has been pending for over eight months. And finally, the Auditors are utilizing a budget that states on its face in capital letters that the cost information provided by the Laboratory was not considered. Since the Auditors have no official budget, but only an interim one, the statement that costs in any category have been exceeded is premature until the Laboratory's eight-month-old request is acted on.

Sentence 40. (ii) (Laboratory) incurred expenditures and obligations of $222,000 in excess of the construction contingency for significant amounts of work without OE's knowledge.

This is a totally erroneous conclusion that is based on inaccurate and incomplete findings of facts. See remarks under Sentences 31 and 39. Also see remarks under Title of Report - Program Reporting, above.

Sentence 41. (iii) (Laboratory) did not accurately report expenditures and obligations in budget categories in accordance with Grant requirements.

This is a totally erroneous conclusion based on inaccurate and incomplete findings of facts. See remarks under Sentence 3 above.

Sentence 42. (iv) (Laboratory) expended $125,000 from the operating program contract for construction related work without OE authorization.

The use of the term "construction related work" is one of first-instance in the Regulations, Guidelines and Grant. Although not clear, the Auditors may be implying that pre-grant planning expenses should have been charged to the Grant. To do so would have constituted a specific violation of Section 151.14 of the Regulations. Expenditure in the operations contract for professional services charged by SOM is specifically authorized by Section 31 of A Guide for Non-Profit Institutions which is controlling as to cost allowances under operating program contracts. There is no requirement for OE approval of professional services in the operations contract. If the
$125,000 includes costs of access to our site, it would be an allowable expense under the provisions of the above Guide since the costs are reasonable, allocable to the period in question and are not precluded by the Guide or operations contract.

Sentence 43. As a result, OE was unaware that the Laboratory was incurring increased construction costs for significant amounts of additional work.

This is a totally erroneous conclusion based on inaccurate and incomplete findings of fact. See remarks under Sentences 39 et seq. above.

Sentence 44. Also, these inaccurate financial statements denied OE the pertinent management information needed to consider the feasibility of redistributing grant budgeted funds.

This is a totally erroneous conclusion based on inaccurate and incomplete findings of fact. See remarks under Sentences 39 et seq. above.

Sentence 45. The laboratory should implement procedures to assure that all financial and technical reports submitted to OE are accurate and complete.

Since all reports met or exceeded all grant requirements, there is no basis for this recommendation.

Sentence 46. The architect's monthly A/E Construction Reports provided erroneous information to OE.

This is a totally erroneous conclusion based on inaccurate and incomplete findings of fact. The Grant terms require copies to be sent only to the Laboratory and ROFEC. As a matter of courtesy, NCERD was also sent copies. Neither of the recipients specified in the Grant (SWRL and ROFEC) was misled since both were cognizant of the fact that the Architect did not approve change orders. This is clearly stated in the Architect's Agreement and the Field Operation Manual. If NCERD was misled, this was caused by their failure to read or understand specific provisions of the Architect's Agreement and Field Operation Manual, copies of which were delivered to them before construction began. Moreover, no knowledgeable person can seriously claim that he was under the impression that a construction project of over 3 million dollars would not have change orders. A mere inquiry to ROFEC or SWRL would have clarified NCERD's confusion.
Sentence 47. These monthly reports stated that change orders had not been executed for additional work during the construction project.

This is an erroneous statement. The Architect's report states no change orders had been "approved."

Sentence 48. The reports were designed to identify those contracts requiring changes, change order numbers, brief descriptions of change and cost, and the revised net amount.

This is an erroneous statement. See Sentence 3 above.

Sentences 49 and 50. However, our review of the construction project accounting records and other related documents disclosed that the total cost of numerous contracts had been increased for significant amounts of additional work. We found that some of the construction project cost increases were attributable to the Laboratory having executed 113 change orders for additional work.

There were no project cost increases on this project, only savings. Moreover, these statements disclose a total lack of understanding of Construction Management budgeting as well as the fact that there are many "change orders" issued under construction management that provide for work required by the plans and specifications. This feature of Construction Management is clearly spelled out in the letter of February 29, 1972 to Gene Peterson and TH 1-72-06 previously delivered to the Auditors.

Sentence 51. For example the A/E monthly report for the period ending November 1971, reported that 53 percent of the construction work had been completed, change orders had not been issued and the job was progressing very well.

November 1971, as all other A/E reports, were absolutely factual. See Sentence 17 above.

Sentences 52 and 53. In December 1971, the Laboratory requested OR to approve a revised construction budget based on the construction cost estimates developed by the Laboratory's construction manager. The proposed budget was increased $189,703 for required and anticipated construction work.
The Laboratory has never requested nor required any increase in the construction budget as delivered to the Project Officer in May 1971 (see SW 1-72-06 entitled Budgeting in Federally-Supported Construction Management Projects previously delivered to the Auditors). In addition, Sentence 53 is totally misleading unless it is also stated that the budget to which reference is made specifically states in capital letters that the information submitted by the Laboratory has not yet been considered.

Sentence 54. We found, however, that prior to the announced budget revision, the Laboratory had executed 19 change orders and had prepared for issuance another 21 change orders having cumulative project cost increases of $123,272.

In its present form the sentence is totally misleading in that it is a series of incomplete facts. First, it must be stated that the "announced budget revision" was not received until five months after receipt of the SWRL information. Second, the Laboratory would have been in clear violation of Section 3.02 of the Grant General Conditions if it had impeded progress for five months by not issuing the change orders. Third, the Laboratory had specific authorization to issue change orders without OE approval within project scope and cost, and if NEC had been the responsible Federal agency received copies of each change order for examination. Fourth, there has never been any "cumulative project cost increase." The fact is that there have been substantial cost savings in total project costs.

Sentence 55.

There are no changes suggested for this sentence.

Sentence 56. As a result of erroneous monthly A/F reports, OE was unable to exercise complete management control over the project.

This is a totally erroneous statement based on inaccurate and incomplete findings of fact. See responses to Sentences 2, 3, 4, 19, 32, 41, 42, 44, 46, 47, 48, 49, 50, 51.
Sentence 57. The Laboratory should implement procedures to assure that all reports provided to OE by the Laboratory's agents are accurate and complete.

All reports furnished to OE were, in fact, accurate and complete. As required in the Grant, the Architect's reports were prepared for a technically-qualified audience (PECA and SWRL). The Architects apparently were under the erroneous impression that NCERD staff had sufficient knowledge of the critical provisions of the Architect's agreement and Field Operation Manual as well as a basic understanding of principles of construction management so as to be able to understand an extremely simple report.

Recommendations - We recommend that the Laboratory implement procedures to assure that all reports provided to OE, whether by it or its agents, are accurate and complete. Necessary factual base to support such recommendations is totally lacking.
1. Scattered throughout the draft are statements that are presumably meant to be findings of fact. With only a few exceptions, these findings of fact are incomplete or erroneous on their face.

2. In many places throughout the draft, the wordings of specific Grant provisions are misquoted.

3. The draft contains several partial quotations of Grant provisions that become distortions of fact because of their incompleteness.

4. The draft omits consideration of relevant and material provisions of the Guidelines, Grant and three separate sets of Regulations.

Most of the statements in the draft which we could identify as conclusions are without adequate bases in fact.

6. There are no findings of facts or supportable conclusions in the draft report that would uphold the recommendations.

7. The basic assumption made throughout the draft and explicitly stated in several places to the effect that OE (presumably NCERD) had authority to "completely manage and control the project" clearly violates Section VIII A of the Guidelines, Section 9A of the Grant, the written delegation of authority to FECA by the Secretary of Health, Education, and Welfare, and the Institutional Support Policy being followed by OE (NCERD).

8. The draft suggests several actions that should have been taken by the Laboratory which, if taken, would have been clear violations of Grant provisions. In at least one instance, State Law would also have been violated. The Laboratory and its agents have complied literally with all requirements related to reporting and obtaining approvals.

9. The draft report would impose requirements as to reports and obtaining approvals on the Laboratory that are not contained in any applicable provision of Law, Regulation, Guideline or Grant.
DATE: August 18, 1972
TO: Ron Pennington
FROM: William H. Hein, Jr.
SUBJECT: ANALYSES OF DRAFTS ENTITLED CONSTRUCTION PROJECT - USE OF FUNDS
AND OPERATING CONTRACT-USE OF PROGRAM FUNDS

In a memo dated August 8, 1972, we acknowledged receipt of the captioned drafts and indicated that we foresaw no difficulty in having written reply back to you by today. This memo also called attention to GAO's recently issued Standards for Audit of Governmental Organizations, Programs, Activities and Functions and requested that you give consideration to application of these standards to the present audit. To date we have had no response to this request; therefore our response is based on the drafts in their original form. In the event that we can agree on what constitutes compliance with GAO's standards, we would be pleased to submit revised responses. Further, if our comments, in the attached responses, were also incorporated into the second drafts, we feel this would result in reports to which USOE, FECA, and SWRL as well as the local office of HEW Auditors could fully subscribe. With regard to the three drafts in their present form, the Laboratory cannot accept the facts, conclusions and recommendations contained therein for the reasons set forth in our attached responses.
The Laboratory's responses to the three drafts are presented as follows. The first part contains those deficiencies that are common to all three drafts. The second part includes those deficiencies that are unique to just the draft identified. Reference may be made to the enclosed sentence-by-sentence analyses of the drafts for more detailed explanations and examples of each deficiency.

Deficiencies Common to All Three Drafts

1. According to our interpretation, the standards set forth in GAO's Standards for Audit of Governmental Organizations, Programs, Activities and Functions, dated June 1970 are repeatedly violated throughout the drafts. While the codification of these standards has only recently been accomplished, their content, in large measure, is identical to the codes of ethical and professional conduct long observed by the American Institute of Certified Public Accountants. Therefore, their applicability is not dependent on such codification.

2. The draft reports ignore the fact that construction of the SWRL facility was completed ahead of schedule, below budget and in strict compliance with all provisions of law, regulation, guidelines and Grant. (See GAO Standards.)

3. The draft reports erroneously assume that the interim budget line distribution of May, 1972 is final, notwithstanding that by its own terms it discloses that cost information submitted last year by the Laboratory and re-arrayed and resubmitted this year have not been considered. (See Analyses.)

4. With few exceptions, the statements set forth as "facts" in the three drafts are incomplete or erroneous on their face. (See Analyses.)

5. In many places throughout the drafts, the wordings of specific Grant provision are misquoted. In other places Grant provisions are partially quoted in such a manner as to become distortions of fact. (See Analyses.)

6. The three drafts repeatedly omit consideration of relevant and material provisions of regulations, Grant, and guidelines. (See Analyses.)

7. With few if any exceptions those statements that can be identified as conclusions are without adequate basis in fact. (See Analyses.)
8. There are no findings of fact or supportable conclusions to uphold any of the recommendations. (See Analyses.)

9. The draft audit reports ignore FECA's estimate of cost savings on the SWRL construction project which have been approved by OMB. These savings have been set at over 15 million dollars. (See GAO Standards.)

10. The draft reports ignore the appreciable losses of public funds resulting from the use of linear and obsolete procedures generally used by NCERD in construction matters as contrasted with the practices used on the SWRL project. (See GAO Standards.)

11. The drafts ignore the direct and indirect savings in public funds resulting from use of an architect in pre-grant planning. (See GAO Standards.)

12. The audit scope and objectives were changed at least four times.

13. The audit team had no members nor consultants possessing the knowledge required by GAO Standards concerning construction and educational research and development. (See GAO Standards.)

14. The draft reports fail to recognize the "system integrity" of a construction project. Rather they have adopted an unsupportable position that the construction project should be considered as a series of unrelated and nondependent projects to be "managed" by NCERD with total disregard of the effect on the overall project. (See Analyses.)

15. No weight or attention has been given in the drafts to the advantages of fast tracking and construction management carefully documented in TN 1-72-04 previously delivered to the audit team. (See GAO Standards.)

16. The audit has been conducted as if a Construction Manager has the contractual obligations of a General Contractor. Consequently there was no understanding by the Auditors of the differences in budgeting for the particular type of construction management utilized on the SWRL project. This in turn has resulted in countless errors throughout the drafts. (See Analyses.)

17. The drafts appear to be, in large measure, "paste-ups" of excerpts from various USOE letters since the errors in the letters are repeated in the draft reports. (See USOE Correspondence.)
18. The Auditors have not considered the adverse effect that their failure to recognize the advantages and savings of the modern techniques validated on the SWRL construction project will have on other Grantees. Such other Grantees will not be willing to utilize these effective procedures if they must be audited by teams who do not understand the differences inherent in construction management. The Auditors have failed to recognize the discrepancy between their professed objective to prevent waste of public funds and their rigid adherence to audit procedures which validate archaic and obsolete construction procedures utilized on other projects. (See GAO Standards.)

19. In addition to violating GAO Standards, the architecture and structure of the audit are so designed as to provide built-in protection for poor management by Federal Grantors. This is illustrated by the fact that waste of public funds caused by government personnel will appear only in a non-public "internal memorandum". Federal employees, therefore, who mismanage projects can operate with relative immunity from public scrutiny and accountability.

20. The draft reports condone the highly questionable actions of NERD in refusing to make budget line item adjustments, although cost information has been in its hands for months, and then requesting an audit against interim line item distributions. The draft reports treat this interim budget as if it were final. (See Analyses.)
Response to Draft Audit Report Entitled

Construction Project - Use of Funds

In addition to the deficiencies shared with the other two drafts and set forth above, the following comments are specifically applicable to draft finding number 1.

21. The basic assumption made throughout the draft and explicitly stated in several places to the effect that OE (presumably NCERD) had authority to "completely manage and control the project" clearly violates the Guidelines, Grant, and Institution Support Policy.

22. The draft suggests several actions that should have been taken by the Laboratory which, if taken, would have clear violations of Grant provisions. In at least one instance, State law would also have been violated.

23. The draft report would impose requirements on the Laboratory concerning reports and approvals that are not contained in any applicable provision of Law, Regulations, Guideline, or Grant.
Response to Draft Audit Report Entitled

Construction Project - Use of Funds

In addition to the deficiencies shared with the other two drafts and set forth above, the following comment is specifically applicable to draft finding number 2.

24. The draft misquotes correspondence from the Grants Officer.
Response to Draft Audit Report Entitled

Operating Contract - Use of Program Funds

In addition to the deficiencies shared with the other two drafts and set forth above, the following comments are specifically applicable to draft finding number 3.

25. In several places throughout the draft, references are made to Grant provisions which do not exist.

26. The draft omits consideration of many key documents delivered by SWRL to the audit team. Examples are the Basic Program Plan, Architect's Contracts and information concerning minimally acceptable site access requirements.

27. The Guidelines governing allowance of costs under the program operating contract are ignored.

28. The draft fails to recognize that under the Guidelines governing allowability of costs under the program operating contract, the type and nature of the services provided is the controlling factor in determining allowability and not the nature of the organization performing them.

29. The draft would impose requirements concerning approvals for expenditures for professional consulting services that are not contained in any applicable provision of Law, Regulation, Guideline, or Grant.
Attachment 40: "Analysis of Analyses" of Auditors' Draft Report
DATE: August 30, 1972
TO: Dr. Richard R. Schutz
FROM: William H. Hein, Jr.
SUBJECT: SUMMARY OF ANALYSES TO DRAFT FINDINGS 1, 2 and 3
COPIES TO: Directorate, Mr. Christensen

We have completed and submitted our responses to the four draft findings of the HEW Audit. It appears that our reported concerns regarding draft finding number 4 can be quickly resolved with the local office of HEW Auditors. On the other hand, the positions of the Auditors and the Laboratory are diametrically opposed as to the validity of the contents of draft findings 1, 2 and 3. Undoubtedly the differences will have to be resolved at higher levels of authority since the Laboratory cannot accept any of the contents of the three drafts in their present form.

To complete our documentation of this phase of the audit, we decided to prepare the attached chart for the following reason. During our review of drafts 1, 2 and 3, it became obvious that although the reports were quite lengthy; they were, in fact, merely repeating only four basic contentions with slightly differing wordings and in different contexts. Such draftsmanship leaves the reader of an audit report with the impression, intended or otherwise, that the institution being audited is guilty of a long list of serious offenses. This would appear to be a highly-questionable auditing practice under GAO standards. It becomes even more objectionable when all of the basic contentions lack the necessary supporting authority to substantiate their validity. This can be illustrated by the fact that when the auditors' four basic contentions are exposed to the analysis on the attached sheet, the structure of their draft findings 1, 2 and 3 collapses.
<table>
<thead>
<tr>
<th>Auditors' Basic Contentions Underlying Draft Findings</th>
<th>Supporting Authorities for Auditors' Contentions</th>
<th>Laboratory's Responses to Auditors' Basic Contentions</th>
<th>Supporting Authorities for Laboratory's Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The terms of the Grant required the Laboratory to report information to NCERD in addition to that which was reported in the quarterly technical progress reports and financial reports, and the monthly A/E reports.</td>
<td>1. Non-existent or misquoted Grant provisions.</td>
<td>1. The quarterly technical progress reports and financial reports met all Grant terms. The monthly A/E report met the requirements of the recipients designated by the Grant (KOPEC and SHRL).</td>
<td>1. Grant Special Conditions-Sections B(1) and B(4) (c)(5).</td>
</tr>
<tr>
<td>2. The May 8, 1972 revised facility budget is the proper document against which to audit.</td>
<td>2. Never disclosed to Laboratory.</td>
<td>2. The May 8, 1972 budget line item distribution indicates, on the third page, that Laboratory cost information had not been considered. Therefore, the only budget that can be used in the audit is September, 1972 NIE final budget (being issued).</td>
<td>2. May 8, 1972 NCERD interim budget-page 3. September, 1972 NIE final budget (being issued).</td>
</tr>
<tr>
<td>3. All items of cost that are &quot;construction related&quot; must be charged to the Grant.</td>
<td>3. Never disclosed to Laboratory.</td>
<td>3. Under the governing work statements and cost reimbursement guidelines for the construction grant and the operating contract, many items of cost are payable from either source.</td>
<td>3. BOB Circular A-21-Section 28; Guide for Non-Profit Institutions-Sections B and 31; Statements of Work-Operating Program Contract and Construction Grant.</td>
</tr>
<tr>
<td>4. The Grant requires the prior written approval of the Grants Officer for costs in excess of 2% of any budgeted category and for expenditures from the unbudgeted reserve.</td>
<td>4. Non-existent or misquoted Grant provision.</td>
<td>4. There is no Grant provision requiring prior approvals. The Laboratory has made repeated submittals of cost information to enable NCERD to make timely budget line-item revisions within the May 1971 construction cost total. For SWRL to have ceased work until the revisions were made (four months after move-in) would have violated the Grant.</td>
<td>4. Grant Special Conditions-Section B(3); Grant General Conditions-Section J.02.</td>
</tr>
</tbody>
</table>
September 15, 1972

Mr. Ron Pennington
HEW Audit Agency
11000 Wilshire Boulevard, Room 12206
Los Angeles, California 90024

Dear Ron:

The enclosed documents are forwarded per discussion in
the pre-exit meeting of September 12, 1972.

Sincerely,

Richard E. Schutz
Executive Director

Enclosures
The Southwest Regional Laboratory provided the Office of Education (OE) with inaccurate and incomplete construction progress reports that met grant requirements but did not cause as a result OE via unable to exercise adequate management control over the construction make adjustments in budget line item distribution in the project budget. This occurred because the Laboratory, although not required by the Grant (i) did not report the execution of change orders in the quarterly technical progress reports and or in (ii) did not always issue timely and accurate quarterly grant financial statements. This condition also occurred because, although not required in the grant, OE received inaccurate monthly Architect and Engineer Construction Reports which stated that change orders had not been issued for additional construction work approved by the architect.

Background

In May 1971, OE authorized the Laboratory to proceed with final bid analysis, contract execution and construction subject to the provisions of the grant. Specific OE approval was to be secured for any change orders which would substantially affect the scope, function and cost of the project. The construction budget grant established $4,286,000 as the limits for federal participation in the construction of the facility, subject to possible adjustments based on the required financial statements.
and technical progress reports changes in the "Total Development Cost" as determined by the Commissioner. The financial statements were to be prepared by budget categories in accordance with the construction grant budget. The progress reports were to be prepared on the technical construction status of the project. In addition, the grant required the Laboratory's architect to prepare monthly Architect and Engineer (A/E) Construction Reports. These monthly A/E reports were provided to OE, although this was not a specific requirement of the grant.

At the completion of the project, the Laboratory was to submit final copies of the financial and technical reports certifying that it would not submit any further claims to OE. These final reports have not yet been furnished to OE because the project has not been approved by the State of California Office of Architecture and Construction (OAC) and some contracts still have not been fully executed. As a result, our audit review has been limited to evaluating the most current technical progress reports for the period ended March 21, 1972. However, our review of construction costs includes all the financial statements prepared through the quarter ended March 31, 1972, and a review of subsequent costs incurred through June 30, 1972, but not reported.

Technical Progress Reports

The Laboratory sent copies of all change orders to FECA for approval; the grant did not require the Laboratory to report the executed change orders for significant amounts of additional work in the technical progress reports furnished to OE. The seven
progress reports provided to OE indicated that the project continued to remain ahead of schedule and was within the budget for the project period ending March 31, 1972. However, although not required by the grant, the progress reports should have been incomplete because they did not provide OE with information relative to the issuance of change orders and the effect that these changes may have had on the construction status budget line item distribution of the project. As a result, OE's management of the project had been impeded was unable to make adjustments in the budget line items because it had not been appraised as to the actual technical construction status of the project change orders.

Our review of change orders showed that the Laboratory had executed 39 change orders for $123,212 as of December 31, 1971. As of March 31, 1972, the issuance of change orders had increased to 75 for $189,285. The Laboratory has since continued to execute change orders and has informed us that all orders have not been received and recorded on its accounting records. As a result, we can neither express an opinion nor quantify the total cost and number of change orders; however, the Laboratory has executed 120 change orders and recorded costs of $260,000 in its accounting records as of June 30, 1972.

For example, the fifth progress report for the project period ending September 30, 1971, stated that the curtainwall mock-up had passed all strength and infiltration tests, the inbeds had been installed and the attachment clips were being welded to the building structure. This work was reported as about 50 percent complete. The sixth progress report, for the period ending December 31, 1971, stated at the curtainwall
framing was 99 percent complete, aluminum spandrel panels completed on the south and east elevation, glazing had commenced and tempered glass was reported in route. In the seventh progress report, for the period ending March 31, 1972, the Laboratory reported that the curtainwall was completed. These reports stated that the project costs were safely within the project budget.

Our review of the construction change orders disclosed that the curtainwall contract awarded amount of $298,627 had been increased by $13,456 because the Laboratory had authorized additional work. These changes were authorized because (i) the contractor had not included the work in his bid, (ii) work was excluded from another contractor's contract, (iii) the Laboratory exercised additive and deductive options and (iv) OAC required certain design changes. Since additional work was necessary in order to complete the project the Laboratory should have informed OE regarding the justification of work required and the necessity of additional federal funding.

Financial Statement Reports

The Laboratory provided OE with quarterly construction financial statements that met Grant requirements but did not cause OE to make adjustments in the line item distribution of the project budget. The construction financial statements as of March 31, 1972, reported $3,966,691 in expenditures and obligations. Expenditures and obligations were reported in all budgeted categories, except for the construction contingency, movable initial equipment and unbudgeted reserve. The construction contingency was authorized to allow the Laboratory the flexibility to execute change orders without specific OE approval if such changes would not substantially affect the scope, function and/or
cost of the project. The budget categories for movable initial equipment and unbudgeted reserve architectural fees were identified as restricted items by the grant. These two budget categories required specific approval elsewhere in the grant before any Federal funds were committed. The grant also required written approval (not prior) by OE for project costs in excess of two percent of any line item. In addition, OE also instructed the Laboratory that it should not assume, that $250,000 of the unbudgeted reserve funds would be available during the fiscal 1972.

Subsequently, the Laboratory was granted use of $250,000 for purchase of the television system.

Our review of the construction accounting records and financial statements disclosed that the Laboratory (i) did not obtain requested but had not yet received the required written approval from OE for costs in excess of two percent of any budgeted category, (ii) incurred expenditures and obligations that required line item adjustments of $222,000 in excess of the construction contingency for significant amounts of additional work without OE's knowledge, (iii) followed grant requirements but did not accurately report expenditures and obligations in a form that would have caused OE to make adjustments in budget categories in accordance with grant requirements, and (iv) expended $125,000 from the operating program contract for construction related work that could have been in part financed from the grant without OE authorization. In addition, OE was unaware that the Laboratory was incurring increased construction costs for significant amount of additional work. Also, these institute financial statements denied did not provide OE the pertinent management information needed.
to consider the feasibility of redistributing grant budgeted funds within the grant total. The Laboratory should implement procedures to assure that all financial and technical reports submitted to OE are accurate and complete sufficient in content to cause OE to distribute budgeted funds among appropriate budget lines.

Monthly A/E Construction Reports

The architect's monthly A/E Construction Reports provided information to OE. These monthly reports stated that change orders had not been executed for additional work approved by the architect during the construction project. The reports were designed to identify for FECA and the Laboratory those contracts requiring changes, change order numbers, brief description of change and cost, and the revised net amount. However, our review of the construction project accounting records and other related documents disclosed that the total cost of numerous contracts had been increased for additional work. We found that some of the increases in contract amounts were attributable to the Laboratory having executed additional change orders for additional work required by the plans and specifications but not included in the contracts awarded to low bidders. This is a unique feature of the type of construction management used on this project. Although not required by the Grant the Laboratory should have reported this feature to OE so as to cause it to adjust its budget line distributions within the total Grant figure.

For example, the A/E monthly report for the period ending November 1971, reported that 53 percent of the construction work had been completed, change orders had not been issued approved and the job
was progressing very well. Although not required by the grant the Laboratory should have informed the Project Officer that under their contract, the architect did not approve change orders. In December 1971, the Laboratory requested OE to approve revised construction adjustments on the construction cost estimated line item distributions within the total developed by the Laboratory's construction manager in May, 1971.

The proposed five months later, OE made adjustments in budget line items totaling $189,703 for required additional construction work. We found however, that as required by the Grant, within this five month period and prior to the announced proposed budget line items revisions, the Laboratory had already executed 19 change orders and had prepared for issuance another 21 change orders, having cumulative project cost increases necessitating further budget line adjustments of $123,272. The Laboratory has continued to execute change orders and has issued 80 changes for $138,728 since December 1971.

Because of reliance on the monthly A/E reports, OE was unable to exercise complete management control over the budget line item distribution under the project budget. On future construction projects, the Laboratory should implement procedures to assure that all reports provided to OE by the Laboratory's agents are sufficiently accurate and complete to cause OE to adjust its budget line items within the total project budget.

Recommendations

We recommend that the Laboratory implement procedures to assure that all reports provided to OE, whether by it or its agents, are accurate and complete to permit OE to take appropriate administrative action.
OPERATING CONTRACT

USE OF PROGRAM FUNDS

The Southwest Regional Laboratory paid $123,003 $33,461 from the operating program contract for architectural services and off-site construction improvements to gain minimally acceptable access to the facility site and Consultant services relating to the construction project without authorization in the amount of $92,442 for assistance in preparation of the Grant Application and procurement, maintenance and installation of equipment systems and office furniture were also paid from this Contract. As a result, these funds were unavailable for use by the laboratory for its other research and development activities.

Background

The Laboratory, under contract with OE, conducts educational research and development programs designed to produce improved instructional systems and procedures in education. It also conducts research and development activities relating to what kind of physical facilities and supporting equipment systems can most efficiently be utilized in the conduct of educational R&D, under the operating program contract. The Laboratory's management is expected to insure optimal use of available fiscal resources to achieve quality in its program development. Therefore, it would be more appropriate to request approval for payment of as many of the above costs, as possible, from Grant funds.
In June 1970, OE awarded the Laboratory a construction grant which provided Federal funds for the development and construction of a new facility. The revised project budget Grant established Federal limits for participation in the construction of a new facility. Under the May, 1972 budget line item distribution the Laboratory was to contribute total non grant funds amounting to $23,200 and $26,650, for consultant services and off-site improvements, respectively. It is not known, at this time, what the final Grant budget will provide with regard to these items.

Professional Services

The Laboratory paid $125,903 for professional services related to its construction project and for gaining minimally acceptable site access from operating program funds without authorization.

Architectural Consulting fees amounting to $67,557 for services requested by the Laboratory were paid a firm of architects from operating contract funds for assistance in preparing the grant application and various other services including utilization and placement of existing furniture, space utilization, etc.

Although the operating program contract included costs for professional and consultant services, these architectural fees also related to services needed for the Grant application and the equipping of the new facility. Cost reimbursement guidelines preclude paying for services in connection with the Grant application from Grant funds. However, the Laboratory’s work program and the applicable guidelines governing allowance of
costs permit payment of entire $67,557.

Contractors' fees amounting to $33,461 for minimally acceptable access to the facility site were paid from program contract funds. The construction grant provided Project Officer specified a maximum of $10,000 for off-site improvements. The Laboratory was required therefore, to pay any remaining additional costs from non-grant local funds. Instead, the Laboratory paid for these additional costs items from operating program funds after informing the Project Officer that these were the only funds available for this purpose.

The Laboratory paid consultant fees of $24,571 for services related to the construction project were paid from program contract funds. The services related to the procurement, maintenance and installation of several research and development equipment systems which were authorized under the construction grant and were paid from construction funds. The May 1972 budget line item distribution provided that these consultant fees were to be paid from non-grant local funds. The Laboratory's work program under the operating program contract and the applicable guidelines governing allowance of costs permit such payment.

We have questioned these the costs of $123,000 $33,461 as they were for minimally acceptable access to the facility site and therefore more attributable to the operating contract not instead related to the construction project. The Laboratory should not be required to neither use nor claim operating funds for minimally acceptable access to the facility site. Instead, the Laboratory should
request the Grants Officer to approve use of the interest earned on investment of Grant funds, in accordance with Grant terms, for these costs. Any operating funds previously expended for construction costs may should then be utilized for program operations upon approval of the Federal government.

Recommendations

We recommend that:

1. The Laboratory request the approval of the Grants Officer to use interest earned on its construction grant for the costs of gaining minimally acceptable access to the facility site;

2. The Laboratory request approval of the Federal Government to utilize for program operations the operating funds previously expended for gaining minimally acceptable access.
CONSTRUCTION PROJECT

USE OF FUNDS

Improvements were needed in the fiscal management practices employed on the Laboratory's construction project. As a result, project expenditures exceeded changes in the budget line items of limitations by about $151,000 were not made by OE. This occurred because the Laboratory (1) expended and obligated funds in excess of the specific amounts authorized in restricted budget categories (II) requested, but has not yet received, Grants Officer approval to exceed certain budget categories by more than the maximum allowable cost increase of 2 percent. In addition, the Laboratory paid $231,000 for construction related costs without authorization. An additional $125,000 has been claimed by two contractors which the Laboratory is disputing, but which may result in additional excessive costs.

Background

OE awarded the Laboratory a construction grant of $4,286,000 for the development and construction of a new facility. However, the total development cost of the project were not to exceed $4,096,000 because OE received $290,000 for unusual contingencies. This reserve was shown in the budget as a restricted unbudgeted reserve line item. The Laboratory was instructed that it should not assume that these reserved funds would become available for its use during the project because of the possibility of OE having to transfer all or part of these funds to other projects. In May 1972, OE withdrew $97,000 of reserved funds from the construction project which reduced the total grant amount to $4,188,900. However, the total development cost limitation remained unchanged.
The construction budget is divided into budgeted line items. The project costs cannot exceed the budgeted line item amounts by more than 2 percent without written approval (not prior) of OE. There are also two restricted budget line items (equipment and architect fees) for which the Laboratory is required to secure prior approval before obligating any Federal funds. The budget included a construction contingency line item for minor project cost increases during the construction of the new facility. The most recent budget line item distribution established a revised construction contingency of $38,084. The Laboratory may not exceed the total project budget because it establishes the limits for Federal participation in the construction of the facility.

Restricted Funds

The Laboratory has requested but has not yet received authorization to expend and obligate funds in excess of the specific amount authorized in the restricted budget category of architectural fees without authorization. As of June 23, 1972, the Laboratory had requested but had not received Grants Officer approval to incur expenditures and obligations which exceeded the this restricted budget category by $77,139 without authorization from OE. For example, the May 13, 1971 project budget line item distribution authorized a total architectural fee of $24,000 plus an architectural contingency allowance for an additional $25,000. These additional funds were included to cover any increased architectural costs for work resulting from extraordinary Federal requirements. Three months later, the
Laboratory was informed that these additional funds were restricted and were not to be used without the prior authorization of OE. However, the Laboratory, had already committed and paid the Architect $29,140 more than the $204,000. Architectural fee limitation without authorization. The Laboratory has requested and should obtain approval for use of these restricted construction funds from the Grants Officer. Without the prior authorization of OE.

Line Item Limitations

In December, 1971 the Laboratory requested budget line item adjustments within the project total. Exceeded budget categories by more than the normal allowable cost increase of 2 percent without authorization. As of June 23, 1972, the Laboratory had not yet received authorization to adjust the distribution of total costs and future estimated costs among the various line items so as not to exceed the 2 percent in any budget line. Normal allowable cost increase was 2.7%. These unauthorized costs resulted primarily because the Laboratory issued construction change orders which substantially increased the cost of the project. The latest budget line item reduction included a construction contingency of only $38,084 for minor construction cost increases. We never therefore questioned $73,034 because these costs exceeded budget categories by more than the normal allowable cost increase of 2 percent. We recommend that the Laboratory not incur any additional construction costs which may exceed the budgeted categories of the final budget when received, by more than the maximum allowable
2 percent. Unless authorization is obtained from OKE.

Operating Program Funds

The Laboratory paid $1,751,983 for construction with Federal funds from the operating program, without authorization. In addition, it had additional obligations for $1,138 which had not yet been paid. For example, the Laboratory paid consultants to contribute local funds for office construction improvements. However, the Laboratory paid $1,481 from operating program funds to another contractor for the required office improvements without authorization from OKE.

The Laboratory had also paid for some architectural services from its operating program funds without authorization. The Laboratory had requested architectural services which consisted primarily of (1) preliminary plans and schedule design studies for the new facility, (2) interior design services, and (3) frontage improvements and landscape maintenance specifications. The Laboratory paid architectural fees for interior design services amount to $18,000 from its operating program funds without authorization from OKE. We recommend that the Laboratory not use its operating program funds to pay for construction related costs.

Disputed Claims

An additional $125,000 has been claimed by two contractors which the Laboratory is disputing; but which may result in additional excessive costs. The Laboratory is disputing an electrical contractor's claim for additional cost of about $32,000. The Laboratory evaluates the value of the claim at less than $15,000. These additional costs represent claims for work performed at the request of the Construction Manager which
the contractor considers as an increase in its original scope of work.

The Laboratory is also disputing the architect's claimed costs of about $93,000 for additional architectural services which were not considered during the preliminary design phase. The architect claims additional costs because the preliminary facility drawings and designs were based on a site-ready building location in Costa Mesa. However, the project site was later changed to the Los Alamitos location which according to the architect, was a non-ready site. The architect stated that as a result, it provided additional drawings and designs for the new project location and acted as a consultant regarding the project site preparatory work that had not been originally anticipated. It is the Laboratory's opinion that the architect is entitled to some additional fee substantially less than the amount claimed, due to changed project locations and other reasons; however, the Laboratory and architect have not yet agreed on a settlement. We recommend that the Laboratory not make additional expenditures and obligations for these contractors' claims without authorization in the final budget from OE.

Total Construction Costs

The Laboratory's fiscal management practices have resulted in the Laboratory incurring and obligating total project costs which exceed the total construction/grant, including the undistributed budget. The total construction grant budget, including the undistributed

undistributed reserve, was $4,188,000 reduced to $4,188,000 by OE. As
of June 23, 1972 the Laboratory had incurred costs and obligations of $4,099,992. It had also estimated that additional costs of $52,076 would be incurred. The Laboratory had paid $23,003 for construction related costs from the operating program contract. In addition there is a potential claim of $123,000 which the Laboratory is disputing but which has not yet been resolved. Should the Laboratory liquidate all these costs, the total expenditures for the construction grant will exceed the total construction budget including the unbudgeted reserve by $72,071. The Laboratory has submitted a final budget for approval which includes all construction costs, as approved by FECA, and also contains a contingency of about $25,000 for the settlement of claims.

Recommendations

We recommend that:

(1) The Laboratory obtain not approval for use of the restricted construction funds in the budget line item, architectural fees, without notification of OE.

(2) The Laboratory not incur any additional construction costs which exceed the budgeted categories of the final budget, when received, by more than the maximum allowable 2 percent.

(3) The Laboratory not use operating program funds to pay for construction related costs.

(3) The Laboratory not make additional expenditures and obligations for contractors' claims without authorization in the final budget from OE.
Attachment 42. Statement of Facts from Contractor/Grantee's Perspective
DATE. August 25, 1972  
TO Ron Pennington  
FROM William H. Hein, Jr.  
SUBJECT.  
COPIES TO: Dr. Schutz, Dr. Baker, Mr. Christensen

In my memorandum of August 18, 1972, I promised to submit a factual summary of the construction project. This is attached and coupled with the previous submittal of our responses to the four draft findings completes our responsibilities in the audit to date.
The Laboratory received a Construction Grant dated June 30, 1970 in the amount of $4,286,000 to plan and construct a research facility in accordance with its Application for Education Research Facilities Program Grant with Patterns and Exhibits. The Grant specified two options of acquiring the facility. Subsequently the Laboratory selected Option B because of the obvious savings in public funds that could be effected by the use of federally-owned land which was made available to the Laboratory through the efforts of FECA. In August, 1970, USOE, FECA and the Laboratory Board of Directors agreed to test new construction techniques known as construction management and fast-tracking, on the SWRL project. The outstanding success of these techniques on the SWRL project has received national attention among professionally-qualified persons in the areas of design and construction of federally-financed facilities. The reasons for this success are set forth in TN 1-72-04 entitled Fast-Tracking Federally-Supported Construction of Educational Research and Development Facilities. (Attachment A). The savings computed by FECA and confirmed by OMB are described in a FECA document, Cost Avoidance on Southwest Regional Laboratory (Attachment B).

All parties realized in August, 1970 that the Grant had been written under the presumption of general contract for construction, as contrasted with a construction management project. The Laboratory could have requested, at that time, that the Grant be rewritten to incorporate a decision flow that could accommodate construction management (see decision flow described in TN 1-72-04 cited above). However, to do so would have delayed the project indefinitely since NCCERD had no experience with grants or projects involving construction management. The anticipated loss of time in effecting modifications in the grant conditions would have outweighed all potential savings before the project started. Therefore, the Laboratory assumed responsibilities unique for a Federal Grantee, namely to comply with a Grant written for a general contract and at the same time act responsibly so as to give the new techniques a fair trial. The Laboratory is understandably pleased with its Grantee role and with the capable service rendered by its architect and construction manager, in that the project was finished ahead of schedule, under budget and in compliance with all provisions of law, regulation, guideline and grant.
Following a change in Project Officer late in August, 1971, alleged misunderstandings arose on the project with regard to the budget line item distributions prepared by NCERD. These misunderstandings can be traced to the fact that one of the differences between the type of construction management used on the SWRL project and a general contract project is the method by which the respective construction project budgets must be determined. The differences are explained in detail in TN 1-72-06 entitled Budgeting In Federally-Supported Construction Management Projects (Attachment C). In May, 1971, SWRL had presented an estimated construction total based on the construction manager's estimate of costs verified by the architect. As explained in TN 1-72-06, this is the accepted manner of determining a project budget for a construction management project where the construction manager does not contractually guarantee a maximum total project cost. Since May, 1971, NCERD has refused to accept this principle and has arbitrarily issued budget-line item distributions based on the unaanalyzed bids from 50 contractors. Starting last year SWRL has repeatedly attempted to have NCERD adjust its budget line distributions within the available construction budget total. Finally, in February, 1972, in a meeting in Washington, USOE Contract Officials promised that this would be done if the cost information submitted the previous year were "re-arrayed" into the form required by NCERD. This was done by SWRL; however, the promised adjustments were never made by NCERD. Indeed the line-item distribution received from the Grants Officer in May, 1972 specifically states that the information provided by SWRL had not been considered.

Immediately following receipt of the May, 1972 budget document, the Laboratory was notified that NCERD had requested an audit of the construction project and that HEW auditors from the Los Angeles office, along with a technical advisor from NCERD, would constitute the audit team. The audit team utilized the interim budget line distribution of May, 1972 as if it were the final budget. SWRL has responded to the draft reports, and the differences in views undoubtedly will have to be resolved at higher levels.
Attachment 43. Contractor/Grantee's Response to Proposed Final Audit Report
January 23, 1973

Mr. Dennis G. Norris
Assistant to the Regional Audit Director
Department of Health, Education and Welfare
50 Fulton Street
San Francisco, CA 94102

Dear Mr. Norris:

Thank you for your letter of January 17, 1973 enclosing the proposed final audit report on the review of management practices and costs incurred under the Office of Education Operating Contract and the Educational Research Facility Grant.

We are looking forward to the exit conference scheduled for January 24, 1973. Our written reply to the findings, as presented, is attached.

Sincerely,

William H. Heip, Jr.
Director, Business and Operations

cc: Mr. Sefton Boyars
     Dr. Schutz
     Dr. Baker
     Mr. Christensen
The conduct and reporting of the audit departed from GAO Standards For Audit of Governmental Organization, Programs, Activities and Functions in numerous respects. While these departures should be of concern to the Federal Government, the consequential import of the report for SWRL lies in the recommendations for action contained in the report. There are recommendations in three areas, and each is discussed separately in this response.

"Construction-Related Costs"

The first area relates to "construction-related costs":

We recommend that the Laboratory:

1. Revise its policies to assure that operating funds are not spent for construction-related costs.

2. Refund $125,589 of operating funds expended for construction-related costs to the Federal Government.

The use of the term "construction-related costs" is without meaning since it is not found in any applicable law, regulation, cost allowability guideline, audit standard, grant provision or contract clause. SWRL has never made an expenditure from operating funds that was not authorized both by the contractual statement of work and the applicable guidelines governing allowability of costs. Although it would be possible to contend that all such expenditures have been for "program-related costs," this would be as empty as the proscription against "construction-related costs." Therefore, the first recommendation merely supports long-standing SWRL policy and practice to assure that operating funds are spent consistent with applicable laws, regulations, cost allowability guidelines, audit standards, and contract provisions.

There is a total absence of authority that would require SWRL to refund any part of the $125,589 to the Federal Government. Consequently, the second recommendation should be stricken from the report together with all discussion pertaining thereto. The allowability of these costs is clear for the following reasons.

In the report, "construction-related costs" are divided into three subcategories. The first is "(i) $67,557 for extra architectural services requested by the Laboratory for the construction project."
There were no "extra architectural services" procured by SWRL in addition to those provided in the approved architect's agreement. The architectural firm that provided such architectural services also provided professional consulting services in two instances. The first was professional consulting services furnished before the grant award to assist SWRL in the preparation of the application. By letter, dated May 22, 1969, NCERD had directed SWRL to prepare the application in compliance with USOE's Guidelines. This required the aid of consultants, and for reasons of economy and efficiency a firm of architects was retained. Professional consulting services were also necessary in the areas of utilization and placement of existing furniture; carpeting needs and specifications; drapery needs and specifications; procurement of draperies and carpeting; furniture layout in offices and special purpose spaces; locations of power and telephone outlets in accordance with furniture layouts; specifications and procurement of furniture; graphics, plants, and accessories. These services were specifically excluded from the architect's agreement for design of the facility. Again for reasons of economy and efficiency the architectural firm for the facility design was retained to provide such services. The costs of the professional consultant services rendered are clearly allowable under Section 31 of the Guidelines governing allowance of costs under the program operation contract and under the program operating contract statement of work. No Federal approval is necessary for professional consulting services under the program operating contract. The SWRL experience demonstrated the advisability of centralizing, in a single firm, the responsibility for pre-grant consulting services, architectural services for the design of the facilities and the other consulting services set forth in this paragraph. Substantial direct and indirect cost savings resulting from unity of control and responsibility were realized from the use of this technique.

The second sub-category of "construction related costs" is "(ii) $33,461 for ineligible off-site street improvements." The improvements described as "off-site," were required by the City of Seal Beach for minimally-acceptable site access. It should be noted that by letter dated August 13, 1971, SWRL was advised by NCERD that grant funds could be used to gain "minimally-acceptable access to the facility site." Subsequently, NCERD arbitrarily and without justification limited access costs to $10,000 under the grant contrary to its own written commitment. Nevertheless, the access costs are allowable under the program contract under Section B of the above-referenced Cost-Reimbursement Guidelines, and no NCERD approval is required for such costs.

The third sub-category is "(iii) $24,571 for consultant fees related to equipment systems installed under the construction contract." A professional consulting firm provided professional services in the areas of procurement, maintenance and installation of the equipment systems.
These are clearly SWRL responsibilities under the program operating contract that would exist regardless of the source of funds used to acquire the equipment. Again, charging these services against the program contract is authorized by Section 31 of the above Cost Reimbursement Guidelines and no NCERD approval is required.

The original grant budget did not provide for the payment of "local funds" by SWRL for any purpose. The Project Officer's unilateral insertion of amounts to be spent from "local funds" in an interim budget was without any discussion with or authorization from SWRL. Since the Project Officer was totally without authority to act for the SWRL Board of Directors in committing SWRL funds for any purpose, his action is null and void as a legal matter. The question was rendered moot by the final approved budget for construction which remedied his error and contains no expenditures from "local funds."

Moreover, the expenditure of these "program-related costs" from the program contract was discussed several times with the Project Officer and Grants Officer. In written and verbal communication NCERD advised SWRL to utilize funds from the operating contract for expenditures allowable under both the grant and the contract so that NCERD could utilize funds from SWRL's grant to cover overruns on two other educational research facility projects. The report implies that the SWRL R&D program was hampered by these expenditures. On the contrary, operating program contractual obligations have been fully met with annual cost underruns. The facility was likewise constructed with an underrun of the original grant total. The HEW Facilities Engineering and Construction Agency, with the concurrence of the Office of Management and Budget, has officially recognized that cost avoidance of $15,041,000 were effected on the SWRL facility project.

**Purchases from GSA Services**

In a second area the report recommends that SWRL utilize GSA services whenever possible in procuring office furniture. The "open-space design" utilized in the design of the SWRL facility is in compliance with the policy initiated by the White House to utilize open spaces (sometimes termed office landscaping) whenever possible. Considerable savings in construction costs were realized from this design. While the desks carried as stock items in GSA stores are suitable for private offices, they were never designed for and consequently are unacceptable for open or "landscaped" spaces. It is to be noted in this connection that Section VII, B. 5 of the USOE Guidelines sets forth a "demanding requirement" that the facility be aesthetically pleasing.

An additional fact is that at the time SWRL planned its furniture needs, the desks were budgeted for purchase from Grant funds. If the items had been purchased under the Grant, GSA supply sources could not be used since SWRL, and not the Federal Government, would hold title to the furniture. NCERD's unauthorized and unilateral reduction of the grant total forced SWRL to purchase the items from the operating program contract, a matter discussed in depth with the Project Officer and the Grants Officer.
It is to be noted that there is no authority in the program contract or elsewhere that limits the contractual term to "supply sources" to items stocked in GSA stores. The term also includes private firms with GSA contracts. Nevertheless, SWRL did negotiate GSA prices for the desks cited in the report, thus complying with the contractual requirement to purchase equipment from GSA supply sources in preference to other sources.

Property Disposal

In the third area, the report recommends that SWRL "coordinate equipment purchases more closely with the hiring of new staff and identify property which is no longer needed and report this excess to NCERD." SWRL has always coordinated all equipment purchases with the anticipated hiring of new staff which in turn has been based on contractual and other written assurances of the Federal Government. However, this coordination has occasionally been hampered by the Federal Government's failure to fulfill such written and contractual assurances. Fully precise coordination will, therefore, be impossible until the ability to meet written funding commitments occurs at the Federal level.

SWRL always notified NCERD when property on hand was determined to be truly "excess" and placed the property in storage pending response from Washington. SWRL has yet to receive a response from NCERD on any of its notices, even on requests over a year old.
Attachment 44. General Accounting Office Letter Regarding Possibility of Appeal of Audits
August 8, 1972

Ron Pennington

William H. Hein, Jr.

