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EXERCISE DESERT ROCK VII AND VIII. AFTER ACTION REPORTS. OPERAT--ETC(U)
1957

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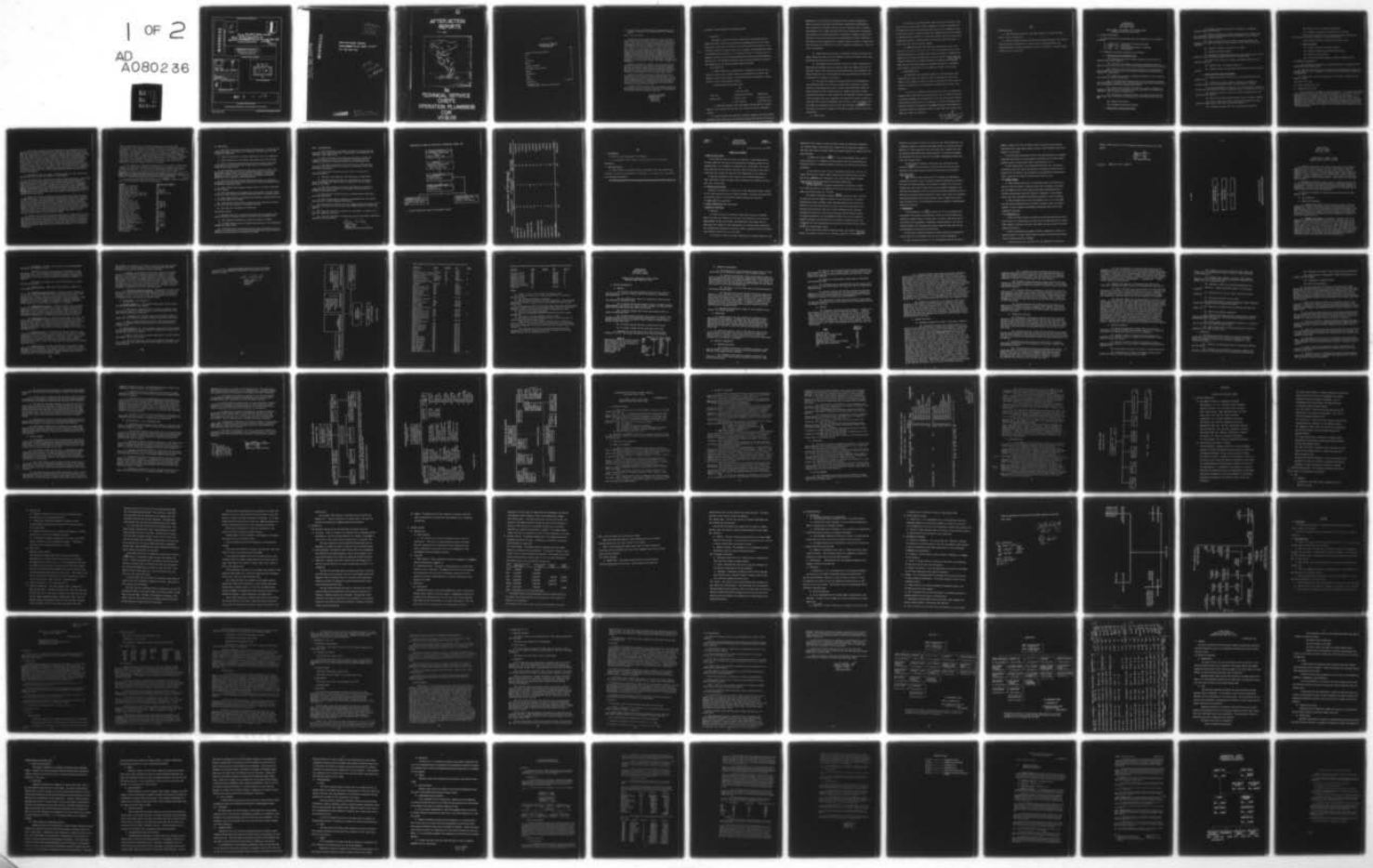

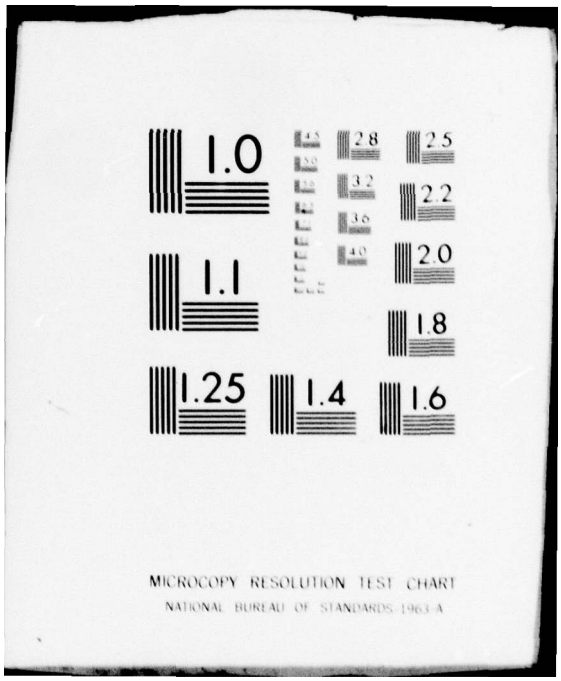
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MICROCOPY RESOLUTION TEST CHART
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Camp DESERT ROCK, Nevada
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Operation PLUMBBOB, Exercise DESERT ROCK VII and VIII
[1957]

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AFTER ACTION REPORTS

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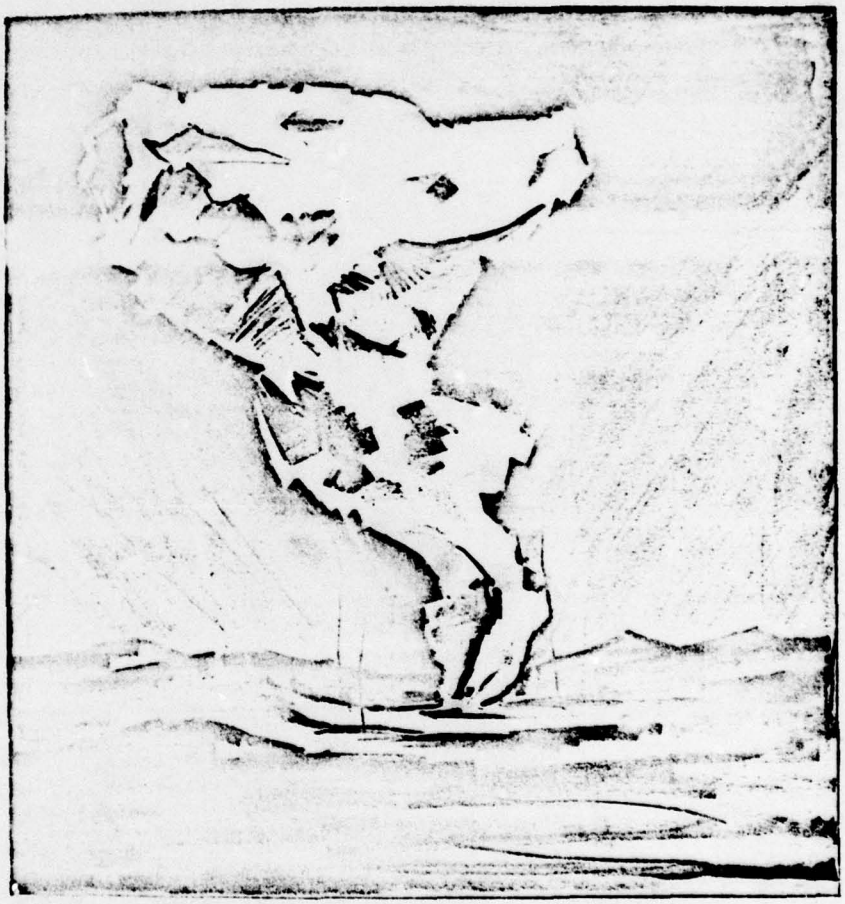


by

TECHNICAL SERVICE CHIEFS

OPERATION PLUMBBOB

CDR VII & VIII

CONTENTS

FINAL REPORTS AS WRITTEN BY TECHNICAL SERVICE CHIEFS AT CAMP DESERT ROCK

TO: All future planners, Technical Service Chiefs and Indians who may be fortunate to be blessed with the planning and operation of Camp Desert Rock IX.

FROM: Those who have served.

The inclosed after action reports represent the views of the Technical Service Chiefs who served throughout the entire operation of CDR, in the case of the Post Engineer, a position that was held by three different individuals, continuity remained, in as much as they were from the same Battalion. One who takes the time to read the Official Final Report of CDR VII & VIII will immediately comment upon the variance in the inclosed reports and the report contained in the Official Final Report. The one and only reason for such a difference is the final report dictated brevity. All attempts were made to include all the data essential to higher headquarters to assist and provide them with a better understanding of the problems encounted in an operation the size and scope of CDR. Many will say they have been on bigger operations that presented no problem to them. I can only say that those fortunate to have been in such positions have never encountered the restrictions imposed by the peculiarities of this type operation, to attempt to enumerate them all at this time would entail extending this letter a few more paragraphs. The reports are as written by the Tech Chiefs. They provide their successor with a very comprehensive coverage on the operation including many of the pitfalls.

One point that I would like to amplify is when the phase out plans are being formulated the tendency is to attempt to pull all your help out from under you. The pressure is greatest from the TO/E units whose commanders also have staff functions. Suddenly, everyone is attempting to justify the fact that their sections can operate without anyone and that some one else can absorb their functions, release as fast as you can and in some cases of a faster rate than you normally would but, be sure every angle is covered.

Projects and Project Officers have been vilified sufficiently in the final report so I won't delve on that subject any further, except to say, establish contact as far in advance as possible, make them submit their logistical requirements in writing, and if local purchase of supplies due to variations in their operations is to be required, make them sub-allot funds from their home station to CDR with the project officers "say so" the authority for your P & C Officer to expend. Many problems will be eliminated if the above authority rests with the Project Officer.

In closing I would like to say that this is not intended by any means to be the solution to all your problems. I believe each operation will encounter many and varied problems not covered here mainly due to the uncertanties that are ever present in this type of exercise. GOOD LUCK!

John J. Robotti

JOHN J. ROBOTTI
Major, Armor
Assistant G-4
CDR VII & VIII

S4 ANNEX TO ADMINISTRATIVE AND LOGISTICAL REPORT

1. MISSION:

The mission of the S4 Section at Camp Desert Rock during Exercise Desert Rock VII and VIII was to advise the Commanding General on all logistical matters affecting the Exercise. To exercise staff supervision for logistical activities of support units, staff agencies, and participating troops to coordinate the activities of the technical services in providing for the housing, sanitation, messing and transportation of all troops and observers, and to assure that adequate logistical support was provided for the successful completion of the mission assigned Camp Desert Rock.

2. ORGANIZATION:

a. The S4 Section was organized with a lieutenant colonel as S4, a Major as Assistant S4, a second lieutenant as Administrative Officer and Captain as Food Service Advisor. Two enlisted men were assigened to section for duty with the administrative section.

b. Organizational Functional Chart.

S4

1 Lt. Col. 4010

Ass't S4	Administrative Section	Food Service
1 Major, 4010	1 2nd Lt. 4000	1 Captain, 4114
	2 PFC 711.10	1 SFC (E6) 941.7

c. Additional personnel were authorized to the S4 Section, however, they were not required and therefore were utilized by the Hq. Commandant Section.

3. a. Obtaining the many different supplies, equipment, and items needed to support the exercise was a never ending problem. The technical services we- [illegible] did not maintain station stock levels, but operational

operations, no stock piling was authorized. The supplies accumulated at start of exercise were based on estimates of requirements established by Camp Irwin and on a strength bases as could be determined from the initial instructions from Hq. Sixth Army and CONARC. The strength used in establishing supplies were materially exceeded at times due to changes in plans, cancellation of observers participation and rescheduling of shots. Furthermore the many and varied requirements of seperate Projects supported by Camp Desert Rock which were also effected by the above conditions necessitated a change in supply requirements.

b. Because stock piling was not authorized, and when items were urgently needed and since it was not feasable to obtain from depot stock, local purchasing proceedure was resorted to.

c. When spare parts were needed, there was a clear indication that some items of equipment was out of service, until the damaged part could be replaced. Parts for GTA vehicles were obtained through local purchase in Las Vegas. Spare parts for tactical vehicles were requisitioned from Camp Irwin or procured from sources in Las Vegas..

d. The issue of supplies to support elements was accomplished in the prescribed manner for a regular camp and station operation. Property issued to participating troops and TOE units was accomplished through the issue directly from the technical service. Property was issued to staff sections and observers on hand receipt from Hq. Commandant Section. Property such as tentage, beds, mess equipment, etc. which was in place as units arrived and left in place on departure, was issued to a unit responsible officer. These issue methods proved to be the most efficient and quickest method for issue and turn-in of property which reduced property losses to very low proportions.

4. Water Supply

a. In volume of material hauled, water was by far the largest. Supply of water was of constant concern because of its absolute necessity to the health and welfare of the troops, and because of the indefinite status of the water source. In order to obtain the required water it was necessary to transport water by truck and trailer from Indian Springs Air Force Base, Indian Springs Ranch (Mr Fred Bartley) 21 miles away and Camp Mercury, 5 miles away. (For details see Engr. Annex)

b. Indian Springs Air Force Base was operating two wells , well number one of which was assigned to the 2000 gallon tankers and well number two was assigned to the 4000 gallon tankers. Because of large requirements for water by the Air Force others sources of water supply had to be found. Mr Bartley owner of Indian Springs Ranch donated water when Air Force Base ran low. Camp Mercury was utilised when special requirements were evoked, ie laying dust in tent areas and trenches in test sites.

5. RECOMMENDATIONS:

a. That Sixth Army Engineers resolve the water problem at Camp Desert Rock in view of the fact that cost of hauling, man power, plus indirect cost, boosted the price of water to one-half cents per gallon. A primary consideration to any subsequent exercise, water must take a high priority.

b. That in the initial planning stages by project offices, funds, special material and scope of responsibilities must be clearly delineated by project offices. This is predicated on the fact that project offices came unprepared and/or gave no consideration to their requirements until arrival of project at Camp Desert Rock. Numerous project offices were of the opinion that the logistical support at Camp Desert Rock would be the same as at their home stations.

A. J. Starkey
Lt Col
54

RECOMMENDATIONS:

a. That Sixth Army continue to give high priority to resolve the water problem at Camp Desert Rock.

b. That the plans directives for the next exercise involving test projects provide for clear delineations of projects funds, special materials, and responsibilities as involve logistical support to be provided by project's home station and Camp Desert Rock.

HEADQUARTERS
CAMP DESERT ROCK
Las Vegas, Nevada

FINAL REPORT, PURCHASING & CONTRACTING SECTION
EXERCISE DESERT ROCK VII and VIII

I. SECTION ORGANIZATION.

1. The Purchasing and Contracting Branch was comprised of the following personnel:

a. 1 Captain QMC - Purchasing & Contracting Officer
b. 1 M/Sgt - BI - Chief Clerk
c. 1 SFC - BI - Chief Purchasing Agent & Accountant
d. 2 PFC - BI - Clerk-Typists

2. Functions of the above personnel are as follows:

a. Purchasing and Contracting Officer

(1) Supervises and directs overal activities of the section in accomplishing assigned mission.

(2) Supervises procurement of authorized supplies and services. Executes all contracts and purchase orders and supervises administration thereof.

(3) Maintains liaison with other activities of the installation and the satellite installation in coordinating purchasing and contracting for installation requirements.

(4) Advises and assists in developing installation plans involving procurement of supplies and services.

(5) Is the authorized representative of the installation commander and the Government in dealings with potential suppliers and current contractors, and contemplating expenditure of appropriated funds.

(6) Assures that funds are available, that current authority for purchase is furnished, and that purchase has been approved by the installation commander or his designated representative.

(7) Purchasing & Contracting Officer will determine the method of purchasing, Formal Advertising or Negotiation, as precribed in ASPR, APP, and M62.

(8) Imprest Fund Cashier.

(9) Maintains Imprest Fund Register.

b. Chief Clerk - Administrative Unit

(1) Maintains continous follow-up on incomplete or delinquent receiving reports DA Form 1155.

(2) Obtains, assembles and audits receiving reports, DA Form 1155, for completeness, accuracy and compliance with requirements of the Purchase Order, Delivery Order or Contract.

(3) Takes necessary action and advises Contracting Officer in connection with delays and defaults under Purchase Orders, Delivery Orders and Contracts.

(4) Maintains immediate supervision over files.

(5) Compiles recurring reports.

(6) Maintains immediate supervision over typing and related clerical duties of such clerk typists assigned and Chief Purchasing Agent.

(7) Chief Clerk reviews all Purchase Instruments before passing them for signature.

(8) Maintains file of qualified suppliers.

(9) Maintains files for regulations and directives and post changes thereto.

c. Chief Purchasing Agent & Accountant

(1) Maintains continuous follow-up on any delinquent deliveries, invoices, etc.

(2) Contacts all logical vendors to obtain price quotations, delivery dates, as to certain quality and to clarify identity of items.

(3) Prepares informal bid forms for use of Purchasing and Contracting Officer, after technical services purchasing agents have received bid figures.

(4) Supervises pickup of supplies by other purchasing agents and audits delivery tickets.

(5) Posts correct amounts from delivery slips to Purchase Requests.

(6) Advises Chief Clerk and/or Purchasing & Contracting Officer whenever accounts reach a low figure on purchase requests.

(7) Maintains Purchase Order and Purchase Request Register.

(8) Retains copies of Purchase Instruments.

(9) Prepares or consolidates information for reports.

(10) Prepares data relative to delinquent reports, payments etc. for necessary action by Purchasing & Contracting Officer.

(11) Maintains Contracts, Purchase and Delivery files.

d. CLERK - TYPISTS

(1) Prepares purchase and delivery orders.

(2) Prepares contracts and modifications thereto.

(3) Prepares correspondence.

(4) File various correspondence, purchase instruments, etc.

II. PERSONNEL REQUIREMENTS

1. That an alternate Purchasing & Contracting Officer be assigned to the Purchasing & Contracting Branch.

2. That the purchasing agents for Engineer and Transportation Supplies be assigned directly to the Purchasing & Contracting Branch for closer supervision of procurement.

3. At least one of the clerk-typists be in the grade of Specialist 3rd Class or equal.

III. TROOP LIST - N/A

IV. TOTAL PARTICIPATION - N/A

V. SUMMARY OF OPERATIONS

1. The Purchasing & Contracting personnel arrived at Camp Irwin o/a 15 April 1957, receiving a very short briefing and orientation on Purchasing & Contracting procedures, and personnel proceeded with limited supply of forms, regulations, etc. for Camp Desert Rock. The Purchasing & Contracting Office was established in Building 128 with the Comptroller Section. Since space was limited in this building, the Purchasing & Contracting Branch moved to building 120 with the S-4 Section. Purchasing & Contracting operations commenced 1 May 1957, and various Vendors were visited in the Las Vegas area establishing charge account procedures.

2. This section operated with one Purchasing Agent, operating out of the Department of Defense Purchasing Office, Las Vegas, on TDY at Nellis Air Force Base, for the purpose of visiting the various Vendors, obtaining supplies, bids, etc. One driver, with a 1 1/2 ton commercial type vehicle, was assigned from the TC Office, Camp Desert Rock, for the purpose of meeting the Purchasing agent and picking up the various supplies purchased. This truck, however, was never used, as vehicles going to Las Vegas for TC and Engineer supplies were found to be adequate for all Camp Desert Rock pickups. This vehicle was released to the motor pool after one week. Govt. transportation was provided as vendors would not deliver supplies to Camp Desert Rock. The Purchasing Agent stationed at Nellis Air Force Base was recalled after about one month, since his experience was limited and the two Tech. Service representatives picking up supplies were found to be adequate.

3. The duties of the Purchasing & Contracting Branch at Camp Desert Rock, was carried out as outlined in section I of this report.

4. The various Tech. Services and Projects at Camp Desert Rock, experienced difficulties in obtaining supplies at the beginning of operations since no Purchase Requests had been initiated by the Tech. Services at Camp Irwin, nor funds allocated for procurement of supplies at Camp Desert Rock. Camp Irwin funds were being utilized to the maximum for all support of Camp Desert Rock projects and utilized until funds had arrived from the various project stations or from the 6th Army Comptroller. Some of the Project funds had been transferred to Camp Desert Rock Finance Office and other project funds remained with the co comptroller at Camp Irwin.

5. Many of the Purchase Requests were initiated at Camp Irwin and others at Camp Desert Rock. This created still further confusion and delay, and many of the Tech. Services requiring supplies for operation, became of an emergency nature and supplies were procured prior to receipt of the Purchase Request. The Purchase Request initiated by the Camp Desert Rock Project Officers with funds at Camp Desert Rock were not registered in the accountable Tech. Service Register at Camp Irwin. This was not in accordance with procurement procedures. The Tech. Services were reluctant to account for project supplies or register the Purchase Requests in their accountable register since these Project Purchase Requests were not Camp Desert Rock Funds.

6. Further, Project Officers arriving with funds at Camp Desert Rock were not familiar with procurement procedures in spending Govt. funds; however after much liaison between the Comptroller, Tech. Services at Camp Irwin, the Tech. Services and Purchasing & Contracting Branch, Camp Desert Rock, a satisfactory working procedure was established. On 30 June 1957, all accounts were closed, balance of remaining funds decommitted and MOD'S prepared for all outstanding obligations.

With the new fiscal year, all Purchase Requests were registered with the respective Tech. Service at Camp Irwin, signed by the accountable Officer, approved by G-4 and Finance at Camp Irwin. All of the 1958 funds remained at Camp Irwin. Some difficulty and delay was experienced in processing of Purchase Requests at the beginning of the new fiscal year since 1958 funds were late in arriving Camp Irwin. Communications (phone patch) between Camp Irwin and Camp Desert Rock were inadequate and problems arising in Purchasing & Contracting could not be resolved until contact could be made. The communications to Las Vegas was constantly overloaded and difficulty arose when trying to make contacts with the various Vendors in Las Vegas.

7. The Procurement Regulations obtained from the Purchasing & Contracting Branch, Camp Irwin were inadequate and incomplete, and problems could not be solved instantaneously. The Purchasing & Contracting personnel were found to be inexperienced and every transaction had to be taught step by step. Practically all purchases for Camp Desert Rock were of an emergency nature which placed a burden on Vendors resulting in higher prices paid on merchandise. This could have been avoided with more lead time for procurement.

8. Charge accounts were established with the following Vendors for Exercise VII & VIII. Services and relations were excellent.

VENDOR	SUPPLIES AND SERVICES
Acme Film Laboratories	Sig
Bandles Auto Body Shop	TC
Cashman Equipment Co.	TC and TS
City Janitor Supply Co.	TS and R&U
Clark County Wholesale Merc. Co.	R&U; ORD; TC; TS;
Crow's Radiator & Auto Glass Shop	TC
Earl Glass Co., Inc.	TC
Ewing Bros.	TS
Gaudin Motor Co.	TC
Hank Electric Mtr. Sv.	R&U and TS
Home Lumber Co. of Nev.	R&U and TS
Inland Sv. & Supply Co.	R&U and TS
Las Vegas Auto Parts Inc.	TC; R&U; TS
L.B. Marsh Allied Refrig.	R&U
Mailman Truck Equip.	TS
McQuay Supply Co.	R&U and TS
Motor Mission Exch. Co.	TC and TS
O'Neill Lumber Co. Ltd.	R&U and TS
Opaco Lumber & Realty Co.	R&U and TS
Osborne Electric Supply Co.	R&U
Paragon blueprint Co.	R&U and TS
Standard Wholesale Supply Co.	R&U
Superior Tire Co.	TC - Tires
U.S. Tire Supply Co.	TC - Tires
Varian Associates	Sig
Western Heating & Vent. Co.	R&U
J.A. Zumstein	TS

VI. CONCLUSIONS

1. That time Purchasing & Contracting personnel spent at Purchasing and contracting Branch, Camp Irwin, for orientation, briefing and on the job training was inadequate.

2. Supply of expendables, DA Forms, Regulations, etc. was inadequate.

3. Space provided for in S-4 Section was adequate for this exercise.

4. The TC & Engineer representatives picking up supplies were found to be adequate for all pickups since a good many of the Vendors were situated in the same locale.

5. The Purchasing & Contracting organization for Exercise VII & VIII was adequate with exception that an alternate Purchasing & Contracting Officer be assigned to the organization with Purchasing & Contracting experience, also TC and Engr. representatives be assigned to and work directly out of Purchasing & Contracting Office.

6. That Tech. Services & Project Fund Officers were not oriented on preparation of Purchase Requests and procedure for purchasing supplies prior to arrival at Camp Desert Rock.

7. Tech. Services were procuring supplies prior to receipt of approved Purchase Request.

8. Purchase Requests were delayed due to late arrival of project funds resulting in many emergency purchases being made without a Purchase Request.

9. That communications to Las Vegas were inadequate causing difficulties in contacting vendors when needed.

10. Communication (Phone Patch) to Camp Irwin was inadequate resulting in much lost time in resolving or expediting problems.

11. Lead time for procurement was inadequate.

VII. LESSONS LEARNED

1. That more lead time is required for procurement of supplies since bulk of supplies are shipped from the Los Angeles - San Bernadino area.

2. That emergency procurement is costly and should be avoided.

3. Las Vegas Vendors could not supply various supplies in the quantities requested on short notice.

4. That Purchasing & Contracting personnel, being inexperienced at the beginning, utilizing on-the-job training and working under close supervision, gained a working knowledge of Military procurement.

VIII. RECOMMENDATIONS

1. That Purchasing & Contracting personnel be screened and only personnel with a working knowledge of Purchasing & Contracting work be assigned to Camp Desert Rock.

2. That Purchasing & Contracting personnel have a minimum of 3 weeks orientation and on the job training at Camp Irwin prior to commencing Purchasing & Contracting operations at Camp Desert Rock.

3. That the Purchasing & Contracting Branch be supplied with a current set of ASPR'S; APP'S; SR'S; SB'S; etc.; pertiment to Post Camp and station procurement.

4. That project funds be available prior to preparation of Purchase Requests.

5. That all funds remain with the Comptroller at Camp Irwin.

6. That all Purchase Requests for Camp Desert Rock be signed by the accountable Tech Service Officer, approved by G-4 and Finance Officer, Camp Irwin.

7. That Tech Services and Project Fund Officers be oriented on preparation of Purchase Requests and procurement procedures prior to arrival at Camp Desert Rock.

8. That a direct telephone line be installed between Camp Irwin and Camp Desert Rock.

9. That a stock level on supplies be established with the various Tech Services to curtail emergency procurement.

10. That another telephone line be installed between Camp Desert Rock and Nellis Air Force Base for exclusive use by Purchasing & Contracting and S-4.

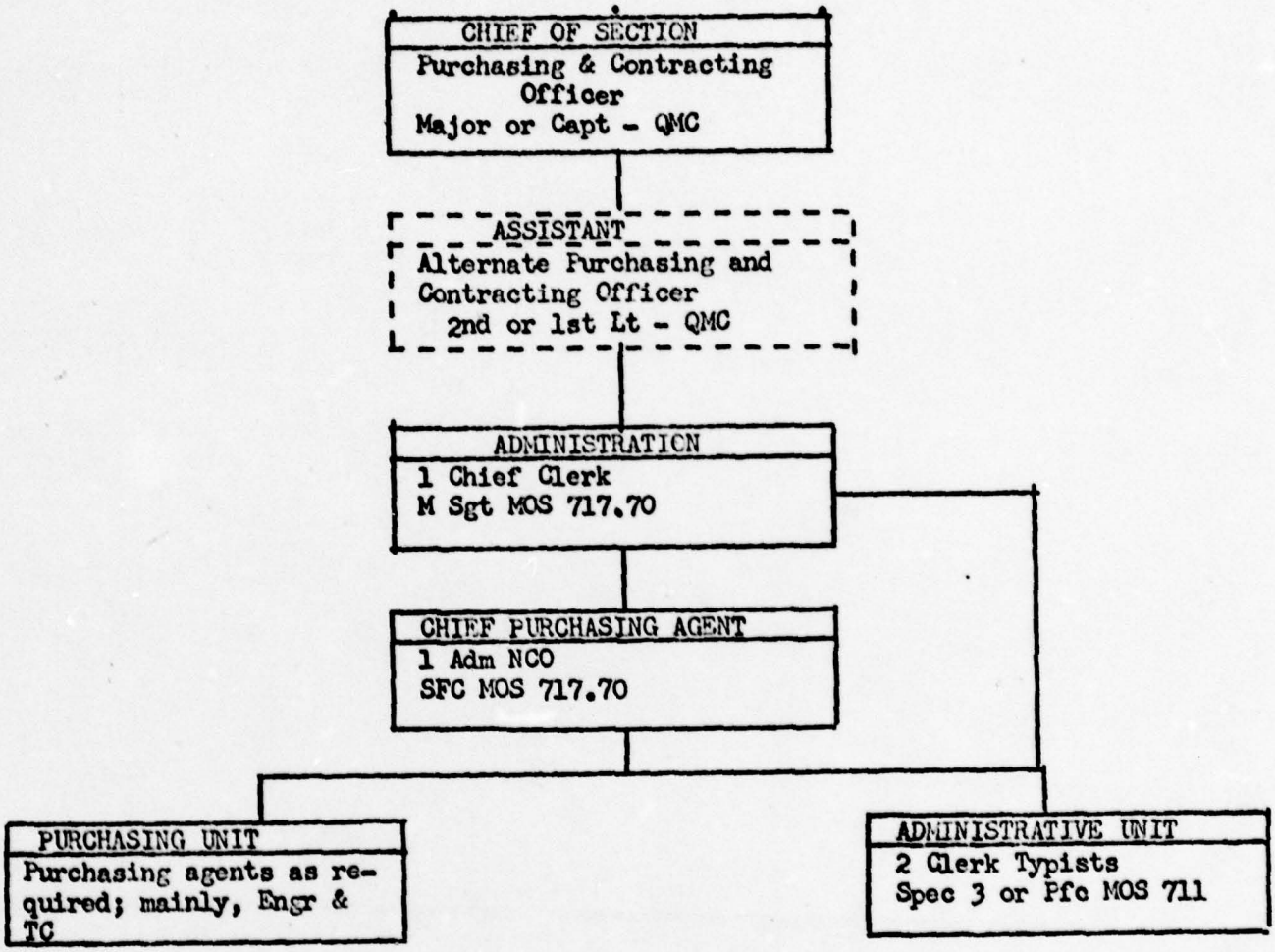
11. That more lead time be alloted for procurement of supplies to alleviate emergency purchases.

12. That Tech Services be supplied with current procurement regulations governing their procurement.

Walter Tomas

WALTER TOMAS
Captain, QMC
Purchasing & Contracting Officer

ORGANIZATIONAL CHART FOR PURCHASING & CONTRACTING BRANCH, CDR



_ _ _ Dotted lines above indicate recommended change.

ANNEX TO FINAL REPORT, P&C SECTION (CDR) (only)

Activity	# Purchase Request Issued	# Purchase Request "Emergency"	Total Purchase Orders Issued	Expenditures
Engineer R&U	14	1	68	$ 30,566.45
Engineer TS	6	0	42	12,121.13
Ordnance	10	8	10	1,682.57
Quartermaster POL	27	2	78	114,391.73
Quartermaster Misc.	19	16	16	1,421.84
Signal	23	16	16	1,935.58
Transportation Misc.	9	1	44	26,802.55
Transportation Tires	5	0	11	5,993.21
Project 51.1	1	1	1	793.06
Project 50.3	10	9	11	2,090.70
Project 50.8	10	6	30	9,055.77
Adjutant General	1	0	1	497.98
TOTAL	135	60	328	$207,352.57

P&C

1. CONCLUSIONS:

a. Lead time for procurement is inadequate.

b. Communications (Phone Patch) to Camp Irwin and to Las Vegas was inadequate.

2. RECOMMENDATIONS:

a. That all Camp Desert Rock funds be controlled by CG, Camp Desert Rock, remaining under the accountability of Comptroller, Camp Irwin, but being handled as a sub-allotment thereof.

~~b. That all Camp Desert Rock funds be under control of CG, Camp Desert Rock,~~

~~DRAFT~~ FINAL

HEADQUARTERS
CAMP DESERT ROCK
LAS VEGAS NEVADA

~~DRAFT~~ FINAL

_____ 1957

AFTER ACTION REPORT

I SECTION ORGANIZATION

A. The Camp Food Service Section was organized at Camp Desert Rock on 10 April, 1957 with the mission of assisting the commanding general in the implementation of the foodservice program at this installation, and to provide liason between the command, and food service activities at Army. These activities were carried out under the staff supervision of the Camp S-4.

B. Section organization was as shown on the attached organization chart (See Annex A) with principal duties of personnel as outlined in TM-10-401, 1957, and AR 30-41.

