~~SECRET~~ UNCLASSIFIED

Document consists of 4 page(s).
Copy 1 of 1

ARM1.950209.097j

CHEMICAL CORPS
CHEMICAL AND RADIOLOGICAL LABORATORIES
Army Chemical Center
Maryland

ADDENDUM TO CRL QUARTERLY HISTORICAL REPORT, 1 July - 30 September 1954

1. p. 19, C. Performance, (amended)

Progress of all research ... Significant Accomplishments. A copy of this latter report is included as appendix 1. ... statistical summary of ... appendix 2.

2. Appendix 5, CRLR 419, Significant Accomplishments, F.Y. 1954, attached hereto, is added.

3. Over-all security classification of the subject Historical Report is changed from CONFIDENTIAL to SECRET, RESTRICTED DATA when above changes and additions are made, and the report should be marked accordingly.

Nellie M. Anson

17 December 1954

NELLIE M. ANSON
Historian

H0-2-87

[redacted]

UNCLASSIFIED

~~RESTRICTED DATA~~
~~SECRET~~

AEC [illegible] - 1946

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

UNCLASSIFIED

[redacted]

CHEMICAL CORPS
CHEMICAL AND RADIOLOGICAL LABORATORIES
Army Chemical Center
Maryland

QUARTERLY HISTORICAL REPORT
PERIOD 1 JULY TO 30 SEPTEMBER 1954

November 1954

Reports Control Symbol
CMLHO-194

Prepared by:

Robert T. Brown
Robert T. Brown

Recommending approval:

E H Schwanke
Edmund H. Schwanke
Deputy for Technical Management

Submitted by:

Nellie M. Anson
Nellie M. Anson
Historian

Approved:

Fred J. Delmore
FRED J. DELMORE
Colonel, Cml C
Commanding

UNCLASSIFIED

[redacted]

[redacted] LIBRARY
[redacted] CHEMICAL CENTER
MARYLAND

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

TABLE OF CONTENTS

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

UNCLASSIFIED

UNCLASSIFIED

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

I. ADMINISTRATION.

A. Changes in Mission and Responsibilities.

No changes in mission and responsibilities were made during the report period.

B. Acquisition and/or Disposal of Physical Facilities.

1. The following buildings were acquired during the report period:

Bldg. No.	Division	Use
T-2000	Radiological	Reconditioning equipment
T-2002	Radiological	Reconditioning equipment
T-2004	Radiological	Reconditioning equipment

2. The following buildings were released during the report period:

Bldg. No.	Division	Use
86 (vault)	Tech. Services	Vault for library storage
T-3955	Munitions	Equipment Storage
T-1310	Munitions	Office space

C. Major Organizational Revisions (see appendix A).

On 1 July, Air Force Munitions Branch, Munitions Division, was redesignated Air Munitions Branch to reflect more exactly the function of the branch.

D. Significant Developments in Administrative Procedure.

1. Administrative inspections were continued during the report period with emphasis placed on correction of discrepancies noted in previous inspections.

2. A program leading to the consolidation of CRL memorandums has been established. This involves a review of all existing memorandums and the elimination of overlapping directives. It is planned to republish all memorandums in a consolidated form by 31 December, and thereafter, to issue changes to memorandums in lieu of the policy file items now published.

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

3. On 23 July, a classified briefing room was established in bldg. 330 containing a permanent display of standard and experimental Chemical Corps items. This room will be used for orientation both of CRL personnel and of visitors. Since many of the items displayed are classified, a custodian is stationed at the entrance, and a register is maintained during duty hours. During off-duty hours the room is securely locked, and is checked periodically by the building guard. The establishment of this room will greatly aid the research and development program, since these displays now will not have to be set up specifically for each occasion requiring their use.

4. On 18 August, the office of the In-Service Training Program was established in bldg. 330. This was made possible by the rearrangement of office space connected with the occupation of the new wing of bldg. 330.

5. Procedure for withdrawing classified material from the Technical Library was revised on 30 August so that each division secret material custodian can maintain control over classified library documents within the division (see CRL Memorandum 90-20, changes 1 and 2).

6. On 31 August, a Classified Documents Review Committee was established in Technical Services Division. This committee, headed by Major Paul P. Rothert, has been assigned the task of reviewing the classification of all classified documents in the Technical Library. This project has been divided into four phases with corresponding priority:

a. Secret documents originated within CRL.

b. Secret documents originated by other agencies.

c. Confidential documents originated within CRL.

d. Confidential documents originated by other agencies.