RECEIPT OF DRAFT'S 2 AND 3

Dr. Schutz, Dr. Baker, Mr. Christensen

This is to acknowledge receipt on August 4 of Draft 2 entitled 
Construction Project - Use of Funds and Draft 3 Operating 
Contract - Use of Program Funds. While we anticipate no diffi-
culty in having a written reply to you by August 18, 1972, we 
have two items that we would like to submit for your earlier 
consideration. First, our initial examination of the Drafts 
that each deficiency set forth in the summary of our analysis 
of Draft 1, delivered to you on August 3, is manifested in 
both Drafts 2 and 3. We submit that this is, in large measure, 
attributable to those features of the audit which we discussed 
in depth with you on June 22 and again with you Sefton Boyars 
and Ken Schneider on June 23. At that time our concerns were 
summarily rejected as contrary to the audit practices followed 
in the local-branch of the NEW Audit Agency. We now request 
that you reconsider the points raised by the Laboratory during 
those conferences in the light of GAO's recently issued 
Standards for Audit of Governmental Organizations, Programs, 
Activities and Functions dated June, 1972. We sincerely feel 
that a bona fide application of the standards set forth in 
this publication to the present audit will help insure a 
professional and meaningful audit report.
Mr. Richard E. Schutz  
Executive Director  
Southwest Regional Laboratory for  
Educational Research & Development  
4665 Lampson Avenue  
Los Alamitos, California 90720

Dear Mr. Schutz:

Your letter of August 16, 1972, to Mr. Elmer B. Staats, the Comptroller General, was referred to me for reply. We thank you for your compliments. The work was the product of many hands including a large contribution by members of the public interest groups and the professional associations. We, too, believe that the standards will make a contribution to the management of public organizations.

I will try to respond to the question you asked, "Is there a remedy for a grantee whose Federal Government audit does not appear to comply with the standards?" We hope that Federal audits will improve and, now that there are standards, that Federal auditors will have criteria to which to conform their work. We, in our reviews of the departmental and agency audit operations, will use these criteria as standards against which to compare the audit operations. Deviations will be disclosed and hopefully corrected.

Where a state or local government is aware of an audit performed by a Federal agency that does not conform to the standards, there are several possible courses of action.

First, the state can advise the Federal agency and request a more complete audit. Second, the state can advise this office or the appropriate Regional Council or Federal Executive Board and request that it intercede for the state in obtaining a more meaningful audit. Third, the state can, providing it has the appropriate audit resources, perform the audit on at least the non-compliant portions of the audit, itself.
I hope this answers your question. If not, please feel free to ask again and I will try to be more responsive.

Sincerely yours,

D. L. Scantlebury
Attachment 45. Contracting Officer's Preliminary Findings
Dear Bill:

Since my site visit in early August with Ray Wormwood and Ned Chalker, I have reviewed the documentation of the Construction Grant, an old operation contract. As you may realize, a great quantity of documentation, transferred from the Office of Education, has had to be examined. I have keyed this response to SWRL letters and it should be read with your letters in hand.

Regarding your letter of June 5, 1973, we believe that funds derived from school tryout materials do constitute income. Disposition of these funds could have been made by the previous Contracting Office. Our initial reaction is that some or all of this income may be retained by Contractor. In order that a reasonable and consistent policy may be established in this regard, please provide some specific alternative uses for the funds. As you may recall, I do not believe that "GAO's proposed guidelines" prohibit use of funds for other reasonable projects. However, NIE may wish that some portion of the funds be applied to NIE related costs. Also, Internal Revenue has some concern with "non-profit" operations and their source of income.

Regarding Robert Christensen letter of March 7, 1973, the interest derived from deposit of construction grant funds should be returned. We have reviewed the file relating to the "Segerstrom"/"Los Alamitos" options. The OE notice of June 30, 1970 clearly gives preference to Los Alamitos. "The Segerstrom alternative shall be pursued only if the Los Alamitos alternative does not acceptably materialize." "Consideration of alternative properties shall be limited to the Los Alamitos site, and shall require no more than 90 days. If the Los Alamitos property has not been found acceptable --- the Laboratory will be authorized to proceed with the Segerstrom alternative." See also Howard F. Perry letter dated August 31, 1971 to Dr. Schutz.

On September 9, 1970, Howard Perry, USOE placed a memo in file regarding a conversation with you on that date. Item two: "S.O.M. (Skidmore, Owings and Merrill) has gone as far as they can with non-site-specific work."
Awaiting right of entry”. File contains a memo by Howard F. Perry dated September 21, 1970. "He (Director, Office of Facilities, FECA) reported that the Los Alamitos property was 'sewn up' and that only formalities remain to be accomplished." "Accordingly, I will notify SWRL of this new development”. Memo dated September 29: On September 25, I called Bill Hein to notify him of the deliverance to SWRL of right-of-entry to the 12 acre Los Alamitos site." In short, the site was available within 90 days.

Howard F. Perry memo dated September 29, 1970. "Bill (Hein) confirmed that the idea of 'fast-track' construction had been dropped. 'Managed construction', however, is still in.”

Other memos indicate that the S.O.M. subcontract was under government review during November and December 1970. ROFEC memo of December 28, 1970 regarding A/E subcontract: "The architect has cut his basic fee from the $223,000 shown on the project estimate dated December 2, 1970 to the $191,000 shown in the A/E contract." Howard F. Perry's letter of February 2, 1971 outlines a number of objections to the A.E. subcontract.

Jacob J. Maimone letter to Dr. Richard Schutz dated May 4, 1971 does likewise. There seems to have been general Government displeasure with the S.O.M. subcontract, especially its vagueness. We cannot now retify the faults of the agreement. We note especially your paragraph 2 of Page 2. If, as you assert, "by the time the contract was submitted for approval, and before its execution (October 1970), it had become apparent to all parties that the job was more complex then it had earlier appeared and that the $191,000 basic fee would be inadequate", the proposed contract should have been withdrawn and revised. We do not find in the record official recognition by any Grant/Contracts Officer of potential "overrun". In any case, the agreement between SWRL and S.O.M., reviewed by USOE, should have reflected any necessary changes. By the time of execution, the complexities of construction management and fast tract could have been foreseen and are a matter of record.

We are not convinced that it became a contractual requirement to purchase new equipment systems "with savings in grant resulting from the decision to utilize federally-owned land." Those "savings" might well have been applied to "overruns". Exceeding cost in an effort to expend savings is a dubious practice. Also your decision to direct S.O.M. "to proceed with design of the facility as if it were to be located at Costa Mesa" --- does not conform with the situation then known to you. Excess costs, if any, attributed to this decision must be questioned. While we will consider a final invoice which reflects unplanned expenditures to S.O.M., please remit interest income to the U.S. Department of Treasury through this office.
If you can present evidence of Contract/Grant Officer approval of excess subcontract costs we will further review our documentation. We do not find any authority to exceed the estimated cost and do not at this time authorize any.

Relative to DHEW Audit No. 30114-9 and your response thereto (Appendix 1) we note the following:

"Construction", "Construction - Related Cost" Contractor takes exception to the auditors disallowance because "The use of the term "construction related costs" is without meaning since it is not found in any applicable law, regulation, ---".

We believe that the auditors determination is that of a "reasonable and prudent" man. Further we note that the regulations applicable to the Grant (45 CFR 151) provides some guidance.

151.2(e) "Construction and Cost of Construction" means:

(1) The Construction of new buildings --- including architects' fees ---

In distinction, the "operation contract" (OEC-4-7-062&05-3073) contains certain provisions relating to "Construction or Program Equipment Funding" (Article 15 for the period through 11/30/69; Article 11 commencing 12/1/69). Construction funds were considered to be "earmarked" funds and were to be accounted for in separate records.

Said contract sets forth provisions and definition regarding subcontracting "Subcontract - means any agreement, purchase order, or lease made and executed by prime contractor or a subcontractor where a material part --- is being obtained for use in the performance of this contract," Beyond certain levels prior notification and/or approval is required of the Contracting Officer.

Also FPR 1.15.107 (Guide paragraph G) provides an admonition regarding the allowability of consultant fees. In the absence of prior Contract Officer approval, or earlier correspondence regarding the lack of meaning of "construction" "construction related costs" or similar terms of art, we find:

A: The "67,557 for extra architectural services" should have received prior approval of the Contracting Officer. We must assume that either an actual subcontract existed or subcontractual agreement was construed among the parties. For Section 31 (FPR 1-15.205-31) to apply - ignoring 1-15.107 and the subcontract provisions - The work would have to be related to the "Scope of Work".

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We believe that the preparation of a grant application is distinct in a cardinal way from the operation contract scope of work. Even if "the preparation of the (Grant) application" were viewed as within the general scope of work, your response in accord with the Changes Clause would have been appropriate.

B. The "$33,461 for ineligible off-site street improvements" is clearly applicable to the "Construction Grant". During informal discussions I believe you conceded this point. Had the expenses been chargeable to the grant you would have been so charged. Had your allegation of arbitrary limitation been timely registered it might have been resolved by the cognizant Contracting Officer. We can but concur with Auditor that the costs are neither allowable nor applicable.

C. The $24,571 for consultant fees related to equipment systems are subject to the same consideration as set forth in A. above.

D. You suggest "a total absence of authority that would require SWRL to refund "any part of the $125,589 to the Federal Government." Please note the Disputes Clause and Examination of Records.

I have reviewed what I believe to be the complete record of fact, if you are unable to provide any documentation of Contracting Officer authorization for the costs incurred, we will issue a formal Contracting Officer decision along the lines set forth above.

It is with some regret that I must make the above negative findings. I believe that all of the questioned costs were incurred prior to NIE's existence, but we concur with auditors findings and I believe we would concur had we been the Contracting Officer. We must now look to the written record; and, since a contract is involved, to the terms and conditions of the bilaterally executed document.

Sincerely,

William C. Sullivan
Contracting Officer
Contracts and Grants
Management Division
Attachment 46. Contractor's Response to Contracting Officer's Preliminary Findings
March 18, 1974

Mr. William C. Sullivan
Contracting Officer
NATIONAL INSTITUTE OF EDUCATION
Marsh Building
1832 M Street, NW
Washington, DC 20208

Dear Bill:

This is in response to that part of your letter received by us on January 21, 1974 relative to DHEW Audit No. 301149. We are also enclosing copies of the Consultants' Contracts as you requested in our February 15 meeting. We are hopeful that your consideration of the matter raised in our letter of March 11, 1974 will make consideration of the present response unnecessary. If so, you may disregard it.

As you know, we have never submitted our final response to the audit as we have been awaiting its completion as promised by the Auditors in their entrance conference and subsequently confirmed in writing by the Project Officer, Larry Kaseman. In other words, it was agreed by the Auditors and the Project Officer that the audit would include NCERD and would not be considered complete until this was done. We are, therefore, submitting for your consideration some additional facts that may not appear in the file delivered to you by NCERD but that undoubtedly will be included in the completed report of the NCERD audit. We have also cited the authorities that we followed in administering the operations contract, which we submit are controlling in the instant case.

In organizing our response, we have set forth our understanding of the bases for your proposed findings 1 and 3 followed by our responses to all four tentative findings.

Tentative Contract Officer Findings 1 and 3

The payments to the architectural firm and consultant for equipment systems were "subcontracts" as the term is used in the operations contract. As such, they required the prior approval of the Contracting Officer. In order for Section 31 (relating to professional services) to apply the work would have to be related to the "Scope of Work." The preparation of a grant application is believed to be distinct from the operation contract scope of work. Even if it were viewed as within the general scope of work, our response in accord with the Changes Clause would have been appropriate.
SWRL Response

In determining the necessity for Contracting Officer approval of subcontracts under operations contracts between 1966 and 1972, both USOE and SWRL used the definitions set forth in the USOE Budget Guidelines. Specifically excluded from the definitions of subcontracts by these Guidelines were consultant agreements and professional services agreements. Consultants contracts were defined as agreements for the reimbursement of fees for professional services paid to individuals. Professional services agreements were contracts with business firms for professional services. USOE consistently applied these definitions and never required Contracting Officer approval for consultants contracts or professional service agreements. (We are well aware, of course, that under the new NIE contract, Contracting Officer approval is required for consultants and professional service agreements. This constitutes a change from USOE agreements which are controlling in the instant case.)

Further, USOE and SWRL were in total agreement that the planning for acquisition of facilities would be an allowable expenditure under the operations contract. This was made explicit in SWRL's proposals for funding for FY '69, FY '70, FY '71, and FY '72 where facility planning and construction were specifically set forth as activities to be conducted by SWRL under the operations contract. In addition, contractual statement of work for 1972 provided in part, Complete System procurement and acceptance stages for new Laboratory facility and Instructional Development Control and Monitoring System.

The expenses for professional services are allowable under the Guide for Non-Profit Institutions dated November 1967. Paragraph B 4(c) provides that a cost is allocable to a Government contract if it is necessary to the overall operation of the institution although a direct relationship to any particular cost objective cannot be shown. Here the professional services bore a direct relationship to SWRL's providing facilities for the cost objectives in the R&D program being supported by the operations contract. In addition, paragraphs 3 and 31 of the Guide specifically provide that proposal costs and professional services are allowable costs.

SWRL appreciates the need to work out in advance agreements as to the allowability of costs. However, in this case the agreement had been worked out in the course of the long standing practice of NCERD for consultants contracts. Moreover, the admonition regarding the allowability of consultant fees was not inserted in paragraph G of the Guide.
until the August, 1970 version which was never incorporated into the SWRL Contract. We did not receive our copy of the August, 1970 version until long after all of the transactions questioned had been completed. Apparently the same was true for USOE since subsequent contract amendments specifically referred to the earlier version of the Guide without the admonition.

We feel that the USOE operations contract is clear on the point that no Contracting Officer approval was required for agreements for professional services or consulting services. Even if the contract were ambiguous on this point, I believe you would agree that the ambiguity is construed against USOE, the party that prepared the agreement. Moreover, the Contractor should be entitled to rely on the long-standing and accepted administrative interpretation thereof by the responsible Federal officials.

Even with the benefit of 4 1/2 years hindsight, it is not reasonable to suppose that SWRL should have responded under the Changes Clause to the USOE Associate Commissioner's Invitation to prepare an application for education research facility construction funds in May, 1969. The CRCF for that year submitted by SWRL specifically pointed out that facility planning would be conducted under the operations contract. Thus, at the time of the issuance of the invitation in 1969, USOE and SWRL were in total agreement that no "change" had been ordered requiring a change order or an equitable adjustment in the contract amount. SWRL did of course give written notice to USOE that it was utilizing a business firm to provide professional services in the preparation of the application. Federal officials including the Contracting Officer met with the firm and SWRL on numerous occasions concerning the grant application.

SWRL notified USOE by letter dated June 11, 1969 that SWRL was totally dependent on Federal funds for the construction of the facility. Thus USOE was fully aware that SWRL had no funds, other than operations funds, for any planning activities related to facility and equipment planning. The same is true as to site access costs discussed below.

In the event that it is finally determined that Contracting Officer approval is necessary, we hereby request it. The considerations in favor of its being granted would be the long standing practice of USOE not to require prior approval of professional services and consultants agreements since they were not considered "subcontracts." In addition it should be noted that no fees were ever paid under the USOE contracts which could be used for disallowed costs. It would be inequitable to
refuse to pay fees and then disallow costs incurred for the benefit of the Federal Government as well as SWRL, and with the well supported belief that all contractual requirements regarding approvals had been met. Moreover, special consideration should be given to the fact that, under USOE policy, Laboratories and Centers were not required to reimburse the Government for disallowed costs since no fee or other sources of income were available for this purpose. NIE's recognition of this precedent for operations within the USOE era would avoid unwarranted favorable treatment merely because of timing of audit reviews of those organizations whose disallowances have been forgiven.

**SWRL Response to Tentative Contracting Officer Finding Number 2**

As you point out, we have already conceded the fact that these amounts were chargeable to the construction grant. We wish to state, however, that SWRL had no choice but to incur these costs under the operations contract because of the failure by USOE to fulfill two written obligations. The first was the total amount of the grant specified which was reduced by NCERD without compliance with the grant terms to cover overruns on other projects. SWRL protested to the Contracting Officer this improper reduction before, while, and after it was made. The second was the Federal Government's failure to deliver a "construction ready" (See Attachment) site at Los Alamos. To this day this written commitment has not been fulfilled because the Federal Government refuses to pay for site access costs erroneously termed "ineligible off-site improvements" by the audit report. SWRL and FECA both made timely, allegation of arbitrary limitation to the Project Officer who was acting as the technical representative of the Grants (and Contracting) Officer. SWRL notified the Project Officer that the site access costs would be paid from the operations contract, otherwise the grant's provisions mandated the lease agreement in Costa Mesa. The wisdom of this decision to relieve USOE from the consequences of its breach of its written obligations is best demonstrated by the multi-million dollar savings resulting therefrom.

In view of the obvious inequities resulting from assessing SWRL for USOE's defaults, we hereby request that the Government bear the site access costs and will be pleased to assist you in any manner toward this end.

**SWRL Response to Tentative Contracting Officer Finding Number 4**

We fully recognize and accept the Federal Government's authority to require the refund of costs that truly are not allowable. On the other hand, we submit the above information for your consideration and request that your final findings result in no penalties being assessed SWRL.
It is our sincere feeling that all of our actions were taken in reliance on sound and sufficient legal authority. In addition every act was taken in good faith and with the full knowledge of the Contracting Officer.

Sincerely,

William H. Hein, Jr.
Director, Business and Operations
III. FINDINGS (Continued)

For the costs in dispute incurred after December 1, 1969, a new Special Provisions and General Provisions (OE Form 5213) were substituted. OE Form 5213, Clauses 23 (Allowable Costs and Payment) and Clause 26 (Subcontracting) are relevant. Article 20 of the Special Provisions incorporates the cost principles set forth in Exhibit X-2-68-1 (OASC-5) of the Department of Health, Education and Welfare Grants Administration, and again defines "subcontract".

The contract at all times required that the contractor get written approval from the Contracting Officer before entering into the agreements with the architectural and consultant firms. The clauses in a contract must be read in a way that gives a meaning to each clause, and the clauses must be read in a consistent manner, if this is possible. Thus, the Allowability of Cost Clause and Guidelines are applicable, but only when read with the Subcontracting Clause. This clause states clearly that written approval of the Contracting Officer is necessary in contracts of over prescribed monetary amounts as is the case here where the architectural services amount to $67,557 and the consultant fees for equipment systems amount to $24,570 (III,B, above).

As is pointed out in the subcontracting clause, this written approval is necessary and does not even constitute a determination of allowability of such cost unless specifically intended.

Any belief on your part that "consultant agreements" did not require approval of the contracting Officer should have been resolved by Jacob Maimone's letter of December 11, 1970, wherein he referred to another ACSI agreement executed under the grant. He clearly identified it as a contract requiring prior approval. That, Mr. Maimone would insist upon prior approval under a construction project, but not require approval under the operation document flies in the face of logic. The approval process serves a number of purposes, one of which is to review business practices. That you entered into agreements which we find did not contain the proper flowdown clauses, attests to the general need for review and approval.
Dear Bill:

This letter constitutes the Contracting Officer's final decision under the Disputes Clause of Contract OEC-4-7-062865-3073, dated March 1, 1967, as modified.

I. STATEMENT OF FACTS

Said contract incorporated General Provisions HEW-315 (Rev. 8/64) including Clause 2, Disputes. By Modification No. 3, dated December 1, 1969, General Provisions OE Form 5213, 4/69 were incorporated including Clause 2, Disputes which is identical to the earlier provision. Total funding under the contract is $17,411,921.00. The completion date is February 28, 1973. The purpose of the contract was for the operation of a Regional Educational Laboratory. Pertinent to this decision are facts and circumstances relative to Facility Grant OEG-0-70-5027. This decision is rendered under the provisions of the operations contract and does not consider the allowability or allocability of any cost item under the facility grant.

Both the operations contract and the facility grant were awarded pursuant to regulations by the U.S. Office of Education. Responsibility for both instruments was transferred to the National Institute of Education pursuant to P.L. 92-318. HEW Audit Agency report (Control No. 30114-09) is germane to this decision.

EXHIBIT A
II. ITEMS UNDER DISPUTE

A. Auditor's Report

The audit report submitted by HEWAA is in draft form. We have taken no exception as to fact. Factual discrepancies have not been alleged by Contractor. Said report finds that "... out of the $14,833,421 of operating funds received by the Laboratory, (as of May 31, 1972) $125,582 was not available for use in its research and development activities" (p. 7). Auditor has found these costs to be construction-related costs allocable to the construction project. The costs are segregated as follows:

1) Extra architectural services in the amount of $67,557.00
2) Off-site street improvements in the amount of $33,461.00
3) Consultant fee related to equipment systems in the amount of $24,571.

B. Contractor Response

Contractor's position is established by "SWRL Reply to Final Audit Report" incorporated as Appendix I to subject audit report and a letter from addressee dated March 18, 1974. Precedence is given to the latter document. Briefly, Contractor concedes that the off-site improvements were chargeable to the construction grant, but requests the Government to consider the claim. Items one, and three above are viewed as allowable costs under the contract and further, that such costs are not subject to approval under the subcontract clause, if they are otherwise allowable. You state that expenditures of this type were made explicit in your proposals for FY's 1969 through 1972, and imply that this negated other approvals.
III. FINDINGS

A. The primary support provided by Contractor in defense of the off-site street improvements is an internal memo to file from R. L. Christensen, dated April 27, 1971. Subject: Use of OE Contract Funds to cover costs of Los Alamitos Frontage Improvements. We are willing to recognize that some problem existed regarding the funding for this segment of the construction costs - although we do not entirely accept the case presented in the memo. In any case, we believe that resolution of the problem could have been arranged with U.S.O.E. While we appreciate your "taxpayer" concern, we find your rationale for charging the operation contract presumptuous and incorrect. Clearly, the U.S.O.E. was the Government agent responsible for allocation of Government funds under both the operation and construction document. Your unilateral decision to charge the operation contract for these construction costs is accepted by neither the auditor nor the undersigned.

Costs associated with off-site street improvements-(II, A, 2) are not allocable to subject contract and are hereby disallowed.

B. Consultant fees related to equipment systems installed under the construction grant (Item II, A, 3 above) are allocable to the construction grant. We believe the auditors findings are correct, reasonable and prudent.

It is not at all clear why you are seeking reimbursement for the ACSI work under subject contract or why those costs appear on your books as charges against the contract. It seems from our record that you were billing for this work, or work very similar to it, under the facility grant. See, for example, your invoice of January 31, 1972 citing a line item "ACSI (Equipment Systems) .... $9,000". Further, your letter of June 28, 1971 requested approval of the ACSI subcontract by Howard F. Perry, Chief, Research Facilities Staff. While your letter did not cite the facility grant document number, the agreement entered into between SWRL and ACSI dated June 28, 1971 cites "Federal Grant OEG-0-70-5079" and passes down certain provisions of said grant including "The Equal Opportunity Clause described in paragraph 3.09 ...." of the grant. In short, the document which you have submitted in support of your claim under the contract, is identical to that previously submitted for approval under the grant. Now the charges appear in the operation contract account. Were it not for your extended defense of charging the contract, we could believe the charges were simply misplaced. The costs of the ACSI agreement are
C. Architectural services (Item II,A,1) are allocable to the facility grant. Again, we believe the auditors findings are correct, reasonable and prudent. An agreement submitted by you in support of your claim is dated January 17, 1969 and is entitled "Contract for Personal Services". The document itself implies that the services to be provided are to assist in work necessary for the operation of a regional laboratory. Skidmore, Owings and Merrill's proposal, however, is "for Architectural Consultant Services for the programming and master planning of your new facilities ..." (SOM letter dated January 17, 1969). We do not find budget support for cost of architectural services set forth in any "explicit way" in your budget presentations.

We recognize that professional services are allowable under 41 CFR 1-15.2, but it is clear that a subcontract was entered into between the parties. There is no evidence that the Contracting Officer waived the requirement for subcontract approval.

Due to several modifications in the contract and the varying dates for the services for which SWRL contracted, the applicable contract clauses and regulations changed, but the basic principles remain the same.

For the costs in dispute which were incurred before December 1, 1969, the Special Provisions provide that General Provisions Form HEW 315 (8/64) are made a part of the contract. The relevant sections of the General Provisions are Clause 23 (Allowable Costs and Payment) and Clause 26 (Subcontracting). Also, a part of the contract by the Special Provisions are "a Guide for Non-Profit Institutions" (OAS-C-5), dated November, 1967, and a definition of "Subcontract", which states that a subcontract is "any agreement, purchase order or lease made and executed by the prime contractor or a subcontractor where a material part of the supplies, services, property or equipment covered by such an agreement, purchase order, or lease in being obtained for use in the performance of this contract".
III. FINDINGS (Continued)

For the costs in dispute, incurred after December 1, 1969, a new Special Provisions and General Provisions (OE Form 5213) were substituted. OE Form 5213, Clauses 23 (Allowable Costs and Payment) and Clause 26 (Subcontracting) are relevant. Article 20 of the Special Provisions incorporates the cost principles set forth in Exhibit X-2-68-1 (OASC-5) of the Department of Health, Education and Welfare Grants Administration, and again defines "subcontract".

The contract at all times required that the contractor get written approval from the Contracting Officer before entering into the agreements with the architectural and consultant firms. The clauses in a contract must be read in a way that gives a meaning to each clause, and the clauses must be read in a consistent manner, if this is possible. Thus, the Allowability of Cost Clause and Guidelines are applicable, but only when read with the Subcontracting Clause. This clause states clearly that written approval of the Contracting Officer is necessary in contracts of over prescribed monetary amounts as is the case here where the architectural services amount to $67,557 and the consultant fees for equipment systems amount to $24,571 (III,B, above).

As is pointed out in the subcontracting clause, this written approval is necessary and does not even constitute a determination of allowability of such cost unless specifically stated.

Any belief on your part that "consultant agreements" did not require approval of the contracting Officer should have been resolved by Jacob Maimone's letter of December 11, 1970, wherein he referred to another ACSI agreement executed under the grant. He clearly identified it as a contract requiring prior approval. That, Mr. Maimone would insist upon prior approval under a construction project, but not require approval under the operation document flies in the face of logic. The approval process serves a number of purposes, one of which is to review business practices. That you entered into agreements which we find did not contain the proper flowdown clauses, attests to the general need for review and approval.
In my earlier letter, I cite certain provisions of the Cost Principles contained in DHEW publication "A Guide For Non-Profit Institutions". The precise citation should have been that set forth in your contract, namely, CFR 1-15.2. The introductory portion of Part 15 admonishes contractor to seek agreement with the Government in advance of the incurrence of special or unusual costs in categories where reasonableness or allocability is difficult to determine.

Organizations such as yours which are predominantly Government funded are especially advised in this regard. As an example, "Professional Services" are given as a cost on which advance agreements may be particularly important (1-15.107). We can recognize that, given their general allowability, you would acquire incidental professional services without advance agreement. However, we believe the onus is upon Contractor to seek agreements where significant sums are involved. The Government can not be presumed to know, what is perfectly known to Contractor. Further, the onus can not be upon the Government to know that the services are significant in dollar terms and being rendered under an agreement which must be identified as a sub-contract subject to the provisions of Subcontracting Clause.

Approval can not be subsumed by such actions as the "Association Commissioner's invitation to prepare an application for education research facility construction funds ..." (SWRL letter, p.3). Knowledge that services are being provided a Contractor does not constitute a blanket authorization for those services.

At least a portion (approximately $29,000) of the SOM costs of $67,557 were specifically disallowed by the USOE under the construction grant. By letter dated November 6, 1970, Robert Christensen of your staff submitted a proposed "Architect agreement" to Mr. Howard Perry, Acting Chief, Facilities Research Branch, USOE. The proposed agreement, dated October 30, 1970, contains a specification B.7 for "interior design, including selection of graphics and finish material, design of selection of furniture ....". Mr. Perry replied February 2, 1971, stating that selection of interior finish material should be part of the basic services included in the " lump sum fee", rather than supplemental services. You have now submitted, in support of your claim, documentation which suggests that you then separately contracted out this portion of the work, which Mr. Perry would not accept and then charged the work (again, without subcontract approval) to the operation document.
III. FINDINGS (Continued)

The SCM proposal of December 11, 1970 contains language almost identical to that task objected to by Mr. Perry. To wit: "SOM would provide "Interior design services ... (in) selection of graphics and finished material, design or selection of furniture ....". Your approval of this work was rendered February 4, 1971. (Initials W.H.H., Jr. (W. Hein)).

Extra architectural services in the amount of $67,557 are hereby disallowed.

IV. OTHER POINTS

A. As noted above, no determination is made herein regarding the allowability or allocability of cost under the construction grant.

B. We view the audit report to be sufficient to our needs in reaching this decision. While much of this decision letter is addressed to the question of subcontract approval, we concur with the auditor that the questioned costs are simply not allocable to subject contract. In the absence of specific Contracting Officer determination on allocability we find with the auditor.

C. Your suggestion of Government breach under the construction grant are not herein considered.

D. Settlement of the Government claim in the amount of $125,589 is hereby requested.

V. APPEALS FROM THIS DECISION

A. The disputes "Clause" of the contract provides that within 30 days from the date of receipt thereof the Contractor may appeal from this decision by mailing or otherwise furnishing to the Contracting Officer a written appeal addressed to the Secretary of the Department of Health, Education and Welfare. Two copies should accompany the original notice of appeal. The notice of appeal should identify the contract (by number), the decision from which the appeal is taken, and be signed by appellant or an officer of appellant organization, or by a duly authorized representative or attorney.
V. APPEALS FROM THIS DECISION (Continued)

B. The armed Services Board of Contract Appeals (ASBCA) is the authorized representative of the Secretary for hearing and determining such disputes.

C. Department regulations are set forth in 41 CFR 3-1.318-50. Procedures of ASBCA are set forth in Appendix A of the Armed Services Procurement Regulations.

Sincerely,

William C. Sullivan, Jr.
Contracting Officer
Contracts and Grants
Management Division
Attachment 48. HEW Grant Appeals Board Rules
PART III:

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Office of the Secretary

DEPARTMENT GRANT APPEALS PROCESS

Revision of Charter for Departmental Grant Appeals Board: Procedural Rules
RULES AND REGULATIONS

Revision of Charter for Departmental Grant Appeals Board; Procedural Rules

The purpose of these amendments is to add four procedural rules for proceedings before the Departmental Grant Appeals Board. Some incidental clarifications are made in the charter of the board and the entire charter (11 16 11) is redesignated as Subpart A—General while the new procedural rules are set forth as Subpart B—Practise and Procedure. For the convenience of users this part has been reprinted in full. An incidental typographical correction is made in the caption heading of the charter.

Interested persons have been afforded an opportunity to participate in the making of these amendments by a notice of proposed rulemaking issued August 13, 1974, and published in the Federal Register on August 19, 1974 (39 FR 10059). No written comments or objections have been submitted. However, a number of informal suggestions have been received and have been considered. These suggestions and minor corrections (which have been made) and for certain clarifications in the text. We believe that the text is adequately clear, and have not changed it but the explanations below elaborate on the intention of the questioned provisions.

The significant changes made in the rules include the following:

There is a correction of the list of programs to which the Part is applicable to show those programs which have current authority to make grants. It is made clear, however, that programs retain the procedural rules in this Part if they meet the requirements of §16.2(a) and (b) even though their authority to make grants no longer exist. Although they thus remain subject to the procedures they were previously included in the list of programs with current authority included in the appendices.

There is a corrected definition in §133 of "constituent agencies" and "head of the constituent agency" to reflect the present organization of the Department.

Paragraph 18.6(a)(5) relating to indirect cost and research patient hospital care rates has been amended to make explicit that the Board will hear appeals from determinations with respect to cost allocation plans negotiated with state or local units of Government and in direct cost rates, research patient care rates and amounts, computer fringe benefits, and other special rates negotiated with colleges and universities by state and local government agencies, hospitals and other nonprofit institutions. The clarification was suggested by the Commissioner's Office which is for this purpose the constituent agency. Authorization of the rights of any grantee receiving funds from this change which simply adds further explicit topics of permissible appeal, which were formerly mentioned in the statute but have been within the Board's interpretation of its jurisdiction.

In the new procedural rules, there is provision making explicit the practice of the Board not to include in panels Board members who have been associated with the particular case to be appealed (§16.4(b)). The intention of this rule is that no person will sit on a panel decided by him or her when personally participated in the decision, being reviewed or when he has had organizational responsibility for the decision being reviewed.

Provision is made for the Board Chairman to designate another member of the Board to act for him (§16.4(c)). The intent of this rule is to permit delegations of the Chairman's authority to other members of the Board in decisional matters. This is without derogation from the authority of the Chairman to delegate to the Executive Secretary of the Board, or another Executive Secretary, any and other actions on behalf of the Board which do not involve the process of Board decision.

The term "Administrative Law Judge" is adopted in form to the granting in the designation of hearing examiners by the Civil Service Commission (§16.9).

The procedural rules are designed to make proceedings simple and prompt for the convenience of the parties and to provide a full opportunity for the constituent agency and the grantee and anyone else directly affected to have their views heard by an impartial decision-maker. It is intended that the Board procedures be in an informal basis for the prompt disposition of applications to the Board, while preserving the essentials of notice and fair treatment.

In particular, it may be noted that Section 16.51 authorizes the modification or waiver of any rule in the interest of serving the ends of justice. It is intended that this power be exercised only in a determination not involving the process of Board decision.

Section 16.51(a) (2) provides that although the application for review need not follow any prescribed form, it shall clearly identify the question or questions in dispute and contain a full statement of the grantee's position with respect to such question or questions, and the pertinent facts and reasons in support of such position." The additional procedural rules which will form Subpart E under section 16.60 specifically provide that a grantee who desires review shall file with the Board an application for review as prescribed in Section 16.6(a).

The purpose of these rules is to maintain, without formalism, requirements of a procedure under which essential issues are identified so that the panel may determine whether oral testimony will be required. Although informal conferences will be useful, whether a hearing will be required. Examination of filings made with the Board indicates that in several instances filings fail to identify with clarity the issues involved and assume on the part of the Board that the merits of the substantive issues in dispute. No useful purpose appears to be served by further amending the regulations, but the attention of the grantee is called to the need for brief and direct presentations of the issues, and the use of such matters in dispute and of specific factual background which will normally include: the terms of the grant award; a specification of the action taken by the grantee; a comparison with the appropriate HEW policy statements and regulations relied on by the grantee; correspondence between the grantee and HEW relied on by the grantee; the audit report, if relevant; the use of the grant, the grantee's conduct; and a brief statement of the grantee's grounds for appeal. Agency responses should normally identify relevant statements of fact that are considered incorrect or misleading and should include such additional documents as are considered necessary for an understanding of the agency position.

Among the informal comments received was one that Section 16.7 of the grantee be amended to make clear that when the Board has assumed jurisdiction pursuant to the filing of an application for review, an appeal cannot be taken prior to a determination. No action may be taken by the constituent agency pursuant to such determination until the application has been disposed of. The charter provides in way of exceptions that the filing of the application shall not affect the authority which the constituent agency may have to suspend assistance under a grant, during appeal proceedings or after a determination. The authority which is suspended under the grant. The purpose of the exception is to assure the protection of the interest of the Government where there may be an immediate need of misuse of grant funds. The purpose of the basic rule of Section 16.7 is to protect the jurisdiction of the Board and to give the grantee assurance against adverse action taken during appeal proceedings or after a determination.

Section 16.7(a)(3) specifically provides that a determination against a grantee with respect to a matter before the Board and to restrict to circumstances of urgency any use of the authority to suspend.

A number of minor typographical corrections are made: in §16.53 the caption is amended to read "Filing and Service;" in §16.58, two references to the Board are corrected to refer to the grantee instead of "it;" and in §16.60(c) the word "it" is corrected to read "whether".

Accordingly, after consultation with the Department's constituent agencies,
SO (a) This part applies to certain determinations (as set forth in § 16.1), made after the effective date of this part, with respect to grants awarded by a constituent agency of the Department of Health, Education, and Welfare pursuant to: (1) Any program which authorized the making of discretionary grant awards, or (2) any other program (including any State plan, formula program) which the head of the constituent agency, with the approval of the Secretary, may designate.

(b) Notwithstanding paragraph (a) of this section, this part shall not be applicable to a determination: (1) If the grantee is entitled to an opportunity for hearing with respect to such determination pursuant to 42 U.S.C. 554 or (2) if, in order to meet special needs applicable to a particular program, the constituent agency has established an appropriate alternative procedure which is available to the grantee for the review or resolution of such determination and the Secretary has approved such procedure as an alternative to the procedures under this part.

Scope:

This part establishes a Departmental Grant Appeals Board, for the purpose of reviewing and providing hearings, consistent with the provisions of Part 16.3, on grant award decisions of the Departmental agency, in: (a) any program which authorized the making of discretionary grant awards, or (2) any other program (including any State plan, formula program) which the head of the constituent agency, with the approval of the Secretary, may designate.

Subpart A-General

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16.2 Scope.
16.3 Definitions.
16.4 Grant Appeals Board; Grant appeals panels.
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Appendix A-Education Programs.
Appendix B-Social and Rehabilitation Services and Child Development Programs.
Appendix C-Public Health Programs.
Appendix D-Food and Drug Programs.
Appendix E-Human Development Programs.

Subpart A-General

16.1 Purpose.

This part establishes a Departmental Grant Appeals Board, for the purpose of reviewing and providing hearings upon post-award disputes which may arise in the administration of or carrying out of grants under grant programs (as described in § 16.2) and, which are submitted to the Board as provided in § 16.6. (Authority cited in the Appendices.)

16.2 Scope.

(a) This part applies to certain determinations (as set forth in § 16.1), made after the effective date of this part, with respect to grants awarded by a constituent agency of the Department of Health, Education, and Welfare pursuant to: (1) Any program which authorized the making of discretionary grant awards, or (2) any other program (including any State plan, formula program) which the head of the constituent agency, with the approval of the Secretary, may designate.

(b) Notwithstanding paragraph (a) of this section, this part shall not be applicable to a determination: (1) If the grantee is entitled to an opportunity for hearing with respect to such determination pursuant to 42 U.S.C. 554 or (2) if, in order to meet special needs applicable to a particular program, the constituent agency has established an appropriate alternative procedure which is available to the grantee for the review or resolution of such determination and the Secretary has approved such procedure as an alternative to the procedures under this part.

16.3 Definitions.

For purposes of this part:

(a) "Board" means the Departmental Grant Appeals Board, as described in paragraph (a) of § 16.4.

(b) "Board Chairman" means the member designated by the Secretary to serve as Chairman of the Board.

(c) "Panel Chairman" means the member designated by the Secretary to serve as Chairman of the Grant Appeals Panel, as described in paragraph (b) of § 16.4.

(d) "Panel Chairman" means the member designated by the Secretary to serve as Chairman of the Grant Appeals Panel, as described in paragraph (b) of § 16.4.

(e) "Constituent agency" means the Office of the Assistant Secretary for Education, with respect to grants pursuant to section 404 of the General Education Provisions Act, the Office of Education, the National Institute of Education, the Office of the Assistant Secretary for Education, to the extent of grants awarded by the Health Resources Administration, the Health Services Administration, the National Institutes of Health, the Center for Disease Control, the Food and Drug Administration, the Alcohol, Drug Abuse, and Mental Health Administration, and the Public Health Service Regional Offices, the Assistant Secretary for Human Development, the Commissioner on Aging, the Administrator of the Social and Rehabilitation Service, the Commissioner of the Rehabilitation Services Administration, the Assistant Secretary, Comptroller, the several Regional Directors (with respect to grants made by them), and the head of any other organizational component which the Secretary may designate.

16.4 Grant Appeals Board; Grant Appeals Panel.

(a) There is established, within the Office of the Secretary, a Departmental Grant Appeals Board, the members of which shall be appointed by the Secretary, for such terms as may be designated by him, to perform the functions described in this part, subject to the limitations set forth in § 16.11. Persons who are officers or employees of the Department or of any of its constituent agencies, or the State or local governments shall be excluded from service on the Board. Persons who are not otherwise full-time employees of the Federal Government may, in accordance with appropriate arrangements, be also be appointed to serve on the Board. Service on the Board may be on a regular or an intermittent basis.

(b) The Secretary shall designate one of the members of the Board to be Chairman. The Board Chairman shall designate Grant Appeals Panels for the consideration of one or more cases submitted to the Board. Each such panel shall consist of not less than three members of the Board, none of whom shall have been associated with the case to be appealed either directly or by reason of any organizational affiliation. The Board Chairman may, at his discretion, constitute the entire Board to sit for any case or class of cases. The Board Chairman...
shall designate himself or any other member of a Panel to serve as Chairman.
(c) The Board Chairman may designate another member of the Board to act for him.

Authority cited in the Appendix.

§ 16.5 Determinations subject to the Jurisdiction of the Board.
(a) Subject to § 16.2 and paragraph (b) of this section, the Board shall have jurisdiction over the following determinations of a defendant officer or employee of a constituent agency adverse to a grantee:

(1) Termination, in whole or in part, of a grant for failure of the grantee to carry out its approved proposal in accordance with the applicable law and the terms of such assistance or for failure of the grantee otherwise to comply with any law, regulation, assurance, term, or condition applicable to the grant.

(2) A determination that an expenditure not allowable under the grant has been charged to the grant or that the grantee has otherwise failed to comply with any law, regulation, assurance, term, or condition applicable to the grant.

(3) The disapproval of a grantee's written request for permission to incur an expenditure during the term of a grant.

(4) A determination that a grant is void.

(5) Determinations with respect to cost allocation or negotiated rates with State and local units of Government, and indirect cost rates, research patient care rates and amounts, computer, fringe benefit, and other special rates negotiated with colleges and universities, State and local Government agencies, hospitals, and other nonprofit institutions except where the grantee has appealed to the Armed Services Board of Contract Appeals with respect to such determination under a contract with the Department.

(b) A determination described in paragraph (a) of this section may not be reviewed by the Board unless: (1) the grantee has notified the appropriate constituent agency that the determination is to be reviewed, that the requirements of §16.5 and paragraph (a) of this section have been satisfied; and (2) the determination is or has been charged to the grant, except that the determination is or has been charged to the grant prior to submission to the Board.

(c) In the case of a determination described in paragraph (a) of this section, the grantee shall have the opportunity to present his case at a hearing on such determination.

(d) After consultation with the constituent agencies, the Board shall, with the approval of the Secretary, promulgate and publish rules of procedure, including rules respecting opportunity for intervention by interested third parties relating to proceedings under this part.

(2) A determination described in paragraph (a) of this section may not be reviewed by the Board unless: (1) the grantee has notified the constituent agency that the determination is to be reviewed, that the requirements of §16.5 and paragraph (a) of this section have been satisfied, and (2) the determination is or has been charged to the grant prior to submission to the Board.

§ 16.6 Submission.
(a) Application for review. (1) A grantee with respect to whom a determination has been made and who desires review may file with the Board an application for review of such determination. The grantee's application for review must be postmarked no later than 30 days after the postmark date of notification provided pursuant to §16.5(b)(1) except when (i) the head of the constituent agency, by regulation, establishes a different period of time for all class of cases; (ii) the Board determines that such requirements have not been met; (iii) the determination is or has been charged to the grant; (iv) the determination is or has been charged to the grant prior to submission to the Board; or (v) the determination is or has been charged to the grant prior to submission to the Board.

(b) Action by Board on application for review.

(1) The Board shall prepare an initial decision identifying the issues to be considered (where such notice has not previously been afforded), and an opportunity to be represented by counsel.

(2) With respect to cases involving a dispute as to a material fact the resolution of which would be materially assisted by oral testimony, the Board shall afford each party an opportunity for a hearing, which shall include, in addition to provisions required by subparagraph (b)(1) of this paragraph, (a) an opportunity to cross-examine other witnesses orally or through written interrogatories; (b) action by the Board pursuant to paragraph (b)(2) of this section, including an opportunity to present witnesses on his behalf; and (c) an opportunity to cross-examine other witnesses orally or through written interrogatories.

(c) The Board may modify the recommendations of the Panel.

(3) After consultation with the constituent agencies, the Board shall disclose to the grantee the results of the Board's action described in paragraph (2)(b) of this section.

§ 16.7 Effect of submission.

When an application has been filed with the Board with respect to a determination, no action may be taken by the constituent agency pursuant to such determination until such application has been disposed of, except that the filing of the application shall not affect the authority which the constituent agency may have to continue to pay a grant during proceedings under this part or otherwise to withhold or defer payments under the grant.

Authority cited in the Appendix.

§ 16.8 Substantive and procedural rules.
(a) Substantive rules. The Panel shall be bound by all applicable laws and regulations.

(b) Procedural rules. (1) With respect to cases involving a dispute as to a material fact the resolution of which would be materially assisted by oral testimony, the Panel shall take appropriate steps to afford to each party to the proceeding an opportunity for presenting his case at the option of the Board or the Board's Panel (1) in whole or in part in writing or (ii) in an informal conference before the Panel which shall afford each party.

(2) (a) An opportunity to cross-examine other witnesses orally or through written interrogatories. (b) After consultation with the constituent agencies, the Board shall, with the approval of the Secretary, promulgate and publish rules of procedure, including rules respecting opportunity for intervention by interested third parties relating to proceedings under this part.

Authority cited in the Appendix.

§ 16.9 Hearing before Panel or a Hearing Officer.

(a) A hearing pursuant to §16.8(b)(2) shall be conducted, as determined by the Board, either before the Panel or a hearing officer.

(b) Copies of the initial decision shall be mailed promptly by the Panel or a hearing officer to the party or parties who have been notified under paragraph (a) of the members of the Panel or a nonmember who is appointed as an administrative law judge under 5 U.S.C. 3105.

Authority cited in the Appendix.

§ 16.10 Initial decision; final decision.

(a) The Panel shall prepare an initial written decision, which shall include findings of fact and conclusions based thereon. In the case of a hearing officer alone, the hearing officer shall separately state the facts and conclusions which shall be incorporated in the initial decision prepared by the Panel.

(b) Copies of the initial decision shall be mailed promptly by the Panel or a hearing officer to the party or parties who have been notified under paragraph (a) of this section, who may then have the opportunity to submit written comments thereon to the Board before the Board issues its final decision.

Authority cited in the Appendix.

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(c) The initial decision of the Panel shall be transmitted to the head of the constituent agency and shall become the final decision of the constituent agency, unless, within 25 days after the expiration of the time for receipt of written comments, the head of the appropriate constituent agency advises the Board Chairman in writing of his determination to review such decision.

(d) In any case in which the head of the constituent agency modifies or reverses the initial decision of the Panel, he shall accompany such action by written statement of the grounds for such modification or reversal, which shall promptly be filed with the Secretary and the Executive. In case he shall afford the Secretary an opportunity to study such decision of the agency head, it shall be served upon the parties no earlier than 30 days after such filing. Such decision shall not become final until it is served, upon the grantee involved or his attorney.

(e) The authority to review initial decisions shall not be delegated. Review of any initial decision by the head of the constituent agency shall be made only within 30 days of the decision, the written record, if any, of the Panel's proceedings, and written comments or oral arguments by the parties, or by their counsel, to the proceedings.

(Authority cited in the Appendices.)

§ 16.11 Separation of functions.

No person who participated in prely administrative consideration, or in the preparation or presentation of a case submitted to the Board shall advise or consult with, and no person having an interest in the proceeding shall make or cause to be made an ex parte communication to, the Panel, Board, or head of the constituent agency with respect to such case, unless the parties to the case are given timely and adequate notice of such advice, consultation, or communication, and reasonable opportunity to respond to such advice.

(Authority cited in the Appendices.)

Subpart B—Practice and Procedure

GENERAL

§ 16.50 Scope of rules.

This subpart governs the practice and procedure for proceedings conducted under this part.

(Authority cited in the Appendices.)

§ 16.51 Waiver, modification.

Upon notice to all parties, the Board, the Board Chairman, a panel, or a hearing officer may, with respect to matters pending before them, modify or waive any rule in this subpart upon a determination that no party will be prejudiced and that the ends of justice will thereby be served.

(Authority cited in the Appendices.)

§ 16.52 Form.

Documents filed in a proceeding under this part shall be dated, the original signed in ink, shall show the docket description and title of the proceeding, and shall indicate the party or amicus curiae filing, and the title, if any, and address of the person signing. Copies need not be signed, but the name of the person signing the original shall be reproduced.

(Authority cited in the Appendices.)

§ 16.53 Filing and Service.

(a) All documents submitted in a proceeding shall be filed in original and four copies, and a copy shall be served on each party. Written notice of the filing shall be served on the Executive Secretary of the Board, by registered or certified mail, or by personal delivery, to the Executive Secretary, Grant Appeals Board, U.S. Department of Health, Education, and Welfare, 330 Independence Avenue, SW., Washington, D.C., 20201.