II PERSONNEL REQUIREMENTS

Personnel requirements were amply met by the organization shown. Because of it's close association with the Camp S-4 Section, clerical work was handled by personnel organic to that section without creating any overload.

III TROOP LIST (Not Applicable)

IV TOTAL PARTICIPATION (Not Applicable)

V SUMMARY OF OPERATIONS

A. Phase-in:

1. Upon arrival of the section at Camp Desert Rock, all personnel then on the post were subsisted at one mess. Post strength at this time was approximately 500 men and officers. Two additional troop messes, and one small mess, all capable of being operational on a ten day notice constituted the remaining mess facilities on the post. Class I support of this installation was provided by Nellis A.F.B. at this time.

2. To insure control and command supervision by a major command, it was

D

determined at the outset to place all messes under the operational control of C.O. Special Troops. Troop messes were staffed with mess personnel organic to the troop units messed in them. Officer and observer messes were staffed with T/D mess personnel.

3. Messes were opened in PACE with the general support troop, and observer phase-in plan. Assignment of troop units to mess was coordinated with Billeting Section to minimize distances, and insure even distribution of mess attendance.

4. With phasein of the 53rd QM. Subsistence Supply Det., and the Vetrinary Officer late in April, Class I support of this installation was assumed locally ~~affecting~~ with consumption 1 May, 1957. Normal Depot & Market Center requisitioning proceedures were effected immediately.

B. DURING OPERATION

5. The question of sur-charge applicability was resolved in Twix, C.G. Sixth Army dated 12 June which gave relief from payment of sur-charge under provisions of para. 4b, AR 30-30.

6. Installed equipment generally PROVED adequate to need. One walk-in reefer per mess was needed in addition to the three 65 cu. ft. reachin refrigerators already provided. Water softening equipment was already installed in all messes upon arrival of troops, but was not operating at any time during the exercise. With use of proper detergents water softening equipment was superfluous. Electrical equipment required abnormal amounts of startup maintenance, and considerable rebuild to put it into operation. Complete dependence upon electricity for operation of garrison messes was responsible for some interruptions in service due to service failures. These were of little consequence, however.

7. To avoid overcrouding of existing messes, and provide more local service to observers billeted in the 600 area, Bldg 628, a prefab HUT TYPE ~~type hut~~

structure was modified to permit it's use as a mess. Fund limitations, and a practical approach restricted these modifications to a minimum with the addition of a food preparation area, wash area, and a storage area. Food was prepared using M-1937 field range equipment. No mechanical equipment was installed, nor did any prove to be neceasary. Headcounts averaged 600 with short surges to 900.

4. While messes located in Bldgs 108, 146, and 325 have been previously ~~messed~~ ASSESSED a rated capacity of 1000 persons per meal, practical experience during this exercise showed 700 persons to be the optimum practical figure.

C. PHASE-OUT

5. Close down upon conclusion of the exercise was effected by reversing the phase-in plan as troops and observers departed this station. The bulk of T/D mess personnel were retained to replace TO & E cooks returning with their units to home stations, and gradually released as the need for them diminished. Food Service Section remained operational until 10 days prior to official end of exercise at which time one mess was operating, messing approximatley 250 men and officers. Class I support was assumed again by Nellis A.F.B. on 17 September, with post strength at approximately 400 men and officers.

VI CONCLUSIONS

A. That allocation of but TWO mess officers on T/D of Hq Commandant for operation of five messes was unrealistic. While two of these messes were operated by support units, servicing their own troops. Supervision had to be provided by Hq Commandant to guarantee unbiased support of all the interests involved. The remaining three messes therefore came under the active management of the two T/D mess officers.

B. That water softening equipment presently installed is superfluous to the needs of all post messes with the use of proper detergents.

C. That a minimum of 600 cu. ft. of refrigeration per 700 man mess is

needed to safely store the "A" Ration under the conditions prevailing at Camp Desert Rock during summer months, using the most feasable ration issue frequency (1-1-1-2-2).

D. That complete dependence of messes upon electrical power to operate equipement that could in a large measure be solved by use of M-1937 field ranges in place of electrically fired installed diesel ranges.

E. That installation of any additional mechanical mess equipment is unnecessary, and would create an additional maintenance requirement out of proportion to the mission, and constitute an unsatisfactory compromise between a garrison and transient field operation such as this.

VII LESSONS LEARNED

A. That constant liason must be maintained between the visitors bureau, S-3, and all messes to insure accurate ration estimates and provide for the timely service of late meals, early meals, and Special meals to arriving and departing observers, because of cancelled , and postponed shots, and other operational uncertainties inherent in such an exercise.

B. That consumption of ice can be expected to run up to five pounds per man per day (including loss in transit & storage) during the hottest weather. In other respects, established subsistence issue factors were completely applicable.

VIII RECOMMENDATIONS

A. That no attempt be made to install any additional mechanical equipment in any of the camp messes, and that as they become unservicable, Diesel fired ranges be replaced by M-1937 field ranges for more reliable and maintenence free service.

B. That watersoftening equipment presently installed be removed to a location where it is more vitally needed to permit more functional arrangements of remaining kitchen equipment.

C. That the large messes in Bldgs 108, 146, and 325 be regarded as

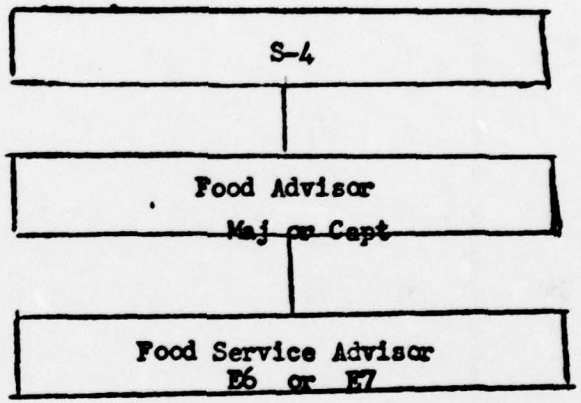
having a rated capacity of 700 if mimimum acceptable service is to be expected.

Warren Olsen
WARREN H. OLSEN
Capt Arty
Food Service Advisor

1 INCL: ORGANIZATION CHART

ORGANIZATION CHART

CAMP FOOD SERVICE SECTION



ANNEX "A"

HEADQUARTERS
CAMP DESERT ROCK
Las Vegas, Nevada

FINAL REPORT, MEDICAL SECTION
EXERCISE DESERT ROCK VII and VIII

1. SECTION ORGANIZATION.--The Medical Section was set up utilizing personnel from the service support unit (1st Hospitalization Unit, 8th Field Hospital). All Camp medical activities came directly under the Medical Section and included; Medical Administrative Section; Preventive Medicine Section; Dispensary Section; Holding Wards; Supply Sections (Medical and Unit); Transportation Section; Dental Section; Veterinary Section; and Field Medical Support Section. (See attached organizational chart, Incl #1)

2. PERSONNEL REQUIREMENTS.--Total amount of enlisted personnel from the 1st Hospitalization Unit, 8th Field Hospital (Augmented) was found to be excessive. Personnel not utilized were returned to parent stations at various times during the exercise. Recommended medical personnel list for future exercises is attached as inclosure #2.

3. TROOP LIST.--Adequacy of assigned troop unit is stated in paragraph 2, above.

4. Not applicable.

5. SUMMARY OF OPERATIONS.

a. General--Dispensary was operational on 24 January 1957 and staffed by an advanced party consisting of one Medical Officer and four enlisted men. During the period 24 January to 16 April the advanced party provided medical support to approximately two hundred (200) personnel on Post. The main party consisting of six (6) Officers and fifty-nine (59) EM arrived 17 April 1957, established sections enumerated in paragraph 1, above, and began operations.

b. Health of the Command was Excellent. Sporadic cases of influenza-like respiratory disease occurred during the latter part of the Exercise. There was one death on post due to a self inflicted gun shot wound. Only six cases of heat exhaustion of a minor nature were treated in the Holding Ward. None of these cases was serious and there were no heat stroke cases. There were no snake bite cases. There were 3,551 cases on sick call in the Dispensary. Of the 3,551 cases two hundred and forty (240) were admitted to the Holding Ward of the Dispensary on a quarters disposition status. Thirty-seven (37) cases were admitted to Nellis Air Force Base Hospital for major surgery and in-patient care.

c. Dispensary.— (1) There were a total of 3,684 prescriptions dispensed in the Pharmacy Section.

(2) The Laboratory Section performed 485 Urinalysis; 1753 Hematology tests; 117 gram stains for Urethritis; 371 samples of blood for serology were sent to Nellis Air Force Base Hospital; 13 throat and urine cultures were taken and sent to Nellis Air Force Base Hospital for analysis.

(3) The X-ray Section took a total of 1,112 X-rays of which 405 were Dental Films.

d. Dental Section.-- There were 1,728 procedures performed on 774 patients.

e. Preventive Medicine Section.-- Conducted periodic inspections of mess halls, food handlers, sewage disposal system, sanitary fill, water intake point, latrines, barber shop, and Officer's and NCO'S Clubs. Conducted daily chlorine residual content of the water and collected weekly samples of water for bacteriological examination. Conducted personal interviews for VD contact reports and forwarded information received to Public Health Office in Las Vegas for follow up of contacts.

f. Transportation Section.-- A total of 21,644 miles was driven by the seven ambulances available to the Medical Section. Three 3/4 ton ambulances were used entirely for field support in the Nevada Test Site. Three 1/2 ton GMC ambulances were used for routine trips into Nellis Air Force Base Hospital located approximately 70 miles from this Camp. One 1957 Pontiac Metropolitan ambulance was used for emergency trips only.

g. Veterinary Section.-- Inspected 661,726 pounds of class 4 food items, with none rejected; 2,265,709 pounds of class 5 food items with 29,089 pounds rejected; 2,852,435 pounds of class 7 food items, with none rejected. Food rejected was found to be spoiled upon delivery to this station by commercial carrier from the Los Angeles Market Center due to improper refrigeration. There were six pet dogs requiring the attention of the Veterinarian.

h. Holding Section.— A twenty-five bed Holding Section was set up in two wards in quonset huts in order to care for personnel on a quarters disposition status for a period from 24 to 72 hours. Two hundred and forty (240) quarters patients were admitted to the Holding Section. Average length of stay in quarters was three days. Beds and patients report was not submitted for this section. This information was contained in the monthly morbidity report.

i. Administration.-- Routine correspondance and periodic reports were prepared and submitted. These reports included; Weekly and Monthly Morbidity Telegraphic Reports; Assignment and Utilization of Medical Service Personnel; Monthly Outpatient Report; Monthly Sanitary Report; Dental Service Report; and Monthly Veterinary Report.

This Section also established, recorded and filed DD Form 1141, "Record of Exposure to Ionizing Radiation", on all permanent party personnel. There were 6,321 separate entries made on DD Form 1141.

j. Supply.-- Approximately $5,000 worth of medical expendable supplies were received from Camp Irwin during the Exercise. A 30 day supply of expendable medical supplies was kept on hand at all times. This Section also handled unit supply matters and included a utilities NCO for minor repair work of equipment and buildings. Medical supplies for handling of approximately 50 casualties was kept on hand anticipating the possibility of aircraft and vehicular accidents. However, it was not necessary to stockpile more than this amount due to the rigid safeguard procedures established by AEC in the test site areas.

k. Field Medical Support Section.-- Field Medical aid teams were set up to support Camp Desert Rock personnel participating in the Nevada Test Site in each of the 14 test events. These aid teams were comprised of medical personnel, cleared for secret and performing normal duties in the Dispensary and other sections in between events.

6. Conclusions.-- See paragraph 7.

7. Lessons Learned.-- a. The Service Support Unit should be under the operational control of the Surgeon.

b. That medical evacuation by H-13 and H-23 helicopters cannot be relied upon during hot weather because of the altitude-density of the area, causing difficulty in air lift.

c. An ambulance with medical supplies and equipment should be reveted near any trench area occupied by troops during an AEC test event.

d. Mass casualty equipment and supplies was not necessary for support of the Nevada Test Site because of the rigid safety procedures enforced by AEC.

8. Recommendations.-- a. All personnel placed on TDY to this station for support of Exercises should be required to bring their medical health records. (DD Forms 722 and 722-1)

b. That a complete set of medical regulations be brought with the next medical unit to this station.

c. That lead sheeting be placed on the walls of the X-ray Section and an additional room built adjacent to X-ray room to be utilized as an X-ray dark room.

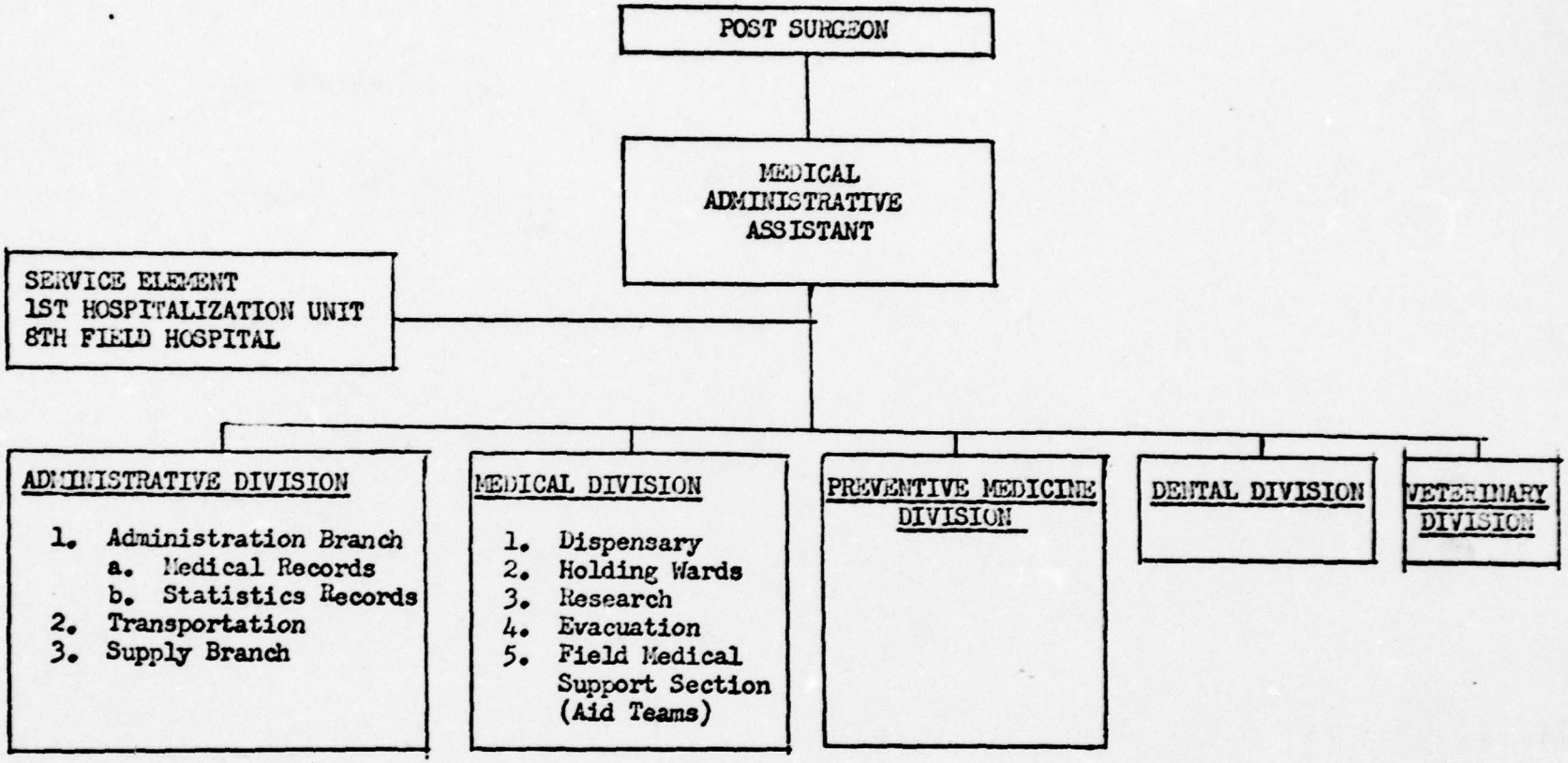
d. That the permanent party personnel be given eight hours orientation by the Instructor Group before the arrival of the first group of observers.

Louis Lebovitz

LOUIS LEBOVITZ
Lt Col, MC
Surgeon

MEDICAL SECTION

ORGANIZATION CHART



Recommended Medical Personnel List For Exercise Desert Rock IX

POSITION	RANK	BRANCH	MOS	NOTES
Surgeon	Lt Col	MC	3000	
Medical Officer General	Maj/Capt	MC	3100	1
Medical Officer General	Capt	MC	3100	
Dental Officer	Maj/Capt	DC	3170	
Medical Assistant	Maj/Capt	MSC	3506	2
Medical Assistant	Capt/Lt	MSC	3506/3005	3
Meat and Dairy Produce Inspector	Capt/Lt	VC	3221	4
1st Sgt	M/Sgt		001.8	
Medical Supply Sgt	Sgt		767.60	
Medical Supply Spec	SP3		767.10	
Utilities Mechanic	SP3		520.20	
Clerk Typist	SP2		711.10	5
Clerk Typist	SP3		711.10	5
Preventive Medicine Specialist	SFC		933.60	
Preventive Medicine Technician	SP2		933.20	
Chief A & D Clerk	M/Sgt		715.60	6
A & D Clerk	SP3		715.10	
S & W Clerk	SP3		715.10	
Senior Operating Room Specialist	Sgt		913.60	
Operating Room Spec	SP2		913.20	
Operating Room Spec	SP2		913.20	7
Operating Room Spec	SP2		913.20	7
Pharmacy Specialist	SP3		933.20	
Medical Laboratory Specialist	SP2		931.20	
Medical Laboratory Specialist	SP3		931.20	
Dental Assistant	SP2		917.20	
X-Ray Specialist	SP2		935.20	
X-Ray Specialist	SP3		935.20	
Chief Wardman	SFC		912.60	
Wardman	Sgt		912.60	
Wardman	Sgt		912.60	
Wardman	Sgt		912.60	
Ward Specialist	SP3		912.10	
Ward Specialist	SP3		912.10	
Ward Specialist	SP3		912.10	
Ward Attendant	PFC		910.00	
Ward Attendant	PFC		910.00	
Ward Attendant	PFC		910.00	
Ward Orderly	PVT		910.00	
Ward Orderly	PVT		910.00	
Wheel Vehicle Mechanic	Sgt		631.60	8 - 9

Recommended Medical Personnel List For Exercise Desert Rock IX, Cont'd.

POSITION	RANK	BRANCH	MOS	NOTES
Ambulance Driver	SP3		910.10	9
Ambulance Driver	SP3		910.10	9
Ambulance Driver	SP3		910.10	9
Ambulance Driver	SP3		910.10	9
Ambulance Driver	SP3		910.10	9
Ambulance Driver	SP3		910.10	9
Light Truck Driver	SP3		910.10	9
Chief Food Inspection Specialist	Sgt		934.60	4

NOTES:

1. Officer in charge of Dispensary and Holding Wards.
2. Detachment Commander and Medical Administrative Assistant in Surgeon's Office.
3. Have training in Preventive Medicine.
4. Does not include personnel for animal management. Two additional Veterinary EM would be required in the event animals are based at Camp Desert Rock.
5. Assigned to Surgeon's Office, would also handle unit correspondance. Initiation, recording and filing of DD Form's 1141, Record of Exposure to Ionizing Radiation, requires a large amount of administrative work.
6. Will also act as NCOIC Dispensary.
7. Utilize as Dispensary emergency treatment personnel at night. (Alternate)
8. Will also act as transportation section leader.
9. All drivers must have security clearance of Secret in order to obtain Nevada Test Site security badge.

Field medical support on days of "Shots" will be provided by personnel listed. All EM must have security clearance of "Confidential". It is highly desirable that at least 60% of EM have security clearance of "Secret".

Mess personnel have not been included in personnel listing. Although mess personnel included in unit will be brought down to Camp Desert Rock for duty in consolidated messes.

HEADQUARTERS
CAMP DESERT ROCK
Las Vegas, Nevada

FINAL REPORT, RADIOLOGICAL SAFETY SECTION
EXERCISE DESERT ROCK VII & VIII

1. SECTION ORGANIZATION

a. Mission:

(1) To advise the Deputy Exercise Director and his staff on all radiological safety and chemical matters that pertain to Camp Desert Rock operations.

(2) To establish and conduct the radiological safety program for personnel of Camp Desert Rock.

(3) To procure and maintain adequate stock of required Chemical Corps equipment and supplies for support troops, observers and troop participants utilizing Camp Desert Rock during the exercise.

(4) To exercise operational control over Chemical units assigned to Camp Desert Rock.

(5) To train selected personnel from project and support units stationed at Camp Desert Rock as augmentation radiological monitors and to provide radiological survey training for Sixth US Army CBR Survey Teams reporting to Camp Desert Rock.

(6) To orient official observers in Radiological Safety.

(7) To conduct a Sixth US Army Cloud Measurement Test.

b. Organizational and Functional Duties (See attached chart Inclosure 1 and 2). The section was made up of the following personnel:

			Called for by Manning Table.	
Position	Rank	Assigned	Rank	Number
Radiological Safety and Chemical Officer	Maj	1	Col	1
Ass't Rad-Safety and Executive Officer	Maj	1	LtCol	1
Ass't Rad-Safety and Ass't Chemical Off			LtCol	1
Nuclear Effects Engineer	Capt	1	LtCol	1
Chemical Supply Officer	Capt/2d Lt	1	Capt	1
Chemical Admin NCO	Sp 2/Pfc	1	E-7	1
Rad-Safe Admin NCO	Sgt/Pfc	1	E-5	1
Clerk typist	Sp 3	2	E-4	2
	Total	8		9

F

2. PERSONNEL REQUIREMENTS

a. The organization of the Radiological Safety Section as indicated above is not considered adequate for the following reasons:

(1) Section had additional duties imposed upon it after arrival at Camp Desert Rock which were not considered in the original personnel assignments indicated in the Exercise Manning Table. These duties required an officer and two enlisted men for training and escort duties, the time of three officers and six enlisted men for dosimetry, and the time of two officers for the cloud measurement test.

(2) Section was one (1) officer short of that authorized by the Exercise Manning Table.

(3) The proficiency of the Rad-Safe Section was materially hampered by the requirement of enlisted personnel to perform details. Two (2) EM of the Rad-Safe Section were on a detail a total of ten (10) times each during the exercise period. Oddly, the Detail time coincided with a shot, when all personnel were required to function as members of a Rad-Safe team operating in the forward area. In addition officer details consisted of fifteen separate non related functions which further distracted from the assigned mission.

b. Recommend organization be changed to that indicated in Inclosure 3 for future exercises.

3. TROOP LIST

a. Assigned troop units were adequate for carrying out the Radiological Safety Function. To assist him, the Radiological Safety Officer had the 50th Cml Plat (Svc) which was activated and trained under Sixth US Army to support the Radiological Safety mission of Headquarters Camp Desert Rock. Average present for duty strength for this unit during the exercise was four (4) officers and sixty-two (62) enlisted men.

b. During the exercise, four (4) ORC Chemical Corps officers on 15 day active duty tours were placed on duty with the Radiological Safety section for training. These officers were given on-the-job training which not only was for their benefit but also was of considerable assistance to the section in operations.

4. SUMMARY OF OPERATIONS

a. Radiological Safety

(1) Provided the directives, facilities, personnel, equipment and materials necessary for carrying out the radiological safety policies of the Deputy Exercise Director.

(2) Established and maintained operating procedures for radiological safety that insured minimum exposure to radiation of Camp Desert Rock personnel.

(3) Enforced the radiological safety criteria established by the Department of Defense. This included making a survey check of the distances from ground zero to the observer trenches, for each shot in which trenches were employed.

(4) Prepared the Radiological Safety Annex to Camp Desert Rock operation orders.

(5) Established basic responsibilities of the various staff and technical service staff officers for activities under the radiological safety function.

(6) Advised, assisted and effected coordination with other members of the staff, project personnel, and troop support commanders of Camp Desert Rock on matters pertaining to radiological safety to include training and guidance on monitoring and decontamination.

(7) Maintained a storage area for radioactive sources used at Camp Desert Rock and advised in the preparation of radioactive materials for shipment from camp.

b. Training

(1) Conducted a Radiological Monitor School as required for the training of selected personnel as radiological monitors. Students were considered qualified as monitors only when they had learned to use their instruments for obtaining the information on the basis of which action could be recommended. They were further taught how to make the necessary elementary computations. Both a written and performance examination was used to determine the proficiency of the students. The program was extensive and trained approximately 417 personnel from the units listed below:

UNITS	NUMBER OF PERSONNEL
Permanent Party	84
Sixth US Army CBR Survey Teams	89
4th Marine Prov Brigade	180
2nd Bn, 5th Marine Div	16
Infantry Battle Group	30
Canadian Infantry (Queens Own Rifles)	3
XVIII Abn Corps Pathfinders	14
AEC	1
Total	417

(2) Conducted training under actual radiological conditions which existed at contaminated target areas subsequent to shot days for a limited number of Sixth US Army CBR Survey Teams. Nine (9) teams received this training at Camp Desert Rock during the period 25 May 57 - 18 Aug 57. The average length of stay was eleven days. Instruction was practical and was adjusted to the state of training of each team upon reporting to Desert Rock. Only that portion of the instruction required to perform an actual 360° radiological survey around Ground Zero was presented. Although this practical training covered all aspects of conducting a ground survey, the actual method and operation plan were made the responsibility of each individual team so as to test the ingenuity of the team leaders. Both military and civilian personnel were involved in this training but the common reaction to operating in a radioactive contaminated area was first that of wonderment and finally that of confidence in the instruments and the results obtained by their use. Details of this program are the subject of a separate report.

(3) Afforded an opportunity for all Chemical Corps Officer Observers to participate in the radiological reconnaissance and safety operations of this section during their stay at Camp Desert Rock as official observers for Exercise DESERT ROCK VII & VIII. This was done because of the emphasis presently placed on radiological operations for the atomic age and the fact that the Nevada Test Site offers the only realiztic stateside area where such training can be obtained. Approximately six (6) officers participated and expressed an interest in such activities as were being conducted at this time.

c. General Monitoring

(1) Conducted radiological surveys on shot days as follows:

(a) Radiological monitors were always present at the trench and open observation areas to protect participants from radioactive hazards. When observers were to view Desert Rock equipment displays subjected to the blast, heat and radiation of a test shot, motorized radio-equipped RAD-SAFE monitor teams were dispatched from vehicle revetments adjacent to the trenches (when trenches were employed) to conduct the survey to and within the display area. These teams moved out on order of the Radiological Safety Officer after the detonation and after it was definitely determined that the radioactive mushroom and dust clouds were moving in a safe direction. While enroute, continuous monitoring was conducted and reports radioed back to the command trench where a radiological situation map was plotted by the Nuclear Effects Engineer to show the extent and intensities within the contaminated area. Upon reaching the 5r/hr line, monitor teams crossed the Desert Rock sector and erected red cones every 30 yards. These cones were connected together with white Engineer tape. Teams then proceeded back to the 20 mr/hr line surveying the display area for any isolated areas of high intensity contamination. If found, these areas were marked with tape and a red cone. In addition, a number of yellow cones with black spots were erected at various locations in the display area and marked with contamination markers to indicate dose-rates to the observer personnel. The 20 mr/hr line was marked with yellow cones which indicated the forward limit for buses and personnel vehicles.

(b) A stand-by emergency monitoring team patrolled the camp area immediately after the shot until such times thereafter when it could be determined that the contaminated cloud was moving in a direction other than towards Camp Desert Rock. This team was also to assist in the emergency evacuation of the camp should it have been required.

(2) Provided routine monitoring of areas to which access was required by Camp Desert Rock personnel on days between shots. This included the monitoring of equipment which was located on site and caught in the downwind fallout pattern.

(3) Provided monitoring assistance to participating projects when required. For example, the fallout collection stations for Project 50.4 were monitored during the PRISCILLA shot by RAD-SAFE monitor teams so that the collection of samples and data could be expedited. Another example was the monitor provided the Human Research and Resources Project in their experiment due to the fact that they arrived late and had no trained monitors in their task group.

(4) Provided personnel and vehicle monitoring service as required so as to prevent personnel or vehicles reading greater than 7mr/hr from returning to camp before being decontaminated. This was also done for helicopters and equipment subjected to the blast, thermal and radiation effects of a test shot.

d. Plotting and Briefing

(1) Maintained a radiological situation map (Scale 1:50,000) for Desert Rock participants at the RAD-SAFE building, the Decontamination Station at Yucca Pass and the orderly room of the 50th Cml Plat (Svc), showing the existence and extent of contaminated areas, isodose lines of 10 mr/hr 100 mr.hr and 1r/hr intensity and other pertinent data. Information plotted was received from Camp Desert Rock Rad-Safe Monitors and from the AEC Rad-Safe Group.

(2) Presented briefings to the official observers on the radiological safety measures employed here at Camp Desert Rock and the Nevada Test Site for their protection. Also briefed all work and recovery parties requesting same on the forward area radiological situation and the safety measures to be observed.

e. Decontamination (See Memo Nr 9, Hq CDR, 6 May 57, "Standing Operating Procedures for Field Decontamination of Personnel, Vehicles, and Rotary Winged Aircraft."

(1) A decontamination station was established and operated on the east side of the Mercury highway approximately one-half (½) mile north of Yucca Pass for the purpose of decontaminating such personnel, vehicles, equipment and rotary winged aircraft contaminated by fallout or exposed to more than the allowable amount of radiation. Equipment and supplies were furnished by the 50th Cml Plat (Svc).

(2) The primary means of decontamination employed was the sweeping of personnel and vehicles with brooms to remove contaminated dust. Decontamination was required whenever the contamination exceeded an intensity of 7 mr/hr. Facilities at the decontamination station included showers for personnel and decontamination trucks for washing down vehicles and equipment. It was not necessary to decontaminate any personnel at the decontamination station during the exercise. Approximately vehicles and helicopters required decontamination.

f. Dosimetry (See Memo Nr 8, Headquarters Camp Desert Rock, 6 May 1957, "Standing Operating Procedure for Photodosimetry (Film Badge)".

(1) Film badges were issued on the basis of one per individual. Processing and developing of these film badges were done by a dosimetry team from the Nucleonics Branch, Lexington Signal Depot, Lexington, Kentucky. Two (2) specially equipped vans for use during the exercise were shipped from Lexington to give Camp Desert Rock its own capability for dosimetry.

(2) Dosimetry support was the responsibility of Sixth U.S. Army Signal. Six personnel plus clerks and typewriters were promised the Lexington Dosimetry Team by Sixth U.S. Army Signal for developing and densitometer work, however, these people were never made available thus creating a problem of insufficient personnel for dosimetry operation. The Camp Desert Rock Signal Officer was not able to supervise the dosimetry function due to a shortage of Signal personnel, but did provide three (3) enlisted personnel to help alleviate the situation. Due to the work overload placed on the 3-man team from Lexington, the inability of Signal to provide sufficient operating and supervisory personnel for the distribution and collection of film badges, and the danger of overexposure to personnel operating in contaminated areas of the Nevada Test Site without prompt evaluation of their film badges, this section assumed responsibility for the dosimetry program. Approximately 33,000 film badges were developed during the exercise.

g. Special Assignments

(1) Tested an experimental radiac meter for Project 2.6 (Evaluation of Radiac Instruments) and submitted comments as to useability, convenience for carrying and configuration of the instrument.

(2) Assisted Project 2.3 (Neutron Flux Measurements) in calibration and evaluation of radiac equipment and the gathering of decay data for various soil samples.

(3) Assisted Project 6.1 (Minefield Clearance by Nuclear Weapons) in decontamination of an area using a Power-driven Decontaminating Apparatus M3A2.

(4) Participated in Program 73, Project 57 (Alpha Monitoring).

(5) Instructed two (2) classes of visitors from the Civil Effects Test Group on field decontamination procedures.

(6) Provided escort officers and film badge service for Project 53.4 (USAF Radiological Defense Training) in their operations in the forward area.

(7) Provided escort officers for Project RCA (Canadian Observers) in their radiological monitoring exercises conducted in the forward area of the Nevada Test Site.

(8) Conducted a Sixth U.S. Army Cloud Measurement Test.

h. Logistics. Chemical logistical support for the exercise included:

(1) Chlorinated lime for mess halls, latrines and shower facilities.

(2) Tri-sodium phosphate for mess halls.

(3) Calcium hypochlorite, sodium bicarbonate, sodium carbonate, sodium-silico fluorite for the Quartermaster laundry.

(4) Smoke pots and grenades for the 50th Cml Plat (Svc) and Project 50.1 .

(5) Alcohol for cleaning typewriters.

(6) Protective field masks and dust respirators for observers and the 4th Marine Corps Brigade. Approximately 3700 masks were used and disinfected prior to reissue.

(7) Density goggles for VIP observers obtained on a loan basis from the AEC and issued under Rad-Safe control.

(8) Radiac instruments for monitoring operations issued and calibrated by the 50th Cml Plat (Svc).

