Central Files

[redacted]

UNIVERSITY OF CALIFORNIA
LOS ALAMOS SCIENTIFIC LABORATORY
P. O. Box 1663
Los Alamos, New Mexico

472

4129

TO: Distribution

20 September 1952

FROM: Test Director

SUBJECT: TEST DIRECTOR'S ORGANIZATION

SYMBOL: J-1184

1. The purpose of this memorandum is to describe the Test Director's Branch of the AEC Continental Test Organization. As presently constituted the Test Organization formally places the full responsibility for all scientific work sponsored by whatever agency with the Test Director. All experimental projects as well as technical supporting units are therefore incorporated in the Test Director's Branch.

Test Director's Office

The Test Director's Office comprises the Test Director, his Deputy, and technical and secretarial assistants. Members of this Office, as distinct from members of the Staff Sections described below, have heterogeneous duties. Apart from the Deputy Test Director they do not have authority except at specific times and in specific matters but rather serve primarily as information channels. The Deputy Test Director, on the other hand, is authorized to represent the Test Director in all matters concerning the Branch. A Group Director may, however, appeal over him to the Test Director.

Group Directors

Virtually complete authority and responsibility for the Programs within any one Group are delegated by the Test Director to the appropriate Group Director. The present organization includes three Groups, the Military Effects Test Group, the Weapon Development Test Group, and the Civil Effects Test Group. With the agreement of the Test Director, Group Directors make any changes, deletions or additions, to Programs within their Groups. Conflicts between Groups are resolved by the Test Director in a way best suited to meeting the over-all aims of a given set of tests or a given test series. Under a broad agreement among all agencies sponsoring tests, the Test Director's decisions in technical and operational matters are final. It should be pointed out that in practice agreements are reached in conference between the interested parties and that a "command" relationship is not evident.

As mentioned above Group Directors have wide authority and responsibility for their Programs. They are familiar with the general technical aims and instrumentation methods of all Projects in their Programs. Through frequent contact with the other Group Directors they are also cognizant of work being done in other Groups. Their primary concern is, however, to ensure that the work being carried on in their Programs is in fact achieving the stated aims of the experiments. By inference a Group Director is in agreement with these aims.

Program Directors

Each Test Group is divided into several Programs. Program Directors are responsible to the appropriate Group Director and are delegated wide authority over the work carried out in their Programs. Conflicts between Programs within a single Group are settled in conference with the Group Director.

Program Directors are thoroughly familiar with the purposes and methods of all Projects within their Programs and are cognizant of work being done in other Programs. The Program Directors taken together should, and frequently do, form a sort of advisory committee of which the Group Director is chairman. In this capacity they advise the Group Director and assist him in making decisions affecting the over-all work of his Group.

Project Officers

The basic experimental unit is the Project. Project Officers should be familiar with related work but are primarily concerned with the details of their own experiments. The Project Officer's knowledge of the purposes and methods of his Project is by implication more thorough than that of any other member of the Test Organization. It is for this reason that the Project Officer is charged with the responsibility of making a detailed statement of the aims of his experiment and the methods he proposes to use, of preparing periodic status reports, of submitting requirements for equipment, construction, logistic support, etc., and of writing the final report on his results.

The success of a given test series depends very strongly on the ability of individual Project Officers to understand and carry out the jobs which they have undertaken. The entire Test Organization is devoted to supporting the Project Officers, since these are the men who are going to obtain the basic experimental data desired from a test series. The Test Director's Support Units and Staff Sections have been set up to provide the Project Officers with the help which they will need.

Support Units

The Support Units, Rad-Safe, Weather, Assembly, Air, etc. are responsible directly to the Test Director. They provide services which are of general use to all experimental units. General requirements originating with experimental units are usually passed to the Support Units through the Test Director's Staff Sections or through the Test Director's Office. Details of these requirements are

[redacted]

on the other hand generally worked out by direct communication. For example, general rad-safe requirements are submitted to the Test Director in status reports but a Project Officer and a head monitor will work out the details of any specific recovery procedure in accordance with the general AEC rules governing radiological safety.