(b) Service shall be made by personal delivery of one copy of each document to each party, or by mailing by first-class mail, properly addressed with postage prepaid.

(c) The date of filing or of service shall be the day when the document is deposited in the U.S. mail, or, if the document is delivered in person, the day it is so delivered.

(d) The original of every document filed and required to be served upon parties shall be accompanied by a certificate of service signed by the party or amicus curiae making service or by his attorney or representative, stating the persons upon whom service has been made, date of service, and manner of service.

(Authority cited in the Appendices.)

§ 16.54 Computation of time.

In computing any period of time under this part or in an order issued hereunder, the time begins with the day following the act, event, or default, and includes the last day of the period, unless it is a Saturday, Sunday, or legal holiday observed in the District of Columbia, in which event it includes the next following business day. If the last day is a Saturday, Sunday, or legal holiday, time prescribed or allowed is less than 7 days, intermediate Saturdays, Sundays, and legal holidays shall be excluded from the computation.

(Authority cited in the Appendices.)

PARTICIPATION AND PRACTICE

§ 16.57 Participation by a party.

A party may participate in person, or by counsel, pursuant to the procedures set forth in this part, in any proceeding held pursuant to this part.

(Authority cited in the Appendices.)

§ 16.58 Participation by interested persons.

(a) (1) The constituent agency and the grantee who has filed an application for review under § 16.6 are parties to proceedings under this part. Persons or organizations other than grantees and constituent agencies shall have the right to participate in proceedings instituted by a grantee if the decision could directly and adversely affect them or the class they represent.

(2) Persons or organizations wishing to participate as parties shall file with the Executive Secretary of the Board, and serve on all parties, a petition within 15 days of the notice initiating the proceeding, (ii) who will represent petitioners, (iii) the issues on which the petitioner intends to participate, and (iv) if a hearing is held, whether petitioner intends to present witnesses.

(b) The Board Chairman shall consider each petition filed. To determine whether each petitioner has the requisite interest in the proceedings, as defined in paragraph (a)(1) of this section, and shall permit or deny participation accordingly. Petitions to participate as parties are made by individuals or groups with common interests, the Board Chairman may request all such petitioners to designate a single representative to represent all petitioners to represent all the petitioners.

The Board Chairman shall give each petition written notice of the decision on the petition, and shall serve such notice on each party. If the petition is denied, he shall brief the grounds for denial and shall then treat the petition as a request for participation as amicus curiae.

(b) (1) Any interested person or organization wishing to participate as amicus curiae shall file a petition within 15 days after the notice initiating the proceeding under § 16.6 is served, and shall serve a copy of any such statement and serve a copy of any such statement.

(c) The date of filing or of service shall be the day when the document is deposited in the U.S. mail, or, if the document is delivered in person, the day it is so delivered.

(d) The original of every document filed and required to be served upon parties shall be accompanied by a certificate of service signed by the party or amicus curiae making service or by his attorney or representative, stating the persons upon whom service has been made, date of service, and manner of service.

(Authority cited in the Appendices.)

§ 16.54 Computation of time.

In computing any period of time under this part or in an order issued hereunder, the time begins with the day following the act, event, or default, and includes the last day of the period, unless it is a Saturday, Sunday, or legal holiday observed in the District of Columbia, in which event it includes the next following business day. If the last day is a Saturday, Sunday, or legal holiday, time prescribed or allowed is less than 7 days, intermediate Saturdays, Sundays, and legal holidays shall be excluded from the computation.

(Authority cited in the Appendices.)
RULES AND REGULATIONS

§ 16.64 Notice of hearing.

If it has been determined pursuant to § 16.63 that a hearing is not required, the panel shall provide an opportunity for all parties, either by written briefs alone or by written briefs in conjunction with an informal conference, to present their arguments and evidence supporting their respective positions. The panel shall specify such time limits for submission as it deems advisable. All such submissions shall be served by the party submitting them on all other parties and shall be filed with the panel within the time limits specified by the panel. Such submissions, together with the application and agency notice of the hearing date, shall constitute the record for decision in such cases.

(Authority cited in the Appendices.)

§ 16.65 Hearing.

§ 16.66 Designation of panel or hearing officer.

Hearings shall be held before a panel or before a hearing officer designated by the panel. All decisions by a panel, at all stages of the proceeding, shall be by majority vote. If a hearing officer is designated, all motions and petitions shall be submitted to and ruled on by the hearing officer until he makes his recommended decision.

(Authority cited in the Appendices.)

§ 16.67 Authority and responsibilities of panel or hearing officer.

(a) If the panel conducts the hearing itself, it shall prepare, on the basis of the record, the initial decision, required by § 16.10, which shall include findings of fact and conclusions based thereon. If a panel hearing officer shall make findings of fact and conclusions based thereon, and recommend an initial decision to the panel on the basis of the record.

(b) If a hearing officer shall have the duty to conduct a fair and impartial hearing, to take all necessary action to avoid delay, and to maintain order. The panel or hearing officer shall have all powers necessary to those ends, including, but not limited to, the power to:

(1) Hold conferences, including pre-hearing conferences, to settle, simplify, or fix the issues in a proceeding, or to consider other matters that may aid in the expedient disposition of the proceeding.

(2) Require parties to state their position, with respect to the various issues in the proceeding.

(3) Direct the parties to exchange their evidentiary exhibits, witness lists, and a notice of the conduct of the hearing prior to the hearing. Where good cause exists, the parties shall be afforded the right at any time to amend, by deletion or supplementation, their evidentiary exhibit and witness lists.

(4) Rule on motions, and other procedural items.

(5) Regulate the course of the hearing and conduct of counsel therein.

(6) Establish rules for media coverage of the proceedings.

(7) Examine witnesses.

(8) Receive, rule on, exclude, or limit evidence taken at the hearing, and fix the limits for submission of written documents.

(9) Take any action authorized by these rules.

(10) Any action authorized by these rules.

§ 16.68 Evidence.

The panel or hearing officer shall receive as evidence the testimony of witnesses and any documents which are relevant and material. Evidence may be received at the hearing even though inadmissible under rules of evidence applicable to court procedures.

(Authority cited in the Appendices.)

§ 16.69 Testimony.

Testimony shall be given orally by witnesses at the hearing, but may, at the discretion of the panel or hearing officer, be prepared in writing and submitted to all parties to the hearing. A witness shall be available for cross-examination, and, at the discretion of the panel or hearing officer, may be cross-examined without regard to the scope of direct examination as to any matter which is material to the proceeding.

§ 16.70 Exceptions to rulings.

Except as specifically provided in these rules, rulings of the panel or hearing officer may be appealed only following the entire hearing and the panel's decision or the hearing officer's findings, conclusions, and recommended decision.

(Authority cited in the Appendices.)

§ 16.71 Interlocutory appeals.

§ 16.72 Official hearing record.

(a) If a hearing is held, the official hearing record shall consist of a transcript of testimony and argument, or an electronic recording thereof, or if all parties to the proceeding agree, a typewritten summary of such testimony and argument. It shall be filed with the Executive Secretary of the Board.

(b) The Department will designate the official reporter for all hearings. Transcript, recordings, or summaries may be prepared by the reporter, by and the parties and the public at rates not to exceed the applicable rates fixed by the contract between the Department and the reporter. Upon notice to all parties, or the hearing officer, the reporter may authorize such corrections to the transcript as are necessary to reflect the testimony accurately.

(c) If a hearing is held, the official hearing record together with all papers, documents, exhibits, and requests filed in the proceedings (except the correspondence section of the docket) including evidence, findings, conclusions, and decision shall constitute the record for decision.

(Authority cited in the Appendices.)

§ 16.73 Proposed findings of fact and conclusions.

If a hearing is held, each party may, within such time as the panel or hearing officer specifies, file proposed findings of fact and conclusions of the hearing officer, and proposed decision, together with a supporting brief expressing the reasons for
such proposals. Such proposals and briefs shall be filed and served on all parties and amici curiae. Reply briefs may be submitted within 10 days after receipt of the initial briefs and proposals, and shall be filed and served in like manner.

(Authority cited in the Appendices.)

§ 16.74 Recommended decision of hearing officer.

Within 30 days after the time for filing reply briefs, or if the parties elect not to file briefs, within 30 days after the filing of the official hearing record, the hearing officer shall make findings of fact and conclusions based thereon and recommend a decision based on the record for decision. These findings, conclusions, and recommendations shall be certified, together with the record, for decision to the panel for its decision. The findings, conclusions, and recommended decision of the hearing officer shall be served on all parties and amici curiae to the proceeding.

(Authority cited in the Appendices.)

§ 16.80 Initial decision.

The panel shall prepare an initial written decision, and transmit it, in accordance with §16.10. Each party shall have an opportunity to submit written comments on the initial decision to the head of the constituent agency within the time specified by the panel.

(Authority cited in the Appendices.)

§ 16.81 Final decision.

If the head of the constituent agency advises that he intends to review the initial decision, the Board Chairman shall notify the parties of this within 30 days of the notice.

(Authority cited in the Appendices.)

§ 16.82 Publication of decisions.

All final decisions made pursuant to this part shall be made available for inspection by the Executive Secretary of the Board at the main office of the Board and at such other locations as the Executive Secretary may designate.

(Authority cited in the Appendices.)

APPENDIX A—EDUCATION PROGRAMS

(1) Section 228 of the Elementary and Secondary Education Act (20 U.S.C. 1232b).
(2) Section 111 of the Elementary and Secondary Education Act (20 U.S.C. 1201).
(6) Section 504 of the Rehabilitation Act (34 U.S.C. 504).

APPENDIX B—SOCIAL AND REHABILITATION SERVICE PROGRAMS

(6) Section 228 of the Social Security Amendments of 1978 (P.L. 95-521, 92 Stat. 2).
(7) Section 229 of the Social Security Amendments of 1979 (P.L. 96-25, 93 Stat. 2).

APPENDIX C—PUBLIC HEALTH PROGRAMS

(1) Section 223 of the Public Health Service Act (42 U.S.C. 201).
(2) Section 224 of the Public Health Service Act (42 U.S.C. 201a).
(3) Section 225 of the Public Health Service Act (42 U.S.C. 201b).
(4) Section 226 of the Public Health Service Act (42 U.S.C. 201c).
(5) Section 227 of the Public Health Service Act (42 U.S.C. 201d).
(6) Section 228 of the Public Health Service Act (42 U.S.C. 201e).
(7) Section 229 of the Public Health Service Act (42 U.S.C. 201f).
(8) Section 230 of the Public Health Service Act (42 U.S.C. 201g).
(9) Section 231 of the Public Health Service Act (42 U.S.C. 201h).
(10) Section 232 of the Public Health Service Act (42 U.S.C. 201i).

APPENDIX D—CHILDREN'S PROTECTION SERVICES

(1) Section 504 of the Indian Health Service Act (42 U.S.C. 200).
(2) Section 505 of the Indian Health Service Act (42 U.S.C. 201).
(3) Section 506 of the Indian Health Service Act (42 U.S.C. 202).
(4) Section 507 of the Indian Health Service Act (42 U.S.C. 203).
(5) Section 508 of the Indian Health Service Act (42 U.S.C. 204).
(6) Section 509 of the Indian Health Service Act (42 U.S.C. 205).
(7) Section 510 of the Indian Health Service Act (42 U.S.C. 206).
(8) Section 511 of the Indian Health Service Act (42 U.S.C. 207).
(9) Section 512 of the Indian Health Service Act (42 U.S.C. 208).
(10) Section 513 of the Indian Health Service Act (42 U.S.C. 209).
(11) Section 514 of the Indian Health Service Act (42 U.S.C. 210).

FEDERAL REGISTER, VOL. 40, NO. 156—TUESDAY, AUGUST 12, 1975
Attachment 49. Notice of Appeal
Appeal of
SOUTHWEST REGIONAL LABORATORY FOR
EDUCATIONAL RESEARCH AND
DEVELOPMENT
under USOE Office of
Education Contract No. OEC-4-7-062865-3073
and Office of Education Grant No.
OEC-C-70-5079 (502)

NOTICE OF APPEAL

The Southwest Regional Laboratory for Educational Research and Development, Contractor, hereby appeals to the Secretary of Health, Education and Welfare from the decision of William C. Sullivan, Jr., Contracting Officer, received on June 10, 1974, a copy of which is annexed as Exhibit A.

1. The decision appealed from erroneously requests Southwest Regional Laboratory for Educational Research and Development to settle the Federal Government's claim of $125,589 by reason of disallowances of costs incurred under Office of Education Contract OEC-4-7-062865-3073. Southwest Regional Laboratory for Educational Research and Development disputes its liability for any part of this claim.

2. The decision appealed from is erroneous for the following reasons:

a. The total costs questioned are allocable to and consequently allowable under the captioned Contract pursuant to Sections B.2 and B.4 of a Guide for Non-Profit Institutions (OASC-5), dated November 1967. Contractor was required to furnish the necessary facilities and equipment for performance of the captioned Contract. The planning and construction of a new facility was set forth as an activity to be conducted in Contractor's approved proposals for funding for FY '69 through FY '72 under the captioned Contract.

a-1. $33,461 of the total was paid to gain access from the City of Seal Beach to the Governmental-owned property specified in the Construction Grant and the USOE Project Officer's letter of August 31, 1970 as the required location for Contractor's facility. It was necessary to the overall operation of Contractor and its ability to perform the work required by the captioned Contract to have vehicular and pedestrian access to this property and hence to its facility. Therefore these costs are clearly allocable under B.4 of the above Guide. USOE had previously furnished Contractor with a written guarantee that the access would be furnished at no cost to Contractor. The City of Seal Beach required that the costs for site access be paid in the form of safety and environmental improvements meeting City Codes to Lampson Avenue which is adjacent to the Governmental-owned site and the only street access to the site. The access costs are not "off-site" work since HEW construction practices on other projects treat a Governmental-owned site as extending to the middle of the adjacent street for the purposes of preparing safe access. By letter dated August 13, 1971, Contractor was advised that the Construction Grant could be used to gain access to the site. The USOE Project Officer then arbitrarily and unilaterally informed Contractor that the Government's full written commitment
would be honored only to the extent of $10,000. The Project Officer had full knowledge that Contractor had no source of funds other than the Contract to acquire access. Contractor would have breached other provisions of the Contract and Grant and lost the multi-million dollar savings realized on the Grant by not so acquiring site access. Thus the Project Officer's action is null and void.

a-2. $24,571 of the total was for consultant services required to assist Contractor's business and professional employees, whose total salaries were being paid under the captioned Contract, in the procurement and acceptance of sophisticated research equipment systems. These consulting costs are allocable to the Contract under Section B.4 and allowable under Section C.31 of the Guide as business and program administration costs necessary to the overall operation of Contractor and benefiting only Government work under the captioned Contract. Contractor had requested and obtained the written approval of the USOE Grants/Contracting Officer to bill for this work against the Construction Grant. However, the USOE Project Officer and the Grants/Contracting Officer notified Contractor that a reduction in Grant total was being considered, and requested that wherever possible expenditures be charged to the captioned Contract. Contractor protested the Grant reduction but complied with the request and billed the charges against the Contract. The audit report treats as controlling the fact that the equipment systems were purchased from Grant funds. However, the memo of April 19, 1972 from USOE Contracting Officials confirms the fact that the costs of equipment systems were allocable to either the Grant or Contract with final decision on the matter reached ten months after the above Consultant's agreement was executed.

a-3. $34,581.57 of the total was paid a firm of architects for professional services (allowable under Section G.31 of the Guide) to assist Contractor's professional and business staff members, whose salaries were paid entirely from Contract funds, in developing engineering and cost data necessary to support Contractor's invited proposal for a Construction Grant. Only those professional services required by Contractor's employees to assist them in preparing the grant applications in the form required by USOE's Guidelines were obtained. Section VI F of these Guidelines required Contractor to submit a schematic design made up of a plot plan, preliminary sketches and sample specifications. The USOE Project Officer agreed to this method of acquiring the data and the specific firm to be used. This agreement was confirmed in writing by Contractor on March 4, 1969. Such costs are allocable to the captioned Contract under Section B.4 of the Guide as necessary to the overall operation of the Contractor and benefiting only Government work under the captioned Contract.
$28,669.49 of the total was paid for professional services in assisting Contractor's professional and business staff members, whose total salaries were allocated to the Contract, in utilization and placement of existing furniture that had been previously purchased under the Contract; layout of such furniture in offices and specially prepared spaces; specification and procurement of furniture, plants and accessories to be purchased under the Contract for the open areas; location of power and telephone outlets, in accordance with the layout of such furniture; graphics, carpeting, and drapery needs and specifications. The cost of the professional services are specifically allowable under Section G.31 of the Guide. Moreover they are allocable to the captioned Contract under B.4 of the Guide in that they were necessary to the overall operations of the Contractor and benefited only Government work under the captioned Contract. These services were specifically excluded by Paragraph 0.3 of the approved architect's agreement. They are to be distinguished from those that were the subject of Howard Perry's letter of October 30, 1970, which made no mention of disallowance of any costs, but rather led to the addition of Paragraph L to the architect's agreement.

$3,881.91 of the total was paid to the architectural firm to prepare landscape specifications as a part of the site access costs required by the City of Seal Beach. The discussion in a-1 above with regard to the remainder of the access costs is applicable here.

$421.15 was paid for professional services to aid Contractor's staff in preparing specifications for use in obtaining bids for landscape maintenance to be financed by the captioned Contract. Such costs are clearly allowable as they benefited only Government work being performed under the captioned Contract.

b. The procurement of consultant and professional services under the captioned Contract did not require Contracting Officer approval as they did not constitute "subcontracts" as the term is used in the Subcontracting Clause of the captioned Contract. In determining the necessity for Contracting Officer approval of "subcontracts" under the Contract, Contractor used the definitions set forth in the USOE Budget Guidelines and the Federal Procurement Regulations. Specifically excluded from the definition of "subcontract" by these Budget Guidelines are consultants contracts and professional services agreements. Consultant contracts are defined therein as agreements for the reimbursement of fees for professional services paid to individuals and professional services agreements as contracts with business firms for professional services. FPR 1-2.08 defines "contract" as a binding legal relation basically obligating the seller to furnish personal property or nonpersonal services.
c. Under controlling case law, where the actions of a Contractor are necessary for the performance of a contract and meet the other requisites for allowability, the absence of an approval will not result in disallowance.

d. The requirements for prior approval of consultant agreements under the Construction Grant referenced in the Maimone letter of December 11, 1970 can not be extended so as to require approval of consultant agreements under the captioned Contract. The approval requirements of the two documents are separate and distinct notwithstanding that Mr. Maimone was both the Grants Officer under the Construction Grant and the Contracting Officer under the captioned Contract. The Construction Grant clearly required approval of all Consulting agreements; the captioned Contract clearly did not.

e. The captioned Facility Grant was reduced by USOE without compliance with Grant terms. Consequently such reduction is null and void, and the amounts should be restored to the extent necessary to pay any costs disallowed under the Contract.

f. While discrepancies in the partial facts presented in the draft audit report have not been alleged, failure to complete and report on the audits of the other agencies involved has been consistently asserted by Contractor over the past two years. The audits of the other agencies should be completed in accordance with the Auditors' commitments made to Contractor at the entrance conference on May 16, 1972 and confirmed in writing by the USOE Project Officer by memo dated May 25, 1972. Copies of the reports of these audits should be first considered by the Contracting Officer and then made available to Contractor for use in preparing its appeal.

3. CFR 1-15.107 should not have been given any weight. Modification 2, effective December 1968 deleted all reference thereto and substituted OASC-5 dated November 1967. This version of OASC-5 was controlling during the period when all of the costs questioned were incurred and contains no reference to the advisability of advance agreements for professional services.

This appeal is taken pursuant to the disputes clauses of the captioned Contract and Grant. The appellant respectfully reserves the right to amend this appeal.

Dated: July 3, 1974

Southwest Regional Laboratory for Educational Research and Development

BY [Signature]

[Name]
Attachment 50. Notice of Docketing by ASBCA; Rules of ASBCA
SUBJECT: Appeal of Southwest Regional Laboratory for Educational Research and Development

ASBCA No. 19587

Contract No. OEC-4-7-062865-3073

Mr. William H. Hein, Jr., Director

TO: Business & Operations
Southwest Regional Laboratory for Educational Research and Development
4665 Lampson Avenue
Los Alamitos, California 90720

Dear Sir:

An appeal under the above-numbered contract has been received, docketed, and assigned the indicated docket number. In future correspondence, the Board should be addressed as shown in the heading hereof and reference should be made to your ASBCA docket number.

A copy of the Rules of the Board is inclosed for your information and convenience. Your attention is particularly invited to Rule 6, requiring that your complaint be filed within 30 days after the receipt of this docketing notice.

If your appeal involves $25,000 or less, you may elect to have it processed on an accelerated basis under Rule 12. This permits waiver of some procedural steps, a very prompt hearing, if a hearing is desired, and either an oral Board decision after hearing, if the amount involved is $5,000 or less, or a written decision within 30 days of the time the appeal is ready for decision. You may make your choice to proceed under Rule 12 by a letter or in your complaint.

An appearance has been made on behalf of the Government by the Office of General Counsel, Division of Business and Administrative Law, Department of Health, Education, and Welfare, 330 Independence Avenue, S.W., Washington, D.C. 20201.

Your attention is further invited to the provisions of 18 U.S.C. 207 and 283 and related statutes concerning prohibited activities of former officers and employees in connection with contracts and claims involving the United States.

George L. Hawkes
Recorder

cc: Office of General Counsel
Div. of Business & Administrative Law
(1 Incl. - Cy of Notice of Appeal)

Contracting Officer
Contracts/Grants Management Division
Department of Health, Education, & Welfare
National Institute of Education
Washington, D.C. 20308
RULES
of the
ARMED SERVICES BOARD OF CONTRACT APPEALS

Approved 15 July 1963
Revised 1 May 1969
Revised 1 September 1973
RULES OF THE ARMED SERVICES BOARD OF CONTRACT APPEALS

PREFACE


The Armed Services Board of Contract Appeals is the authorized representative of the Secretary of Defense, the Secretary of the Army, the Secretary of the Navy, and the Secretary of the Air Force, in hearing, considering and determining, as fully and finally as might each of the Secretaries:

(a) Appeals by contractors from decisions of contracting officers or their authorized representatives or other authorities on disputed questions, taken pursuant to the provision of contracts requiring the determination of such appeals by the Secretary of Defense or by a Secretary of a military department or their duly authorized representative or board;

(b) Appeals by contractors taken pursuant to the provisions of any directive whereby the Secretary of Defense or the Secretary of a military department has granted a right of appeal not contained in the contract.

When an appeal is taken pursuant to a disputes clause in a contract which limits appeals to disputes concerning questions of fact, the Board may in its discretion hear, consider, and decide all questions of law necessary for the complete adjudication of the issue. In the consideration of an appeal, should it appear that a claim is involved which is not cognizable under the terms of the contract, the Board may make findings of fact with respect to such a claim without expressing an opinion on the question of liability.

When a contract requires the Secretary of Defense or the Secretary of a military department, personally to render a decision on the matter in dispute, the Armed Services Board of Contract Appeals makes and submits findings and recommendations to the appropriate Secretary with respect thereto.
There are a number of divisions of the Armed Services Board of Contract Appeals, established by the Chairman of the Board in such manner as to provide for the most effective and expeditious handling of appeals. The Chairman and a Vice Chairman of the Board act as members of each division. Appeals are assigned to the divisions for decision without regard to the military department or other procuring agency which entered into the contract involved. Hearing may be held by a designated member (administrative judge), or by a duly authorized examiner. The decision of a majority of a division constitutes the decision of the Board, unless the Chairman refers the appeal to the Board's Senior Deciding Group (consisting of the Chairman, Vice Chairmen and all division heads), in which event a decision of a majority of that group constitutes the decision of the Board. Appeals referred to the Senior Deciding Group are those of unusual difficulty, significant precedential importance, or serious dispute within the normal division decision process.

On request of the parties, an appeal involving $25,000 or less may be decided by a single member and a Vice Chairman or the Chairman under a simplified, accelerated procedure in accordance with Rule 12. This procedure contemplates a short decision made in not over 30 days from the time the appeal is ready for decision. Further, in appeals involving $5,000 or less, a single member may decide the appeal orally from the bench at the conclusion of a hearing.

II. Statement of Purpose

Emphasis is placed upon the sound administration of these rules in specific cases, because it is impracticable to articulate a rule to fit every possible circumstance which may be encountered. Those rules will be interpreted so as to secure just and inexpensive determination of appeals without unnecessary delay.

Preliminary procedures are available to encourage full disclosure of relevant and material facts, and to discourage unwarranted surprise.

All time limitations specified for various procedural actions are computed as maximums, and are not to be fully exhausted if the action described can be accomplished in a lesser period. These time limitations are similarly eligible for extension in appropriate circumstances, on good cause shown.
Whenever reference is made to contractor, appellant, contracting officer, respondent and parties, this shall include respective counsel for the parties, as soon as appropriate Notices of Appearance have been filed with the Board.

PRELIMINARY PROCEDURES

1. Appeals, How Taken - Notice of an appeal must be in writing, and the original, together with two copies, may be filed with the contracting officer from whose decision the appeal is taken. The notice of appeal must be mailed or otherwise filed, within the time specified therefor in the contract or allowed by applicable provision of directive or law.

2. Notice of Appeal, Contents of - A notice of appeal should indicate that an appeal is thereby intended, and should identify the contract (by number), the department and agency or bureau cognizant of the dispute, and the decision from which the appeal is taken. The notice of appeal should be signed personally by the appellant (the contractor making the appeal), or by an officer of the appellant corporation or member of the appellant firm, or by the contractor's duly authorized representative or attorney. The complaint referred to in Rule 6 may be filed with the notice of appeal, or the appellant may designate the notice of appeal as a complaint, if it otherwise fulfills the requirements of a complaint.

3. Forwarding of Appeals - When a notice of appeal in any form has been received by the contracting officer, he shall endorse thereon the date of mailing (or date of receipt, if otherwise conveyed) and within 10 days shall forward said notice of appeal to the Board. Following receipt by the Board of the original notice of an appeal (whether through the contracting officer or otherwise), the contractor and contracting officer will be promptly advised of its receipt, and the contractor will be furnished a copy of these rules.

4. Preparation, Contents, Organization, Forwarding, and Status of Appeal File -

(a) Duties of Contracting Officer - Within 30 days of receipt of an appeal, or advice that an appeal has been filed, the contracting officer shall assemble and transmit to the Board, with a copy to the Government trial attorney, an appeal file consisting of all documents pertinent to the appeal, including:
(1) the decision and findings of fact from which appeal is taken;

(2) the contract, including specifications and pertinent amendments, plans and drawings;

(3) all correspondence between the parties pertinent to the appeal, including the letter or letters of claim in response to which decision was issued;

(4) transcripts of any testimony taken during the course of proceedings, and affidavits or statements of any witnesses on the matter in dispute made prior to the filing of the notice of appeal with the Board;

(5) any additional information considered pertinent.

Within the same time above-specified, the contracting officer shall furnish the appellant a copy of each document he transmits to the Board, except those stated in subparagraph (a)(2) above, as to which a list furnished appellant indicating specific contractual documents transmitted will suffice, and those stated in subparagraph (d), below.

(b) Duties of the Appellant - Within 30 days after receipt of a copy of the appeal file assembled by the contracting officer, the appellant shall supplement the same by transmitting to the Board any documents not contained therein which he considers pertinent to the appeal, and furnishing two copies of such documents to the Government trial attorney.

(c) Organization of Appeal File - Documents in the appeal file may be originals or legible facsimile or authenticated copies thereof, and shall be arranged in chronological order, where practicable, numbered sequentially, tabbed, and indexed to identify the contents of the file.

(d) Lengthy Documents - The Board may waive the requirement of furnishing to the other party copies of bulky, lengthy, or out-of-size documents in the appeal file when a party has shown that doing so would impose an undue burden. At the time a party files with the Board a document as to which such a waiver has been granted, he shall notify the other party that the same or a copy is available for inspection at the offices of the Board or of the party filing same.
(e) **Status of Documents in Appeal File** — Documents contained in the appeal file are considered, without further action by the parties, as part of the record upon which the Board will render its decision, unless a party objects to the consideration of a particular document in advance of hearing or of settling the record in the event there is no hearing on the appeal. If objection to a document is made, the Board will rule upon its admissibility into the record and/or the weight to be attached to it as evidence in accordance with Rules 13 and 20, hereof.

5. **Dismissal for Lack of Jurisdiction** — Any motion addressed to the jurisdiction of the Board shall be promptly filed. Hearing on the motion shall be afforded on application of either party, unless the Board determines that its decision on the motion will be deferred pending hearing on both the merits and the motion. The Board shall have the right at any time and on its own motion to raise the issue of its jurisdiction to proceed with a particular case, and shall do so by an appropriate order, affording the parties an opportunity to be heard thereon.

6. **Pleadings**

(a) Within 30 days after receipt of notice of docketing of the appeal, the appellant shall file with the Board an original and two copies of a complaint setting forth simple, concise and direct statements of each of his claims, alleging the basis, with appropriate reference to contract provisions, for each claim, and the dollar amount claimed. This pleading shall fulfill the generally recognized requirements of a complaint, although no particular form or formality is required. Upon receipt thereof, the Recorder of the Board shall serve a copy upon the respondent. Should the complaint not be received within 30 days, appellant's claim and appeal may if in the opinion of the Board the issues before the Board are sufficiently defined, be deemed to set forth his complaint and the respondent shall be so notified.

(b) Within 30 days from receipt of said complaint, or the aforesaid notice from the Recorder of the Board, respondent shall prepare and file with
the Board an original and two copies of an answer thereto, setting forth simple, concise, and direct statements of respondent's defenses to each claim asserted by appellant. This pleading shall fulfill the generally recognized requirements of an answer, and shall set forth any affirmative defenses or counter-claims, as appropriate. Upon receipt thereof, the Recorder shall serve a copy upon appellant. Should the answer not be received within 30 days, the Board may, in its discretion, enter a general denial on behalf of the Government, and the appellant shall be so notified.

7. Amendments of Pleadings or Record - The Board upon its own initiative or upon application by a party may, in its discretion, order a party to make a more definite statement of the complaint or answer, or to reply to an answer.

The Board may, in its discretion, and within the proper scope of the appeal, permit either party to amend his pleading upon conditions just to both parties. When issues within the proper scope of the appeal, but not raised by the pleadings or the documentation described in Rule 4, are tried by express or implied consent of the parties, or by permission of the Board, they shall be treated in all respects as if they had been raised therein. In such instances, motions to amend the pleadings to conform to the proof may be entered, but are not required. If evidence is objected to at a hearing on the ground that it is not within the issues raised by the pleadings or the Rule 4 documentation (which shall be deemed part of the pleadings for this purpose), it may be admitted within the proper scope of the appeal, provided, however, that the objecting party may be granted a continuance if necessary to enable him to meet such evidence.

8. Upon receipt of respondent's answer or the notice referred to in the last sentence of Rule 6(b), above, appellant shall advise whether he desires a hearing, as prescribed in Rules 17 through 21, or whether in the alternative he elects to submit his case on the record without a hearing, as prescribed in Rule 11. In appropriate cases, the appellant shall also elect whether he desires the optional accelerated procedure prescribed in Rule 12.
9. **Pre-Hearing Briefs** - Based on an examination of the documentation described in Rule 4, the pleadings, and a determination of whether the arguments and authorities addressed to the issues are adequately set forth therein, the Board may in its discretion require the parties to submit pre-hearing briefs in any case in which a hearing has been elected pursuant to Rule 8. In the absence of a Board requirement therefor, either party may in its discretion, and upon appropriate and sufficient notice to the other party, furnish a pre-hearing brief to the Board. In any case where a pre-hearing brief is submitted, it shall be furnished so as to be received by the Board at least 15 days prior to the date set for hearing, and a copy shall simultaneously be furnished to the other party as previously arranged.

10. **Pre-Hearing or Pre-Submission Conference** - Whether the case is to be submitted pursuant to Rule 11, or heard pursuant to Rules 17 through 25, the Board may upon its own initiative or upon the application of either party, call upon the parties to appear before a member or examiner of the Board for a conference to consider:

   (a) The simplification or clarification of the issues;

   (b) The possibility of obtaining stipulations, admissions, agreements on documents, understandings on matters already of record, or similar agreements which will avoid unnecessary proof;

   (c) The limitation of the number of expert witnesses, or avoidance of similar cumulative evidence, if the case is to be heard;

   (d) The possibility of agreement disposing of all or any of the issues in dispute;

   (e) Such other matters as may aid in the disposition of the appeal.

The results of the conference shall be reduced to writing by the Board member or examiner in the presence of the parties, and this writing shall thereafter constitute part of the record.

11. **Submission Without a Hearing** - Either party may elect to waive a hearing and to submit his case upon the record before the Board, as settled pursuant to Rule 13. Submission of a case without hearing does not relieve the parties from the necessity of proving...
the facts supporting their allegations or defenses. Affidavits, depositions, admissions, answers to interrogatories, and stipulations may be employed to supplement other documentary evidence in the Board record. The Board may permit such submission to be supplemented by oral argument (transcribed if requested), and/or by briefs, arranged in accordance with Rule 23.

12. Optional Accelerated Procedure — In appeals involving $25,000 or less, either party may elect, in his notice of appeal, complaint, answer, or by separate correspondence or statement prior to commencement of hearing or settlement of the record, to have the appeal processed under a shortened and accelerated procedure. For application of this rule the amount in controversy will be determined by the sum of the amounts claimed by either party against the other in the appeal proceeding. If no specific amount of claim is stated, a case will be considered to fall within this rule if the sum of the amounts which each party represents in writing that it could recover as a result of a Board decision favorable to it does not exceed $25,000. Upon such election, a case shall then be processed under this rule unless the other party objects and shows good cause why the substantive nature of the dispute requires processing under the Board's regular procedures and the Board, acting through a Vice Chairman or the Chairman, sustains such objection. In cases proceeding under this rule, parties are encouraged, to the extent possible consistent with adequate presentation of their factual and legal positions, to waive pleadings, discovery, and briefs.

Written decision by the Board in cases proceeding under this rule normally will be short and contain summary findings of fact and conclusions only. The Board will endeavor to render such decisions within 30 days after the appeal is ready for decision. Such decisions will be rendered for the Board by a single Board member with the concurrence of a Vice-Chairman or the Chairman; except that in cases involving $5,000 or less where there has been a hearing, the single Board member presiding at the hearing may, in his discretion, at the conclusion of the hearing and after entertaining such oral arguments as he deems appropriate, render on the record oral summary findings of fact, conclusions and decision of the appeal. In the latter instance, the Board will subsequently furnish the parties a typed copy of such oral decision for record and payment purposes and to establish the date from which the period for filing a motion for reconsideration under Rule 29 commences.
Except as herein modified, these rules otherwise apply in all respects.

13. **Settling the Record.**

(a) The record upon which the Board's decision will be rendered consists of the appeal file described in Rule 4, and, to the extent the following items have been filed, pleadings, pre-hearing conference memoranda or orders, pre-hearing briefs, depositions or interrogatories received in evidence, admissions, stipulations, transcripts of conferences and hearings, hearing exhibits, post-hearing briefs, and documents which the Board has specifically designated be made a part of the record. The record will at all reasonable times be available for inspection by the parties at the office of the Board.

(b) Except as the Board may otherwise order in its discretion, no proof shall be received in evidence after completion of an oral hearing or, in cases submitted on the record, after notification by the Board that the case is ready for decision.

(c) The weight to be attached to any evidence of record will rest within the sound discretion of the Board. The Board may in any case require either party, with appropriate notice to the other party, to submit additional evidence on any matter relevant to the appeal.

14. **Discovery - Depositions**

(a) **General Policy and Protective Orders.** - The parties are encouraged to engage in voluntary discovery procedures. In connection with any deposition or other discovery procedure, the Board may make any order which justice requires to protect a party or person from annoyance, embarrassment, oppression, or undue burden or expense, and those orders may include limitations on the scope, method, time and place for discovery, and provisions for protecting the secrecy of confidential information or documents.

(b) **When Depositions Permitted** - After an appeal has been docketed and complaint filed, the parties may mutually agree to, or the Board may, upon application of either party and for good cause shown, order the taking of testimony of any person by deposition upon oral examination or written interrogatories before any officer authorized to administer oaths at the place of examination, for use as evidence or for purpose of discovery. The application for order shall specify whether the purpose of the deposition is discovery or for use as evidence.
(c) Orders on Depositions - The time, place, and manner of taking depositions shall be as mutually agreed by the parties, or, failing such agreement, governed by order of the Board.

(d) Use as Evidence - No testimony taken by depositions shall be considered as part of the evidence in the hearing of an appeal unless and until such testimony is offered and received in evidence at such hearing. It will not ordinarily be received in evidence if the deponent is present and can testify personally at the hearing. In such instances, however, the deposition may be used to contradict or impeach the testimony of the witness given at the hearing. In cases submitted on the record, the Board may in its discretion receive depositions as evidence in supplementation of that record.

(e) Expenses - Each party shall bear its own expenses associated with the taking of any deposition.

15. Interrogatories to Parties; Inspection of Documents; Admission of Facts - Under appropriate circumstances, but not as a matter of course, the Board will entertain applications for permission to serve written interrogatories upon the opposing party, applications for an order to produce and permit the inspection of designated documents, and applications for permission to serve upon the opposing party a request for the admission of specified facts. Such applications shall be reviewed and approved only to the extent and upon such terms as the Board in its discretion considers to be consistent with the objective of securing just and inexpensive determination of appeals without unnecessary delay, and essential to the proper pursuit of that objective in the particular case.

16. Service of Papers - Service of papers in all proceedings pending before the Board may be made personally, or by mailing the same in a sealed envelope, registered, or certified, postage prepaid, addressed to the party upon whom service shall be made and the date of delivery as shown by return receipt shall be the date of service. Waiver of the service of any papers may be noted thereon or on a copy thereof or on a separate paper, signed by the parties and filed with the Board.

HEARINGS

17. Where and When Held - Hearings will ordinarily be held in Washington, D. C., except that upon request seasonably made
and upon good cause shown, the Board may in its discretion set the hearing at another location. Hearings will be scheduled at the discretion of the Board with due consideration to the regular order of appeals and other pertinent factors. On request or motion by either party and upon good cause shown, the Board may in its discretion advance a hearing.

18. Notice of Hearings - The parties shall be given at least 15 days notice of the time and place set for hearings. In scheduling hearings, the Board will give due regard to the desires of the parties, and to the requirement for just and inexpensive determination of appeals without unnecessary delay. Notices of hearing shall be promptly acknowledged by the parties. A party failing to acknowledge a notice of hearing shall be deemed to have submitted his case upon the Board record as provided in Rule 11.

19. Unexcused Absence of a Party - The unexcused absence of a party at the time and place set for hearing will not be occasion for delay. In the event of such absence, the hearing will proceed and the case will be regarded as submitted by the absent party as provided in Rule 11.

20. Nature of Hearings - Hearings shall be as informal as may be reasonable and appropriate under the circumstances. Appellant and respondent may offer at a hearing on the merits such relevant evidence as they deem appropriate and as would be admissible under the generally accepted rules of evidence applied in the courts of the United States in non-jury trials, subject, however, to the sound discretion of the presiding member or examiner in supervising the extent and manner of presentation of such evidence. In general, admissibility will hinge on relevancy and materiality. Letters or copies thereof, affidavits, or other evidence not ordinarily admissible under the generally accepted rules of evidence, may be admitted in the discretion of the presiding member or examiner. The weight to be attached to evidence presented in any particular form will be within the discretion of the Board, taking into consideration all the circumstances of the particular case. Stipulations of fact agreed upon by the parties may be regarded and used as evidence at the hearing. The parties may stipulate the testimony that would be given by a witness if the witness were present. The Board may in any case require evidence in addition to that offered by the parties.
21. Examination of Witnesses.—Witnesses before the Board will be examined orally under oath or affirmation, unless the facts are stipulated, or the Board member or examiner shall otherwise order. If the testimony of a witness is not given under oath the Board may, if it seems expedient, warn the witness that his statements may be subject to the provisions of Title 18, United States Code, Sections 287 and 1001, and any other provisions of law imposing penalties for knowingly making false representations in connection with claims against the United States or in any matter within the jurisdiction of any department or agency thereof.

22. Copies of Papers.—When books, records, papers, or documents have been received in evidence, a true copy thereof or of such part thereof as may be material or relevant may be substituted therefor, during the hearing or at the conclusion thereof.

23. Post-Hearing Briefs.—Post-hearing briefs may be submitted upon such terms as may be agreed upon by the parties and the presiding member or examiner at the conclusion of the hearing. Ordinarily they will be simultaneous briefs, exchanged within 20 days after receipt of transcript.

24. Transcript of Proceedings.—Testimony and argument at hearings shall be reported verbatim, unless the Board otherwise orders. Transcripts of the proceedings shall be supplied to the parties at such rates as may be fixed by contract between the Board and the reporter. If the proceedings are reported by an employee of the Government, the appellant may receive transcripts upon payment to the Government at the same rates as those set by contract between the Board and the independent reporter.

25. Withdrawal of Exhibits.—After a decision has become final the Board may, upon request and after notice to the other party, in its discretion permit the withdrawal of original exhibits, or any part thereof, by the party entitled thereto. The substitution of true copies of exhibits or any part thereof may be required by the Board in its discretion as a condition of granting permission for such withdrawal.

REPRESENTATION

26. The Appellant.—An individual appellant may appear before the Board in person, a corporation by an officer thereof, a partnership or joint venture by a member thereof, or any of these by an attorney at law duly licensed in any state, Commonwealth, Territory, or in the District of Columbia.
27. **The Respondent** - Government counsel designated by the various departments to represent the departments, agencies, directorates, and bureaus cognizant of the disputes brought before the Board, may in accordance with their authority represent the interests of the Government before the Board. They shall file notices of appearance with the Board, and notice thereof will be given appellant or his attorney in the form specified by the Board from time to time. Whenever at any time it appears that appellant and Government counsel are in agreement as to disposition of the controversy, the Board may suspend further processing of the appeal in order to permit reconsideration by the contracting officer. Provided, however, that if the Board is advised thereafter by either party that the controversy has not been disposed of by agreement, the case shall be restored to the Board's calendar without loss of position.

**DECISIONS**

28. Decisions of the Board will be made in writing and authenticated copies thereof will be forwarded simultaneously to both parties. The rules of the Board and all final orders and decisions (except those required for good cause to be held confidential and not cited as precedents) shall be open for public inspection at the offices of the Board in Washington, D. C. In accordance with paragraph 3 of the Charter, decisions of the Board will be made upon the record, as described in Rule 13.

**MOTIONS FOR RECONSIDERATION**

29. A motion for reconsideration, if filed by either party, shall set forth specifically the ground or grounds relied upon to sustain the motion, and shall be filed within 30 days from the date of the receipt of a copy of the decision of the Board by the party filing the motion.

**DISMISSALS**

30. **Dismissal Without Prejudice** - In certain cases, appeals docketed before the Board are required to be placed in a suspense status and the Board is unable to proceed with disposition thereof for reasons not within the control of the Board. In any such case where the suspension has continued, or it appears that it will continue, for an inordinate length of time, the Board may in its discretion dismiss such appeals from its docket without prejudice to their restoration when the cause of suspension has been removed.
Unless either party or the Board acts within three years to reinstate any appeal dismissed without prejudice, the dismissal shall be deemed with prejudice.

31. DISMISSAL FOR FAILURE TO PROSECUTE - Whenever a record discloses the failure of the appellant to file documents required by these rules, respond to notices or correspondence from the Board, comply with orders of the Board, or otherwise to indicate an intention to continue the prosecution of an appeal filed, the Board may issue an order requiring appellant to show cause within thirty days why the appeal should not be dismissed for lack of prosecution. If the appellant shall fail to show such cause, the appeal may be dismissed with prejudice.

EX PARTE COMMUNICATIONS

32: No member of the Board or of the Board’s staff shall entertain, nor shall any person directly or indirectly involved in an appeal submit to the Board or the Board’s staff, off the record any evidence, explanation, analysis, or advice, whether written or oral, regarding any matter at issue in an appeal. This provision does not apply to consultation among Board members nor to ex parte communications concerning the Board’s administrative functions or procedures.

EFFECTIVE DATE AND APPLICABILITY

33. These revised rules shall take effect on the first day of the month following the month in which they are approved by the Assistant Secretary of Defense (I&L) and the Assistant Secretaries of the military departments responsible for procurement. Except as otherwise directed by the Board, these rules shall not apply to appeals which have been docketed prior to their effective date.
The following Rules 3 and 4 of the Department of Health, Education, and Welfare are substituted for Rules 3 and 4 of the Rules of the Armed Services Board of Contract Appeals:

(a) Rule 3 (HEW). Forwarding of Appeals. When a notice of appeal in any form has been received by the contracting officer, he shall endorse thereon the date of mailing (or date of receipt, if otherwise conveyed) and within 10 days shall forward said notice of appeal to the ASBCA with copies to the Office of General Counsel and the Procurement Management Division, Department of Health, Education, and Welfare. Following receipt by the Board of the original notice of an appeal (whether through the contracting officer or otherwise), the contractor, the contracting officer and the Office of General Counsel will be advised promptly of its receipt, and the contractor will be furnished a copy of these rules and the rules of the ASBCA.

(b) Rule 4 (HEW). Duties of the Contracting Officer. Following receipt of a notice of appeal, or advice that an appeal has been filed, the contracting officer shall promptly, and in any event within 30 days, compile and transmit to the Procurement Management Division three copies of all documents pertinent to the appeal and shall send one copy of the documents to the Office of General Counsel, including the following:

1. The findings of fact and the decision from which the appeal is taken, and the letter or letters or other documents of claim in response to which the decision was issued;

2. The contract, and pertinent plans, specifications, amendments, and change orders;

3. Correspondence between the parties and other data pertinent to the appeal;

4. Such additional information as may be considered material.

The Procurement Management Division will compile an appeal file from such documents, which file must contain the items enumerated in paragraphs (1) through (4) above, and will promptly, and in any event within 60 days after the appeal is docketed by the Board, transmit the appeal file to the Board. The Procurement Management Division will notify the appellant when it has compiled the appeal file, will provide him with a list of its contents and will afford him an opportunity to examine the complete file at the Office of the Board or at the office of the contracting officer for the purpose of satisfying himself as to the contents, and furnishing or suggesting any additional documentation deemed pertinent to the appeal. After receipt of the foregoing file as it may be augmented at the time of receipt, the Board will promptly advise the parties.

(Effective March 11, 1968.)
Attachment 51. Notification of Submission of Appeal File
William H. Hein  
SWRL  
4665 Lampson Avenue  
Los Alamitos, California 90720  

Dear Bill:  

Attached hereto is an index of documents placed in the ASBCA appeal file (Docket No. 19587). While most of the documents are known to you, it might be useful to review the compiled material. The file will be available to you at either the ASBCA or this office during regular working hours.  

Sincerely,  

[Signature]  

William C. Sullivan, Jr.  
Contracting Officer  

Enclosure
INDEX

PAGE 1

Audit Report No. 3014-09 (Tab A)

Sullivan Letter to Mr. Hein, marked "Mailed 16 January 1974".

Draft SWRL letter dated February 1, 1974.


SWRL letter dated March 18, 1971 (Marked Tab B and including Tab C).

Final decision letter dated June 5, 1974.

SWRL letter dated July 3, 1974 transmitting Appeal.

Sullivan letters to ASBCA Recorder dated July 17, 1974 and July 26, 1974.

PAGE 2

Contract OEC-4-7-062865-3073 with modifications.

PAGE 3


SWRL letter dated January 31, 1972 to Mr. Kaseman, USOE (Tab D).

Skidmore, Owings and Merrill letter dated December 11, 1970 to Mr. Hein; SUM letter dated February 2, 1971; Various SWRL Purchase Orders (Tab M).

H. Perry letter dated February 2, 1971 to Mr. Christensen (Tab L).

R. Christensen letter dated November 6, 1970 to H. Perry with proposed SUM agreement dated October 30, 1970 (Tab K).

R. Christensen letter dated May 1, 1974 transmitting Tab K material.
PAGE 3 (Continued)

J. Maimone letter dated December 11, 1970 to Dm. Schu.

SWRL contract with SCN dated January 17, 1971 (Tab).