5. CONCLUSIONS

a. The Radiological Safety Section is a special organization conducting a specialized program that emphasizes avoidance of overexposure to radiation. The key to this program is organization. This organization requires:

(1) Provision for training personnel in radiological monitoring and safety.

(2) Provision for the facilities, personnel, equipment and materials necessary for the execution of the radiological safety function.

(3) Preparation of written safety instructions and regulations.

(4) Indoctrination in radiological safety of personnel not associated with the program.

(5) Assignment of responsibilities.

(6) Plans for emergencies.

b. All plans, policies and directives for Radiological Safety should again be tentatively worked out, put in a folder and circulated among the officers who are to be the Radiological Safety Section and the key individuals of the exercise staff prior to opening Camp Desert Rock. This is necessary in order that everyone will better understand the problems and the measures required for radiological safety; and further, that the required directives may be made effective the day Camp Desert Rock becomes operational for an exercise.

c. Radiological Safety operations and established policies were effective. It was noted, however, that certain instructions given in the directives on movement in the forward area as pertains to Radiological Safety were not always adhered to by subordinate units or projects assigned to Camp Desert Rock.

d. The personnel authorization given in the Exercise Manning Table did not consider the extra duties performed by the Radiological Safety Section which required the full time of two (2) officers and two (2) additional enlisted men. This work overload hindered operations considerably.

e. Training of Sixth U.S. Army CBR Survey Teams demonstrated that in order to achieve proficiency in performing radiological hazard assessment,. Training under the realistic conditions available only at atomic tests is necessary.

f. Sufficient radiological monitors were trained by the Camp Desert Rock Radiological Monitor School prior to commencement of the exercise. As a result, each project and unit were able to provide their own Rad-Safe Monitors most of the time.

g. Radiological Monitors should be considered trained only when Radiac instrument readings will indicate to the monitor an appropriate action or recommendation, and are thoroughly familiar with the radiological safety program.

h. Lack of coordinating operational details between the staff sections complicated planning requirements for implementing Rad-Safe procedures on shot days.

i. Several officers of the Radiological Safety Section should be prepared to present the Rad-Safe orientation for observers in case the regular instructor is unable to be present.

j. The Radiological Safety Officer or his representative should be present at all AEC weather briefings prior to Desert Rock participating shots.

k. Dosimetry service provided by the Nucleonics Branch of Lexington Signal Depot was superior considering the fact that personnel who were to be provided for developing and densitometer work were never furnished.

l. The film badge provided by Lexington Signal Depot was an excellent badge that measured both gamma and beta exposures for personnel. It was made evident from the number of lost film badges, however, that a different clip would be needed for future field operations if this badge is to be used again. The difficulty experienced was the ease with which the alligator clip of the film badge could be removed from the soldier's articles of clothing particularly when wearing the badge on a working detail.

m. Camp Desert Rock needs to have its own dosimetry section to support the Rad-Safe function because of the frequent processing required plus the large number of personnel participating in the exercise.

n. Water samples should again be collected on a routine basis from Camp Desert Rock water supplies and given to the AEC Off-Site Radiological Safety Organization for analysis to see whether or not the water became contaminated as a result of the series of test shots and if so, by what magnitude.

6. LESSONS LEARNED

a. The Radiological Monitor School for Camp Desert Rock must be ready to train permanent party and project personnel the day camp becomes operational. Monitor augmentation is required because the 50th Cml Plat (Svc), supports the Rad-Safe Function, is a small organization and cannot provide all the monitors required on shot day.

b. Radiological survey operations are of considerable interest to Chemical Corps Officers since they are charged with technical supervision over such operations. Desert Rock Exercises provide excellent practical on-the-job training for such operations. Those officers who participated in this exercise found it very worthwhile for experience and benefited by it in many ways.

c. Due to the interest shown by many observers and the lack of knowledge on their part of radiological operations in the field, display boards showing the Rad-Safe Function, how it was conducted and how it applies to field operations would be both useful and educational for future exercises.

d. Permanent party personnel should be required to have a two (2) hour orientation on the Rad-Safe function, the Rad-Safe regulations, why restrictions are placed on their movements in the forward areas of the Nevada Test Site, how the Radiological Safety Section will protect them and the

cooperation required of them. This orientation should be given by the Radiological Safety Officer or his representative.

e. Individual film badge requests are required for a smooth dosimetry operation due to the many varied duties among permanent party and project personnel.

f. The Camp Desert Rock responsibility for distribution and collection of film badges requires close supervision as does the recording and mailing of the evaluated data. A dosimetry section should be organized and put under the Radiological Safety Officer for staff supervision of their operations since he is the person most interested in preventing overexposure to nuclear radiation. Other radiological safety organizations both at the Nevada Test Site and elsewhere, have dosimetry as part of their organization.

g. Assistance given to Camp Mercury projects in monitoring and other phases of their work by the Desert Rock Rad-Safety organization was returned manyfold and created a friendly working relationship.

7. RECOMMENDATIONS. It is recommended that:

a. The methods and procedures used in Exercise Desert Rock VII & VIII for Radiological Safety be used as a guide for future exercises provided the mission is similar.

b. All personnel departing Camp Desert Rock for the forward area be checked at the main gate by the Military Police for film badges, destination, access permit to contaminated areas and whether or not vehicles and personnel returning from the forward area have been monitored and decontaminated (when required).

c. Radiological monitor training be conducted at Camp Desert Rock for all support troops and assigned projects prior to the start of the exercise. Monitors should be considered trained only when they can convert radiac instrument readings into appropriate actions or recommendations.

d. Radiological monitor training with helicopters and fixed wing aircraft be initiated so as to give CBR Survey Teams and pilots training in the specialized techniques required for aerial radiological surveys.

e. Continued training of CBR Survey Teams from all Army areas be carried on during future exercises. Coordination with Headquarters, Armed Forces Special Weapons Project should be effected at an early date since the Air Force, Navy and Marines plus Canadian radiological training was conducted during this exercise and indications were that this would be a continuous program if possible.

f. Chemical Corps Officers of other commands and Army areas be given on-the-job training with the Radiological Safety Section since

radiological safety is a function of the Chemical Corps. The atomic tests and the resultant contaminated areas of the Nevada Test Site offer realistic and valuable training in radiological reconnaissance and safety operations.

g. All supplies and equipment required for the Rad-Safe function be determined as early as possible and provisions made to obtain same at the appropriate time, especially batteries for radiac equipment.

h. Criteria for the maximum limits to which Department of Defense personnel will be exposed when participating in training and troop tests conducted in conjunction with atomic weapons tests be established early so that the proper type film badge can be arranged for and procured.

i. Lexington Signal Depot do dosimetry for Camp Desert Rock and be allowed to either bring and/or hire the personnel required to do this before the exercise starts, or be assigned the number of military personnel required on a full time basis and that such personnel be excused from all details. This is mandatory for continuity of dosimetry operations.

j. A conference be held with the Nucleonics Branch of the Lexington Signal Depot several months before the next exercise to decide upon type of film badge to be used, procedures of issue and turn-in, and procedures by which evaluation data will be reported.

k. The overall supervision of the issue, turn-in and reporting of evaluated data be the responsibility of the Radiological Safety Officer since his office is directly concerned with prevention of overexposure to nuclear radiation.

David I. Saunders

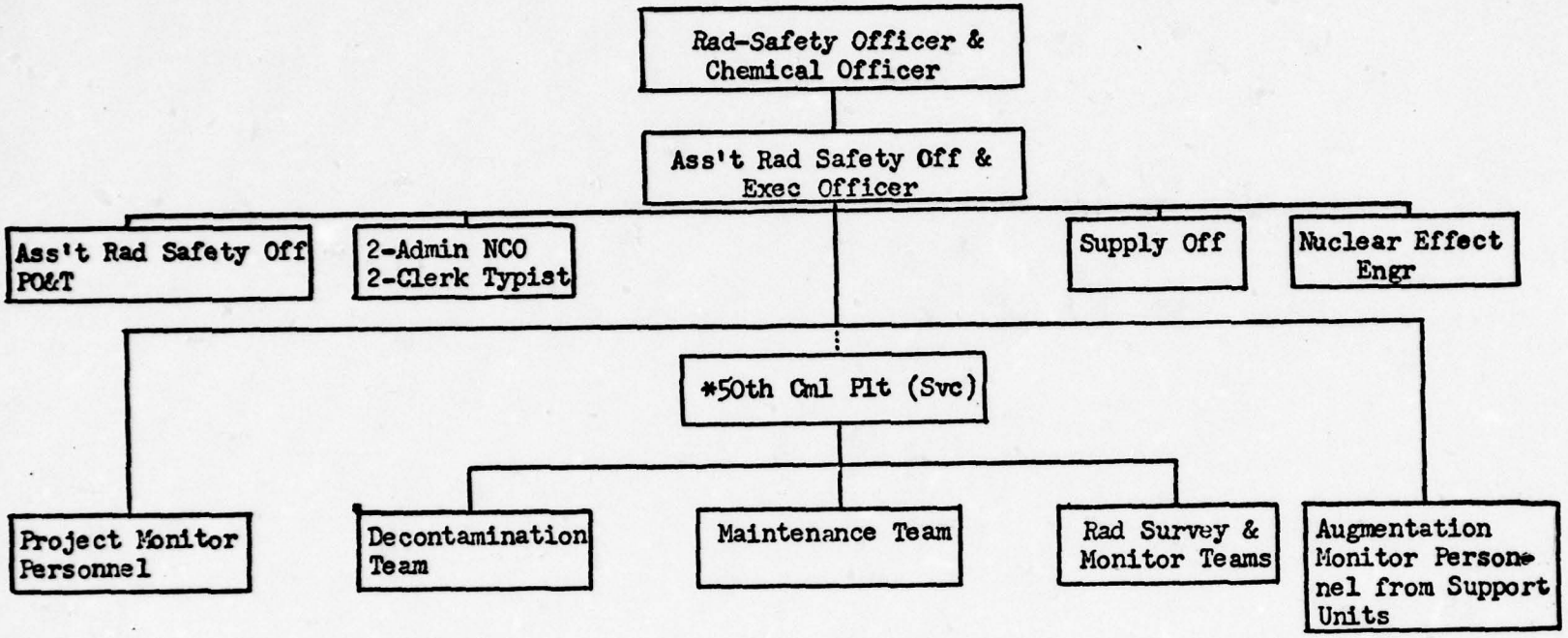
DAVID I SAUNDERS
Maj CmlC
Radiological Safety Officer

6 Incls
1. Orgn Chart
2. Functional Chart
3. Proposed Orgn Chart
4. Memo Nr 8, Hq CDR
5. Memo Nr 9, Hq CDR
6. Memo Nr 10, Hq CDR

CHEMICAL Officer

RADIOLOGICAL SAFETY SECTION

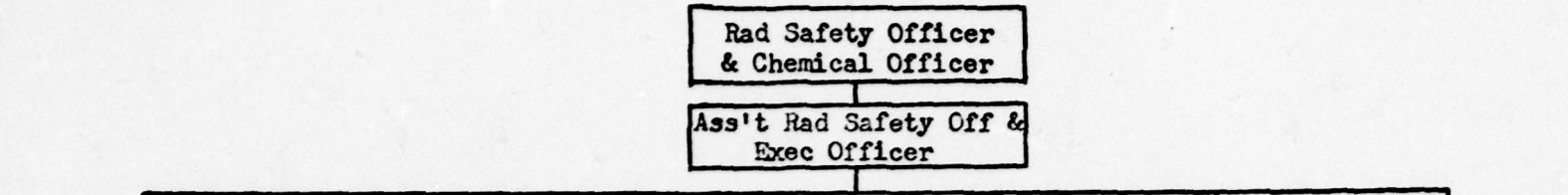
ORGANIZATION CHART



1. 50th Cml Plat (Svc): provides the trained personnel to the Radiological Safety Officer to establish an conduct the radiological safety program for the protection of personnel engaged in atomic test operations at Camp Desert Rock and the Nevada Test Site.

2. - - - - - - denotes operational control.

RADIOLOGICAL SAFETY SECTION
FUNCTIONAL CHART



Ass't Rad Safe Off PO&T

1. Supervises tng of 50th Cml Plt, CBR Teams & Monitor tng of DR Perm Personnel.
2. Conducts refresh courses as req.
3. Prep POI, Lesson Plans, Tng Aids, etc., as req.
4. Tests proficiency of Rad Support Units
5. Coordinates on-site tng of Rad monitors & monitor teams.
6. Orient & Tng CmlC Officers in Rad-Safe opns.

2-Admin NCO 2-Clerk Typist

1. Operates M/C
2. Types Corres
3. Files Corres
4. Maintains Classified Files
5. Maintains Opn Map
6. Types Operational directives
7. Supply Clk
8. Rad-Monitors
9. Spc Projs
10. Prepares Rad-Safe Opn Maps
*11. Vehicle drivers & Radio Oprs for Safe Opns.

1. Prepares Rad-Safe Plan for Opn Orders
2. Supervises Rad-Safe Opns
3. Assists Rad Safe Off in coord with other staff sects.
4. Prep Rad-Safe presentation for obsvrs
5. Coord activities with G-3
6. Recon of fwd areas for compliance w/Rad-Safety provisions.
7. Conducts obsvrs & VIP briefings.
8. Coordinates Spc Projs

Supply Off

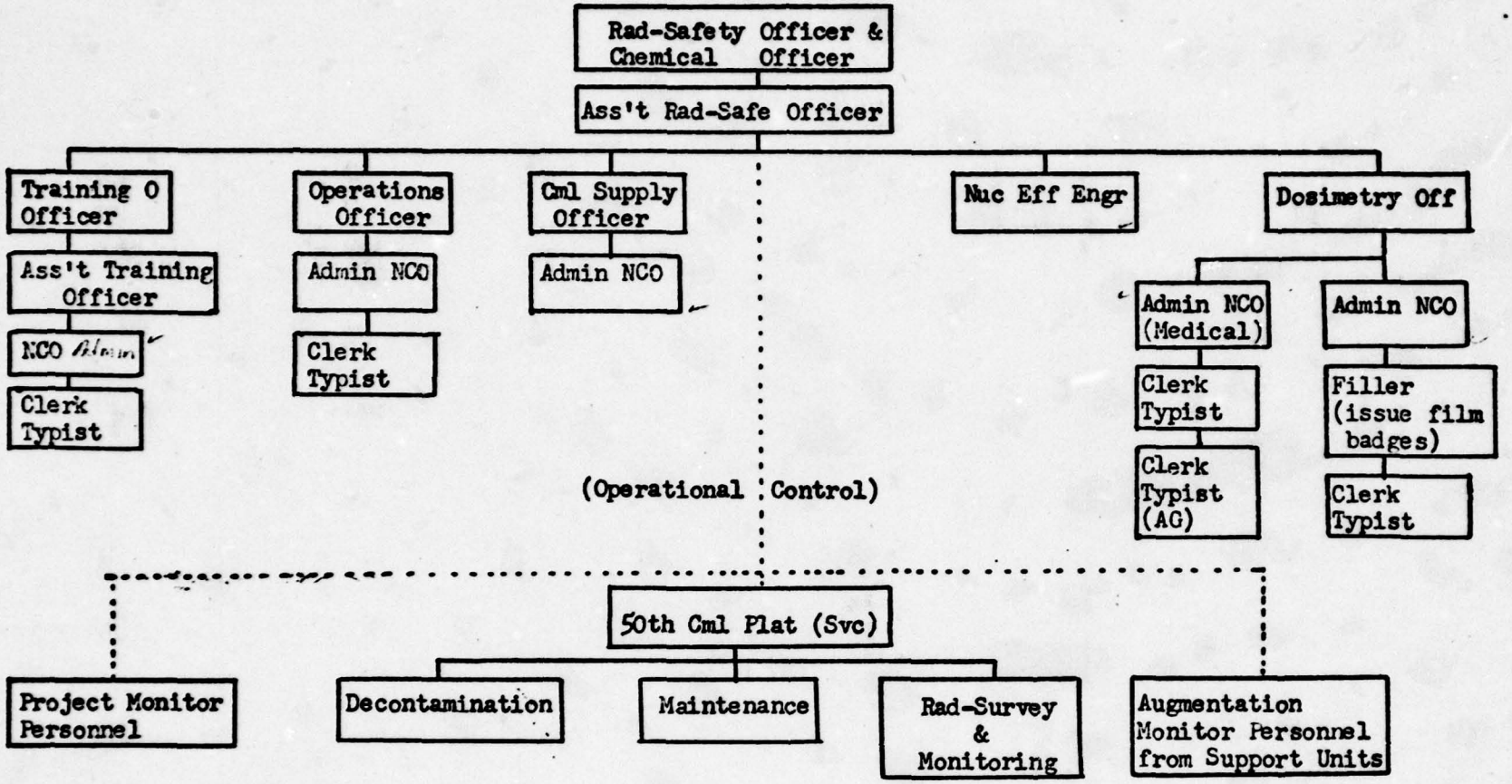
1. Receive & store CmlC items of equip.
2. Ass't Rad-Safe Off.
3. Admin Off.

Nuclear Eff Engr

1. Advises Rad Safe Off on tech matters.
2. Estimates effect of atomic wpns prior to shot
3. Advises on calb & util of radiac instr
4. Coord w/PO&T on Rad Si-tuation maps.
5. Coord w/Cp Merc on Rad Safe.
6. Recon of fwd area w/Rad-Saf provision.
7. Rec polcy & helps formu dir&plans

* Additional Duty

PROPOSED ORGANIZATION FOR NEXT EXERCISE



HEADQUARTERS 50TH CHEMICAL PLATOON (SERVICE)
Camp Desert Rock, Nevada

16 September 1957

FINAL REPORT, 50TH CML PLAT (SVC)
EXERCISE DESERT ROCK VII AND VIII

~~1. UNIT ORGANIZATION~~

a. TOE 3-500R dtd 22 Apr 55 with change 1 dtd 21 Jun 56 and TOE 29-500R dtd 8 Apr 55.

b. This unit is a Strategic Army Force unit organization under cellular TOEs to perform chemical service operations and chemical technical intelligence services as required throughout the Sixth Army area.

c. The mission is to provide radiological safety support for Camp Desert Rock, Nevada as directed by the Radiological Safety Officer consisting of but not limited to the following duties:

(1) Area surveys.
(2) Personnel and equipment monitoring.
(3) Establish and operate field decontamination stations.
(4) Establish and operate a monitor training school.

d. Organizational chart-see incl 1.

2. PERSONNEL REQUIREMENTS-If the unit is operating away from a Signal support unit it would be necessary to have a radiac instrument repairman with the unit.

3. TROOP LIST-not applicable.

4. TOTAL PARTICIPATION

a. The unit arrived at Camp Desert Rock, Nevada on 17 April 1957 and departed 16 September 1957 for its home station, Fort Ord, Calif.

b. The average present for duty strength for the unit during the Exercise was four (4) officers and sixty-two (62) enlisted men.

c. The type and extent of support rendered for each test project or event was as follows:

(1) Four (4) Officers and seven (7) EM participated in Project 57, Program 73 conducted by the Research Directorate Air Force Special Weapons Center, Kirtland Air Force Base, New Mexico at the Nevada Test Site in Area 13 during the period 25 April-31 May 1957.

(2) Area survey, personnel and equipment monitoring and survey of military equipment display for atomic detonations: Priscilla, Hood, and Smoky.

(3) Area survey, personnel and equipment monitoring for atomic device detonations: Boltzman, Franklin, Wilson, Diablo, Kepler, Owens, and Galileo.

(4) Stand-by monitor teams at observer area and/or trenches for atomic device detonations: John, Shasta, Doppler, and Franklin Prime.

(5) The field decontamination station was operational for all the atomic device detonations.

5. SUMMARY OF OPERATIONS

a. Area surveys-radiological surveys were performed immediately after the detonation of nuclear devices. These surveys consisted of the delineation, assessment, and control of contaminated areas.

b. Personnel and equipment monitoring-performed in conjunction with participation events after 20 shots. A total of 5725 personnel and 867 vehicles were monitored during the Exercise.

c. Personnel and vehicle decontamination:

(1) A field decontamination station was established vicinity of News Nob at Yucca Pass (848885) to provide decontamination service for personnel, vehicles, and rotary-winged aircraft throughout the Exercise.

(2) An auxiliary decontamination station was established vicinity AEC check point Nr 2 (913805) on 11 Jun 57 for use in shots located in Frenchman Flat area and was manned for "Priscilla" on 24 Jun 57.

(3) An emergency decontamination station at Camp Desert Rock was prepared approx 500 yds south of Engineer Road to the rear of the EM civilian auto parking lot.

(4) Monitoring before and after attempted removal of contaminant and decontamination were performed on the following:

(a) Vehicle and equipment monitoring 867
(b) Vehicle and equipment decontamination 166
(c) Personnel decontamination (7)

d. Radiological monitor training

(1) A Rad Monitor School was established under the supervision of the Assistant Rad Safe Officer. This course consisted of 18 hours of formal instruction followed by several days of practical application of monitoring techniques in contaminated areas at the Nevada Test Site.

(2) 374 persons of 424 attending the school satisfactorily completed the course of instruction.

(3) Complete information concerning the training provided is included in an operational report prepared by the CDR Rad Safe section.

e. Miscellaneous operations

(1) An average of 20 EM participated on a project involving the measurement of clouds formed by nuclear detonations. These tests were conducted to determine the feasibility of using optical instruments, available in an Army area and organic Artillery units, as a means of measuring atomic burst clouds in order to determine ground zero, height of burst, yield of weapon and thereby predict a radioactive fallout pattern. Observation posts were established at prominent terrain features along a line between Beatty, Nevada and Nellis Air Force Base, Nevada and an average of 10 of these were manned per shot.

(2) Escort personnel were furnished for Project 53.4, USAF Radiological Defense Training and the Royal Canadian Army personnel when area surveys were conducted by their monitors at the Nevada Test Site.

(3) Spot area monitoring services were provided for Project 50.4, Office of Chief of Engineers Evaluation of Water Decontamination Methods during "Priscilla" at pre-selected fallout stations in Frenchman Flat on 24 June.

(4) Six (6) EM were furnished for DOD Project 3.1 for approx 10 days involving the calibration and evaluation of experimental Radiac

instruments such as the Jordan radiation survey meter model AGB-10-SR. Instruction was received in the operation of spectroscopes and pulse-counters. Field tests were conducted on the decay of fission products and induced radiation in soil samples following a nuclear detonation.

(5) The Radiac meter IM-123(XE-1)/PD manufactured as the Chatham Model CH-720 was used in area surveys for the purpose of field testing it for the Evans Signal Laboratory test group from Ft Monmouth, New Jersey.

(6) Instruction and demonstration of decontamination procedures was presented to two separate groups of members and visitors from AEC Civil Effects Test Group, Program 31.

(7) Approximately 3600 protective masks were inspected, classified, disinfected, and inventoried at Camp Desert Rock during the Exercise.

(8) The 50th Cml Plat (Svc) maintained a Radiac instrument issuing section for Camp Desert Rock. The total issue of instruments during the Exercise was 1703. (GM-893 and IC-810)

(9) The following additional monitor requirements were filled for shot "Smoky" 31 Aug 57:

(a) One (1) monitor with the Human Research group project involving the Provisional Company from the 82nd Airborne Division from Ft Bragg, North Carolina.

(b) One (1) monitor with Engineer personnel involved in clearing a minefield vicinity of trench area.

(c) Two (2) monitors furnished to DOD project 2.3 for recovery of instrumentation in the forward area.

(d) Four (4) monitors accompanied the helicopter Pathfinder teams to the objective area.

6. CONCLUSIONS

a. This unit is capable of providing radiological safety support for an Exercise of this nature if necessary equipment such as additional radiac instruments and radio sets is available.

b. The two radiac instruments, AN/PDR-T1B and AN/PDR-27A, used by this unit for radiological surveys and personnel and equipment monitoring required extensive maintenance and recalibration.

c. The power-driven decontamination apparatus truck (PDDA) can be used effectively and efficiently to reduce the level of radioactive contamination on military vehicles to a permissible level.

d. Contamination on personnel clothing may be reduced to a permissible level by brushing with straw brooms.

e. Radio set, AN/PRC-10, is inadequate for use by mobile radiological survey teams due to its relatively limited range. (3-5 miles over level terrain and 10 mile range with favorable weather and both radio sets elevated above masking terrain features).

7. LESSONS LEARNED

a. (1) Fifty-five percent (55%) of the 97 AN/PDR-27A radiac instruments initially issued required maintenance with the major problem being the Geiger-Mueller tube.

50TH CHEMICAL PLATOON (SVC) RADIAC INSTRUMENT ISSUE & REPAIR

CAMP DESERT ROCK, NEVADA EXERCISE VII AND VIII

INSTRUMENT	OPENING INVENTORY	CLOSING INVENTORY	TOTAL ISSUED	TURNED IN FOR REPAIR	REASON	NON-REPAIRABLE
GM-AN/PDR 27A	97	86	893	84 (53	Sep Inst - 55%)	11
				(2)	Broken 413 Wire	
				(1)	Broken 416 Wire	
				(2)	Broken GM Wire to Probe	
				(3)	Broken Selector Switch	
				(5)	Broken Probe Tube	
				(4)	Broken Calibration Adjustment	
				(7)	Broken Resistors	
				(1)	Broken 401 Batt Case	
				(48)	Broken (Burned out) Tubes	
				(11)	Unknown Repairs & Turned In	
IC-AN/PDR T1B (39)	98	81	810	263 (90	Sep Inst - 92%)	17
				(152)	Broken 1278 Wire	
				(8)	Broken 1277 Wire	
				(8)	Broken 51 Wire	
				(15)	Broken Ground Wire	
				(20)	Broken Selector Switch	
				(6)	Broken Calibration Adjustment	
				(19)	Broken Zero Adjustment	
				(11)	Broken Selector Knob	
				(4)	Plastic Case Broken From Mount	
				(20)	Unknown Repairs & Turned In	

BATTERIES USED DURING EXERCISE: BA 51 - 43; BA 1277 - 6; BA 1278 - 49; BA 42 - 11; BA 413 - 17; BA 416 - 58; BA 401 - 103; BA 30 - 16.

Incl: #1 to
APPENDIX I to
ANNEX J

(2) Ninety-two percent (92%) of the 98 AN/PDR-T1B radiac instruments initially issued required maintenance with the major problem being broken wire connection to the BA-1278/U dry battery.

(3) Details of radiac instrument repairs are contained in incl 2. There were no incidents of dry batteries bursting inside any radiac instruments due to the extreme desert heat. A critical shortage of BA-413/U dry batteries existed throughout the Sixth Army area and this proved critical to the AN/PDR-27A radiac instruments.

(4) Monitor training on the AN/PDR-T1B radiac instrument should stress that the "check" knob should be returned slowly to its original position and that the selector switch should be turned to each scale slowly.

b. The power-driven decontamination apparatus truck (PDDA) can decontaminate, by flushing, a vehicle contaminated from radioactive fallout or dust in two (2) minutes and reduce the contamination approx 75%.

c. Mess gear must be monitored not only for gamma but also for alpha radiation. Alpha instruments were on loan from RECO Rad Safe.

d. All personnel had to be cross trained as monitors from each cellular team. The majority of the monitors came from Cml Supply (EA) team and the Cml Maintenance (FA) team.

e. Cards and a chart were kept on the periodic exposure and total cumulative dosage of each man in the unit. It was necessary to keep a continual watch to assure that no person would be assigned to a job that would knowingly bring his cumulative exposure to the maximum level of 5R. During the entire Exercise only two persons received 5R or greater. These instances were due to rescuing another unit's jeep and men from an extremely hot area and another unit's mistake in the use of one of our monitors.

8. RECOMMENDATIONS

a. The IC AN/PDR-T1B (or 39) should be replaced by a 0-100R/hr or greater dose rate instrument capable of withstanding rugged field use within accuracy of ± 10 percent measuring beta-gamma radiation.

b. An alpha survey meter such as the Gas Proportional alpha counter PAC-type manufactured by the Eberline instrument company be intergrated into the Army supply system. This type of Radiac instrument is necessary for surveying and decontamination of alpha radiation.

c. A radiological monitor school should be established in a permanently assigned building (preferable air-conditioned in summer months).

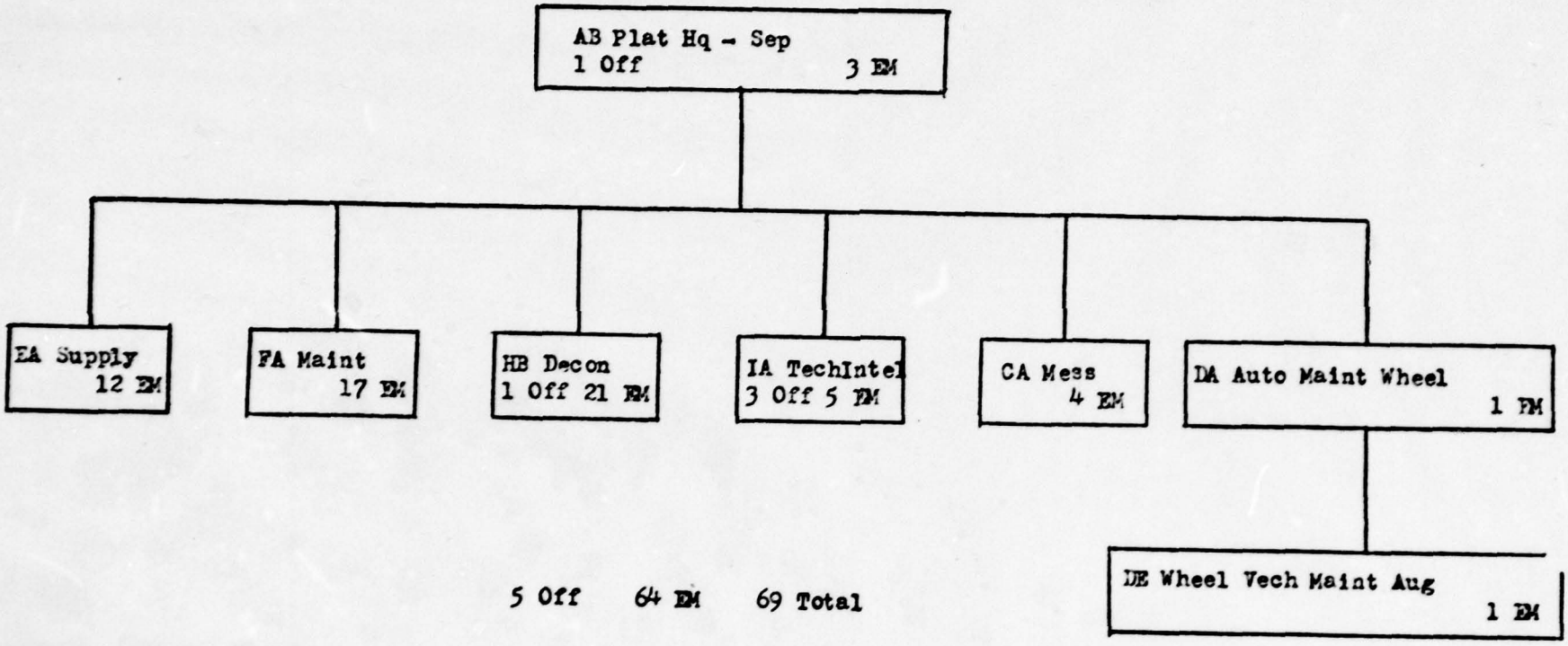
d. Attendance at the rad monitor school should be limited to personnel who have a minimum of 10 years education and who will have at least 12 months service remaining upon completion of the course.

e. The Army field decontamination station in the Nevada Test Site area should be of a semi-permanent construction. The use of squad tents cannot withstand the high winds of this area for any length of time. Tents have been ripped several times due to high winds, money wise it would be cheaper to have semi-permanent buildings (pre-fabrication)errected.

f. Radiac instrument batteries should not be removed each time the instrument is turned in during Exercise of this type. This would reduce maintenance of broken wires.

ORGANIZATIONAL CHART

50TH CML PLAT (S7C)



5 Off 64 EM 69 Total

Incl: 1

D R A F T

FINAL REPORT ENGINEER SECTION

1. SECTION ORGANIZATION:

a. The Engineer Section was organized as follows;

Camp Engineer - Lt. Col - MOS 1331, Secret Clearance.

Operations Officer - Lt - MOS 7130, Secret Clearance.

Troop Supply Officer - CWO - MOS 4470 Secret Clearance.

Clerk typist - E4 - MOS 711, Secret Clearance.

Storekeeper - E4 - MOS 760, Confidential Clearance.

Storekeeper - E5 - MOS 760, Confidential Clearance.

Requisition Clerk - E3 - MOS 733, Confidential Clearance.

Stock Record Clerk - E3 - MOS 521, Confidential Clearance.

Work Order Clerk - E4 - MOS 840, Confidential Clearance.

Fire Chief - E6 - MOS 525, Confidential Clearance.

6 - Fire Fighters - E3 - MOS 525, Confidential Clearance. (See Incl 1)

b. The function duties were as follows;

(1) Camp Engineer - Engineer advisor to the camp Commander, manages the repair and utilities program, plans and coordinates all Engineer activities on camp and is camp Fire Marshall.