It is estimated that the entire program will require two years to complete due to the large volume of documents filed in the Technical Library.

7. On 10 September, a conference was held in bldg. 330 concerning personnel policy on employing students who are prospective permanent employees. The conference was attended by representatives of Civilian Personnel Division, these Laboratories, and other research and development activities. In this conference it was decided that students would be employed for a six-month period and then be released to attend school for another six-month period.

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

8. On 15 September, a revised proposed Table of Allowances was submitted to higher echelon after having been reviewed and approved by other Technical Services.

9. On 15 September, a consolidated Electronic Supply Room was established in Technical Services Division in accordance with a recommendation resulting from the annual general inspection. This change is expected to result in an improvement in supply economy and conservation.

10. On 17 September, a correspondence suspense system was established (see CRL Policy File Item 20-18). This procedure is expected to assure prompt replies to correspondence requiring same.

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

II. FISCAL

A. Funds Available and Committed (in units of thousand dollars).

Source	Available	Committed	Balance
Army R&D	9,218	3,013	6,205
Air Force	1,834	292	1,542
Navy	172	31	141
Ordnance	5	4	1
Marine Corps	30	24	6
CD	21	9	12
MATCOM	103	3	100
AFSWP	189	117	72
Dugway P.G.	6	0	6
G-4	16	6	10
Maint. & Oper.	3	1	2
TOTAL	11,597	3,500	8,097

B. Commitments by Type Operation (in units of thousand dollars).

Type Operation	Available	Committed	Balance
Atomic Warfare	398	126	272
Chemical Warfare	8,155	2,761	5,394
Land Combat	565	131	434
Supporting Research	100	24	76
~~TOTAL~~ TOTAL	9,218	3,042	6,176

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

III. PERSONNEL

A. Changes in Key Personnel.

1. OCO.

Col. George R. Oglesby was assigned duty as Deputy Commander on 15 July, vice Lt. Col. Walter W. Kuehler.

1st Lt. Nicholas George was relieved from assignment and duty as Chief, Enlisted Personnel Section, Personnel Policies Branch, Administrative Office, and transferred to Ground Munitions Branch, Munitions Division on 22 July.

Capt. Frederic Cornell was assigned additional duty as Enlisted Personnel Assignment Officer on 22 July.

Major Gordon L. Jacks, Chief, Special Projects, was transferred to the Chemical Corps School, Fort McClellan, Alabama, on 1 September.

2. Munitions Division.

Mr. Theodore R. Paulson was appointed Chief, Special Projects, on 1 July.

Lt. Col. Paul R. Cerar was appointed Chief, Ground Munitions Branch on 26 August.

1st Lt. Harold W. Shear was relieved from assignment and duty as Chief, Ground Munitions Branch and was assigned duty as Assistant Chief, Ground Munitions Branch on 26 August.

Mr. Richard W. Harris was appointed Assistant Chief, Ground Munitions Branch on 26 August.

3. Radiological Division.

Capt. William S. Cranford, Chief, Service Branch, was transferred to the Chemical Corps School, Fort McClellan, Alabama, on 26 July.

Dr. Fritz A. Hedman was appointed Chief, Service Branch, on 27 July.

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

On 5 September, Mr. Charles M. Plumer, Administrative Assistant, transferred to Plants Division.

On 6 September, Mr. George W. Lewis was appointed Administrative Assistant.

4. Technical Services Division.

Mr. William S. Evans, Chief, Safety Branch, transferred to Fort Monmouth, New Jersey, on 21 August.

Mr. Joseph F. Voeglein transferred from Munitions Division and was appointed Chief, Safety Branch on 5 September.

