THIS FILE IS MADE AVAILABLE THROUGH THE DECLASSIFICATION EFFORTS AND RESEARCH OF:

THE BLACK VAULT

THE BLACK VAULT IS THE LARGEST ONLINE FREEDOM OF INFORMATION ACT / GOVERNMENT RECORD CLEARING HOUSE IN THE WORLD. THE RESEARCH EFFORTS HERE ARE RESPONSIBLE FOR THE DECLASSIFICATION OF THOUSANDS OF DOCUMENTS THROUGHOUT THE U.S. GOVERNMENT, AND ALL CAN BE DOWNLOADED BY VISITING:

HTTP://WWW BLACKVAULT COM

YOU ARE ENCOURAGED TO FORWARD THIS DOCUMENT TO YOUR FRIENDS, BUT PLEASE KEEP THIS IDENTIFYING IMAGE AT THE TOP OF THE .PDF SO OTHERS CAN DOWNLOAD MORE!



DEPARTMENT OF ENERGY DECLASSIFICATION REVIEW

SINGLE REVIEW AUTHORIZED BY:

A.B. SIEBERT MEMO 12/10/93

REVIEWER (DC, IDR, SO-70)

NAME: I. O'Baker To

DATE: 9-16-05

DATE: 9-16-05

DATE: 9-16-05

DATE: 9-16-05

DEPARTMENT OF ENERGY DECLASSIFICATION (CIRCLE NUMBER(S))

1. CLASSIFICATION CHANGED TO:

3. CONTAINS NO DOE CLASSIFIED INFO

4. COORDINATE WITH:

5. CLASSIFICATION CANCELED

6. CLASSIFICATION CANCELED

7. OTHER (SPECIFY):

MANHATTAN DISTRICT HISTORY

BOOK VIII, LOS ALAMOS PROJECT (Y)

VOLUME 3, AUXILIARY ACTIVITIES

CHAPTER 1, LOS ANGELES, CALIFORNIA, PROCUREMENT OFFICE

CLASSIFICATION CANCELLED

DATE 10/30/72

For The Atomic Energy Commission

Chief, Declassification Br. och DIVISION OF CLASSIFICATION



8 October 1947





FOREWORD

This chapter of Volume 3, Auxiliary Activities, of Book VIII, Los Alamos Project, has been prepared to present the activities of the Los Angeles, California, office which played an important part in the operation of the Los Alamos Project, even though it was located approximately one thousand miles from the site. The period covered is from 25 February 1943, when the Area Engineer was selected, to 31 Fecember 1946, when the activities of the Manhattan Pistrict, including the Los Angeles Area office, were transferred to the Atomic Energy Commission.

The security of the Project has been fully covered in other volumes. However, it was certainly enhanced under an arrangement whereby the technical contract was administered away from the site and procurement, one of the major battles during World War II, could be accomplished at an accelerated rate to meet the scientists' demands without revealing to the supply markets that such supplies were ultimately being shipped to a secret Project in New Mexico.

This chapter has been confined to the activities of the Los Angeles
Procurement Office. However, the administrative functions of this office
were reflected in other activities and will be found in complete detail
in Volume 1, General, and Volume 2, Technical, of Book VIII, Los Alamos
Project.







MANHATTAN FISTRICT HISTORY Book VIII, Volume 3 Chapter 1, Los Angeles, California, Procurement Office

TABLE OF CONTENTS

POREWORD

SUMMARY

SECTION 1 - INTRODUCTION

Par. Mo.		Page No.
1-1	General.	1.1
1-2	Functions of the Area Engineer Office	1.1
1-3	Establishment of Contractor's Purchasing Department	1.3
	SECTION 2 - HISTORICAL ACCOUNT	
2-1	Purchasing Program	2.1
2-2	University of California Purchasing	2.3
2-3	Government Procurement by Transfer	2.5
2-4	Engineering Procurement Division	2.6
2-5	Project Camel	2.8
2-6	Property Accountability	2.11
2-7	Accounting, Fiscal and Cost	2.13
2-8	Transportation	2.15
	SECTION 3 - SUPPLEMENTARY INFORMATION	
3-1	Costs	3.1
3-2	Organisation Charts	3.1

APPENDIX "A" - Tocuments

INIEX





SUMMARY

l. General. - After selection of the site for the laboratory, it became evident that an office would have to be established to purchase materials and supplies and expedite delivery of these to the Project. This office was required to be located near the industrial centers and convenient to transportation and shipping facilities to the site. Such a place was Los Angeles, California, which also had the added convenience of being the location of a part of the University of California, prime contractor and operator of the scientific laboratory at Los Alamos.

An Area office and contractor's Purchasing Department were established just as soon as possible after it was definitely decided that the University of California was to be the prime contractor. Additional offices were established in New York, New York, and in Chicago, Illinois, so that the industrial supply centers of the entire United States could be conveniently covered and the very best advantage taken of shipping and transportation facilities.

2. <u>Ristorical Account</u>. - It fell upon this office to produce satisfactory materials and supplies for use in the research work being performed at the Project, with a minimum of information as to the purpose for which the materials were desired or the end item being sought. In order to perform the task in a satisfactory manner, this office was required to hurdle war restrictions in the fast procurement of goods, transportation of personnel and supplies, and the procurement and retention of essential personnel, while at the same time preserving the





security of the Project and the connection of the University of California with the Government on a contractual basis.

Many difficulties were encountered in procuring the required materials and supplies and it was frequently necessary to augment the staffs of the various organizations and make changes in procedures. Organization of additional groups was necessary in order to take advantage of Government surplus stocks, and obtain supplies which were entirely under the control of the Manhattan Fistrict. The actual development of the bomb itself required the organization of an engineering procurement group with sufficient technical personnel to obtain equipment involving special design and shop fabrication. It was also necessary to utilize the facilities of the California Institute of Technology for this purpose through Project Gamel, which was a part of a Naval Ordnance Testing Station at Inyokern, California.

Selective Service restrictions on deferments required the personal supervision of the Area Engineer and his staff. Property accounting and fiscal procedures made it necessary to maintain accounting staffs for the purpose of assisting the contractor in establishing property records and to audit claims for reimbursement submitted by the contractor.

It was necessary to establish the best transportation facilities available for the rapid movement of personnel, equipment, and supplies. The restrictions imposed by the military traffic control boards made it necessary to establish liaison with the military authorities so that air priorities could be obtained to insure the fastest delivery possible and, in some cases, just before the actual testing of the atomic bomb, it was necessary to charter special planes to fly equipment needed by the





Project.

The total amount paid to the University of California under its contract with the Government was about \$32,000,000; this amount includes about \$3,700,000 of income received from charges for quarters and various services at Los Alamos, and from the sale of scrap, unclaimed property, etc. This may be regarded as a credit to the cost of operations as Los Alamos.

The maximum number of personnel on duty in the Area effice was 90, as of 1 November 1945, made up of 18 officers, 8 enlisted men and 64 civilian employees.

The contractor's Purchasing Department reached the peak of its operations as of 15 July 1945, with a total of 271 employees. Shortly after the cessation of hostilities many workers returned to their peacetime occupations, and it was necessary to make some replacements in the spring of 1946.

The contractor's Accounting Department reached a maximum of 47 employees in August 1945, and gradually decreased after V-J Day to 24 in December 1946.





MANHATTAN LISTRICT HISTORY LOS ANGELES CALIFORNIA PROCUREMENT OFFICE

SECTION 1 - INTROJUCTION

- General. Concurrent with the plans for the establishment of the Los Alamos Project, and upon selection of the University of California as the prime contractor, by letter of intent effective 1 January 1943, later superseded by formal contract No. N-7405-eng-36, Major General L. R. Groves, decided to open an Area office in Los Angeles, California, to supervise and expedite the contractor's procurement program and to administer the technical contract. Major Stanley L. Stewart, was appointed in February 1943 and, after a brief period of orientation during contract negotiations and a period of temporary duty in Los Angeles, California, formally established an Area office in April 1943 at 815 South Hill Street, Los Angeles, California, in the same building with the contractor's organisation.
- Functions of the Area Engineer Office. The Area Engineer was not informed of the magnitude of the Project being undertaken by the Manhattan District and, like many others associated with the Project, was given only limited instructions. He was told that he was to administer a highly secret contract with the University of California and was to supervise and expedite the contractor's Purchasing Department. He was designated as a duly authorised representative of the contracting officer with power to take action and make decisions so there would be no delay. In general terms he was informed that the Project was assembling the best



scientists available for the purpose of research needed by the War Department, which would involve an unusual procurement program, and that delays, no matter how trivial, would adversely affect the scientific work; that courage and determined effort and resourcefulness would be required; that complete information could not be given him regarding the end item; that only such information would be divulged as was considered necessary for those concerned to perform their daties; that he would be the only person from the contractor's Purchasing Department to be allowed to visit the Project to acquaint himself with the Project's requirements and assist the Project Director, Tr. J. R. Oppenheimer, on administrative matters; and that these visits should be scheduled at such times as not to affect the functioning of the Purchasing Department. The basis for organization was in the form of a memorandum dated 26 February 1943, prepared by the Project Director (See App. Al), and while applicable to the contractor's Purchasing Department, implied that a small organisation would be required for the Area Engineer's office. Consequently, offices were opened with the staff of the Area Engineer, one secretary, and one teletype operator. The decision for such a small staff was also based on security as it was the intent that the contractor's force would keep all records and, actually, the Area Engineer would represent and act as a business manager for the University of California. Additional functions and increased work program soon proved that this assumption was erroneous and additional personnel was necessary. In order to safeguard the security of the Project, the Area Engineer, even though an Army officer.





wore civilian clothes and shared offices with the contractor.

Establishment of Contractor's Purchasing Pepartment. - The contractor opened a Purchasing Pepartment at 815 South Hill Street, Los Angeles, California, on 16 March 1943, under the supervision of Mr. D. L. Wilt. Previous arrangements with University officials had made it mandatory that key appointments to the Purchasing Tepartment would be made from the regular University staff experienced in their method of buying. They would be subject to the supervision of the contracting officer's representative, who would be assigned office space in Los Angeles, California, and serve as Area Engineer. Under this arrangement the Director of Procurement, who was stationed at the Project, was solely responsible for determining needs and indicating priorities and delivery dates and kinds of transportation needed to meet desired deadlines, and the Purchasing Department was to be responsible for buying the material needed and meeting the required delivery dates. As might be expected of most purchasing agents, with such limited instructions Mr. Wilt had no conception of the magnitude of the Project and was very slow about employing ample help. Within a few months this was somewhat corrected, but there was always a tendency to be slow about having sufficient employees to meet the Project's requirements. The basis for organisation (App. Al) dated 26 February 1943 indicated that additional offices would be required in Chicago, Illinois, and in New York City. These offices were not opened until 1 May 1943. Teletype machines for communication facilities were installed in each purchasing office for hookup with the Project, which proved invaluable in transmitting messages, and



relieved the load that would otherwise have been placed on long distance telephone lines. The teletype machines were originally rented by the contractor. He could not obtain Army cryptographic auxiliary equipment, however, and the machines were taken over by the Area Engineer for operation on Signal Corps contracts.