(2) Operations Officer - Assists the Camp Engineer, coordinates activities of the section and directs the section in the absense of the Camp Engineer, performs special assignments directed by the Camp Engineer. "e coordinates the preparation of reports. Supervises the maintenance repair and improvements of buildings, structures and grounds; plans and accomplishes the furnishing, maintenance and repair of all utilities plants systems and facilities.

(3) Troop Supply Officer - Procures, warehouses, distributes items of repair and utilities and engineer troop supply maintains records and property accounting. Acts as Purchasing & Contracting Officer for Engineer Section. Also Field Maintenance Representative.

(4) Clerk Typist - Handles all typing clerical work for Camp Engineer and Assistant Camp Engineer. Also acts as Classified Documents Control N.C.O.

(5) Storekeeper - Assists the Supply Officer in warehousing and distribution of supplies for the Engineer Section.

(6) Requistion Clerk - Edits and prepares all requisitions for both R&U supplies and Troop Supply items used by Engineer Section.

(7) Stock Records Clerk - Maintains all supply records, purchasing and contracting records and accountable records for the Camp Engineer Section.

(8) Work Order Clerk - Maintains, edits, and files all work orders for the Engineer Section Prepares and forwards to shop all Forms DA 5-35.

(9) Fire Chief and Fire Fighters - Prepares and executes fire prevention and protection probrams, maintains fire fighting equipment, conducts necessary inspections and training.

2. PERSONNEL REQUIREMENTS: The following requirements are made as far as personnel requirements are concerned;

a. Add;

1. Officers;

1 Lieutenant - MOS 7130, Secret Clearance to act as Utilities Officer.

2. Enlisted Men;

1. Sargeant - MOS 711- E7 to act as chief of office service in Administrative and Management section.

2. 1 Work Order Clerk E4 Confidential Clearance to assist in processing and maintaining work orders and reports necessary to the operations.

3. Sargeant MOS 622 E7 to act as advisor and inspector for field maintenance activities for Engineer equipment.

4. 2 Civilians or Military personnel who are familiar with high tension electric lines and distribution systems. To maintain and operate the high tension lines in t e camp.

3. Troop List;

Adequacy of Troop Units;

The troop unit assigned (one Engineer Construction Company augmented) is not adequate for the operations of the camp and the projects in the forward area. It is recomended that the troop strength be increased to two companies (one for the Camp Engineer and one for the forward area) augmented with Heavy Equipment form the H/S Company Engineer Construction Battalion. This change would provide sufficient utilities crews for Camp Engineers and projects in the forward areas. (See Section 8 - Recomendations)

4. Total Participation - to be furnished by S-3.

5. Summary of Operations - The First Engineer Unit - Company "B", 84th Engr Bn (Cons). Arrived 21 January 1957. From this date until 9 March 1957; most of the Engineer effort was in preparing the camp for the summer, performing general rehabilitation work, the main projects being, enlarging the drying beds for the sewage disposal plant, building a road (3) three miles long to the well, The

design and layout of a tent city to house approximately 2300 men, and reshaping the airfield. From 9 March to 1 May 1957, the main effort was the construction of 50 quonset huts and furnishing personnel for the Post Engineers. Numerous other small projects for the camp were completed during this period.

On 1 May 1957 work was started in the forward area. The first project completed were twenty seven emplacements and 22 field fortifications by 17 May 1957. Another project started on 14 May 1957 on digging 7575 ft of trench for the Yucca Flat area for the Diablo Shot, but due to rough terrain, location etc. it was relocated on 19 June to another area with a deadline of 28 June 1957. This deadline was met with considerable difficulty due to terrain and breakdown of equipment.

During this period the Post Engineer personnel were increased to 44 men due to an excessive amount of work order request submitted. Besides normal R&U work, 6 additional latrines were constructed, an outdoor stage and theater was built and dug trenches for and laid 2700 ft of water line for the tent city area. Also dug 14 latrines in the same area. Work was started in the 700 block on a tent city of 40 tents.

On 24 May 1957, work was started on trenching required for the Prisilla Shot which consisted of 1000 yds of trench. The trenches were completed on 29 May 1957.

The tent city area electrical work was completed on 14 June '57. Consisting of 7600 ft of #6 wire, 2000 ft of #6 wire, 4500 ft of #12 wire, 20 switch boxes, 19 poles, 9 floodlights and wiring, 4 pole switch boxes for three refrigerators, complete secondary wiring of 12 transformers, and wired lights for 98 tents.

The tent city in the 700 block was completed on 14 June 1957. Work was started on 6 June 1957 for the Hood & Shasta Shots, Completed on 18 June 1957, with 1075 yards of trenching. On 13 June, project 14-57 was started in the camp area. This consisted of installing 132 evaporative coolers in 78 buildings and trailers.

On 14 June an auxilary water point was established at the ranch of Mr. Fred L. Bartley of Indian Springs.

During period 18 to 21 Junel957, 9 emplacements for equipment were augmented for the Priscilla Shot.

On 12 July,1957, the work was completed on the evaporative coolers.

On 12 July 1957, 1200 ft of 4" pipe, pump and cable were moved from the well to the Engineer yard for storage.

On 12 July 1957 project was tarted on hauling cinder o lite (volcanic ash) to be used as a dust pallitive for various area in camp. This project was completed 2 August 1957, with a tatal of 2200 cu yds being hauled.

On 23 July 1957, 1120 yeds of old trenches used during the 1955 exercises were cleaned out, eleven new exists dug and 2 revetments 60 by 110 ft, dug to be used for Kepler Shot.

On 29 July 1957 work was commenced on the Smokey Trenches consisting of 1625 yds of trenching; 2 large vehicle revetments, 22 exitways; a crawling course to be used by the 82nd Airborne troops, 3 shallow tank emplacements and 2 observer bleachers area using 4000 sandbags. Project completed on 16 August 1957.

On 20 August 1957 due to a rather heavy rain and flash flood, the primary electric line failed, three high tension poles were sheared off at the base, disrupting the service for approximately

eleven hours.

On 14 August 1957, 800 yds. of trenches were started for the Doppler Shot. This was completed on 17 August 1957. Also work was started on constructing 2 sandbag observer bleachersites.

6. CONCLUSIONS:

The following conclusions can be drawn from the present exercise;

a. Personnel; The present Table of Distrubution for the Engineer Section is inadequate but with certain additions and changes as outlingd in other parts of this report would be adequate for the Engineer Unit.

The troop strength of one Construction Battalion type unit is inadequate to fulfill the needs of both the Camp and forward areas.

b. Heavy Equipment; The present types of heavy units are satisfactory but additional specialized equipment such as detach diggers, electrical line trucks and fork lifts are needed for future operations.

c. Operations; Engineer troop units should arrive far enough in advance of the main body so as to have the Camp open all utilities in operations.

The work in the forward area was usually completed on time however additional prior planning on the part of the staff section and Engineer staff, to definite location of trenches and emplacements would have enabled the Engineers to perform their mission without crews working around the clock.

The post Engineer mission got off to a slow start but as the summer developed by expermentation and readjusting personnel and missions a workable solution was developed. The specific trades needed for Post Engineer mission were not available at all time and those that were present did not have sufficent training to perform without maximum supervision.

d. Supply; The system used of local purchase of supplies needed was very satisfactory and is deemed more than adequate for an operation of this type

7. LESSONS LEARNED:

a. Organization;

1. Camp Engineer;

a. The organization of the Camp Engineer is not adequate or satisfactory. The policy of using necessary utilities personnel from the construction unit disrupted the units organization and made it necessary in some cases to fill the requirements of the Camp Engineer with unqualified personnel.

b. Personnel;

1. Camp Engineer; There insufficient personnel assigned to the manning table as discussed in paragraph 2.

2. Construction Unit; The policy of rotating personnel every three months was not satisfactory. The administrative work load of clearing the personnel and the time lag of replacement personnel to become aquainted with their duties resulted in a lack of continuity of performing the mission.

c. Utilities;

(1) Electricity:

Distribution lines; Most of the distribution poles are dry rotted and will cause trouble in the near future. Transformers presently installed are not adequate due to the fact that most of them came from Camp Irwin and all of them need to be cleaned and re-oiled. The only main switch for the camp is located in Mercury and when it was

necessary to cut the power to repair lines or transformer, the Mercury communication center, security office, and administrative officer were without power. Some distribution lines are old and frayed. Becacause of the manner in which the camp was wired it was necessary to maintain a 75 KW generator as emergency standby for the QM reefer area and for a period of approximately 3 months. The present distribution lines will be inadequate in case of future expansion of the camp.

d. Interior Wiring: The interior wiring needs to be revamped throughout approximately 80% of the Camp. In-correct and inadequate wiring prevails throught the camp area.

(2) Water Supply: The present method of hauling water from Indian Springs in expensive and unsatisfactory. The constant turnover of permanent party and observer personnel required on the average of 12, 2000 gallon tankers hauling 24 hours a day to meet the water requirements. The following chart shows the monthly consumption.

MONTH	TOTAL GALLONS USED PER MONTH	INDIAN SPRINGS WELL	BARTELEY WELL	MERCURY WELL
APRIL	752,000	752,000		
MAY	2,170,000	2,170,000		
JUNE	3,372,000	2,590,000	578,000	204,000
JULY	4,362,000	2,682,000	1,554,000	126,000
AUGUST	4,470,000	3,066,000	1,404,000	
SEPT*	1,010,000	990,000		20,000

NOTE: *Consumption up to 15 September 1957.

The wooden storage tank is developing leaks at several points on the seams, and approximately 50% of the steel hoops have reached the maximum as to tightening.

The receiving point trough needs a new method of covering to prevent

dust , dirt and debris from entering the trough.

There are indications that the water distribution lines are deteriorating rapidly and will cause trouble in the future.

Due to a new housing development being built at Indian Springs Air Force Base II, it is doubtful that any future excerises will be able to draw water from the location.

(3) Sewage Disposal:

1. Imhoff Tank; The present Imhoff Tank is not large enough to fill the requirements for the camp. It was necessary to shovel the

solid material from the tank during the present exercise. The leaching beds are too small to carry the effluent.

(4) Sewage Lines: The 10" soil line was at maximum flow during the peak morning and evening hours.

Also in the EM latrines a new system will be needed to prevent bottles, cans, and pieces of clothing from entering the sewer lines.

(5) Plumbing:

a. Showers: The use of spring closing valves on the shower heads were not satisfactory. It was necessary to replace most of them due to leaks, broken chains and failure to close.

b. General Plumbing: The plumbing was not standardized causing considerable delay in securing replacement parts.

(6) Buildings and Grounds:

a. Existing culverts are of 12" diameter and not sufficient to carry the water during a medium rainfall.

b. Roads; Generally the roads held up well but extensive repair will be needed before the next exercise.

c. Buildings: Considerable difficulty exist with the Mercury type hutments due to excessive damage to window screens coming loose and doors coming off their hinges.

(7) Supply: The system of local purchasing for R&U and Troop supply worked very satisfactorily. Some difficulty was experienced in the processing of paper work due to the use of more than one Purchase Request for both R&U and Troop Supply, but in most cases once a request was made for material, the material was on hand ready for issue within 48 hours.

8. RECOMMENDATIONS:

A. Personnel:

1. Additional personnel are recommended:

a. 1 Lt MOS 7130, Secret Clearance to act as Utilities Officer.

b. 1 E7 MOS 711, Secret Clearance to act as Chief of Office Service in Administrative & Managment Section.

c. 1 E7 MOS 622, Secret Clearance to act as advisor and inspector for for Field Maintenance activities for Engineer Equipment.

d. 1 E4 MOS 850, Condidential Clearance to assist in processing and maintaining work orders and reports necessary to the operations.

e. 2 Civilian high tension electricians to maintain and service the high high tension lines for the camp.

2. Changes: 1 Storekeeper E4 MOS 760 to 1 clerk E4 MOS 711 Confidential Clearance. This individual should have experence in Fiscal Accounting and purchasing and Contracting Procedures.

B. Organization: Recommend that the Camp Engineer organization be changed as shown on Inclosure #2.

C. Utilities:

1. Electricity: It is recommended that the wiring both experior and interior of the Camp be completely renovated and rebalanced. A cut out switch should be installed on the main line in order to be able to disconnect the service of the camp without disconnecting part of Mercury as it is at the present. The interior wiring in approximately 80% of the Camp is unsatisfactory.

2. Water Distribution:

a. It is recommended that the present well be completed or a new well dug. A source of water nearer to the camp is mandatory for future operations.

b. The present A new storage tank is deteriorating rapidly and it is felt that

it would be more economical to install a new storage tank.

3. Sewage Disposal System:

a. Imhaff tank; It is recommended that a new Imhaff tank capable of supporting 3400 men be installed in addition to present tank and that the leaching beds of present tank be increased to double their present size.

b. Latrines; That permanent traps be installed in all pit type latrines to prevent debris from intering the main sewer lines.

4. Buildings and Grounds:

a. Additional buildings; It is recommended that additional buildings be constructed to take the place of the tent city used for this exercise. A plan was submitted to Sixth Army during July as to what additional buildings were recommended.

b. Culverts; All the present culverts should be increased to a minmum of 24" diameter.

c. Roads; A survey should be conducted by Camp Irwin and resurfacing of main and arterial roads are recommended.

d. Desert Air Coolers; It is recommended that air cooler be installed in all troop housing and administrative buildings.

5. Supply: It is recommended that the procedure used during the exercise of local purchase be dontinued. A few minor changes in policy are recommended howerer;

a. There should be two Purshase Requests for Engineer supplies, one for R&U and one for Troop supply.

b. That a system be set up for reimbursement of supplies furnished to special projects for the camp on a monthly basis.

c. Accounting for R&U supplies should be by work order instead of separate purchase orders as used during this exercise.

d. Units reporting to Camp Desert Rock should bring at least a 30 day

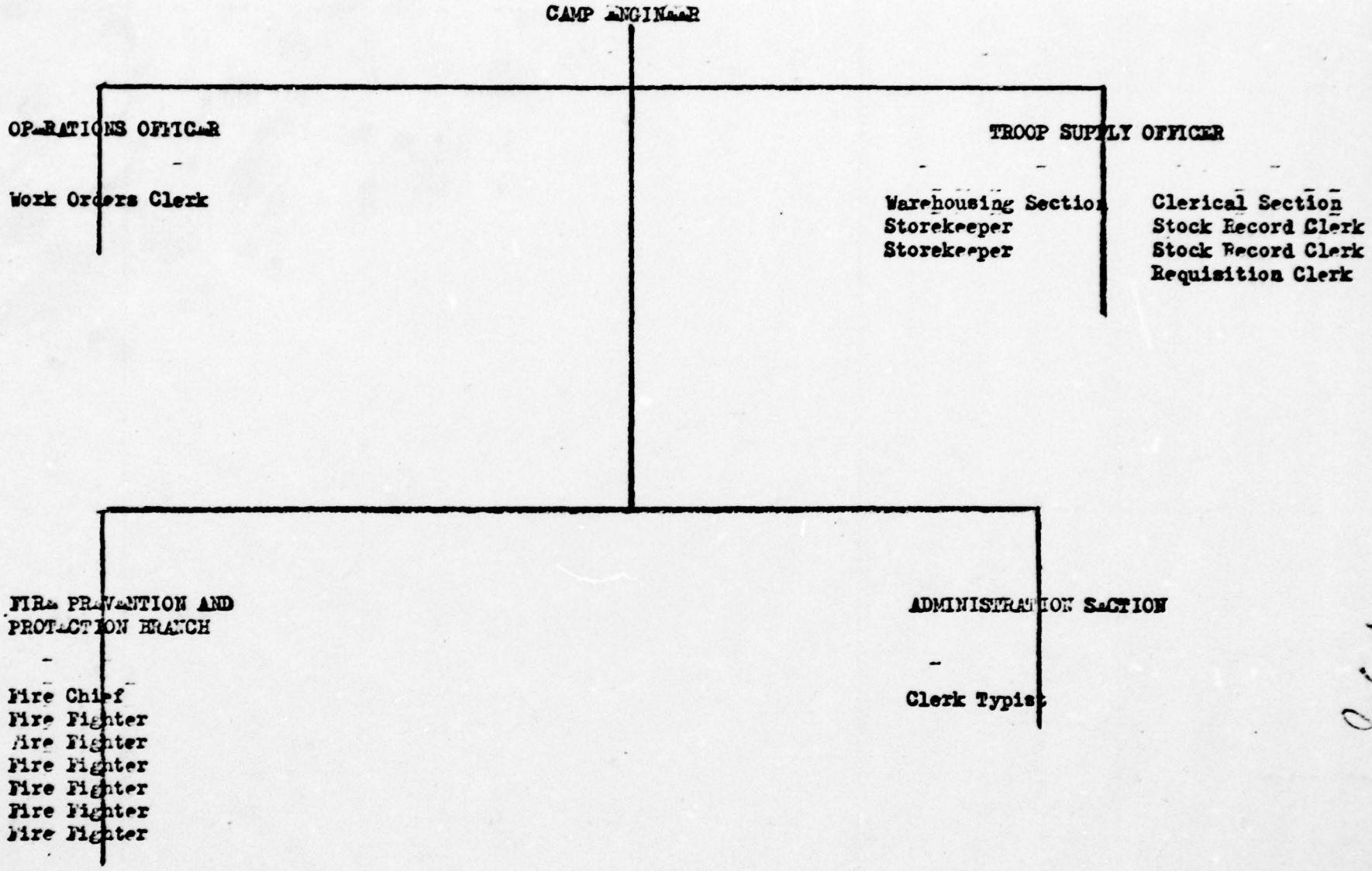
limit of expendables and have their full TO&E supplies on hand when they arrive.

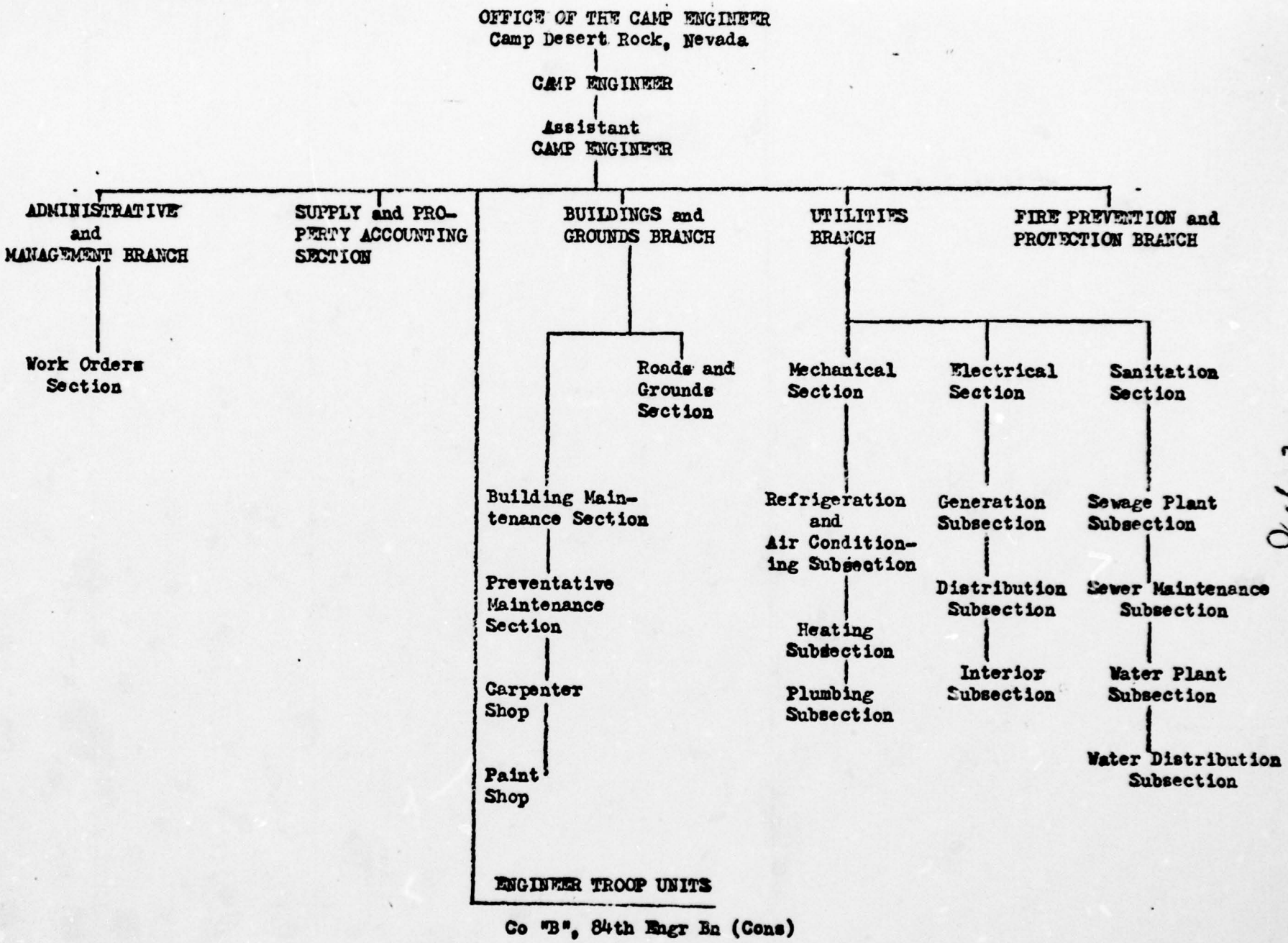
John D. Rabathe
Maj. Cav
Asst - S-4

For
Capt. Sanders
PE -

PE OFFICERS
Maj. Charles Hall } 845 Eng Bn. (C) AF.ORD
Capt. Clayton
Capt. Sanders

Above off. held job of PE at different periods of


CAMP ENGINEER
OPERATIONS OFFICER
Work Orders Clerk
TROOP SUPPLY OFFICER
Warehousing Section
Storekeeper
Storekeeper
Clerical Section
Stock Record Clerk
Stock Record Clerk
Requisition Clerk
FIRE PREVENTION AND PROTECTION BRANCH
Fire Chief
Fire Fighter
Fire Fighter
Fire Fighter
Fire Fighter
Fire Fighter
Fire Fighter
ADMINISTRATION SECTION
Clerk Typist


OFFICE OF THE CAMP ENGINEER
Camp Desert Rock, Nevada
CAMP ENGINEER
Assistant
CAMP ENGINEER
ADMINISTRATIVE and MANAGEMENT BRANCH
Work Orders Section
SUPPLY and PROPERTY ACCOUNTING SECTION
BUILDINGS and GROUNDS BRANCH
Roads and Grounds Section
Building Maintenance Section
Preventative Maintenance Section
Carpenter Shop
Paint Shop
UTILITIES BRANCH
Mechanical Section
Refrigeration and Air Conditioning Subsection
Heating Subsection
Plumbing Subsection
Electrical Section
Generation Subsection
Distribution Subsection
Interior Subsection
Sanitation Section
Sewage Plant Subsection
Sewer Maintenance Subsection
Water Plant Subsection
Water Distribution Subsection
FIRE PREVENTION and PROTECTION BRANCH
ENGINEER TROOP UNITS
Co "B", 84th Engr Bn (Cons)

ENGINEER

1. CONCLUSIONS:

a. That the present Table of Distribution for the Engr Sect and the troop strength are inadequate.

b. That the interior wiring of approximately 80% of the camp is unsatisfactory.

2. RECOMMENDATIONS:

a. That the personnel and troop augmentation listed in Para. _____ Pg. ____ of Engr ANNEX be approved for next exercise.

b. That the wiring both exterior and interior of the Camp be completely renovated and rebalanced. A cutout switch should be installed on the main line in order that the service of the Camp may be disconnected without disconnecting part of Camp Mercury.

c. That it will prove more economical in the long run to establish a new storage tank.

d. That a new Imhoff tank capable of supporting 3400 men be installed and the leaching beds be doubled in size.

e. That permanent traps be installed in all pit type latrines to prevent debris from entering the main sewer lines.

f. That additional buildings be constructed to take the place of Tent City.

g. That all the present culverts be increased to a minimum of 24" diameter.

h. That a survey and resurfacing of main and arterial roads be initiated.

ORIGINAL FROM QM Office

OFFICE OF THE CAMP QUARTERMASTER
Desert Rock, Nevada

3 September 1957

Quartermaster Annex to
Administrative and Logistical Report
Exercise VII and VIII

1. Mission

a. The mission of the Camp Quartermaster was to provide quartermaster supplies and services to support operations and atomic field maneuvers at Camp Desert Rock, Nevada.

2. Organization

a. The Sixth Army Manning table provided two (2) officers (one (1) Camp Quartermaster and one (1) Property Officer) and four (4) enlisted men. Actually the manning table called for two (2) additional officers (one (1) Commissary Officer and one (1) POL Supply Officer); however, these two (2) officers were provided by the addition of the 53d QM Subsistence Det comprised of one (1) officer and fifty-one (51) enlisted men from Fort Ord, California, and the 656th POL Supply Det consisting of one (1) officer and twenty-one (21) enlisted men from Fort Lee, Virginia. The 163d QM Laundry Det, comprised of one (1) officer and thirty (30) enlisted men from Fort Lewis, Washington, completed the quartermaster organization.

b. The 53d QM Sub Det furnished operating personnel for Cl II & IV supplies and the quartermaster office.

c. The 163d QM Laundry Det located twenty two (22) miles north-east of Desert Rock at Indian Springs Air Force Base, operated three (3) mobile laundry sections.

d. The interior guard for safe guarding rations, POL, and Cl II & IV open storage was furnished by the 53d and 656th.

e. The veterinary detachment was located in the Commissary office, and furnished veterinary service for the commissary officer.

f. Attached is a QM Organizational Chart (Appendix # 1).

3. Operations, Cl I

a. Cl I

(1) Perishables

(a) Source: Quartermaster Market Center, Los Angeles, California

(b) Level: Three (3) days on Tuesday and four (4) days on Thursday

(c) Requisition Schedule: As established by the Field Commissary Officer

(2) Non-Perishables

(a) Source: Utah General Depot, Ogden, Utah

(b) Level: Thirty (30) days

(c) Requisition Schedule: As established by servicing depot

(3) Rations Issued

Month	"A" Rations	"C" Rations	Assault Packets	Reimburseable Rations	Total
May	42,947	1,512	48	6,624	44,507
June	64,347	2,790		11,258	67,137
July	71,262	2,322	48	13,587	73,632
Aug	90,260	2,843	2,843	9,291	95,946
Sept	30,000	350		2,000	30,350

(4) Discussion

(a) At the start of the Exercise, and until the strength of Camp Desert Rock reached approximately 1100, rations were drawn from the Nellis Air Force Base Commissary Officer. This arrangement proved satisfactory. The arrival at CDR of the 53d QM Sub Sup Det from Fort Ord, California 24 April 1957 eliminated this arrangement, and on 1 May 1957 the 53d took over the ration issue responsibility. The strength on day of phase out of NAFB support was approximately 1100.

(b) Milk, ice cream, and cottage cheese contracts were let by the Los Angeles QM Market Center and were effective 1 May 1957. Milk was delivered from Las Vegas five (5) days each week. Contracts were also let with Las Vegas firms for bread and ice----bread on a daily delivery basis to mess halls and ice, transported by vehicles of the 53rd Sub Sup Det, also delivered daily.

(c) Cash collected for the sale of meals was turned in to the Finance Officer CDR by the ration breakdown officer daily except Sundays, thus eliminating the long journey to NAFB such as was done in previous exercises.

(d) A security guard for the subsistence, POL, and Cl II and IV storage areas had to be maintained at all times. At the start of the Exercise this was accomplished by an M.P. patrol; however, upon arrival of the 53d Sub Sup Det and 656th POL Sup Det, the interior guard was taken over by them.

(e) Due to the extreme heat the problem of feeding participating troops in the forward area was met by the use of "C" rations rather than sack lunches as used in previous exercises. Danger of contamination was the primary reason for this change.

(f) Strength figures were very fluid throughout the exercise. As a result, it complicated requisitioning, particularly of perishable items. Constant supervision had to be maintained over these items and many changes were necessary, increasing and decreasing previously submitted orders. Where time permitted, changes were forwarded to Market Center by mail or T.W.X. If time did not permit, changes were made by telephone.

(g) Considerable difficulty was experienced throughout the entire exercise with refrigerated storage boxes for the following reasons:

1 Inadequate chill and freeze space initially

2 Insufficient and fluctuating power

3 Antiquated refrigeration units

4 Extreme heat, requiring equipment to operate 24 hours each day, necessitating constant maintenance.

(h) The installation of four (4) 325 cu ft walk-in out side boxes and three (3) 250 cu ft inside boxes gave the commissary approximately five thousand (5000) cu ft of storage space, which is considered adequate for future exercises with a peak strength comparable to that of Exercise VII and VIII. At the request of the quartermaster a 75 KV generator was installed as stand-by power. This proved a necessity during power failures, fluctuation of power and during the time an adjustment of commercial power was being made by this installation. As the breakdown of perishable items was made direct from box to truck, a curtain of salvage canvas was hung just inside the door of each box. This served to retain most of the cold air in the box during the time the door was open. (i)

(i) Personnel

1 Personnel assigned to the camp quartermaster by the Sixth Army manning table were of high calibre, and well trained in their respective MOS's. This was true of all QM personnel. However, administrative personnel, especially, were at a minimum and losses due to levies, sicknesses, details, etc. caused many delays which could have other wise been avoided had we had sufficient personnel. In one instance a levy for six (6) men was placed on the 53d QM Sub Det by Sixth Army which caused the loss of key personnel. Once the replacements learned their jobs they performed well; however, a training period was necessary during the peak of the exercise. It was also imperative at times for the Quartermaster to request labor details during the last part of the exercise in order to keep abreast of the work load

2 Personnel of the Veterinary Det while not under control of the quartermaster were well qualified and gave excellant support to the commissary officer.

(j) While the commissary account at CDR was a sub-account of the commissary at Camp Irwin, the CDR commissary officer was responsible for requisitioning, receipt, storage and issue of all Cl I supplies. This was a satisfactory arrangement; however, close coordination between the two was essential for efficient and economical operation.

(k) Two (2) shipments of perishable items were refused by the Veterinarian because the shipment arrived at CDR in non-refrigerated vans, with inside temperatures ranging from 70 to 85 degrees. Shipments consisted of butter, eggs, fish, ham and bacon. It was found that it was absolutely imperative that all shipments from Los Angeles Market Center be shipped in refrigerated vans arriving at CDR during the early morning hours rather than late afternoon. This is essential because of high temperatures ranging from 90 to 110 degrees farenheit during the afternoon periods.

(1) Initially the supply of ice was delivered daily to the mess halls on a ½ pound per man basis. This was gradually increased to three (3) pounds per man because of the extreme heat. Inadequate storage space prevented the quartermaster from storing ice.

4. Operations, Cl II & IV

a. Clothing, Organizational

(1) Source: Camp Irwin, Calif.; No level of supply authorized for Camp Desert Rock

b. Clothing, Individual

(1) Source: Camp Irwin, Calif.

(2) Level: None; requirements for clothing for station complement, observers, and participating troops obtained by sending a quartermaster representative to Camp Irwin by regular courrier plane, Tuesday of each week

c. Non-Expendables

(1) Source: Ogden Depot, Ogden, Utah

(2) Level: None; CDR requirements made to Camp Irwin

d. Expendables

(1) Source: Camp Irwin, upon requisition from CDR

(2) Level: None

e. Operations

(1) Because the quartermaster property section had not been established prior to the re-activation of Camp Desert Rock, considerable difficulty was encountered in segregating the QM property from the consolidated account. Separate property books were kept for each technical service; however, only one voucher file was maintained. Initially, some QM property was issued on MR in conflict with SR 735-30-10 Chg 1 thru 4.

(2) All requirements for quartermaster supplies were consolidated by the property section and forwarded to the property officer at Camp Irwin. This arrangement caused considerable delay, particularly with expendable supplies. In several instances it was necessary for the CDR property officer to submit an emergency requisition to Camp Irwin for items which were later found to be "out of stock" at that station. Considerable time and money was spent on telephone calls in an effort to expedite these requisitions.

(3) All units arriving at CDR were instructed to bring a thirty (30) day supply of expendables with them, which served to conserve the QM stocks The QM requested an inventory be made of expendable supplies in all units as of 1 Aug 1957. This inventory was used as a basis for a replenishment

requisition to Camp Irwin for the remainder of the exercise.

(4) Due to the many projects at CDR issue trends were never stable, primarily due to the QM not being given firm requirements.

(5) Wind storms occurred during the exercise causing damage to tentage and other canvas. All economically repairable canvas was shipped to Lompoc, California. However, approximately 50% of all canvas was turned in to salvage.

(6) Approximately 75% of all QM supplies were stored in open storage. Covered storage consisted of three (3) quonset-type buildings. These buildings were built by the caretaking personnel in 1953, using salvage lumber and canvas, and were found to be entirely inadequate for the supplies stored in them.

(7) A Butler-type building, constructed in 1956 and used during the exercise VII & VIII for storage of dry stores, will make an additional 5000 sq ft of storage space available, during the inactive period of CDR.