R. Christenson letter dated April 11, 1974 transmitting Tab G material.

Copy of final decision letter marked with Tab reference.

PAGE 4


Director, Grant and Procurement Management Division memo to Sullivan dated June 8, 1974.

PAGE 5

SWRL letter dated March 11, 1974 to Sullivan, with attachments.


SWRL letter dated June 17, 1974 to Sullivan.


PAGE 6

OGC (Robbins) memo to Sullivan dated May 13, 1974.
Attachment 52. Complaint Filed with ASBCA
Armed Services Board of Contract Appeals
200 Stovall Street
Alexandria, Virginia 22332

Re: Complaint of Southwest Regional Laboratory for Educational Research and Development
ASBCA No. 19587—Contract Nos. OEC-4-7-062865-3073 & OEG-0-70-5079 (502)

Gentlemen:

Enclosed are the original and two copies of the complaint to be filed on behalf of the Southwest Regional Laboratory for Educational Research and Development in connection with its request for reimbursement under the captioned contracts.

Please let me know if you require any further or other information. Please address all correspondence to my San Pedro office.

Sincerely,

Jerry F. Halverson

JFH:ya
Enc.

cc: Mr. William C. Sullivan
    Mr. William H. Hein

The Appellant, Southwest Regional Laboratory for Educational Research and Development, for its complaint against the United States pursuant to the rules of the Armed Services Board of Contract Appeals, by its Attorney, Jerry F. Halverson, alleges as follows:

I. At all times mentioned in this Complaint, Appellant was and still is a public agency comprised of public agencies of the states of Arizona, California and Nevada, and more specifically is a Joint-Powers Agency duly organized and existing under and by virtue of the laws of the states of California, Arizona and Nevada. It has a principal office and place of business at 4665 Lampson Avenue, Los Alamitos, California 90720.

ASBCA NO. 19587 COMPLAINT
At all times mentioned in this Complaint, Respondent, United States of America, was and still is a corporation.

Respondent, acting pursuant to regulations of the U.S. Office of Education, entered into a no fee cost reimbursement contract (No. OEC 4-7-062865-3073) effective March 1, 1967 for the performance of research and development as a Regional Educational Research and Development Laboratory. The completion date was February 28, 1973.

Said Contract required Respondent to reimburse Appellant for allowable costs incurred in the performance. Modifications 2 and 3 of said Contract provided that the allowability of costs under the Contract be determined "by the Contracting Officer to be allowable in accordance with A Guide for Non-Profit Institutions (GASC-5) dated November 1967."

II.

The Appellant was awarded a grant (No. OEG-0-70-5079) by the U.S. Office of Education for construction of a facility which was designed specifically to facilitate Appellant's educational research and development efforts. Appellant was to utilize the facility in performing the work required under subject Contract. The Grant specified the site, upon which the facility was to be constructed. The site was owned by the Respondent. In the negotiations with Respondent on the site location, Respondent guaranteed the Appellant that access to the site would be furnished at no cost.

Subsequently, the City of Seal Beach, which had control over the street, curbs, gutters, sewers, water and other utility easements, paralleling the south side of the site, notified the Appellant, who in turn notified the Respondent, that site access costs would be assessed against Appellant in
the form of safety and environmental improvements to Lampson Avenue. This Avenue is parallel to the south side of the construction site and is the only street access to the site. Appellant notified Respondent of the City's requirements. After much deliberation, the Respondent notified the Appellant that any access costs in excess of $10,000 would not be allowable under the Grant. Respondent knew that the sum of $10,000 would not be adequate to provide the required access. The costs of performing the work required by the City was $33,461.00.

The Appellant charged the costs of site access work to the said Contract, since the work had to be done and no funds, other than funds from the Department of Health, Education and Welfare are available to Appellant. Prior to charging this work to the Contract, Appellant orally advised Respondent of its intention to do so, and no objection was raised.

Subsequently, Respondent performed an audit, in the normal course of events, with respect to Appellant's expenditures under the Contract. In essence, the audit report determined that the $33,461.00 which was utilized to provide access to the Laboratory building "was not available for use in its research and development activities," that the expenditure was "construction-related," and that it should have been allocated to the construction grant.

The Contracting Officer has adopted the auditor's position.

Whether or not the costs of gaining access to the Laboratory building are "construction-related" is not the issue. The costs are allocable to the said Contract if they meet any of the tests of allocability set forth in Section III, 3.4 of the Guide for Non-Profit Institutions. Clearly, the disputed $33,461.00 for the work necessary to gain access to the Laboratory building meets the test of Section III, 1.
It appears manifest that the questioned expenditure was necessary to the overall operation of Appellant and to its ability to perform the work required by the said Contract. To have vehicular and pedestrian access to Appellant's building seems fundamental. When the Grants Officer refused to allocate more than $10,000 for the work, and when the City refused access unless work costing $33,461 was accomplished, Appellant had no choice but to utilize contract funds.

III.

In order to perform properly the services provided for in the said Contract, Appellant undertook to procure sophisticated research equipment systems. In order to develop information and cost data necessary to prepare bid proposals meeting Appellant's requirements, it was necessary to obtain expert consultative services. These services were provided solely to Appellant's employees who were performing under, and who were paid under, the said Contract.

A total of $24,571.00 was paid for this purpose from contract funds.

Appellant applied for and obtained the written approval of the USOE Grants/Contracting Officer to fund the consulting services from the construction grant. However, the Grants/Contracting Officer and Respondent's Project Officer advised Appellant that a reduction in construction grant funds was under consideration and therefore requested that wherever possible Appellant charge expenditures to the said Contract. The reduction in construction grant funds was made and Appellant allocated the costs of the consulting services to the said Contract.

As a part of the H.E.W. audit report described above, the auditors determined that the costs of the consulting services were "construction-related" and should have been
allocated to the construction grant. The Contracting Officer
has accepted the auditor's determination.

The Appellant is entitled to reimbursement for
these costs. All of these costs were incurred in order to
provide consulting services to Appellant's staff and solely
for the purpose of performing the said contract.

These costs are specifically allowable and allocable
under Section III, B. 4 and G. 31 of the Guide for Non-Profit
Institutions as costs incurred specifically for the said Contract
and as benefiting only the work performed by Appellant for
Respondent under the said Contract. Only those professional
consulting services, necessary to assist Appellant's admin-
istrative and professional staff in fulfilling the requirements
of said Contract, were obtained.

IV

In order to prepare properly Appellant's proposal to
Respondent for a construction grant, Appellant obtained consulting
services from a firm of architects. Only those services necessary
to enable Appellant's employees to develop engineering and cost
data, required for the preparation of the construction grant
application, were obtained. The costs for these services were
$34,584.57, and were allocated by Appellant to the said Contract,
not to the construction grant.

As a part of the H.E.W. audit report described above,
the auditors determined that the costs of these consulting
services were "construction-related" and should have been
allocated to the construction grant. The Contracting Officer
has accepted the auditor's determination.

Appellant is entitled to reimbursement for these costs.
All of these costs were incurred in order to provide consulting
services to Appellant's staff and solely for the purpose of
performing the said Contract.
These costs are specifically allowable under Section III, G. 3 and G. 31, and allocable to said contract under Section III, B. 4, of the Guide for Non-Profit Institutions as costs incurred specifically for the said Contract and benefiting only work performed by Appellant for Respondent under said Contract. Only those professional services necessary to assist Appellant's administrative and professional staff in fulfilling the requirements of the Contract in the form required by Respondent's guidelines (Guidelines and Application Procedures for the Educational Research Facilities Program. Bureau of Research) were obtained. Section VI. F of these guidelines required Appellant to submit, among other things, a schematic design made up of a plot plan, preliminary sketches and sample specifications. Respondent's authorized officials agreed to this method of acquiring the data and agreed to the specific form which furnished the professional consulting services.

V

In order to provide to the new laboratory building the necessary furniture, files and other office equipment, Appellant obtained consulting services for its professional staff members. These services consisted of the development of specifications for and the procurement of furniture, office equipment and accessories to be purchased under said Contract, advice on the location of power and telephone outlets consistent with the layout of the furniture, graphics, carpeting, equipment and draperies, and advice on the utilization and placement of existing furniture and equipment which had previously been purchased under the said Contract.

The costs of these consulting services was $28,664.49 and were allocated by Appellant to the said contract.
As a part of the H.E.W. audit report described above, the auditors determined that these consulting services were "construction-related" and should have been allocated to the construction grant. The Contracting Officer has accepted the auditor's determination.

Appellant is entitled to reimbursement for these costs. All of these costs were incurred in order to provide consulting services to Appellant's staff and solely for the purpose of performing the said Contract.

These costs are specifically allowable under Section III, G. 31 of the Guide for Non-Profit Institutions. They are allocable to the said Contract under Section B.4 of the Guide, in that they were incurred specifically for the Contract and benefited only work performed by Appellant for Respondent under the said contract.

VI

In order to comply with the requirements of the City of Seal Beach for site access, as hereinabove described in Section II, it was necessary for Appellant to provide specifications for the landscaping of the street divider strip, required by the City. Appellant obtained professional consulting services to enable it to prepare those specifications. The cost of these consulting services was $3,881.91 and were allocated by Appellant to the said Contract.

As a part of the H.E.W. audit report described above, the auditors determined that the costs of these consulting services were "construction-related" and should have been allocated to the construction grant. The Contracting Officer has accepted the auditor's determination.

Appellant is entitled to reimbursement for these costs. All of these costs were incurred in order to provide consulting services to Appellant's staff and solely for the purpose of performing the said Contract.
performing the said contract.

These costs, along with the costs alleged hereinabove in Section II, were necessary in order to gain the approval of the City of Seal Beach for access to the laboratory building. These costs were necessary for the overall operation of Appellant and benefited only work performed by Appellant for Respondent under the said Contract. These costs should therefore be allocable to the said Contract pursuant to Section III, B. 4 of the Guide.

VII

In order to maintain properly Respondent's grounds which surround the laboratory building and which are a part of the laboratory facility, it was necessary to obtain professional services for this purpose. In order to determine the nature and extent of the services to be required, and to prepare specifications to be used by Appellant in obtaining bids on the work of maintaining the grounds, Appellant obtained consulting services. The cost of these services was $424.15 and were allocated by Appellant to the said Contract.

As a part of the H.E.W. audit report described above, the auditors determined that these consulting services were "construction-related" and should have been allocated to the construction grant. The Contracting Officer has accepted the auditor's determination.

Appellant is entitled to reimbursement for these costs All of these costs were incurred in order to provide consulting services to Appellant's staff and solely for the purpose of performing the said Contract.

These costs are specifically allocable under Section VII, G. 31 of the Guide and allocable to the said Contract under Section III, B. 4 of the Guide as costs incurred specifically for the Contract and benefiting only work performed by
Appellant for Respondent under the Contract.

VIII

Each of the foregoing claims of Appellant have been denied by the Contracting Officer by his decision received by Appellant on June 10, 1974, from which a timely appeal has been filed by Appellant, dated July 3, 1974, pursuant to the Disputes Clause of the said Contract.

IX

In addition to denying the claims of Appellant on the grounds that each claim is "construction-related", the Contracting Officer has denied the claims on the ground that each claim for consulting services was based upon a subcontract between Appellant and the firm which provided the services, that each such "subcontract" required the approval of the Contracting Officer, and that in no case was such approval granted.

It is the position of Appellant that the procurement of the above-mentioned consultant and professional services under the said Contract did not require the approval of the Contracting Officer as such services did not constitute "subcontract" as the term is used in the Subcontracting Clause of the said Contract.

X

The decision of the Contracting Officer is erroneous for the following reasons, among others:

(a) The expenditures are allowable under and allocable to the said Contract by Appellant under the provisions of A Guide for Non-Profit Institutions.

(b) The consulting services obtained by Appellant as alleged above did not require prior approval of the Contracting Officer.
(c) The Contracting Officer or other agents of Respondent had actual and advance knowledge of the intention of the Appellant to obtain the consulting services alleged hereinabove, except for the services alleged in Section V, and therefore either granted actual or constructive approval to Appellant to obtain such services.

(d) Where a cost contract makes not provision for a fee and provides for reimbursement only, it is inequitable for Respondent to take the benefit of the work and of the savings effected by Appellant, and, at the same time, disallow legitimate costs incurred by Appellant for alleged procedural mistakes in its efforts to perform properly the work under the Contract. The Respondent has not been harmed but has only benefited by Appellant's actions.

XI

Appellant requests a full and complete hearing at which time it shall have the opportunity to present oral and written evidence in support of its appeal and this complaint. WHEREFORE, Appellant requests this Board to sustain its appeal in its entirety, by holding:

(1) That Appellant is entitled to full recovery and reimbursement for its costs alleged hereinabove.

(2) That Appellant is entitled to such further or other relief as to the Board seems proper.

DATED: September 17, 1974

SOUTHWEST REGIONAL LABORATORY FOR EDUCATIONAL RESEARCH AND DEVELOPMENT

By

- 10 -

Jerry F. Halverson
Attorney for Appellant
Attachment 53. Answer Filed With ASBCA
SUBJECT: APPEAL OF Southwest Regional Laboratory for Educational Research and Development  
ASBCA No. 15557 Contract No.GEC-4-7-062665-3073 and OEC-6-70-5079

TO: Jerry F. Halverson, Esquire 
Halverson & Halverson 
29240 Palos Verdes Drive East 
San Pedro, California 90732

Dear Sir:

A copy of the answer filed by the Government in the above-entitled appeal is inclosed.

1 Incl Copy of Govt Answer

George L. Hawkes
Recorder

cc: Office of General Counsel 
Division of Business and Administrative Law 
Department of Health, Education, and Welfare
In the Matter of the Appeal of
SOUTHWEST REGIONAL LABORATORY
FOR
EDUCATION RESEARCH AND DEVELOPMENT
Under Contract DIC-4-7-052555-3073

ASBCA No. 19587

ANSWER

The Respondent, National Institute of Education, Department of
Health, Education, and Welfare, for its answer to the complaint dated
September 17, 1974, of Southwest Regional Laboratory for Education
Research and Development, alleges as follows:

1. Respondent admits the statements as set forth in I of the Complaint,
   but further alleges that all clauses and modifications of the contract must be
   read as to give meaning to each so that they be consistent one with another,
   in order to determine the applicable cost principles.

2. a. Respondent admits the factual pattern as set forth in II of the
   Complaint, up until line 6 on page 3. What respondent knew about the money
   involved at the time is conclusory.

   b. Respondent does not have sufficient knowledge to comment on the
      other sources of funds of Appellant.
c. Respondent denies the allegation in lines 13-15 on page 3 that it was so advised by the contractor.

d. Respondent admits the performance of an audit, and that the contracting officer has adopted the auditor's position.

e. Respondent denies the Appellant's contentions as set forth in line 25 on page 3 to line 28 on page 4.

3. a. Respondent does not have sufficient knowledge with regard to lines 10-17 of III in the Complaint to admit or deny.

b. Respondent admits lines 18-22 of III, but denies the next statement that the contracting officer requested the expenditures be charged to the contract.

c. Respondent denies all the remainder of III except that an audit was performed, and respondent is in agreement with this audit.

4. a. Respondent does not have sufficient information with regards to lines 16-23 on page 5 to admit or deny.

b. Respondent admits the performance of an audit and the agreement of respondent with this audit.

c. Respondent denies that the costs are allowable.

d. Respondent does not have sufficient knowledge with regards to lines 6-17 (page 6) of IV in the Complaint to admit or deny.

5. a. Respondent does not have sufficient knowledge with regards to lines 19-29 on page 6 to admit or deny.

b. Respondent admits the performance of the audit, and the agreement of respondent with this audit.

c. Respondent denies the remainder of V.

6. a. Respondent does not have sufficient knowledge with regard to lines 17-24 on page 7 to admit or deny.
b. Respondent admits the performance of the audit, and the agreement of respondent with the audit.

c. Respondent denies the remainder of VI.

7. a. Respondent does not have sufficient knowledge with regard to lines 11-19 on page 8 to admit or deny.

b. Respondent admits the performance of the audit, and the agreement of respondent with the audit.

c. Respondent denies the remainder of VII.


9. a. Respondent admits lines 9-15 of IX.

b. Respondent denies lines 16-21 of IX.

10. a. Respondent denies (a) of X.

b. Respondent denies (b) of X.

c. Respondent denies (c) of X.

d. Respondent denies (d) of X.

11. Upon information and belief the figures cited by Appellant for the various costs that were deemed not allowable by the Contracting Officer are correct.

12. Respondent further denies any and all other allegations, or parts thereof, contained in the Complaint which have not been specifically admitted.

13. Respondent further alleges as an affirmative defense that there is no jurisdiction in the instant cases over the Office of Education Grant No. OES-0-70-5079(502).

WHEREFORE, Respondent respectfully requests that the Board uphold the decision of the Contracting Officer and deny the Complaint.

Respectfully submitted,

[Signature]
Of Counsel
Attorney for Respondent
Department of Health, Education, and Welfare
Office of the General Counsel
330 Independence Ave., S.W.
Washington, D.C. 20201
(202) 245-5331

OCT 21 1974
DATE
Attachment 54. Summary of Procedures Before ASBCA
TO: Audit Appeal File
FROM: William H. Hein, Jr.
SUBJECT: PROCEDURES BEFORE ASBCA

In a letter received on June 10, 1974, the NIE Contracting Officer affirmed the decision of HEWAA. On July 3, 1974, our Notice of Appeal was sent by registered mail to the Contracting Officer. This Notice meets all the requirements of ASBCA Rules 1 and 2. Set forth below are the remaining procedures of the ASBCA as summarized from Appendix A of ASPR with additional commentary from Government Contracts Practice, California Continuing Education of the Bar, 1964.

1. ASBCA Rule 3 - Within 10 days of the receipt of the Notice of Appeal, the Contracting Officer must forward the original to the Armed Forces Board of Contract Appeals. The Board must notify the Contractor of its receipt.

2. ASBCA Rule 4 - Within 30 days of the receipt of the Notice of Appeal, the Contracting Officer is required to compile and transmit to the Board and the government trial attorney copies of all documents pertaining to the appeal including:
   a. The findings of fact and the decision from which the appeal is taken;
   b. The Contract and pertinent plans, specifications, amendments, and change orders;
   c. Correspondence between the parties and other data pertinent to the appeal;
   d. Statements of any witnesses on the matter in dispute made prior to the filing of the notice of appeal with the Board;
   e. Such additional information as may be considered material.
The Contracting Officer is required to send Contractor a list of the compiled documents and give Contractor an opportunity of examining the documents at the office of the Contracting Officer or the Board. The purpose is to satisfy the Contractor of their contents and to permit it to suggest or furnish additional documents pertinent to the appeal. Following receipt of the compilation, as it may be augmented at the time of receipt, the Board must promptly advise the parties.

3. ASBCA Rule 6a - Within 30 days after Contractor receives notice from the Board that its appeal has been docketed, it must file with the Board an original and two copies of a Complaint, setting out each of its claims in direct, simple, and concise language, and alleging the contractual basis and dollar amount of each claim. Documentary evidence may be included with the Complaint or exhibits. The recorder of the Board serves a copy of the Complaint on the Contracting Officer upon receipt thereof.

4. ASBCA Rule 6b - The Government has 30 days, from the date it receives the Complaint, in which to prepare and file an original and two copies of an Answer. The Answer must set out the defenses to each claim, including affirmative defenses and counterclaims. Upon receipt thereof, the recorder must serve a copy on Contractor.

5. ASBCA Rule 7 - Since the rule as to amendment is liberal, Contractor should have no difficulty amending the Complaint without prejudice at the hearing, provided the amendment is within the scope of appeal. Consequently, a reply to the Answer is probably unnecessary.

6. ASBCA Rule 8 - Upon receipt of the Government's Answer, Contractor must notify the Board whether it wishes to submit its case without a hearing under Rule 11, or desires a hearing as prescribed in Rules 17-25. Although Rule 11 permits oral agreement when the case is submitted without a hearing, the hearing has advantages that a Contractor should not overlook (See 12 below).

7. ASBCA Rule 9 - Makes provision for pre-hearing briefs. The objective of such briefs is to acquaint board members with the facts and to present supporting authorities. Whenever possible, citations to previous decisions of that board should be included.
8. ASBCA Rule 10 - Makes provision for a pre-hearing conference, on the Board's own initiative or the application of either party, to consider:
   
a. the simplification or clarification of the issues;
   
b. the possibility of obtaining stipulations, admissions, agreements on documents, understandings on matters already of record, or similar agreements which will avoid unnecessary proof;
   
c. the limitation of the number of expert witnesses or avoidance of cumulative evidence;
   
d. the possibility of agreement disposing of all or any of the issues in dispute; and
   
e. such other matters as may aid in the disposition of the appeal.

9. ASBCA Rule 14 - Provides for the taking of testimony of any person, by deposition upon oral examination or written interrogatories for use as evidence. It must appear that it is impracticable to present the deponent's testimony at the hearing.

10. ASBCA Rule 15 - Provides for interrogatories to parties, inspection of documents and admission of specified facts.

11. ASBCA Rule 18 - Provides that parties must be given at least 15 days notice of the time and place set for the hearings. Notices of hearings must be promptly acknowledged by the parties. A party failing to acknowledge a notice of hearing shall be deemed to have submitted his case upon the Board record.

12. ASBCA Rule 20 - Provides that hearings are to be as informal as may be reasonable and appropriate under the circumstances. The admission of evidence is based on the generally accepted rules of evidence in Federal nonjury trials. However technical observance of the rules of evidence is not required. Admissibility depends on relevancy and materiality. Stipulations of facts agreed on by the parties may be used as evidence. The parties may stipulate the testimony that would be given by a witness if the witness were present.
13. ASBCA Rule 23 - Provides that post-hearing briefs may be submitted upon such terms as may be agreed upon.

14. ASBCA Rule 26 - Provides that the Contractor may appear before the Board by an officer of the Corporation or an Attorney.

15. ASBCA Rule 27 - Provides that HEW General Counsel will represent the Government before the Board. They must file notice of appearance with the Board. Whenever it appears that the Contractor and Government Counsel are in agreement as to the disposition of the controversy, the Board may suspend further processing of the Appeal to permit reconsideration by the Contracting Officer.

16. ASBCA Rule 28 - Requires the Board's decision to be in writing and authenticated copies forwarded simultaneously to both parties.
Attachment 55. Proposal from Moving Company.
Relocating Your Organization the Bekins Way.

Relocation Proposal for

MR. ROB CHRISTENSEN
SOUTHWEST REGIONAL LABORATORIES
6151 WEST CENTURY BOULEVARD
LOS ANGELES, CALIFORNIA 90045
Introduction

We are pleased to present this proposal on your forthcoming move.

We've made every effort to research and accumulate all the information necessary to make an accurate and practical recommendation.

The following pages represent the results of our survey and preplanning, so vital to an efficient operation. Every phase of the project, including personnel, rolling stock, specialized equipment needed, are covered, as is cost.

We are confident that we can meet your needs and perform the move to your complete satisfaction. We'd welcome the opportunity.

On the following pages, we have tried to give you in as much detail as possible, the information you requested on your forthcoming move.

It goes without saying, that my Supervisors and I are available for future meetings and planning.

Please feel free to call me.

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The Marking System

An efficient marking system, using color-coded, pressure-sensitive labels and arrows (supplied free by [Company]) is a most important time and money-saver. It insures easy and instant location of every item at destination. Color places items in the right areas. A number system then places items in the right rooms and in the exact location. Our Office Moving Instructions show where individual items should be labeled.

Colors: blue, green, orange, red, gray, purple, brown, yellow, black, pink

We recommend that each Department be assigned a "COLOR" by building to coordinate with the Master Moving Overlay.

Our Supervision and Moving Men are trained to work with this system and it can only result in organization and faster placement of each item moved.
A good floor plan is most important. A number of copies should be made and posted in prominent areas, such as elevator lobbies on each floor hallways, etc. The floor plan is essential to quick and accurate placement of your articles at the new facility.

Copies of the floor plan will be cut up into sections representing individual areas or private offices and these will be posted at the door of such offices. This is additional insurance of accurate, placement of furniture and cabinets.

We can use color-coordinated arrows to direct the flow of items in proper sequence to individual areas.
Moving Information for Your Employees

We provide moving instruction sheets for all your employees to convey complete information about the move and their part in it. These sheets explain the marking system and are accompanied by a quantity of pressure sensitive labels.

Note that at the top of the sheet there's space for the employee's name, his tag color and number. This enables each employee to properly tag and mark his own items.

Bekins will supply enough Instruction Sheets for each employee.
The Elevator—Very Important

Efficient elevator operation is a big factor in the cost of your move. Its effect on the total time of the move is very important. So please help us save you money by following these steps:

1. Request the representatives of the elevator maintenance company to be available "on call.”

2. Adjust automatically operated elevators so that each cab will go to the proper floor and return to ground level, instead of going to the top floor or stopping at other floors before returning to the ground level.

3. Remember that large items may be best moved on top of the elevator.

4. Consider the possible economic advantage of an evening or night move.

We will be sure to comply with the policy of each building manager to be sure that ample elevators are reserved for your move.

Paddling and floor coverings will be used where it is necessary, to insure maximum protection for your office furniture and equipment as well as the buildings.
Preliminary Packing

We suggest you ask your employees to take care of their "personal" things, such as contents of their desks and cabinets. It saves time and money. Before the move we'll deliver office moving cartons (nominal cost) in collapsed form, for convenience. They're easy to assemble. The Bekins "Office Moving Instructions," available to all employees, tells exactly what to pack and how. If you need extra help packing just before the move, call us!

It is our understanding that all packing will be performed by SOUTHWEST REGIONAL LABS personnel.

BEKINS will supply ample packing material and containers to complete the job.
Experienced Moving Teams

Ultimately, it's the men or the job who will ensure a smooth move. You know it and we know it. So, keep these points in mind:

1. Our men are regular, bonded Bekins' employees who've had extensive office and industrial moving experience.

2. Many of our men work as teams. These men have worked together on many jobs where the same skills and techniques are required.

3. They call us "the Professionals." Why? We like to think that's because since 1891 we've learned a few things and that much of this accumulated knowledge shows in the skill, concern, attitude, and ability of our men.

Bekins will assign only trained, bonded and experienced office and industrial moving men to your job.

Bekins is a one company owned operation which gives us the big advantage of assembling more professional moving men and equipment than any other moving company.

We will plan to utilize men from our Orange County offices for unloading purposes instead of riding extra helpers back and forth between loading and unloading which means that you pay for the actual unloading labor and not time spent riding in the truck.
Supervision—The Ultimate Key to Satisfaction

Skilled supervision ensures a smooth, efficient, and economical move. We'll supply highly trained and experienced supervisors to adjust manpower to maintain a constant flow of items from beginning to end of the move.

You are cordially invited to join forces with us by stationing "monitors" at the destination location to ensure a smooth and flawless operation.

We will plan to use 4 Working Supervisors on your job: Two at origin and two at destination.

This will insure a steady and organized control of your entire move.
Let's Talk About Insurance

You should feel comfortable that in case of an unavoidable accident you are properly covered:

1. First, we recommend you check your own insurance policy or carrier to see if your coverage extends to your goods in transit. If so, as is often the case, you may be adequately covered. Sometimes a temporary rider can be secured.

2. If your own policy is not completely satisfactory, Bekins will be pleased to offer complete coverage. We can provide insurance coverage at a rate of $2.50 for each $1,000 of total value being moved. If you wish to order insurance, please let us know in good time.

Under California Law, Bekins Legal Limit of Liability is $50 per pound per article.

Additional insurance should be considered.
Dollies—The Workhorses

Dollies, in various shapes and sizes are, of course, the mover's workhorses. But even in this basic piece of equipment such factors as condition, number of units available, and specialization will set one moving company apart from another.

Regular Dolly
Two or four wheel swivel and 18" x 34" size provides maximum maneuverability. All our dollies are protected with cushioning material (carpet or new rubber pads) which prevents mars and scratches.

Platform Dolly
Larger than the regular dolly, this 30" x 42" unit is versatile and very maneuverable. Two front swivel wheels.

Dollies will be the most frequently used piece of equipment on your job.

REKINS is capable of assembling an unlimited number of dollies in order to keep your move on wheels at all times.
Specialized Dollies

Bin Dollies
For heavy items like dies, stock parts, package goods, addressograph trays and general supplies. Two front swivel wheels.

914 Xerox Dolly
Used exclusively for moving 914 Xerox machine. Capacity near 1,000 lbs. Four swivel wheels. With logistic strapping.

Two-Way Swivel Shelving Dolly
Flanged frame and recessed flooring, accommodates tall and/or top-heavy items. Saves you money by allowing us, for example, to move two-drawer stationary cabinets or shelves without being emptied and contents packed separately.
Book/Record Cart—Eliminates Packing Costs

Placing books, files, or records in this unit saves cost of packing and unpacking these items. It’s independent of dolly for maximum versatility.

BEKINS will use this type of cart to transport the books from your library.

Instead of packing and unpacking, they will be placed on carts as they are now placed on the shelves and put back in the same order.
The Office Machine Cart

Several versions available. This convenient piece of equipment, independent of dolly, or built as one unit, can hold at least 6 and up to 12 office machines like typewriters, calculators, etc.

This cart will be used for all office machines as well as small electronic equipment.
Bekins Cartons—
Sturdy and
Inexpensive.

We strongly recommend using our sturdy high-test cartons to ensure safety and avoid damage.

Bekins Tote Boxes
Made of fiberboard or wood and can be used for heavy machine parts or library or stationery supplies. Can usually hold contents of one shelf. Dimensions: 11 1/2" wide, 12" high, 36" long. Stackable.

Bekins Office Moving Cartons
These are 15" x 12" x 16", designed with interlocking bottoms, eliminating need to tape. Test strength: 20 lbs. Ideal for office supplies, and for employees to pre-pack their personal supplies.

REKINS agrees to supply all cartons and packing material at our cost, delivered directly to the moving site.
Safe Rapid Desk Relocation

This specialized equipment ensures safe, rapid moving of desks, without danger of damage. These are significant "time-and-money" savers.

Portable Desk Lift
Especially designed for internal within a building, hand moves of desks and similar objects, to avoid having to up-end desk which requires removal of drawer contents. Desks can be moved "as is."

Executive Desk Box
This fully-carpeted unit, independent of dolly, allows easy handling of executive-type desks that have sizeable overhangs at each end, as shown. A real time-saver.
The Rollo Lift—
Also called the Safe Jack

For items heavier than 800 lbs. Available in several models capable of weights from 1,000 lbs. to 3,500 lbs. Often used for sales and electronic consoles and rotary tub files. Hydraulically operated.
The Heavy and Light Reefer

The heavy reefer can transport safe files, small safes and similar items up to about 1,000 lbs. Ratchet lever allows use of cinch web. Can be used in upright or reclining position. Two small wheels under blade add to controllability. Light reefer performs same function for lighter loads.
Outside Elevator

This "high-rise" platform, often enclosed on three sides, is operated by a fork lift, and is an enormous help in relieving the load on single or restricted elevator systems and in generally reducing the relocation timespan.
Want Someone to Call to Make Sure About Us?

Quite right and good thinking. It's what we do when we're about to invest in an important product or service. Everyone should. It's just good business. We invite you to check with the following:

<table>
<thead>
<tr>
<th>Company</th>
<th>Contact Name</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARKER AIRCRAFT</td>
<td>Mr. Kelly Green</td>
<td>(714) 233-3000</td>
</tr>
<tr>
<td>HUGHES AIRCRAFT</td>
<td>R. P. McGoldrick</td>
<td>644-2611</td>
</tr>
<tr>
<td>ELECTRONIC MEMORIES</td>
<td>Loren Schultz</td>
<td>644-0881</td>
</tr>
<tr>
<td>YAMAHA INTERNATIONAL</td>
<td>Yoshiaki Kobayashi</td>
<td>(714) 522-0911</td>
</tr>
<tr>
<td>NORTHROP CORP.</td>
<td>Bob Evans</td>
<td>767-5181</td>
</tr>
<tr>
<td>AMERICAN HOSPITAL SUPPLY</td>
<td>Bob Mason</td>
<td>(714) 540-6360</td>
</tr>
<tr>
<td>BOISE CASCADE</td>
<td>Russell Jones</td>
<td>641-3300</td>
</tr>
<tr>
<td>HYLAND LABS</td>
<td>Bill Schmidt</td>
<td>625-7551</td>
</tr>
</tbody>
</table>
PROVISIONS OF MOVE

1. BEKINS agrees to meet whatever schedule is convenient for SOUTHWEST REGIONAL LABS. It is our understanding that your move will commence on July of 1972.

2. SOUTHWEST REGIONAL LABS agrees to give BEKINS as much advance notice as possible as to the moving schedule to allow for the commitment.

3. All disconnect and reconnect of plumbing and electricity will be performed by SOUTHWEST REGIONAL LABS.

4. All packing of offices, print shop, supply-stations, and other designated areas will be performed by SOUTHWEST REGIONAL LABS personnel.

5. BEKINS agrees to supply moving cartons and material to SOUTHWEST REGIONAL LABS at BEKINS cost.

6. All storage racks to be disassembled and reassembled by SOUTHWEST REGIONAL LABS personnel. It is our suggestion that all shelves be stacked and banded for easier handling.

7. All electronic equipment will be transported in "air-ride" trucks to insure a shock-free ride.
GENERAL MOVING PLAN

1. Each segment of your move will be surveyed again, in detail, by a team of Supervisors in order to develop a clear understanding of the job prior to the actual move.

2. REKINS suggests that the moves from each Tishman Building be loaded on a Saturday to comply with Tishman Policy and delivered on the following Monday. The vans will be secured in fenced yards at REKINS warehouse.

3. Loading from 11300 LaCienega to commence on Monday and deliver on Tuesday.

4. Loading from 2930 W. Imperial to commence on Wednesday and deliver on Thursday. A total of 4 days loading and 5 days unloading will be necessary to complete your move.

<table>
<thead>
<tr>
<th>DAY</th>
<th>SCHEDULE OF MEN AND EQUIPMENT BY THE DAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>SATURDAY</td>
<td>4151 W. Century 7 loads - 7 vans and Drivers 6 extra Helpers and 1 Foreman</td>
</tr>
<tr>
<td></td>
<td>5156 W. Century 3 loads - 3 vans and Drivers 6 extra Helpers and 1 Foreman</td>
</tr>
<tr>
<td>MONDAY</td>
<td>Unload at Los Alamitos from Tishman Buildings Use - 12 men</td>
</tr>
<tr>
<td>MONDAY</td>
<td>Load 4th floor 11300 LaCienega 7 loads - 7 vans and Drivers 6 extra Helpers and 1 Foreman</td>
</tr>
<tr>
<td>TUESDAY</td>
<td>Unload 4th floor 11300 LaCienega at Los Alamitos Use - 12 men</td>
</tr>
<tr>
<td>TUESDAY</td>
<td>Load 5th floor 11300 LaCienega 3 loads - 3 vans and Drivers 6 extra Helpers and 1 Foreman</td>
</tr>
<tr>
<td>WEDNESDAY</td>
<td>Unload 5th floor at Los Alamitos from 11300 LaCienega Use - 6 men</td>
</tr>
<tr>
<td>WEDNESDAY</td>
<td>Load 2930 W. Imperial 7 loads - 7 vans and Drivers 6 extra Helpers 1 Foreman</td>
</tr>
<tr>
<td>THURSDAY</td>
<td>Unload at Los Alamitos from 2930 W. Imperial Use - 12 men</td>
</tr>
</tbody>
</table>
### RATES

<table>
<thead>
<tr>
<th></th>
<th>Straight Time per hour</th>
<th>Overtime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truck-van and Driver</td>
<td>$12.35</td>
<td>$13.50</td>
</tr>
<tr>
<td>Extra Mover</td>
<td>9.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Working Foreman</td>
<td>10.50</td>
<td>11.50</td>
</tr>
<tr>
<td>Office and Industrial Cartons</td>
<td>approximately 21¢ each</td>
<td></td>
</tr>
</tbody>
</table>

### COST BY BUILDING

<table>
<thead>
<tr>
<th>Building</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>6151 West Century</td>
<td>$2,712.40</td>
</tr>
<tr>
<td>5150 West Century</td>
<td>1,600.00</td>
</tr>
<tr>
<td>11300 La Cienega 4th floor</td>
<td>2,712.40</td>
</tr>
<tr>
<td>11300 La Cienega 5th floor</td>
<td>1,600.00</td>
</tr>
<tr>
<td>2930 West Imperial</td>
<td>2,712.40</td>
</tr>
<tr>
<td>Materials</td>
<td>420.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$11,757.20</strong></td>
</tr>
</tbody>
</table>
It Is Your Move

We believe our proposal is complete, and coupled with our experience and pride of workmanship will produce for you the best moving operation you can buy. We'd like to prove it.

Thank you for calling BEKINS MOVING & STORAGE CO.

Chuck Hart
Attachment 5. Housing Questionnaire
DATE: December 8, 1971

TO: SWRL STAFF MEMBERS

FROM: Geraldine Starkey

SUBJECT: HOUSING INFORMATION

COPIES TO: Directorate

As you know, the Laboratory will be moving to a new facility soon. The actual date will be fixed next January. The Personnel office will attempt to obtain information about housing for those staff members who turn in the attached sheet.

Attachment
REQUEST FOR HOUSING INFORMATION

Name: ___________________________ Division: ___________________________

I will be relocating around: ___________________________ (Month' and Year)

1. Do you

Own or are you buying home
Rent
Own a house/trailer

2. Type of housing desired

Purchase home
Rent house furnished
Rent house unfurnished
Rent apartment furnished
Rent apartment unfurnished
House Trailer

3. Size of house or apartment

Number of bedrooms: ___________________________ Other features desired: ___________________________

4. Location desired:

Beach area
Inland
Rural

5. Specific towns:

Los Alamitos
Redondo Beach
San Pedro
Long Beach
Garden Grove
Westminster
Santa Ana

Huntington Beach
Costa Mesa
Seal Beach
Anaheim
Laguna Beach
Others

6. Type of activities required nearby:

Gradq schools
Junior High
High School
Parochial School
Junior College
University
Special schools
Attachment 57. Guidelines For Reimbursement of Moving Expenses
Guidelines for Reimbursement of Exempt Employees' Moving Expenses

To be eligible for reimbursement of all or part of his relocation expenses in connection with the move to the new laboratory facility in Los Alamos, an exempt employee must meet all of the following criteria:

1. Must be a full-time, permanent employee prior to February 1, 1972.

2. Must not have been moved at laboratory expense since July 1, 1970.

3. Must reside in a location that is a longer commuting distance from the Los Alamos site than it is from his present working location.

4. Must relocate to a residence that is at least 10 miles closer (commuting distance) to the new facility at Los Alamos than his present residence.

5. May move following the commencement of construction. Must complete relocation not later than June 30, 1973, unless an extension of time has been obtained from the Director of Business and Operations prior to this date.

6. Must enter into a written agreement with SWRL whereby he agrees to reimburse the Laboratory for the relocation expenses, if he voluntarily terminates his employment within:
   a. One year, if hired as a full-time permanent employee prior to July 1, 1970.
   b. Two years, if hired as a full-time permanent employee since July 1, 1970 and prior to February 1, 1972.

7. Administrative Policies 120.0 et. seq. will be controlling.
Rationale for Preceding Guidelines

The following is the rationale for the seven guidelines set forth on the previous page:

1. Paying for the move of a part-time or temporary staff member cannot be justified.

2. The official announcement of the Lab move was made on July 1, 1970. All employees moved at Laboratory expense after that date did so with official notice of relocation.

3. There is no justification for paying moving costs for an employee who is closer to his working location after the move.

4. The figure of 10 miles is arbitrary and can be adjusted when the circumstances dictate. The Laboratory should not have to pay the costs of a move that does not bring a staff member a reasonable distance closer to his new working location.

5. This is to provide for those employees who will be moving following a school year of a child.

6. The policies have proved to be workable and are understood by movers.

7. This will reduce the possibility of unreasonable charges for the move of any single individual.
TO: PERSONNEL

REQUEST FOR HOUSING INFORMATION

Name: ___________________________  Division: ___________________________

will be relocating around ___________________________ (Month and Year).

1. Do you
   Own or are you buying home
   Rent
   Own a house trailer

2. Type of housing desired
   Purchase home
   Rent house furnished
   Rent house unfurnished
   Rent apartment furnished
   Rent apartment unfurnished
   House Trailer

3. Size of house or apartment
   Number of bedrooms ___________________________ Other features desired ___________________________

4. Location desired:
   Beach area
   Inland
   Rural

5. Specific towns:
   Los Alamitos
   Redondo Beach
   San Pedro
   Long Beach
   Garden Grove
   Westminster
   Santa Ana
   Huntington Beach
   Costa Mesa
   Seal Beach
   Anaheim
   Laguna Beach
   Others

6. Type of activities required nearby:
   Grade schools
   Junior High
   High School
   Parochial School
   Junior College
   University
   Special schools
EMPLOYEE RELOCATION AGREEMENT

Employee Name: ____________________  Empl No.: ____  Cost Ctr.: _____

Current Address: ____________________  Phone: __________

New Address: ________________________  (where household property is to be delivered)

Desired Date for Move: __________

I hereby agree that if within two years from the date of the moving of my household goods or the Laboratory Relocation Date, whichever is later, I voluntarily terminate my employment or am discharged for misconduct, I will repay to the Laboratory the amount SWRL has paid the moving company on my behalf. I further agree and hereby authorize the Southwest Regional Laboratory for Educational Research and Development to deduct from all monies due and owing to me by the Southwest Regional Laboratory for Educational Research and Development on termination, an amount sufficient to repay such costs as were incurred by my relocation.

In the event of involuntary termination other than for misconduct, the terms of this agreement will not apply.

Notwithstanding anything to the contrary set forth herein, this agreement does not constitute an employment contract that will bind the Southwest Regional Laboratory for Educational Research and Development for the stated two year period or any other fixed term.

Date: __________  Signed: __________  Employee: __________  Employee No.: __________

Approval: __________  Director of Business and Operations: __________  Date: __________

Accounting Use Only:

Check Amount: __________  Acct. Distib.: __________  Approved: __________  Audited: __________
Attachment 58. Bidding Documents -
Custodial and Maintenance Services
NOTICE TO BIDDERS

BID #

HOUSEKEEPING AND JANITORIAL SERVICE

FOR THE

SOUTHWEST REGIONAL LABORATORY FOR EDUCATIONAL RESEARCH & DEVELOPMENT (SWRL)

1. RECEIPT AND OPENING OF BIDS

THE SOUTHWEST REGIONAL LABORATORY FOR EDUCATIONAL RESEARCH AND DEVELOPMENT (SWRL) will receive bids for:

Housekeeping and Janitorial Service at the following address:

Southwest Regional Laboratory
for Educational Research and Development (SWRL)
11300 La Cienega Boulevard
Inglewood, California 90304

Bids will be received until 12:00 p.m., PST, 1972.

Bids shall be sealed and clearly marked with the PR number and sent to the Attention of: Mr. Robert L. Christensen, Business Officer.

On the date and at the time and place stated, the bids will be publicly opened.

2. WORK TO BE DONE

a. LOCATION. The services to be supplied under this Invitation to Bid shall be at the SWRL facility at:

4665 Lampson Avenue
Los Alamitos, California 90720

b. SPECIFICATIONS. The services to be provided shall be in strict conformity with the specifications which are a part of this Invitation to Bid (ITB).
3. **PREPARATION OF BIDS**

   a. Bidders are expected to examine the Instructions to Bidders, specifications, drawings, and other contract documents, including any addenda. Each bidder will be presumed to have made such an inspection as he may deem necessary of the building site in Los Alamitos, California. Bidders may examine the building plans and specifications on file at the Southwest Regional Laboratory's current Los Angeles, California facility.

   b. Each bidder must furnish the information required by the bid form. Each bidder must sign the bid. Erasures or other changes must be initialed by the person signing the bid. Bids signed by an agent are to be accompanied by evidence of his authority.

   c. The price(s) must include Contractor's overhead, profit, and other costs chargeable to the item or work described. Price or prices bid shall conform to the bid form attached.

   d. To constitute a complete bid, all papers, specifications and addenda must be returned with the signed bid form.

   e. The bid format specified in the Instructions to Bidders, attached hereto, shall be precisely followed by the bidders.

4. **AWARD OF CONTRACT**

   a. The contract will be awarded to the responsible bidder who submits the lowest responsive bid.

   b. SWRL reserves the right to reject any or all bids, to consider equal alternates, and to waive irregularities in bids received.

   c. The contract price to be stipulated in the agreement will be determined on the basis of the bid submitted by the bidder to whom the contract is awarded.

   d. A written award (or acceptance of offer) mailed or otherwise furnished to the successful bidder shall be deemed to result in a binding contract without further action by either party.

5. **REQUESTS FOR INTERPRETATION AND CLARIFICATION**

   a. Questions concerning this Invitation to Bid may be directed to:

      Mr. Robert L. Christensen  
      Business Officer  
      SWRL  
      6151 West Century Boulevard  
      Los Angeles, California 90045  
      213 - 670-6384
6. **SUBMISSION OF BIDS**

   a. Bids and modifications thereof must be enclosed in sealed envelopes, addressed to the office specified in Section 1. Telegraphic bids will not be considered; however, bids may be modified by telegraphic notice subject to **LATE BIDS AND MODIFICATIONS CLAUSE**.

   b. Bids shall be made upon the bid forms which accompany this notice. All applicable items shall be filled out. No oral or telephonic bids or modifications of bids previously submitted will be considered. No bidder shall qualify his bid. Letters, papers, or statements of any kind which purport to qualify any bid or modify in any way the conditions of the bid as stated in the Bid Form will be entirely disregarded whether submitted with that bid or at any other time.

7. **FAILURE TO BID**

   SWRL requests that it be informed in the event no bid is to be submitted by a prospective bidder who may receive this notice. If not bidding, all documents shall be returned immediately.

8. **WITHDRAWAL OF BIDS**

   Bids may be withdrawn subject to the following Clause.

9. **LATE BIDS AND MODIFICATIONS OR WITHDRAWALS**

   a. Bids and modifications or withdrawals thereof received at the address designated in Paragraph 1 after the time set for opening of bids will not be considered unless they are received before an award is made, and are sent by registered mail, or by certified mail for which an official dated post office stamp on the original receipt for certified mail has been obtained and it is determined by SWRL that the late receipt was due solely to delay in the mails for which the offeror was not responsible.

   However, a modifications which makes the terms of the otherwise successful bid more favorable to SWRL will be considered at any time it is received and may thereafter be accepted.

   b. Any bid may be withdrawn prior to the scheduled time for receipt and opening of bids stated in Section 1.

10. **QUALIFICATION OF BIDDERS**

   SWRL and/or its consultants may make such investigation as deemed necessary to determine the ability of a bidder to perform the work, and any bidder shall furnish to SWRL all information and data for this purpose as may be requested. SWRL reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy SWRL that such bidder is properly qualified to carry out the obligations of the contract and to complete the performance contemplated herein. Conditional bids will not be accepted.
FORM OF CONTRACT

The Contract between the parties shall be made up and consist of the things listed in the clause hereof entitled, ORDER OF PRECEDENCE, which will constitute the entire agreement between the parties. It may be modified only by a written amendment signed by officials authorized to bind the parties.

CERTIFICATION

Each bidder certifies that his bid is genuine and not sham or collusive or made in the interest of or in behalf of any person not named and that he has not directly or indirectly induced or solicited any other bidder to put in a sham bid, or any person, firm or corporation to refrain from bidding, and that he has not in any manner sought by collusion to secure for himself an advantage over any other bidder.

ORDER OF PRECEDENCE

In the event of an inconsistency or conflict between the provisions of this Notice and other contract documents, the inconsistency or conflict shall be resolved by giving precedence in the following order to:

a. Written addenda and clarification of this Notice to Bidders in inverse chronological order.
b. This Notice to Bidders
c. Instructions to Bidders attached
d. Specifications attached
e. Special Conditions attached
f. General Conditions attached
g. Successful Bidder's Bid
h. Award

Issued at Inglewood, California, this ___ day of _____, 1972.

SOUTHWEST REGIONAL LABORATORY FOR EDUCATIONAL RESEARCH AND DEVELOPMENT

By ____________________________
BID COVER SHEET

Invitation to Bid Number 103-72

Southwest Regional Laboratory
4665 Lampson Avenue
Los Alamitos, California

Dear Sirs:

We agree to secure supplies and provide all labor and equipment for housekeeping and janitorial services at Southwest Regional Laboratory, 4665 Lampson Avenue, Los Alamitos, California, as detailed in the Invitation to Bid Number 103-72, herewith attached and made a part of this document.