SECTION 2 - HISTORICAL ACCOUNT

Purchasing Program. - The task of supplying a research laboratory secretly in wartime one thousand miles from the nearest large markets appeared to be an impossible one. It was contemplated that the contractor would operate procurement offices in Los Angeles, Chicago, and New York City, with good buyers in each office and an engineer in the Los Angeles office to negotiate and direct the machine shop orders and orders involving special fabrication. This procedure was followed until, in 1944, the Ordnance Division at the Project established its own procurement group under Lt. Col. R. W. Lockridge, with responsibility for all jobs involving machine shop work and mechanical assembly, the regular procurement division under the supervision of Mr. D. P. Mitchell being responsible for all stock items. It was soon evident that the University of California buyers did not have sufficient technical experience to handle this special type of purchasing, and the Engineering Procurement Division was established under the direct supervision of the Area Engineer for awarding and administering direct contracts between the Government and the vendor. With the opening of the Chicago and New York City offices of the contractor, and the Engineering Procurement Division in the Los Angeles Area office, the buyers in the respective offices could maintain contact with all manufacturing centers and supply markets of the United States. Requisitions for procurement by the contractor were submitted to the Los Angeles office and all controls originated at that point by the Los Angeles Purchasing Department. Such





items as could be procured in Los Angeles were turned over to the buyers in that office. Other items not available on the West Coast were forwarded to New York or Chicago, depending upon the commodity. These consisted mostly of electronics items, items manufactured by the larger electrical manufacturers, such as General Electric and Westinghouse, and other industries having their manufacturing plants and selling headquarters located in the eastern cities. Shipments were made direct to the Project from Chicago, as mentioned below. However, all communications were transmitted through the contractor's Los Angeles office. Security made it necessary that all eastern vendors ship direct to warehouses located in Chicago and Los Angeles and operated under the jurisdiction of the University of California. Commercial labels and any other identifying marks were then removed from the packages and shipments were made to Mr. D. P. Mitchell, Santa Fe, New Mexico. For further security, shipments were made to him as an individual rather than to the contractor's organisation and the shipper was indicated as Mr. C. E. Lee, Mr. Halph W. Ring, or whoever happened to be in charge of the particular warehouse at the time of shipment. The primary function of the Area Engineer with respect to the contractor's purchasing offices in Chicago and New York was to accelerate procurement. For a short period in 1944, Major C. B. Mengerink served as the Area Engineer's representative at these offices, first in Chicago and then, for about two months, in New York. The Chicago and Los Angeles offices remained open during the lifetime of the Manhattan District, but the New York offices were closed, effective 10 November 1945, when the amount of purchasing was reduced to such an





extent that the Los Angeles and Chicago offices could handle the requests.

- 2-2. University of California Purchasing. The University of California procured the material and supplies generally specified in catalogues as required by the scientific staff, with the exception of certain items which are more fully described in the following subparagraphs. In the first six months after establishment of the Los Angeles Area effice, the money value of the purchases made averaged over \$200,000 per month. Later, this increased to a maximum amount of \$1,315,000.00 for the month of May 1945.
- a. <u>Lifficulties Encountered</u>. Because of the need for the utmost secrecy regarding the end item during the early period of the Project, and the consequent inability to explain fully to the buyers the reason for speed, it was necessary to exert considerable pressure on the Purchasing Department of the contractor's organisation in order to insure the procurement and delivery of material within the specified time.

 Under pressure, the situation showed continual improvement and satisfactory performance until approximately June 1944, when it appeared that the buyers had again relaxed in their efforts to obtain delivery of the proper material by the specified times, and it became necessary in August 1944 to assign an Army officer to see that requisitions were placed in the order received and to assist in expediting delivery from vendors.

 During the spring of 1945, the volume of requisitions increased tremendously, and the Purchasing Department again failed to keep pace with the increase, with the result the Project Director officially advised the





Area Engineer that the progress of the work was being alarmingly delayed. The dontractor's Purchasing Fepartment was urged by the Area Engineer to strengthen their buying and expediting forces to handle this increased volume and backlog of requisitions and, in addition, to institute an adequate control system so that the Area Engineer and the Project staff might have complete, up-to-the-minute information regarding the status of all requisitions.

Corrective Action Taken. - On 6 May 1945 a meeting was held at the Project site between officials of the contractor and military personnel to discuss the problem of delay and recommend corrective measures. Details regarding this meeting and the action taken are contained in Minutes of the Meeting dated 6 May 1945, App. A3, and letter from the Secretary-Treasurer. Board of Regents of the University of California, dated 4 June 1945, App. A4. Shortly after this meeting, the contractor put into effect the recommendations for increase in personnel strength in all offices, direct communication between the site and the various purchasing offices, and the arrangement for transmittal of copies of specifications and drawings direct from the site to the New York City and Chicage offices as well as the Los Angeles office. Experienced buyers were added to all three offices, an administrative staff was hired to relieve Mr. A. E. Dyhre, the Purchasing Agent, of administrative details, contact was established with the Signal Corps for electronic items, and the Area Engineer assigned a civilian to coordinate and expedite placing of requisitions and to act as liaison officer between





the contractor and the Area Engineer. Immediate improvement was evidenced in the over-all procurement picture (See App. A2).

- c. Effect of Cessation of Hostilities. After the cessation of hostilities the pressure was removed and there was a tremendous decrease in the amount of requisitions (See App. A2), with a resultant decrease in number of personnel. A slight increase was noticed during the period the University of California was engaged in precuring items of supply for Operations Crossroads (the Bikini bomb tests), but no difficulty was encountered in obtaining the items requested.
- 2-3. Government Progurement by Transfer. In a large number of cases it was found that items required by the Project were being produced entirely under the control of the Manhattan District. The University of California, being a commercial organisation, could not produce such items, thus making it necessary to set up a procurement unit within the Area office to obtain materials by transfer from other offices of the Manhattan District. It was also found that numerous items could be obtained by this producement unit from other Government agencies by similar transfer in a much shorter time than they could be delivered by open market purchase. Mandatory items which were normally produced by the Treasury Department and other technical services of the War Department were also added to the group of items purchased or arranged to be transferred by this producement group.
- a. Screening Contractor's Requisitions. The procedure was established whereby this group received all requisitions from the





contractor's Purchasing Department at the Project by teletype and screened and relayed them by teletype to the appropriate office of the Manhattan District for procurement action. This procedure of clearance through the Los Angeles office was also necessitated in order to maintain the security of the Project. In some cases carload lots were ordered to be shipped to Los Angeles in order that the technical services of the Army would not know that the Manhattan District was buying certain items for a Project in New Mexico. The cars would in turn be reshipped on a separate bill of lading to the Project. This devices manner of shipping is more fully govered in another section, but it is mentioned here to show the difficulties confronting the buyers in meeting deadlines on deliveries.

- b. Effect of Cessation of Hostilities. After the public announcement of the development of the atomic bomb and the cessation of hostilities, this secrecy was no longer required and after 19 December 1945 the contractor's Purchasing Department at the Project transmitted requests for such material direct to the various offices of the Manhattan District in almost every case. Requisitions for procurement of items from surplus Government stocks, however, continued to be submitted to this office.
- 2-4. Engineering Procurement Division. This division was organized primarily to procure special engineering equipment desired by the Project by utilizing available machines and shop time in the Los Angeles Area in order to step up production and obviate the necessity for establishing large machine shops at the site with additional delay and expense for machinery and buildings. Most of the procurement done





by this division was directly connected with the atomic weapons, and in view of this fact, this phase was considered one of the most secret operations of the Los Angeles Area office. Accordingly, all contracts entered into with the vendors were classified, with no indication as to technical service or ultimate location of deliveries. Most of the contracts were for experimental items, making it necessary to award them based on trial runs, with renegotiation of price upon completion of the trial runs or at such time as the item might be put into production. This division issued two hundred and twenty-one purchase orders and awarded ninety-three contracts for a total of \$2,108,970.00 as of 31 December 1946.

In March 1945, as the result of an inspection, it was discovered that certain irregularities had occurred in the operations of the Engineer Procurement Division. This was reported by the Area Engineer and, after a thorough and detailed investigation, charges of negligence were brought against two of the employees of the division. The charges involved such practices as: approval of unjustified prices and manufacturing costs; failure to obtain competitive bids; failure to maintain adequate records; award of orders and contracts to unqualified concerns; condoning the subcontracting of all work at a fraction of the contract prices; failure to obtain proper adjustments of prices; and failure to determine the sources of actual machining and fabrication of parts, resulting in delays and increased costs. The two employees were first suspended and then summarily dismissed, after they failed to furnish satisfactory answers to these charges, and effective steps were taken to improve coordination and control



of operations; to prevent similar occurrences thereafter. This phase of procurement was turned over to Project Camel, described in the following paragraph, in February 1945, and was handled by that unit until November 1945, when it was transferred back to the Los Angeles Area office procurement group.

- 2-5. Project Camel. After satisfactory arrangements were made between the Manhattan District and the Office of Scientific Research and revelopment for prosecution of the work at Project Camel (See Book VIII. Volume 3, Chapter 2), it was decided that a sub-office or branch of the Los Angeles Brea office should be established in Pasadena at the California Institute of Technology. The primary purpose of this sub-office was to assist the California Institute of Technology in matters of priority and to provide a method whereby the expediting and priority facilities of the Manhattan District could be utilized. The office was formally established on 19 January 1945, with one officer attached to the Los Angeles Area office and one security agent. This staff was later increased and during July 1945 there were two officers, one procurement engineer, two stenographers, one teletype operator, and two security agents. The Pasadena sub-office reported to the Area Engineer, Los Angeles, in all matters except prioritites and expediting, it having been determined that, in the best interests of the program, expediting matters should be handled directly between the Pasadena office and the Washington Liaison Office of the Manhattan Pistrict, with copies of such communications being furnished the Los Angeles Area Engineer for his information.
 - Liaison. The Passdena sub-office also served as





liaison between the California Institute of Technology, the Los Angeles Area office, and Project Y (Los Alamos), and assisted the Manhattan District representative located at Inyokern, California (Project Camel).

- Priorities. Because of the fact that large quantities of critical material were required both in the research and developmental program and in the procurement program, one of the main functions of the Pasadena sub-office was to assist the California Institute of Technology in procurement problems. Policies were adopted whereby the representative at the Pasadena sub-office reviewed purchase orders placed by the California Institute of Technology, to determine the urgency, and to secure the necessary uprating by teletype from the Washington Liaison Office. Turing the period in which the Pasadena office functioned, January to November 1945, approximately one hundred ninety Triple A ratings were secured. This figure includes scheduling assistance with the War Production Board and the Manhattan District. Approximately eighty directives, over-riding directives, and diversions were secured. These Triple A ratings and directives, etc., applied to critical electronics instruments and other electrical materials, brass, aluminum, steel in various forms, machine tools, photographic equipment, radio parts, and other miscellaneous items.
- Deferments. When the Selective Service restrictions on deferments were increased during the early part of 1945, it was decided that the Los Angeles area office, with the assistance of the Pasadena office, should sponsor essential deferment requests made by the California Institute of Technology. Many of the highly skilled and technical employees of the Institute were quite young and were essential to the



satisfactory prosecution of the work. Each deferment case was thoroughly investigated and, between January 1945 and Movember 1945, approximately one hundred forty-three cases were handled.