B. Personnel Strength.

1. Total Military Personnel.

The following three tables indicate the total military personnel assigned to Chemical and Radiological Laboratories:

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

Officer Personnel Strength 30 September 1954

Assigned

Division	Military Occupation Specialty												Total
	2025	2120	2162	5530	7050	7300	7310	7312	7314	7318	7330	7360	7422	9311	
CCO	3	-	1	-	-	-	-	-	1	-	-	-	-	1	6
Chemical	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
Munitions	1	-	-	-	2	-	-	-	-	-	-	6	-	-	9
Plants	-	-	-	-	-	3	1	-	-	2	-	-	-	-	4
Protective	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2
Radiological	-	-	-	-	-	-	-	1	-	-	-	-	-	-	3
Tech. Serv.	1	1	-	1	-	-	-	-	1	-	-	-	1	-	5
Total	5	1	1	1	2	3	1	1	2	3	2	6	1	1	50

Attached and Special Duty

Division	Attached MOS			Special Duty MOS		Total
	7310	7318	1981	9311		
CCO	-	-	-	1		1
Protective	1	1	-	-		2
Test	-	-	1	-		1
Total	1	1	1	1		4

1981 - Air Observation Pilot (Transportation Corps)
2025 - Chief or Director, Major Departmental Unit
2120 - Administrative Officer
2162 - Operations and Training Staff Officer
5530 - Librarian (MAC)
7050 - Product Design Development Officer
7300 - Chemical Engineer
7310 - Chemical Research Engineer
7312 - Physicist
7314 - Chemical Officer
7318 - Organic Chemist
7330 - Radiological Defense Engineer
7360 - Chemical Munitions Development Officer
7422 - Safety Officer
9311 - Intelligence and Security Officer

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

[redacted]

UNCLASSIFIED

Enlisted Personnel Strength, 30 September 1954

Division	Military Occupation Specialty									Total
	1065	1591	1592	1595	1594	1595	1569	1731	1870	4065	
CCO	-	3	1	-	-	-	-	-	-	-	4
Chemical	-	-	-	-	62	-	-	-	-	-	62
Engineering	-	4	-	6	-	6	-	-	-	-	16
Munitions	-	21	5	11	4	20	-	1	-	-	62
Plants	-	11	-	56	4	6	-	-	-	-	77
Protective	-	6	-	19	2	23	-	-	-	-	50
Radiological	-	-	-	3	-	25	-	-	-	-	28
Tech. Services	-	2	1	5	-	4	2	-	-	-	14
Test	1	8	1	2	-	5	-	-	1	4	22
Unassigned	-	2	1	1	1	4	-	-	-	1	10
Total	1	57	9	105	11	155	2	1	1	5	345

1065 - Harbor Craft Supervisor
1591 - Civil-Mechanical Engineering Research Asst.
1592 - Mathematical-Statistical Research Asst.
1595 - Chemical Engineering Research Asst.
1594 - Electro-Electronic Research Asst.
1595 - Physical Science Research Asst.
1569 - Information Supervisor
1731 - Smoke Generator Supervisor
1870 - Chemical Staff Specialist
4065 - Harbor Craft Crewman

UNCLASSIFIED

[redacted]

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

2. Total Civilian Personnel.

The following three tables indicate the total civilian personnel employed at Chemical and Radiological Laboratories:

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

[redacted]

UNCLASSIFIED

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Total
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	-	50
[illegible]	-	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-	-	70
[illegible]	-	-	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5	[illegible]	13	9	4	2	73
[illegible]	-	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-	11	[illegible]	17	[illegible]	11	11	8	-	-	136
Plants	-	[illegible]	4	4	7	9	-	13	4	7	3	4	3	5	1	-	70
Protective	-	1	5	7	13	18	2	14	3	18	17	15	13	10	-	-	156
Radiological	-	1	1	4	3	4	-	10	2	7	1	5	4	4	1	-	45
Tech. Services	-	-	-	-	3	2	-	3	1	-	5	12	11	19	4	-	60
Test	-	1	3	3	6	9	-	10	4	19	18	8	6	5	-	-	92
Total	1	8	25	42	62	80	4	88	25	86	70	68	76	75	11	2	718

UNCLASSIFIED

[redacted]

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

Per Diem Civilian Personnel Strength, 30 September 1954

Ware Board Supervisor

Division	WBS Grade									Total
	15	11	10	9	8	7	6	2	1	
Engineering	1	1	2	1	1	-	-	-	-	6
Munitions	-	1	-	1	1	-	-	1	-	4
Plants	-	-	-	1	3	-	-	-	-	4
Radiological	-	-	-	-	-	-	-	1	-	1
Tech. Serv.	-	-	-	1	-	-	1	-	2	4
Test	-	-	1	-	-	1	-	-	-	2
Total	1	2	4	3	5	1	1	2	2	21