Based on the specifications, our bid for MONTHLY contract service is:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Hours Per Day</th>
<th>Hours Per Wk.</th>
<th>Hours Per Mo.</th>
<th>Rate</th>
<th>Monthly Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreman (1)</td>
<td>8</td>
<td>40</td>
<td>174</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Porter (1)</td>
<td>8</td>
<td>40</td>
<td>174</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Janitor (4)</td>
<td>32</td>
<td>160</td>
<td>696</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Labor: __________

Vacation, % of Labor: __________

Grand Total Labor: __________

Overhead, Supervision and Fee, % of labor: __________

Payroll Taxes and Insurance, % of labor: __________

Health and Welfare, $ per employee: __________

Pension, $ per-hour: __________

Total Monthly Bid: __________

Submitted by: ____________________________  Accepted by: ____________________________

For: ____________________________  For: ____________________________

Southwest Regional Laboratory
4665 Lampson Avenue
Los Alamitos, California

Date: __________  Date: __________
INSTRUCTIONS/SPECIFICATIONS
INSTRUCTIONS/SPECIFICATIONS

INSTRUCTIONS TO BIDDERS

These specifications outline the requirements for Housekeeping and Janitorial Services to be supplied by the contractor. Said Contractor shall be required to supply these services in accordance with the enclosed specifications.

The bid document should be bound in one volume containing the bid cover sheet, price information and any applicable descriptive information.

This bid document shall be submitted in duplicate with both copies including identical information.

SPECIFICATIONS.

1. PROPERTY DESIGNATION: The property consists of one 2 story building containing 88,000 square feet of floor space, subdivided as follows:

<table>
<thead>
<tr>
<th>Area</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Carpet</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>First Floor</td>
<td></td>
</tr>
<tr>
<td>Service Area</td>
<td>2400</td>
</tr>
<tr>
<td>Shops &amp; Studio</td>
<td></td>
</tr>
<tr>
<td>Computer Room</td>
<td></td>
</tr>
<tr>
<td>A-V Studio</td>
<td></td>
</tr>
<tr>
<td>Toilets</td>
<td></td>
</tr>
<tr>
<td>Offices, Work Areas &amp; Hallways</td>
<td>32,525</td>
</tr>
<tr>
<td>Second Floor</td>
<td></td>
</tr>
<tr>
<td>Service Area</td>
<td>3,200</td>
</tr>
<tr>
<td>Library</td>
<td></td>
</tr>
<tr>
<td>Toilets</td>
<td></td>
</tr>
<tr>
<td>Offices, Work Areas &amp; Hallways</td>
<td>34,600</td>
</tr>
<tr>
<td></td>
<td>70,325</td>
</tr>
</tbody>
</table>

TOTAL SQUARE FEET 88,000

207
2. REQUIREMENTS: These specifications cover the furnishing of all labor, equipment and supplies necessary to satisfactorily clean and service all areas specified under the property designation to wit:

a. LABOR

(1) CLEANING: The contractor shall provide a minimum of one (1) Foreman and four (4) Janitors to perform all housekeeping and janitorial functions, working 8 hours per day, 40 hours per week, Monday through Friday. Working hours shall be established as 4:00 P.M. to 12:30 A.M.

(2) SERVICE: The contractor shall provide a minimum of one (1) Porter to perform all service functions as well as emergency cleaning, working 8 hours per day, 40 hours per week, Monday through Friday. Working hours shall be established at 7:30 A.M. to 4:00 P.M.

(3) SUPERVISION: In addition to the 240 man-hours per week, the contractor shall provide any and all supervision deemed necessary to satisfactorily complete the terms and conditions of this contract.

b. SUPPLIES: The contractor shall purchase in the owner's behalf all supplies necessary to maintain an effective housekeeping program. These supplies shall include all of the following:

- Detergents, cleaners and disinfectants
- Shampoo, spot removers and stripper
- Waxes, polishes and sealers
- Dusters and wipers
- Wringer, pails and applicators
- Rest room sanitary supplies
- Paper towels and tissue
- Light globes

(1) STORAGE: The contractor shall store all supplies on the owner's premises, maintaining a current inventory at all times.

(2) OWNER CONTROL: The owner reserves the right to specify brand names and or suppliers or purchase directly any of the above mentioned items.

(3) PAYMENT: All supplies purchased by the contractor shall be invoiced and billed directly to the owner by the supplier, following delivery to the owner's property.

(4) CONTRACT TERMINATION: In the event of contract termination, all supplies remain in the custody of, and are the property of, the owner.
17° 1. y.

**EQUIPMENT:** The Contractor shall provide and maintain the following equipment:

Vacuum Cleaners
- 20" Upright, 4
- 12" Upright, 1
- Wet & Dry Pick Up, 1
- Tank Type, Light, 2
- Pile Lifter, 1
- Scrub Machines
  - Dry Foam Carpet Shampooer, 1
  - Floor Machine, 1
- Trucks
  - Dolly, 4 Wheeled, Solid Platform, 2
  - Truck, 2 Wheeled, Hand, 4

(1) **STORAGE:** While this contract is in force, the storage and use of the aforementioned equipment shall be restricted to the Owner's property only.

(2) **REPAIR:** The Contractor shall be responsible for the maintenance and repair of all equipment. The equipment shall be kept in good operating condition in accordance with all safety regulations.

3. **FREQUENCY:** The Contractor shall provide all housekeeping and janitorial service in accordance with the following table of frequencies:

**Daily Service (5 Days)**
- Vacuum all traffic lanes, entry ways and corridors.
- Spot clean rugs and carpet.
- Mop and buff all composition floors in lobbies, corridors and lounges.
- Remove black and scuff marks and stains from floors in the above areas.
- Dust mop all composition floors.
- Dust all flat surfaces such as desks, window ledges, office furniture, and equipment.
- Empty and damp wipe waste baskets, disposal cans and other receptacles.
- Empty and wash ash trays.
- Empty pencil sharpeners.
- Remove all finger marks, smudges, carbon stains, etc., from desk tops.
- Clean drinking fountains.
- Clean and service all sand urns.
- Clean all metal work in elevators, entrances and hand rails.
- Spot clean walls, woodwork, baseboards, glass partitions, glass doors and entrances.
- Sweep stairways as necessary.
Wash blackboards that are cleaned of written work and dust chalk trails. Replace burned-out lamps.

Restrooms
Scrub and sanitize floors. Clean commodes, urinals, sinks, faucets and metal fixtures. Clean and sterilize both sides of toilet seats. Wash all mirrors and spot clean partitions. Wash and polish toilet tissue, paper towel and sanitary napkin containers.

Weekly Service
Vacuum all rugs and carpet. Wash tile walls in restrooms. Dust low ledges, moldings, door and window casings. Clean picture glass and dust frames. Clean telephones.

Monthly Service
Clean and polish all wood furniture. High dust all areas, including air conditioning vents, fans, etc. Vacuum all draperies, furniture and cornices. Dust wood paneling. Clean, wax and buff all composition and tile floor areas to maintain good appearance.

Yearly
Shampoo all carpeting.

4. WORKMANSHIP:
a. All building areas and furnishings shall be cleaned in accordance with good commercial practices.
b. Prompt, courteous response to service requests is the responsibility of the Contractor's personnel.
c. The security of the property during non-business hours is the responsibility of the Contractor.
d. All cleaning compounds are to be mixed and used in accordance with the manufacturer's directions.
e. Surfaces shall be clean and free of deposits prior to the application of waxes, polishes and sealers.
f. Janitor closets shall be maintained in a clean and orderly manner.

g. Flammables shall be stored in approved containers only.

h. Any property damaged or destroyed by the Contractor's personnel during the performance of this contract shall be replaced to the satisfaction of the Owner.
GENERAL CONDITIONS
1. **EQUAL OPPORTUNITY**

During the performance of this Contract, the Contractor:

a. Will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by SWRL setting forth the provisions of this nondiscrimination clause.

b. Will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

c. Will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by SWRL, advising the labor union or workers' representative of the Contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

d. Will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and the rules, regulations, and relevant orders of the Secretary of Labor.

e. Will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Government contracting agency and the Secretary of Labor for purposes of investigations to ascertain compliance with such rules, regulations, and orders.

f. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of such rules, regulations, or orders, this Contract may be cancelled, terminated or suspended in whole or in part, and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
g. Will include the provision of Paragraphs (a) through (b) in every subcontract or purchase order unless exemuted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such actions with respect to any subcontract or purchase order as the United States may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

2. CERTIFICATION OF NONSEGREGATED FACILITIES

(Applicable to contracts and subcontracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity Clause.)

By entering into this contract the contractor or subcontractor certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. He certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The contractor or subcontractor agrees that a breach of this certification is a violation of the Equal Opportunity clause in this contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, rest rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise. He further agrees that (except where he has obtained identical certifications from proposed subcontractors for specific time period) he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity clause; that he will retain such certifications in his files; and that he will forward the following notice to such proposed subcontractors (except where the proposed subcontractors have submitted identical certifications for specific time periods):

NOTICE: TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT FOR CERTIFICATIONS OF NONSEGREGATED FACILITIES

A certification of Nonsegregated Facilities, as required by the May 9, 1967 order (32 F.R. 7439, May 19, 1967) on Elimination of,
Segregated Facilities, by the Secretary of Labor, must be submitted prior to the award of the subcontract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semi-annually, or annually).

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

3. EXAMINATION OF RECORDS

Contractor agrees that Secretary of Health, Education, and Welfare and the Comptroller General of the United States or any of their duly authorized representatives shall, until the expiration of three years after final payment under this Contract, have access to and the right to examine any directly pertinent books, documents, papers, and records of Contractor involving transactions related to this Contract.

4. OFFICIALS NOT TO BENEFIT

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this Contract, or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this Contract if made with a corporation for its general benefit.
CONTRACT WORK HOURS STANDARDS ACT - OVERTIME COMPENSATION

This contract, to the extent that it is of a character specified in the Contract Work Hours Standards Act (40 U.S.C. 327-330), is subject to the following provisions and to all other applicable provisions and exceptions of such Act and the regulations of the Secretary of Labor thereunder.

a. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any workweek in which he is employed on such work to work in excess of eight hours in any calendar day or in excess of forty hours in such workweek on work subject to the provisions of the Contract Work Hours Standards Act unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all such hours worked in excess of eight hours in any calendar day or in excess of forty hours in such workweek, whichever is the greater number of overtime hours.

b. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the provisions of paragraph a, the Contractor and any subcontractor responsible therefor shall be liable to any affected employee for his unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic employed in violation of the provisions of paragraph a in the sum of $10 for each calendar day on which such employee was required or permitted to be employed on such work in excess of eight hours or in excess of the standard workweek of forty hours without payment of the overtime wages required by paragraph a.

c. Withholding for unpaid wages and liquidated damages. The Contracting Officer may withhold from the Government Prime Contractor, from any money payable on account of work performed by the Contractor or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the provisions of paragraph b.

d. Subcontract. The Contractor shall insert paragraphs a through d of this clause in all subcontracts, and shall require their inclusions in all subcontracts of any tier.
SPECIAL CONDITIONS
SPECIAL CONDITIONS

1. Authority of Operators:
Only employees designated by the contractor may perform work under this contract. Such employees must bear the contractor's signed designation.

2. Safety Requirements:
In the performance of this contract, the contractor shall take such safety precautions as the owner or his designee may determine to be reasonably necessary to protect the lives and health of the occupants of the building. The owner or his designee will notify the contractor of any non-compliance with the foregoing provision and the action to be taken. The contractor shall after receipt of such notice immediately correct the conditions to which attention has been directed. Such notice when served on the contractor or his representative at the site of the work, shall be deemed sufficient for the purpose aforesaid. If the contractor fails or refuses to comply promptly, the owner may issue an order stopping all or any part of the work, and hold the contractor in default.

3. Workmen's Compensation:
The contractor agrees to procure and maintain for the contract period, Workmen's Compensation and Employers Public Liability Limits of not less than $100,000 for any one accident and at least $300,000 if more than one person involved.

4. Liability and Insurance Coverage:
The contractor will be solely responsible for injuries or damage to persons or owner's property which may be caused by acts or omissions by him or anyone in his employ while executing the contract and shall maintain personal liability and property damage insurance having coverage for a limit of at least $200,000 per occurrence.

5. Fidelity Bond:
The contractor agrees to procure and maintain for the contract period, fidelity bonding with limits of not less than $5,000 per employee.

6. Evidence of Coverage:
Before commencing work under the contract the contractor shall furnish to the owner a certificate from his insurance company indicating that the coverage outlined in Special Conditions 3, 4, and 5 has been obtained and that it may not be changed or cancelled without written notice to the owner.

7. Contract Termination:
The owner reserves the right to terminate this contract on thirty days written notice. In the event of termination, the owner shall be liable for payment for work performed prior to the date of termination.
SPECIAL CONDITIONS

(Cont'd)

8. **Payment:**
   a. **Invoices:** On the first business day of each month, the contractor shall furnish the owner with a billing invoice for the preceding month.
   
   b. **Payment:** Within 10 days of receipt of contractor's billing invoice, the owner shall make payment for that portion of the contract completed.

9. **Terms:**
   a. The contract shall be valid for one year from the date of acceptance by the owner or his designee.
   
   b. The contractor shall provide all labor, supplies and equipment as detailed in these specifications.
   
   c. To qualify, all bids shall quote unit prices and/or percentages on each item.
   
   d. Contract award will be based on the total bid onl
NOTICE TO BIDDERS
NOTICE TO BIDDERS

BID #100-73

GARDENING SERVICE
F OR THE
SOUTHWEST REGIONAL LABORATORY FOR EDUCATIONAL RESEARCH & DEVELOPMENT (SWRL)

1. RECEIPT AND OPENING OF BIDS

THE SOUTHWEST REGIONAL LABORATORY FOR EDUCATIONAL RESEARCH AND DEVELOPMENT (SWRL) will receive bids for Gardening Service at the following address:

Southwest Regional Laboratory for Educational Research & Development (SWRL)
4665 Lampson Avenue
Los Alamitos, California 90720

Bids will be received until 2:00 p.m., PST, February 1, 1973. Bids shall be sealed and clearly marked with the bid number and sent to the attention of: Mr. James O. Davis, Purchasing Supervisor.

2. WORK TO BE DONE

a. LOCATION. The services to be supplied under this invitation to Bid shall be at the SWRL facility at:

4665 Lampson Avenue
Los Alamitos, California 90720

b. SPECIFICATIONS. The services to be provided shall be in strict conformity with the Specifications which are a part of this Invitation to Bid (ITB).
PREPARATION OF BIDS

a. Bidders are expected to examine the Instructions to Bidders, specifications, drawings, and other contract documents, including any addenda. Each bidder will be presumed to have made such an inspection as he may deem necessary of the building. Bidders may examine the building plans and specifications on file at Southwest Regional Laboratory for Educational Research and Development.

b. Each bidder must furnish the information required by the bid form. Each bidder must sign the bid. Erasures or other changes must be initialed by the person signing the bid. Bids signed by an agent are to be accompanied by evidence of his authority.

c. The price(s) must include Contractor's overhead, profit and other costs chargeable to the item or work described. Price or prices shall conform to the bid form attached.

d. To constitute a complete bid, all papers, specifications and addenda must be returned with the signed bid form.

e. The bid format specified in the Instructions to Bidders, attached hereto, shall be precisely followed by the bidders.

AWARD OF CONTRACT

a. The contract will be awarded to the responsible bidder who submits the bid most advantageous to the Laboratory.

b. SWRL reserves the right to reject any or all bids, to consider equal alternates, and to waive informalities and minor irregularities in bids received.

c. The contract price to be stipulated in the agreement will be determined on the basis of the bid submitted by the bidder to whom the contract is awarded.

d. A written award (or acceptance of offer) mailed or otherwise furnished to the successful bidder shall be deemed to result in a binding contract without further action by either party.

REQUESTS FOR INTERPRETATION AND CLARIFICATION

a. Questions concerning this Invitation to Bid may be directed to:

Mr. James O. Davis
Purchasing Supervisor
Southwest Regional Laboratory for Educational Research & Development
4665 Lampson Avenue
Los Alamitos, California 90720
(213) 598-7661
6. SUBMISSION OF BIDS

a. Bids and modifications thereof must be enclosed in sealed envelopes. Telegraphic bids will not be considered; however, bids may be modified by telegraphic notice subject to LATE BIDS AND MODIFICATIONS CLAUSE.

b. Bids shall be made upon the bid forms which accompany this notice. All applicable items shall be filled out. No oral or telephonic bids or modifications of bids previously submitted will be considered. No bidder shall qualify his bid. Letters, papers, or statements of any kind which purport to qualify any bid or modify in any way the conditions of the bid as stated in the Bid Form will be entirely disregarded whether submitted with that bid or at any other time.

7. FAILURE TO BID

SWRL requests that it be informed in the event no bid is to be submitted by a prospective bidder who may receive this notice. If no bidding, all documents shall be returned immediately.

8. WITHDRAWAL OF BIDS

Bids may be withdrawn subject to the following Clause.

9. LATE BIDS AND MODIFICATIONS OR WITHDRAWALS

a. Bids and modifications or withdrawals thereof received at the address designated in Paragraph 1 after the time set for opening of bids will not be considered unless they are received before an award is made, and are sent by registered mail, or by certified mail for which an official dated post office stamp on the original receipt for certified mail has been obtained, and it is determined by SWRL that the late receipt was due solely to delay in the mails for which the offeror was not responsible.

However, a modification, which makes the terms of the otherwise successful bid more favorable to SWRL will be considered at any time it is received and may thereafter be accepted.

b. Any bid may be withdrawn prior to the scheduled time for receipt and opening of bids stated in Section 1.

10. QUALIFICATION OF BIDDERS

SWRL and/or its consultants may make such investigation as deemed necessary to determine the ability of a bidder to perform the work, and any bidder shall furnish to SWRL all information and data for this purpose as may be requested. SWRL reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy SWRL that such bidder is properly qualified to carry out the obligations of the contract and to complete the performance contemplated herein. Conditional bids will not be accepted.
11. **FORM OF CONTRACT**

The Contract between the parties shall be made up and consist of the things listed in the clause hereof entitled, ORDER OF PRECEDENCE, which will constitute the entire agreement between the parties. It may be modified only by a written amendment signed by officials authorized to bind the parties.

12. **CERTIFICATION**

Each bidder certifies that his bid is genuine and not sham or collusive or made in the interest of or in behalf of any person not named and that he has not directly or indirectly induced or solicited any other bidder to put in a sham bid, or any person, firm or corporation to refrain from bidding, and that he has not in any manner sought by collusion to secure for himself an advantage over any other bidder.

13. **ORDER OF PRECEDENCE**

In the event of an inconsistency or conflict between the provisions of this Notice and other contract documents, the inconsistency or conflict shall be resolved by giving precedence in the following order to:

- a. Written addenda and clarification of this Notice to Bidders in inverse chronological order.
- b. This Notice to Bidders
- c. Instructions to Bidders attached
- d. Specifications attached
- e. Special Conditions attached
- f. General Conditions attached
- g. Successful Bidder's Bid
- h. Award

Issued at Los Alamitos, California, this ____ day of __________, 1973.

SOUTHWEST REGIONAL LABORATORY FOR EDUCATIONAL RESEARCH AND DEVELOPMENT

By __________________________
Dear Sirs:

We agree to provide all labor, supplies and equipment for landscape and grounds maintenance at Southwest Regional Laboratory, 4665 Lampson Avenue, Los Alamitos, California, as detailed in the Invitation to Bid Number 100-73, herewith attached and made a part of this document.

Based on the specifications, our bid for MONTHLY service is $_______.

Submitted by ____________________________
For ____________________________
Date ____________________________

Accepted by ____________________________
For Southwest Regional Laboratory for Educational Research & Development
4665 Lampson Avenue
Los Alamitos, California 90720
Date ____________________________
GARDENING AND GROUNDS MAINTENANCE SPECIFICATION
SOUTHWEST REGIONAL LABORATORY FOR
EDUCATIONAL RESEARCH & DEVELOPMENT

Invitation to Bid Number 100-73

PURPOSE: Provide a contract gardening grounds maintenance program for the Southwest Regional Laboratory for Educational Research & Development.

OWNER: Southwest Regional Laboratory, also known as SWRL and hereafter designated as Owner, does request sealed bids for the purpose of securing complete gardening and grounds maintenance by contract for its property located at 4665 Lampson Avenue, Los Alamitos, California. The Owner reserves the right to reject any and all bids.

CONTRACTOR: The successful bidder shall fulfill all terms and conditions of the contract as stipulated in these specifications, to the satisfaction of the Owner.

AREA DESIGNATION: The property consists of one twelve acre plot subdivided as follows:

<table>
<thead>
<tr>
<th>Area</th>
<th>Planted</th>
<th>Non-Planted</th>
<th>Total</th>
<th>Approximate Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Interior Court</td>
<td>44,000</td>
<td>4,800</td>
<td>44,000</td>
<td>1.0</td>
</tr>
<tr>
<td>Lawns: Lawns</td>
<td>106,000</td>
<td></td>
<td>106,000</td>
<td>6.2</td>
</tr>
<tr>
<td>Seed</td>
<td>165,000</td>
<td></td>
<td>165,000</td>
<td></td>
</tr>
<tr>
<td>Parking Lot</td>
<td>16,250</td>
<td>134,600</td>
<td>150,850</td>
<td>3.4</td>
</tr>
<tr>
<td>Miscellaneous (Walks, Drives, Parkways, Planted Areas)</td>
<td>25,800</td>
<td>43,100</td>
<td>68,900</td>
<td>1.5</td>
</tr>
<tr>
<td>Trees</td>
<td>245</td>
<td></td>
<td></td>
<td>12.1 Acres</td>
</tr>
</tbody>
</table>

Total Square Feet: 44,000

Total Approximate Acreage: 12.1 Acres
LANDSCAPE MAINTENANCE SPECIFICATIONS

PART I - GENERAL

1.1 SCOPE

a. Work Included: Provide landscape maintenance, complete, as specified, to effect optimum plant growth and health, pleasing appearance, in conformance with Architect's plans and directions, and proper operation of irrigation system.

1.2 GENERAL

a. Restrictions: C-27 License; previous experience in large scale, commercial landscape maintenance.

b. Supervision: Qualified foreman on job. Maintain close communication with Owner, regarding maintenance program.

c. Soil Testing: On semi-annual basis, provide Owner with soil tests of selected areas, checking for soil fertility, salt build-up or other toxic conditions. Base soil treatment on recommendations of testing laboratory.

d. Equipment: Furnish labor, materials, equipment, tools required to perform landscape maintenance. Water and electrical power provided by Owner.

e. Certification of Materials: Deliver materials to site in original, unopened containers, with name of product, manufacturer and chemical data on analysis marked on container.

f. Substitutions: No substitutions of specified materials without written consent of Owner.

g. Emergency Telephone Numbers: Throughout duration of Contract, provide Owner with two emergency numbers which can be called when Contractor is not available at job site.

h. Method of Payment: Present monthly invoice, based on one-twelfth of total amount of annual contract, together with labor and material releases. Payments shall be made monthly after completion of work scheduled for month has been verified.

1.3 OWNER-REQUESTED EXTRA WORK

a. Records: Maintain records sufficient to distinguish direct cost of extra work from cost of other operations. Prepare daily reports of extra work on forms furnished by Owner; itemize cost for labor, materials and equipment rental. Include hours worked, rates of pay, names and classifications of
workmen; and size, type and identification number of equipment, together with hours of operation.

b. Labor Costs: Based on prevailing wage scale for each craft or type of workman. Include employer payments for payroll taxes and insurance, health and welfare, pension, vacation, and other direct labor costs.

c. Material Costs: Actual cost of materials purchased and used for extra work, including sales tax, freight and delivery charges.

d. Equipment Rental: Include reasonable rental time that machinery or equipment is required, and equipment rental costs. Use equipment that is in good working order and suitable for its purpose.

e. Basis for Payments: Daily reports, signed by Contractor and Owner, shall become basis for payment. Submit vendors' invoices for materials and equipment rental costs. To totals computed for labor, materials, and equipment rental authorized by Owner, add following percentages:

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor</td>
<td>0.15%</td>
</tr>
<tr>
<td>Materials</td>
<td>0.15%</td>
</tr>
<tr>
<td>Equipment Rental</td>
<td>None</td>
</tr>
</tbody>
</table>

f. Scope: Extra work may include, but not be limited to following:

1. Replacement of plant materials.
2. Major repairs of irrigation system.
   a) Replacement of damaged or worn-out heads, controller, etc.
   b) Replacement of damaged or worn piping systems.
3. Repair or replacement of drains other than storm drains.
4. Repair or replacement of paved walks.
5. Additional treatment for plantings not specifically set forth in this specification

PART II - PLANT MATERIALS

2.1 LAWNS

a. Mowing: Mow at such frequency as required to keep grass below height of 3". Mowing height 1-1/2" to 2". Trim edges.
at each mowing; trim around trees, shrubs, valve boxes, flagpoles, and other items located in lawns. Keep grass from ground cover and non-lawn areas. Remove clippings; clean curbs, gutters, walks and driveways. Keep lawn free from excessive amounts of leaves, papers and debris.

b. Weeds: Treat as necessary to prevent establishment of weeds in lawns.

c. Fertilization: Nine times a year at six-week intervals.

d. Aeration: Aerate prior to August fertilization, with equipment that removes cores of soil. Break up cores and rake out.

e. Grading: Maintain adequate surface drainage in lawn areas. Adjust high and low areas in lawn; resod with same grass mixtures as on site.

f. Pest and Disease Control: Maintain continuous controls against insects, sod web worms, cutworms, grubs and fungus by chemical treatment. Control gophers and moles by trapping or poison gasses.

2.2 GROUND COVER AND SHRUB AREAS

a. General: Check beds weekly for debris and weed growth. Remove leaves, branches, paper and other debris. Remove weeds, including roots, rhizomes and stolons, to prevent establishment of Bermuda grass or other noxious weeds.

b. Trimming: Neatly prune or trim groundcovers away from shrubs, trees, walks and headerboards. Thin out and taper edges of ground covers away from walks and headers; do not trim vertically.

c. Fertilization: Six times annually, spread balanced, pelleted commercial fertilizer over ground cover and shrub areas. Annual application rate: 6 lbs. actual nitrogen. Water in thoroughly after each application.

2.3 TREES

a. General: Provide sufficient water to trees to insure proper growth. Deep water trees at least twice during summer months.

b. Supports: Maintain stakes and guys for support and protection against wind. Inspect ties regularly; adjust at least every six months to permit growth expansion and prevent chafing. Remove staking materials when trees can support themselves.

c. Pruning: Prune to control form and size as directed by Architect. Remove dead wood, low branches, misshapen and misdirected branches, and damaged growth. Begin in September to prune for wind damage. Do major pruning when trees are at most dormant stage.
d. Fertilization: Fertilize trees around drip line in holes drilled 12 inches deep at three foot intervals. Apply fertilizer in February and August, at a rate of one pound actual nitrogen per inch of caliper.

e. Insect and Disease Control: Treat as necessary to prevent disease or infestation of insects, worms, scale or other pests.

2.4 INSECT AND DISEASE CONTROL

a. General: Maintain plant materials in healthy condition, free from insects and disease, through use of appropriate chemicals. Exercise every precaution to protect humans and animals from possible toxic effects of materials used. Take necessary safety precautions where traps or poisonous baits are used for control of rodents and pests.

2.5 TRASH REMOVAL

a. Clean-Up: At least once a week, provide general clean-up operation to remove leaves, twigs, trash and windblown debris from lawn, shrub and ground cover areas. Sweep parking lot, walks and drive.

b. Maintenance Operations: At no additional cost to Owner, remove from site debris accumulated as result of maintenance work.

PART III - IRRIGATION SYSTEM

3.1 GENERAL

a. Operation: Maintain entire system in proper working condition. Adjust watering schedules to reflect seasonal changes in temperature and rainfall.

b. Heads in Lawn: Before mowing or edging lawns, make sure that pop-up heads are in retracted position. At Contractor's expense, replace heads damaged by mowers or edgers. Trim grass away from sprinkler heads to ensure proper operation. Do not use weed killer or remove sod from area around head.

c. Shrub Heads: Trim ground cover away from shrub heads; do not cut holes in ground cover. Adjust riser heights to keep shrub heads just above top of ground covers.

3.2 REPAIRS

a. Malfunctions: Immediately report to Owner's representative any malfunction of controllers, valves, damage to main lines or control wires, and damage caused by others. During period malfunction exists, water manually by whatever means necessary to prevent development of dry conditions.
b. **Damage By Others:** Obtain authorization from Owner before proceeding with alterations to irrigation system or repair of damage or failure caused by other than Contractor or his operations. Such work shall be done under separate agreement.

c. **General Repairs:** Regularly inspect for and repair or replace broken sprinkler heads or risers. Remove foreign matter of any kind to keep heads in proper operating condition. Flush lines when required, to remove foreign matter from system. Correct leaks in heads or valves.

* * * * *
GENERAL PROVISIONS

1. EXAMINATION OF RECORDS

Contractor agrees that Secretary of Health, Education, and Welfare and the Comptroller General of the United States or any of their duly authorized representatives shall, until the expiration of three years after final payment under this Contract, have access to and the right to examine any directly pertinent books, documents, papers, and records of Contractor involving transactions related to this Contract.

2. CONTRACT WORK HOURS STANDARDS ACT - OVERTIME COMPENSATION

This contract, to the extent that it is of a character specified in the Contract Work Hours Standards Act (40 U.S.C. 327-330), is subject to the following provisions and to all other applicable provisions and exceptions of such Act and the regulations of the Secretary of Labor thereunder.

a. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any workweek in which he is employed on such work to work in excess of eight hours in any calendar day or in excess of forty hours in such workweek on work subject to the provisions of the Contract Work Hours Standards Act unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all such hours worked in excess of eight hours in any calendar day or in excess of forty hours in such workweek, whichever is the greater number of overtime hours.

b. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the provisions of paragraph a, the Contractor and any subcontractor responsible therefor shall be liable to any affected employee for his unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic employed in violation of the provisions of paragraph a in the sum of $10 for each calendar day on which such employee was required or permitted to be employed on such work in excess of eight hours or in excess of the standard workweek of forty hours without payment of the overtime wages required by paragraph a.

c. Withholding for unpaid wages and liquidated damages. The Contracting Officer may withhold from the Government Prime Contractor, from any moneys payable on account of work performed by the Contractor or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the provisions of paragraph b.

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d. Subcontract. The Contractor shall insert paragraphs a through d of this clause in all subcontracts, and shall require their inclusions in all subcontracts of any tier.

3. CONTRACTOR AND SUBCONTRACTOR LISTING REQUIREMENT

The Contractor agrees that all employment openings of the Contractor which exist at the time of the execution of the contract and those which occur during the performance of this contract, including those not generated by the contract and including those occurring at an establishment of the contractor other than the one wherein the contract is being performed but excluding those of independently operated corporate affiliates, shall, to the maximum extent feasible, be offered for listing at an appropriated local office of the State Employment Service System wherein the opening occurs and to provide such periodic reports to such local office regarding employment openings and hires as may be required; Provided that this provision shall not apply to openings which the contractor fills from within the contractor's organization or are filled pursuant to a customary and traditional employer-union hiring arrangement and that the listing of employment openings shall involve only the normal obligations which attach to the placing of job orders.
GENERAL CONDITIONS

1. EQUAL OPPORTUNITY

During the performance of this Contract, the Contractor:

a. Will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by SWRL setting forth the provisions of this nondiscrimination clause.

b. Will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

c. Will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by SWRL, advising the labor union or workers' representative of the Contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

d. Will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and the rules, regulations, and relevant orders of the Secretary of Labor.

e. Will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Government contracting agency and the Secretary of Labor for purposes of investigations to ascertain compliance with such rules, regulations, and orders.

f. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or any of such rules, regulations, or orders, this Contract may be cancelled, terminated or suspended in whole or in part, and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
Will include the provision of Paragraphs (a) through (b) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such actions with respect to any subcontract or purchase order as the United States may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

2. CERTIFICATION OF NONSEGREGATED FACILITIES

(Applicable to contracts and subcontracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity clause.)

By entering into this contract the contractor or subcontractor certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. He certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The contractor or subcontractor agrees that a breach of this certification is a violation of the Equal Opportunity clause in this contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, rest rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise. He further agrees that (except where he has obtained identical certifications from proposed subcontractors for specific time periods) he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity clause; that he will retain such certifications in his files; and that he will forward the following notice to such proposed subcontractors (except where the proposed subcontractors have submitted identical certifications for specific time periods):

NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT FOR CERTIFICATIONS OF NONSEGREGATED FACILITIES

A certification of Nonsegregated Facilities, as required by the May 9, 1967, order (32 F.R. 7439, May 19, 1967) on Elimination of
Segregated Facilities, by the Secretary of Labor, must be submitted prior to the award of the subcontract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semi-annually, or annually).

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

3. EXAMINATION OF RECORDS

Contractor agrees that Secretary of Health, Education, and Welfare and the Comptroller General of the United States or any of their duly authorized representatives shall, until the expiration of three years after final payment under this Contract, have access to and the right to examine any directly pertinent books, documents, papers, and records of Contractor involving transactions related to this Contract.

4. OFFICIALS NOT TO BENEFIT

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this Contract, or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this Contract if made with a corporation for its general benefit.
SPECIAL CONDITIONS

1. **CAUTION TO BIDDERS - BID ENVELOPES:** It is the responsibility of each bidder to take all necessary precautions, including the use of a proper mailing cover to insure that his bid price cannot be ascertained by anyone prior to bid opening.

2. **QUALIFICATIONS OF BIDDER:** Bids will be considered only from bidders who are regularly established in the business and who, in the Owner's judgement, are financially responsible and able to provide prompt, satisfactory service.

3. **INSPECTION OF PREMISES:** Bidders should inspect the premises prior to submitting bids in order to be fully aware of the scope of services required to maintain the landscaping and grounds. Failure to do so will in no way relieve the successful bidder from performing in accordance with the strict intent and meaning of the specifications without additional cost to the owner.

4. **HOURS OF WORK:** The work will be performed during the regular business hours of 7:00 A.M. to 4:30 P.M., Monday through Friday, except holidays.

5. **AUTHORITY OF OPERATORS:** Only operators designated by the Contractor may perform work under this contract.

6. **SAFETY REQUIREMENTS:** In the performance of this contract, the Contractor shall take such safety precautions as the Owner or his designee may determine to be reasonably necessary to protect the lives and health of occupants of the building. The Owner or his designee will notify the Contractor of any non-compliance with the foregoing provision and the action to be taken. The contractor shall after receipt of such notice immediately correct the conditions to which attention has been directed. Such notice when served on the Contractor or his representative at the site of the work, shall be deemed sufficient for the purpose aforesaid. If the Contractor fails or refuses to comply promptly, the Owner may issue an order stopping all or any part of the work, and hold the contractor in default.

7. **WORKMEN'S COMPENSATION:** The Contractor agrees to procure and maintain for the contract period, Workmen's Compensation and Employers Public Liability limits of not less than $100,000 for any one accident and at least $300,000 if more than one person involved.
8. LIABILITY AND INSURANCE COVERAGE: The Contractor will be solely responsible for injuries or damage to persons or Owner's property which may be caused by acts or omissions by him or anyone in his employ while executing the contract and shall maintain personal liability and property damage insurance having coverage for a limit of at least $200,000 per occurrence.

9. EVIDENCE OF COVERAGE: Before commencing work under the contract the Contractor shall furnish to the Owner a Certificate from his insurance company indicating that the coverage outlined in Special Conditions 7 and 8 has been obtained and that it may not be changed or cancelled without written notice to the Owner.

10. CONTRACT TERMINATION: The Owner reserves the right to terminate this contract on thirty days written notice. In the event of termination, the Owner shall be liable for payment for work performed prior to the date of termination.

PAYMENT

1. INVOICES: On the first business day of each month, the Contractor shall furnish the Owner with a billing invoice for the preceding month.

2. PAYMENT: Within 10 days of receipt of Contractor's billing invoice, the Owner shall make payment for that portion of the contract completed.

TERMS

1. The contract shall be valid for 18 months from the date of acceptance by the Owner or his designee.

2. The Contractor shall provide all labor, supplies and designated equipment as per these specifications.

3. To qualify, all bids shall quote a unit price on each item.

4. Contract award will be based on the aggregate monthly bid only.
Attachment 59: Example of Architectural and Engineering Criteria for Special Purpose Areas
ARCHITECTURAL CRITERIA

SPACE: A-V Production Studio

Square Feet
1000 - 1200

SPATIAL RELATIONSHIPS

Contiguous to A-V Control and Audio Production; visual access provided (described below).
Adjacent to A-V Production Storage; providing 5' wide access to facility exterior.
Access to Film Storage and Photo Lab areas.
(See NOTES below)

PHYSICAL

Ceiling height minimum 15 feet, single span.
Floor non-reflecting; without seams; level to 1-in-10; suspended construction (insulated against vibration).
Walls covered with acoustical material to within 5' of floor.
Door (one only, to traffic) to be 6' wide minimum, with no center member.
Ramps, if required, should be as near the AV Control "end" as possible, to avoid interference with programming space; stairs not acceptable.
Provide sound locks and warning lights at all entries.
Provide double glazed window, 4' high by 20' long, on the common AV Control wall; window to be slanted downward 10° on studio side (first priority).
Provide pipe grid 12' above floor; 4' on centers, covering 80% of studio area eliminating ramp and window areas. Provide back-light rail on three perimeter walls.
Cyc drapes required on two walls minimum.

ENVIRONMENT

Two lighting systems required: production package and standard "house" lighting. Separate service required.
(See engineering data.)
Acoustically isolate from all exterior spaces (including AV Control).
Acoustically isolate all air handling equipment and ducts.
Independent cooling system required (see engineering data).
Temperature range acceptable 75±2°, humidity acceptable 40-60%.
SPACE: A-V Production Studio

SERVICES

Power distribution system defined in engineering data.
Multi circuits required, 20-amp service.
Control of "house" lighting to be provided within the Studio area, with duplicate control (master) in the A-V Control area.
Control system for production lighting provided in engineering data.

NOTES

1. This studio should be located away from any noise or vibration producing activity, including heavy equipment areas, restrooms, and mechanical rooms.

2. Conduit is required for camera cables and audio cables to the A-V Control area. (See engineering data).

3. Equipment used in this area will include technical lighting equipment, audio equipment, videotape recording equipment, motion picture filming equipment, and still photography equipment. Sets and properties, carts, mobile ladders, projection equipment, and musical instruments may also be used in this facility.

4. Conduit, junction boxes and other signal carrier hardware as noted in engineering data.
ENGINEERING CRITERIA

SPACE: AV Production Studio

STRUCTURAL SPECIFICATIONS

Flooring

To isolate the studio from building vibration and noise, suspended construction is necessary. Fiberglass, cork and equivalent materials have been found successful by the Consultant when used as subfloors. To guard against camera movement on the television picture, cameras should be mounted on three-wheeled dollys and the entire floor must be level (seamless construction is advised). If the floor is on-grade and a poured topping is applied, the topping should be 5", or thicker to prevent ground moisture from affecting the level of floor surfaces. The floor should be a middle-tone gray (numbers 5 to 7) based on the ten-step television gray scale. Since paint will wear unevenly, and may chip or crack from heavy equipment used in the area, coloring should be natural to the flooring material. In addition, flooring must have a low-gloss or non-gloss finish to help guard against glare from studio lighting during production.

The texture of the floor should be smooth and should resist permanent indentation, primarily to facilitate precise camera movement. The floor should be acoustically "soft" to preclude microphone pick-up or contact noise. The floor must resist moisture and stains. It is advisable that studio floors also permit temporary patterns to be painted on the surface with tempera colors, and removed with soap and water at completion of a production. The floor should require minimum maintenance and should not harbor dust particles which may be harmful to equipment.

Accidental damage to the flooring material is to be expected; thus, methods of repair must be considered. For example, if the floor is gouged by a light fixture dropped from the grid, repair should be possible without disturbing the level quality of any area and without introducing seams.

Recommended flooring materials include treated concrete, synthetic resins, and oxychloride.

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Walls and Ceilings
The most significant contribution of walls and ceilings to studio quality is acoustical control. The overall noise level of the unoccupied studio must not exceed 20 db. Reverberation must be minimized without fully "deadening" the studio.

Occasionally, acceptable acoustical conditions can be attained by using cellular spacing units strategically placed in the studio; however, in most cases, this treatment has proven unsatisfactory for sophisticated production. It is preferable to cover the walls, ceiling, and ductwork with acoustical materials.

The proper selection of materials involves an examination of maintenance requirements. Dust filters with NBS efficiency ratings of 40% or better will resolve some of the maintenance problem, but all acoustical materials have surface cover which harbor embedded dirt particles. The acoustical material selected should lend to cleaning or painting, without reduction of sound absorbing power. If painting is desired, sprayed or troweled fiber material is recommended.

The difficulty encountered in application of a specific acoustical material is an important factor, primarily in terms of repair. Many acoustical materials are easily damaged by accidentally gouging with equipment, lights, or even hands. Some of the danger of this kind of damage may be reduced by limiting the use of the material to heights above five (5) feet from the floor.

Sprayed, foamed, or loose fiber materials are inedible and should not be placed above reach level where children will occupy the studio.

Doors and Windows
The AV Production Studio will have two doors. Each door must be at least six feet wide to accommodate studio equipment and properties. There must be no center member, door sills, or other obstructions in doorways.

Each door will open into the studio from a sound-lock which has been acoustically treated. The Consultant recommends either bonded fiber boards or tiles with drilled holes as
A fixed grid is specified for suspending lighting elements and microphones in the studio. The grid should be placed 12 feet above the floor four ft. on centers, covering 80% of the studio area and eliminating ramp and window areas. The grid is to be constructed of ASA Schedule 40 pipe, or equivalent.

A drapery track (cyclorama) is required at a minimum of two walls of the studio (excluding window wall). For this purpose, trolley rails shall be placed at grid height, not more than two feet out from the walls.

A back-light rail is required on three walls (excluding window wall) and shall be constructed of ASA Schedule 40 pipe, or equivalent. It shall be placed at grid height, and shall be no more than three feet from the wall surface. The back-light rail must be one foot nearer to the interior of the studio than the cyclorama trolley rail.

The Consultant recommends six primary considerations in the design of an air distribution system for the AV Production Studio:

1) the studio must have dual independent controls of temperature and on/off controls.

2) high sensible heat loads will be generated.

3) studio temperature must be maintained at 75 ± 2 degrees F.

4) humidity must be maintained at 40-60%.

5) dust control is essential.

6) the system must not raise the studio noise level above 20 db.
The high sensible heat loads in the studio predicate an air change rate of 15-20 changes per hour. Three of these changes must be ventilation; thus 20% of the studio air will be "outside" air. This 20% is the primary source of moisture content in the studio air. Design of the air distribution system should relate to the potential effects of local climate on the specified 40-60% humidity. Ranges exceeding this specification may cause damage to sensitive electronic equipment.

Introduction of dust and lint particles into the studio area must be avoided to protect sensitive electronic equipment and porous acaustical materials. Filters should be approximately 40% or better NBS efficiency. Electrostatic filters are not recommended unless precautions are taken against the generation of transient voltages, which may adversely affect television production equipment.

The noise level of the unoccupied studio must not exceed 20 db. Operation of the air distribution system must not cause this level to be exceeded. Measurement of equipment noise should be accomplished within apparatus which reflects the sensitivity of studio microphones (flat frequency response from 20 to 15,000 hz). Normal sound measuring apparatus approximates the response of the human ear which is considerably less sensitive. Its use may result in microphone pick-up of equipment noise near air outlets and returns.

Air movement is a critical factor in system noise control. A low-pressure, low-velocity system is recommended for top efficiency and silent operation at lowest cost.

Ductwork will affect air velocity, and the distribution pattern and location of air outlets and returns should be planned to eliminate counter-currents in the studio. Sensitive microphones may pick up turbulence and whistles within ducts caused by rough edges, holes, poor turns, or improperly installed dampers. Acaustical treatment of ductwork should include suspension in vibration mountings; acaustical lining of ducts, attenuator boxes between rooms, and acaustical sealing of wall and floor.
MECHANICAL SPECIFICATIONS

slab openings. Supply fan discharge and return and exhaust fan inlets should be through attenuator boxes, and duct-fan connections should be flexible, non-metallic material for noise control. Piping must be supported from floor or wall mounted stands, rather than light structure elements. Precautions against vibration include suitable vibration mountings for all piping and flexible connections used at pumps and compressors. The velocity of the pipe contents must be low enough to prevent microphone pick-up.

Air distribution equipment rooms must be structurally separated from the AV Production Studio. All equipment should be mounted on vibration-eliminating supports.

Thermal considerations

The required tonnage of air conditioning for the studio may be calculated by determining and converting total BTU's of lighting, equipment, ventilation, and 20% for construction and occupants as follows:

Equipment (per attached list) 9,000 BTU's/hour
Lighting - 25,000 watts 85,000 BTU's/hour

NOTE: Initially, the studio shall be supplied with 15,000 watts of 3200 degree Kelvin, 500 hour tungsten-halogen lighting elements. However, the anticipated maximum at any future time shall be 25,000 watts of the same type lighting elements.

Personnel - 15 persons at 500 BTU's ea. - calculated total = 7,500 BTU's/hour max. per person

ELECTRICAL SPECIFICATIONS

Power

The lighting elements to be used in this studio will number from 10-25. It is highly probable that there will be 15-20 lights operating simultaneously for most studio applications. Each of these tungsten-halogen lighting elements require 10 amps. Therefore, with 25 overhead lights and several (3-4) floor lights operating, it is obvious that this small studio will require slightly more than 350 amperes of service. All lights of the type alluded to above require 120V for their operation.
## EQUIPMENT LIST

**SPACE:** AV Production Studio

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<th>Qty</th>
<th>Item</th>
<th>Volts</th>
<th>Amps</th>
<th>Watts</th>
<th>BTU's</th>
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<td></td>
<td>1000</td>
<td>3400</td>
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<tr>
<td>2</td>
<td>Ampex 7000 VTR's</td>
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<td>120</td>
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<td>200</td>
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</tr>
</tbody>
</table>
ELECTRICAL SPECIFICATIONS

Four 12' battens with plugging strips shall be installed on a Schedule 40 pipe grid mounted to the ceiling of this studio. Each batten will contain five 18" 25 amp, 3 pole pin connectors on pigtailed. Each batten shall mount directly to the 1-1/2" pipe grid with suitable mounting brackets. The four (4) battens shall be connected by conduit to a wall mounted patch panel located on the window wall of the studio opposite the side entrance to the studio. Three wall outlet boxes with two 18", 20 amp, 3 pole pin connectors shall be installed on the back wall (under-window) and the two side walls respectively. These wall boxes should be connected by conduit to the overhead lighting system conduits or directly to the patch panel.

Other 120V duplex outlets shall be installed on 10' centers 18" above the floor on each studio wall. Each of these outlets must be capable of supplying 20 amps each.

The power to the studio lighting circuits should be supplied with separate circuits from those supplying the electronic equipment in the AV Control room.

In addition to the studio lighting system, "house" lights shall be provided (fluorescent fixtures) which can be controlled by switches located in the studio and AV Control.

Signal:
Two 1.5 - 2" conduits shall be run from the AV Control room to the back wall (opposite window) of the studio. These signal carriers are for the cameras and must be terminated in 12" x 12" x 3" (typical) wall boxes.

A conduit (3") from the TV studio to the telephone room shall be required.

In addition, if feasible, two 1.5" conduits from the AV Control (underfloor) to the center of the ceiling in the studio would greatly facilitate the employment of overhead microphones.

A means, such as a wall box (two-sides) mounted in wall between AV control and the studio, should be provided for connecting camera cables directly to the back of the Control consoles located in the AV Control room (see Structure next section).
ARCHITECTURAL CRITERIA

SPACE: Audio Production Studio

Square Feet 300-350 sq. ft.

SPATIAL RELATIONSHIPS
Contiguous with A-V Control area and A-V Production Studio area.
Locate away from heavy equipment areas, restrooms, mechanical rooms, or other noise and vibration producing activities.

PHYSICAL REQUIREMENTS
All surfaces must be acoustically treated to dampen, but not deaden, sounds.
Ceilings, walls, floors and doors must be constructed to prevent entrance of noise and sounds from any direction.
Floor should be suspended construction.
Visual access is required from and to the A-V Control area.