(8) Some QM property reported excess in 1953 was and is still stored in open storage.

(9) 90% of all QM supplies were handled by troop labor using hand trucks, assisted by one (1) Clark fork-lift, one (1) slew crane, and roller conveyors.

(10) Discussion

(a) By the time the quartermaster section had been organized to support the exercise, decisions relative to the amount of supplies required has been made at higher headquarters and requisitions had been submitted. To assure responsibility for requisitioning and determination of present and future requirements, considerable research was required. Additional requirements for the exercise developed rapidly and were needed in much less time than Camp Irwin could supply them. As a result many items such pencils, acetate, tracing paper, roofing paper, memograph paper, twine, tape, drawing ink, thumb tacks, calendar pads, blotters, etc. were borrowed from A.E.C., D.O.D., Indian Springs Air Force Base, and Nellis Air Force Base. Upon arrival of the QM, 1 May 1957, all supplies except the most sensitive items were stored in open storage, covered with tarpaulins and salvage canvas. Upon inspection, all items in open storage were found to be covered with dust and badly in need of cleaning. Tentage used in the previous exercise was found to be in poor condition. Of a total of 318 tents of all types stored in open storage, 250 were found to be dirty but serviceable, 46 unserviceable but repairable, and 22 salvage. Unserviceability was due primarily to dry rot. All unserviceable tentage was repaired by QM personnel and used during the exercise. Due to high winds approximately 38% of all canvas tents had to be salvaged at close of the exercise. The one piece of material handling equipment available was invaluable, being used by all technical services.

5. Operations, Cl III

a. Packaged Products

(1) Source: Camp Irwin by requisition from CDR, Indian Springs AFB, and Nellis AFB

(2) Level: None; based on CDR requirements

b. Bulk Products

(1) Source: Indian Springs AFB, Nellis AFB, Los Angeles, Calif., and Las Vegas, Nevada; by contract, purchase request, and cross servicing agreements

(2) Level: None authorized, based on requirements

c. Operations

(1) Initially the only requirement for gasoline was for 82 Octane regular gas. This was obtained from Tarr & McComb of Los Angeles by contract, on call by the Desert Rock Purchasing and Contracting Officer. Stove and Diesel oil were also on contract and on call by the P&C officer.

(2) As the exercise progressed cross service agreements with Indian Springs and Nellis AFB were made for aviation fuel, luboils, and greases.

(3) It was necessary to obtain from Nellis AFB sixteen (16) 2000 gallon trailer refuelers for storage of aviation fuel. These refuelers were in turn issued to the using units on hand receipt as needed. As soon as refuelers were emptied they were turned in to POL Section and filled immediately.

(4) Some difficulty was encountered with the pumps and dispensing units and in one instance the services of a Las Vegas contractor were reguired before gasoline could be dispensed. During the breakdown period gasoline was issued from a reserve stock of 4000 gallons held in the POL yard in five gallon cans. The dispensers are the type used in modern service stations and are not designed for 24 hour a day service, as was experienced during the exercise.

(5) Shortly after arrival of the QM an informal accounting system was set up to account for receipts and issues of fuels and lubricants. W.D. AGO form 421 was used for this purpose and proved very satisfactory. Additional records were maintained for all reimburseable projects. Before the arrival of the QM no formal records were kept because of lack of sufficient personnel.

(6) The sale of regular gasoline was authorized to military and DA civilian personnel. Monies collected from the sale of gasoline was turned in to Camp Irwin initally; however, this was changed to a daily turn-in to the Finance Officer CDR.

(7) Prior to arrival of the QM all receipts, issues, and storage of POL were the responsibility of two (2) enlisted men of the caretaker Det.

Upon arrival of the 656th POL Sup Det from Fort Lee, all responsibilities were given to them. The 656th did not have qualified administrative personnel which necessitated the initiation of a training period for two (2) men from the QM office.

(8) Attached is a chart showing POL expenditure for Exercise VII and VIII (See appendix # 2)

6. Laundry

a. The 163d QM Laundry Det consisting of two (2) sections (one (1) officer and thirty (30) enlisted men) arrived at Camp Desert Rock 21 Apr 57. Due to the non-availability of water at CDR, on 23 Apr 57 the detachment was moved to Indian Springs AFB 22 miles away. Equipment used in previous exercises was taken over by the laundry detachment and consisted of four (4) laundry unit trailers mounted W/Extracter and Washer, Prosperity Model PLMW-51A and four (4) units w/generator and tumbler drying, Troy Model PLMT-51A. Constant and continuous maintenance was necessary on this equipment throughout the exercise. In one instance spare parts for a later model were received and could not be used. This equipment was reported on Standard Form 120, 2 May 1957, Condition Code "R". During the past Exercise $3610.00 was spent for repairs and spare parts, which included the replacement of three motors.

b. Due to the continuous breakdown of laundry equipment, it was necessary during peak periods to send organizational work to Camp Irwin on a direct exchange basis. In addition drying lines were hung as a field expedient in order to keep abreast of the workload.

c. Individual laundry bundles were limited to fifteen (15) pieces including the laundry container, and were processed free of charge to all CDR personnel.

d. In early May an agreement was made with the Marine Laundry, Barstow, California, whereby they agreed to launder khaki and fatigue uniforms twice each week for a nominal cost of $0.42 and $0.36, respectively. On 20 May 1957 this service was offered to CDR personnel and continued throughout the exercise with satisfactory results. A turn-in and pick-up point was established by the QM and operated by personnel from the 53rd QM Sub Sup Det.

e. During the period 24 April through 1 Sept 1957 the laundry detachment processed approximately 80,000 pieces and 7500 bundles.

7. Services

a. Shoe repair: This was accomplished by turn-in to Camp Irwin.

b. Clothing: Individual orders were accepted by the QM and sent to Camp Irwin by courier, Tuesday of each week.

c. Office machine repair: Accomplished by requesting a repair man from Camp Irwin. Machines needing repair were turned in to QM on Form 811.

d. Dry cleaning service: Accomplished by PX concessionaire.

e. Mortuary service: Agreement with Nellis Air Force Base.

f. Property disposal: Arrangement with Nellis Air Force Base.

8. Recommendations

a. That all personnel assigned to future exercises be frozen for the duration.

b. That the Camp Quartermaster and the Quartermaster Property Officer and his staff arrive at CDR at least thirty (30) days prior to the start of the exercise.

c. That auxiliary power be available for refrigeration units in case of commerical power failure.

d. That refrigerated storage space be made available for reserve storage of 800 to 1000 lbs of ice.

e. That milk be delivered six (6) days each week and that ice cream be delivered with the milk on call by the commissary officer, when required by the menu.

f. That at least three qualified refrigeration men be included in the quartermaster manning table.

g. That either the Camp Quartermaster or the QM Property Officer be included on pre-exercise planning.

h. That all requirements be submitted thru the camp quartermaster.

i. That present laundry units be declared unserviceable and replaced with up-to-date equipment.

j. That a supply of high mortality spare parts for laundry equipment be on hand at the start of laundry operations.

k. That one additional 6000 lb fork lift truck be made available to the camp quartermaster.

l. That POL officer and NCO report at least thirty (30) days prior to opening date of exercise so that initial requisitioning, sources of supply, contracts and local purchases, cross services, etc. may be obtained or if already available, information as to procedure to be used can be studied and/or set up. Too, since POL officer is more or less directly responsible to QM Property Officer Camp Irwin, there should be periodic visits between these two individuals, at least once every two weeks, and ideally once a week.

m. That remainder of POL section report fifteen (15) days prior to opening date.

n. That underground storage for automotive gas be increased from thirty (30) thousand gallons to at least fifty (50) thousand gallons. During this opn, gasoline on hand during peak of exercise was expended in a matter of two and a half to three days which meant that constant communication between CDR P&C officer and the source of supply (Los Angeles) was imperative and delivery in some cases had to be of an emergency nature (possibly two loads a day due to inability of

personnel concerned to anticipate gasoline requirements as a result of shots). Another problem arose in that the company contracted was at times unable to make delivery because of lack of trailers and/or short notice for delivery.

o. That heavier duty pumps be installed in gas station since pumps now available do not suffice for round the clock use. This may be remedied in part by placing the pumps directly over the storage tanks and moving the dispensers closer to the pumps.

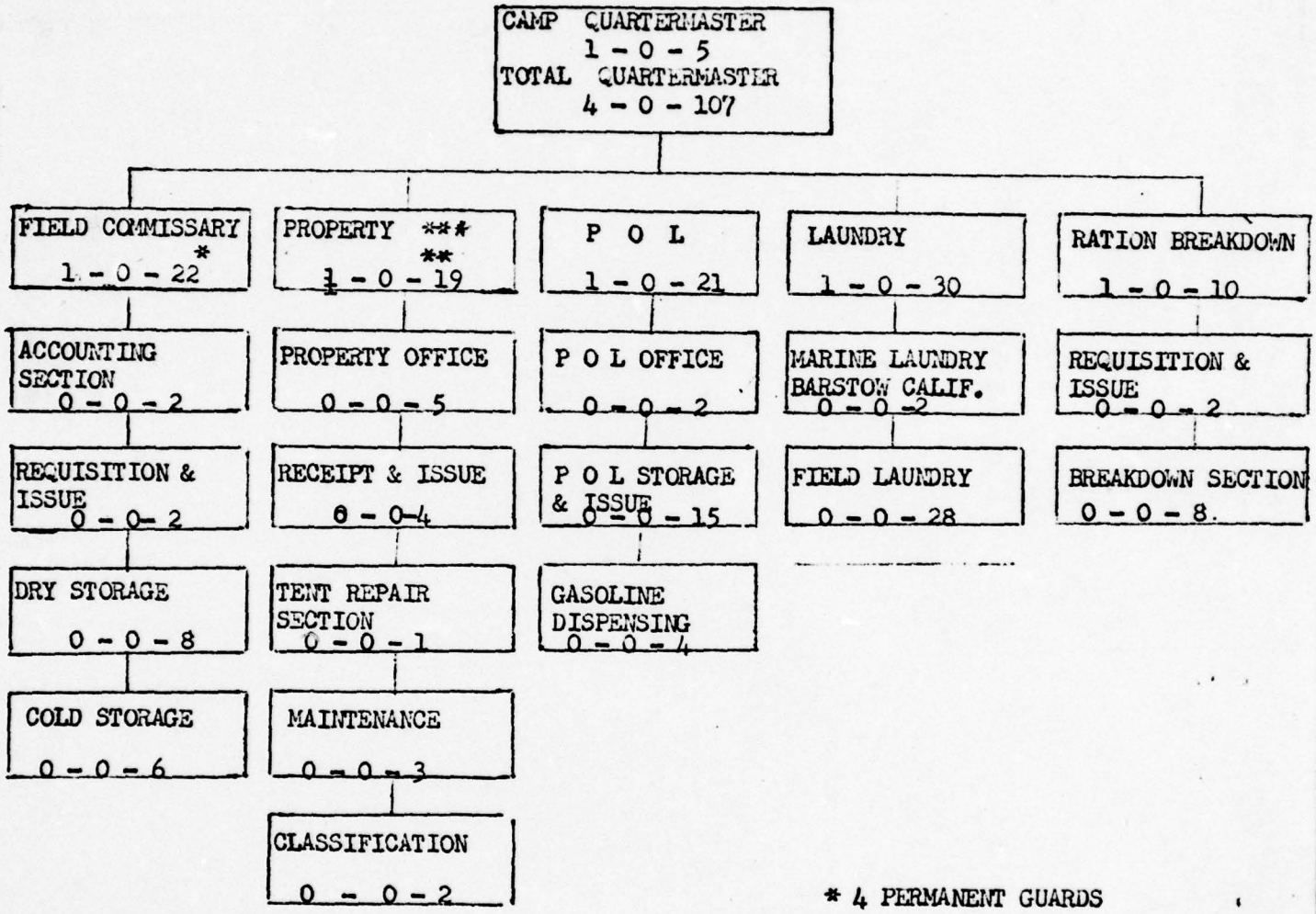
p. That units submit to POL section prior to their arrival a requisition of items needed on their arrival and what their anticipated needs will be while at CDR.

q. That an inventory be taken at time POL officer arrives so that a new account can be opened and closed when operations cease.

Norton McDonald

NORTON McDONALD
Lt Col QMC
Camp Quartermaster

APPENDIX # 1



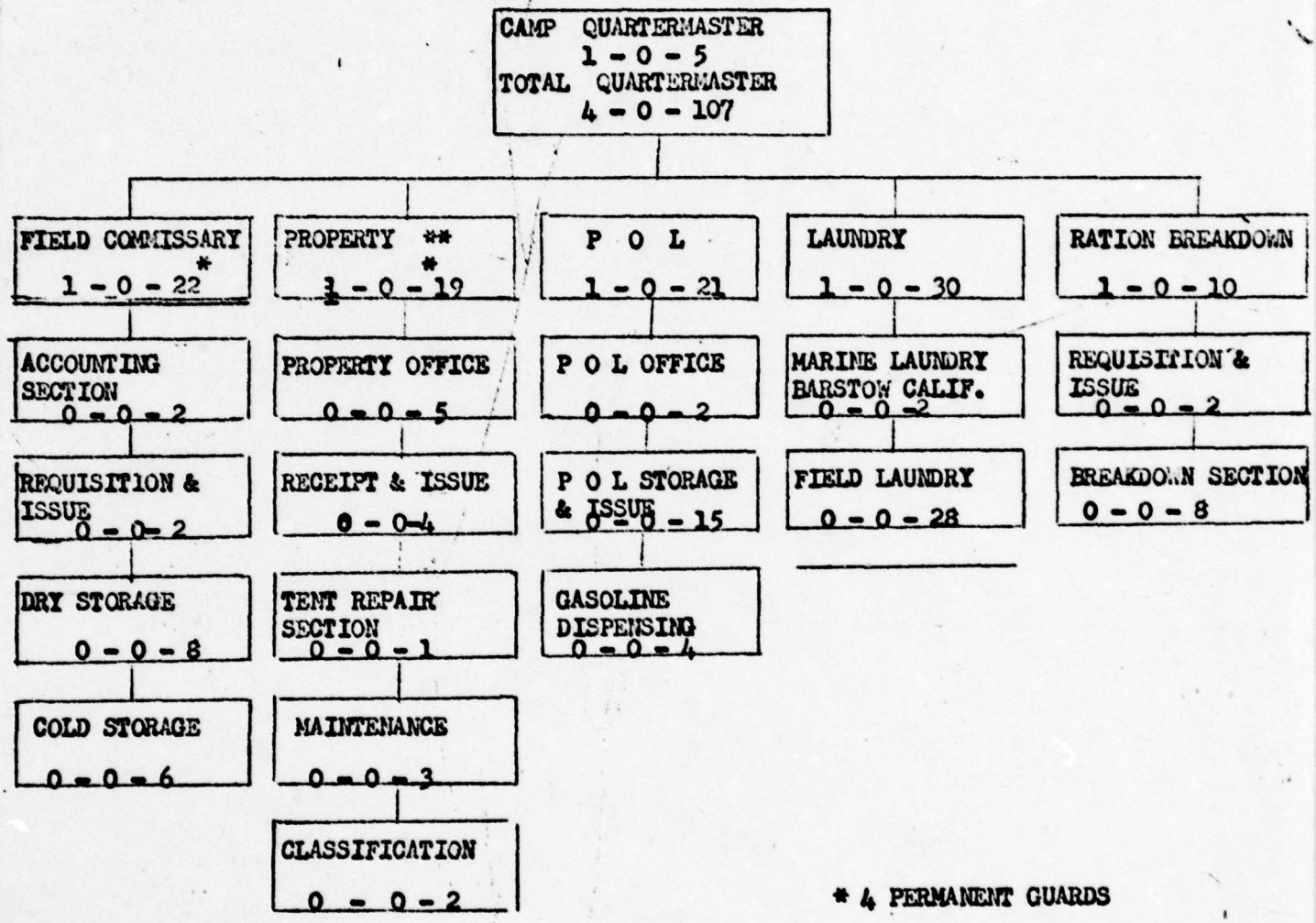
* 4 PERMANENT GUARDS

** 4 PERMANENT KPs

*** RATION BREAKDOWN AND PROPERTY SECTION SAME OFFICER

The number of officers and enlisted men shown above are considered adequate for the Quartermaster operation for future exercises comparable in size to Exercise VII and VIII.

APPENDIX # 1



* 4 PERMANENT GUARDS

4 PERMANENT KPs

** RATION BREAKDOWN AND PROPERTY SECTION SAME OFFICER

The number of officers and enlisted men shown above are considered adequate for the Quartermaster operation for future exercises comparable in size to Exercise VII and VIII.

APPENDIX 2

POL CONSUMPTION, CDR, NEV-DIV 1957-31 AUG 1957

ITEM	UNIT ISSUS	UNIT COST	MAY AMT.	MAY COST	JUNE AMT.	JUNE COST	JULY AMT.	JULY COST	AUGUST AMT.	AUGUST COST	TOTAL AMT.	TOTAL COST
1. Mtr. Fuel (82) Octane	gal.	$.1845	54,570	$10068.17	117,239	$21630.60	131,577	$24331.31	133,870	$24699.02	437,556	$80729.10
2. Deisel Fuel No.2	gal.	$.152	5,085	$ 772.92	3,601	$ 547.35	1,822	$ 276.94	428	$ 65.06	10,936	$1662.27
3. Stove Oil No. 1	gal.	$.1769	28,388	$5021.83	13,198	$2334.73	9,753	$1725.31	5,148	$ 910.68	56,487	$9992.55
4. Luboil OE-30	gal.	$.493	204	$ 100.57	1,763	$ 869.16	1,736	$ 855.85	2,578	$1270.95	6,281	$3096.53
5. Luboil OE-30	gal.	$.596	23	$ 13.71	267.5	$ 159.43	10	$ 5.96	275	$ 163.90	575.5	$ 343.00
6. GEARLUBE GO-90	gal.	$.58	19.3	$ 11.19	116	$ 67.28	123	$ 71.34	285	$ 165.30	543.3	$ 315.11
7. Grease GAA	gal.	$.18	52	$ 9.36	1,094	$ 196.92	530	$ 95.40	1,365	$ 245.70	3,041	$ 547.38
8. Grease WE # 2	Lb.	$.14	715	$ 100.10	40	$ 5.60	90	$ 12.60	15	$ 2.10	860	$ 120.40
9. Solvent	gal.	$.22	330	$ 72.60	1,065	$ 234.30	1,013	$222.86	1,496	$ 329.12	3,904	$ 858.88
10. Hydra Fluid	gal	$1.45	24	$ 34.80							24	$ 34.80
11. Grease MIL-L-7711	Lb.	$.28			15	$ 4.20	288	$ 80.64	169	$ 47.32	472	$ 132.16
12. Grease MIL-L-3278	Lb.	$1.08			15	$ 16.20	25	$ 27.00	48	$ 51.84	88	$ 95.04
13. AV GAS 80/87	gal.	$.253	1,730	$ 437.69	4,000	$1012.00	3,140	$ 794.42	3,900	$ 986.70	12,770	$3230.81
14. AV GAS 115/145	gal.	$.21			4,000	$ 840.00	13,127	$2756.67	74,914	$15731.94	92,041	$19328.61
15. AV GAS 91/96	gal.	$.16	3,970	$ 635.20	4,000	$ 640.00	4,014	$ 642.24	5,219	$ 835.04	17,203	$2752.48
16. AV OIL 1100	gal.	$.63			265	$ 166.95	423	$ 269.64	1,886	$1136.92	2,577	$1622.51
17. Grease MIL-L-3545	Lb.	$.14					35	$ 4.90			35	$ 4.90
TOTAL COST			May	$ 17,278.18	June	$ 28,724.72	July	$ 32,173.08	Aug	$ 46,691.59	=	$124,867.53

57-837

FINAL REPORT
SIGNAL CORPS ACTIVITIES
EXERCISE DESERT ROCK VII & VIII

15 September 1957

I. MISSION

To provide essential fixed and tactical Signal Communications, Pictorial and Photo-Dosimetry service, and Maintenance and Supply for Exercise Desert Rock VII & VIII.

II. SUMMARY OF OPERATION

A. Organization

The Signal Officer for Exercise Desert Rock VII and VIII was a Lieutenant Colonel who acted in the capacity of Post Signal Officer and Signal Operations Officer with a Staff Section composed of one Chief Clerk, one Clerk Typist, one Film Librarian Specialist, and one Draftsman.

Adequate Signal Communications were provided by a Signal Support Company at full TO&E strength augmented by one Photo Team, two maintenance Teams (one wire and one radio), and one Signal Supply Team.

B. Wire

The post wire communication system was activated during the camp build-up phase in mid-April. It consisted of a four position switchboard (WE 605) and the installation of all of the locals. Close supervision was required in the allocation of telephones and circuits in order to insure that adequate instruments were available.

Interpost circuits are contained in 300 and 100 pair lead covered cables with distribution points for different telephone circuits which connect into the distribution frame of the switchboard. One hundred and forty-five drop lines plus thirty extensions were installed.

Following trunk lines were installed:

Four tie trunks to Camp Mercury

J

Two spiral-four cables to the Forward Area Nevada Test Site to provide for carrier circuits.

One leased line to Nellis AFB

Four toll trunks to Las Vegas

One direct line to Las Vegas for Transportation Section

Extensive wire communications to numerous installations and sites in the Forward Area which required more than 1200 miles of wire during the Exercise.

C. Radio

A MARS station was installed which operated direct phone patches with Camp Irwin and Fort Huachuca. During the Exercise 2534 telephone patches were accomplished by this means.

Several radio nets were established for each shot, using AN/GRC-26's, AN/GRC-9's, AN/GRC-19's, and AN/VRC-19's.

A net of AN/PRC-10's was formed for the 50th Chemical Platoon which was utilized by Rad-Safe personnel in monitoring forward positions after and between shots.

A Guard Radio Net was established to organize a Military Police, Ambulance, and Emergency Net with one Base transmitter, two relay stations, and twenty-nine AN/VRC-10's mounted in 19 ¼ ton trucks, six sedans, and four ambulances.

D. Communication Center

Routing indicator RUWPLDE was changed from inactive to active status and appropriate changes to pertinent JANAP's were made.

E. Crypto Center

Essential cryptographic material was requisitioned and obtained through the Sixth US Army ASA office. Equipment was adequate but Crypto Room meets ASA

minimum physical standards only.

F. Public Address System

This system consisted of 12 AN/TIQ-2 PA Systems and one AN/TIQ-3 System. Speakers were placed throughout Camp Desert Rock until required at various locations in the Forward Area to control personnel and afford the Countdown at shot time.

G. Television

Television equipment was inadequate to support both Plans A and B for the Infantry Troop Test for the shot Smoky. As normal wind directions favored Plan A, all TV coverage for the troop units which consisted of three ground camera locations and one aerial coverage via camera mounted in an L-20 aircraft, was concentrated on Plan A maneuvers. A shift of wind directions necessitated the use of alternate Plan B and the evacuation of positioned TV vehicles with microwave equipment which had been accurately aligned for optimum transmission tests of the video and audio systems were excellent for Plan A, but as the evacuation was completed at H-2 hours, there was no chance to align equipments for Plan B. As a consequence there was no television program.

H. Signal Supply and Maintenance Section

Supply activities were conducted by a Signal Property Officer and teams mentioned in Section II with the invaluable assistance of Signal Officer and staff at Camp Irwin. Requisitions were submitted far enough in advance to enable rapid installation and maintenance of communications facilities and to provide continuous supply support throughout the Exercise. The first major problem developed when items requisitioned were not available at Camp Irwin. A series of Blue Streak and Special requisitions partially remedied this situation but at a much greater transportation cost to the government. Local pro-

curement appreciably relieved the supply problem. A total of 1890 items were locally procured at a cost of approximately $9,000.

I. Radiac

Although a radiac van and a radiac technical specialist were furnished, there were practically no tools or testing equipment provided; however, the technician had his own tools and very successfully kept up with the maintenance problem. A small percentage of the sets had to be sent to the Presidio of San Francisco for major repairs.

J. Photo-Dosimetry

Photo-Dosimetry vans from Lexington Signal Depot, Lexington, Kentucky together with three physicists provided evaluations and dosimetry readings in processing film badges during the Exercise. This operation was highly successful and the statistics accumulated will provide adequate basis upon which to render scientific data for study.

K. Pictorial Service

The 2d Signal Platoon (Photo) Team was sent here from the Army Pictorial Center, Long Island, New York to document pictorially and historically troop participation and to take still and motion pictures in black and white and in color of activities during Exercise Desert Rock VII and VIII in coordination with the Public Information Office. Hometown releases, TV sequencies, and maneuvers were successfully recorded and released.

L. Communications Support for Projects

Communications requirements by Projects were not requested in sufficient time to allow for desired preparation. For example, Project 50.8 wanted extensive communications over a vast area approximately 100 x 35 miles from points near Nellis AF Base, Las Vegas, to locations well in the Forward Area. There were a total of sixteen such sites involved. As this

was beyond the capabilities of the 232d Signal Company, it was necessary to obtain an AN/TRC team of one officer and forty enlisted men from Fort Huachuca, Arizona in order to accomodate this requirement. Also, desired facilities of Air Weather Service consisting of Teletype and Facsimile equipments were not stated until the Exercise was well under way. Maintenance personnel were finally located and procured from Sacramento Signal Depot. Later, still, was a request for an installation of an Antenna Group OA/1124, a component part of AN/FPS-36, Radar, (formerly AN/TPS-1D). This is a 40' X 11' structure normally mounted on a concrete block but in this case was mounted on a timber crib at Nellis AF Base. Technicians to install the modification kit were procured from Fort MacArthur, California.

M. Press coverage

No Army Signal communications were desired for press coverage during the Exercise except the TV facilities discussed in subparagraph G above.

III. CONCLUSION

The Signal phase for the operation of Camp Desert Rock fixed communications as well as the tactical communications provided for activities in the Forward Area for Exercise Desert Rock VII & VIII was very successful. It is considered that the operational plans are sound and need no notable changes for future operations.

IV. LESSONS LEARNED

Negotiations for any long lines required through the Southern Nevada Telephone System should be conducted six months prior to the beginning of any future Exercise. This will require coordination with the Bell Telephone system, also, as the facilities of each system are utilized in such leases.

At the beginning of this Exercise, Spiral-Four cable was laid from CDR to the vicinity of Yucca Pass and later was extended as far as the "Y" in the Forward Area to accomodate multiple channel telephone communications via carrier.

During activities for various shots, it was necessary to move the forward equipments including carrier and Desert Rock Forward switchboard many times. It would have been easier if terminal strips had been placed at strategic locations to facilitate rapid connections for such movements. This practice was inaugurated but not until some of the last shots when it was learned how much time and effort could be saved.

V. RECOMMENDATIONS

A. Wire

For future exercises held at Desert Rock, it is believed that the advance party of the Signal Unit should consist mainly of wire and supply personnel so the post wire communications can be placed into operation and preparations can be made for full operations of the camp.

The four position telephone switchboard (WE 605) required constant maintenance, rendered inadequate service, required numerous replacement parts, and cost approximately nine hundred dollars ($900.00) upkeep in four months. It is recommended that this equipment be replaced with a mobile unit such as the switchboard TTC-7.

At least two direct wire lines to Las Vegas will be required for Transportation Section if observers are invited to witness future Exercises.

B. Radio

All plans which will involve radio frequencies should be prepared and frequency clearance requests should be initiated at least three months prior to the exercise.

C. Supply

It is recommended that three quonsets be erected to accomodate office, workshop, and warehouse space for any future Exercise.

Requirements should be submitted by projects and participating units about three months in advance in order to expect supplies when needed.

D. Television

If there is to be a television mission by the Public Information Office, it is suggested that the requirements be specifically detailed in advance in sufficient time to allow for adequate planning and preparation of equipment for the program.

E. Radiac

Necessary radiac test equipment and appropriate tools should be provided.

F. Photo-Dosimetry

Tropical tarps should be included in the event Photo-Dosimetry vans are sent to Camp Desert Rock during the summer months.

G. Radiological Safety training

It is considered that an appropriate, complete course of Radiological Safety training be given to all radio and wire personnel who will operate in the Forward Area prior to obtaining badges for them.

H. The same type organization at full TO&E strength should be provided to furnish adequate communications facilities in any future Exercise of a similar scope.

I. During the Exercise there was some discussion as to whether ionization in the stem of an atomic cloud would appreciably interfere with radio waves passing through the stem from one AN/GRC-9 to another. These discussions arose toward the end of the Exercise and no tests were conducted to prove anything. It is accordingly suggested that experiments be conducted in any future Exercise.

J. A crypto room which will meet with ASA audio as well as physical standards must be constructed.

4.61. Kelton
SIG Off.

FINAL REPORT ORDNANCE SECTION
EXERCISE DESERT ROCK VII AND VIII

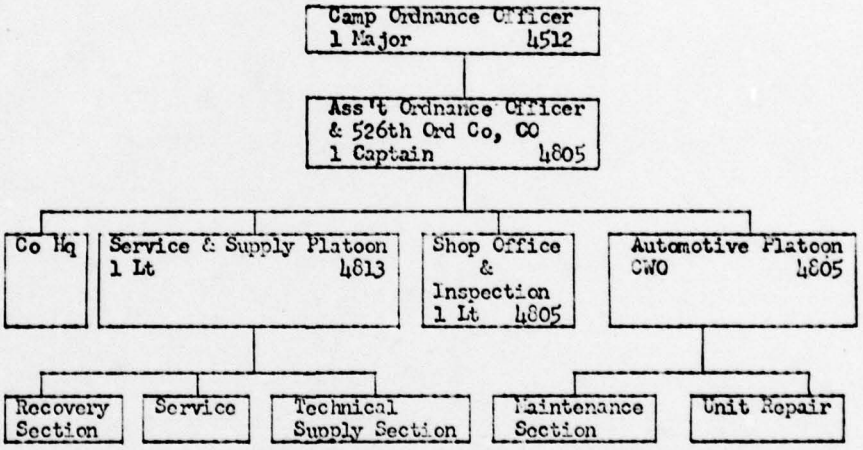
1. MISSION:

To provide Ordnance Support (Supply and Maintenance) for all units stationed at Camp Desert Rock and to provide emplacement and recovery of all equipment used as display items in the atomic exercise.

1. ORGANIZATION:

a. The Ordnance Officer was assigned to Headquarters, Camp Desert Rock. The 526th Ordnance Company (HAM) operated the Camp Ordnance Section under the supervision of the Camp Ordnance Officer. An average of three (3) officers, one (1) warrent officer and eighty-five (85) enlisted men were present for duty with the Ordnance Section.

b. The following is the Organizational Chart for the Ordnance Section.



2. PERSONNEL REQUIREMENTS:

a. If the use of display equipment is contemplated for future atomic exercise, the following change to personnel organization is suggested. Because of the size and type of vehicles and equipment used and the conditions of this equipment subsequent to the shots, it is suggested that one or more tank retrievers M74 with trained crew be included in the Recovery Section. Although the work was accomplished during this exercise with the use of truck, wreckers M62 and truck, tractor and trailer M123, it is strongly felt that wear and tear on seals, tires and engines on the M62 was excessive and not justifiable. Personal safety of the operator, both insofar as handling heavy salvage materiel and operation within radio-active areas, would be greatly increased by use of the retriever M74.

3. SUMMARY OF OPERATIONS:

a. Supply Section:

(1) Normal requisitioning procedures were found in most instances to be inadequate for Camp Desert Rock as the time lag between the date requisitioned and the date delivered was in most instances about 30 days. This delay resulted in a large number of vehicles being deadlined awaiting parts.

(2) The above situation was combatted by fabrication of parts where ever possible, by local purchase of some small items in Las Vegas and by substitution of unserviceable for serviceable parts and assemblies on equipment to be used as display in the atomic exercise.

(3) It is recommended that all requisitions be marked either emergency or special, that they be either teletyped or hand carried to Benicia Arsenal, that personnel from the Ordnance Company be dispatched weekly to Benicia Arsenal using Camp Desert Rock vehicles for pick up of supplies.

(4) Total cost of all parts and assemblies issued at Camp Desert Rock for either immediate use or for replenishment of basic loads was $452,863.73. A breakdown of this figure is too lengthy to include in this report, however the major portion of it is reflected in paragraph 5b(3) of this report. All figures are those reflected by the stock record cards of the 526th Ordnance Company's Supply Section.

b. Maintenance and Service:

(1) The Camp Ordnance Maintenance Shops were established using FM 9-10, Ordnance Maintenance and General Supply in the Field, as a guide.

(2) Considerable difficulty was experienced at this station with non-standard equipment. Primary source of trouble was the truck tractor, International M425. Following are listed the parts and cost of replacement for thirty (30) each of this type vehicle alone at this exercise.