Staff and Advisory Sections

The two major Staff Sections are the Engineering & Construction Section and the Plans & Operations Section. The first is charged with the responsibility of coordinating construction of all test installations, with the maintenance of a current instrument chart, and with processing of job orders originating in the Test Director's Branch. In the planning phases of an Operation the Engineering & Construction Section coordinates the layout of instrumentation at the Proving Grounds, assists the Project Officers in formulating design criteria for recording shelters and instrument stations, passes design sketches to the AEC Field Manager for the preparation of working drawings, obtains approval of these drawings from the Project Officers, and authorizes for the Test Director the construction of required facilities. During the construction phases this Section assists the Field Manager in the programming of the work and in the inspection and acceptance of completed facilities. During the operational phases the Section assists Project Officers in obtaining additional minor facilities, emergency repairs, etc. through the processing of job orders.

The Plans & Operations Section is charged with the responsibility for coordination of all test operations. This Section arranges for operational transportation, coordinates the use of radio frequencies, schedules recovery parties, etc. While the Engineering & Construction Section is generally most active in the pre-operational phases, the Plans & Operations Section is most active in the operational phases.

The other Staff Sections have functions which are somewhat less extensive than is the case with the corresponding military sections. The Test Director's Personnel Section does not, for example, maintain pay records. These are maintained by parent organizations, civilian or military. Instead the Personnel Section presents to the AEC Field Manager the Test Director's view in matters of housing, messing, the handling of personal mail and laundry, recreational facilities, etc. The Section also operates a Mail Room for official correspondence.

The Field Manager handles a large portion of the logistics and supply problems which arise in the Test Organization inasmuch as he furnishes shipping instructions, cartage from railheads, and warehousing and storage at the Nevada Proving Grounds. Most experimental units handle their supply problems internally, and the Test Director's Logistics & Supply Section is in effect an offshoot of the LASL Supply & Property Department set up to serve LASL experimenters.

The Test Director has no Security Section as such. Security is a function handled by the AEC Field Manager. The Test Director has, however, a Classifi-

[redacted]

cation Section which serves all members of the Branch. This Section prepares the Classification Guide prior to a test series and in the course of the series is available for interpretation of the guide, as well as for classification of specific pieces of data. The Classification Officer occupies a dual position inasmuch as he is also Classification Officer of the AEC Santa Fe Operations Office.

The remaining Sections are primarily advisory. They do not have what are frequently called "operational functions". These Sections are concerned with industrial safety, radiological safety, and special assembly problems.

2. It is quite true that the Nevada Proving Grounds were originally thought of as an extension of the facilities of the Los Alamos Scientific Laboratory and it was therefore natural that the technical organization should be composed largely of LASL personnel. It is equally true that no Operation at the Nevada Proving Grounds has ever been carried out without participation by experimental units from the Defense Department and by civilian organizations outside of the administrative jurisdiction of the AEC's Santa Fe Operations Office.

Because of the fact that the Proving Grounds have never been reserved exclusively for use by LASL or even exclusively for laboratories under SFOO, the technical organization has always been an entity distinct from the parent organizations which have furnished its personnel. In practice every member of the Test Director's Branch including the Test Director is formally employed by a parent organization outside the administrative jurisdiction of the Las Vegas Field Office and in many cases outside the jurisdiction of the Atomic Energy Commission. So far as the technical aspects of a test series are concerned, however, the Test Director is responsible directly rather than through his parent organization to the sponsoring agencies or their delegated authorities.

3. In this description of the Test Director's Branch no mention has yet been made of the sources of technical information or its flow channels. The Test Director's Branch includes a great number of competent scientists, specialists in all phases of research techniques and experienced in the special problems peculiar to nuclear explosions. The combined knowledge of all of these people is available to every Project Officer. Project Officers are encouraged to make full use of this information.

In many cases Project Officers will know whom to see for answers to specific technical questions. If this is not the case the Project Officer should bring his problems to the Test Director's Office. He will then be put in touch with those people best qualified to help him.

4. From time to time in the course of a test series formal and sometimes formidable documents are issued by the Test Director to cover specific points in detail. These documents run the gamut from general information sheets to the Administrative and Operation Orders. The general purpose of all such documents is to answer as many detailed questions in advance as can be anticipated.