ENVIRONMENT
Lighting should be adjustable 60 to 100 footcandles, if contiguous to A-V Production Studio.
Acoustics are prime consideration in this area; no dead spots and no reverberation-producing surfaces are acceptable.
Ventilation of this area is required to eliminate smoke odors.

SERVICES
Provide 120V outlet, duplex.
Do not connect to general telephone/intercom system (see below).

*This space should be acoustically treated to allow for natural reproduction of sound.
NOTES

1. Seating and work surface required for four persons; all furniture should be movable.

2. Conduit required to A-V Control (see engineering data).

3. Provide station for headset intercom system; connecting to A-V Control and to A-V Production Studio.

4. Equipment in this area will be seating, work surface, microphones and microphone support equipment.

5. Entrance should be sufficiently clear to permit frequent movement of tables, armchairs, musical instruments, etc.

6. Conduit, junction boxes and other signal carrier hardware as noted in engineering data.
ENGINEERING CRITERIA

SPACE: Audio Production Studio

STRUCTURAL SPECIFICATIONS

All walls within this area should be designed so that they attenuate sound transmission equal to an STC rating of 55-60.

All surfaces must be acoustically treated to dampen, but not deaden, sounds; i.e. to allow for natural reproduction of sound.

The Audio Production Studio should be provided with a double glazed (sound control) window 4' high and 20' long on the common A-V Control wall. This window shall be slanted downward to a 10-12 degree angle on the studio side, for the purpose of preventing glare.

Acoustic treatment as stated in the A-V Production Studio "Engineering Criteria" shall also apply to the Audio Production Studio.

MECHANICAL SPECIFICATIONS

Thermal considerations

Equipment and lighting within this area shall produce a negligible amount of dissipated heat. However, a maximum of eight personnel will be operating in this Studio at one time. Thus, AC capacity should allow for:

- 8 persons @ 500 BTU's/hour each -
- Total 4,000 BTU's/hour

ELECTRICAL SPECIFICATIONS

Power

Locate duplex outlets on 8'-10' centers 18' above floor surface on each wall in Audio Studio.
SPACE: Audio Production Studio

ELECTRICAL SPECIFICATIONS continued

Provide adjustable lighting control as this studio should double as a TV announce facility. Lighting should be adjustable from 25 ft. candles to 80 ft. candles.

Signal
This area must have direct signal cable access to the A-V Control room. Use underfloor duct or conduit and floor mounted junction boxes to tie these two areas together. Wall mounted 12" x 12" x 4" utility boxes will also meet the above requirements. Two 3" conduits or their equivalent should be used to supply the required access.
Attachment 60. Functional Specifications for Component of R&D Equipment System
COLOR STUDIO CAMERA SYSTEM

1.0 General Description

1.1 This specification describes a color studio camera capable of producing broadcast quality pictures with a minimum of operating adjustments and simplified set-up procedures.

1.2 The color studio camera shall be of three separate-mesh plumbicon (one-inch) design.

1.3 The color studio camera shall consist of: camera head and zoom lens, camera cable, camera remote control unit, and interconnecting cables and accessories.

1.4 The camera head shall be provided with a 10:1 zoom lens and professional operating zoom lens control system. The zoom lens iris shall be servo-operated from the remote camera control unit.

1.5 The camera head shall be equipped with a 9-inch rectangular viewfinder.

2.0 Mechanical Description

2.1 The camera head dimensions (excluding lens) shall not exceed 30 inches deep, 12 inches wide and 18 inches high.

2.2 Weight of the camera head assembly (excluding lens) shall not exceed 75 lbs.

2.3 The optical color separation system shall be sealed and require no adjustments.

2.4 Tally lamps shall be provided at the top front of the camera housing and inside the viewfinder hood.

2.5 The remote camera control unit shall be rack-mountable in a standard 19-inch electronic rack and shall not require more than 7 inches of rack space.
2.6 The camera system shall be supplied with a separate 2-line vertical aperture equalizer. The aperture equalizer shall mount in a standard 19-inch electronic rack and shall not require more than 3.5 inches of rack space.

2.7 The camera optical system shall have filtering to reduce polarization effects.

3.0 Electrical Specifications

3.1 The camera system shall be designed for operation from a nominal power input of 120 volts AC, 50/60 Hz. It shall operate satisfactorily with excursions of 108 to 130 volts. Nominal power consumption shall not exceed 275 watts.

3.2 The camera shall be completely solid-state excepting plumbicon and cathode ray tubes.

3.3 The camera shall operate at a 525 line 60 field sweep standard.

3.4 The camera head and remote camera control shall be provided with intercom jacks and provisions shall be available to interconnect the camera intercom system to a standard 2-wire studio intercom system with DC imposed. Intercom jacks shall have anti-sidetone and gain controls for each headset.

3.5 Camera system resolution (luminance) shall not be less than 500 lines at the center or 400 lines in the corners before aperture correction.

3.6 Window signal tilt shall be less than 2% horizontal and vertical.

3.7 Geometric distortion shall be less than 1% within a circle having a diameter equal to picture height; less than 2% elsewhere.

3.8 On-axis linearity shall be 1% or better.

3.9 Registration error shall be less than 0.15% within a circle whose diameter is 80% of picture height.

3.10 The camera shall be equipped with adjustable gamma circuits for 0.3, 0.5, 0.7 and unity gamma correction.
3.11 Signal-to-noise ratio shall be equal to or better than 46 dB.

3.12 The camera remote control shall have controls including: IRIS or master GAIN, master PEDESTAL, individual RED, GREEN, BLUE GAIN controls; individual RED, GREEN, BLUE PEDESTAL controls, VERTICAL and HORIZONTAL CENTERING controls for red and blue channels.

3.13 The camera control shall contain electronic RGB sequencer circuitry for use with an external waveform monitor.

3.14 A viewfinder input selector shall be provided on the camera head to permit viewing red, green, blue and Y signals, or combinations of signals for normal operation or set-up/registration adjustments.

3.15 The camera system shall meet all operational NTSC and FCC color broadcast standards.

4.0 Special Requirements

4.1 The color camera system shall be furnished with a camera cable. The minimum length of this cable shall be 75 feet. The contractor shall supply and install a wall-mounted cable hanger for each camera cable supplied. This hanger shall support the cable in such a manner as to prevent the cable from being deformed beyond normal bend radius at the supporting point during storage.

4.2 A close-up adaptor and retaining ring to permit focusing the camera zoom lens to 24 inches shall be furnished. Only one such lens per installation need be supplied.

4.3 The color camera will be utilized with an external encoder. This encoder is specified elsewhere.

4.4 The camera system shall be furnished with manufacturer recommended set-up charts, color balance charts, and other devices required to simplify and facilitate set-up and alignment of the camera system.

4.5 All accessory extender boards, special extender harnesses, specialized tools or alignment gauges shall be furnished with the camera system. Only one such set shall be required per installation.
4.6 The color camera head shall be equipped with broadcast quality plumbicon tubes. Second grade industrial tubes will not be acceptable.

4.7 The contractor shall be required to interface the electronic RGB sequencer to the waveform monitor, specified elsewhere.

4.8 The vertical aperture corrector shall be the model recommended by the camera manufacturer for best results with their camera.

4.9 The camera system will be mounted on existing customer supplied pan/tilt head, pedestal and dolly. The contractor will be responsible for installing the camera equipment to the customer supplied mounts.

4.10 Manufacturer: General Electric model TE-201A or IVC model 300A or equal.
Attachment 61. Functional Specifications for R&D Equipment System
STUDIO TELEVISION SYSTEM REQUIREMENTS

The following requirements and design criteria for the basic Studio Television equipment are derived from the consultant's analysis of SWRL's present and future activities. Furthermore, the system described herein should be considered a basic system. This basic system configuration will be adequate for the production of high quality prototypical instructional materials. Although the consultant acknowledges the fact that there are numerous equipment items available for inclusion in such a system, it is doubtful that their acquisition would be meritorious during the first year of operation in SWRL's new Los Alamitos facility.

The basic system outlined herein consists of a two studio color camera, plus color film chain system. The basic system shall include color compatible switching, recording, synchronizing and distribution equipment. This studio system, as described here, is basically a commercial quality (rather than Broadcast quality) two color camera system with color recording capability. Wherever the consultant was able to specify higher quality, NTSC broadcast compatible equipment, for the same price as commercial quality equipment he has done so. Thus, this basic system was designed to reflect the maximum state-of-the-art in an attempt to attenuate obsolescence.

Functional requirements for the basic system are as follows:

1. The basic system shall be capable of two camera studio operation.
2. Said system shall permit technical direction from the contiguous control room via a studio intercom system.

3. Said system shall permit remote camera operation via remote camera control units rack mounted in a control room.

4. This basic system shall also permit technical directors and technicians to monitor both video signals (from cameras) and waveforms at camera control stations.

5. The system shall incorporate a means of recording all teleproduction signals originating in the studio. Said capability shall be a color signal capability. Thus, the video recorder included in the basic system shall be capable of recording and reproducing color television signals in the NTSC form.

6. This basic system shall incorporate a means of previewing both studio cameras and the film chain before they are switched into the outgoing program line.

7. Said basic system shall incorporate a means of including basic special effects in the program output signal.

8. This basic system shall include a video tape recorder/reproducer which permits operation of its tape motion controls from the TD position on the control room console.

9. This basic system shall yield recorded video information that is of sufficient quality to be reproduced on other recorders using a 1/2", 1", or 2" magnetic video recording medium.

10. The basic system shall include a means of controlling the operation of all film chain equipment (35mm projector, 16mm projector, film chain camera) at the TD's position on the main console.

11. Said basic system shall also provide a means of monitoring the program output line with a large screen (see specifications) rack mounted color monitor.
12. This basic system must include means of receiving all VHF and UHF television channels broadcast in the Los Angeles-Long Beach area. The receiving and control apparatus shall consist of a rack mounted unit or units. The output signals from these units shall consist of separate audio and video feeds which are connected into the system in a manner that will permit them to be recorded or distributed via the included switching equipment.

13. The basic system shall incorporate a means of monitoring both the video signal information as well as the actual waveform of said signal from the VHF and UHF receivers specified above.

14. This basic system shall be provided with a means of patching or switching the input and output signals from video tape recorders in a manner which will permit the system operators to use one of these VTR's as a video source.

15. Said system shall contain its own color sync generator. This generator shall be so designed as to permit it to "lock" onto the sync signal fed to it from other (non system) sources.

16. The film chain included within this system shall include an optical multiplexer which will permit the use of 35mm and 16mm film sources. Said multiplexer shall be remote controllable from the ID's position on the main studio console.

17. This basic system shall include an audio mixer console which will permit the use of 3 or more studio microphones simultaneously in addition to accepting a line input from the audio mixer located on the opposite side of the control room (see architect's drawing).

18. Said basic system shall include in its master switcher enough source inputs to accept video signals from the Laboratory's mobile van (3 video inputs), and the program line from both the control room of the Learning Labs, the simulated laboratories (see architect's drawing), and the conference area. These inputs should accept composite video signals from peripheral cameras and recorders.

It should be noted that the consultant has evaluated SWRL's existing teleproduction equipment in formulating these recommendations. Existing pedestals now being used to support monochrome studio cameras should be utilized to mount the new color camera equipment.
The following equipment list contains those system elements which the consultant considers critical to the development of an effective basic studio system for SWRL.

REQUIRED EQUIPMENT

The television equipment components which appear in the following list have been selected to provide (when properly interconnected) a complete two color camera, color film chain studio, TV system including a complete audio control center. This list contains only the major system items. It is assumed that this system shall be assembled using accepted engineering practices, and that the actual system which is proposed by the responsive bidders shall contain all necessary interface items. It is further presumed that said bidders will configure their proposed systems employing a sufficient quantity of pulse and video distribution amplifiers and other interface hardware to achieve a properly engineered system. It shall be the contractor's responsibility to be aware of the fact that this is a basic system and expansion of said system shall occur over a five year period. Therefore, in addition to adequately performing the previously stated functions, this basic system must be designed so as to permit rapid expansion in accordance with program requirements. Another key design factor shall be that of flexibility. Sufficient measures shall be taken by the system contractor to insure flexibility, such as video and audio patch panels, switches (passive) etc.

In addition to the above mentioned following list, ACSI has supplied a suggested interconnection diagram of the basic system showing all major components and
major video signal flow paths. The reader should note, however, that no attempt
has been made to show all video, audio, and sync interconnections since there
are numerous design schemes that could be employed effectively. Nevertheless, it
shall be the responsibility of the system contractor to supply an actual block diagram
of all components proposed as well as the intended method of interconnection. This
block diagram shall represent the contractor design in detail with all items labeled.
Additional procedures to be followed by interested bidders are contained within the
Request for Proposal (RFP) format prepared by SWRE's management.

The following equipment list includes both studio and control room equipment
necessary to complete the basic studio-TV system (see accompanying block diagram).
All system contractors desiring to bid on this system shall study the architect's
construction documents prior to submitting his proposed system design.

1. Studio color cameras and accessories.
2. Optical-Multiplexer with remote control for one 35mm projector
   and one 16mm motion picture projector and remote light level
   control.
3. Video switcher, lapse dissolve amplifier and special effects generator.
4. Video monitors for camera, special effects, and TV receiver pre-
   view functions.
5. Video monitors for program line out. 8 or 9" for console and
   14 - 17" color unit for rack mounting.
6. Waveform monitors for the cameras, VTR's and off-the-air monitors.
7. Video tape recorder (color) with editing capability.
8. Video distribution amplifiers.
11. All necessary power supplies.
12. Low silhouette consoles with an adequate number of bays for audio TD, and camera apparatus (2 studio + film chain). (See illustration).
13. Sync generator for color operation with "Gen Lock" and an adequate number of pulse distribution amplifiers.
14. Additional standard (EIA) 19" wide enclosures for mounting other system components.
15. All necessary interface hardware.
16. All mounting hardware.
17. All necessary interconnection cables.
18. 16mm film projector for use with film chain including remote control.
19. 35mm slide projector with remote control.
20. Studio intercom for TD, Audio Director, Lighting Director, 3 camera operators, and floor director.
21. All remote camera cables.
22. Microphone booms (2).
23. Three studio microphones.
24. All necessary cable connectors.
25. All necessary headsets for studio intercom.
27. Audio mixer (console mount) and accompanying enclosures and patch panel.
28. Mobile color studio monitor.
29. (Optional) chroma key effects.
30. (Optional) graphics camera.
31. (Optional) additional color video recorder with same format as master recorder.
32. (Optional) color update kit for existing Ampex VR-7800.
33. Color black generator.
34. Elapsed time indicators for VTRs and cameras.
INSTALLATION REQUIREMENTS AND
MINIMUM ACCEPTANCE STANDARDS

A. GENERAL

1. The equipment specified in this document shall be installed according
to standards of good engineering practice and the conditions specified herein.

2. Consoles, control panels, desks, panel mountings and equipment racks
shall be designed and installed according to standards of good human engineer-
ing. The facility shall be built to provide the optimum use of operator
capabilities. Equipment installed shall be selected within the criterion of
operational simplicity and ease of maintenance.

   a. Equipment markings shall present only needed information
      and readable from the operator's normal work position. These
      markings shall be designed to minimize ambiguous interpretation.

   b. Control panels shall be designed to reduce chances of human
      error and controls shall be natural and consonant with normal
      operator expectations.

   c. All control consoles and their panel mountings shall be
      provided with the necessary controls, clocks and switches, etc.
      as outlined in the pertinent sections of this specification. The
      grouping of these facilities shall be in accordance with the
      associated drawings and shall in all cases be arranged to present
      a neat, functional appearance. The layout of controls shall
      be such that priority of accessibility shall be given to those
      facilities which frequently require attention.

   d. The total design of the system shall simplify the operator's
      task, insure maximum performance and reliability, minimize
      possibilities for human error and provide a comfortable environ-
      ment to the operators during operation.

   e. Layout sketches of control panels, consoles and racks shall
      be submitted for approval before construction.

3. Workmanship on the installed system shall be of professional quality,
best commercial practice, and accomplished by persons experienced in the
techniques and standards of the television broadcast industry. The following
requirements shall be observed during the construction process:
a. Cables shall be grouped and bundled as to type and routed from source to termination in a uniform manner throughout all equipment housings. Care shall be taken not to break the insulation or deform the cable by harness supports. Cables shall not change relative position in a cable group throughout a cable route.

b. High and low or medium level audio cables shall not be grouped together.

c. Cable support bars shall be installed to support video, audio or control cables in areas of dense harness breakouts such as behind patch panels, video switchers, distribution amplifiers and other multiple input/output devices.

d. Control cables and power distribution wiring shall not be installed adjacent to signal cables. Power distribution cabling shall be on the opposite side from signal wiring in equipment enclosures and shall be uniformly located throughout an installation.

e. Edge protection material ("cat track") shall be installed on the edges of holes, lips of ducts or any other point where cables or harnesses cross metallic edges.

f. The contractor shall employ the latest installation practices and materials. Coaxial connectors shall be crimp-on. Audio and control wires shall be terminated in crimp-on lugs at terminal strips.

g. Audio and control cable ends shall be neatly formed and shrinkable tubing applied to secure the insulation against fraying or raveling.

4. Paint finish on console and racks hardware, panels and components shall be considered special for this installation. All racks and console frames will be of one color. All panel inserts, equipment and blank panels will be of a second color. Color will be specified at the time of contract award. It is suggested that the contractor provide the specified paint to sub-contractors supplying material to insure match of paint finish on all components.

Paint finish shall be protected during assembly, shipment or installation and alignment by means of adhesive paper or cardboard applied to easily damaged or scratched areas such as console desk tops and other flat surfaces. These protections shall be removed and discarded just prior to acceptance testing.
5. All cabling (audio, video, rf and control) shall be individually identified. Each cable identification shall be a unique number located approximately 1.5 inches from the cable termination connector at both ends of a cable. This cable identification number shall be impressed on a fixed length of white shrinkable tubing with a heat impression stamping machine. The lettering shall be filled with a black filler and covered with a protective coating after shrinking that will not crack, peel or yellow. The letters shall be approximately 1/4 inch in height. These unique numbers shall appear on "as built" documentation to be supplied at the completion of the project.

RGB cables shall have a 1-inch piece of colored shrinkable tubing (red, green or blue) applied adjacent to the cable identification number to aid in cable identification.

Care shall be taken not to damage coaxial cables while shrinking tubing with a heat gun. Markers shall be pre-shrunk to the approximate size before installing. Cable markers shall be oriented for ease in viewing before installation.

6. Power distribution throughout the television system shall be done according to applicable local and national codes.

a. The contractor shall supply and install one power distribution panel per each group of equipment racks or equipment consoles. This power distribution panel shall contain a main 20 ampere power breaker (single, two or three phase, depending upon local power source available), power ON indication lamps for each power phase, front panel convenience outlets with separate 5 ampere breaker, and one enclosed terminal block for input/output power connection. Internal wire size shall be #12 minimum and shall be of proper color code. Mechanical protection against accidental operation shall be provided for the main power breaker. Convenience outlets shall be operable when main power breaker is in OFF position. The power panel shall rack mount and require no more than 3.5 inches of rack space.

b. Metal outlet strips (grounding type) shall be provided and mounted vertically in rack or console section. A minimum of two unused recepticals shall be provided in each rack or console section for future expansion.
c. All power wiring interconnect in each group of equipment racks or consoles shall be done with flexible conduit, properly installed and of the proper size.

d. Power cords from individual equipments to power outlet strips shall be shortened to the proper length and neatly dressed into the rack or console. Cradle clamps with removable rubber retainers shall be utilized to secure power cords to the side of the rack supports. Power cords shall not be secured by non-reusable supports.

7. Ground System

a. The technical ground system shall be of the "true" type with a main single tie point brought to the building ground.

b. All equipment and racks shall be connected to the main building ground at only one point. The various racks comprising the complete system shall be connected together via No. 4 (AWG) stranded insulated copper wire which shall in turn be connected to the station ground at or near the largest concentration of adjacent racks in the system. All other grounds such as cisterns, shielded audio pairs, coax, bulkhead connectors, etc., shall be insulated from ductwork, plumbing or conduit which in turn may cause accidental contact to the main station electrical ground at other points than that intended. In cases where the power consumption of a rack or piece of equipment exceeds 5 KVA the grounding shall be accomplished via a copper strap of at least 1" x 1/16". The connection of ground straps shall be made with solder or brazing techniques and shall include the minimum practical number of compression type connectors. The Contractor shall ensure that all ground connections are in accordance with the National Electrical Code.

c. In the event that the foregoing method of one point grounding cannot be carried out, additional grounds may be tolerated, provided that the overall audio signal to noise ratio is better than 65 r.m.s. peak-to-peak.

8. Cabinets

a. The cabinets shall be constructed to easily accommodate interconnecting cables entering from above or below. Approved terminal blocks shall be provided or other suitable means of terminating, as approved by the Engineer, for connecting incoming and outgoing cables. Interconnecting cables with plugs for disconnecting on at least one end shall be provided for interconnecting the various pieces of equipment being furnished. All connectors shall be the latch or lock type.
9. Items of equipment supplied for this specification shall be of essentially standard production equipment of a type already fully developed and with adequate operating experience to indicate suitability for the intended use. All equipment items supplied shall be selected for easy accessibility of replacement parts and maintenance and alignment services.

10. Work Schedule

The contractor shall schedule his work to assure completion on the installation, alignment, inspection and tests within the time stipulated in the proposal; provided, however, that such installation shall not commence prior to notice in writing from the Owner that applicable authorizations from regulatory bodies have been obtained, that buildings furnished by the Owner are ready for occupancy, and that titles or easements to the construction sites including rights of ingress and egress have been secured.

11. Responsibilities

The Contractor shall obtain the Owner's permission before proceeding with any work necessitating cutting into or through any part of the building structure provided by the Owner, such as girders, beams, concrete or tile floors, partition or ceilings. This does not apply to the installation of lag screws, expansion bolts and similar devices used for fastening equipment to floors, columns, walls, and ceilings.

The Contractor shall be responsible for and repair all damage to the building due to carelessness of the workmen, and exercise reasonable care to avoid any damage to the Owner's property. He will report to the Owner any damage to the building which may exist or may occur during occupancy of the quarters.

ACCEPTANCE TESTS

1. Upon completion of inspection of the construction and installation, and if no remedial action is deemed necessary to place the system in proper operation condition, final acceptance tests shall be made.
2. The following tests shall be conducted by the Contractor in the presence of the owner or the engineer to determine if the equipment meets the specifications. The data recorded during the tests shall be checked against that obtained during the final alignment of the equipment. All associated facilities shall be in place and permanently connected where practicable. All instruments shall be furnished by the Contractor. It is desirable that the same instruments be used for these tests as were used in the final alignment of the equipment. All instruments must be industrial grade (not utility or home entertainment, equipment, repair quality).

C. DEFINITIONS OF AUDIO STANDARDS

1. All sound levels shall be referred to 0 dbm equal to 1 milliwatt in 600 ohms.

2. Standard Reference Level shall be +18 dbm at 1000 Hz for all measurements.

3. Standard Low Level Input shall be -60 dbm at 1000 Hz.

4. Output Operating or Functional Level shall be +8 dbm.

5. Standard System Impedance shall be 600 ohms, balanced.

6. Console Low Level Source Input shall be -60 dbm.

7. Console Low Level Source Impedance shall be 150/250 ohms nominal, balanced.

8. Bridging Impedance shall be 10 K or higher, balanced.

D. DEFINITIONS OF VIDEO STANDARDS

1. Standard System Video Level shall be 1.0 volt peak-to-peak composite picture and sync.

2. Standard System Video Polarity shall be white positive-going.

3. Standard System Pulse Level shall be 4.0 volts for combined horizontal and vertical blanking pulses, horizontal drive pulse, vertical drive pulse and combined horizontal and vertical synchronizing pulses.
4. Standard System Pulse Polarity shall be negative.

5. Standard System Impedance shall be 75 ohms +/- 2% over the frequency range 0-10 mhz.

E. OVERALL SYSTEMS CHARACTERISTICS

1. General

The composite television waveform transmitted to a network or local transmitter shall be in accordance with the following specifications.

2. System Pulse Timing

The system timing and synchronizing waveform shall be according to F.C.C. rules, specifically F.C.C. 73.699, Figure 6, latest edition.

3. Waveform Amplitude

   a. Peak-to-peak amplitude of the composite television waveform shall be 1.0 volt and shall be referred to as Standard System Video Level. It shall be measured in IRE units on the IRE scale graticule where 140 IRE units represent 1.0 volt.

   b. Synchronizing pulse amplitude of a composite video signal of Standard System Video Level shall be measured from blanking level to reference white level and shall be 40 IRE units (0.3 nominal).

   c. Video amplitude of a composite video signal of Standard System Video Level shall be measured from blanking level to reference white level and shall be 100 IRE units (0.7 nominal).

   d. Picture set-up of a composite video signal of Standard System Video level shall be measured from blanking level to black level and shall be 7.5 IRE units (7.5% of the video amplitude).

   e. Overshoot of any pulse shall be less than 2% of the pulse amplitude.

4. Amplitude/Frequency Response

The overall Video Frequency Response shall be measured from any input of the video switcher via any normal program path to the input of the Distribution Link. It shall be +/- 2 db from 60 hz to 9 mhz and not more than 4 db down at 10 mhz.
5. **Low Frequency Distortion**

The low frequency distortion shall be measured from any input of the video switcher via any normal program path to the input of the Distribution Link. It shall be less than 2% at line and field rates.

6. **Signal to Noise (peak-to-peak)**

The peak-to-peak signal-to-rms noise ratio shall be measured from any input of the video switcher via any normal program path to the input of the Distribution Link with all circuits except the one under test terminated at their inputs and outputs.

7. **Signal to Crosstalk**

The signal to crosstalk ratio shall be measured in same manner as the signal-to-noise, and shall be greater than 45 db at 3.58 mhz.

8. **Differential Gain**

The differential gain shall be measured from any input of a Studio Switcher via any normal program path to the input of the Distribution Link. It shall be less than 1 db.

9. **Signal to Transient**

The signal to transient ratio shall be measured as the signal to noise while observing for any transient caused by the operation of a) any piece of equipment associated with that program path; or, b) any other electrical, lighting, ventilation equipment, etc. Under condition a), the signal to transient ratio shall be as good as the signal to noise ratio and under condition b), it shall be greater than 40 db.

10. **K-Factor Rating**

The K-Factor rating for any normal program path from the output of any video source via any input of the Distribution Link shall be better than 1% for a Video Band-width of 5 mhz minimum and a half amplitude duration T of 0.1 microsec.

11. **General**

The audio portion of the system from a source input network to any receiving device input shall be in accordance with the following specifications:
a. Frequency response shall be +/− 2 db from 30 hz to 15,000 hz and not more than 4 db down at 20,000 hz.
b. Total Harmonic Distortion shall be less than 1.5% from 30 hz to 20 KHz.
c. Signal to Noise Ratio shall be greater than 60 db.
d. Signal to Crosstalk shall be greater than 60 db for frequencies up to 10,000 hz and not less than 50 db for frequencies from 10,000 hz to 15,000 hz.
e. Signal to Transient Ratio shall be greater than 50 db.
f. Total Intermodulation distortion shall not exceed 2%.
g. Levels shall not vary more than 2 db under any loading conditions.

F. METHODS OF MEASUREMENT, AUDIO

1. All audio measurements shall be made at or with respect to Standard Reference Levels except for Total Harmonic Distortion, which shall be measured at both Standard Reference Level and Output Working Level.

2. The normal test set-ups include tests from both a low level input and a high level or line input to the routing switcher via a normal program path to the input of any receiving device. All other technical services shall be set up for normal operation.

3. Signal to Noise measurements shall be made with the system set for normal gain to give a Standard Reference Level output. The input shall then be terminated in a resistive load equal to its source impedance and the residual output level measured on a noise meter in terms of db below Standard Reference Level. All other circuits except that under test shall be terminated both at their inputs and outputs.

4. Signal to Crosstalk measurements shall be made as for Signal to Noise measurements above, except that any number of other circuits shall be fed with tone varying in frequency from 30 to 15,000 hz. The residual output level shall be measured in terms of db below Standard Reference Level for each frequency.
5. Signal to Transient Measurements shall be made as for Signal to Noise Measurements above. When the noise meter shall read the signal to noise, an oscilloscope shall be connected across the meter at the noise meter or oscilloscope terminals of the noise meter if provided, and its gain shall be adjusted to obtain full-scale deflection on peak-to-peak steady-state noise. Then the noise meter multiplier shall be reduced by 10 or 20 db in order to provide lower reference level to permit observation and measurement of the transient peaks for all switching operations available on the circuit under test. The peak level of the transients above the reference level established above, shall be added to the steady-state noise to give the Signal to transient ratio.

6. Intermodulation Distortion Measurements shall be made using an instrument approved by the engineer. The peak-to-peak amplitude of the combined frequencies shall be the same as that obtained for a single frequency sine wave at the same point which gives rated output or Standard Reference Level, whichever is higher.

7. Wow and flutter measurements on Disc Reproducers and Audio Tape Record Playback units shall be made in the range from 0.5 hz to 250 hz using a sine-wave test frequency of 3,150 hz and measured on an acceptable Wow and Flutter meter.

8. With no further adjustments to the equipment after completing the test described, signaling, talking and listening tests shall be made in both directions or transmission on all voice circuits.

9. After the acceptance tests have been completed and the engineer has agreed in writing that the specifications have been met, the data shall be submitted by the Contractor to the owner before the Contractor leaves the project.

10. A list of all instruments, including accessories by manufacturer and type number used by the Contractor to obtain the data shall be submitted to the owner along with maintenance recommendations for all equipment furnished under this contract.

11. A price list of all instruments, including accessories by manufacturer and type number, required to maintain the equipment, shall be recommended by the Contractor.

G. METHODS OF MEASUREMENTS, VIDEO

1. General

All system measurements shall be made by bridging directly across the terminated 75 ohm circuit with an oscilloscope of 10,000 ohms minimum shunt
impedance and 40 mmfd. maximum shunt capacitance. The oscilloscope shall be fitted with an "IRE" graticule or special sine (to the second power) graticule of at least 10 cm height. The bandpass of the oscilloscope shall be at least 10 mhz +/- 1 db.

2. Standard Test Signals

a. Grey Scale Signal (Used for Differential gain, maximum gain)

| Video:                | 100 IRE units |
| Sync:                 | 40 IRE units  |
| Number of steps:      | 10 (Ascending) |
| 3.58 mhz modulation   | 20 IRE units  |
| (when required)       | on each step   |

b. Sine Pulse and Window Signal (Used for transient state and low frequency distortion testing)

| Video:                | 100 IRE units |
| Sync:                 | 40 IRE units  |
| Half Amplitude        | 0.1 microsec |
| duration T pulse:     |               |
| Half Amplitude        | 0.2 microsec |
| duration 2T pulse:    |               |

Window Signal, Size and Position:

| 1/8 line | set-up | (black level) |
| 3/8 line | window | (white level) |
| 1/2 line | set-up | (black level) |
| 1/4 field| set-up | (black level) |
| 1/2 field| window | (white level) |
| 1/4 field| set-up | (black level) |
c. Sweep Signal (Used for amplitude/frequency response testing)

- Pedestal: 50 IRE units
- Video: 75 IRE units (including 50 units of sweep and 25 units of set-up)
- Sync: 40 IRE units
- Bandwidth: 0-10 MHz markers at each mhz
- Sweep Rate: 60 hz

d. Multi-Burst Signal (Used for amplitude/frequency testing)

- Video: 100 IRE units (including 10 units of set-up)
- Sync: 40 IRE units
- Burst Frequencies: 0.5, 1.5, 2.4, 3.0, 3.6 and 4.2 mhz

e. Grating Signal (Used for scan linearity testing)

- Video: 100 IRE units
- Sync: 40 IRE units

The Video shall have an electronically generated grid pattern, with from 5 to 25 horizontal rows of bars or dots and 4 to 25 vertical rows of bars or dots. Vertical and horizontal element shift shall be provided.

3. Pulse Duration Measurements

Pulse duration measurements shall be made with an oscilloscope having a bandwidth of approximately 10 mhz and an accurate time marker generator. Pulse duration shall be measured at 10% amplitude, except for horizontal blanking pulse duration which is measured at 90% amplitude. Rise and decay times shall be measured between 10% and 90% of the pulse amplitudes.
4. Video System Measurements

The normal test set-up consists of the signal generator output feeding, the input of the "equipment under test", the output of which is connected to the terminal oscilloscope input. All circuits shall be operated at 75 ohms ±2%; this shall apply to cable as well as inputs and outputs. Terminations shall be connected as close as physically possible to the input of equipment.

a. Differential Gain Measurement - Using the test set-up and the grey scale signal with modulation, the system under test shall be set at unity-gain with the output at Standard System Level. Insert a high pass filter (to eliminate the low-frequency step waveform from the grey scale signal leaving only the 3.58 mhz modulation bursts) in the output circuit of the system under test, between a terminated T-connector and the oscilloscope input. Measure on the oscilloscope the ratio between the burst of maximum amplitude and the burst of minimum amplitude, the burst corresponding to black level, and the burst corresponding to white level. Express the ratio in db.

b. Low Frequency Distortion - Using the test set-up and the Window Signal, the system under test shall be set at unity gain with the output at Standard System Level. Measure on the oscilloscope the amount of tilt (positive or negative) or other amplitude variation on the top of the window signal. Express as a percentage of the maximum window amplitude at line and field rates.

c. Signal to Noise (peak-to-peak) - Using the same test set-up as above, set the oscilloscope level so that the video portion of the output signal covers from 0 to 100 IRE units. Remove the video portion of the test signal and re-adjust the pedestal if necessary to 10 IRE units. Increase the oscilloscope vertical deflection sensitivity by a factor of 10. Measure the peak-to-peak spikes of residual noise, convert to rms, and ratio to the signal, then convert this figure to db. Full scale deflection (100 IRE units) will now correspond to a 20-db ratio and 10 IRE units will correspond to a 40-db ratio. It is possible to estimate an amplitude equal to 2 IRE units; this will correspond to a 54 db ratio. This measurement shall be made at line and field rates.

d. Signal to Crosstalk - Using the same test set-up and Standard Sweep Signal, feed all the circuits under test and set for unit gain. Connect the oscilloscope to the output of the circuit under test and adjust its level so that the video portion of the output signal covers from 0 to 100 IRE units. Remove the test signal from the input of this particular circuit under test and substitute standard sync and set-up from another source or terminate with 75 ohms. Increase the oscilloscope's vertical deflection sensitivity by a factor of 10. The crosstalk
shall be measured in the same manner as signal to noise at line rate. If the Standard Sweep Signal is used, the measured crosstalk figure should be increased by 6 db, because the video portion of this signal is 6 db lower than standard amplitude. Indicate also the frequency at which the measurement is made.

e. Signal to Transients - Follow the same procedure as for Signal to Noise. Measure any observable transients which may be caused by the operation of electronic, electrical, lighting, ventilation or any other equipment, and indicate the source of these transients.
Attachment 63, Analysis of Administrative Equipment Request
### Present Inventory of Desks Includes:

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1</td>
<td>Staff and Clerical Desks</td>
<td>129</td>
</tr>
<tr>
<td></td>
<td>60&quot; w. x 34&quot; d.</td>
<td></td>
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<tr>
<td>Type 2</td>
<td>Directors Desk - Executive</td>
<td>18</td>
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<tr>
<td></td>
<td>78&quot; w. x 42&quot; d.</td>
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<tr>
<td>Type 3</td>
<td>Directors Desk - Jr. Executive</td>
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<tr>
<td></td>
<td>76&quot; w. x 43&quot; d.</td>
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<tr>
<td>Type 4</td>
<td>Secretarial Desk</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>60&quot; w. x 30&quot; d. with 18&quot; d. x 18&quot; w. typi ng extension</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL PRESENT INVENTORY**  
210

### New Building Requires 272 Office Desks:

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1</td>
<td>Staff and Clerical</td>
<td>161</td>
</tr>
<tr>
<td>Type 2</td>
<td>Directors Executive</td>
<td>0</td>
</tr>
<tr>
<td>Type 3</td>
<td>Directors Jr. Executive</td>
<td>9</td>
</tr>
<tr>
<td>Type 4</td>
<td>Secretarial</td>
<td>102</td>
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</table>

**TOTAL DESKS REQUIRED**  
272

Of the total present inventory of desks (210), 20 will not be useable (types 2 and 3) in the new facility when the full staff complement has been hired.

Total present inventory of useable desks is:  

\[
\text{Total present inventory} = 210 - 20 = 190
\]

New building desks requirements  
Present useable desks  
Additional office desks required  

New building requires 101 secretarial desks for steno areas.
<table>
<thead>
<tr>
<th>Area</th>
<th>Item No.</th>
<th>Items</th>
<th>Quan. Per Office</th>
<th>Unit Cost</th>
<th>Total Cost Per Office</th>
<th>Quan. of Offices</th>
<th>Totals Scheme B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Man Office</td>
<td>1</td>
<td>Desk</td>
<td>1</td>
<td>$153.00 ea.</td>
<td>$153.00</td>
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<tr>
<td></td>
<td>4</td>
<td>Desk Chair</td>
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<tr>
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<td>6</td>
<td>File</td>
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<td>Unit Cost</td>
<td>Total Cost Per Office</td>
<td>Quant. of Offices</td>
<td>Total</td>
</tr>
<tr>
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<td>----------------------</td>
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<tr>
<td>3 Man Office</td>
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<td>$459.00</td>
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<tr>
<td>Secretary</td>
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<td>Desk</td>
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<td>5</td>
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<tr>
<td>Work Area</td>
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<td>$102.00 ea.</td>
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<tr>
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**TOTALS**

$7,964.08 + $90,374.80 + $11,648.00 = $116,986.88
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<th>Area</th>
<th>Item No.</th>
<th>Items</th>
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<th>Quan. of Offices</th>
<th>Totals Scheme B</th>
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<td>$160.00</td>
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**TOTALS:**

**Auditorium:** $2,800.00

**Large Conf.:** $3,029.70

**Reading Rms:** $6,211.56

**Mgmt. Recept.:** $1,835.00
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<th>Unit Cost</th>
<th>Total Cost Per Office</th>
<th>Unit Cost</th>
<th>Total Cost Per Office</th>
<th>Quan. of Offices</th>
<th>TOTAtS</th>
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<tbody>
<tr>
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<td>Double Lge. Chs.</td>
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<td>$860.00</td>
<td>$215.00 ea.</td>
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<td>Settee</td>
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<td>317.50 ea.</td>
<td>317.50</td>
<td>317.50 ea.</td>
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<td>227.40</td>
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<tr>
<td>Waiting Area</td>
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<td>Lounge Chair</td>
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<td>$430.00</td>
<td>$215.00 ea.</td>
<td>$430.00</td>
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<tr>
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<td>45.00 ea.</td>
<td>45.00</td>
<td>45.00 ea.</td>
<td>45.00</td>
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<p>| Sub Total | $172,330.56 |
| Tax       | $9,478.18   |
| 4% contingency | 17,233.05 |
| GRAND TOTAL | $199,041.79 |</p>
<table>
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<tr>
<th>Item</th>
<th>Description</th>
<th>Unit List Price</th>
<th>GSA/Discount</th>
<th>Unit Net Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Desk</td>
<td>General Fireproofing #1260F, 60&quot; L x 30&quot; D. x 29&quot; H, Desk w/File Drawer in both pedestals</td>
<td>$306.00</td>
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<tr>
<td>2. Steno Desk</td>
<td>General Fireproofing #1216ED, 60&quot; L. x 30&quot; D. x 29&quot; H, Steno Desk w/40&quot; L. x 19&quot; D. Typing Unit</td>
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<td>$244.70</td>
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<tr>
<td>3. Work Table</td>
<td>General Fireproofing #1260T, 60&quot; L. x 30&quot; D. x 28&quot; H, Table</td>
<td>$202.25</td>
<td>50%</td>
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<td>4. Desk Chair</td>
<td>General Fireproofing #8137 Desk Chair</td>
<td>$238.75</td>
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<td>5. Steno Chair</td>
<td>General Fireproofing #8135 Steno Chair</td>
<td>$189.50</td>
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<tr>
<td>6. File</td>
<td>General Fireproofing #0202CL, 2 drawer Legal File w/lock</td>
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</tr>
<tr>
<td>7. File</td>
<td>General Fireproofing #0505CL, 5 drawer Legal File w/lock</td>
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<td>8. Side Chair</td>
<td>General Fireproofing #40/4 Side Chair</td>
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<td>$20.00</td>
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<tr>
<td>9. Lounge Chair</td>
<td>Knoll #55-131, 29-7/8&quot; W. x 34-5/8&quot; D. x 26-3/4&quot; H, Lounge Chair</td>
<td>$320.00</td>
<td>50%</td>
<td>$160.00</td>
</tr>
<tr>
<td>10. Settee</td>
<td>Knoll #55-133, 59-7/8&quot; W. x 34-5/8&quot; D. x 26-3/4&quot; H, Settee</td>
<td>$635.00</td>
<td>50%</td>
<td>$317.50</td>
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<tr>
<td>11. Double Lounge Chair</td>
<td>Knoll #55-141, 29-7/8&quot; W. x 58-5/8&quot; D. x 26-3/4&quot; H, Double Lounge Chair</td>
<td>$430.00</td>
<td>50%</td>
<td>$215.00</td>
</tr>
<tr>
<td>12. Ottoman</td>
<td>Knoll #55-159, 31-1/2&quot; W. x 24&quot; D. x 13-3/4&quot; H, Ottoman</td>
<td>$175.00</td>
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<td>$87.50</td>
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<tr>
<td>13. End Table</td>
<td>Knoll #50-310, 21-5/8&quot; W. x 13-7/8&quot; D. x 17-3/4&quot; H, End Table</td>
<td>$30.00</td>
<td>50%</td>
<td>$15.00</td>
</tr>
<tr>
<td>14. Conf. Table</td>
<td>General Fireproofing #1275 F.O.H, 58&quot; L. x 42&quot; D. x 22-3/4&quot; H, Conference Table</td>
<td>$376.75</td>
<td>50%</td>
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<tr>
<td>Item</td>
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<td>--------</td>
<td>--------------------------------------------------</td>
<td>-----------------</td>
<td>--------------</td>
<td>---------------</td>
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<tr>
<td>17.</td>
<td>Folding Table Howe #575, 84&quot; W. x 36&quot; D. x 29&quot; H.</td>
<td>$300.00</td>
<td>50% &amp; 10%</td>
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<td>18.</td>
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<td>50% &amp; 10%</td>
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<td>19.</td>
<td>Arm Chair Knoll Stephens #1305 VVO: 22-1/8&quot; W. x 22-1/2&quot; D. x 32&quot; H.</td>
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<td>$65.00</td>
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<tr>
<td>20.</td>
<td>Table General Fireproofing #1272T, 72&quot; W. x 36&quot; D. x 29-3/4&quot; H.</td>
<td>$255.25</td>
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<tr>
<td>21.</td>
<td>Console General Fireproofing #1207-C, 60&quot; W. x 19&quot; D. x 26-1/2&quot; H.</td>
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<td>22.</td>
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## Office Desk Count

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<th>Office Size</th>
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<th>Quan. Floor 2</th>
<th>Total Office Quantity</th>
<th>Total Desk Quan.</th>
<th>Desk Type Required</th>
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</thead>
<tbody>
<tr>
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<td>10 x 20</td>
<td>200</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>3/Jr. Exec.</td>
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<tr>
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<td>10 x 15</td>
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<td>6</td>
<td>3/Jr. Exec.</td>
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<tr>
<td></td>
<td>10 x 14</td>
<td>140</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>3/Jr. Exec.</td>
</tr>
<tr>
<td></td>
<td>10 x 11</td>
<td>110</td>
<td>12</td>
<td>1</td>
<td>13</td>
<td>13</td>
<td>1/Staff</td>
</tr>
<tr>
<td></td>
<td>10 x 10</td>
<td>100</td>
<td>24</td>
<td>13</td>
<td>37</td>
<td>37</td>
<td>1/Staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TOTAL - 59</td>
<td>159</td>
<td></td>
</tr>
<tr>
<td>TWO MAN OFFICES</td>
<td>10 x 15</td>
<td>150</td>
<td>10</td>
<td>1</td>
<td>11</td>
<td>22</td>
<td>1/Staff</td>
</tr>
<tr>
<td></td>
<td>10 x 14.5</td>
<td>145</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>12</td>
<td>1/Staff</td>
</tr>
<tr>
<td></td>
<td>10 x 13</td>
<td>130</td>
<td>8</td>
<td>-</td>
<td>8</td>
<td>16</td>
<td>1/Staff</td>
</tr>
<tr>
<td></td>
<td>10 x 12.5</td>
<td>125</td>
<td>14</td>
<td>-</td>
<td>14</td>
<td>28</td>
<td>1/Staff</td>
</tr>
<tr>
<td></td>
<td>10 x 11.5</td>
<td>115</td>
<td>12</td>
<td>4</td>
<td>16</td>
<td>32</td>
<td>4/Sect.</td>
</tr>
<tr>
<td></td>
<td>10 x 10</td>
<td>100</td>
<td>-</td>
<td>5</td>
<td>5</td>
<td>10</td>
<td>4/Sect.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TOTAL - 60</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>THREE MAN OFFICES</td>
<td>10 x 20</td>
<td>200</td>
<td>7</td>
<td>2</td>
<td>9</td>
<td>27</td>
<td>1/Staff</td>
</tr>
<tr>
<td></td>
<td>12 x 13</td>
<td>156</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>6</td>
<td>1/Staff</td>
</tr>
<tr>
<td></td>
<td>10 x 15</td>
<td>150</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>15</td>
<td>4/Sect.</td>
</tr>
<tr>
<td></td>
<td>10 x 14</td>
<td>140</td>
<td>7</td>
<td>3</td>
<td>10</td>
<td>30</td>
<td>4/Sect.</td>
</tr>
<tr>
<td></td>
<td>11 x 11.5</td>
<td>126.50</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>15</td>
<td>4/Sect.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TOTAL - 31**</td>
<td>93</td>
<td></td>
</tr>
</tbody>
</table>

*Including 6 one man offices in administration.*
<table>
<thead>
<tr>
<th>Desk Type</th>
<th>Present Inventory</th>
<th>Requirement</th>
<th>Requirement</th>
<th>Requirement</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Man Office Desk</td>
<td>(129)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2 Man Office Desk</td>
<td>33</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1 Man Office Desk</td>
<td>78</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Staff</td>
<td>(18)</td>
<td>(11)</td>
<td>(52)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Director Executive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Director</td>
<td>0</td>
<td>9</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sect.</td>
<td>0</td>
<td>42</td>
<td>102</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Additional Office Desk</td>
<td>161</td>
<td>32</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Attachment 64. Example of Procurement, Installation and Maintenance Specifications for R&D Equipment System
The Instructional Development Control and Monitoring System (IDCMS), was developed in response to a number of Laboratory program requirements. Most of these requirements are associated with that phase of the Laboratory's activities classified as "design". In order to examine instructional procedures and other parameters under study in this phase of SWRL's work, an electronic system for experimenting with instructional variables which will yield comprehensive observable results is needed.

In addition, a large percentage of design efforts involve systematic investigations of a partial synthesis of some aspect of a product under development. This "model" testing is generally conducted in a carefully controlled, simulated environment so that systematic manipulations can be performed to suit the purpose of the test.

In response to these and other needs associated with Laboratory program activities, IDCMS shall perform the following functions:

1. Present audio and visual stimuli to a learner according to pre-programmed instructions stored in a digital system controller.

2. Present audio and visual stimuli to a learner in accordance with his interactive command, as well as stored program control codes.

3. Present all visual information in color, half-tone or alpha-numeric display via a portable terminal.

4. Record all learner responses entered via a keyboard located on said portable terminals.
5. Permit terminal operators to control the rate of information presentation.

6. Create alpha-numeric displays from machine language and control codes stored in the system controls.

7. Print a hard-copy of learner response patterns and other ideographic data associated with terminal operators.

8. Perform complex mathematical operations on learner-response information stored in the system.

9. Permit all terminal (6) users to gain access to all analog information stored in the system's master storage components.

10. Convert binary information stored in working storage to a standard composite video signal which can be displayed, recorded on video tape or distributed throughout the entire laboratory facility.

11. Provide a basic capability for synthesizing speech from stored digital information through the use of digital to analog conversion techniques for future system development.

12. Accept visual information stored on motion picture film, 35mm slides, photographs, line drawings, video tape and election video recordings (EVR) through conversion to an NTSC type, composite video signal.