- d. Expediting. The Pasadena office served as the channel through which purchase orders from Project I were issued to the California Institute of Technology. These purchase orders and necessary drawings and specifications were mailed directly from Project I to the Pasadena office for distribution and administration. It was the responsibility of the Pasadena office to see that production of these orders was on schedule and satisfactory, and to expedite deliveries and shipments. During the period of this operation, there were approximately one hundred seventy purchase orders from Project I processed in this manner. It was the responsibility of this office to follow all shipments and notify all consigness of shipments made, with complete information as to date of shipment, number of pieces, total weight, and estimated time of arrival at destination.

 Approximately 2,500 shipments were made, the majority going to Project I and Wendover Field, Utah, and others to McAlester, Oklahoma; Port Chicago, Vallejo, California; and the Naval Mine Depot, Yorktown, Virginia.
- e. <u>Transportation</u>. The extreme urgency of the program necessitated arrangements with the Regional Air Priorities Control Board whereby passengers and freight connected with Project Camel would carry highest priorities to insure prompt arrivals and deliveries. Between January 1945 and November 1945 air priorities were established for approximately one hundred passengers and approximately 50,000 pounds of cargo. On several occasions various materials were so urgently needed



that the Air Transport Command furnished airplanes for the exclusive transportation of these materials. On some occasions this amounted to one or two complete plane loads of material and, in some instances, it amounted to a complete plane load each day for seven or eight days.

- 2-6. Property Accountability. The procedure for property accountability was established when the prime contract was written and Article XI of the contract states that "the contractor agrees to keep records and books of account showing the actual cost of all items of labor, materials, equipment, supplies, services, and other expenditures of whatever nature for which reimbursement is authorized under the contract. The system of accounting to be employed by the contractor shall be that customarily utilized by the contractor in the regular conduct of its business." It further states that the contractor's records shall be made accessible to the Contracting Officer.
- a. Accountable Property Officer. The Area Engineer was appointed as property officer at the inception of the Area office. However, it seem became evident that additional duties and responsibilities being assigned to this office made it necessary that an officer be appointed to devote full time to property matters. Effective 20 March 1945, an accountable property officer was assigned, with accountability for all property under the jurisdiction of the Area Engineer, and with office located in Los Angeles, California. He was unable, however, to maintain proper accountability for property located in the various offices of the Purchasing Departments, for the following reasons:
 - (1) The remoteness of the Project;



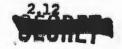


- (2) The extreme urgency for completion of the scientific work, which necessitated direct procurement by scientists of some items
 from sources other than the Los Angeles Area office;
- (3) Direct deliveries of supplies to the Project without handling by property personnel;
- (4) Transfer of supplies between locations by other than property personnel; and
- (5) Measures taken to effect the highest secrecy on certain supplies, when property personnel had no knowledge of the contents of packages delivered to scientists, for many months after delivery, and sometimes not at any time.

It became necessary, therefore, to appoint an additional officer to maintain accountability for the property located at Los Alamos, New Mexico.

Accordingly, affective 1 July 1945, an officer was appointed accountable property officer for all property pertaining to Contract No. W-7405-eng-36 located at Los Alamos. The property officer located at Los Angeles maintained accountability for all property located at all other points under the jurisdiction of the Los Angeles Area. Subsequent to relief from accountability for property located at Los Alamos, the property officer, with approximately six civilian employees, devoted his whole time to reconstructing property records from shipping tickets and other papers and succeeded in setting up adequate control of property after much work.

The principal difficulty was encountered in maintaining accountability for the items purchased by the Engineering Procurement Division, for the reason that the method of purchasing was so unusual, in many cases it being





necessary to ship items from one vendor to another for performance of a certain amount of work, all under separate contracts, until the end item was completed. Some of this work was performed by small vendors and machine shops and it was most difficult to maintain adequate control records when this type of operation was in process.

had been instituted, in 1946, an inventory and a careful study of all the previous records were made, and an Inventory Adjustment Report, dated 22 October 1946, was prepared; covering all operations since the inseption of the account; this report was approved, and the adjustments recommended therein were made on the stock records.

2-7. Accounting, Fiscal and Cost. - The original plan was to process claims for reimbursement through the main accounting office of the University at Berkeley, California, for security reasons. It soon became apparent that the increased temps of the procurement program caused by the rapid growth of the Project required additional personnel, changes in policies, etc., and the usual University procedure followed by the general office at Berkeley was not sufficiently flexible to absorb changes and process the accounts at the speed required for the successful and efficient operation of the Project. The University of California was then instructed to set up a separate Accounting Department, in conjunction with the Purchasing Department in Los Angeles, to handle all accounting and fiscal matters for the University pertaining to this contract. It was also apparent that the reimbursement vouchers submitted in accordance with the usual procedure would not meet the requirements of the General Account-





ing Office in the matter of supporting documents, etc. This made it necessary to establish an Audit Division in the Area office under the supervision of the Area Engineer to examine all claims for reimbursement prior to certification. During the early stages, a large number of vouchers were passed for reimbursement without supporting documents, which were later submitted by the contractor, audited after the fact by the Project Auditor, and transmitted to the General Accounting Office for attachment to the original vouchers. The Preject Auditor devoted only about one-half of his time to the Los Angeles Area office, as he was also required to audit another contract with the University for a different project not under the jurisdiction of the Los Angeles Area Engineer. This arrangement for division of time of the Project Auditor was made by the Mistrict Engineer in order that uniform audit policies could be formulated on both contracts with the University of California. Additional personnel was employed during the latter part of 1943 and the spring of 1944. Because of the restrictions on visitors to the Project site for security reasons, it was a part of the Area Engineer's duties personally to examine the records at the Project in support of the claims submitted to the Los Angeles office for reimbursement. This auditing group maintained records and also audited invoices for payment submitted by supply contractors in connection with the engineering procurement group. Other research sub-contracts under the supervision of the Area Engineer which were located at points far from southwest United States were audited by representatives of the District Engineer stationed in the vicinity of the associate research contractors. A detailed schedule showing the number





and total cost of these contracts is attached to this report as Appendix A5.

- 2-8. <u>Transportation</u>. The importance of the work being performed by the Los Angeles Area made it necessary to establish the best transportation facilities available for the rapid movement of personnel, equipment and supplies. The Project was located in an isolated section, with limited railroad and air service.
- Supplies and Equipment. The first shipments made from Los Angeles to the Project were transported via the Los Angeles-Albuquerque Express Notor Freight Lines, later augmented by the Mavajo Freight Lines. These facilities rendered excellent cooperation in transporting freight to the Project. Arrangements were made whereby specific drivers would be assigned to drive truck-trailers to the University warehouse and leave them to be loaded. These same special drivers would later return to the warehouse when the loading was completed and move the trailers to the freight lines' headquarters, where the regular drivers would then take them out on the regular runs, thereby avoiding connection of the University of California with shipments to the scientific laboratory at Los Alamos. Shipments were made on commercial bills of lading and paid by the University of California so that there would be no connection between the University and the Kanhattan Fistrict. With the cessation of hostilities, however, security requirements were somewhat relaxed and it was possible subsequent to September 1945 to make all shipments on Government bills of lading in accordance with usual Government procedures.
 - b. Personnel. In most cases personnel reporting to the





Project traveled by regular trains except upon the specific recommendation of the Project Director, in which event extra-fare trains and/or aircraft were authorised when deemed necessary by the Director. When the military reservation bureaus took over control of the major portion of the available train space, it became evident that contractor personnel traveling on official business would find it hard to obtain reservations. Therefore, special arrangements were made between the Manhattan District and the Atchison, Topeka & Santa Fe Railway System to hold space twice weekly on one of its faster trains between Los Angeles and the Project, and the Project and Chicago, and returning, which space was used by Project personnel whenever possible. The excellent cooperation of the ATASF Railway and other western railroads was of great assistance in moving personnel to and from the Project. Most of the arrangements for transportation of personnel were handled from the Project. However, the travel section of the Los Angeles Area was frequently called upon to make transportation arrangements for personnel recruited in the vicinity of Los Angeles, and personnel travelling on temporary Project business obtained reservations through the Los Angeles Area office.





SECTION 3 - SUPPLEMENTARY INFORMATION

Cost. - Complete cost figures were not maintained in the Los 3-1. Angeles Area office. Consequently, complete cost of operations of the Area office is not known and can only be obtained by compilation of records from all of the Disbursing and Fiscal offices located in the Manhattan District. Appendix A5 indicates the total cost of research contracts administered by the Los Angeles office. The attached schedule, which indicates \$31,987,200.66 paid to the University of California, includes income in the amount of \$3,753,719.23, which was credited to the cost of the work under the previsions of a modification to the prime contract. This income consists of funds received by the Post Commander for services rendered to the Technical Forces, such as charges for quarters, utilities. laundry, etc. Accordingly, this amount could be applied as a credit to cost of operations for the Los Alamos Post, described in Book VIII, Volume 1. The Twlue of equipment and supplies purchased by the Engineering Procurement Division as of 31 December 1946 was \$2,108,970.00. Costs relative to Project Camel Program are included in Book VIII, Volume 3, Chapter 2. Costs relative to materials obtained from other agencies of the Government and from other Areas of the Manhattan District are not available.

3-2. Organisation Charts.

a. <u>Area Office</u>. - There is attached as Appendix A6, Organization Chart of the Los Angeles Area indicating positions and functions



as of 1 November 1945. This chart represents the maximum number of military and civilian personnel on duty in the Area office and is divided as follows:

Officers 18

Enlisted Men

Civilian Employees . 64

Total 90

Thereafter, the number of personnel was gradually reduced.

- b. Contractor's Purchasing Department. The organisation of the contractor's Purchasing Department is attached as Appendix A7. This chart has been prepared as of 15 July 1945. It depicts the contractor's purchasing organization at the peak of operations and, while the Los Angeles, California, Chicago, Illinois, and New York, New York, purchasing offices were in operation. A total of 271 employees is indicated. This amount was reduced shortly after the cessation of hostilities when a large number of the workers expressed a desire to return to their peacetime occupations, and it was necessary to make some replacements during the spring of 1946. The District Purchasing Agent, Mr. A. B. Pyhre, who succeeded the original incumbent shortly after the establishment of the office, was transferred to the Project at Los Alamos to act as Business Manager in May 1946 and was replaced by Mr. R. W. Johnson, who had served as Mr. Dyhre's assistant during the entire period Mr. Dyhre was in office.
- c. <u>Contractor's Accounting Department</u>. Little has been said of this organization throughout the history of this office. However, they played an important part in the contractor's organization and





it is believed necessary that an organization chart of this Department be attached as Appendix A8. It must be borne in mind that this Department handled all fiscal and accounting work for the Project, located a great distance from their office. This chart has been prepared as of 5 June 1945 and indicates 34 employees as of that date. This was increased to a maximum number of 47 in August 1945, which was gradually reduced subsequent to V-J Pay to 24 employees in December 1946.