ASSEMBLY	QUANTITY	UNIT COST	TOTAL COST
Engine Ass'y, New	24 @	$1,343.00 ea	$32,232.00
Engine Ass'y, Rebuilt	6 @	$1,065.00 ea	$6,390.00
Lamp Unit	1 @	$8.40 ea	$8.40
Shaft, Drive	1 @	$26.60 ea	$26.60
Regulator, Generator	2 @	$20.70 ea	$41.40
Kit, Water Pump Repair	14 @	$8.44 ea	$118.16
Transmission	2 @	$402.00 ea	$804.00
Disk Clutch	4 @	$16.90 ea	$67.60
Pressure Plate	6 @	$35.50 ea	$213.00
Kit, Repair, Clutch	1 @	$7.10 ea	$7.10
Bearing, Release	5 @	$1.30 ea	$6.50
Bearing	1 @	$.98 ea	$.98
Tail Pipe	1 @	$5.20 ea	$5.20
Core, Radiator	1 @	$123.00 ea	$123.00
			$40,043.94

(3) Breakdown of all major assemblies installed at Camp Desert Rock follows:

GROUP NUMBER	ASSEMBLY	QUANTITY	UNIT COST	TOTAL COST
G749	Transmission	4	$611.00 ea	$2,444.00
G671	Transmission	1	$402.00 ea	402.00
G744	Transfer	5	$745.00 ea	$3,725.00
G741	Transfer	3	$126.00 ea	$378.00
G741	Front Axle Assy	1	$399.00 ea	$399.00
G744	Transmission	2	$535.00 ea	$1,070.00
G749	Transmission	10	$576.00 ea	$5,760.00
G744	Gear Steering	4	$208.00 ea	$832.00
G740	Engine	13	$472.00 ea	$6,136.00
G758	Engine	8	$555.00 ea	$4,440.00
G671	Engine	6	$1,065.00 ea	$6,390.00
G671	Engine	26	$1,345.00 ea	$34,970.00
G741	Engine	6	$565.00 ea	$3,390.00
G744	Engine	7	$2,182.00 ea	$15,274.00
G749	Engine	6	$734.00 ea	$4,404.00
			Grand Total	$90,014.00

(4) A very high rate of engine mortality was experienced during the exercise. This is attributable to three causes: Driver negligence, including inadequate first and second echelon maintenance; operation at high speeds, particularly of off-post vehicles on US Highway 95 and on roads in the forward area, Camp Mercury (control was particularly weak on the former); and to heat, sand and dirt, normal desert. Cost of these factors to the government is reflected in paragraph 3b(3), above.

(5) As units and drivers at Camp Desert Rock were representing posts, camps and stations from all armies of the country, it is felt that driver training and experience on an Army-wide basis leaves much to be desired. Particularly with reference to preventive maintenance, the importance and performance of the PM checks, at least as out lined on the DD Form 110.

(6) Lack of adequate shops proved a hindrance to part of the 526th Ordnance Company (HAM)'s normal capabilities. Because of the excessive amount of sand and dust in the desert, the rebuild section of the company was maintained at Camp Irwin, California. Were adequate shops available, rebuild of assemblies and sub-assemblies could be accomplished by a Heavy Automotive Maintenance Company thereby expediting the return of these items to serviceable use or stock. The delay necessitated by transportaing these vehicles to Camp Irwin would not be warranted. The shop building now in existence, with its small three bays, unpaved floor and loose construction, is inadequate except as storage space as it offers no resistance to sand and wind even with doors closed.

(7) Field maintenance for all tech services was accomplished by Ordnance at Camp Desert Rock for quartermaster laundry unit and materiel handling equipment and for Engineer vehicles, machinery and equipment. These items, while they were repaired by Ordnance, are normally outside of the scope of Ordnance repair.

(8) The ordnance section supported 533 vehicles during the exercise. The following is a resume of the activities of the maintenance shops and service section of the 526th Ordnance Company (HAM):

	JOBS COMPLETED	WORKING DAYS	AVERAGE DAILY PRODUCTION
April	3	4	.75
May	96	23	4.17
June	142	20	7.10
July	171	23	7.43
August	253	22	11.50
September	45	5	9.00
Totals	710	97	6.65

4. CONCLUSIONS:

a. Ordnance Field Maintenance and Supply Procurement could better be performed if those recommendations as outlined in paragraph 6, of this report were followed.

b. Needs of projects, activities and units should be anticipated and firm prior to arriving at Camp Desert Rock. Some demands on supply were unreasonable. An example is the request by the Helicopter Company at the exercise in conjuntion with the Infantry Battle Group, Exercise Hill and Dale, 540 gallons of hydraulic oil of a non-standard type. This oil was procured by a special truck to Benicia Arsenal, California, a round trip of approximately 1200 miles; to meet the "suspense" date set down by the requisitioning unit. The oil, in twelve (12) fifty-five (55) gallon drums was issued to this group. Immediately prior to departure of this unit from Camp Desert Rock, the entire amount of oil was turned in to ordnance as not needed. Not one of

the drums had been opened. Also required by units were items that are TO/E To them such as stop watches, spotting instruments, binoculars, aiming circles, machine gun barrels, blank firing adapters for the machine gun, 30 cal, 1919A4, and some items not TO/E but which seem unreasonable as watches with black face and white markings and an aircraft maintenance tool set valued at $4061.00 which was never picked up after arrival at Camp Desert Rock because it was not needed. These too were procured, again at unnecessary expense, from Benicia Arsenal.

c. Non-standard vehicles and equipment should not be included at Camp Desert Rock, particularly because of the extended supply line.

5. LESSONS LEARNED:

a. That driver instruction and training, on an Army wide basis, is weak.

b. That units, projects, and activities held an unrealistic outlook in many cases toward their own requirements for completion of their own mission.

6. RECOMMENDATIONS:

a. That funds for local purchase of non-standard items and parts be allocated directly to Ordnance at Camp Desert Rock for use at Las Vegas. This was done on a small scale five hundred ($500) dollars per month but could be more effective if in greater quantity and for a longer period.

b. That an accountable Ordnance Property Officer be present at Camp Desert Rock for the exercise to facilitate expedition of parts and supplies. Physical distance between Camp Irwin and Camp Desert Rock is too great to enable easy checking on status of supplies.

c. That if paragraph 6b. above is not practicable, Ordnance at Camp Desert Rock be authorized to deal directly with Benicia Arsenal, California, for requisitioning and pick up of parts and supplies. The normal action period for supply of critical items from Camp Desert Rock through Camp Irwin, California to Benicia Arsenal proved too long.

d. That non-standard and limited standard items of equipment be excluded from participation in any future exercises. Procurement of parts and assemblies for these items is too difficult and involves too much time.

e. That all units, activities, and projects understand their mission and anticipate realistically their requirements to complete this mission.

f. That in addition to truck, tractor and trailer M123, that one or more tank retrievers M74 be authorized and furnished to facilitate the work for which the M123 and truck, wrecker, M52 are not suited.

WILLARD BAKER
Major Ordnance
Ordnance Officer

LETTER TO SUCCESSOR

TAB A.....ADMINISTRATIVE BRANCH

TAB B.....COMMERCIAL TRAFFIC DIVISION

TAB C.....OPERATIONS BRANCH

TAB D.....MAINTENANCE BRANCH

TAB E.....TRANSPORTATION SUPPLY BRANCH

TAB F.....SUMMARY OF OPERATION TRANSPORTATION DIVISION

OFFICE OF THE TRANSPORTATION OFFICER
Camp Desert Rock, Nevada

4 September 1957

SUBJECT: Letter To Successor

TO: Administrative Officer
Camp Desert Rock Exercise IX
Camp Desert Rock, Nevada

I. SECTION ORGANIZATION: The Administ rative Division is subdivided into Administrative Services Branch and Personnel Action Branch consisting of one (1) officer, one (1) warrant officer and ten (10) enlisted men including the personnel administrative clerks from the four attached companies organized as outlined on organization chart attached as enclosure number 1.

II. PERSONNEL REQUIREMENTS: No Recommended Changes.

III. TROOP LIST: (furnished by S-3).

IV. TOTAL PARTICIPATION: (furnished by S-3).

V. SUMMARY OF OPERATIONS: A. A minimum security clearance of secret was required for all personnel to move to Camp Desert Rock. By setting up an assembly line procedure the situation was handled with little trouble.

B. Existing personnel shortages (both officer and enlisted men) were alleviated by placing levies on other units at Ft Ord. A verbal agreement was made with G-4, Ft Ord, that these attached personnel would be allowed to remain with the unit until the completion of the exercise. A further agreement was made in that the only losses to the battalion would be due to overseas levies.

C. The battalion initially started requesting personnel shortages in October 1956. Follow up requests were submitted to AG approximately every two weeks. The majority of personnel replacements recieved were not able to be cleared by G-2 for access to SECRET security information. Most of the replacements were not recieved until March and April, which caused a great of hardship, getting personnel cleare d for SECRET at the last moment.

D. All personnel were screened to insure; sufficient time remaining so that no one would be required to leave due to an ETS while at Camp Desert Rock; No great personnel problems to interefere with the operation were present; no derogatory information that would hinder final security clearances was evident.

E. Two (2) months supply of blank forms and office supplies were requisitioned and obtained prior to departure from the home station. Due to non-availability of office furniture and typewriters from S-4, Camp Desert Rock, TOE office equipment was utilized throughout the exercise.

F. The 2nd Transportation Company moved to Camp Desert Rock on 2 April 1957 as an advance party for the main body.

G. The stabilization of personnel was not realized, however, losses due to overseas levies, voluntary and mandatory early releases, and withdrawl of security clearances continued thoughout the operational phase.

H. The battalion was strongly levied by Camp Desert Rock for various details such as engineer detail, trash details, etc. These losses were not contemplated, and combined with the normal losses mentioned above, shortages of operational personnel became critical in the final month of the operation.

SUBJECT: Letter To Successor 4 September 1957

I. Immediately upon arrival, liaison between the battalion personnel section and Camp Desert Rock S-2 and Radiation Safety Officer was initiated. Post S-2 instructed personnel clerks as to the method of filling out badge requests, and badging of personnel was quickly underway. Film packs were issued as soon as they were available from the Radiation Safety office.

J. After arrival of the main body at Camp Desert Rock, the battalion was joined by the 531st Transportation Company attached from Ft Riley, Kansas. This company was cleared for confid ential only, and imposed an unneccessary load on the personnel section in order to obtain secret clearances for badging purposes. See inclosure Nr 2 "Specific Function Of The Administrative Division".

VI. CONCLUSIONS: A. That all personnel problems encountered during the build-up phase can be solved by application of current personnel and administrative procedures and directives.

B. The liaison and cooperation wit h the staff sections at both Ft Ord and Camp Desert Rock was vitally essential in accomplishing the assigned mission.

C. That, in general, replacement personnel will not be available during the exercise.

D. Close liaison is necessary between the personnel section and Camp Desert Rock S-2 and Radiation Safety Office to accomplish necessary badging as soon as posible.

VII. LESSONS LEARNED: A. That all personnel should be cleared for SECRET before arrival at Camp Desert Rock. This will dispence with the delay of all individuals being badged to enter the Nevada Test Station. Rec.

B. That all personnel should be recieved and frozen in the battalion at least two (2) months prior to the operations. Rec.

C. That no overseas levy should be placed on the battalion during the operation.

VIII. RECOMMENDATIONS: That on initial notification of assignment to support the exercise requests be made as to the security clearance requirements, length of period personnel will be stabilized, and amount of office space available.

B. That adequate supplies of blank forms and expendable office supplies are obtained for use during the first two (2) months away from the normal supply channels.

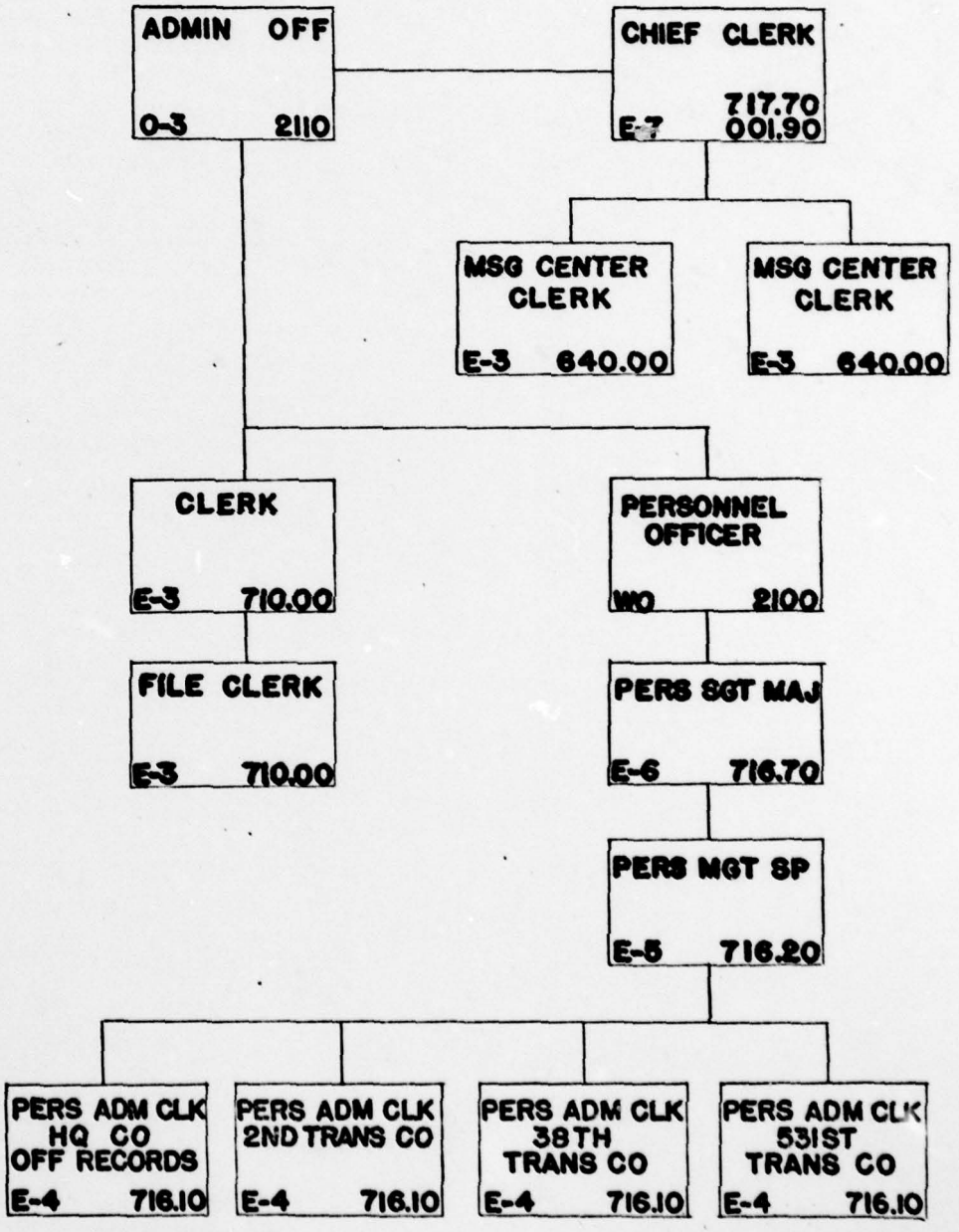
C. That all personnel reporting to the battalion be cleared for secret. The attached company from Ft Riley tied up the operations of several typists for several weeks due to the necessity of clearing the company for access to secret information.

D. That the battalion be overstrength prior to movement to Camp Desert Rock to offset losses sustained during the operation.

2 Incls
1. Organization Chart Administrative Division Transportation Section
2. Specific Functions Of The Administrative Division

JESSE F. TUCKER, JR.
1st Lt, TC
Administrative Officer

ORGANIZATION CHART
ADMINISTRATIVE DIVISION
TRANSPORTATION SECTION



INCLOSURE # 1

SPECIFIC FUNCTIONS OF THE ADMINISTRATIVE DIVISION

Operates in accordance with approved policies, activities of the transportation section pertaining to:

1. Classification of all individuals joining the section as pertains to assignment, subsequent reassignment, reclassification, promotion and reductions.

2. Procurement and replacement of military personnel.

3. Administration of military personnel.

4. Supervises the strength accounting activities of the section.

5. Operates the internal headquarters communication control, distribution center and messenger service.

6. Distributes, safeguards and accounts for classified correspondence.

7. Publishes, authenticates, and distributes all orders and instructions except those certain instructions and orders specifically delegated to other divisions of the Transportation Section.

8. Requisitions, stores and distributes publications and blank forms.

9. Maintains the office of record, including the records of personnel assigned to the transportation section. This includes the supervision of record administration in subordinate units and activities. Retirement of noncurrent records under the record administration program.

10. Performs all office services and every possible administrative service for the Transportation Section in order that other divisions with specific missions need not have their attention diverted by routine administrative procedures.

11. Supervision of administrative procedures within the Transportation Section, and the formulating of directives pertaining thereto.

12. Assist all personnel on administrative problems.

Incl Nr 2

AD-A080 236 EXERCISE DESERT ROCK LAS VEGAS NV F/G 18/3
EXERCISE DESERT ROCK VII AND VIII. AFTER ACTION REPORTS. OPERAT--ETC(U)
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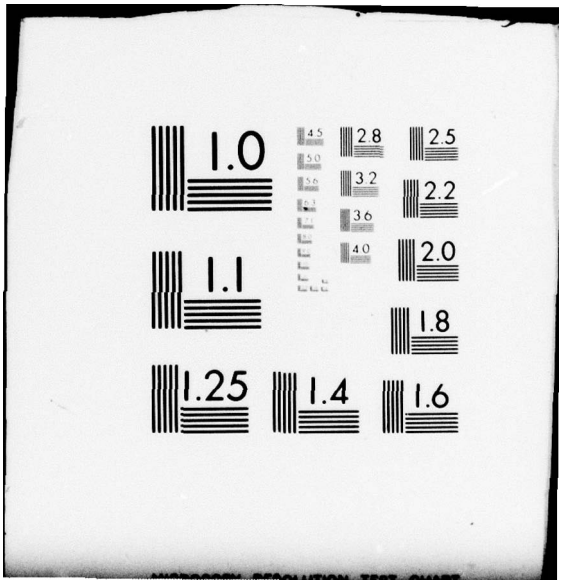
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OFFICE OF THE TRANSPORTATION OFFICER
Camp Desert Rock, Nevada

31 August 1957

SUBJECT: Letter To Successor

TO: Commercial Traffic Division
Camp Desert Rock Exercise IX
Camp Desert Rock, Nevada

I. SECTIONAL ORGANIZATION: The organization and function of the Commercial Traffic Division required the services of two (2) officers and eleven (11) enlisted men. For a detailed breakdown of the organization of the assigned maintenance personnel, (See Incl No. 1).

II. PERSONNEL REQUIREMENTS: No Recommended Changes.

III. TROOP LIST: (furnished by S-3).

IV. TOTAL PARTICIPATION: (furnished by S-3)

V. SUMMARY OF OPERATIONS: A. Formation of the Commercial Traffic Division was initiated at Fort Ord, California on 15 March 1957, to operate in support of Camp Desert Rock, Exercise VII & VIII. Prior to departing Fort Ord, California, training of personnel in Commercial Traffic operations was begun and necessary forms, publications and equipment were arranged for.

B. The advance party, consisting of one (1) Officer and twenty-one (21) EM arrived Camp Desert Rock, Nevada on 2 April 1957 and set up operations in Bldg 1001. By 3 May 1957, this figure had been increased to two (2) Officers and twenty-nine (29) enlisted personnel.

C. The Commercial Traffic Division was organized with three (3) branches; Passenger Branch, Freight Branch, and Operations Branch, (Las Vegas). See Organizational chart (Incl 2).

D. To provide adequate coverage for incoming observers the Passenger Branch began operating on a 24 hour daily basis seven (7) days in advance of the first shot. Experience gained demonstrated that during "shot periods" two (2) shifts of personnel on a 12 hour per day basis were required to handle peak work loads with a slightly larger shift for the day period than for the night shift. Between shots it was found feasible to re-allocate available personnel to three shifts to allow the men more time off. The Passenger Branch was assigned responsibility for movement of observers from Las Vegas to CDR. The Visitors Bureau was assigned responsibility for arrangement of transportation for observers from CDR to Las Vegas. No vehicles (sedans, carry-alls, or buses) were under operating control of the Passenger Branch or Visitors Bureau.

E. It was apparent from initiation of operations that communications was the greatest single bottleneck. Efforts were commenced the first month to augment communications facilities. Initially one local camp phone was given the Division, notwithstanding its class "A" status which permitted long distance calls to Las Vegas etc, it soon became obvious that demands on that instrument by the Freight Branch (during build-up period) taxed its ability. Additional phones were not obtained until after the first "shot". One additional "camp phone" was then installed and additionally one inter-connected "direct line" phone (with Signal Corps field telephone sets for instruments) was installed. This direct line connected the ATO and RTO plus one instrument in each of the Airlines and one instrument in Las Vegas in the Freight and Passenger Branches at CDR; since all instruments were on a "party line basis", a system of assigned "rings" for each office except the four Airlines was devised. A Las Vegas commercial telephone was installed at the ATO

Paragraph "E" continued.

to enable the ATO Personnel to connect the Passenger Branch to any one designated air carrier in Las Vegas by calling the air carrier and having the carrier answer his CDR telephone. This latter arrangement materially speeded up the ability of Passenger Branch to book reservations. Notwithstanding, the one line continued to be inadequate during peak operations. Pending installation of the above described facilities resort was made to dispatch of couriers to Las Vegas airport to accomplish booking of reservations during heavy work load periods. (2)

F. Personnel for staffing of the operations branches in Las Vegas, (seven EM plus three drivers for the ATO-RTO) were assigned there to on 8 May after arrangements had been made for them to be billeted at Nellis Air Force Base. Vehicles used by the group were based at Nellis. Later additional space for operation of a downtown motor pool was obtained. It was located in Las Vegas midway between the Union Pacific RR station (RTO) and McCarran Field (ATC) and normally consisted of ten sedans and four buses during peak periods. Experience however, seems to indicate that improved efficiency could be realized if such a sub-motor pool were located in the immediate vicinity of the municipal airport.

G. The Freight Branch was set up immediately upon arrival in camp to afford support during the camp "build-up" period. It operated on a normal work schedule (0700-1700) except when circumstances required otherwise. A Daily Log was maintained on GBL's received and likewise a Daily Register of GBL's issued. Freight was received by truck, rail and air. To accomodate after hour deliveries, EM of the Freight Branch were rotated on a daily "on call" basis after normal duty hours and if a shipment was received the "on call" EM was summoned by the Passenger Branch, (which was staffed on a 24 hour per day basis).

H. All commercial carriers contacted were co-operative within their respective capabilities, (Sections III & IV Discussion, for capabilities). The four (4) airlines serving the city of Las Vegas were usually able and willing to augment space allocations (or put on additional planes) during peak observer departure periods. The Las Vegas, Tonopah, Reno, Stage Lines, Inc., has an exclusive franchise on US Hwy 95 via Mercury and CDR and represents the only Commercial Bus service available to Camp Desert Rock. Experience demonstrated that Commercial Bus Service from CDR to Las Vegas was not adequate. If postponement of a "Shot" occured, the observers desired to go to Las Vegas, but there was such short notice for the bus line that in many instances they could not furnish required transportation for recreation runs. The Western Greyhound Lines operating from Las Vegas were used in movement of personnel to other points but such use required Army Transportation from CDR to Las Vegas. The Union Pacific RR would not firm up reservations on "shot" days; therefore few observers departed Las Vegas on D-day. On D-day plus one (1), additional equipment was add and most observers departing by rail were accommodated.

I. CAM and MAIN movements were processed as follows:

1. Upon the arrival of a CAM or MAIN the troop commander was contacted and he with a representative of the Commercial Traffice Division inspected the equipment. The TR for the airline or railroad and bus line was picked up, checked to be certain that it was correct, and given to the appropriate carrier.

2. A transportation information sheet was prepared in full by the Troop Commander, and each member of the CAM or MAIN was required to fill out a transportation information sheet to include his name, rank, serial number, point at which he joined the CAM or MAIN, home station and CAM or MAIN number. The Transportation Information sheet was not used for each member of the group if it was an organizational move.

3. Representatives of incoming MAIN a/o CAM units were required to report to transportation Office within 24 hours after arrival of unit to resolve any problems which may have arisen on inbound movements; to turn in any unused tickets(TR's or ALT's) and to be briefed regarding requests for outbound movements.

4. Not less than three days prior to departure date of each unit from CDR,

Paragraph I, 4 continued

OIC was intructed to contact the Transportation Officer to resolve details of his return travel.

5. Upon receipt of request for return travel and based on information received from OIC, the Transportation Officer submitted telephone request to CCCFT, Washington, D. C., immediately following "slot", (generally by 0530 hours D-day) for transportation; giving unit name, incoming main, CAM or MRO Number, return destination, date and time of departure requested, mode of travel; number of personnel, amount of baggage and impediments etc.

6. Return routing numbers normally were received by phone from CCCFT, Washington within (4) hours after request was submitted. A majority of the scheduled CAM flights departed NLT 2000 hours on D-day, a few were scheduled to depart the morning following D-day. The OIC of CAM or MAIN was informed of the quantity and type of Highway transportation to be furnished him for outbound movement to Las Vegas. He informed his group and was responsible for their loading on buses taking them to Las Vegas.

7. For CAM Movements, Passenger Manifests (Incl 6) were made up in quintuplicate from information previously furnished; Reports of Sevice and Reports of Inspection were attached in duplicate to two copies of the manifest (one copy for carrier) and given to OIC for his use on return trip. Remaining copies of manifest were used as working copies (by ATC in checking passengers aboard planes and for files).

8. For MAIN Movements railroad furnished train make up about 12 hours prior to time of movement. Based upon this information, car seating rosters were made up to be completed by units. Consists were made up in triplicate; one for train Commander, one for Troop Commander and one for file.

a. The passenger section was assigned responsibility for dispatch of departure TWX's to Transportation Officer upon departure of units.
(See Incl 1 for recommended personnel list for future exercise)
(See Incl 2 for recommended organizational structure).

VI. DISCUSSION - PASSENGER BRANCH

A. The Passenger Branch chief must be prepared to build up and operate the section from "scratch", as normally few trained personnel, supplies, directives or equpment can be expected to be on hand.

B. Inasmuch as some enlisted personnel assigned had not had previous experience in the type of operation to be handled during the Exercises a training program was initiated at Ft Ord and continuously conducted throughout the operation.

C. Since information had been received that publications and blank forms would not be available at Camp Desert Rock, necessary forms, publications, regulations etc, were arranged for prior to departure from Fort Ord, California. (Incl 7 - List of Forms used).

D. A Transportation Information form (Incl 3) proved most effective in obtaining information from the traveler for the purpose of making return reservations. Each traveler, upon arrival at the air or rail terminal was requested to fill out same.

E. Assistance was given by personnel on duty at the ATC-RTO in filling out the form, it was then taken to the Airline or Railway carrier reservation section concerned and the return routing and initial bookings were made. After the bookings were made the forms were sent by the first available courier or any Camp Desert Rock Driver to the Passenger Branch at Camp Desert Rock for final processing and handling as below described.

F. Processing of Transportation Information forms by Passenger Branch, Camp Desert Rock:

1. Upon receipt of forms from ATO-RTO a numerical sequence number is placed on upper right corner of the form.

2. Travelers rank, grade, and return destination are entered in a Numerical Reservation Register (See Incl Nr. 4).

3. Information as to routing, reservation made by carrier confirmation, if applicable; numerical reservation register number, travlers name and grage; date reservation made and initials of reservation clerk (filling out the card) was next entered on a "Reservation Card". See Incl Nr. 5. The reservation cards were furnished by the airlines.

4. Transportation Information form was then placed in a daily ticket folder for day on which traveler was booked to depart.

5. Reservation cards were placed in alphabetical order in a card index file.

6. Upon notification by traveler that he intended to depart, the reservation card was transferred to a "Dead File" and entry was made in Register (at corresponding line number) of date of departure. Note: When postponed shot required new reservations to be booked a new card was always prepared and basic information transferred from the old card; only one entry for a named traveler was made in the register.

7. Transportation Information forms were removed daily form ticket folders; and for those who had departed, transferred to a "Dead Folder" in numerical order; for those who had advanced their reservations the forms were re-filled in appropriate daily folder.

a. Reservations Booked were entered on card in green pencil.

b. Booking confirmed were entered on card in red pencil.

G. During the constant post-ponement of shots and requirements of a twenty-four (24) hour day operation up to two (2) weeks duration, requests for changes in reservations were consolidated by carrier to facilitate the calling in of such requests. For this purpose the transportation information forms were used; the reproduced fascimile of a reservation card on the reverse side of the form was filled in for the second time (and third time if required) reservation and a new card prepared as described above; the old reservation card being transferred to "Dead Card File". When more than three (3) reservations were made for an individual a blank transportation information form was stappled to the original to afford spaces for recording (on reverse thereof) information re-changed reservations.

H. The passenger branch utilized the direct telephone line runing from the passenger section at Camp Desert Rock to the RTO and ATO desks.

I. An example of how postponents of shots reflected on work loads is indicated by the placement of 4892 calls making 2,672 individual reservations to move 1,032 observers during July.

DISCUSSION - FREIGHT BRANCH

A. The Freight Section of the Commercial Traffic Division was organized to ship and recieve all freight for personnel and units stationed at Camp Desert Rock, Nevada.

B. Personnel of the Freight Section arrived at Camp Desert Rock one (1) month prior to the beginning of the exercise. The freight branch was set up immediately upon arrival at Camp to furnish support during the build up period.

C. The first duties of the freight section involved the collection of all GBL'S shipping documents and supporting papers that had arrived prior to the arrival of freight personnel.

D. A daily log was maintained on GBL'S received on inbound freight and likewise and outbound GBL register on GBL'S issued.

E. Local carriers in Las Vegas area were visited and information was obtained pertaining to their operating rights and the capacity of freight they could handle. All commercial carriers contracted were very cooperative. There are only two (2) carriers serving Camp Desert Rock with less than truck load delivery. They are Ringsby Truck Lines and Wells Cargo Truck Lines. The other lines serving Las Vegas and vicinity, turn their freight over to Ringsby and Wells Cargo. If cargo is less than a truck load and if loads are 10,000 pounds or more, the carriers will haul the freight into Camp Desert Rock. Ringsby Truck Lines make daily runs to Camp Mercury and Camp Desert Rock. (See incl Nr, 7 List of Carriers).

F. The Provost Marshall Office was contacted in reference to commercial trucks with shipments for Camp Desert Rock and arrangements were made upon arrival at the main camp gate for them to be sent directly to the Freight Branch office.

G. During the time shipments were being recieved, it was noted that most shipments were not accompanied by Army Shipping Documents as required. In order that units could receipt for shipments, a blank form was originated to take the place of the Tally Sheet copy of the shipping document including all of the pertinent information contained in a shipping document. This form proved adequate in receipting for shipments.

H. When shipments commenced arriving, no advance notice notice was received prior to their arrival at Las Vegas; It is sixty-five (65) miles to the nearest railhead and seventy-one (71) miles to McCarran field. As the unit must be notified and make arrangements for transportation and unloading of equipment; a problem was created when advance information was not known.

I. Several shipments of perishable items were received where shipments were rejected due to thawing enroute. All perishable shipments were inspected by a qualified food inspector before being redeived. These shipments were sent back to the shipper; GBL's and a rejected shipment report was established and shipped to the office of the appropriate Traffic Region.

J. During the beginning of the operation, shipments were received for units that had not yet arrived at this installation. This created a major problem as there was no storage space available. The large equipment was stored outside of the freight section under shelter and the smaller pieces kept inside.

K. Since the railhead was sixty-five (65) miles from Camp Desert Rock, there was a need for courier service. A driver was assigned to the freight branch with a duty assignment of making a daily trip to Las Vegas Monday through Saturday to pick up LCL shipments, railway express shipments and local government purchases and to pick up and deliver administrative forms and correspondence to the ATO and RTO.

L. Since all shipments weighing 10,000 pounds or more require a traffic control number, the Western Traffic Region, Oakland, California was notified and given information as required by AR 55-155. This information was usually given over the telephone or sent in TWX form when time did not permit otherwise. If time permitted, this information was put on a DA form 55-103 and fowarded by mail. Confirmation of traffic control was received by mail.

M. During the latter part of the exercise, prepartion of proposed movement tables was accompanied on outbound shipments for units returning to their home station. Units who shipped equipment to Camp Desert Rock and were to ship it back to their home station were contacted and the follow-

ing information was requested:

1. Amount of equipment to be shipped.

2. Description fo equipment, weight, cube, etc.

3. Date of shipment.

4. Destination.

5. Desired method of shipment.

6. Authorization for shipment.

M. Shipment by rail was kept to a minimum due to absence of rail facilities at Camp Desert Rock. Further limited blocking and bracing material was available. Normally an Engineer function, blocking and bracing was sometimes retarded due to the workload of the Post Engineer and untrained personnel; where this service could not be performed by government means, a commercial firm was paid to perform this service.