13. Permit individual learner (terminal) control over all program materials stored in the analog portion of the system on an independently buffered basis.

While the IDCMS is a very specialized system, it is also very flexible in that its most specialized components, i.e. audio and video storage, can be interfaced with numerous other systems and individual equipment items specified for inclusion in SWRL's new facility.
ACTIVATION REQUIREMENTS

The following schedule has been determined after considerable discussion with various systems suppliers and manufacturers.

1. Upon release of the request for proposals (RFP), the suppliers should be allowed a maximum of 45 days to submit a proposal. After receipt of proposals, one month should be allowed for approval and award of a contract.

2. After a contract has been awarded, in-house construction will require approximately 8-1/2 months. During this time, the system contractor will construct the system at his plant and thoroughly test it for compliance with the specifications. At the end of the in-house construction period, the system will be ready for installation.

3. Prior to delivery of the system at the project site, a two-week site preparation time should be allowed for pulling of cables, etc. After delivery, it is estimated that installation will require 2 to 2-1/2 months maximum.

4. Upon completion of installation, final testing and acceptance should be estimated at 2 weeks maximum on-site.

For exact scheduling, by date, refer to the "Modified PERT Diagram" contained within another section of this document.
OPERATION AND MAINTENANCE

Although the manufacturers of systems which meet the IDCMS design requirements usually provide a one year warranty against defects in materials, workmanship and design with an option to replace or repair parts on site or at their factory, it is necessary to plan an effective preventive maintenance program at the completion of installation and a corrective maintenance program subsequent to the covered period. All parts are covered under this basic manufacturer's warranty with the exception of rotary heads and disc equipment.

On a yearly basis, it is estimated that a total of 300 manhours will be required to provide adequate preventive maintenance and 320 manhours will be required after the first year warranty for corrective maintenance. These figures are supported by the attached maintenance breakdown by component.

The consultant has recommended that SWRL hire a qualified in-house technician preferable with a background in digital computer programs to perform both preventive and corrective maintenance on the system, as part of his total responsibility. Should SWRL hire such an individual (see personnel recommendations), it is the practice of the system manufacturers to provide training at no cost to the client. This training period would preferably occur during the final testing of the system on-site by the designated manufacturer's representative.
Should SWRL management wish to consider alternative maintenance plans for IDCMS, the following would represent typical plans offered by system manufacturers in this field:

1. Yearly service contract to provide an extended warranty covering any and all parts and service (excluding heads and discs) required for the particular system. This type of service contract does not usually obligate the manufacturer to provide any scheduled calls to the customer and, as such, does not relieve the customer from the responsibility of provided routine preventive maintenance as mentioned above. Such a contract would cost between $7,500 and $9,000 for a system of this type.

2. On-call corrective maintenance program provided as required by the system manufacturer. This type of service would cost the customer approximately $30 per hour, portal-to-portal, with a minimum of four hours per call. Preventive maintenance is still the customer's responsibility under this plan.

3. Full-time engineer to be provided by the manufacturer on a yearly or six-month basis as a resident individual at the customer's facility. This engineer would be qualified to perform both preventive and corrective maintenance. It is estimated that such a program would cost
approximately $25,000. for a one year contract or
$15,000. for a six month period.

Based upon these alternative figures, the following chart represents
the difference in annual costs reflected by a total in-house main-
tenance program versus each of the three alternative plans. In
each case, the anticipated number of hours shall be: 300 preventive
and 320 corrective.

<table>
<thead>
<tr>
<th>PLAN</th>
<th>PREVENTIVE MAINT.</th>
<th>CORRECTIVE MAINT.</th>
<th>TOTAL</th>
</tr>
</thead>
</table>
| In-house technician to perform all main-
  tenance                         | 300 x 6.75 = $2,025  | 320 x 6.75 = $2,160  | $4,185  |
| Alternative 1                       |                    | Max. = $9,000     |          |
| Yearly service contract             | 300 x 6.75 = $2,025  |                   | 11,025  |
| Alternative 2                       |                    |                   |          |
| On-call program                     | 300 x 6.75 = $2,025  | 320 x $30. = $9,600 | 11,625  |
| Alternative 3                       | $12,500.           | $12,500.          | 25,000  |

With regard to replacement parts, the anticipated program budget should
reflect approximately 1% of the cost of the basic equipment installa-
tion for the first year of operation (to include disc and heads not
included under warranty as well as other items which require replace-

* indicates that preventive maintenance must still be provided
by customer on an in-house basis.
ment or repair due to normal wear on the system). For the second year of operation, a figure of 5% should be estimated for replacement parts and approximately 7% per year thereafter.

**Test Equipment**

Test equipment required to troubleshoot the system and to aid in providing routine maintenance is included within the Maintenance Instrumentation recommendations section of this document. In addition, complete shop facilities including an Electronics Test and Materials Assembly area have been included in the SWRL facility. The equipment which has been specified for SWRL's facility in those sections should be adequate for the IDCM system designed by AC31.
MAINTENANCE BY COMPONENT

Based upon an annual 1400 hour operating program, the following list represents the estimated number of hours required for both preventive and corrective maintenance for each component of the IDCM system.

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Item</th>
<th>Preventive Maintenance</th>
<th>Corrective Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Hours Required</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>System controller</td>
<td>30</td>
<td>14</td>
</tr>
<tr>
<td>1</td>
<td>Teletypewriter</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>1</td>
<td>Digital disc</td>
<td>80</td>
<td>40</td>
</tr>
<tr>
<td>1</td>
<td>Disc control</td>
<td>--</td>
<td>15</td>
</tr>
<tr>
<td>1</td>
<td>Control interface</td>
<td>--</td>
<td>35</td>
</tr>
<tr>
<td>1</td>
<td>Tape control</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>1</td>
<td>Magnetic tape drive</td>
<td>24</td>
<td>16</td>
</tr>
<tr>
<td>6</td>
<td>Dual Audio Master reproducer</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>1</td>
<td>Audio switch</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Dual audio buffers</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>Video master</td>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>1</td>
<td>Video buffer with 6 channels</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>A/V master loading center</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>Color student terminals (A/V)</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>1</td>
<td>Audio patch panel</td>
<td>--</td>
<td>8</td>
</tr>
<tr>
<td>1</td>
<td>Video patch panel</td>
<td>--</td>
<td>8</td>
</tr>
<tr>
<td>1</td>
<td>Inter-com system</td>
<td>--</td>
<td>8</td>
</tr>
<tr>
<td>1</td>
<td>Cassette duplicator</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>(covered in Audio Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>section of this document)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Miscellaneous system</td>
<td>43</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>maintenance</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>300 hours</td>
<td>320 hours</td>
</tr>
</tbody>
</table>
Of all the systems and equipment to be included in the SWRL's new facility, the Instructional Development Control and Monitoring System and its peripheral equipment is among the most complex and expensive. The functional and performance capabilities, which it will provide clearly justify the initial cost factor. It is conceivable that technological advances and breakthroughs could reduce the estimated system cost. However, ACSF recommends that an estimated cost of $221,187 be allocated for the IDCMS. It should be noted that the estimated cost includes any engineering and installation charges that could be anticipated.

Since this system must be designed as a total package, a detailed cost by component breakdown has not been included. The system, as detailed by the previously mentioned design criteria and the block diagram appearing in the Systems and Equipment Specifications document (Volume 1) represents the total instructional system.
TELEVISION SYSTEMS.

The total television capabilities for the new SWRL facility have been divided between two major functions: the Studio Television System and the Television Observation System. Since it is probable and desirable that a single-system contractor will bid both of these systems, their schedule for acquisition has been combined.
STUDIO TELEVISION SYSTEM REQUIREMENTS

The following requirements and design criteria for the basic Studio Television equipment are derived from an analysis of SWRL's present and future activities. Furthermore, the system described herein should be considered a basic system. This basic system configuration will be adequate for the production of high quality prototypical instructional materials. Although it is acknowledged that there are numerous equipment items available for inclusion in such a system, it is doubtful that their acquisition would be meritorious during the first year of operation in SWRL's new Los Alamos facility.

The basic system outlined herein consists of a two studio color camera, plus color film chain system. The basic system shall include color compatible switching, recording, synchronizing and distribution equipment. This studio system, as described here, is basically a commercial quality (rather than Broadcast quality) two color camera system with color recording capability. Wherever the consultant was able to specify higher quality, NTSC broadcast compatible equipment, for the same price as commercial quality equipment he has done so. Thus, this basic system was designed to reflect the maximum state-of-the-art in an attempt to attenuate obsolescence.

Functional requirements for the basic system are as follows:

1. The basic system shall be capable of two camera studio operation.
2. Said system shall permit technical direction from the contiguous control room via a studio intercom system.

3. Said system shall permit remote camera operation via remote camera control units rack mounted in a control room.

4. This basic system shall also permit technical directors and technicians to monitor both video signals (from cameras) and waveforms at camera control stations.

5. The system shall incorporate a means of recording all teleproduction signals originating in the studio. Said capability shall be a color signal capability. Thus, the video recorder included in the basic system shall be capable of recording and reproducing color television signals in the NTSC form.

6. This basic system shall incorporate a means of previewing both studio cameras and the film chain before they are switched into the outgoing program line.

7. Said basic system shall incorporate a means of including basic special effects in the program output signal.

8. This basic system shall include a video tape recorder/reproducer which permits operation of its, tape motion controls from the TD position on the control room console.

9. This basic system shall yield recorded video information that is of sufficient quality to be reproduced on other recorders using a 1/2"., 1", or 2" magnetic video recording medium.

10. The basic system shall include a means of controlling the operation of all film chain equipment (35mm projector, 16mm projector, film chain camera) at the TD's position on the main console.

11. Said basic system shall also provide a means of monitoring the program output line with a large screen (see specifications) rack mounted color monitor.
12. This basic system must include a means of receiving all VHF and UHF television channels broadcast in the Los Angeles - Long Beach area. The receiving and control apparatus shall consist of a rack mounted unit or units. The output signals from these units shall consist of separate audio and video feeds which are connected into the system in a manner that will permit them to be recorded or distributed via the included switching equipment.

13. The basic system shall incorporate a means of monitoring both the video signal information as well as the actual waveform of said signal from the VHF and UHF receivers specified above.

14. This basic system shall be provided with a means of patching or switching the input and output signals from video tape recorders in a manner which will permit the system operators to use one of these VTR's as a video source.

15. Said system shall contain its own color sync generator. This generator shall be so designed as to permit it to "lock" onto the sync signal fed to it from other (non-system) sources.

16. The film chain included within this system shall include an optical multiplexer which will permit the use of 35mm and 16mm film sources. Said multiplexer shall be remote controllable from the TD's position on the main studio console.

17. This basic system shall include an audio mixer console which will permit the use of 3 or more studio microphones simultaneously in addition to accepting a line input from the audio mixer located on the opposite side of the control room (see architect's drawing).

18. Said basic system shall include in its master switcher enough source inputs to accept video signals from the Laboratory's mobile van (2 video inputs) and the program line from both the control room of the Learning Labs, the simulated laboratories (see architect's drawing), and the conference area. These inputs should accept composite video signals from peripheral cameras and recorders.
RECAP

SYSTEMS AND EQUIPMENT BUDGET

The budget summary on the following page includes the estimated basic cost of all media systems and support equipment recommended for the new SWRL facility. The cost figure, in each case, represents all components required by each system or equipment group, as well as any applicable installation charges. In a few instances, an escalation factor has been included to cover the anticipated cost rise between the time of the system design and the actual contractor bidding. Where no escalation factor has been included, no increase is expected.
## BUDGET SUMMARY

<table>
<thead>
<tr>
<th>SYSTEM/EQUIPMENT</th>
<th>COST OF BASIC SYSTEM INCLUDING INSTALLATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Development Control and Monitoring System (IDCMS)</td>
<td>$221,187.00</td>
</tr>
<tr>
<td>Studio Television System (including film chain equipment) - Color</td>
<td>193,843.00</td>
</tr>
<tr>
<td>Television Observation System</td>
<td>42,187.00</td>
</tr>
<tr>
<td>Studio Lighting System</td>
<td>13,665.00</td>
</tr>
<tr>
<td>Audio Equipment</td>
<td>24,895.00</td>
</tr>
<tr>
<td>Microform Equipment</td>
<td>26,045.00</td>
</tr>
<tr>
<td>Wood/Metal Shop Equipment</td>
<td>14,126.00</td>
</tr>
<tr>
<td>Maintenance Instrumentation</td>
<td>16,845.00</td>
</tr>
<tr>
<td>Photographic Equipment</td>
<td>8,816.00</td>
</tr>
<tr>
<td>Film and Still Photography Equipment</td>
<td>15,565.00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$577,174.00</strong></td>
</tr>
</tbody>
</table>
PERSONNEL REQUIREMENTS

The staffing pattern which appears to be the most economical and effective for performing the preventive and corrective maintenance described in previous sections of this report would employ the following personnel:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Title</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IDCMS Technician</td>
<td>Technician A</td>
</tr>
<tr>
<td>1</td>
<td>Video Engineer</td>
<td>Engineer A</td>
</tr>
<tr>
<td>1</td>
<td>Video Technician</td>
<td>Technician B</td>
</tr>
<tr>
<td>1</td>
<td>Electro-mechanical Technician</td>
<td>Technician C (presently employed)</td>
</tr>
<tr>
<td>1</td>
<td>Technical Assistant</td>
<td>Assistant A (presently employed)</td>
</tr>
<tr>
<td>1</td>
<td>Technical Production Assistant</td>
<td>Media Specialist (presently employed)</td>
</tr>
</tbody>
</table>

It should be noted that the number and type of personnel required to maintain and operate the various electronic equipment and systems was calculated by analyzing the quantity and characteristics of the basic systems and equipment specified for inclusion in the new SWRL facility.

It is assumed that staffing levels will be monitored continuously, and that if the utilization factor for the systems increases significantly, additional staff will be retained to service and operate said systems.

Recruitment for both the video engineer and the IDCMS technician should begin on or before February 15, 1972. By July 1, 1972,
selection of the most desirable candidate should be complete; and by August 15, 1972 these two employees should begin work. It would be desirable for the IDCMS Technician to participate in the final acceptance testing of the complete system. This will afford the new technician an opportunity to witness proof of performance and observe how the system should operate under ideal circumstances. The IDCMS Technician should then be allowed to experiment with and operate the system for a period of from two to three weeks under the direction of a company representative or consultant.

A similar procedure should be followed in the case of the TV Engineer. However, since it is assumed that the TV Engineer will have extensive experience in the operation and maintenance of studio color television systems, after SWRL has officially accepted the studio and observation systems it should not be necessary for this man to receive further training.

The main responsibility of Technician B shall be the maintenance and operation of all video equipment. He will perform most of his duties under the direction of the TV engineer and program directors; it is unlikely that his services shall be required until after the TV engineer has been hired and has had time to become familiar with the system and his responsibilities. Therefore, recruitment for Technician B should begin on or before May 1, 1972, and selection should probably be complete by September 15, 1972.
The major responsibilities of Technician C will include corrective and preventive maintenance of optical projection and audio equipment, and prototype teaching/learning apparatus development. It is anticipated that this employee will continue to discharge his present duties until approximately September 15, 1972, at which time ACSI recommends that he, too, should be trained in the maintenance and operation of the television systems. Since it is conceivable that film and TV camera crews will require the services of Technician B, a technical back-up capability for the TV studio can be created by training him in the operation and maintenance of the color TV system. In addition, since one of the major responsibilities of Technician B shall be the maintenance and calibration of test instruments, he would become more proficient in the maintenance of the color TV system if he understood the proper function of the system elements which are to be tested by the instruments in his charge. It is also assumed that during the move-in period following completion of the building, this technician will assist various equipment and system vendors install the newly acquired items.

Technical Assistant A is required to assist in the maintenance of numerous audio/visual equipment, microform equipment and other instructional media apparatus. In addition, there is a secondary requirement for such an assistant to assist laboratory personnel with the scheduling and setup of audio/visual equipment.

The following job descriptions were developed to assist SWRL's management in obtaining and evaluating qualified applicants for the described positions.
<table>
<thead>
<tr>
<th>TITLE</th>
<th>SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Engineer</td>
<td>$14,000</td>
</tr>
<tr>
<td>Video Technician</td>
<td>16,000</td>
</tr>
<tr>
<td>Prototype and Maintenance Technician</td>
<td>12,000</td>
</tr>
<tr>
<td>Technical Assistant</td>
<td>15,000</td>
</tr>
<tr>
<td>Media Specialist</td>
<td>10,000</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td><strong>77,000</strong></td>
</tr>
<tr>
<td>13% benefits</td>
<td>10,010</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$87,010</strong></td>
</tr>
</tbody>
</table>
TECHNICAL SUPPORT STAFF - BY PERCENTAGE OF APPLIED TIME

The chart on the following page indicates the percentage allocation of each technical support employee's annual working hours for the operation and maintenance of the recommended systems/equipment. A full-time employee is scheduled for 2080 annual working hours.
<table>
<thead>
<tr>
<th>System/Equipment Group</th>
<th>Technician A</th>
<th>Engineer A</th>
<th>Technician B</th>
<th>Technician C</th>
<th>Assistant A</th>
<th>Media Specialist</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCMS</td>
<td>30%</td>
<td>30%</td>
<td>43%</td>
<td>30%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>Other EDP Equipment</td>
<td>20%</td>
<td>20%</td>
<td>14%</td>
<td>14%</td>
<td>20%</td>
<td>14%</td>
</tr>
<tr>
<td>Studio TV</td>
<td>43%</td>
<td>30%</td>
<td>43%</td>
<td>20%</td>
<td>13%</td>
<td>30%</td>
</tr>
<tr>
<td>TV Observation</td>
<td>14%</td>
<td>10%</td>
<td>14%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Studio Lighting</td>
<td>2%</td>
<td>11%</td>
<td></td>
<td>10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microform</td>
<td></td>
<td>4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood/Metal Shop</td>
<td></td>
<td>13%</td>
<td></td>
<td>15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instrumentation</td>
<td></td>
<td>6%</td>
<td></td>
<td>10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Film</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Photography</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misc. A/V equip. maint.</td>
<td>10%</td>
<td>25%</td>
<td>10%</td>
<td>4%</td>
<td>10%</td>
<td>60%</td>
</tr>
<tr>
<td>Prototype development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Attachment 66. Schedule for Installation and Testing of R&D Equipment Systems
INSTALLATION PRIORITY SCHEDULE

It should be noted that where two or more systems/equipment groups are listed together, they should be installed concurrently.

<table>
<thead>
<tr>
<th>Priority</th>
<th>System/Support Equipment Group</th>
<th>Site Prep.</th>
<th>Installation</th>
<th>Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Studio Lighting System</td>
<td>1/2 mo.</td>
<td>1/2 mo.</td>
<td>1/4 mo.</td>
</tr>
<tr>
<td></td>
<td>Studio Television System</td>
<td>1/2 mo.</td>
<td>2 mos.</td>
<td>1 mo.</td>
</tr>
<tr>
<td>2</td>
<td>Instructional Development</td>
<td>1/2 mo.</td>
<td>2 mos.</td>
<td>1/2 mo.</td>
</tr>
<tr>
<td></td>
<td>Control &amp; Monitoring System</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Wood/Metal. Shop Equipment</td>
<td>N/A</td>
<td>1/2 mo.</td>
<td>included in installation</td>
</tr>
<tr>
<td>3</td>
<td>Audio Equipment</td>
<td>1/2 mo.</td>
<td>2 mos.</td>
<td>1/2 mo.</td>
</tr>
<tr>
<td>4</td>
<td>Microform Equipment</td>
<td>N/A</td>
<td>3 days</td>
<td>included in installation</td>
</tr>
<tr>
<td>5</td>
<td>Maintenance Instrumentation</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>5</td>
<td>Photographic Equipment</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>5</td>
<td>Film and Still Photography Equipment</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
SWRL CONSTRUCTION SCHEDULE

1. BEGIN CONSTRUCTION: 6-1-71
2. CONSTRUCTION: 6-1-72
3. INSTALL: 9-1-72
4. INSTALL: 9-15-72
5. FINAL TESTING
6. TESTING

- Activation: 9-1-72
- Site Prep.: 9-15-72
Attachment 67. PERT Diagram - R&D Equipment System Installation
The Modified PERT Diagram appearing on the following page indicates a total plan for the equipment and support personnel scheduling commencing with the beginning of construction on June 1, 1971, and detailed through the activation period and final testing of installed systems. The key to understanding the diagram is a clear comprehension of the Construction Schedule noted as the top line of the diagram and further analyzed within the "Construction Schedule" section of this document.

The scheduling of systems, support equipment and personnel within this diagram is a result of the analysis of the individual requirements contained within the "System Configuration" and "Personnel Requirements" sections of this document. The purpose of the diagram is to detail the interrelationships of the construction schedule, the implementation of each system and support equipment group, and personnel acquisition. By following the diagram from left to right, it is possible to determine which events shall have occurred at any one point on the dateline.

By scheduling each phase of work involved in implementing either a system or particular personnel, it will be possible for SWRL to be assured that all systems and equipment shall be operating by final activation of the new facility.

More specifically, the various elements contained in this diagram are defined as follows:
Dateline

Chronological listing of critical dates recorded across the top of the diagram and corresponding to the events scheduled directly below. Dates are indicated by month through final building activation.

Construction Schedule

Critical construction schedule events are detailed from left to right, corresponding to the dateline. Refer to "Construction Schedule Analysis" section of this document for further explanation.

System/Support Equipment

Each system and support equipment group is detailed by events involved in its implementation. Numbering of events is consecutive from left to right, corresponding again to the dateline. Since separate scheduling, in-house construction, site preparation, installation, and testing schedules are required for each system/equipment group, a separate event and activity line has been used for each.

However, events 1 through 6 (bid/proposal preparation through award of contract) will occur at the same time for all equipment.

Personnel

The acquisition of new employees, as recommended per the "Personnel Requirements" section of this document has been scheduled to reflect recruitment, selection, hiring, training, and individual work programs as they relate to the system/equipment implementation.
Attachment 68. Budget Summary - R&D Equipment Groups/Systems
INTRODUCTION

The budget summary appearing on the following page has been included to provide SWRL management with a detailed analysis of the total yearly operational costs involved in acquiring, staffing, and maintaining the new systems and support equipment to be installed within the Laboratory's Los Alamos facility.

A breakdown of costs for each system and equipment group has been included on this chart according to the following categories:

1. Basic System Cost

This figure indicates the estimated cost of each basic system and support equipment group, including installation.

2. Yearly In-House Personnel Costs

These figures are determined by dividing annual salaries of individual personnel (see Personnel Requirements section) by percentage of applied time for each category and system. Note that approximately 13% of the gross salary for each employee must be added to the budget figure to cover benefits provided by SWRL.

   a. Operation

   This figure indicates the estimated in-house personnel cost for operation of the particular system/equipment for a one year period of time. This cost should remain fairly constant during the first 18 months of operation.

   b. Maintenance

   This figure indicates the estimated in-house personnel costs for preventive and corrective maintenance of the system/equipment. Although
b. Maintenance (cont.)

corrective maintenance labor for certain systems is to be provided by the manufacturer for a period of 90 days to one year from installation (see Maintenance and Operation category of Systems/Equipment Configuration section for exact warranty periods), an amount of time equal to the required corrective maintenance hours has been used for in-house personnel. This has been done to serve as an instructional period so that maintenance operations may be conducted in-house in subsequent periods.

This figure indicates the cost of a maintenance contract or "on-call" maintenance program provided by an outside agency. Although the Consultant recommends the use of in-house personnel for all maintenance operations, this alternative method has been presented for analysis by SWRL management in making final determinations.

4. Replacement Parts

This figure indicates the cost of replacement parts for a particular system/support equipment group during the first year of operation, second year of operation, and third (and thereafter) year of operation. This figure is supported, in each case, by the analysis of requirements as documented in the "System/Equipment Configuration" section of this document.
<table>
<thead>
<tr>
<th>SYSTEM</th>
<th>BASIC COST</th>
<th>IN HOUSE PERSONNEL COSTS</th>
<th>ALTERNATIVE OUTSIDE MAINTENANCE CONTRACTS</th>
<th>REPLACEMENT PARTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>MAINTENANCE</td>
<td>OPERATION</td>
<td>1st YEAR</td>
</tr>
<tr>
<td>IDCMS</td>
<td>527,187</td>
<td>4,185</td>
<td>4,185</td>
<td>$11,025 to $25,000</td>
</tr>
<tr>
<td>TV STUDIO</td>
<td>195,842</td>
<td>12,150</td>
<td>5,500</td>
<td>$19,264 contract</td>
</tr>
<tr>
<td>TV OBSERVATION</td>
<td>42,187</td>
<td>3,819</td>
<td>5,260</td>
<td>4,218 contract</td>
</tr>
<tr>
<td>STUDIO LIGHTING</td>
<td>13,665</td>
<td>218</td>
<td>2,200</td>
<td>570</td>
</tr>
<tr>
<td>AUDIO</td>
<td>24,895</td>
<td>2,312</td>
<td>6,400</td>
<td>2,459</td>
</tr>
<tr>
<td>MICROFORM</td>
<td>26,045</td>
<td>616</td>
<td></td>
<td>2,000 (includes parts)</td>
</tr>
<tr>
<td>WOOD/METAL SHOP</td>
<td>14,126</td>
<td>2,002</td>
<td>2,250</td>
<td>Not applicable</td>
</tr>
<tr>
<td>INSTRUMENTATION</td>
<td>16,845</td>
<td>954</td>
<td>1,500</td>
<td>1,600</td>
</tr>
<tr>
<td>FILM</td>
<td>15,585</td>
<td>375</td>
<td>2,500</td>
<td>Not applicable</td>
</tr>
<tr>
<td>PHOTOGRAPHY</td>
<td>8,616</td>
<td>178</td>
<td>6,400</td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>577,174</strong></td>
<td><strong>526,817</strong></td>
<td><strong>539,335</strong></td>
<td><strong>526,817</strong></td>
</tr>
</tbody>
</table>

**NOTES:**
Add 13% benefits to all gross salary figures for SWRI personnel.

Difference between total of Col. 2a ($526,817) and Col. 2b ($539,335) or Col. 3c, 75%, and calculated on base of $77,000, reflects time spent by in-house personnel on functions not relating to operation and maintenance of new systems/support equipment. Refer to TECHNICAL SUPPORT STAFF page.
Attachment 69. Management Control System
MANAGEMENT CONTROL SYSTEMS

ACSI has found from experience with past clients that the most effective management systems for controlling the operation and concomitant expenses of equipment/systems is an on-line process that makes use of a continuous feedback loop.

ACSI has purposely designed the two television systems and the IDCMS to include elapsed time indicators on various components so that SWRL's management can periodically monitor the operation of these systems. For example, if the lighting system time meter shows that this equipment was used 10 hours, and if the studio TV cameras were also operated the same amount of time, the ratio of this elapsed time to the amount of usable video program material produced will yield a ratio of production time to finished video tape product (PT/VP). This ratio will vary according to the subject being taped. However, a mean ratio developed over a year's time can be very valuable as a planning factor. The total available system hours vs. the amount of time required for corrective and preventive maintenance can also be useful in deploying personnel and determining TV system production capacity. Similar use indicators are suggested for the other equipment/systems groups. These indicators are applicable to the full scope of SWRL program activities. For example, if 10 hours of video program materials were required as part of a particular R&D activity, the use indicators given here could then be used to calculate the cost of video system supplies and the amount of system time required to yield 10 hours of finished video tape.
In addition, each system has been designed to include a lapsed time indicator for the purpose of monitoring the time required to meet the various objectives. ACSI recommends that all indicators be maintained continuously and that adjustments be made periodically to update the indicators presented in this report.

The monitoring data will be reported by the technical staff. This procedure insures the cooperation and interest necessary to properly organize and monitor the operation of these systems. Depending upon the type of information synthesis required by middle and higher management levels, data collection forms can be constructed that will meet various planning requirements. The information contained in these operational reports may then be used for utilization planning, budgeting, personnel deployment, etc.
Use Indicators

Television System (Studio)
1. 1" Video tape 1 hr (qty. in ft.) = 3,000 ft. = $35/hr.
2. Cameras Elapsed time in hours
3. Film Chain Elapsed time in hours + minutes
4. Editing recorder Elapsed time in hours + minutes
5. Program recorder Elapsed time in hours + minutes

Studio Lighting System
1. luminaires Max. life in hours
2. system (total) Elapsed time in hours

Instructional Development Control and Monitoring System
1. system Elapsed time in hours
2. terminal time Elapsed time in hours + minutes
3. Loading station Elapsed time in hours + minutes
4. Stored programs Elapsed time in hours + minutes
   a) audio
   b) video

Audio System
1. Conference system Elapsed time in hours + minutes
2. Audio production unit Elapsed time in hours + minutes
3. Cassettes Quantity (finished product) in units
4. Master reel to reel recorder Elapsed time in hours + minutes

332
5. Reel to reel tape

Television Observation Systems

1. Video tape*  
2. VTR  

* Note that no total system elapsed time indicator can be derived from the TV Observation system since many parts of this system will be used in other systems to augment their capabilities.
Attachment 70. RFP for R&D Equipment System
TO: Southeast Regional Laboratory for Education Research & Development (SWRL), 11300 La Cienega Blvd., Inglewood, California 90304

In response to the foregoing Request for Proposals dated the undersigned submits the attached Proposal. This is firm for a period of thirty (30) days.

By submission of this offer, the offeror certifies that, except as noted below, up to the date of this offer no advice, information or notice has been received by the offeror from any Federal Government agency or representative thereof that the offeror or any of its divisions or affiliates or known first-tier subcontractors is in violation of any of the provisions of Executive Order No. 11246 of September 24, 1965, Executive Order No. 11375 of October 13, 1967, or rules and regulations of the Secretary of Labor (41 CFR, Chapter 60) and specifically as to not having an acceptable affirmative action program or being in noncompliance with any other aspect of the Equal Employment Opportunity Program. It is further certified and agreed that should there be any change in the status of circumstances certified to above between this date and the date of expiration of this offer or any extension thereof, SWRL will be notified forthwith.

Signed at __________________________________ on __________________ day of __________________, 1971.
PROPOSAL COVER SHEET, CONT'D.

Name of Firm

Address of principal place of business:

California address, if different:

Type of Organization:

If Partnership, names of partners:

If corporation, State or Country (if non-U.S.) of incorporation:

IRS Identification Number:

Firm's Phone Number

Name & Title of Individual authorized to sign for firm:

Authorized Signature:
REQUEST FOR PROPOSALS

MEDIA SYSTEMS AND SUPPORT EQUIPMENT

for the

SOUTHWEST REGIONAL LABORATORY

for

EDUCATIONAL RESEARCH AND DEVELOPMENT

(PR C-1001)

1. RECEIPT AND OPENING OF PROPOSALS.

THE SOUTHWEST REGIONAL LABORATORY FOR EDUCATIONAL RESEARCH AND DEVELOPMENT (SWRL) will receive proposals for the sale and installation of the Instructional Development Control & Monitoring System on or before Sept. 1, 1971, at the following address:

Southwest Regional Laboratory
for Educational Research & Development
11300 La Cienega Blvd.
Inglewood, California 90304

Proposals shall be delivered in sealed envelopes clearly marked: "MEDIA SYSTEM AND SUPPORT EQUIPMENT PROPOSAL, PR C-1001", ATTENTION: Robert L. Christensen.

On the date and at the time and place stated, the proposals will be privately opened.
2. GENERAL DESCRIPTION

Proposals are requested on the following System which is to be a part of the Media Systems and Support Equipment in the new SWRL facility to be constructed in Los Alamitos, California.

INSTRUCTIONAL DEVELOPMENT CONTROL AND MONITORING SYSTEM - This system shall provide SWRL the necessary means for experimenting with instructional variables which will yield comprehensive observable results. The system has been designed to include the following four separate elements integrated into one unique system: 1) an audio storage and distribution system, 2) a video storage and distribution system, 3) a stored program system controller and its peripheral components, and 4) portable student/subject interactive terminal units.

3. SPECIFICATIONS

The complete specification for the system is set forth in detail in Section VI: Specifications for Purchase.

4. NON-ASSIGNMENT

a. This Request for Proposal shall not be reassigned to any other division or subsidiary of the company to whom it has been directed, nor to any other company, firm or corporation.
5. PROPOSAL FORMAT AND CONTENTS

   a. The Proposal shall include the following information in the order listed:

      (1) Cover Sheet. The Proposal Cover Sheet shown in Section II shall be completed and supplied as the first page of the proposal document.

      (2) Cost Summary. Cost data itemized to reflect the following in dollars:

         (a) Total design and engineering costs

         (b) Unit cost for each component with sales tax separately stated. This basis should be used for arriving at the final quotation. No discount pricing should be shown. (If this information is detailed elsewhere in the proposal, reference to page location and a recap of subtotals will suffice here.)

         (c) Installation charges

         (d) Total cost—the sum of the above

      (3) Technical Proposal. The Technical Proposal shall include the information and adhere to the format requirements set forth in the Specifications for Purchase (Section VI).

   b. Two complete copies of the proposal shall be submitted to SWRL.
6. TIME SCHEDULE

The following time schedule is to be used for planning purposes:

- Receipt of Proposals: 9-1-71
- Negotiations and Award: 10-1-71
- Contractor's System Analysis, Design, Scheduling, and Fabrication: 4-15-72
- In-House Final Adjustments: 6-15-72
- Site Preparation: 7-1-72
- Installation: 9-1-72
- Final Testing: 9-15-72

7. DELIVERY AND SHIPMENT

All components are to be assembled as a system in Contractor's plant and shipped to installation site so as to permit compliance with the foregoing schedule.

8. CONSTRUCTION DOCUMENTS

a. The following architect's construction drawings for the SWRL facility which are pertinent to this Request for Proposal are listed below, and are included as a part of this Request for Proposal.
b. The above set of drawings is to be returned to SWRL whether or not a proposal is submitted.

9. **FIRM OFFER**

Proposals shall be offers and must be firm for a period of thirty (30) days.

10. **EVALUATION OF PROPOSALS**

Proposals will be evaluated by SWRL with the counsel, advice and assistance of Alta California Systems, Inc. The evaluation will be based upon the criteria stated in the Specifications. It shall be the perogative of SWRL and/or their consultants to request further information concerning the bidder's proposed system throughout the evaluation process.

11. **AWARD OF CONTRACT**

a. Award of the contract will be made to that responsible person, firm or corporation whose proposal, conforming to this request, will be most advantageous to SWRL.

b. SWRL reserves the right to reject any or all proposals, to consider alternates, and to waive informalities and minor irregularities.

12. **FORM OF CONTRACT**

The person, firm, or corporation to whom an award may be made shall by submitting a proposal signify that he will enter into a two party contract with SWRL which contract shall be consistent with the conditions stated in this Request for Proposals and shall reflect mutually agreeable terms as to price and shipment. The contract will be in the style shown in Section III and shall include installation Terms and Conditions shown in Section IV.

13. **QUALIFICATION OF OFFERORS**

SWRL may make such investigation as it deems necessary to determine the ability of an offeror to perform the work, and any offeror shall furnish to SWRL all information and data for this purpose as SWRL may request. SWRL reserves the right to reject any proposal if the evidence submitted by, or investigation of, such offeror fails to satisfy the Laboratory that such offeror is properly qualified to carry out the obligations of the contract and to complete the performance contemplated herein. Conditional proposals will not be accepted.
14. BONDS

The person, firm, or corporation to whom an award is made, as a condition to the award, and before a contract is consummated, shall be required to provide a performance bond, per the specimen form shown in Section V, executed by good and sufficient sureties satisfactory to SWRL, the cost thereof to be paid by the Laboratory.

15. REQUESTS FOR INTERPRETATION AND CLARIFICATION

a. Informal questions concerning this Request for Proposals may be directed to the following individuals. However, it should be noted by all system contractors and their representatives or vendors that no SWRL staff member, with the exception of Mr. Christensen (listed below) may be contacted without first receiving the permission of ACSI. Any prospective bidder or supplier who contact any employee of the Laboratory, with the exception of Mr. Christensen, will be immediately disqualified from bidding.

(1) As to technical matters:

Mr. John V. Deal, President
ACSI (Alta California Systems, Inc.)
P. O. Box 3029
Stanford, California 94305
(415) 969-9680

(2) As to the business aspects of the proposal:

Mr. Robert L. Christensen
Business Officer
Southwest Regional Laboratory
11300 La Cienega Blvd.
Inglewood, California 90304
(213) 776-3430

b. Requests for interpretation and/or clarification of any provision of this RFP shall be made in writing to the address shown in Paragraph 1. Every interpretation will be in the form of a written addendum or clarification which will be mailed to each addressee.
16. LATE PROPOSALS AND MODIFICATIONS OR WITHDRAWALS

a. Proposals and modifications or withdrawals thereof received at the address designated in Paragraph 1 after the time set forth for opening will not be considered unless they are received before an award is made, and are sent by registered mail, or by certified mail for which an official dated post office stamp on the original receipt for certified mail has been obtained and it is determined by the Southwest Regional Laboratory that the late receipt was due solely to delay in the mails for which the offeror was not responsible.

However, a modification which makes the terms of the otherwise successful proposal more favorable to SWRL will be considered at any time it is received and may thereafter be accepted.

b. Any proposal may be withdrawn prior to the scheduled time for receipt and opening of proposals stated in Paragraph 1.

17. FUNDING

The SWRL facility is funded by a Grant from the U.S. Department of Health, Education and Welfare, Office of Education pursuant to the provisions of the Cooperative Research Act.

18. ORDER OF PRECEDENCE

In the event of an inconsistency between the provisions of this Request and other contract documents, the inconsistency shall be resolved by giving precedence in the following order to:

a. Addenda to this Request for Proposals, the last one first;

b. Provision of this Request for Proposals;

c. The provisions of the specimen contract shown in Section III;

d. The Terms and Conditions shown in Section IV;

e. The Proposal.

Issued at __________________ California, this __________ day of __________________

Southwest Regional Laboratory for Educational Research and Development

By __________________
PROPOSAL INSTRUCTIONS

1. Introduction

The enclosed specifications describe an Instructional Development Control and Monitoring System (IDCMS), which must be designed to meet the functional requirements stated in the following specifications.

The entire IDCMS shall be supplied by a single contractor. Said contractor shall be required to design, manufacture, install and test these sub-systems in accordance with the enclosed design and installation criteria.

It should be noted that the enclosed equipment specifications have been assembled in a Request for Proposal (RFP) format rather than the conventional Invitation for Bid (IFB) format. This procedure for the bidding process has been adopted in order to give system contractors greater latitude in developing a responsive proposal and the laboratory greater potential value in the delivered system.

Therefore, the enclosed specifications represent state-of-the-art equipment selections and should be considered a guide for design, not rigid item specifications. The most important criteria for the system designer is one of function. The total system must be responsive to the programmatic needs of the laboratory. In addition to the functional requirements stated in the preface to the actual specifications, Mr. John V. Deal of Alta California Systems, Inc. (ACSI) shall be available to answer all questions regarding the design requirements.
In choosing the actual system elements, it shall be necessary for the proposal developer to insure that no element is chosen which will inhibit or degrade the performance of the overall system with respect to the stated functional requirements. Failure to adhere to these continuity requirements shall constitute sufficient reason for proposal rejection (see proposal evaluation). This proposal shall be bound in two separate documents. The first volume shall contain the operational description, system block diagram, equipment list (Summary) failure rate analysis (if available), response time analysis, installation cost schedule, and the contractor's statement of experience as required for this RFP.

The second volume shall contain all performance ratings, schematics specifications, operating manuals and all other descriptive literature pertaining to each system component proposed by the contractor (including his own proprietary products).

2. Proposal Format

The proposal shall be bound in two separate volumes. Volume 1 shall include the items listed in 3. Proposal Requirements. Volume 2 shall contain all performance ratings, schematics specifications, operating manuals, and all other descriptive literature pertaining to each system component proposed by the contractor (including his own proprietary products).
3. Proposal Requirements

Due to the relatively high cost estimated for this system, SWRL is compelled to require each system contractor receiving an RFP to submit their proposal in accordance with the following format. All proposal materials shall be assembled in the same outline format as these instructions. All proposals must provide the following information to qualify for evaluation:

A. OPERATIONAL DESCRIPTION. A comprehensive description of the operation of the IDCMS shall preface the contents of the proposal. This preface must adequately describe all features of the system as well as the functional characteristics of each system element. This description shall be sufficiently detailed to indicate how the proposed system meets the stated functional requirements outlined in this document and described in conversations with representatives of Alta California Systems. If the bidder prefers to add features to his proposed system which were not identified in this document, he should be cognizant of the fact that the criteria for selecting the most responsive bid gives preference to those features which meet the laboratory’s programmatic needs.

B. PROPOSAL DIAGRAM. Following the operational description of the system, a block diagram showing each system element or component within the proposed system shall be included in the proposal. Major signal flow and control signal paths shall be illustrated. A suitable graphic technique shall be employed for the purpose of clearly distinguishing the mass analog storage components (audio/video) from the digital storage components proposed.
This diagram(s) shall be bound in the same volume as the operational description
the equipment list, the failure rate analysis, the response time analysis and the
contractor's statement of experience.

C. EQUIPMENT LIST. This proposal must also include a detailed
list of the actual equipment items which the contractor intends to use to configure
the system which he will deliver to the SWRL facility for the quoted price.
Each item on this list shall include manufacturer's name, catalog numbers,
written descriptions, performance ratings and price quotations. A recap sheet
shall summarize all of the above with specifications and performance ratings
bound separately in a second volume. All equipment which the contractor
intends to manufacture himself shall be accompanied by the same descriptive
literature as those items which he intends to secure through OEM arrangements
or "buy-outs".

D. FAILURE RATE ANALYSIS. A failure rate analysis report
(if available) shall be submitted on all proposed system components which are
obtained through OEM purchases or similar agreements between the contractor
and the manufacturer. It is assumed that such information will be available
on all major items that the contractor manufactures since the base data for
calculating mean time between failure (MTBF) can be derived directly from
engineering notes.

The analysis shall be conducted and reported in accordance with standards set
forth in the U.S. Department of Defense MIL Handbook 217A - (Reliability
Stress and Failure Rate Data). The actual report to be contained within
volume one of the proposal document shall contain MEAN time between failure and failure rate value for all items manufactured by the system contractor. Since the reliability of the IDCMS is critical to the success of SWRL's research and developmental programs, the failure rate report shall become an important factor in the evaluation of the proposal.

E. RESPONSE TIME ANALYSIS. Only those companies which purport to offer random or remote access information systems have been solicited for a proposal. Therefore, it is assumed that each of these companies is familiar with digital electronic circuits and systems, and that for any given system configuration the contractor can calculate "worst case" conditions by the use of a simulation model or similar technique. The necessary information for setting up such a simulation can be obtained from these specifications in addition to discussion with ACSI. The above described response time analysis shall be reported in volume one of the proposal document.

F. PRE-ACCEPTANCE TESTING. The successful bidder shall be prepared to assemble the entire system in his facility prior to shipment. Moreover, all proposals shall contain a statement (to be included in vol. one) describing the final assembly and test procedures. A comprehensive statement should be made describing how the contractor plans to test and validate system performance prior to shipment.

G. PERFORMANCE GUARANTEE. Acceptance tests demonstrating the performance of this system in accordance with the specifications contained herein will be conducted (on-site) prior to acceptance by SWRL. Any
exceptions or modifications to the specified acceptance tests or standards must be identified and justified in the formal proposal.

H. PHYSICAL INSTALLATION. The proposal and its concomitant quotation must include a separate item covering installation costs and schedules (to be bound in Vol. one of said proposal). More specifically, this statement must designate cable installation within the building, wall and floor surface mounting hardware (including connectors) signal cable, terminal cabinets, junction boxes, and all equipment enclosures not provided by the general contractor. It shall be the responsibility of the bidder to review all construction documents (architectural schematics, engineering drawings, architectural/engineering specifications, etc.) which are pertinent to the design and installation of this system.

I. CONSTRUCTION DOCUMENTS. All key architectural and engineering drawings have been supplied with this RFP. However, it shall be the responsibility of the contractor preparing a proposal in response to this RFP to make certain that he has reviewed all necessary construction documents for the new SWRL facility under construction at the new Los Alamitos site. This requirement is especially important in view of the fact that the new facility has been designed to accept the installation of the IDCMS in two possible locations (each with raised floors). At the time this RFP was prepared, the exact location for the IDCMS main frame and peripheral equipment had not been chosen. All proposals shall be prepared in accordance with the new facility
design. Thus, each bidder must study all construction documents carefully.

Since ACSI was retained very early in the architectural planning phases of this project, ACSI personnel shall be able to answer most questions regarding the new building. All questions of this nature should be directed to Mr. John V. Deal of the Alta California Systems. Due to the fact that the IDCMS is inextricably bound to the design of the physical plant, the evaluation of all proposals will include an examination of the contractor's proposed location, mounting, cabling, and containment of all system components.

J. EXPERIENCE AND FACILITIES. A plant visit and discussion of the proposal with the contractor's technical personnel will be arranged with each contractor submitting a responsive proposal. All contractors desiring to bid on this system shall supply the name and address of at least one customer to which said contractor has supplied at least one similar RAS (Random Access, Audio/Video retrieval system). These references must be current (installed within the last two years) and be representative of the size and type of system described herein. The degree of similarity is extremely important and the evaluation of the quality of the previously installed system shall be a significant factor in the selection of the most meritorious proposal.

K. SYSTEM ASSEMBLY. No component of this system shall be drop-shipped by OEM or vendors to the SWRL Los Alamitos site prior to being tested on the contractor's premises. It shall be the prerogative of SWRL's administration and
their consultants to witness all final tests of these systems on the contractors' premises prior to delivery.

L. LOCAL AND NATIONAL ELECTRICAL CODES. All system proposals shall reflect design and installation practices which are in accordance with the latest requirements of the National Electrical Code. The proposed installation shall also be in accordance with State and local codes and ordinances. All power and signal wiring associated with the operation of the IDCMS shall be described by the contractor in his proposal. Furthermore, the method which he proposes to employ to route cables and tie into power supply circuits shall be clearly indicated in the proposal. Each proposal shall clearly indicate the amount or percentage of conduit or duct space the contractor shall require for the system (power and signal). The bidder shall prepare an abbreviated schedule showing the designation number of each conduit (shown on the architect's plans) which he plans to utilize in his installation. Moreover, in addition to the designation number, the total percentage of available space within the conduit or duct which he plans to claim shall be indicated.

M. ACCEPTANCE TESTING. Final acceptance tests shall be performed by the System contractor or his appointed sub-contractor (testing contractor) in accordance with the enclosed installation requirements and minimum acceptance standards. These tests shall be witnessed by representatives from ACSI, and ACSI's recommendation shall be reported in writing to SWRL's administration.
N. PROPOSED SCHEDULE. The system contractor shall submit with his proposal a schedule of his proposed in-house construction, staging, system testing, installation and final acceptance testing to insure compliance with the RFP Time Schedule as it has been established.

O. SPECIAL INSTRUCTIONS. This system shall be warranted by the system contractor against defects in materials and workmanship for a period of 12 months following acceptance of the system. This warranty shall cover all necessary parts and labor required during the warranty period.

4. PROPOSAL EVALUATION

A technical and functional evaluation of proposals will be made independent of the quoted system price. However, the final decision for a Contract award will be made by the SWRL's administration on the basis of technical evaluation, price and other significant factors.

A comprehensive evaluation of those proposals received on schedule shall be conducted using the following criteria. An unacceptable rating on any portion of the received proposal (when evaluated against any of the following criteria) may be sufficient cause for rejection of that proposal.
1. Compliance with the requirements of RFP.

2. Degree to which the proposal reflects SWRL's unique media system requirements.

3. An acceptable failure rate for those portions of the system manufactured by the system contractor as reported in the proposal.

4. Adequacy of the components selected for use in configuring the required system.

5. Ability of the bidder to choose system components of a reliable nature with historically demonstrated acceptable performance characteristics.

6. An acceptable response rate under conditions of maximum loading as predicted in the simulation study report submitted with the proposal.

7. Component selection based on ease of maintenance.

8. Ease of updating or replacing components within the system.

9. Degree of system flexibility with respect to SWRL's programatic requirements and facility utilization.

10. Degree to which the proposed systems reflect the state-of-the-art in computer controlled audio/video access systems.

11. Past performance history of the system contractor with regard to the manufacture and installation of similar systems.