MANHATTAN DISTRICT HISTORY

LOS ANGELES CHAPTER

APPENDIX "A"

NO.	7.447	
1	Basis for Organization and Establishment of Area Office as Prepared by Project Director	
2	Chart Showing Status of Orders for University of Calif- ornia Covering Period April 1943 to December 1945	
8:	Minutes of Meeting Dated 6 May 1945 Regarding Status of Procurement Program	
4	Letter dated 4 June 1945 from Secretary-Treasurer of University of California Regarding Improvements Made in Procurement Organisation	
5	Schedule Showing Cost of Research Contracts	
6	Organisation Chart - Los Angeles Area of Manhattan District	
7	Organisation Chart - University of California Purchasing Department	
8	Organisation Chart - University of California Assounting Department	





APPENDIX A1

C O P Y

26 February 1943

BASIC

That the Purchasing Agent feel the importance of speed and not be responsible for items (and quality) to be purchased. That this be authorised by requisitions, the authority for which is delegated by the Director of the Scientific work, showing; quantity, description, date required and urgency, and suggested source. That the Urgency be the P. A's criteria for degree of priority and means of communication and transportation that may (and will) be used to meet delivery date. Obviously the New York and Chicago buyers to do likewise. (See Page 2)

BIDS:

A clear directive to relieve the P. A. and his buyers of necessity of showing competition in small purchases as well as special cases.

AT THE LABORATORY

Director of procurement with an assistant and two secretaries. Catalogue clerk, Bookkeeper to register commitments, represented by the requisitions, Merchandise Manager; Receiving and Reserve Stock clerks, Forward Stock and Distribution clerks, Property record clerks and Shop stock and tool clerk.





Page 2

C O P

IN LOS ANGELES

Specialists buyers to assist Purchasing Agent

- 1. Metals, hardware and machine tools.
- 2. Electronis and electrical.
- 3. Laboratory apparatus and chemicals.

Expediters

Probably 3 whose sole job is to follow up on delivery prospects.

Pick-up car.

Probably; an engineer to negotiate and direct machine shop and order "to order" jobs in Southern California.

Also a shopper for cash buying.

IN NEW YORK CITY

At least one and probably two men and stenographer assistant.

IN CHICAGO

One very good man and secretarial assistant.

These eastern offices to issue orders upon requisitions from the Los Angeles Offices.

TELETYPE MACHINES: Laboratory

Los Angeles Office

New York Chicago.



APPENDIX AS

MINUTES OF MEETING HELD TO REVIEW PROCUREMENT SITUATION SUNDAY MORNING, MAY 6, 1945

The meeting was called by Mr. Oppenheimer to review the procurement situation with special reference to the University's offices in Los Angeles, Chicago, and New York. Those present were Mr. Oppenheimer, Mr. Mitchell, Colonel Antes, Lt. Colonel Stewart, Major Newcomb, Captain Karl, Mr. Underhill, Mr. Baker, Mr. Olson, and Mr. Dow.

Mr. Oppenheimer opened the meeting with a short review of the procurement situation emphasizing the fact that there have been a continuing number of requisitions on which deliveries have not been made for more than M days. He also pointed out the extreme seriousness of this problem at the present time in view of fixed work schedules here, making it even more important to meet the delivery dates than in the past.

Mr. Baker stated that in the past three weeks the number of hold-over requisitions has been substantially decreased and further decrease is expected. He has personally spent a good deal of time in the Los Angeles office, but he has made no major changes in procedures there. As of May 3 there were 59 items ever 20 days old. He stated that the approximate distribution of orders placed was from 45% to 50% in the Los Angeles are, 30% to 33% in the New York arm, and 20% to 28% in the Chicago Area.

Colonel Antes asked what the importance of those 59 items was, and Mr. Oppenheimer answered that we do not know because we do not know what all of the items were, but that because of fixed schedules it is important to meet all requested delivery dates.

Captain Karl produced a chart of the past record of the purchasing effice indicating a fairly steady increase in the number of requisitions and pointing out that there was practically no increase in the number of buyers since January 1944.

Colonel Stewart asked Mr. Underhill what the University proposed to do to remedy the present situation. Mr. Underhill stated that although there were no direct restrictions on the hiring of additional personnel, there have been many difficulties in view of salary restrictions. These restrictions made it difficult to hire men at the high salaries demanded, but it was even more difficult to secure salary raises for men in the organisation to meet the higher salaries demanded by new men. It was Colonel Antes' opinion that \$350 a month is not high enough to pay a buyer. Golonel Stewart stated that he would approve higher salaries for good men when necessary.

Mr. Oppenheimer asked if, in the epinion of the University and Colonel Stewart, time could be saved by having a small staff of the University's procurement men at Site Y to decide where to place orders, thereby saving time in the actual placing of orders between here and New York and Chicago. Mr. Baker stated that he did not know of any man who was capable of doing this. Mr. Mitchell asked who did it in Los Angeles now. Mr. Baker stated that it was being done by each separate buyer. Mr. Baker further said it would be unwise to bring an experienced man here because within a very short time he would lose contact with the markets which would be the sole basis of where to place orders. Mr. Mitchell peinted





out that no buyer in Los Angeles sould have any better feeling for the New York and Chicago markets than he could here and that there were a number of situations in which it was to be expected immediately that the best market would be in New York or Chicago. This would be true, for example, of electronics items, and that it was wrong to waste time trying the Los Angeles market before placing the order through New York. It was Nr. Baker's feeling that on many items this time is not lost because the buyer will send the order immediately to New York from Los Angeles, but he pointed out that the greatest time loss is in the communication between Site Y and Chicago or New York once the orders have been referred to those effices.

After further discussion of various methods of speeding procurement, the following five-point program was outlined by Mr. Oppenheimer and agreed to by Mr. Underhill and Colonel Stewart:

- 1. Direct communication was authorised between Mr. Mitchell's office and Site Y and the New York and Chicago purchasing offices.
- 2. A separate organization will be established in the Los Angeles office whose purpose will be to keep in constant touch with the markets in Los Angeles and elsewhere and to allocate all requisitions from Site Y to the Los Angeles, Chicago, and New York purchasing offices.
- 3. The New York and Chicago offices will be strengthened both in the University's functions of buying and expediting and in the District's functions of securing necessary priorities. This means increasing personnel in those offices and increasing the quality of personnel.
- 4. Once orders have been placed with New York or Chicago vendors, these offices will act as separate entities for the expediting and delivery of the items, advising the Los Angeles office of progress.
- S. In order to expedite the work of the New York and Chicago offices Mr. Mitchell's office at Site Y will send out all orders involving drawings or involving specifications to each of the three purchasing offices. This means that three copies of all drawings will go to Los Angeles, New York, and Chicago.

Further suggestions were that Mr. Mitchell should give Mr. Baker a list of suggested personnel for the New York and Chicago offices. Colonel Antes pointed out that the Los Angeles office needs an office expeditor and coordinator so that the day by day situation is known to the office manager with respect to hold-over orders and buyers' progress. Mr. Baker stated that he realised that a business manager for the office was needed, and he was now trying to procure one to relieve Mr. Dyhre of administrative office problems. Mr. Mitchell pointed out that the number of critical items has increased very much within the last two or three months and that they consequently take up more time for each item so that twice as many buyers for twice as many requisitions would not be enough. The University's purchasing office should therefore have an apparent surplus of buyers to take care of these critical items.

Mr. Oppenheimer was asked to suggest a goal for the purchasing offices to meet. He stated that in his opinion the program outlined above should be accomplished



within three weeks if possible, that the delivery of 70% of our requisitions must be on time, and that the delivery of the remaining 50% must be within two weeks of our requested delivery dates. This was understood to be a very rough estimate, but it indicates the urgency of the problem. At this point Mr. Oppenheimer left the meeting.

Mr. Mitchell said that one of the basic problems to be linked was the immediate status of the market on all requisitions, and these should be reported to Site Y so that we could immediately consider substitutions where delivery dates on requested items sould not be met. In many cases we can make substitutions if we know about it soon enough.

Captain Karl suggested that a proper goal should be that within three weeks the purchasing office should have no orders over 5 days unplaced with the exception of items referred back to Site Y for further consideration, and that there should be at that time an average of 200 requisitions earried over from day to day.

Mr. Mitchell was asked if an estimate of the length of the critical procurement situation could be given, and he gave as his personal view the expectation that it would last for at least 9 months but that the most critical time was the next 90 days.

A number of names were suggested to Mr. Baker of possible sources of personnel. These were Mr. Drows of Columbia Broadcasting System, Mr. Nealon of Radio Corperation of America, Mr. Harry Gross of the New London Laboratories, Mr. Pond, Mr. Scofield, and Mr. Paul Smith of the Metallurgical Laboratory, Anepa, Fort Monmouth, airplane manufacturers where outbacks are in progress, and army officers.

There was a discussion of the procedure for procuring key personnel, and it was suggested by Golonel Stewart that we make use of our right to borrow personnel from other organisations wherever necessary. In every case the army through Golonel Stewart or Major Newcomb will do everything to help the University in securing additional personnel. Major Newcomb asked that wherever possible he be given two or three names since it was often difficult to break away one key individual. He also eaid that the army could not back up the University in asking for a number of persons from any one particular manufacturer.

ec:
Colonel Antes
Mr. Baker
D. Dow
Captain Karl
Mr. Mitchell
Major Newcomb
Nr. Olson
Mr. Oppenheimer
Lt. Col. Stewart
Mr. Underhill



Robert M. Underhill Secretary of the Regents

June 4, 1945

Colonel Donald E. Antes P.O. Box 2610 Washington, D. C.

Dear Colonel Antes:

1.197

At the conference held on May 6 at Site Y, attended by persons noted in the minutes of that meeting, copies of which have already been distributed, I was asked to inform you on or about June 1 as to what steps would be taken by the University of California administration to improve the purchasing in connection with the Project to the end that deliveries could be obtained more gromptly and more in line with the requirements as indicated on the requisitions.

Improvements in the Purchasing Office have been put into effect as indicated in this report, some of them starting on the very afternoon of the meeting. It is expected that others will be placed in effect as additional space is occupied and as the changes mentioned in this report take effect. It must be pointed out, however, that there are at least two factors in connection with the delivery of materials on the date requested, and the entire control of these factors does not lie within the administration of the University of California. The details in this report indicate changes that can be made on one side of the matter, but, as stated at the conference by persons located at the site, it seems to them impossible on many occasions to give reasonable notice of requirements, and indications of urgency appear on requisitions which, with greater anticipation of needs, would not be required. At the very inception of this project by direction to the University the functions of listing requirements and the functions of purchasing materials were separated by geography over a distance of many miles, and the functions were assigned to entirely separate and unrelated groups.

The University will make every effort to obtain materials on the date requested and while it is to be hoped, as pointed out in the report, that the 70% of the requisitions marked for special urgency may be delivered on time, such will be impossible if a reasonable time is not allowed for such purchase by those whose needs are undoubtedly urgent. Improvements have been made in the matter of purchasing, and whether or not they can be made in the matter of anticipation and other subjects or procurement and stock control at the site must be considered by others.