DISCUSSION OPERATION BRANCH

A. The Operation Branch was charged with responsibility of receiving observers and permanent party personnel at the ATO and RTO. Reviewing transportation information sheets, and making an initial outbound reservation for all incoming observer personnel. Permanent party personnel who were going to be at CDR for four (4) or five(5) months and groups traveling on CAM's or MAIN's were handled by passenger branch, Camp Desert Rock, Nevada. In addition it was charged with the responsibility for furnishing sufficent transportation to CDR.for all incoming personnel and acted as liaison between the freight carriers and the freight section.

B. Initially, most of the passengers arrived sporadically at the ATO and RTO so the assignment of personnel to man the ATO and RTO was progressive. Individuals who were assigned to the ATO and RTO worked with the Passenger Branch at CDR to learn the procedure to be used by that branch until they were required in Las Vegas. They were assigned to Las Vegas billeted and rationed at Nellis Air Force Base and assigned to duty as a unit. The ratinning became apreblem because of the distance between Nellis Air Force Base and the place of duty. Duty assignments to the ATO and RTO depended on the expected influx of passengers, passes and leaves, and to allow equitable distribution of working hours. The shifts varied from eight to twelve hours on duty to twelve to seventy-two hours of duty.

C. A sub-motor pool was set up at 700 South Main ST. in Las Vegas and during the shot period (approx three days before the scheduled shot to three days after the scheduled shot. Ten (10) sedans and four (4) were normally assigned. The drivers were billeted at Nellis Air Force Base. If more equipment was required it was furnished on a trip basis from the motor pool at CDR. Gasoline was obtained at Nellis Air Force Base, if the vehicle did not have enough to make a special trip to Nellis Air Force Base, otherwise gasoline credit cards were used and gasoline was obtained in Las Vegas. The location of this motor pool proved to be ineffective, however, as most of the passengers arrived at the ATO and most of the transportation was parked at the ATO or traveling on the road to CDR. The posibility of obtaining parking space at McCarran Airfield has been investigated, and should be employed in future operation. A firm policy on the use of this transportation was not available, so a policy of furnishing transportation from the ATO to RTO to CDR upon arrival of the observers was initiated, except for General Officers. Many of the observers desired to stay in Las Vegas at hotels overnight prior to reporting to CDR, or would come to town on VOCO and desire transportation from hotels to CDR, this type transportation was not furnished.

D. Individuals and groups were processed as soon as possible and moved to CDR. The processing consisted of obtaining return reservations information (See Incl Nr, 3) and making an initial reservation as soon as possible. On incoming CAM's or MAIN's the ATO/RTO personnel should have

a check list and be assigned to perform specific functions. Some CAMS arrived without manifests, some arrived with round trip TR's which could not be used because of the unknown time, date and airlines to be used on departure. The check list helped to detect these deficiencies immediately. Due to unexpected arrival of CAMS or a major unknown change in arrival time, military bus transportation was required at times as an expedient because the commercial bus line was not prepared to make the move. A baggage truck should be assigned to each military bus. This situation was not found to exist on incoming MAINS and the commercial bus line handled the move without too much difficulity. The reverse procedure for handling outgoing CAMS and MAINS should be followed. A check list should be made up in advance and individuals assigned to specific functions. Observers departing on CAMS may arrive at the airport as individuals, this presented a problem with the storage of baggage until flight time. The airport manager designated an area for storage of baggage and signs were placed on the wall indicating the destination of the various piles.

F. Communications were inadequate during this exercise and it noted that this appeared also in the report of the 1956 test. There should be a minimum of three direct connections to Las Vegas. One connecting the ATO, RTO, Passenger Branch, WAL, and Bonanza Airline. (Southwest Airlines should be tied in with this line, if they are operating at McCarran Field during the next exercise), one connecting the passenger branch and TWA, and one connecting the passenger branch and UAL. (The connections between the Airlines can be varied as the anticipated work shapes up in future tests). The importance of good communications cannot be overstressed.

VI. CONCLUSIONS: A. That definite plans be formulated for training personnel in advance of reporting for exercise.

B. That personnel assigned to Commercial Traffic duty be hand picked. A working knowledge of commercial traffic operations is required, likewise a pleasant manner, appearances, ability to work with the public and VIP'S.

C. That rail moves of freight and impediments be kept to a minimum because of the distance (65 miles) of the railroad from this installation.

VII. LESSONS LEARNED: A. That CAM'S or MAINS be utilized as much as possible for incoming and outgoing personnel due to limited space available on eastbound flights at this terminal.

B. The importance of good communications between carriers and this office should not be over-looked.

VIII. RECOMMENDATIONS: A. Communications should be planned and budgeted at least two (2) months prior to the first shot.

B. That every effort be made to secure sufficent classification list, AAR loading rules, and other appropriate publications in addition to a complete set of Army Regulations and Special Regulations of the 55 series, JTR, and CTB-2.

C. Consideration be given during future exercises to experienced men for operation of that office.

D. That personnel attached for duty in Commercial Traffic Division be billeted together because of unusual working hours and to develope a desirable state of morals and team work within the section.

E. That a storage space be available for inbound shipments which are received prior to arrival of units.

F. All government shipment be marked Transportation Officer, Camp Desert Rock, Nevada, as during the operation, some shipments arrived at Indian Springs Air Force Base, requiring dispatch of transportation and personnel to provide pick up at an additional point.

G. That original and memo copy #7 of theGBL be sent directly to the consignee. This will reduce the amount of lost GBL's and will speed up accomplishment.

H. Advance information be submitted to Transportation Officer, Camp Desert Rock, Nevada prior to arrival of shipments so that unit concerned will have sufficent time to prepare for unloading.

I. That the freight section be set up at least one (1) month prior to opening of camp to familarize personnel with procedure and to arrange for facilities to accomodate incoming shipments, as numerous shipments can be expected to arrive prior to camp opening and arrival of units.

J. That funds be made available for unloading and delivery of cargo to Camp Desert Rock, Nevada, by commercial means if rail is used for incoming shipments.

K. Funds for Per Diem, under provisions of AR 35-3080, should be budgeted so as to eliminate the problem of rationing personnel assigned in Las Vegas, Nevada

L. Prior to the arrival of the first observer group, a policy should be published by Camp Headquarters on the use of vehicle transportation.

M. Round trip transportation requests should not be issued for incoming CAM's or MAINS by the station of origin because of the unknown time, date, and airline of departure.

N. Storage space for inbound cargo, which arrives prior to the consignee, should be requested as soon as practicable.

O. Action should be taken to trace original and number seven (7) copies of GBL, which does not arrive with the shipment, not later than five (5) days after the arrival of the cargo.

Incls
1. Recommended Personnel For Operation
2. Organizational Chart
3. Transportation Information Form
4. Numerical Reservation Register
5. Reservation Card
6. Passenger Manifest List
7. List Of Commercial Carriers Las Vegas Area
8. Blank Forms Required

HAROLD B. DONAHUE
Major, TC
Transportation Officer

RECOMMENDED PERSONNEL
FOR OPERATION OF
COMMERCIAL TRAFFIC DIVISION

TITLE	GRADE	MOS	NUMBER
TRAFFIC DIVISION			
1. Chief Commercial Traffic Div.	Maj	0612	1
2. Movement Supervisor	E-7	719.6	1
3. Movement Specialist	E-5	719.1	1
4. Clerk Typist	E-4	711.1	3
PASSENGER BRANCH			
1. Movement Superisor	E-7	719.6	1
2. Movement Supervisor	E-6	719.6	3
3. Movement Specialist	E-5	719.1	9
OPERATION BRANCH			
1. Field Transportation Officer	Capt/Lt	0612	2 *
2. Movement Supervisor	E-7	719.6	1
3. Movement Specialist	E-5	719.1	9
FREIGHT BRANCH			
1. Movement Supervisor	E-7	719.6	1
2. Sr. Document Clerk	E-5	719.1	1
3. Sr. Cargo Checker	E-5	719.1	3
4. Clerk Typist	E-4	711.1	1

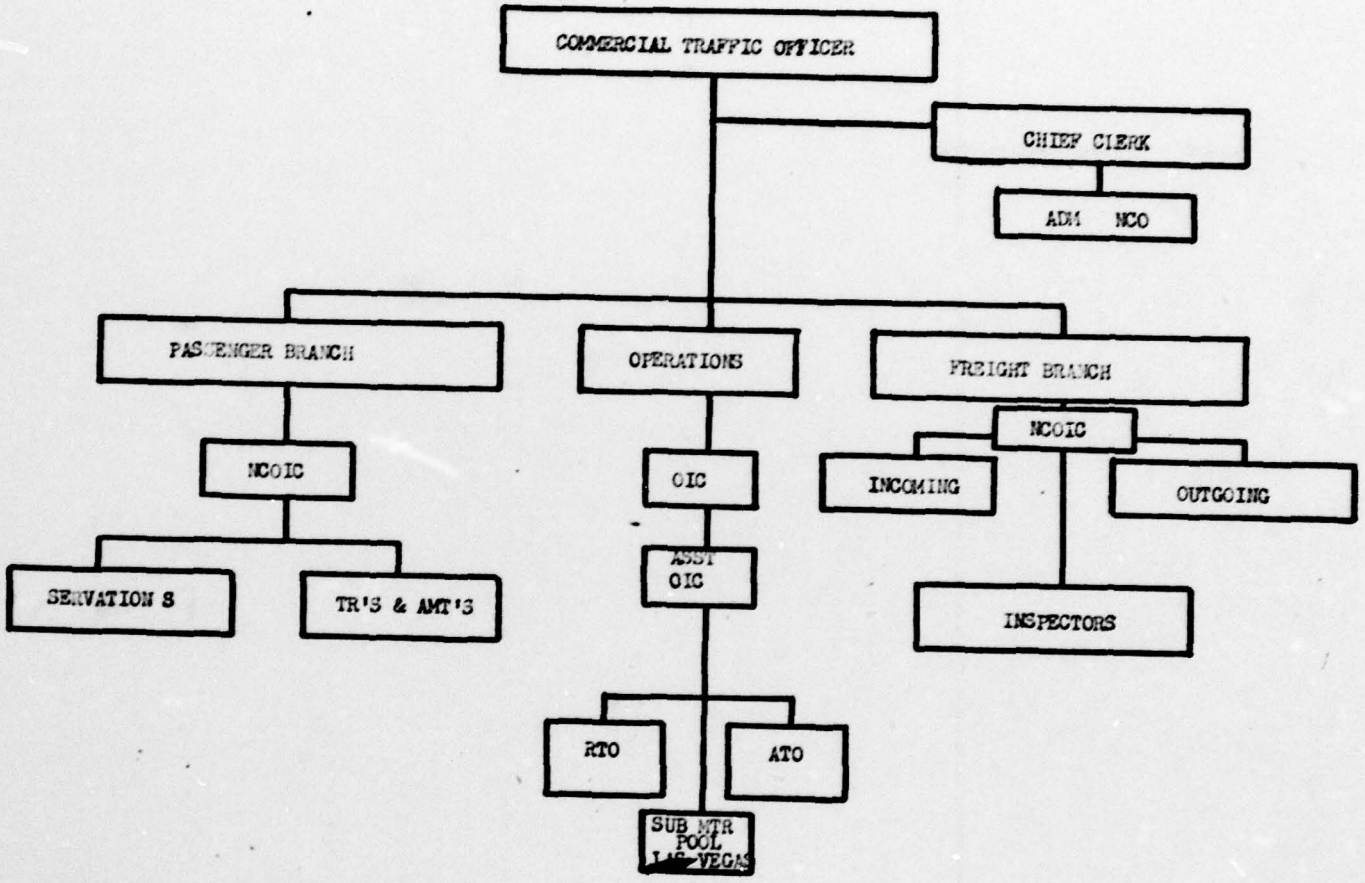
TOTAL: 3 Officers
34 Enlisted Men

* Can be used in Passenger and Freight Branches between shots.

719.1 - 23
711.1 4
719.6 7

Incl 1

OFFICE OF THE TRANSPORTATION OFFICER
COMMERCIAL TRAFFIC DIVISION
CAMP DESERT ROCK, NEV.



1

SIER 1 1157

POST TRANSPORTATION OFFICER
CAMP DESERT ROCK
LAS VEGAS, NEVADA

15 August 1957

All reservations out of Las Vegas Area MUST be confirmed by the Transportation Office.

TRANSPORTATION INFORMATION

1. NAME Brown (Last) W. (First) F. (Middle) Major (Grade)

2. Attach one Copy of Orders _____

3. Point of Origin Madison, Wisconsin (City) (Station) (Field)

4. Type of Ticket now holding, (Check Applicable Boxes) First Class ____
Tourist ____ Air Commercial X Air Military ____
TPA ____ Rail First Class X Tourist one Way ____
Round Trip X

EXAMPLE

5. Routing Inbound (Taken from Ticket)
a. Initial Carrier North Central
b. Intermediate Routing Via Chicago - United Air Lines
c. Destination Carrier United Air Lines

6. Routing on return trip (desired) if other than reverse of inbound record
a. Carrier United - North Central or TWA
b. Route Chicago - Madison

7. Departure date NOT LATER THAN D - Day (DATE) 8 August 1957 (HOUR)

8. Quarters Address BOQ _____ HOTEL _____

Signature /s/ W.F. Brown (NAME) Major (RANK)

Incl 3

NUMERICAL RESERVATION REGISTER

NUMBER	RANK	NAME	DESTINATION	DEPARTURE
~~1152~~				
1153 1				
1154	MAJ	B.O.N W F	MADISON	26 JULY
1155		1	1	
1156				
		STEP ~~SEPTEMBER~~ 2		STEP ~~SEPTEMBER~~ 6

FLT	DTE	CODE	FRM	TO
UAL 616	24/7	2120 / 1345	LAS	DEN
UAL 604	25/7	0049 / 0600	DEN	CHI
NCA 462	25/7	0800 / 0925	CHI	[illegible]
	0025	23/7		2CT

TKT. NO.

TKT'D BY DATE TIME

WILL CALL MAIL ATP DEPOSIT

CNCLD. BY: [illegible] 24/ TIME DATE AGT

PTY	NAME	INITL
1	BROWN, W. F	
	MAJ	

TIME	AGT	DATE	LIMO
0900	2CT	23/7	1454

LOCAL ARR

VIA	DATE	FROM

CONTACT INFO

D-DAY NLT 8/6/57

RES/HOTEL BUSINESS

Orel 5

OFFICE OF THE TRANSPORTATION OFFICER
COMMERCIAL TRAFFIC DIVISION
Camp Desert Rock, Nevada

AMCDR-TRO 22 July 1957

PASSENGER MANIFEST LIST

CAM Nr and name of carrier

ORIGIN AND DATE:

DESTINATION:

Grade, Name and Svc. Nr.	Grade, Name and Svc. Nr.
Ft. Campbell, Kentucky	USA Mil Dist. Nashville, Tenn
Maj Edson R Mattice 0358222	* Col Silas B Dishman 029052
Capt Oscar E Holtz 0988609	Lt Col John F DeV Patrick 0290515
Maj Donald A Crawford 027881	Lt Col Dolf W Walters 01288147
1st Lt Charles P Griffen 072884	
2nd Lt George K Withers Jr 073934	Ft. Bragg, N. C.
MSgt Alfred S Glandnecy RA 14234452	
MSgt Burney C Jetton RA 38739363	* Maj Carlton R Horne 02045028
Sfc Walter J Partridge RA 68800370	Capt Joseph J Yurko 0995246
CH (Maj) Franklin T Gosser 0933511	Capt Alfred E Williams 01877794
1st Lt Janes E McDonnel 066487	Sfc Ralph M Karr RA 15357234
MSgt Sherman Thompson RA 967321	1st Lt William C Buckheit 070639
1st Lt Joseph Perlow 068672	
MSgt Ralph Israel RA 20536832	
Sfc Jack H Dasnett RA 12343985	
Sfc Blaine Thacker Jr RA 15473334	
Maj Gordon B Haynes 01996586	
2d Lt Joe F Burke 04062707	
1st Lt John W Klingelhoefer 01924933	
Capt James C Kussy 01942092	
1st Lt Joseph C Wilson 068781	
CH (1st Lt) Clifford E Keys 02272284	
* Maj John B Kope 040812	
Maj albert D Cassidy 01101773	
Sfc San M Garrett RA 24900094	
2nd Lt John H Oakes 073811	
2d Lt JanesW Branlet 04074565	
Capt Raymond K Whale 01120616	
CWO W-2 Rickard A Poe W2005763	
1st Lt Donald B Schroeder 070498	
1st Lt Jack F Angel 068894	
CSO W-2 Chester J Bahrke W2147909	

EXAMPLE

* Officer-in-Charge

HAROLD B DONAHUE
Maj TC
Transportation Officer

Incl 6

11

LIST OF COMMERCIAL CARRIERS LAS VEGAS AREA

AIR LINES - McCarran Field, Las Vegas, Nevada

Bonanza Air Lines - DU 44100

Trans World Air Lines - DU 21100

United Air Lines - DU 20509

Western Air Lines - DU 22105

RAIL CARRIER - Fremont and Main Las Vegas, Nevada

Union Pacific Railroad - Mr. Neustram, General Agent - DU 4-9000

BUS CARRIERS - Greyhound Bus Station 110 S. Main St. Las Vegas, Nevada

Continental Trailways Bus System
123 South 1st St. Las Vegas, Nevada
DU - 4-1560

Las Vegas - Tonopah - Reno Stage Lines Inc.
917 Stewart Ave. Las Vegas, Nevada
Mr. Mikulich (President) DU 4-1230

Greyhound Lines:
110 S. Main St. Las Vegas, Nevada DU 2-2640

HIGHWAY CARRIERS

Fleetline Trucking Service
1500 South A Street Las Vegas, Nevada
Mr. James T Wells DU 22460 or DU 22461

Pacific Intermountain Express
West Utah Avenue Las Vegas, Nevada
Mr. Guern Royster (Branch Mgr.) or
Mr. Carson (Asst Branch Mgr.) DU 4-6832

Arizona, Nevada Express
2215 N. Main Street
Mr. Mitchel Tabeek (Branch Mgr.) DU 44134

Garrett Trucking Service
2850 Bracken Road Las Vegas, Nevada
Mr. George Carmichael DU 2-7641

Ringsby Trucking Service
131 West Utah Avenue Las Vegas, Nevada
Mr. Dave Siegal (Terminal Mgr.) or
Mr. Alvidrez (Asst Terminal Mgr.) Du 24739 or DU 24740

Wells Cargo Trucking Company
Cinder Road Las Vegas, Nevada
Mr. Ray Embry DU 4-0700

Interstate Motor Lines
2236 North Main St. Las Vegas, Nevada
Mr. Robert E Kylius

Milne Trucking Service
1303 North Main St. Las Vegas, Nevada
Mr. Norman E Cubler (Manager) or
Mr. Joe West

CARLOADING AND UNLOADING

Nevada Carloading and Unloading
1000 South A Las Vegas, Nevada Du 2-6575

Encl 7

The following is a list of publications and blank forms required for use of Commercial Traffic Division.

ACCOUNTABLE FORMS

Std Form 1169 - Transportation Request

Std Form 1103 - Government Bill of Lading

DD Form 652 - Army Meal Ticket

NON - ACCOUNTABLE

CTB #2

ARs & SRs 55 Series

Joint Travel Regulations

Uniform Freight Classification Guide

National Motor Freight Classification Guide

Air, Rail & Bus Routing Guide

Joint Bus Military Agreement #7

Joint Military Passenger Agreement

Std Form 116 - Request for Shipment

Std Form 117 - Inventory of HHGs

Std Form 1109 & 1109a US GBL Original & Memo Cont Sheet

Std Form 1108 - Certificate in Lieu of Lost GBL

DA Form 110 - Tally-in & Tally-out

DA Form 450-5-C - Army Shipping Document.

DD Form 96 - D/F

DD Form 730 - Receipt for unused Transportation Request & Army Meal Tickets

DD Form 626 - Inspection Report

DD Form 475 - Report of Final Train Inspection

DD Form 474 - Report of Service

DD Form 55-103 - Domestic Route Order (Long Form)

6AA Form 588 - Request for Convoy Clearance

6AA Form 587 - Request for Oversize Overweight Clearance

2nd 8

OFFICE OF THE TRANSPORTATION OFFICER
Camp Desert Rock, Nevada

2 September 1957

SUBJECT: Letter To Successor

TO: Operations officer, TMP
Camp Desert Rock Exercise IX
Camp Desert Rock, Nevada

I. SECTION ORGANIZATION: This section is under the operational supervision of the Motor Transport Officer. It is directly responsible for the organization of the vehicle park; assignments of drivers to various types of vehicles; and proper dispatch and control of vehicles assigned and/or attached to the Camp Desert Rock Transportation Motor Pool. The task vehicles and personnel of the Transportation Battalion are attached to the Transportation Motor Pool for operational control. (See inclosure Nr 1, Organizational Chart).

II. PERSONNEL REQUIREMENTS: A. To perform the required maintenance, repair, and supply qualified drivers as required; the personnel of the three transportation companies attached to a Transportation Battalion are required and should be used exclusively in support of the Transportation Motor Pool and not utilized as a source of personnel for post fatigue details.

B. Prior to arrival at Camp Desert Rock, instructions must be forwarded to each transportation company to have their driver personnel qualified as thirty-seven (37) and twenty-nine (29) passenger bus operators as well as five (5) Ton Tractors Trailer Operators.

C. No recommended changes in organization of personnel.

III. TROOP LIST: (furnished by S-3)

IV. TOTAL PARTICIPATION: (furnished by S-3)

V. SUMMARY OF OPERATIONS: . The principal requirement of the Transportation Motor Pool during this exercise was the transporting of personnel to the foward areas of the Nevada Test Site for the purpose of participating in the various shots and then returning these personnel to Camp Desert Rock. The accomplishment of this requirement was ordinarily handled in the following manner:

A. The Operations Officer would be summoned to the S-3 Officer where he would be briefed as to the location of the shot; the number of participants; where participants were to be located; where vehicles were to be parked; and the times in which all roads were to be cleared of Camp Desert Rock vehicles.

B. Following this briefing the Operation Officer in conjunction with his assistants makes a reconnaissance, determines compositions of the convoys, prepares March Tables, vehicle rosters and submits this information to the S-3 Section for inclusion as the Transportation Annex of the Operation Order.

C. In addition to the above the Transportation Motor Pool is responsible for the furnishing of transportation to the various participants and projects involved in the exercise, as well as the furnishing of transportation support for the Station Compliment and the supporting of Camp Desert Rock transportation. To adequately meet this requirement a user-driver system of operation had to be established as the units attached to the Transportation Motor Pool could not furnish the number of drivers required for the above mission.

D. In connection with support of Camp Desert Rock the large single requirement was the hauling of water from Indian Springs Air Base and Bartley's Ranch (a round trip of forty-four (44) miles) to Camp Desert Rock. This requirement of the Transportation Motor Pool necessitated twenty-four (24) hour operation. In that units were operating with obsolete equipment and the fact that the wells and the pumps were not adequate for the amount of water to be pumped, the water run mission was the greatest of our many headaches.

E. In Las Vegas a sub-motor pool was established for the purpose of transporting incoming observer personnel from Las Vegas to Camp Desert Rock. This was a fluctuating type operation in that during the incoming periods, the workload was heavy and during the outgoing phase following the shots the workload would be heavy. The lulls would occur during the periods between scheduled shots and when the periods between shots was excessive the personnel assigned to the sub-motor pool would be returned to Camp Desert Rock and only skeleton crew maintained in Las Vegas. Personnel were quartered at Nellis Air Force Base and ate all meals at Nellis except for those which were consumed while they were on duty. Enlisted men were reimbursed for the meals they purchased from their own monies while on duty in Las Vegas. This arrangement was deemed necessary due to the distance to Nellis Air Force Base and the exacting meal hours in effect at Nellis.

VI. CONCLUSIONS: A. The minimum personnel required to operate the Transportation Operation Section are dispatchers, drivers, and truck masters of three transportation truck companies, either medium or heavy truck companies, other than the maintenance, administrative, supply, and mess personnel.

B. Vehicles over five years old are definite handicaps in this desert area due to frequent major engine and power train failures. This is particularly evident in the performance of the buses, sedans, and the older TO&E vehicles.

C. Ten (10) four-thousand (4000) gallon tankers could supply all the water required for an operation the size of Desert Rock VII and VIII hauling over fifty (50) mile turn around.

D. Higher standards of performance could be attained if post fatigue details eliminated.

E. A situation which developed during every shot period was a requirement to furnish officer personnel for duties as Escort Officers for observers. This, on several occasions necessitated using NCO's as Serial Commanders and Trail Officers on convoys because the officers had been placed on escort duty.

VII. LESSONS LEARNED: A. Adequate commercial transportation for recreational purposes is not available from Camp Desert Rock to Las Vegas. It is necessary to furnish transportation upon approval of Post Headquarters for Special Service recreational programs.

B. Buses, both twenty-nine (29) and thirty-seven (37) passenger, operating in the NTS should carry an extra five (5) gallons of water and one (1) or two (2) quarts of oil when operated independently and adequate water and oil carried when convoys operate in the NTS, especially during day light operations.

VIII. RECOMMENDATIONS: A. Personnel participating in future exercises must be fully qualified to drive all types vehicles up to five (5) ton tractors and trailers. Mechanics in TO&E units should insofar as possible be trained to operate wrecker M-62.

B. Prior to participating in an exercise of this nature all personnel should be cleared for access to classified information up to and including SECRET. In this exercise one unit was instructed to obtain CONFIDENTIAL clearances for all personnel. On arrival at Camp Desert Rock it was learned that all personnel were required to have a minimum security clearance of SECRET. Thus new clearances had to be initiated here at Camp Desert Rock, creating an additional workload, tying up drivers etc. This incident greatly effected the operations section of the transportation motor pool in that drivers who were to go into the foward area of NTS were required to have a SECRET clearance and a Camp Desert Rock badge issued by AEC. This threw the greatest portion of the driving load on the same individuals and in many instances they were required to drive as many as twenty hours a day during shot periods.

C. Vehicles compromising the GTA fleet of the Transportation Motor Pool should very definitely be late model vehicles. Because of the age of the majority of the vehicles the maintenance problem became intolerable and particularly during shot periods when badged mechanics were required to drive because of the situation cited in the preceeding paragraph.

D. Post details placed an undue strain on operations throughout the exercise because of the drain on driver and mechanic personnel. Units attached to the transportation motor pool were required to furnish the following daily details:

1. In addition to the above the units were continually called on for details to dig trenches in the foward area, the hauling of gravel, painting of buildings, waiters for VIP Mess, details to Post Engineer, details to the AG.

2. Again in view of the badge requirements the detail situation made the meeting of cometments almost an impossibility. Wherever possible non-badged drivers were utilized to the maximum on comitments which required no security clearance.

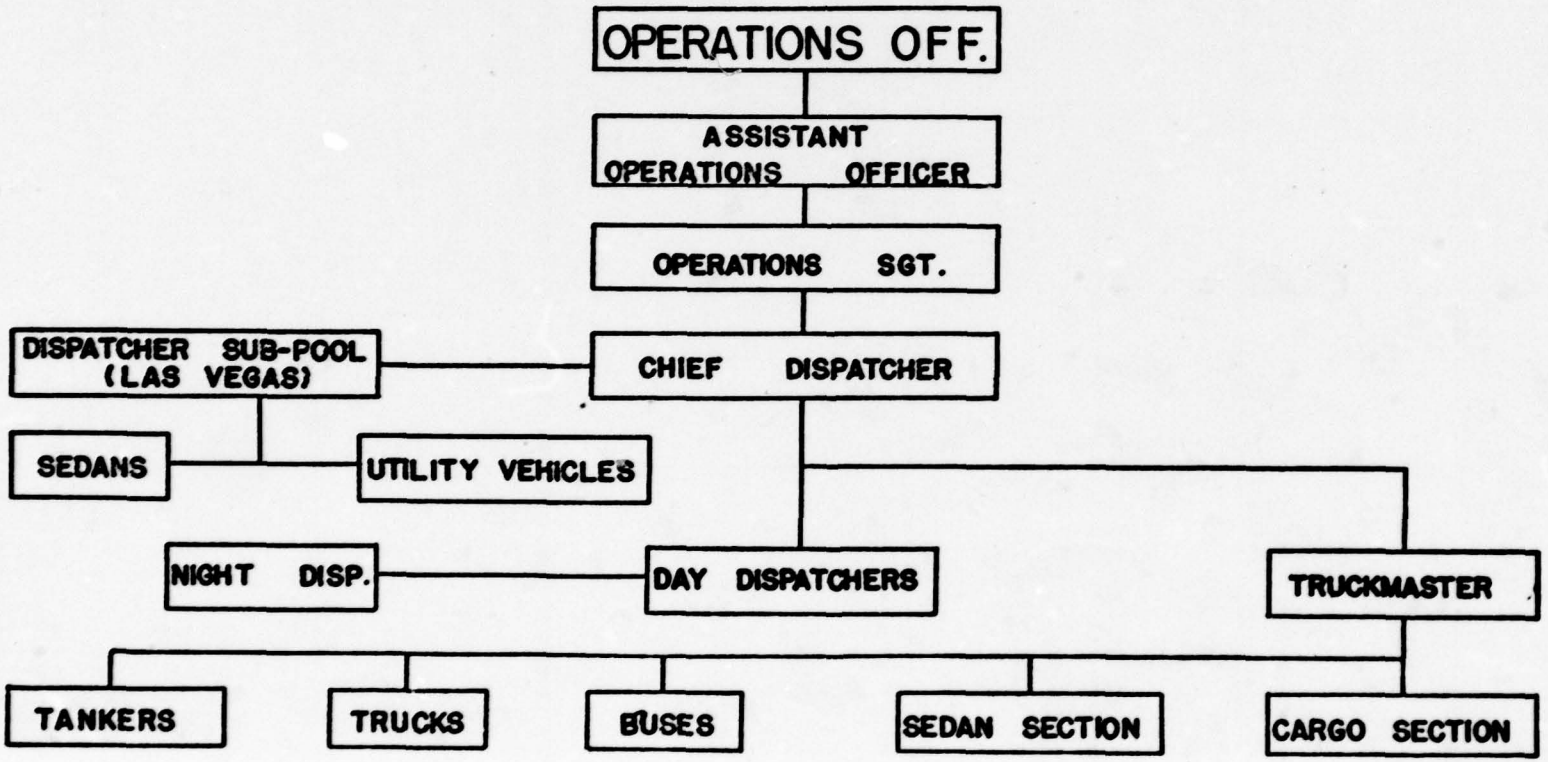
E. For the future exercises the following change to the composition of GTA fleet is recommended: (See incl Nr 2 proposed GTA Fleet for TMP)

1. Prior to participation in such an exercise participating units be furnished with a comprehensive outline of what to expect, equipment personnel required.

2 Incls
1. Organizational Chart
2. Proposed GTA Fleet for TMP

TIMOTHY A. INGRAM
Captain, TC
Operations Officer

ORGANIZATION CHART
OPERATIONS BRANCH
TRANSPORTATION MOTOR POOL
CAMP DESERT ROCK, NEV.



PROPOSED GTA FLEET FOR
TRANSPORTATION MOTOR POOL FOR EXERCISE IX

		AUTH	ASGD	PROPOSED
1.	AMB. Lt 4x2	2	3	4
2.	AMB, METRO	1	1	2
3.	AUTO 5 Pass Lt	35	67	45
4.	BUS 27-33 Pass 4x2 Boc	22	25	15
5.	BUS 36-43 Pass 4x2	30	17	25
6.	TRUCK ¼T 4x4 Utl	50	45	50
7.	TRUCK ½ T 4x2 P.U.	18	27	20
8.	TRUCK 1½T 4x2 S&P	24	31	15
9.	TRUCK 2½ 4x2 S&P	12	14	12
10.	TRUCK 2½ 4x2 1200 Gal T.	4	7	6
11.	TRUCK 5T 4x2 Dump	5	0	2
12.	TRUCK 5T 4x2 Tractor	3	3	8
13.	TRUCK 10T 4x2 Tractor	3	2	2
14.	TRUCK, Wrecker, Coml Type	2	0	0
15.	SEMI-TRL 10T Dt 26' S&P	2	2	2
16.	SEMI-TRL 10T Dt 26' Van	2	0	0
17.	SEMI-TRL 20T 4W 34' S&P	1	1	1
18.	TRUCK 3/4T 4x4 Car go	6	6	16
19.	TRUCK 3/4T 4x4 AMB.	3	3	1
20.	TRUCK 2½T 6x6 Cargo	6	6	6
21..	TRUCK5T 6x6 Tractor	6	6	6
22.	TRUCK 5T 6x6 Wrecker	6	4	4
23.	TRAILER 1½T Cargo M-105	9	9	
24.	SEMI-TRL Fuel Ser. 4W 4000 Gal.	1	1	1
25.	SEMI-TRL Water 4W 4000 Gal.	2	2	7
26.	TRUCK 2½T 1000 Gal. Wat.	0	1	1
27.	TRUCK ½ T Carry All	0	7	10
28.	TRUCK 2½T Trl Wrecker	0	2	2
29.	TRUCK ½T Panel	0	1	3
30	Tractor, refrigerated 10ton	0	0	2

(The number of vehicles by type in proposed column was developed from average usage data obtained from daily dispatching record of motor vehicles and requested for vehicles).