12. Application of basic human factors for consideration in design.
of work space and system operation.

13. Degree to which the electro mechanical system components represent the maximum state of the art.

14. Technical equipment and facilities including space, existing equipment, and the extent of proposed subcontracting.

15. Compliance with all other provisions set forth in these specifications.

16. Total cost of the system.

17. Ease of loading analog information.

18. Adequacy of maintenance capabilities.

19. Cost of maintaining the proposed system.
Attachment 71. Analysis of Proposals Received for R&D

Equipment Systems
PROPOSAL EVALUATION RATING SCALE

The following rating scale (Figure 2) has been developed for the purpose of evaluating each system contractor's total proposal response. The various criteria which appear in the Specifications for Purchase section of the formal Request for Proposal document have been listed on this scale with an appropriate rating for each company. Ratings range from "1" (least compliance) to "5" (full compliance) on the basic rating scale. To the right of each firm's basic rating on each evaluation criteria, a second figure appears. This second figure represents the total points received by the company in accordance with the basic rating as it has been applied to the weighted scale. A total of 100 points is possible as the maximum for all evaluation criteria. The relationship between the basic rating scale and the weighted points is represented in Figure 1 which appears on the following page. The maximum number of points available on the weighted scale for each individual criteria has been indicated with the corresponding number of available points depending upon the basic rating (from 1 to 5) achieved by each system contractor.

BASIC RATING SCALE

Although all ratings must be of a subjective nature, a thorough analysis has been made by ACS of each point for evaluation against a theoretical ideal. If a system contractor has fully complied with an individual criterion, he receives a "5." If he has not supplied particular required information, or if that information
supplied is totally unacceptable, he receives a "1". A contractor receiving a "2, 3, or 4" falls somewhere in between with a 2 representing below average, a 3 representing a merely acceptable or average response, and a 4 denoting an above average response.

A thorough written analysis of each system contractor's proposal has been included in the following section of this document. Each of the evaluation criteria has been considered and the particular rating of each firm has been detailed in this examination.

WEIGHTED SCALE (POINTS)

Of the total criteria presented, some are more critical to the total system design and actual formal proposal than others. For this reason, each item has received a specific rating. Utilizing a cost-benefit analysis technique, an attempt has been made by the Consultant to determine the maximum gain (benefit) for the specified budget figure (cost). This determination can also be described as the minimum of cost for achieving a specified benefit. All criteria represented on this scale represent specific benefits offered by a particular system proposal, with the exception of the last criteria which represents the total cost of the proposed system. For this reason, system cost has been more heavily weighted than the other criteria, all of which represents benefits. Consequently, of a total 100 points available, a maximum of 10 points may be reflected by the system cost. The remaining 90 points represent the benefit evaluation criteria. This weighting supports the requirement that the recommendation for award be based
upon responsiveness to performance specifications and total system cost. In addition, a sub-total figure has been entered to indicate the points received for all criteria with the exception of cost. This figure has been presented as a further comparison of the submittal.

LINE GRAPHS

The rating of each system contractor on both the basic rating scale and the weighted scale (points) has been further detailed by the use of two separate line graphs (Figure 3 and 4). Each contractor's performance rating is represented by a separate coded line.

Figure 3, Basic Rating Scale, shows the basic ratings (1 - least compliance through 5 - full compliance) on the vertical axis. The horizontal axis represents the various criteria, by number, corresponding to the full written explanations on Figure 2.

Figure 4, Weighted Scale, indicates the position of each system contractor using the weighted points which correspond to the 1 - 5 ratings appearing on the Basic Rating Scale. The weighted points appear on the vertical axis with the numbered criteria appearing on the horizontal.

It should be noted that the last criterion on the horizontal axis represents total cost of the proposed system. This heavily weighted criteria should be given careful consideration as it relates to the other benefit criteria appearing prior to it.
### Figure 1
#### BASIS FOR WEIGHTING SCALE

**PR C-1001 IDCMS (Instructional Development Control and Monitoring System)**

<table>
<thead>
<tr>
<th>Criteria from Basic Rating Scale</th>
<th>Maximum possible weighted points</th>
<th>Weighted points corresponding to rating scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>1 3 4 5 6</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>1 2 3 5 7</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>1 2 2 3 4</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>5</td>
<td>8</td>
<td>1 2 4 6 8</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>1 2 2 3 4</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>1 2 3 4 5</td>
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<tr>
<td>8</td>
<td>5</td>
<td>1 2 3 4 5</td>
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<tr>
<td>9</td>
<td>7</td>
<td>1 2 3 5 7</td>
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<td>10</td>
<td>7</td>
<td>1 2 3 5 7</td>
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<td>4</td>
<td>1 2 2 3 4</td>
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<tr>
<td>12</td>
<td>5</td>
<td>1 2 3 4 5</td>
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<td>17</td>
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<tr>
<td>18</td>
<td>4</td>
<td>1 2 2 3 4</td>
</tr>
<tr>
<td>19</td>
<td>10</td>
<td>1 3 5 7 10</td>
</tr>
</tbody>
</table>

**100 points possible.**

**Example:** If contractor received a rating of 5 on criteria number 1 (from basic rating scale), he would receive 6 points on weighted scale.
## PROPOSAL EVALUATION CRITERIA

<table>
<thead>
<tr>
<th>Basic Rating</th>
<th>Points</th>
<th>Basic Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Compliance with requirements of RFP</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Degree to which proposal reflects understanding of buyer's requirements</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>3. Acceptable failure rate for portions of system manufactured by system contractor</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>4. Adequacy of components in configuring system</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>5. Ability of bidder to select reliable components with record of acceptable performance characteristics</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>6. Acceptable response rate under maximum loading conditions</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>7. Component selection based on ease of maintenance</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>8. Ease of updating or replacing components</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>9. Degree of system flexibility as required by SWRL</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>10. Degree to which state-of-the-art technology is represented</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Past performance history of system bidder</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>12. Application of human engineering factors in design</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>13. Degree to which electro mechanical components represent maximum state-of-the-art</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. Technical equipment and facilities</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>15. Compliance with all other proposal provisions</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>16. Cost of maintaining the proposed system</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>17. Ease of loading analog information</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>18. Adequacy of maintenance capabilities</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Sub-total Criteria 1-18</strong></td>
<td><strong>49</strong></td>
<td><strong>78</strong></td>
</tr>
<tr>
<td><strong>TOTAL all criteria, including No. 19 (total cost of system)</strong></td>
<td><strong>50</strong></td>
<td><strong>88</strong></td>
</tr>
</tbody>
</table>

Figure 2

PROPOSAL EVALUATION SCALE

PR C-1001  IDCMS (Instructional Development Control & Monitoring System)
FIGURE 3
BASIC RATING SCALE
(IDC BASED SYSTEM)

CRITERIA

AMPX EPS.
AV ELECTRONICS
FIGURE 4
WEIGHTED SCALE (IDCM SYSTEM)
System Contractor: AV ELECTRONICS, INC.

1. COMPLIANCE WITH REQUIREMENTS OF RFP

Rating: 2

AV Electronics IDCMS proposal meets many of the formal RFP requirements. A complete operational description, equipment list, proposal diagrams, and warranty provisions are included within the proposal. However, AV has failed to include specific reference to in-house system assembly, pre-acceptance and final acceptance testing as required by the RFP. The proposed construction schedule has also been omitted and no specific listing of similar system installations, during the past two years was included. AV lists a variety of "dial access" system installations, but their proposed Apollo System, as a currently operating installation, for the IDCMS application is not mentioned.

2. DEGREE TO WHICH PROPOSAL REFLECTS UNDERSTANDING OF BUYER'S REQUIREMENTS

Rating: 3

It appears as if AV has developed a modified version of their standard Apollo system in response to the SWRL RFP. A large percentage of the proposal system meets the requirements set forth in the RFP. However, no "short segment" audio capability has been provided by AV. A future speech synthesizer input was proposed, but
no hardware included in this bid.

The fact that the proposed system contained certain elements which were not under computer control at all times, means that the proposed system could have severe limitations in future SWRL applications.

3. ACCEPTABLE FAILURE RATE FOR PORTIONS OF SYSTEM MANUFACTURED BY SYSTEM CONTRACTOR

Rating: 3

Most of the RFP data was supplied with this proposal; however, not all the information was included. Failure rates for those components included are acceptable.

4. ADEQUACY OF COMPONENTS IN CONFIGURING SYSTEM

Rating: 3

All functions required by SWRL were provided by AV except the "short segment" audio capability. The AV proposal lacked sufficient software information. However, ACSI has determined that the PDP 11 and its associated peripherals will permit Fortran IV programming in addition to Basic.

The student record capability proposed by AV is of little value in ACSI's opinion and, frankly, could lead to a possible erasure of important picture codes.
5. **ABILITY OF BIDDER TO SELECT RELIABLE COMPONENTS WITH RECORD OF ACCEPTABLE PERFORMANCE CHARACTERISTICS**

   **Rating: 2**

   All digital hardware components chosen by AV are acceptable to ACSI. However, the cassette audio master and buffer (audio) transports would be severely less reliable than bin loop, or reel-to-reel transports. Therefore, ACSI believes that the entire system would be vulnerable to failure and/or possible loss of valuable research data.

6. **ACCEPTABLE RESPONSE RATE UNDER MAXIMUM LOADING CONDITIONS**

   **Rating: 3**

   Statements made by AV lead ACSI to believe that AV did not employ an acceptable method of analyzing response time such as GPSS or SIMSCRIPT. Furthermore, AV seems to disregard the speed limitations of the CPU with what is essentially 12K of core under severe loading and the use of a background/foreground program format.

7. **COMPONENT SELECTION BASED ON EASE OF MAINTENANCE**

   **Rating: 3**

   The limitation of the cassette audio master/buffer arrangement proposed by AV seems to be the largest single weakness in said system. All other components appear to offer fair maintenance capabilities. AV has not supplied enough
information to indicate whether or not they have given sufficient thought to
simplifying maintenance procedures. No test instruments have been proposed
by AV.

8. **EASE OF UPDATING OR REPLACING COMPONENTS**

   Rating: 3

The proposed system makes use of a number of modular components which would
certainly simplify system update. Nevertheless AV has proposed to employ a
number of analog storage components which are manufactured by other companies.
Therefore, it is doubtful that they plan to utilize standard interface hardware.
The result of such a "hardwired" configuration would be a system that would be
difficult to update or expand.

9. **DEGREE OF SYSTEM FLEXIBILITY AS REQUIRED BY SWRL**

   Rating: 3

The AV proposal meets many of the requirements set forth in the RFP. However,
the degree of flexibility, to a large extent is predicated on the proposed
software. Unfortunately, the AV proposal offers insufficient evidence that
a flexible software design has been included in the basic proposal.
10. DEGREE TO WHICH STATE-OF-THE-ART TECHNOLOGY IS REPRESENTED

Rating: 4

As mentioned earlier, it is doubtful that the cassette format employed by AV could be termed state-of-the-art since the cassette format has certain inherent information bandwidth limitations and severe mechanical restrictions which can only be overcome with specially designed cassettes. The video disc proposed by AV has an acceptable history of operation. However, it is somewhat prosaic in design compared to that employed by the competition, and the large amount of modification to the OEM disc drive means that this particular disc was not designed specifically for this type of retrieval application. All other aspects of the system, especially the computer and its peripherals, employ latest state-of-the-art in solid state circuitry.

11. PAST PERFORMANCE HISTORY OF SYSTEM BIDDER

Rating: 3

AV Electronics has installed many dial access audio and video systems in the past few years. However, none of these installed systems actually reflect the high degree of technology required by the IDCMS. As such, ACS can give no more than a rating of 3 in this category.
12. APPLICATION OF HUMAN ENGINEERING FACTORS IN DESIGN

Rating: 4

Although rack layouts have been included, no console layouts were submitted with this proposal. As such, we can assume from their descriptions that the components described by their proposal would be enclosed in a standard (EIA) type enclosure or console.

13. DEGREE TO WHICH ELECTRO MECHANICAL COMPONENTS REPRESENT MAXIMUM STATE-OF-THE-ART

Rating: 3

As mentioned in Paragraph 10, the AV proposal represents a state-of-the-art just short of the latest trends in the industry. A few of these components, upon inspection by ACSI, were found to be little more than prototype components.

14. TECHNICAL EQUIPMENT AND FACILITIES

Rating: 3

AV's Fresno, California, production facility includes a complete machine shop, test and production equipment, and engineering and maintenance personnel. This facility may be considered as adequate for the production of the system covered by this RFP.
15. **COMPLIANCE WITH ALL OTHER PROPOSAL PROVISIONS**

Rating: 3

AV's proposal includes explanation of any deviations from system requirements and functional specifications. In addition, fairly complete support documentation (data sheets/brochure) has been provided for the system components. However, the AV response does not reflect any more than an "acceptable" rating in this category.

16. **COST OF MAINTAINING THE PROPOSED SYSTEM**

Rating: 4

Based on the aforementioned unfinished state of the components proposed by AV, ACSI believes that the said system may pose significant maintenance problems until the various newly developed hardware items can be displayed in a similar system for a long enough period to work out the inherent "bugs" that normally accompany complicated electro-mechanical devices such as these. However, ACSI has determined that although these components are little more than prototype, they represent the result of excellent engineering and any anomalies will probably be fairly easy to correct.

17. **EASE OF LOADING ANALOG INFORMATION**

Rating: 3

The scheme proposed by AV for loading analog information is somewhat more compli-
cated than that proposed by their competition. It would appear that at least a nominal amount of liaison work would be necessary between the computer programmers and media personnel to permit proper intrinsic code assignments.

It would also be necessary for the media specialist to become familiar with computer software codes for him to do a credible job of programming the analog portion of the system. However, once the procedure was mastered, the only chance for error would be a result of the requirement for entering actual digital codes into the system. A more advanced technique for accomplishing this objective would be to permit the computer to make address assignments.

18. ADEQUACY OF MAINTENANCE CAPABILITIES

Rating: 3

AV maintains an adequately equipped maintenance facility in Fresno, California. ACSI has visited the facility and evaluates it as acceptable for performance of maintenance operations anticipated for this system.

19. TOTAL COST OF THE SYSTEM

Rating: 1

Unfortunately, AV's proposal reflects a total-system cost of $329,421.85, representing a price of more than $100,000 over budget. Within their proposal, AV has made no statement regarding the reason for this costly submittal. Since they were made aware of the system budget at the proposal conference on July 21, 1971, it is unfortunate that their proposal was not more competitively priced.
Attachment 72. Grants Officer Approval for Procurement of R&D Equipment Systems
November 5, 1971

Your Reference: 'Facility Grant
Our Reference : OEG-0-70-5079(502)

Dr. Richard Schutz
Director
Southwest Regional Laboratory
11300 LaCienega Boulevard
Inglewood, California 90304

Dear Dr. Schutz:

The Southwest Regional Laboratory is hereby authorized to execute the following procurement contracts:

1. with Telemation California, Inc. in the amount of $252,775 for the fabrication and installation of the Closed Circuit Television System;

2. with Ampex Corporation in the amount of $222,348 for the fabrication and installation of the Instructional Development Control and Monitoring System;

3. with Suppliers Inc. in the amount of $20,078 for the fabrication and installation of the Audio System;

4. with Century Strand Inc. in the amount of $13,395 for the fabrication and installation of the Studio Lighting System.

This authorization is based upon your recommendation of October 7, 1971, and a review of the full history of this procurement, including the evaluation of your system consultant. Our review has confirmed that the above referenced firms' proposals represent the best combination of life cycle cost and functional suitability relative to the criteria approved by the Office of Education and incorporated by SWRL into the respective RFP's.

The $517,806 expenditure for these procurement actions leaves $59,368 for IFB procurement of the equipment sub-systems approved by my letter of October 13, 1971. Thus Grants Officer post-bidding approval of these sub-systems will be required if their total cost exceeds $59,368.

Please provide two copies of the executed procurement contract to the Project Officer. Thank you for your assistance during our review process.

Sincerely yours,

Jacob J. Mainone
Grants Officer
Attachment 73. Contract for Procurement of R&D Equipment System
SALE AND INSTALLATION AGREEMENT

INSTRUCTIONAL DEVELOPMENT CONTROL AND MONITORING SYSTEM

SOUTHWEST REGIONAL LABORATORY FOR
EDUCATIONAL RESEARCH AND DEVELOPMENT

AMPEX CORPORATION

This Contract is made and entered into this 18th day of November, 1971, by and between the SOUTHWEST REGIONAL LABORATORY FOR EDUCATIONAL RESEARCH AND DEVELOPMENT, a duly organized and validly existing public agency organized and operating under the Joint Exercise of Powers Act of the State of California, hereinafter referred to as SWRL or BUYER, and AMPEX, a California corporation with its principal place of business located at 401 Broadway, Redwood City, California, 94063, hereinafter referred to as CONTRACTOR or SELLER.

This Agreement is made in light and consideration of the following circumstances:

a. A new facility known as the Southwest Regional Laboratory for Educational Research and Development, under construction in Los Alamitos, California, is funded by a Grant from the United States Department of Health, Education and Welfare, Office of Education, made under the Cooperative Research Act (Grant Number 0EG-6-70-5079 (502)).

b. Contracts with others have been entered into by SWRL for the construction of the building.

c. The facility is to contain comprehensive electronic media systems and support equipment intended to further the educational research and development activities conducted by SWRL.
d. Contractor has made a proposal to supply the system described herein, and SWRL desires to enter into an Agreement for the acquisition thereof.

NOW, THEREFORE, Contractor does hereby agree to assemble and sell to SWRL the system described in this Agreement and all components thereof and to deliver the same, as well as to perform the services set forth in the Agreement for the consideration stated, and SWRL agrees to purchase the system and all components thereof and to receive the services. The rights and duties of the parties shall be subject to and shall be governed by the provisions, terms, and conditions of this Agreement.

1. CONTRACT PRICE

SWRL agrees to pay to Contractor, subject to such additions and deductions as may be provided for elsewhere in this Agreement, the sum of TWO HUNDRED TWENTY TWO THOUSAND THREE HUNDRED FORTY EIGHT DOLLARS ($222,348.00). The price is the installed price for the system and all components in accordance with Ampex Corporation's Proposal #25205-21004 dated September 1, 1971, as modified by Ampex letter dated September 30, 1971, Addendum #2 dated September 30, 1971, and including a total of three (3) Option A Alpha-Numeric Terminal Interface units (all of which are detailed below in Article 3, SPECIFICATIONS). This price shall also include the cost of installation and all shipping charges to the construction site in Los Alamitos, California. The stipulated price for sale and installation includes California Sales/Use taxes which are separately stated and applicable only to the goods sold. The total price aforesaid takes precedence over the unit prices and subtotals stated in the proposal Equipment Lists.

2. QUANTITY AND DESCRIPTION

a. GENERAL. Contractor shall sell and deliver the goods, materials equipment, and components comprising the system described herein and install the same at the designated locations at the new SWRL facility in Los Alamitos, California, in accordance with this Agreement.

b. SYSTEM. The thing sold by Contractor and purchased by SWRL shall be a system capable of performing as such and unless the materials do so perform the obligations of Contractor shall not have been fulfilled.

3. SPECIFICATIONS

Except as may be modified by the language of this signed Agreement or by amendments thereto, the goods and materials sold and the work of installation
performed shall be in strict accordance with the following, all of which are by reference incorporated herein whether or not attached hereto. Their identity and whereabouts at the time this Agreement is executed are stated.

a. AMPEX PROPOSAL. Volume I, Parts I through IV inclusive, of Ampex Corporation Proposal No. 25205-21004 dated and submitted September 1, 1971, as modified by Ampex Corporation letter of September 30, 1971, pages 1 through 3, signed by Ronald A. Polster and covering Control System Software, Hardware Additions, Deletions and Changes, and Training; Addendum #2, Cable/Control Panel Change and Additional Training, pages 1 through 2, dated September 30, 1971, and Option A, Alpha-Numeric Terminal Interface, dated September 30, 1971, of which a total of three (3) Option A Units shall be included within the total contract price (Reference Article I of this Agreement).

b. SPECIFICATIONS FOR PURCHASE. Instructional Development Control and Monitoring System (IDCMS) consisting of Section VI, pages I-I, through I-II, 2-I through 2-14, and 3-I through 3-47, which is part of SWRL's Request for Proposal #PR C-1001 in possession of the Contractor.

To the extent of any inconsistency between Paragraph 3a. (AMPEX PROPOSAL) and Paragraph 3b. (SPECIFICATIONS FOR PURCHASE), the former (Para. 3a.) shall control.

4. DOCUMENTATION

Contractor shall furnish and supply to SWRL the following documentation, the cost of which is included in the price aforesaid:

a. MANUALS. One complete set of instruction manuals for each component and piece of equipment which are to be adequate for operation, maintenance, and servicing thereof.

b. DRAWINGS.

(1) One complete set capable of reproduction of as-built drawings showing the detail of installation as made. As built drawings shall include a wiring legend showing all locations and clearly coded by color or other identification.

(2) One set of drawings for each component and piece of equipment consisting of circuit schematics and mechanical drawings.
5. **WARRANTY**

   a. **TITLE.** Contractor warrants that title conveyed shall be good, and its transfer of title to all materials and equipment shall be free of any security interest or lien or encumbrance.

   b. **CONTRACTOR'S WARRANTY.** Contractor warrants goods, materials, and equipment supplied under this Agreement to be free from defects in material and workmanship, it being intended that the warranty extend to defects which impair the normal use and service for which the system is intended. The warranty shall apply to any and all repaired or replaced parts, but the warranty on repaired or replaced parts shall terminate at the same time as the basic warranty. The warranty period shall commence on the date the system is accepted and will expire twelve (12) months thereafter, except that the video head assemblies and all parts thereof are warranted for six (6) months or 300 hours of operation for the recording head and disk of disk recorders.

   c. **EXTENDED WARRANTY.** In addition to the foregoing warranties, Contractor agrees to extend to SWRL the benefit of all subcontractor and materialmen's warranties to the full extent remaining where any such warranty extension would result in a greater warranty benefit to SWRL hereunder than is provided by the Contractor under Subparagraph 5b. The above warranty provisions cancel and supersede Ampex Corporation's Audio/Video Communications Group "Equipment Warranty" which was submitted with Proposal No. 25205-21004.

6. **PATENT INDEMNITY**

   Contractor shall protect and indemnify SWRL from and against all claims, damages, judgments, and loss arising from infringement or alleged infringement of any United States Patent by any of the articles or materials delivered under this Agreement, provided that in the event of suit or threat of suit for patent infringement, Contractor shall promptly be notified and given full opportunity to negotiate a settlement. Contractor does not warrant against infringement by reason of SWRL's use of articles sold under this Agreement in combination with other materials or in the operation of any process. In the event of litigation, SWRL agrees reasonably to cooperate with Contractor. All parties concerned shall be entitled, in connection with any proceeding under the provisions of this Clause, to be represented by counsel at their own expense.
Contract No. PR C-1001

### PERIOD OF PERFORMANCE

Contractor agrees to commence acquisition and procurement of materials immediately upon the execution of this Agreement by the last party signing it, thereafter diligently to prosecute performance until completion, and to complete performance in conformity with the milepost dates and events listed below. The references are to clauses of this Agreement or to the Specifications identified in Clause 3b. of this Agreement.

<table>
<thead>
<tr>
<th>EVENT</th>
<th>REFERENCE</th>
<th>DATE OR TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Schedule to Alta California Systems Inc. (ACSI) as designated in Article II.</td>
<td>Agreement 4c.</td>
<td>On or before January 3, 1972</td>
</tr>
<tr>
<td>Interconnect Schematic Diagrams to ACSI. (Contractor not to fabricate or assemble until approved by ACSI.)</td>
<td>Agreement 4b. (3)</td>
<td>On or before January 3, 1972</td>
</tr>
<tr>
<td>Commence fabrication and assembly upon approval by ACSI of interconnect schematic diagrams</td>
<td>Agreement 4b. (3)</td>
<td>On or before January 31, 1972</td>
</tr>
<tr>
<td>Complete in-house construction</td>
<td>SWRL Specifications identified in Article 3b. hereof</td>
<td>On or before May 15, 1972</td>
</tr>
<tr>
<td>In-house adjustments</td>
<td>SWRL Specifications identified in Article 3b. hereof</td>
<td>On or before June 1, 1972</td>
</tr>
<tr>
<td>Test</td>
<td>SWRL Specifications identified in Article 3b. hereof</td>
<td>On or before June 15, 1972</td>
</tr>
</tbody>
</table>

In-house tests will be conducted by the Seller on individual sub-systems only. The initial test of the entire IDCMS will not be conducted until after installation at the site with the understanding that the Seller remains fully responsible for the operation of the system in accordance with the requirements of this Agreement.
<table>
<thead>
<tr>
<th>EVENT</th>
<th>REFERENCE</th>
<th>DATE OR TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commence Site Preparation</td>
<td>SWRL Specifications identified in Article 3b. hereof</td>
<td>June 16, 1972 or on day following completion of building by General Construction Contractor, whichever is later.</td>
</tr>
<tr>
<td>Complete Site Preparation</td>
<td>SWRL Specifications identified in Article 3b. hereof</td>
<td>Two weeks thereafter</td>
</tr>
<tr>
<td>Commence Installation</td>
<td>SWRL Specifications identified in Article 3b. hereof</td>
<td>Day after Site Preparation complete.</td>
</tr>
<tr>
<td>Complete Installation</td>
<td>SWRL Specifications identified in Article 3b. hereof</td>
<td>Two months thereafter</td>
</tr>
<tr>
<td>Test and final acceptance</td>
<td>SWRL Specifications identified in Article 3b. hereof</td>
<td>In two week period after installation completed</td>
</tr>
<tr>
<td>Deliver as-built drawings and manuals</td>
<td>Agreement 4b. (1) (2)</td>
<td>One month after tests completed.</td>
</tr>
</tbody>
</table>

8. **SHIPMENT**

Transportation and shipment of all materials shall be the responsibility of Contractor with shipment to the SWRL facility directed to Contractor in care of:

Southwest Regional Laboratory for Educational Research and Development
4665 Lampson Avenue
Los Alamitos, California 90720

9. **BILLING INSTRUCTIONS**

Invoices are to be made in quadruplicate to SWRL and mailed to:
10. COMPOSITION OF CONTRACT

The Contract between the parties shall consist of this signed Agreement and the following, all of which are by this reference incorporated into the Contract as fully as those set out at length at this point in the Agreement:

a. Ampex Corporation Proposal 25205-21004 dated September 1, 1971; Ampex letter dated September 30, 1971; Addendum #2 dated September 30, 1971; and Option A dated September 30, 1971 (all of which are further detailed within Article 3a. of this Agreement).

b. Terms and Conditions which were included in SWRL's Request for Proposal #PR C-1001 and appearing here as Attachment A.

11. COMMUNICATION

The Contract number appearing on Page 1 of this Contract shall be referred to in all invoices and correspondence concerning this Contract, and communications between the parties shall be through the following persons:

a. Southwest Regional Laboratory for Educational Research and Development (SWRL)

   Technical matters: Mr. John V. Deal, President
   Alta California Systems Inc. (ACSI)
   2483 East Bayshore Road, Suite 209
   Palo Alto, California 94303 (415) 327-2115

   Contractual matters: Mr. Robert L. Christensen
   Business Officer
   SWRL
   6151 West Century Blvd.
   Los Angeles, California 90045 (213) 670-6384

b. Ampex Corporation
IN WITNESS WHEREOF, the parties hereto have set their hands by proper persons duly authorized on the day and year first above written.

It is understood that the clarifications as provided in Ampex proposal 25205-21004 dated September 1, 1971, and letter dated September 30, 1971 with addendum #2, modify the appropriate terms as stated herein.

SOUTHWEST REGIONAL LABORATORY FOR EDUCATIONAL RESEARCH AND DEVELOPMENT
(SWRL)

By /s/ William Hein, Jr.
Director of Business and Operations

AMPEX CORPORATION

By /s/ Charles A. Steinberg
(Signature)

Charles A. Steinberg
(Type Name)

Vice President-General Manager
(Type Title)
ATTACHMENT A

TERMS AND CONDITIONS

1. WORK TO BE DONE

The work to be done by Contractor includes all acts to be performed, labor to be supplied, and all materials, tools, equipment, cartage and other facilities, and Contractor's superintendence required for the full, timely, and complete performance of the Contract. Utilities are not included in such work unless the Specifications specifically provide for the furnishing thereof by Contractor.

2. LABOR AND USE OF PREMISES

a. SITE. Contractor shall confine his apparatus, the storage of materials, and the operation of his workmen to limits indicated by law, ordinance, permits, or directions of SWRL, and shall not unreasonably encumber the site with this material. Contractor shall not load nor permit any part of the structure to be loaded with a weight that will endanger its safety.

b. PERSONNEL. Contractor shall not employ on the work any unfit person or anyone unskilled in the work assigned to him. Contractor agrees that he will require his employees, subcontractors, and subcontractors' employees to be decorous and agrees that he will remove from the work any such employee or subcontractor who fails to comport his conduct or appearance with the rules of SWBL.

c. SUPERVISION. Contractor shall give efficient supervision to the work, using his best skill and attention. He shall lay out the work, be responsible for the work and its correctness, and shall keep on the work during its progress a competent foreman and necessary assistants.

d. CLEANING UP. Contractor shall at all times keep the premises free from any accumulation of waste materials or rubbish caused by his employees or work and at completion of the work shall remove all rubbish from and about the building, and all his tools, scaffolding, and surplus materials, and shall leave the work "broom clean" or equivalent and capable of properly functioning, unless more exacting requirements shall be specified.
3. PROTECTION AND SAFETY

Contractor shall continuously maintain adequate safeguards against the occurrence of accidents, injuries, damage, or hurt to any person or property and shall alone be responsible and make good without reimbursement hereunder any such damage or injury which may occur. Contractor shall comply with all federal, state, county and other appropriate health and safety orders, codes and regulations.

4. STANDARDS

a. WORKMANSHIP. All work done under this Contract shall be performed in a good, workmanlike, and substantial manner.

b. MATERIALS. Unless otherwise specifically provided, all equipment, material, and articles incorporated in the work are to be new and of a suitable grade for the purpose intended.

5. COORDINATION OF WORK

Contractor agrees that he will accommodate his work with that of the general contractor, if any, and with that of any other contractor working on the same project in order to avoid interference with other contractors and in order to further the expeditious completion of the overall project. Contractor will accept the directions and requests received by him from SWRL, and, if the general contractor is so authorized by SWRL, from the general contractor which are issued for the purpose of coordinating the performance of all work being or to be done on the project.

6. SEPARATE CONTRACTS

a. OTHER CONTRACTORS. SWRL reserves the right to let other contracts in connection with the project of which the work under this Contract is a part, including installation of equipment with forces in the employ of SWRL. Contractor shall afford other contractors reasonable opportunity for introduction and storage of their materials and the examination of their work and shall properly connect and coordinate his work with that of others.

b. OTHER WORK. If any part of Contractor's work depends for proper execution upon the work of any other contractor or work done or to be done by SWRL's employees, Contractor shall inspect such other work and shall promptly
report any defects in such work that render it unsuitable for his own proper execution and results. Contractor's failure to inspect and report shall constitute an acceptance by him of the work of another contractor or of SWRL employees as fit and proper for the reception of Contractor's work, except as to latent defects.

7. INSPECTION

Persons duly authorized by SWRL shall at all times have free access to Contractor's facilities and to the site of installation for the purpose of making inspection of materials and work. SWRL has the right to inspect before acceptance and before making payment. Inspection and tests by SWRL do not relieve Contractors from responsibility regarding defects or other failures to meet Contract requirements which may be discovered prior to acceptance. Except as otherwise provided in the Contract, acceptance shall be conclusive except as regards latent defects, fraud, or such gross mistakes as amount to fraud.

8. COMPLETION

The work shall not be deemed completed until Contractor has ceased work under the Contract and SWRL has made final inspection thereof and has accepted the installation as complete according to the terms of the Contract. Final inspection and tests shall be commenced promptly upon receipt of notice from Contractor that the installation has been completed and is ready for inspection and testing.

9. TITLE AND RISK OF LOSS

Title to and risk of loss of materials being installed by Contractor pass to SWRL upon completion.

10. UNEXPECTED COSTS

No cost resulting from any unfavorable or unexpected condition or event which might have been foreseen from a thorough examination by Contractor of the site or the working conditions of the Contract shall be the basis for any extra or other compensation to Contractor, but all such items shall be entirely at Contractor's expense without reimbursement.
report any defects in such work that render it unsuitable for his own proper execution and results. Contractor's failure so to inspect and report shall constitute an acceptance by him of the work of another contractor or of SWRL employees as fit and proper for the reception of Contractor's work, except as to latent defects.

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11. **COSTS OF NEGLIGENCE**

Any cost of performance due to the negligence of Contractor or anyone directly employed by him or due to their failure to comply with all applicable laws, ordinances, rules and regulations, or due to failure to observe and comply with the Contract, either for repairs or replacements, refinishing, disposal of material wrongly supplied, or the making good of defective work or of damage to property shall be born by Contractor and shall not be reimbursed to him in any way by Owner.

12. **CONTRACTOR AS INDEPENDENT CONTRACTOR**

Contractor is and shall be an independent contractor and shall not under any circumstances be or be deemed to be the agent, servant, or employee of SWRL.

13. **INDEMNITY**

Contractor shall indemnify and save harmless SWRL of and from any and all claims and demands which may be made by reason of the circumstances described in the following subparagraphs. Contractor shall at Contractor's own cost defend any and all actions, suits or proceedings that may be brought against SWRL on any such claim or demand and pay and satisfy any judgment that may be entered against SWRL in such action, suit or proceeding:

a. **EMPLOYEES AND SUBCONTRACTORS.** Any injury or damage arising out of the work suffered or sustained by any agent, servant, workman, employee, or subcontractor of Contractor or of persons assisting such subcontractor.

b. **PUBLIC.** The death of or injury to any person or damage to property suffered or sustained by any person or corporation caused by or alleged to have been caused by any willful or negligent act or omission of Contractor or Contractor's agents, servants, workmen, employees, or subcontractors or person assisting such subcontractors.

c. **OWNER.** Any injury or damage to Owner's plant or property caused by any willful or negligent act or omission of Contractor or of Contractor's agents, servants, workmen, employees or subcontractors under this Contract or by persons assisting such subcontractors.
d. PENALTIES. Any and all penalties imposed on account of the violation of any law or regulation compliance with which is the responsibility of the Contractor, except where the same shall have resulted from causes other than the fault or neglect through action or the failure to act of Contractor or any employee or representative of his, or of a subcontractor or subcontractor's employee or representative.

14. CONTRACTOR'S LIABILITY INSURANCE

For the period of this Contract, Contractor shall take out and maintain in full force and effect the following types of insurance and shall, before commencement of work hereunder, furnish SWRL satisfactory proof thereof. If Contractor fails to maintain insurance, SWRL may take out and maintain its own insurance covering such risks, and the premiums on such insurance shall be deducted from any payment by SWRL to Contractor:

a. WORKMEN'S COMPENSATION. Workmen's Compensation insurance covering all persons whom he may employ directly or through subcontractors in carrying out the work called for under this Contract in accordance with the Workmen's Compensation Insurance, and Safety Laws of the State of California.

b. PUBLIC LIABILITY. Public Liability insurance with limits of not less than $250,000 for injury to one person and, subject to that limit per person, $500,000 for one occurrence.

c. PROPERTY DAMAGE. Property Damage Liability insurance with limits of not less than $250,000.

15. SUBCONTRACTORS' INSURANCE

Contractor shall require all intermediate contractors and subcontractors and the immediate employers of all employees engaged in the execution of the work to be done hereunder to take out and maintain insurance of the kind which Contractor is required to carry by the terms hereof.

16. CHANGES

a. EXECUTION. This Contract may be amended or modified only by an amendment in writing executed in the same manner as the original.
b. **SUPPLEMENT TO CONTRACT.** Within the scope of work to be performed under this Contract, SWRL may direct changes, substitutions, additions, omissions, or extra work, and Contractor shall perform them if ordered by SWRL and agreed to by Contractor under the terms and conditions of the original contract. In the event that SWRL should contemplate the making of any change, it shall notify Contractor in writing of the nature and character of such proposed change. Contractor shall thereupon as soon as possible make an estimate of the effect thereof on the cost (whether such effect shall be to decrease or increase the cost) and of the period, if any, by which completion of the work will be delayed, and notify SWRL in writing. Thereafter, if SWRL desires to have such changes incorporated in the work, SWRL and Contractor shall execute a supplement to this Contract setting forth changes in the work, providing for modification of the Contract price upwards or downwards as the case may be adding thereto or subtracting therefrom the cost of such change, and providing for the number of additional calendar days required for completion, if any.

17. **RELEASE OF LIENS**

No payment will become due until the Contractor, if required by SWRL, shall deliver a complete release signed by the lien claimant of any and all liens arising out of this Contract, or receipts in full in lieu thereof and, if required by SWRL in either case, an affidavit that so far as Contractor has knowledge or information the release and receipts include all the labor and materials for which a lien could be filed. Contractor may, if any subcontractor or other possible lien claimant refuses to furnish a release or receipt in full, furnish a bond satisfactory to SWRL conditioned upon Contractor indemnifying SWRL against any claim by lien or otherwise. If any lien or claim remains unsatisfied after all payments are made, Contractor shall refund to SWRL all monies that the latter may be compelled to pay in discharging such lien or claim, including all costs and attorney’s fees.

18. **ASSIGNMENT**

Contractor shall neither assign any right nor delegate any duty under this Contract without the express written consent of SWRL and then only upon such terms and conditions as SWRL may stipulate in writing. This prohibition of assignment and delegation extends to all assignments and delegations that may lawfully be prohibited by agreement.
19. EXAMINATION OF RECORDS

Contractor agrees that Secretary of Health, Education, and Welfare and the Comptroller General of the United States or any of their duly authorized representatives shall, until the expiration of five years after final payment under this Contract, have access to and the right to examine any directly pertinent books, documents, papers, and records of Contractor involving transactions related to this Contract.

20. EQUAL OPPORTUNITY

During the performance of this Contract, the Contractor:

a. Will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places available to employees and applicants for employment, notices to be provided by SWRL setting forth the provisions of this nondiscrimination clause.

b. Will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

c. Will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by SWRL, advising the labor union or workers' representative of the Contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

d. Will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
e. Will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Government contracting agency and the Secretary of Labor for purposes of investigations to ascertain compliance with such rules, regulations, and orders.

f. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of such rules, regulations, or orders, this Contract may be cancelled, terminated or suspended in whole or in part, and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

g. Will include the provisions of Paragraphs (a) through (g) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such actions with respect to any subcontract or purchase order as the United States may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

21. PAYMENT

a. SWRL agrees to make progress payments to Contractor during the course of Contractor's performance, but not oftener than once every calendar month, in accordance with the following:

(1) As a condition precedent to SWRL's making any progress payment, Contractor shall first submit a written application therefor to SWRL accompanied by the extent required by SWRL by receipts or other vouchers showing Contractor's payments for material, supplies, equipment and labor, including payments to subcontractors, to the date of the application for payment. This application for progress payment shall be dated the first day of any month during which application is made.
(2) Within fifteen (15) days after SWRL's receipt of Contractor's application for a progress payment, SWRL will pay Contractor a sum obtained by taking 80% of Contractor's cumulative costs of direct labor performed and materials, equipment, and supplies acquired by Contractor for performance hereunder directly allocable to performance in accordance with generally accepted accounting principles, through the date of Contractor's application, deducting the aggregate of all previous progress payments.

(3) SWRL's decision as to the amount of any progress payment to be made to Contractor shall be final.

b. FINAL PAYMENT. Upon completion of the work and acceptance, Contractor shall submit his invoice for final payment to SWRL for all amounts claimed by Contractor to be due under the Contract. Within thirty (30) days after receipt of Contractor's final invoice, SWRL will make final payment to Contractor covering the balance of the contract price remaining unpaid, provided, however, that final payment shall not become due until Contractor, if requested by SWRL shall have complied with the Clause hereof entitled RELEASE OF LIENS.

22. EFFECT OF GOVERNMENT TERMINATION

In the event the United States terminates its Grant to SWRL as provided in the General Terms and Conditions of the Grant, SWRL may terminate this Contract in whole or in part coterminous with such Government termination. Termination shall be effected by delivery to Contractor of a Notice of Termination specifying the extent to which the performance of work under the Contract is terminated and the date upon which termination becomes effective. Thereafter, Contractor shall stop work, and SWRL's obligation of payment to Contractor shall be limited to reimbursing Contractor his costs incurred or expended to the effective date of termination.

23. DEFAULT

a. BASES. SWRL may, subject to the provisions of subparagraph c below, by written notice of default to the Contractor, terminate the whole or any part of this Contract in any one of the following circumstances:

[Additional text continues below the page]
If the Contractor fails to make delivery of the supplies or to perform the services within the time specified herein or any extension thereof; or

If the Contractor fails to perform any of the other provisions of this Contract, or so fails to make progress as to endanger performance of this Contract in accordance with its terms, and in either of these two circumstances does not cure such failure within a period of 10 days (or such longer period as SWRL may authorize in writing) after receipt of notice from SWRL specifying such failure; or

If a receiver is appointed on account of Contractor's insolvency or if Contractor is adjudged a bankrupt or makes a general assignment for the benefit of creditors.

EXCESS COSTS. In the event SWRL terminates this Contract in whole or in part as provided in this Clause, SWRL may procure, upon such terms and in such manner as it may deem appropriate, supplies or services similar to those so terminated, and the Contractor shall be liable to SWRL for any excess costs for such similar supplies or services, provided, that the Contractor shall continue the performance of this Contract to the extent not terminated under the provisions of this paragraph.

EXCUSE FOR DELAY. Contractor shall not be liable for delays which are excusable under the Clause entitled EXCusable DELAYS.

OBLIGATIONS UPON DEFAULT. If this Contract is terminated as provided in Subparagraph c, SWRL, in addition to any other rights provided in this Clause, may require the Contractor to transfer, title and deliver to SWRL in the manner and to the extent directed by it any of the completed or partially completed work not theretofore delivered to and accepted by SWRL, any completed supplies, and such partially completed supplies and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information, and contract rights (hereinafter called "manufacturing materials") as the Contractor has specifically produced or specifically acquired for the performance of such part of this Contract as has been terminated, and the Contractor shall, upon direction of SWRL, protect and preserve property in the possession of the Contractor in which SWRL has an interest. Payment for completed work and supplies delivered to and accepted by SWRL shall be at the contract price, if separately stated. Payment for completed work for which no separate price is stated, partially completed work, and manufacturing materials delivered to and accepted by SWRL and for the protection and
preservation of property shall be in an amount agreed upon by the Contractor and SWRL. SWRL may withhold from amounts otherwise due the Contractor for such completed supplied, work, or manufacturing materials such sum as SWRL determines to be necessary to protect it against loss because of outstanding liens or claims of former lien holders.

e. NONEXCLUSIVE. The rights and remedies of SWRL provided in this paragraph shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

24. EXCUSABLE-DELAYS

Except with respect to defaults of subcontractors, the Contractor shall not be in default by reason of any failure in performance of this Contract in accordance with its terms (including any failure by the Contractor to make progress in the prosecution of the work hereunder which endangers such performance) if such failure arises out of causes beyond the control and without the fault or negligence of the Contractor. Such causes may include, but are not restricted to: acts of God or of the public enemy; acts of the Government in either its sovereign or contractual capacity; fires; floods; epidemics; quarantine restrictions; strikes; freight embargoes; and unusually severe weather, but in every case the failure to perform must be beyond the control and without the fault or negligence of the Contractor. If the failure to perform is caused by the failure of a subcontractor to perform or make progress, and if such failure arises out of causes beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either of them, the Contractor shall not be deemed to be in default, unless (i) the supplies or services to be furnished by the subcontractor were obtainable from other sources, (ii) SWRL shall have ordered the Contractor in writing to procure such supplies or services from such other sources, and (iii) the Contractor shall have failed to comply reasonably with such order. Upon request of the Contractor, SWRL shall ascertain the facts and extent of such failure and, if he shall determine that any failure to perform was occasioned by any one or more of the said causes, the delivery schedule shall be revised accordingly, subject to the rights of SWRL under the Clause hereof entitled DEFAULT.

25. OFFICIALS NOT TO BENEFIT

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this Contract, or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this Contract if made with a corporation for its general benefit.
26. COVENANT AGAINST CONTINGENT FEES

The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty, SWRL shall have the right to annul this Contract without liability or in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage or contingent fee.

27. GRATUITIES

a. SWRL may, by written notice to the Contractor, terminate the right of the Contractor to proceed under this Contract if SWRL finds that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by the Contractor, or any agent or representative of the Contractor, to any officer or employee of SWRL with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performing of such contract.

b. In the event this Contract is terminated as provided in Paragraph (a) hereof, SWRL shall be entitled:

(1) To pursue the same remedies against the Contractor as it could pursue in the event of a breach of the Contract by the Contractor; and

(2) In addition to any other damages to which it may be entitled by law, to exemplary damages in an amount which shall be not less than three nor more than ten times the costs incurred by the Contractor in providing any such gratuities to any such officer or employee.

c. The rights and remedies of SWRL provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.
28. **PUBLICITY AND ATTRIBUTION**

   a. **NEWS RELEASE.** No news release nor public announcement concerning this Contract or its subject matter shall be made by either party prior to completion of performance hereunder without prior written consent of the other party.

   b. **ACKNOWLEDGMENT OF SUPPORT.** Any paper, film, or test published or made by Contractor which publishes information concerning the work under this Contract shall carry a footnote acknowledgment of the assistance received from the Department of Health, Education, and Welfare, Office of Education.

29. **COPYRIGHTS**

Where activity under this Contract results in a book or other copyrightable material the author is free to copyright, but SWRL on behalf of itself and for the U.S. Department of Health, Education, and Welfare reserves a royalty-free, nonexclusive, and irrevocable license to reproduce, publish, translate, or otherwise use, and to authorize others to use, all copyrightable or copyrighted material resulting therefrom. Material referred to in this paragraph includes reports, books, programs, tests, films, or other documents and their contents produced as a result of work under this Contract.

30. **PATENTS**

   Any invention arising out of the activities and work under this Contract shall be promptly and fully reported to SWRL acting in this matter on behalf of Secretary of Health, Education, and Welfare. Ownership and the manner of disposition of all rights in and to such an invention shall be determined by Secretary of Health, Education, and Welfare. The report required hereby shall sufficiently describe and identify the invention, appropriately illustrated by sketch or diagram, to permit the invention to be understood and evaluated. In any patent application filed on such an invention, there shall be included in the first paragraph of the specification of the patent application filed and any patent issued an appropriate reference to the source of funds as required by the Secretary of Health, Education, and Welfare.
31. CERTIFICATION OF NONSEGREGATED FACILITIES

(Applicable to contracts and subcontracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity clause.)

By entering into this contract the contractor or subcontractor certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location under his control where segregated facilities are maintained. He certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location under his control where segregated facilities are maintained. The contractor or subcontractor agrees that a breach of this certification is a violation of the Equal Opportunity clause in this contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise. He further agrees that (except where he has obtained identical certifications from proposed subcontractors for specific time periods) he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity clause; that he will retain such certifications in his files; and that he will forward the following notice to such proposed subcontractors (except where the proposed subcontractors have submitted identical certifications for specific time periods):

NOTE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT FOR CERTIFICATIONS OF NONSEGREGATED FACILITIES

A certification of Nonsegregated Facilities, as required by the May 9, 1967, order (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities, by the Secretary of Labor, must be submitted prior to the award of a subcontract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semianually, or annually).

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.
PERFORMANCE BOND

Contractor shall secure a Performance Bond in the amount of 100% of the contract price naming the SWRL obligee within 15 days after the execution of this contract.

THE CONDITION OF THIS OBLIGATION is such that if the above bounden Principal, his heirs, executors, administrators, successors or assigns perform the covenants, conditions and agreements in said Contract, and any alteration thereof made as therein provided, on their part to be kept and performed at the time and in the manner therein provided, on their part to be kept and performed at the time and in the manner therein specified and in all respects according to the true intent and meaning, and shall indemnify and save harmless THE SOUTHWEST REGIONAL LABORATORY FOR EDUCATIONAL RESEARCH AND DEVELOPMENT, its members, officers, agents and employees as therein stipulated, then this obligation shall become null and void; otherwise, it shall be and remain in full force and effect.

And the said Surety for value received hereby stipulate and agree that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or to the specifications accompanying the same shall in any wise affect its obligations on this bond, and it do hereby waive notice of any change, extension of time, alterations or addition to the terms of the Contract or to the work or to the specifications.