As indicated at the conference, it is exceedingly difficult to keep a staff at high-pressure on matters which, while urgent, are beyond their comprehension, and when by reason of security they can never learn why the matters are important, nor can they ever note the results of their activities. Speedy production is much more possible in a shippard where those who have contributed toward the construction of a ship can see it going down the ways ahead of schedule.





The advantages of such an incentive are not available to those who are contributing to this project. Since we have never been informed on the subject and are unable in any way to indicate to the staff what is being accomplished, high production may be slightly sacrificed to secrecy which at times seems to have overshadowed every other objective. To this policy we do not take exception, but it is one that must be borne in mind, and those in charge of its administration must be on the alert to release any unnecessary requirements where the results would aid in the matter of procurement which it was indicated in the conference is of such importance.

A detailed statement of changes made and the plans ahead follow:

- 1. A procedure for direct communication between Mr. Mitchell's office at Site Y and the New York and Chicago purchasing offices has been established. Immediately after our meeting on May 6, instructions were given to Los Angeles to institute a system of progress reports in order that the personnel at the Site might be made aware of the status of requisitions. The details of this practice were clarified later and culminated in a detailed procedure for handling the function of direct communication. A copy of this procedure is attached for your information.
- 2. A reorganisation of duties and responsibilities has been made in Los Angeles in connection with the allocation of requisitions from Site Y to the Chicago and New York purchasing offices. Decisions as to when items should be sent to the eastern offices are no longer made by buyers but are now being made by principal members of the staff. This reorganisation makes it possible for those responsible to know the disposition of requisitions and to be able better to follow the status of requisitions at all times.
- 3. All three offices have been strengthened both in buying functions and in expediting functions. The additional personnel which has been secured has been secured with the thought in mind that it will strengthen our buying organisation as to product knowledge and sources. At the same time, this will permit us to distribute our work load in such a manner that all buyers will be able to handle each requisition more thoroughly. This will enable us to exhaust more possibilities of stocks and substitutions together with other possible solutions of the project's requirements.

In New York to date, three buyers have been added. Several men are under consideration so that the best man available as needed will be secured. Two expeditors have been hired as well as necessary clerical help for both buyers and expeditors.

The first problem in New York was to secure additional office space. Immediately upon my arrival in New York, Mr. Schruben and I spent considerable time finding suitable space which did not require too much alteration. We viewed several locations and after agreeing upon suitable space all details for acquiring this space were completed within three days after my arrival in New York. These quarters will be available for occupancy by June 9 after necessary alterations and arrangements have been made.

Three buyers and one expeditor with necessary clerical assistance for the buyers and expeditors have been added to the Chicago staff. Additional space has been acquired adjoining the present Chicago office. Part of this space has already been occupied while the balance of the space will be occupied as soon as adjustments and rearrangements are made.



In Los Angeles two buyers and one expediter and necessary clerical assistance have been employed. Sufficient additional personnel will be added as they become available in order that the work load may be handled without delay. The additional space in Los Angeles which had been acquired previous to our meeting is now occupied.

On May 6, the question was raised regarding the possibility of securing men from the Signal Corps' Fort Monmouth School. In this connection, I volunteered to make contact with Major General James A. Code, Jr., Assistant Chief Signal Officer. This contact was agreed to by you with the assurance that I be authorised to make some general statements regarding the work in which we were engaged and on your agreement to render all possible assistance in explaining our problem to Major General Code should I find it necessary to call upon you. I informed you by telephone on Saturday, Kay 19, that I had made the contact on Way 16 and had directed Er. Schruben to call upon Major General Code early the following week and that he might sak you to go with him. It seemed possible as the result of these interviews that we might be strengthened as to personnel and might also be given access to Signal Corps atocks. The details of these conferences are set forth in a report from Mr. Schruben to Mr. Dyhre, a copy of which is attached for your information. In connection with the inventory and the list of substitutes referred to in the reports, it would be desirable if one copy of such lists might be made available for Mr. Dyhre in los Angeles.

At the meeting on May 6, a number of names were suggested as possible staff additions. In addition to this list of names, there was a discussion of the procedures for procuring personnel. I talked with an official of Columbia University regarding Mr. Gross and with an official of the University of Chicago regarding Messrs. Pond, Schofield, and Smith. I was told by both officials that because of their work on present government contracts and in view of their present responsibilities, none of these men could be released. Mr. Baker spent considerable time in sontact with industry regarding qualified personnel which might be released or which might be loaned for a temporary period for our program. He met with sympathy, but with no help on either a permanent basis or on a loan basis, in view of the fact that industry is at present in a mad scramble regarding its own reconversion programs.

On May 30, a permanent employee assumed his duties as Business Manager in Mr. Dyhre's office. When his staff is completed, practically all administrative responsibility will be delegated to him by Mr. Dyhre, thereby relieving Mr. Dyhre and his buying group of these details. This will enable them to spend their time on purchasing matters. This will enable them to maintain a closer daily contact with the problems of each individual requisition. Immediately after our meeting on May 6, we arranged for a temporary employee, who has been working since May 9, This man has, during this period, assumed a large load in connection with office management, which has in turn relieved the buying group from this responsibility.

4. With added personnel in the expediting group of each office, it will be possible for each office to maintain closer contacts with vendors on each order. The need for meeting delivery schedules and the need for keeping the project advised of the current delivery status of each order can now be better met by the expediting groups both by regular means of communication with vendors and with plant visits. This effort will be an effective means at the disposal of each office to push orders through vendors' warehouses and factories and thereby meet the required delivery dates.



5. In connection with all orders involving drawings and/or specifications, you will notice that this point is covered in the outline of procedure for direct communication discussed under No. 1 above. In connection with the question of drawings and-or specifications, may I again reiterate our request that these be improved. There have been not infrequent losses of time due to the necessity of clarifying questions on blueprints and specifications. This not only contributes to the delay in procurement but consumes the time of personnel both at the Site and in the buying offices.

At the meeting of May 6, the question of salaries was discussed. It is our intention to submit a plan for an overall adjustment of salary rates which will be in keeping with responsibilities, length of service and other factors affecting each employee. In the meantime, special requests for salary adjustments will be submitted as and when needed to correct an obvious inequality of compensation.

For the past six weeks, an all-out effort has been made to accomplish results with respect to the work load and with respect to delivery of items. In connection with the work load the effort has been to reduce it in total and particularly to reduce the number of items which have been outstanding more than five days. A detailed inventory has been made at the close of each week which is set forth in the tabulation directly below:

			AGE	OF ITEMS NOT	ORDERED
WEEK ENDING	REQUISION HAND	ITEMS THEREON	1 to 5 da.	6 to 19 da.	20 or more
4-23	659	2481	1497	818	169
4-28	348	1396	848	459	89
5-5	326	1406	960	387	59
5-12	906	1243	730	457	56
5-19	31.7	1119	689	343	87
5-26	355	1264	778	400	85
6-2	294	1079	609	399	62

The second point has to do with meeting delivery dates. It is realised that this is one of the most important aspects of purchasing. There is nothing to be gained by merely having an order placed if delivery cannot be secured. The real proof of good buying is therefore indicated by the ability to place orders so that delivery will be made when required. The success of this phase of the program is set forth in the tabulation immediately below:

	- DE	ADELIVERY OF ITEMS		
	Over 14 days late	8 to 14 days late	On time	
April 30	27\$	12\$	61\$	
May 31	25%	9%	68%	

*These figures were secured from Lt. Col. Stewart's office.



Col. Donale E. Antes (Site Y)

A factor which has contributed to an increase in deliveries on time is the fact that purchase order writing has been brought up to date. This group of the organisation has been working overtime to accomplish this. It has been strengthened so that the writing of purchase orders will be kept up to date henceforth.

Very truly yours,

Robert M. Underhill

RMU:W Enclosures (2)

det S. L. Stewart





TO: MR. A. E. DYERE

SUBJECT: Electronic Buyers and Expeditors

Mr. Underhill telephoned from Washington, May 17th, that he had told Major General J. A. Code, Jr., Asst. Chief Signal Officer, of our problems in placing orders for and securing delivery of electronic items to meet the Project's specifications and delivery requirements. General Code felt that the Signal Corps could assist us with this problem and Mr. Underhill requested that I check with you and Mr. Lee concerning the personnel requirements of Los Angeles and Chicago. After determining the number of people each office could use, Mr. Underhill requested that I go to Washington at once to explain in detail to General Code our problems.

You will, of sourse, remember our telephone conversation of May 17th in which you advised me not to contact General Code until you had had an opportunity to discuss the matter with Mr. Stewart. Late Maturday afternoon you told me to proceed in arranging an appointment with General Code. I had already scheduled Monday appointments in New York which made it impossible to go to Washington Monday. However, Monday morning, Mr. Stewart called from Washington and, at that time, he felt that his office could secure the complete story from the General and that he would give me the benefit of their call on his expected visit to our effice Tuesday. Mr. Underhill telephoned from Chicago Monday and I informed him that Mr. Stewart was in Washington and that it was his intention to contact General Code and relay the story to us the following day. Mr. Underhill felt that we should handle the contact curselves, and on his instructions I telephoned General Code for an appointment. In talking with the General, it developed that Mr. Stewart and Colonel Antes were in his effice at the time. The General naturally turned the call over to Mr. Stewart.

After the conference Mr. Stewart called and we arranged to meet in Washington Tuesday morning. Mr. Stewart, Colonel Antes and myself discussed our problems and they advised me of their visit with the Signal Corps on Monday. We then telephoned General Code and he invited us to his office for a further discussion of our problems. In this conference I attempted to outline our problems and difficulties and as a result the General proposed the following:

- 1. That our requisitions be sent to the Signal Corps for processing. This, of course, would not be practical due to the urgent delivery dates together with the security involved. Mr. Stewart said that some of the requisitions were at present being handled by the Signal Corps and he commented that any additional requisitions which could be turned over to the Signal Corps would be reviewed and processed that way if possible.
- 2. That our Project should not requisition modifications of standard items or specials in that subject requisitions should be made up in our own model shop. This was based on the experience of the Signal Corps in the delay that always occurs in attempting to have manufacturers modify or fabricate specials during present conditions. They found it was much faster and more satisfactory to make such items in their own model shops. He also suggested that the Signal Corps would, in some cases, undertake to fill special requisitions of this type. Of course, to one who doesn't understand our particular set-up this is a splendid suggestion. However, due to the fact that we are to undertake any assignment of such requirements, requisitions must continue to be processed by our office.





- 3. General Code called in one of his advisors, Dr. L. C. Smeby, requesting that he advise us regarding sources for experienced electronic engineers that also have had purchasing experience. Dr. Smeby felt our best field would be from laboratories of the major electronic manufacturers. This suggestion, of course, was one which we have known for a long time.
- 4. General Gode directed Colonel Cover, Chief Personnel Officer for the Signal Corps, to make available their files on individuals qualified for our work with the thought of either arranging a loan or some other manner of bringing them into our organisation.