Incl Nr. 2

OFFICE OF THE TRANSPORTATION OFFICER
Camp Desert Rock, Nevada

31 August 1957

SUBJECT: Letter To Successor

TO: Maintenance Officer MTD
Camp Desert Rock Exercise IX
Camp Desert Rock, Nevada

I. SECTIONAL ORGANIZATION: The organization and function of the maintenance branch required the services of two (2) officers and fifty-nine (59) enlisted men. Total number of GTA vehicles was three hundred thirty-three (333). For a detailed breakdown of the organization of the assigned maintenance personnel, See Incl No 1.

II. PERSONNEL REQUIREMENTS: No Recommended Changes.

III. TROOP LIST: (furnished by S-3).

IV. TOTAL PARTICIPATION: (furnished by S-3)

V. SUMMARY OF OPERATIONS: A. During the period 5 April 1957 thru 3 May 1957 preceding the arrival of the maintenance party, the maintenance functions in support of the Camp Desert Rock Motor pool were performed by personnel of the maintenance section of the 2nd Transportation Company (Med Trk)(Petrl).

B. Upon the arrival of the advance party 4 April 1957 steps were taken to organize and establish the physical setup for the Motor Pool Maintenance Branch. The Maintenance Officer established liaison with the Transportation Supply Officer for parts to repair vehicles.

C. Normal GTA maintenance and functions were followed by the maintenance branch during the operational phase. Some difficulty was encountered early in the operation in obtaining spare parts due to funds not being made available to to Transportation Corps Supply Officer. Ordnance did not know type of vehicles the 26th Transportation Battalion had for hauling water and therefore did not have parts available. If successor has Fageol Buses, parts will have to be shipped from Kent, Ohio.

D. Utilizing the personnel of the maintenance branch, a six (6) station production-line maintenance system was organized. The purpose of this was to expedite the processing of GTA vehicles for return to their assigned station. As vehicles were turned over to the maintenance branch by the operations branch, they were processed, repaired as needed, and placed in a parking lot in their order of return to assigned stations. This production line method proved to be extremely satisfactory, permitting normal maintenance operations to continue and to obtain the utmost utilization of man power.

E. Tools for the operation were furnished by TO&E Units of the 26th Transportation Battalion. Personnel for the maintenance operation were procured from the TO&E Units. During the operation a high deadline rate was encountered. This was due to worn out obsolete vehicles and lack of funds being allocated from Higher Headquarters. Catalogs or pricing guides were not available to expidite requisitions by the Purchasing and Contracting Officer.

SUBJECT: Letter To Successor 31 August 1957

VI. CONCLUSION: A. That a successful maintenance operation can be performed if necessary spare parts are procured immediately and experienced driver personnel are provided from the Transportation Motor Pool.

B. Higher Headquarters make available funds to Transportation Corps Supply for immediate ordering of parts and supplies for Transportation Maintenance Section.

VII. LESSONS LEARNED: That funds were not immediately available for purchase of spare parts delaying maintenance operations.

VIII. RECOMMENDATIONS: A. Recommend commercial firms in Las Vegas be notified ahead of time.

B. Recommed that parts supply be placed under the maintenance officer instead of the S-4 Section. (By)

C. That a large permanent type building be made available for maintenance operations. This is extremely important, as maintenance operations during heavy wind and dust conditions in summer months (100 to 115 degrees) are extremely hot for men who have to lay on fenders to diagnose engine troubles.

2 Incls
1. Breakdown of TC Maint Section
2. Organizational Chart & Equipment

CARL D. STANARD
Captain, TC
TMP Maintenance Officer

MAINTENANCE OFFICER
One Captain

ASST MAINTENANCE OFFICER
One 1st Lieutenant

MAINTENANCE SUPERVISOR
One E-7

ADMINISTRATIVE BRANCH

SHOP FOREMAN
One E-7

INSPECTION SECTION
Two E-6
One E-4

CHIEF CLERK
One E-5

COST ACCOUNTING CLERK
One E-2

RECORD CLERK
One E-2

CLERK TYPIST
One E-3

SHOP MAINTENANCE

58th TRANS CO:

HEAVY MAINTENANCE
One E-6
One E-4
Three E-2

TO&E VEHICLES
One E-3
Two E-2

TO&E TOOL ROOM
One E-2

TO&E PARTS MAN
One E-2

2ND TRANS CO:

BUS MAINTENANCE
One E-5
Two E-4

TO&E VEHICLES
One E-6
Two E-5
Three E-4
Two E-3

TO&E TOOL ROOM
One E-3

TO&E PARTS MAN
One E-4

531ST TRANS CO:

LIGHT MAINTENANCE
One E-6
Five E-5
Five E-4
Three E-3
Six E-2

TO&E VEHICLES

TO&E TOOL ROOM
One E-5

TO&E PARTS MAN
One E-4

LUBRICATION RACK
Two E-3
One E-2

ORDNANCE PARTS MAN
One E-4

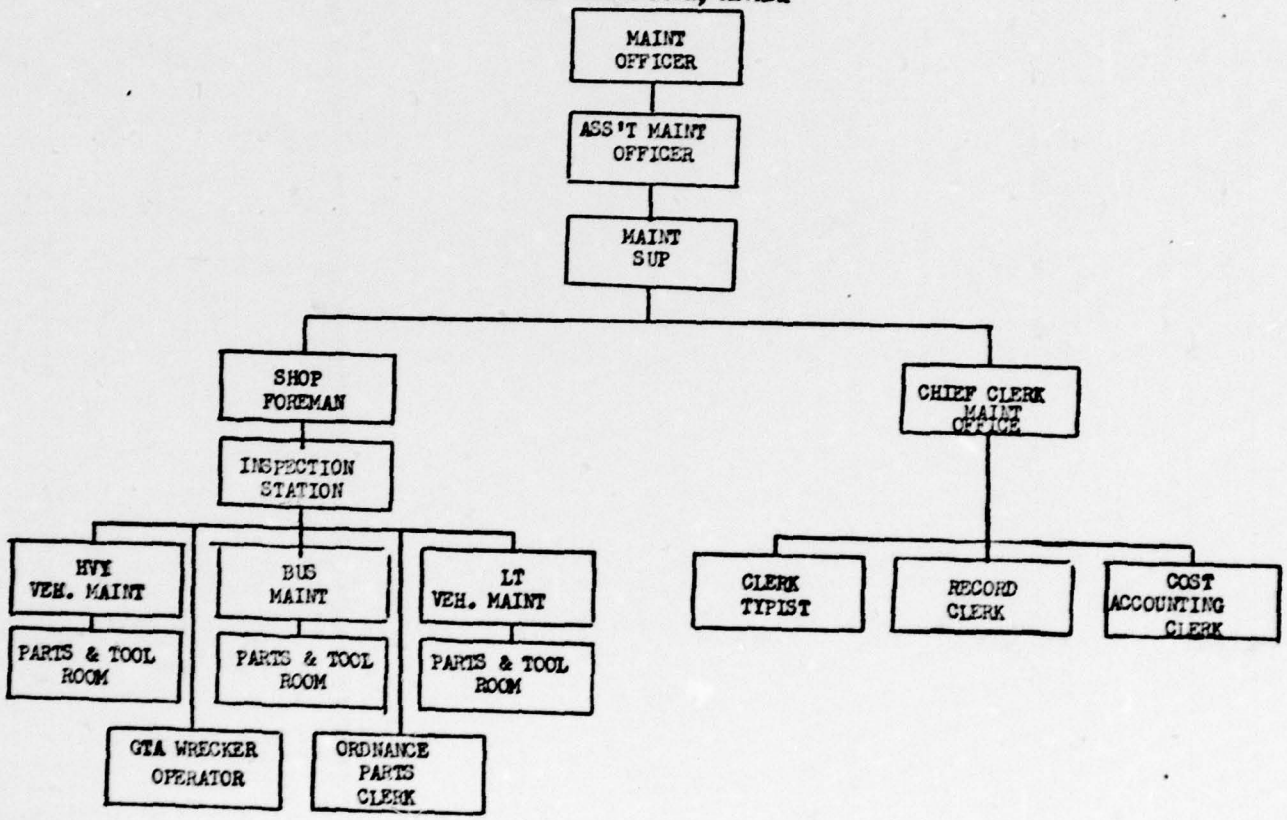
GTA WRECKER OPERATIONS
One E-6
One E-5
Three E-4
One E-3

Inclosure # 1

Inclosure # 2

ORGANIZATIONAL CHART TC MAINTENANCE

MAINTENANCE BRANCH
CAMP DESERT ROCK, NEVADA



OFFICE OF THE TRANSPORTATION OFFICER
Camp Desert Rock, Nevada

4 September 1957

SUBJECT: Letter to Successor

TO: Transportation Corps Supply
Camp Desert Rock Exercise IX
Camp Desert Rock, Nevada

I. SECTIONAL ORGANIZATION: The organization and function of the Transportation Corps Supply required the services of two (2) officers and six (6) enlisted men. For a detailed breakdown of the organization of the assigned maintenance personnel, (See Incl No. 1).

II. PERSONNEL REQUIREMENTS: No Recommended Changes.

III. TROOP LIST: (Furnished by S-3).

IV. TOTAL PARTICIPATION: (Furnished by S-3)

V. SUMMARY OF OPERATIONS: A. The TC Supply Section arrived at Camp Desert Rock with the Advance Party approximately thirty (30) days prior to the Main Body. The itinial period was spent assembling the GTA fleet, which consisted of the following type of vehicles:

1/4 T Truck M38	M 52 w/Trailer
1/2 T Pick up Truck	Sedans
1/2 T Carryall	Buses
1 1/2 T S&P	M 62 Wreckers
2 1/2 T S&P	Ambulances

B. These vehicles were shipped from various Posts in the 6th Army Area via Camp Irwin, California, to Camp Desert Rock, Nevada. The TC Supply Officer at Camp Irwin is the accountable officer ant the TC Supply Officer at Camp Desert Rock the responsible officer. Credit accounts were opened in Las Vegas for the purchase of miscellaneous spare parts, tires, and tubes, for commercial type vehicles in the GTA Fleet.

C. Justification for the allocation of TC Funds to be used in the maintenance of commercial type vehicles in the GTA Fleet was submitted to Camp Irwin Transportation Officer. Due to the condition of some of the vehicles upon receipt at Camp Desert Rock, a considerable amount of TC funds were required for repairs and for the purchase of tires to put these vehicles into service.

D. The procedure used to purchase spare parts, tires and tubes for the commercial type vehicles in the GTA Fleet was established. Requisitions for parts, tires, tubes are submitted to this section via the parts supply room from the maintenance officer on DA Form 9-79 in two copies. The request is screened for duplication and the price of the item estimated in pencil. One copy is forwarded to the Chief Clerk of the Supply Section and the other copy is placed in the Parts Clerk's suspense file.

E. The Chief Clerk of this section makes four copies of DA 9-79 for the approval of the TC Supply Officer. Two approved copies are forwarded to the Purchase and Contracting Officer for subsequent approval. One copy is retained by P&C and the other copy is filed in TC Supply. The Parts Procurement Agent carries two copies of the DA 9-79 to the appropiate vendor retains one copy of the invoice and one copy of the DA 9-79. The Parts Procurement Agent retains three copies of the invoice and one copy of the DA 9-79.

He turns the parts along with the invoice and one copy of the DA 9-79 over to the TC Supply Officer who authenicates the receipt of such items. The Parts Supply Clerk, after having received the parts from the Supply Officer, issues the parts tot the maintenance section and clears his suspense file. It is very essential that detailed records are maintained on all activities in the Supply Section. The Chief Clerk keeps a daily record of the obligated and unobligated amount of the TC Funds for the maintenance of commercial type vehicles in the GTA Fleet. The Transportation Officer is given a daily run down of activities in the Supply Section, through the Daily Journal.

F. One month prior to the tentative closing of the operation, a request was sent to Sixth Army via Channels as to the disposition of the GTA Fleet. While awaiting an answer, the vehicles were grouped as to their source of roigin, type, year and serviceability. Various rosters of the vehicles were forwarded to Camp Irwin. The answer was that all vehicles be returned to their source of origin as indicated by the shipping document except for tactical type vehicles in the GTA Fleet. The tactical type vehicles were turned in to Camp Irwin for storage. Shipping documents were checked to insure that OVM etc were placed on the assigned vehicles. All vehicles were given a technical inspection and tentative convoys were scheduled immediately after the last "shot". The records of TC Supply were audited by Sixth Army. Records were closed and the after action report submitted.

VI. CONCLUSIONS: That all problems may be solved thru close cooperation with P&C Office of S-4 Section, Battalion Maintenance Section, and with the application of proper supply requisitioning procedures.

VII. LESSONS LEARNED: A. That funds for parts and local tire purchase should be made available through this post instead of thru Camp Irwin, to expedite parts procurement.

B. That vehicles for the TMP should be shipped direct to the TC Supply Officer, Camp Desert Rock, instead of TC Supply Officer, Camp Irwin, thereby making TC Supply Officer, Camp Desert Rock, accountable officer instead of Camp Irwin, this would eliminate and confusion.

C. That blank forms are not readily available at this installation.

VIII. RECOMMENDATIONS: A. That the TC Supply Officer be present at Camp Desert Rock in advance of any vehicles that are shipped for use at this installation.

B. To effect savings to the US Government, personnel from stations to which vehicles must be returned, be utilized in the convoy.

C. Installations shipping vehicles to TC Supply Officer be instructed to inspect vehicles throughly to preclude shipment of unserviceable vehicles.

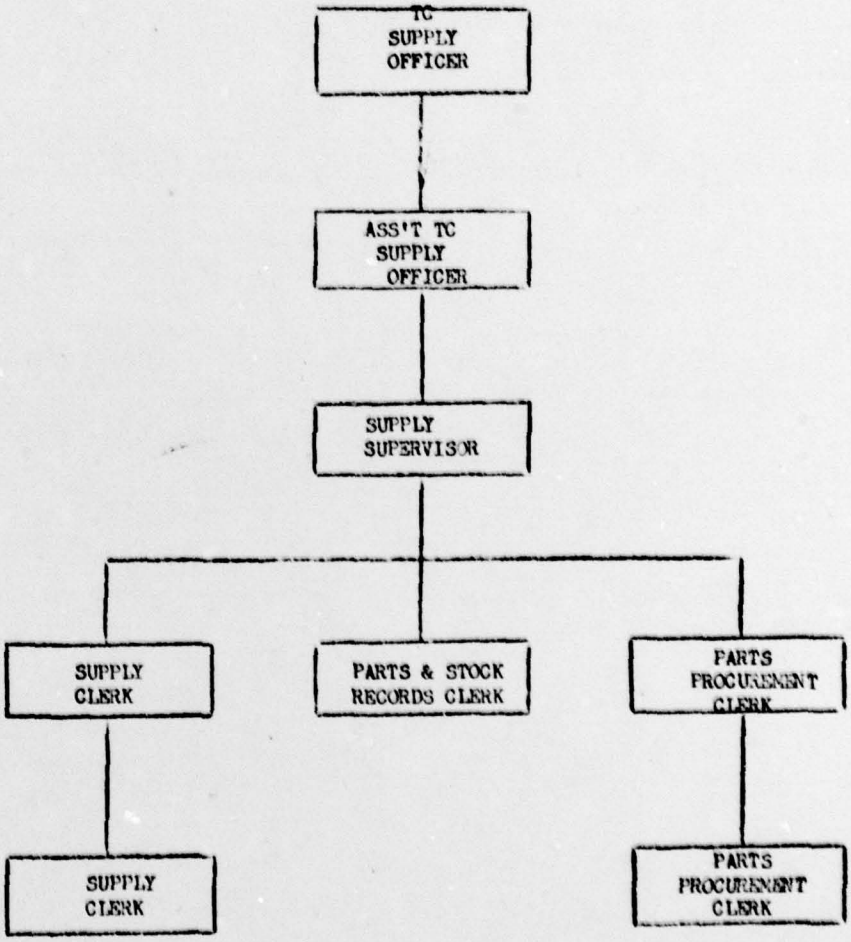
D. All vehicles shipped to TC Supply Officer be equiped with the required OVM.

1 - Incl
Organizational Chart

TEDY N. LACAP
Capt, Inf
TC Supply Officer

ORGANIZATIONAL CHART TC SUPPLY

SUPPLY BRANCH
CAMP DESERT ROCK, NEVADA



Incl # 1

SUMMARY OF OPERATION OF THE TRANSPORTATION
SECTION FOR OPERATION DESERT ROCK VII & VIII

1. COMMERCIAL TRAFFIC DIVISION

a. Passenger Operations:

(1)	Transportation Request issued.	365
(2)	Meal Tickets issued.	170
(3)	Government Bills of Lading, accomplished.	306
(4)	Government Bills of Lading issued	102
(5)	Commercial Carrier Reservations made.	12,470

b. Freight Operations:

(1) Inbound Freight

via truck	2, 608 ,204	Pounds
via rail	1, 556 ,693	Pounds
via REA	6 680	Pounds
via air	8 952	Pounds
Total Inbound	4, 180, 529	Pounds

(2) Outbound Freight

via truck	232, 933	Pounds
via rail	2,282, 054	Pounds
via REA	6, 560	Pounds
via air	630	Pounds
Total Outbound	2,522, 179	

2. MOTOR TRANSPORT DIVISION

a. Vehicles assigned to Motor Transport Divison.

(1)	General Transport Administrative Vehicles.		293
(2)	Vehicles of 26th Trans Bn (Trk)(Army)		100
		Total	393

b. Miles Operated.

(1)	General Transport Administrative Vehicles.		620,476
(2)	Vehicles of 26th Trans Bn (Trk)(Army)		450,618
		Total	1,071,094

c. Accidents Rate Per 100,000 Miles

(1)	General Transport Administrative Vehicles.	1.45
(2)	Vehicles of 26th Trans Bn (Trk)(Army)	.88

d. Daily Average Percentage Deadline for Maintenance.

(1)	General Transport Administrative Vehicles.	10.9%
(2)	Vehicles of 26th Trans Bn (Trk)(Army)	24.8%

e. Miscellaneous (General Transport Administrative Vehicles).

(1) Percentage of utilization. 60.6%

(2) Total operating and maintenance expense. $130,304.00

(3) Averages expense per vehicle mile $0.21

f. Number gallons of water transported per day.

(1) Average gallons of water transported per day 97,933 gal

(2) Maximum gallon of water transported any one day. 222,000 gal

3. T.C. SUPPLY DIVISION

a. Motor Vehicle

(1) Spare parts purchased $22,806.85

(2) Labor Cost $3,725.00

(3) Tires $4,939.50

(4) Seat Covers $35.00

(5) Glass $479.39

b. Bus tickets purchased 3.75

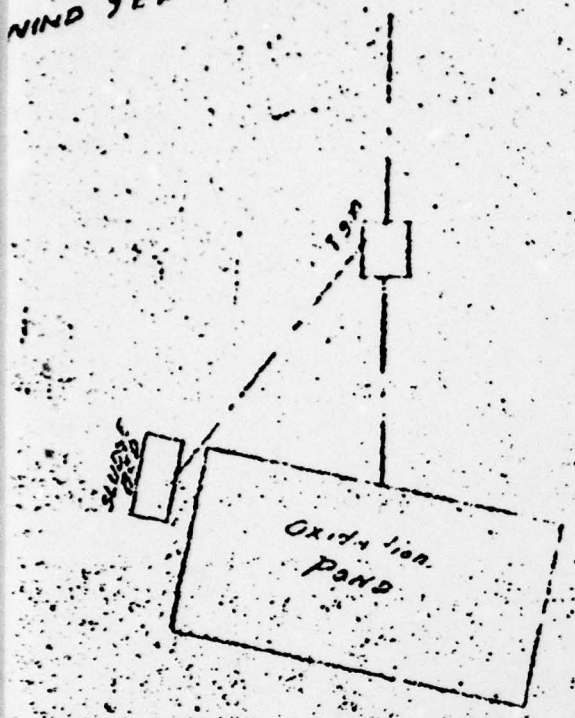
c. Commercial Traffic Bulletin

Grand Total Expenditures

HAROLD B. DONAHUE
Major, TC
Transportation Officer

TR AIRSIE

WIND TEE T-02



CAMP DESERT ROCK

List of Buildings

Bldg Nr	Use	Size	SF
01	Animal Shelter (*)	22' 6" x 75'	1690
02	Wind Tee (*)		
10	Generator House (***)	18 x 18	324
100	Flag Pole		
101	Dispensary (****)	20 x 60	1200
102	BOQ	20 x 48	960
103	BOQ	20 x 48	960
104	BOQ	20 x 48	960
105	BOQ	20 x 48	960
106	Latrine (****)	20 x 60	1200
107	BOQ	20 x 48	960
108	Officers Mess (****)	32 x 160	5120
109	BOQ	20 x 48	960
110	BOQ	20 x 48	960
111	Administration (**)	20 x 48	960
112	Administration (**)	20 x 48	960
113	EM Barracks	20 x 48	960
114	EM Barracks	20 x 48	960
115	EM Barracks	20 x 48	960
116	BOQ	20 x 48	960
117	Officers Latrine (***)	26 x 20	520
118	Administration (**)	20 x 48	960
119	Administration (**)	20 x 48	960
120	EM Barracks	20 x 48	960
121	EM Barracks	20 x 48	960
122	EM Barracks	20 x 48	960
123	BOQ	20 x 48	960
124	EM Barracks	20 x 48	960
125	EM Barracks	20 x 48	960
126	EM Barracks	20 x 48	960
127	EM Barracks	20 x 48	960
128	EM Barracks	20 x 48	960
129	EM Barracks	20 x 48	960
130	Library	20 x 48	960
131	Officers Mess (****)	20 x 60	
		9 x 24	1411
132	Administration (**)	20 x 48	960
133	Administration (**)	20 x 48	960
134	EM Barracks	20 x 48	960
135	EM Barracks	20 x 48	960
136	EM Barracks	20 x 48	960
137	EM Barracks	20 x 48	960
138	EM Barracks	20 x 48	960
139	Administration (**)	20 x 48	960
140	Communications (*****)	20 x 48	960
141	EM Barracks	20 x 48	960
142	EM Barracks	20 x 48	960
143	EM Barracks	20 x 48	960

Bldg Nr	Use	Size	SF
144	EM Barracks	20 x 48	960
145	EM Barracks	20 x 48	960
146	EM Mess (****)	32 x 160	5120
147	EM Barracks	20 x 48	960
148	EM Barracks	20 x 48	960
149	EM Barracks	20 x 48	960
150	EM Barracks	20 x 48	960
151	Latrine (****)	20 x 60	1200
152	EM Barracks	20 x 48	960
153	EM Barracks	20 x 48	960
154	Auditorium (****)	32 x 100	3200
155	Auditorium (****)	32 x 100	3200
156	Post Office & Barber	20 x 48	960
157	Generator House (*)	18 x 18	324
158	Can Washing Pad (*)	8 x 12	96
160	Trailer	8 x 28	224
161	Trailer	8 x 28	224
162	Trailer	8 x 26	208
163	Trailer	8 x 26	208
164	Trailer	8 x 26	208
165	Trailer	8 x 28	224
166	Trailer	8 x 28	224
167	Trailer	8 x 28	224
168	Trailer	8 x 28	224
169	Trailer	8 x 28	224
170	Trailer	8 x 28	224
171	Trailer	8 x 28	224
172	Trailer	8 x 28	224
173	Trailer	8 x 28	224
174	Trailer	8 x 28	224
175	Trailer	8 x 28	224
176	Trailer	8 x 28	224
177	Trailer	8 x 26	208
178	Trailer	8 x 26	208
179	Trailer	8 x 26	208
180	Trailer	8 x 26	208
181	Trailer	8 x 28	224
182	Trailer	8 x 28	224
183	Trailer	8 x 28	224
184	Trailer	8 x 28	224
186	Trailer	8 x 28	224
186	Trailer	8 x 28	224
187	Trailer	8 x 28	224
200	EM Barracks	20 x 48	960
201	EM Barracks	20 x 48	960
202	EM Barracks	20 x 48	960
203	EM Barracks	20 x 48	960
204	EM Barracks	20 x 48	960
205	EM Barracks	20 x 48	960
206	EM Barracks	20 x 48	960
207	EM Barracks	20 x 48	960
208	EM Barracks	20 x 48	960

2

Bldg Nr	Use	Size
209	EM Barracks	20 x 48
210	EM Barracks	20 x 48
211	EM Barracks	20 x 48
212	EM Barracks	20 x 48
213	EM Barracks	20 x 48
214	EM Barracks	20 x 48
215	EM Barracks	20 x 48
216	EM Barracks	20 x 48
217	EM Barracks	20 x 48
218	Latrine (****)	20 x 80
219	EM Barracks	20 x 48
220	EM Barracks	20 x 48
221	EM Barracks	20 x 48
222	EM Barracks	20 x 48
223	EM Barracks	20 x 48
224	EM Barracks	20 x 48
225	Administration (**)	20 x 48
229	Can Washing Pad	8 x 12
230	Can Washing Pad	8 x 12
231	Can Washing Pad	8 x 12
232	Can Washing Pad	8 x 12
233	Can Washing Pad	8 x 12
300	EM Barracks	20 x 48
301	EM Barracks	20 x 48
302	EM Barracks	20 x 48
303	EM Barracks	20 x 48
304	EM Barracks	20 x 48
305	EM Barracks	20 x 48
306	EM Barracks	20 x 48
307	EM Barracks	20 x 48
308	EM Barracks	20 x 48
309	EM Barracks	20 x 48
310	EM Barracks	20 x 48
311	EM Barracks	20 x 48
312	EM Barracks	20 x 48
313	EM Barracks	20 x 48
314	EM Barracks	20 x 48
315	EM Barracks	20 x 48
316	EM Barracks	20 x 48
317	EM Barracks	20 x 48
318	Latrine (****)	20 x 80
319	EM Barracks	20 x 48
320	EM Barracks	20 x 48
321	EM Barracks	20 x 48
322	EM Barracks	20 x 48
325	EM Mess (****)	32 x160
326	Administration (**)	20 x 48
327	P.X Administration (**)	20 x 48
328	Administration (**)	20 x144
329	Can Washing Pad	8 x 12
330	Can Washing Pad	8 x 12

Size	SF	Bldg Nr	Use	Size
20 x 48	960	331	Can Washing Pad	8 x 12
20 x 48	960	332	Can Washing Pad	8 x 12
20 x 48	960	333	Can Washing Pad	8 x 12
20 x 48	960			
20 x 48	960	400	EM Barracks	20 x 48
20 x 48	960	401	EM Barracks	20 x 48
20 x 48	960	402	EM Barracks	20 x 48
20 x 48	960	403	EM Barracks	20 x 48
20 x 48	960	404	EM Barracks	20 x 48
20 x 80	1600	405	EM Barracks	20 x 48
20 x 48	960	406	EM Barracks	20 x 48
20 x 48	960	407	EM Barracks	20 x 48
20 x 48	960	408	EM Barracks	20 x 48
20 x 48	960	409	EM Barracks	20 x 48
20 x 48	960	410	EM Barracks	20 x 48
20 x 48	960	411	EM Barracks	20 x 48
20 x 48	960	412	EM Barracks	20 x 48
8 x 12	96	413	EM Barracks	20 x 48
8 x 12	96	414	EM Barracks	20 x 48
8 x 12	96	415	EM Barracks	20 x 48
8 x 12	96	416	EM Barracks	20 x 48
8 x 12	96	417	EM Barracks	20 x 48
		418	Latrine (****)	20 x 80
20 x 48	960	419	EM Barracks	20 x 48
20 x 48	960	420	EM Barracks	20 x 48
20 x 48	960	421	EM Barracks	20 x 48
20 x 48	960	422	EM Barracks	20 x 48
20 x 48	960	423	EM Barracks	20 x 48
20 x 48	960	424	EM Barracks	20 x 48
20 x 48	960	425	Administration (**)	20 x 48
20 x 48	960	429	Can Washing Pad	8 x 12
20 x 48	960	430	Can Washing Pad	8 x 12
20 x 48	960	441	Can Washing Pad	8 x 12
20 x 48	960	432	Can Washing Pad	8 x 12
20 x 48	960	433	Can Washing Pad	8 x 12
20 x 48	960			
20 x 48	960	518	Latrine (****)	20 x 80
20 x 48	960	529	Can Washing Pad	8 x 12
20 x 48	960	530	Can Washing Pad	8 x 12
20 x 48	960	531	Can Washing Pad	8 x 12
20 x 48	960	532	Can Washing Pad	8 x 12
20 x 80	1600	533	Can Washing Pad	8 x 12
20 x 48	960			
20 x 48	960	618	Latrine (****)	20 x 80
20 x 48	960	626	Administration (**)	20 x 48
20 x 48	960	627	Administration (**)	20 x 48
32 x160	5120	628	Administration (**)	20 x 144
20 x 48	960	629	Can Washing Pad	8 x 12
20 x 48	960	630	Can Washing Pad	8 x 12
20 x144	2880	631	Can Washing Pad	8 x 12
8 x 12	96	632	Can Washing Pad	8 x 12
8 x 12	96	633	Can Washing Pad	8 x 12

SF	Bldg Nr	Use
96	718	Latrine (*
96	729	Can Washi
96	730	Can Washi
	731	Can Washi
960	732	Can Washi
960	733	Can Washi
960		
960	801	Ordnance S
960	802	Lubricatio
960	803	Lubricatio
960		
960	900	Imhoff Tan
960	901	N.C.O. Clu
960	902	Outdoor The
960	920	Administrat
960	921	Warehouse (
960	922	Warehouse (
960	926	Warehouse (
960	927	Refrigerato
960	936	Administrati
960	937	Warehouse (
960	938	Warehouse (
1600	939	Warehouse (
960	940	Warehouse
960	960	Gas Station
960	951	Gas Station
960	1001	Fire Station
960	1101	Gate House(*
960	1102	100,000 Gall
960		Tank
96	1103	Chlorinator
96	1104	Pump Rack (*
96	1105	Generator Ho
96		
	99	Officers Ope
1600	434	EM Barracks
96	435	EM Barracks
96	436	EM Barracks
96	437	EM Barracks
96	438	EM Barracks
96	439	EM Barracks
	440	EM Barracks
1600	441	EM Barracks
960	442	EM Barracks
960	443	EM Barracks
2880	444	EM Barracks
96	445	EM Barracks
96	446	EM Barracks
96	447	EM Barracks
96	448	EM Barracks
96	449	EM Barracks

Use	Size	SF
ine (****)	20 x 80	1600
Washing Pad	8 x 12	96
Washing Pad	8 x 12	96
Washing Pad	8 x 12	96
Washing Pad	8 x 12	96
Washing Pad	8 x 12	96
ance Shop (***)	30 x 90	2700
ication Rack (***)	9 x 45	405
ication Rack (***)	9 x 45	405
ff Tank	20 x 50	1000
O. Club (*****)	20 x 48	972
oor Theater	27 x 30 x 12	810
nistration (*****)	20 x 48	960
house (*****)	20 x 48	960
house (*****)	20 x 48	960
house (*****)	20 x 48	960
igerator Shed (***)	30 x 60	1800
nistration (*****)	20 x 48	960
house (***)	20 x 48	960
house (***)	20 x 48	960
house (***)	20 x 48	960
house	6 x 15	90
Station (***)	6 x 20	120
Station (***)	12 x 12	144
Station (****)	40 x 100	4000
House(*)	8 x 12	96
000 Gallon Water	30' dia.	
inator Building	8 x 9	72
Rack (*)	8 x 8	64
ator Housing	18 x 18	324
ers Open Mess	35.5 x 55	1952.5
racks	14 x 32	448
racks	14 x 32	448
racks	14 x 32	448
racks	14 x 32	448
racks	14 x 32	448
racks	14 x 32	448
racks	14 x 32	448
racks	14 x 32	448
racks	14 x 32	448
racks	14 x 32	448
racks	14 x 32	448
racks	14 x 32	448
racks	14 x 32	448
racks	14 x 32	448
racks	14 x 32	448

Bldg Nr	Use
450	EM Barracks
903	Mars Radio
928	Warehouse (****)
	.QK
952	Warehouse
953	Warehouse
1003	Lub. Shed
1004	Paint Shed
1106	Gravity Water Int

Size	SF
14 x 32	448
14 x 32	448
40 x 160	4800
20 x 48	960
8 x 20	160
9 x 9	81
6 x 6	36

ke

* Not shown on Map
** Straight wall Quonset
*** Wood
**** Bulter
***** Quonset

CAMP H

GENE
WITH
CAMP

DRAWN B
Nilsen & deB

DATE

LEGEND

PREFAB BLDGS.

OFFICE OF THE POST ENGINEER
CAMP IRWIN - BARSTOW - CALIFORNIA

GENERAL LAY OUT PLAN
WITH BLDG INDEX
CAMP DESERT ROCK, NEVADA

DRAWN BY
M/Sgt A deB

PRINCIPAL ENGINEER

POST ENGINEER

COMMANDING GENERAL

DRAWING NO
DR-116

DATE
25 JAN 1957 SCALE 1" = 100'