[redacted]

The form of these documents may sometimes lead to a misunderstanding of their intent. They are not in general a promulgation of rigid rules or unalterable facts but encompass the best available information and the most generally useful operating procedures. The Test Director is willing and anxious to consider any extensions, alterations and amendments which can be shown to improve the efficiency of an Operation and to achieve more valuable test results.

5. Though written communication between all participants of the Test Organization is a necessity in so large and complex an undertaking as a test series, it is not actually sufficient. Frequent and extensive discussion is encouraged, and all members of the Test Director's Branch are invited to bring their problems to the Test Director's Office for whatever assistance they may need.

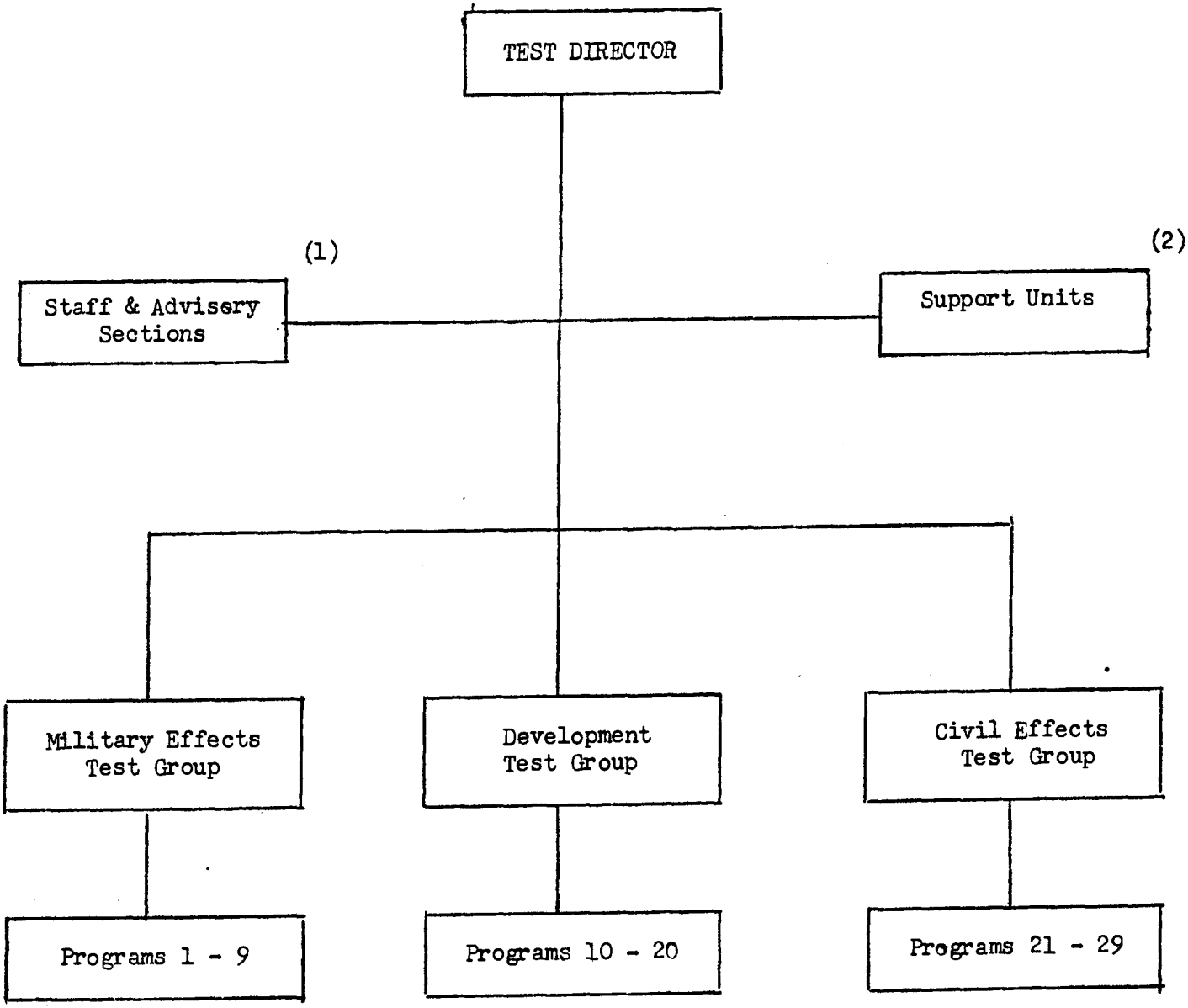
Alvin C. Graves

ALVIN C. GRAVES
Test Director

Distribution:

Test Director's Office - 5
Group Directors - 2 each
Program Directors - 2 each
Project Officers - 1 each
Staff Sections - 2 each
Support Units - 2 each
O.T.O. - 10
LVFO - 10
Manager, SFOO - 2
AFSWP Field Command - 10
DMA - 5

[redacted]



(1) Staff and Advisory Sections include: Personnel, Classification, Operations, Engineering, Industrial Safety, Radiological Safety, Special Assembly, Supply.

(2) Support Units include: Weather, Documentary Photography, Assembly, Rad-Safe, Air.

T E S T D I R E C T O R ' S B R A N C H

of the

A E C C O N T I N E N T A L T E S T O R G A N I Z A T I O N

[redacted]

[redacted]

APPENDIX

A partial directory of the Test Director's Branch for the next series of tests at the Nevada Proving Grounds is attached for your information.

Test Director's Office

Test Director:	Alvin C. Graves J Division, LASL Los Alamos, New Mexico
Deputy Test Director:	John C. Clark J Division, LASL Los Alamos, New Mexico
Assistant:	Gaelen L. Felt J Division, LASL Los Alamos, New Mexico

Group Directors

Military Effects Test Group:	E. B. Doll c/o DWET Headquarters Field Command, AFSWP Sandia Base, P. O. Box 5100 Albuquerque, New Mexico
	Col. H. K. Gilbert, USAF c/o DWET Headquarters Field Command, AFSWP Sandia Base, P. O. Box 5100 Albuquerque, New Mexico
Development Test Group:	W. E. Ogle J Division, LASL Los Alamos, New Mexico
	L. B. Seely J Division, LASL Los Alamos, New Mexico
Civil Effects Test Group:	Robert L. Corsbie Division of Biology & Medicine Atomic Energy Commission Washington 25, D. C.

[redacted]

[redacted]

Support Units

Weather:	Unknown as of 20 September 1952
Documentary Photography:	Loris M. Gardner Graphic Arts, LASL Los Alamos, New Mexico
Assembly:	H. S. North Division 5232 Sandia Corporation Albuquerque, New Mexico
Rad-Safe:	Unknown as of 20 September 1952
Air:	Unknown as of 20 September 1952
Timing & Firing (Program 20):	H. E. Grier Edgerton, Germeshausen & Grier 160 Brookline Avenue Boston, Massachusetts

Staff & Advisory Sections

UCRL Technical Advisor:	H. F. York Radiation Laboratory University of California Berkeley, California
Special Assembly Advisor:	W. C. Bright DIRX, LASL Los Alamos, New Mexico
Industrial Safety Advisor:	Roy Reider H Division, LASL Los Alamos, New Mexico
Radiological Safety Advisor:	Unknown as of 20 September 1952
Classification Officer:	Ralph Carlisle Smith D Division, LASL Los Alamos, New Mexico
Personnel Section:	Armand W. Kelly J Division, LASL Los Alamos, New Mexico C. R. Canfield J Division, LASL Los Alamos, New Mexico

[redacted]

Personnel Section (Continued):	Cdr. R. W. Luther, USN c/o DWET Headquarters Field Command, AFSWP Sandia Base, P. O. Box 5109 Albuquerque, New Mexico
Operations Section:	B. C. Lyon J Division, LASL Los Alamos, New Mexico
	Col. L. F. Dow, USAF c/o DWET Headquarters Field Command, AFSWP Sandia Base, P. O. Box 5100 Albuquerque, New Mexico
Engineering & Construction Section:	R. W. Newman J Division, LASL Los Alamos, New Mexico
	Cdr. L. N. Saunders, USN c/o DWET Headquarters Field Command, AFSWP Sandia Base, P. O. Box 5100 Albuquerque, New Mexico
Supply Section:	H. S. Allen SP-Department, LASL Los Alamos, New Mexico
	Lt. Col. E. M. Tolliver c/o DWET Headquarters Field Command, AFSWP Sandia Base, P. O. Box 5100 Albuquerque, New Mexico