General Code's office in Washington is not a major purchasing point and of the two individuals given us for review by Colonel Cover neither had the experience or qualifications which we would require. Colonel Cover advised that General Code was under the impression that a surplus of electronic engineers, buyers and expediters existed at Fort Monmouth. There was a surplus at Fort Monmouth a few months ago but all personnel was reassigned and is not presently available. Colonel Cover suggested that the Philadelphia Signal Corps Precurement District, 128 N. Broad Street, Philadelphia, would be our most likely source of personnel from the Signal Corps. I intend to make a trip to Philadelphia next week and before going will telephone Colonel Cover who has agreed to contact Major. W. S. Williams prior to my visit informing him that General Code is interested in helping the University of California, if it is at all possible, with the subject problem.

General Gode advised that the Signal Corps purchases and stocks 140,000 various electronic items. He is to furnish Mr. Stewart's office in Washington with three copies of their catalogue covering these items. In addition, General Gode advised that a group of their engineers in 1942 and 1943 worked up the substitutes of all the various items they stock. This is a cross referenced list, as we understand it, by each manufacturer's article number. Three copies of this information will also be made available to Mr. Stewart's Washington office.

Summarising this whole report, Mr. Underhill most certainly made a contact with an office that handles the largest volume of electronics in the country, General Gode as a result of Mr. Underhill's contact is most interested to extend to us any possible help. Mr. Stewart and Colonel Antes are desirous of lending any assistance from their organisation in working with the Signal Corps, and it is hoped that we will be able to receive the maximum benefits from the interest all of the above have shown in our problem.

Please forward attached copy of this letter to Mr. Underhill.

C. H. SCHRUBEN

CHS; eog



May 29, 1945

BULLETIN

CHANGE IN PROCEDURE IN HANDLING REQUISITIONS DIRECT CONTACT BETTEEN EASTERN OFFICES AND PROJECT

In order to speed up the time consumed in the handling of requisitions, we are to inaugurate a new procedure, whereby on certain items of requisitions, or entire requisitions, the New York and Chicago offices will make direct communication with the Project. The plan will proceed in the manner as follows:

The Los Angeles office will send requisitions and/or items of requisitions which are complete as received from the Project, on which no purchases have been made. In forwarding, the buyer will indicate directly after the item the word "COMP", (abbreviation for the word "Complete"), and also indicate that this is Item No. 2 or 3, as the case may be. In cases of an entire requisition the word "COMP" will follow the requisition and order number, and not after each item. On these entire requisitions, the items must be listed on your teletypes in exactly the same order as on the Project requisitions. When these are received in the New York or Chicago office it will be their responsibility to place the order in the shortest possible time.

When it develops that a purchase cannot be made which will meet the required delivery date, full information to that effect, along with all information regarding any possible substitutes, delivery dates, or higher priority requirements will be referred direct by that office to the Project for their advice and recommendation.

These offices will then place the order in accordance with Project instructions, except when AAA or directive is required. When the New York or Chicago offices confirm purchases to the Los Angeles office, they will explain their actions along the lines of one of the following possible situations:

- 1. We have purchased for delivery 20 June per Project TY No._____, etc., etc.
- 2. We have purchased substitute per Project TY No. ______, etc., etc.

On items or requisitions not meeting Project delivery requirements and which cannot be filled with acceptable substitutes, the New York or Chicago office will advise the Los Angeles office (1) That they have killed; (2) What they can secure, as specified on AA-1 and AAA, if possible; (3) Substitutes offered, but unsatisfactory to the Project. They will also notify the Project that it has been referred back to Los Angeles. This office will then advise the Project of action being taken.





The New York and Chicago offices will notify the Project of progress on Urgency X and Urgency A Potential X requisitions. If they are not able to complete the purchase immediately upon receipt, they are to explain the difficulties and offer all possible substitutes, in order that the Project may be advised, and thus have the opportunity to change their specifications to accept readily available substitutes.

Should the Project offer requisitions whereby it is necessary to work from detailed drawings or specifications, they will mail three prints and three sets of specifications to the offices in Los Angeles, New York and Chicago. These prints and specifications will be identified by the TR number. The Los Angeles office will start work immediately upon receipt of the requisition. Should this office fail to produce the materials as requested, we will immediately notify the Eastern office chosen as the most likely source, assigning the order number, requisition number, or IN number. The Los Angeles office will not be required to forward prints. Upon receipt of detailed drawings or specifications from the Project, the New York or Chicago office will file them under the requisition or "IN" number, and if in due time, no requisition is received from the Los Angeles office to purchase, they will understand that the request has been completed at some other source.

The Project may send one-source inquiries (IN) direct to the office in the geographic location of the factory or source of information.
In other words, where it is required to receive information on IN's only,
the Project has the privilege of by-passing the Los Angeles office. The
office receiving such inquiries will answer direct to the Project and will
send a copy of all messages, correspondence, etc. to Los Angeles as the
transaction progresses. The Los Angeles offices, immediately upon receipt
of such information from an Bastern office, will immediately set up a
file in the same manner as if the inquiry was originally sent here. This
refers to one-source inquiries only. General survey inquiries will continue to come to Los Angeles as in the past.

In many instances, purchases made by the Eastern offices will require that a copy of the written purchase order be in the hands of the wendor before they will enter the order or ship the merchandise. In these instances the Eastern office will wire such orders to the vendor direct, extending proper priority certification, etc. The Eastern office will then advise Los Angeles that they have purchased and also state that they have wired the order to the vendor. This procedure will not apply to orders which require special WPB forms or other certificates. In such instances, information will be forwarded to Los Angeles to complete and forward any required forms with the purchase order.

It has been requested that the New York and Chicago offices confine communications between their office and the Project to teletype messages. Telephones are to be used only in rare instances, and any telephone messages will be confirmed by teletype.





Page 3--

It has been clearly defined to the Eastern offices that copies of all communications between their offices and the Project, by telephone or otherwise, including other pertinent information, is to be forwarded immediately to the Los Angeles office for attaching to the file.

The right for the Project to communicate directly with the Eastern offices on expediting matters is restricted to eases of extreme emergency and rush handling. All such messages, both to and from the Project, will be relayed to Los Angeles. This will enable the Los Angeles office to pick up, should the action needed by the Project be such that it would have to be handled direct by this office.

A. E. DYHRE

ABD: og



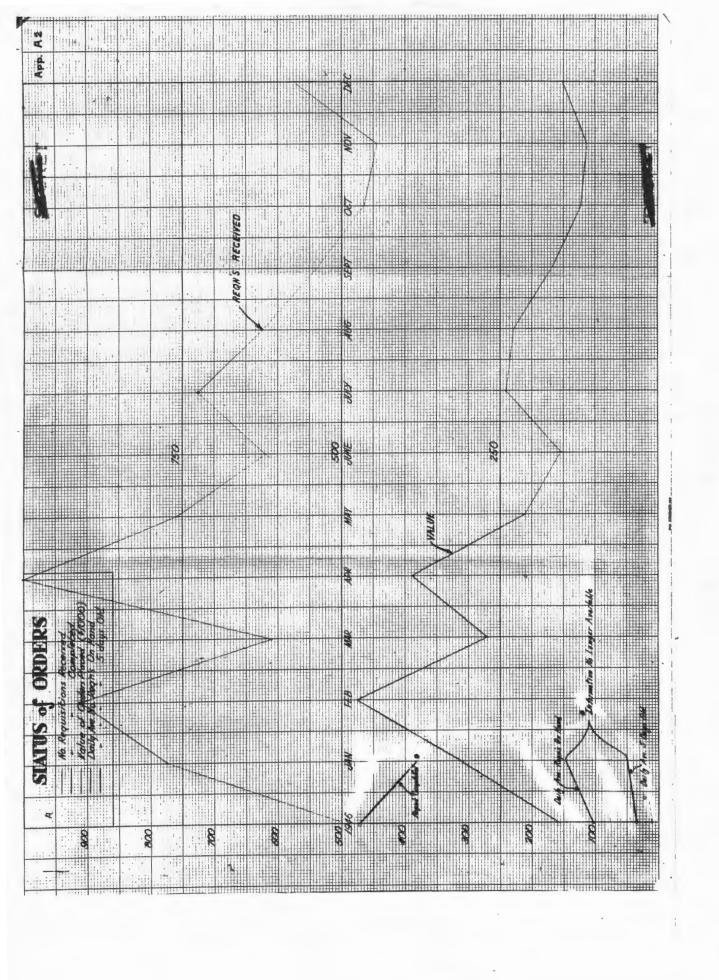
APPENDIX A5 SCHEDULE SHOWING TOTAL COSTS RESEARCH CONTRACTS

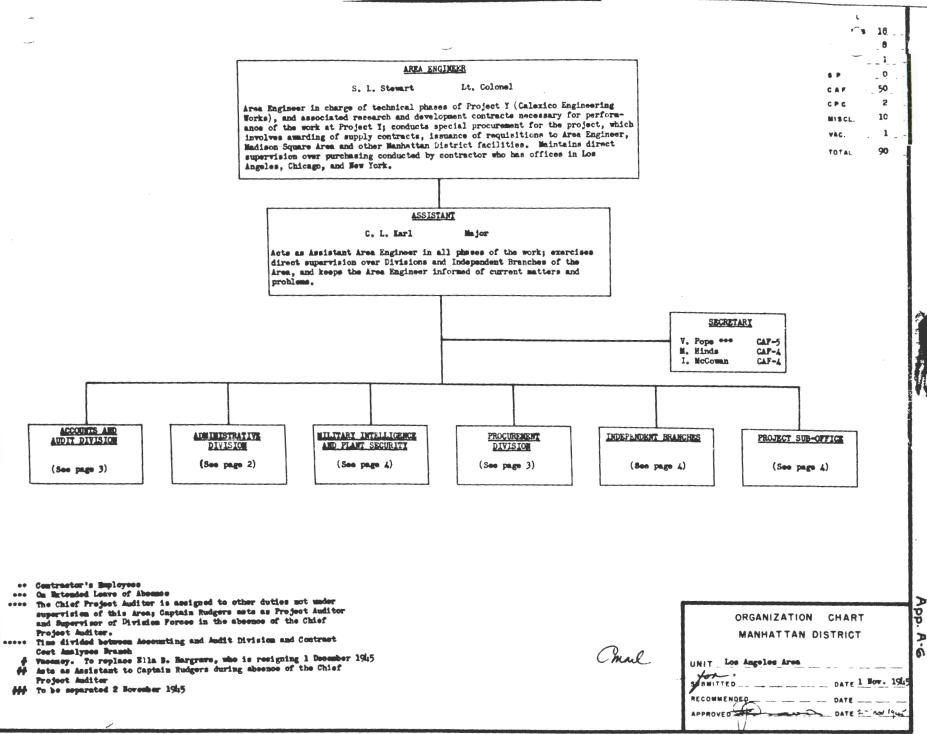
CONTRACTOR	CONTRACT NO.	AMOUNT OF REIMBURSED CONTRACT UNDER CONTRACT
California Institute of Technology The President and Fellows of Harvard College Purdue Research Foundation Ohio State University Research Foundation Sparkman & Stevens, Inc.	W-7401-Eng-63 W-22-075-Eng-54 W-7405-Eng-146 W-7405-Eng-93 W-26-021-Eng-17	\$ 25,000.00 \$ 22,644.06 20,000.00 2,441.64 18,000.00 11,370.72 204,750.00 196,398.76 \$25 per day plus travel— 2,947.15 ing expenses for consul- tant services not to ex- ceed 105 days.
Union Carbide & Carbon Research Laboratories	W-740 5-Erg-273	Consultant fees & expen- 2,503.84 ses estimated cost, \$5000 per year.
Chadwick & Associates	W-7405-Eng-36 Sabcontract No.	2 40,200.00 **23,359.35
Frederie-Flader	W-7405-Eng-36 Subcontract No.	3 100,000.00 **47,990.84
Regents of the University of California	W-7405-Eng-36	51,000,000.00 *31.987.200.66 \$32.296.857.02
# Includes Welfare Fund of Collateral Fund Credit under Wod. I Funds Does not include Cash Advance Payment of Total of \$35,926,965.00 obligated by contractor.	\$1,000,000.00 500,000.00 3,753,719.23 2,000,000.00	
	California Institute of Technology The President and Fellows of Harvard College Purdue Research Foundation Ohio State University Research Foundation Sparkman & Stevens, Inc. Union Carbide & Carbon Research Laboratories Chadwick & Associates Frederic Flader Regents of the University of California * Includes Welfare Fund of Collateral Fund Credit under Nod. 1 Funds Does not include Cash Advance Payment of	California Institute of Technology The President and Fellows of Harvard College Purdue Research Foundation Ohio State University Research Foundation Sparkman & Stevens, Inc. Union Carbide & Carbon Research Laboratories W-7405-Eng-95 W-26-021-Eng-17 Union Carbide & Carbon Research Laboratories W-7405-Eng-273 Chadwick & Associates W-7405-Eng-96 Subcontract No. Frederic Flader W-7405-Eng-96 Subcontract No. Regents of the University of California W-7405-Eng-96 Subcontract No. Collateral Fund Collateral Fund Credit under Nod. 1 Funds J,753,719-23 Does not include Cash Advance Payment of 2,000,000.00

EXPENDITURE

totals.

** Included in total of reimbursements under Contract No. W-7405-Eng-36. Not included in page





SHEET NO 1 OF 4 SHEETS

ADMINISTRATIVE DIVISION

Maintains administrative control of contracts, personnel, mail and records, property, transportation, expediting, and other administrative matters for the Area.

Chief

C. L. Karl

Ma for

CONTRACT BRANCE

Advises Area Engineer on all legal matters pertaining to the operation of contracts under the administrative and/or technical supervision of this area. Prepares contracts, supplemental agreements, purchase orders; reviews matters on legal opinions investigates and prepares reports on settlements; checks and advises on insurance and claim

Chief	P. E. Brown	Captain
1 ***	Clerk	CAP-5
1	Clerk	CAP-L
1	Clerk-Stenographer	CAP-3
2	Clark-Pool at	CAT-3

PROPERTY BRANCH

Maintains property accountability and stock records for the area; checks and advises contractor on property records; orders trans-shipment of material as required and prepares Government Bills of Lading; maintains lisison with warehouses on shipments; prepares reports of survey; supervises maintenance of records on motor pool; maintains records of unserviceable and surplus items.

Chief	Victor W. Hummel	Captain
Assistant	J. M. Jennings	CAP-6
3	Clerk	CAP-L
í	Clerk-Stemographer	CAP-L
2	Clerk-Typist	CAF-3
1 #	Clerk-Typist	CAF-3

CONTROL, PRIORITY, AND EXPEDITING SECTION

Conducts special studies and surveys in regard to various procurement problems, coordinates activities of using services with procurement organizations by securing and reviewing various reports on procurement status. Interprets and distributes information relative to expediting assistance and priority regulations. Assists contractor in obtaining upratings and expediting orders to assure deliveries as required by the project.

Chief	E. B. Treemel	P-I
Assistant	T. R. Jones	CAT
1	Clerk-Stemo	CAP-L

GENERAL ADMINISTRATIVE BRANCH

Maintains administrative control and supervision over Persommel, Mail & Records, Travel, PEZ, and other administrative matters for the area; processes wage authorisations and salary approvals for contractors.

Chief	E. P. BRUSSER	CAP-9
1	Clerk-Stemographer	CAP-L

PERSONNEL, PAYROLL & TRAVEL SECTION

Processes employment, change of status, and termination papers: prepares timerolls and maintains leave records; initiates efficiency reports; handles hotel and travel reservations for the area and lends assistance to the project on travel reservations; maintains necessary civilian and military personnel records; prepares travel vouchers.

M. A. Watson

Dispatches incoming and outgoing correspondence, classifying seme for files; maintains Deway-Decimal file for Area. Handles all messenger service.

Chief	H. Et skey	CAP
1	Clerk-Stemo	CAP
3	Clerk-Typists	CAF-
1	Telephone Operator	CAF-
2	Messengers	CPC-

ORGANIZATION CHART MANHATTAN DISTRICT

Los Angeles Area

DATE 1 Hov. 1945 RECOMMENDED

APPROVED

ACCOUNTS & AUDIT BIVISION

house requestivity for all seconding and multing functions of the fore in consection with the similar stration of the sectration under the fore's experticion.

Chief Project Audither 6. P. Verser Cap-12
Chief core ii. B. Reggers Capsula
Assistant P. H. Conferent Cap-10
Clerb-Stems CAP-5

SPECIAL AUDIT BRANCE

MATERIAL AND SERVICE AUDIT HEADER

Protoculit of contractor's described to the state relation to the formerding to District Office for etemporal to respective versions. Assembling data and properting reply to implify data.

ments of contrastor's december colonities in emport of claim for relatives for miterials and corriso, freight, commission, print costs, and miscellances capplies.

Old of \$6 P. M. Seedbreed CaP-10

1 Glark CaP-5

1 seems Clark CaP-5

PATROLL AUDIT BRANCH (CURRENT)

And the secondary reserves.

Calof B. Massen Calver Calver

SUPPLY ABOUT MANICH

Property Transfers and smilts inroless for payment to contractors and vendors under direct contract with Government. Audito travel vendoers for civilian and military travel.

Chiles S. Seathoff Call-5

PROCUMENTS DIVISION

Procurs special engineering equipment and supplies for Project "T", involving the mad anterial, target-prise, lamp-sub, and fixed unit price, direct Ceverament contracts and purchase orders, allocation of procurement to various seatoners, and engineering and production liaisem between project and Area.

Assistant Chief B. C. Van Dine Captalan
Assistant Chief B. D. Durton

1 Clark ...acryshor Captalan
1 condiminer of Engineering
1 condiminer of Engineering
2 condiminer of Engineering
1 condiminer Procurement & Follow-up Eng.
1 condiminering Captalant Procurement & Follow-up Eng.

SPECIAL OFFICER ASSIGNMENT

Contracting Officer

Lt. Col. E. L. Semmert interesty to enter late contrasts to \$500,000.

Contracting Officer's Representative

Lt. Col. S. L. Stemart

Mc.....

POTAL

C A P

The Regents of the University of California 150, N-7505-cmc-36
Chie State Research Femdation 150, N-7505-cmc-3;
Marward University.

Marward Calbage 150, N-7505-cmc-3;
Marward Calbage 150, N-7505-cmc-36
Marward W of Illiand 150, N-7505-cmc-36
Marward W of Illiand 150, N-7505-cmc-36
California Lastitute of Technology 150, N-7505-cmc-36

Certifying Officer

Lt. Col. S. L. Stemert

233

P. E. Onta Clerk Clerk

Child of

Major C. L. Earl

Assountable Property Officer

Captain V. M. Bamel (Les Ampoles) Captain W. A. Parian (Project Sub-office)

Captain Paul E. Brown

- 18 km

Inspection Officer

Injor C. L. Earl (Les Angeles) Injor R. I. Hemondo (Freject Sub-Office)

Assistant Transportation Officer

Lt. Col. S. L. Stemert Shojer C. L. Karl Majer D. C. Yan Kime Captain H. D. Burten Captain V. W. Hummel 2nd Lt. R. S. Killough Captain W. A. Parine

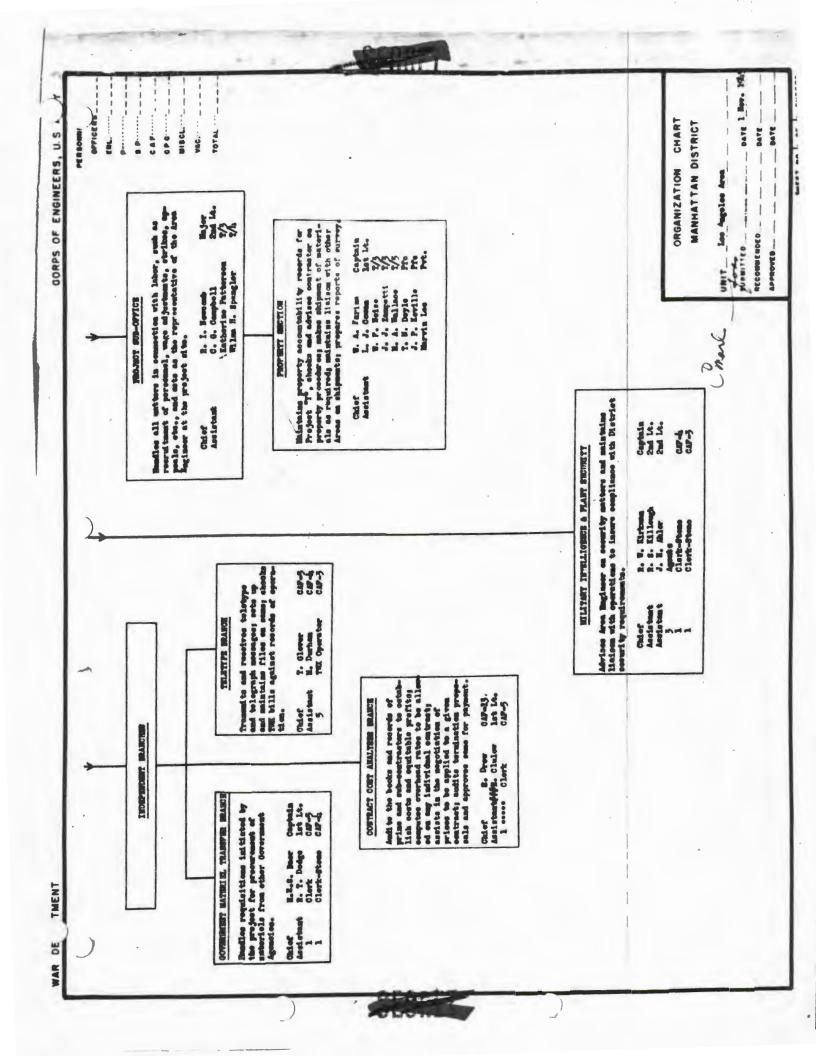
Bend Officer

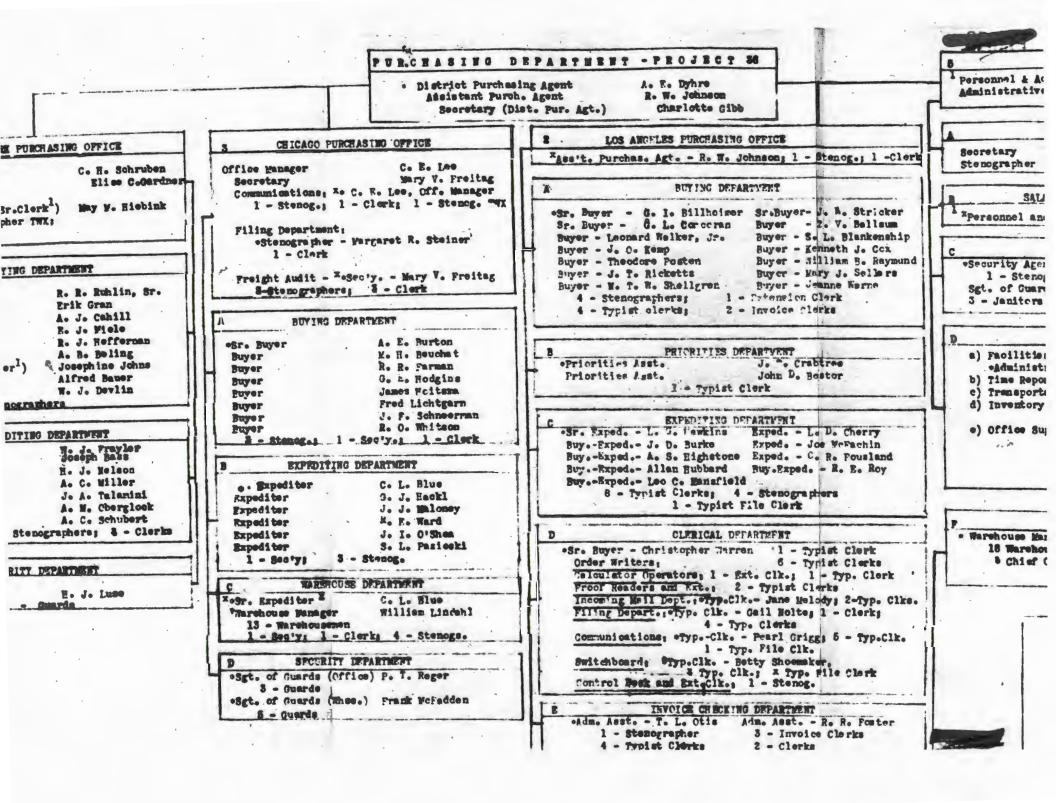
Captain V. W. Persol

ORGANIZATION CHART MANHATTAN DISTRICT DUBLY Los Augolos Area OATE 1 Bor. 194, RECOMBENDED OATE OATE

'm'

SHEET NO 4 OF L. QUETA





40000

BUSINESS OFFICE

Personnel & Administrative Manager - R. P. Col Administrative Assistant - A. F. Pol

PERSONNEL DEPARTMENT

Secretary . Stenographer Edythe Frame

SALARY AND WATE CONTROL DEPT.

*Personnel and Administrative Langer - R. P.

SECURITY DEPARTMENT

John We Pesse .Security Agent 1 - Stenographer 1 - Typist Clerk Sgt. of Guards - M. P. Whiteman 3 - Janitors V. B. Eubanks

SERVICE DEPARTMENTS

- a) Facilities . Administrative Asst. A. F. Perner
- b) Time Reports Typist Clerk
- c) Transportation 2 Typist Clerks
- d) Inventory -ol Statistical Clerk Il Typist Clerk; 2 - Typ. Cle

e) Office Supplies -ol Typ. Clerk

2 Type Clerks

ers

ist Clerk ist Clerks - Typ. Clerk

rks dys 2-Typ. Clks. 1 - Clerks

Stenoge; 1 -Clerk

J. R. Stricker

lliam 5. Raymund

Z. V. Bellsum Le Blankenship nneth J. Ccx

ry J. Sellers

anne Warne

lerk

rks

tree stor

Buth the S

D. Cherry

e Verachin R. Pousland - R. E. Roy

s 5 - Typ.Clk.

lile Clerk

R. R. Foster Clerks

WAREHOUSE DEPARTMENT

Warehouse Manager 18 Warehousemen

R. W. Ring 2 Clerks

Chief Clerk

Marguerite M. We

11 - Typist Clerks

CONTRACTOR - UNIVERSITY OF CA CONTRACT NO. W-7405 ENG. 36 TITLE - FURCHASING DEPARTMENT ORCAVIZATION CHART

Legende Legende

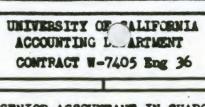
X - Duplicate Position

1 - Proposed Classification

2 - Temporary Assignment

BY . R. P. CONNELL





SENIOR ACCOUNTANT IN CHARGE PHILLIP M. DOUGLAS STENOGRAPHER - SECRETARY LUCILLE C. EBENSTEIN

ACCOUNTS PAYABLE

SENIOR BILL CLERK SEC. HI WILLIAM AMIL RAIRS JR. CALCULATING MACHINE OFERATOR JULIA MARION HELTWER CLERK-TYPIST ALICE M. CUNNINGHAM " CLERK-TYPIST JEAN TORNELLO CLERK RUTH DAVIS COVELL ALALAST LUCILE F. BOOTS ANALYST RALPH W. CAMPERLL AHALEST WILLIAM F. SILIAVO ANALYST HAL TISUE SMITH AMALYST

CHARLES P. WEBBER

DAVID K. FINN

DISBURSEMENTS

BOOK KEEPING MACHINE
OPERATOR. SECTION HEAD
EVELYN M. DIMMITT
BOOK KEEPING MACHINE
OPERATOR. J.D. WILLIAMS
CLERK-TYPIST
HELEN MARIE HINCKLEY

PAY ROLL & TRAVEL CLAIMS

AND AUDITING

ACCOUNTANT
JOHN GRAHAM McDONALD
CLERK-TYPISTS
LEONA RUTH MERSFELDER

The state of the s

REQUISITION AND GENERAL OFFICE SERVICE

ACCOUNTANT-SECTION HEAD CLIFFORD K. BARCLAY CLERK-TYPISTS ELSIE MAE GRIFFIN FRANCIS MAY HUDSON DOROTHY EVELYN ZISER

CLAIMS

EXCEPT PATROLL & TRAVEL

AMALYST
GARD C. PIERCE
CLERE-TYPIST
FERN LOUISE SORENSEN

PAY ROLL

SENIOR PERSONNEL CLERK
SECTION HEAD
FRANKIE N. HENNETT
BOOK KEEPING MACHINE
OPERATOR
ELAIME M. TEBO
CALCULATING MACHINE
OPERATOR
LEOMA L. WESTENBERG
CLERK-TYPISTS
FRANCIS M. ATWELL
VIVIAM HARMATZ
CLOVER AME JOHNSON
CECILE LOUISE SCOTT

FINANCIAL AUDITING

AND BANKING

INTERNAL AUDITOR
W. T. LOCKETT
ANALYST
WILLIAM M. McLEAN
CLERK-TYPIST
MARCIA LUCILLE KELLY

D

3

ANALYST

ORGANIZATION CHART
MADE JUNE 5, 1945
BY H. L. SMITH FOR
PHILLIP M. DOUGLAS



INIBX

(Abbreviation App. = Appendix)

Accountable Property Officer, 2.11, 2.12
Accounting, Fiscal & Cost, 2.13
Air Transport Command, 2.11
Antes, Lt. Col. D.E., App. A3, App. A4,
Atchison, Topeka & Santa Fe Railway,
2.16

Baker, L.G., App. A3 Bikini Bomb Teet, 2.5 Business Manager, 1.2, 3.2, App. A4

California Institute of Technology, 2.8, 2.9 Cessation of Hostilities, Effect of, 2.5, 2.6, 2.13 Chicago Purchasing Office, 1.3, 2.1, 3.2 Contract W-7405 eng-36, 1.1, 2.12 Contractor's Requisitions, Screening of, 2.5 Costs, 3.1

Deferments, Project Camel, 2.9
Pistrict Engineer, 2.14
Pouglas, P.M., App. A8
Dybre, A.B., 2.4, 3.2, App. A3, App. A4,
App. A7

Engineering Procurement Division, 2.1, 2.6, 2.7, 2.12, 3.1 Establishment of Contractor's Purchasing Dept., 1.3

Functions of Area Engineer, Office, 1.1

General Accounting Office, 2.13, 2.14 Government Procurement by Transfer, 2.5 Graphs, App. A2 Groves, Major General L.R., 1.1

Inyokern, Calif., 2.9

Johnson, R. W., 3.2, App. A7

Karl, Captain C.L., App. A3, App. A6

Lee, C.E., 2.2, App. A7
Liaison, Project Camel, 2.8
Lockridge, Lt. Col. R.W., 2.1
Los Alamos, N. M., 2.12, 3.2
Los Alamos Post, 3.1
Los Angeles-Albuquerque Express
Freight Lines, 2.15

McAlester, Okla., 2.10 Mengerink, Major C.E., 2.2 Mitchell, D.P., 2.1, 2.2, App. A3

Navajo Freight Lines, 2.15
Naval Mine Pepot, Yorktown, Va.
2.10
New York Purchasing Office, 1.3,
2.1, 3.2

Operations Crossroads, 2.5
Oppenheimer, Dr. J.R., 1.2, App. A3
Ordnance Div. (Los Alamos), 2.1
Organisation
 Accounting Dept., 3.2, 3.3
 Area Office, 3.1, 3.2
 Basis of, 1.2, App. A1
 Charts, 3.1, 3.2, App. A6,
 App. A7, App. A8
 Contractor's Purchasing Dept.,
 3.2
OSRD, 2.8

Pasadena Sub-office, 2.8ff
Port Chicago, Vallejo, Calif.,
2.10
Priorities, Project Camel, 2.9
Project Auditor, 2.14
Project Camel, 2.8, 3.1
Project Director, 1.2, 2.3, 2.16
Project T, 2.9, 2.10
Property Accountability, 2.11
Purchase Statistics, App. A2
Purchases, Money Value of, 2.3



Purchasing
by University of Calif., 2.3
Corrective Measures, 2.4
Fifficulties Encountered, 2.3,
App. A-3, A4
Program, 2.1

Ratings, Triple A, 2.9
Regional Air Priorities Control Board, 2.10
Reimbursement of Voushers, 2.13, 2.14
Ring, R. W., 2.2

Santa Pe, New Mexico, 2.2 Schruben, C. H., App. A4, App. A7 Security, Shipping Procedure, 2.6, 2.15 Selective Service, 2.9 Statistics, App. A2 Stewart, Stanley L., Major, 1.1, App. A3, App. A4, App. A6

Transportation, 2.15, 2.16
of Personnel, 2.15, 2.16
Project Camel, 2.10
Treasury Repartment, Mandatory Items, 2.5

Underhill, R. K., App. A3, App. A4

War Production Board, 2.9 Washington Liaison Office, 2.8, 2.9 Wendover Field, Utah, 2.10 Wilt, D. L., 1.3