Ware Board

Division	WB Grade																			Total
	23	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	
Chemical	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2
Engineering	1	22	2	6	7	9	-	3	5	1	-	-	-	6	3	-	-	8	-	2	-	80
Munitions	-	-	-	-	1	3	3	4	5	1	3	4	3	1	1	6	-	2	1	-	-	38
Plants	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5	1	-	-	-	57
Protective	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1
Radiological	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	1	-	-	-	4
Tech. Services	-	-	1	-	-	6	-	1	11	1	4	-	2	2	1	-	1	4	8	-	29	71
Test	-	-	4	-	2	3	3	9	-	12	1	-	-	3	-	5	-	2	-	3	1	45
Total	1	22	7	6	10	32	6	25	48	19	8	6	5	12	5	16	8	18	10	7	80	298

Total WBS 21
Total WB 298
Total Per Diem 319

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

IV. PLANS.

A. Plans for Permanent Peacetime Establishment.

No change from previous report.

B. Mobilization Plan.

No change from previous report.

C. Current Planning.

No changes have been made in current planning during the report period.

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

V. OPERATIONS.

A. Operations or Activities Accomplished.

1. Chemical Division.

The final development test of E5 thickener was completed.

2. Munitions Division.

a. The following tests were initiated during the report period:

(1) Tests on thermal attenuation by aerosol of hollow plastic spheres.

(2) Application of mars turbine as a dissemination device for thermal, radar, and visual screening.

(3) Field tests of E1OR2 attenuation agent.

(4) Evaluation of X200 incendiary land mine.

(5) Tests of artillery shell for colored smoke bursts.

(6) Test of shell base-ejection principle for dissemination of percutaneous agent.

(7) Test of small unstabilized bomblets.

(8) Test of E8 kit for 3.5-in. rocket.

(9) Investigation of ballistic shapes for guided-missile warheads.

(10) Test of bomb closures.

(11) Test of spool shapes and discs.

(12) Aerial spray test of thickened and unthickened agents.

(13) Tests of modified E22 and E32 portable flame thrower.

(14) Comparative tests to determine quantity of fuel required for portable flame throwers.

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

✓(15) Preliminary test of irritant-gas dispenser.

✓(16) Preliminary test of new design heads for E42 rocket transsonic flight.

✓(17) Comparative tests of canister versus central burster in Navy smoke munitions.

✓(18) Test firing of E42 rocket with 2.75-in. FFAR motor.

b. The following tests were continued during the report period:

✓(1) Tests on the thiokol-designed fuel blocks for thermal generation.

✓(2) Test of E15 colored smoke grenade.

✓(3) Test of E34 SO_2 candle.

✓(4) Tests of incendiary burster.

✓(5) Tests of intimate-mixture and two-compartment thermal generators for toxic agents (pot and bomb prototypes).

✓(6) Tests on E14 pouch destroyer incendiary.

✓(7) Tests on E14 and E15 contaminants.

✓(8) Laboratory tests of infrared attenuation by smokes.

✓(9) Tests on the application of infrared methods to analyze toxic aerosols.

✓(10) Preliminary tests with spray tank for dispersion of agent-filled capsules.

✓(11) Tests on attenuation of infrared with E32 smoke pot (carbon) and J-31 turbojet (fog oil).

✓(12) Test of M5 smoke generator to produce carbon smoke.

✓(13) Test of E11 projector.

✓(14) Test of pocket-size incendiary (halogen fluoride).

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

(32) Tests of E30 one-shot flame thrower.

(33) Final development test of remote-controlled smoke generator.

(34) Engineering test of 6"/47 Navy smoke rocket.

(35) Preliminary engineering tests simulating VT fuzes for rockets.

(36) Tests of closures for gas rockets - press-fit ball, silver-solder press-fit bursters, riv nut, deforming plugs and tube expander, etc.

c. The following tests were held in abeyance during the report period:

(1) Tests of E109 incendiary bombs.

(2) Flight test of E60 750-lb. plastic cluster adapter modified for external stowage on F-84E aircraft at 450 m.p.h.

(3) Test firing of 10- and 30-gal. long-range rockets.

d. The following tests were abandoned during the report period:

(1) Preliminary test of E17 field-filling unit for spray tanks. A preliminary model (designated E18), designed to overcome deficiencies, has been assembled for test.

(2) Engineering tests on E26R1 spray tank.

e. The following tests were completed during the report period:

(1) Tests of improved CN-DM grenade.

(2) Tests on exploitation of AP-3.

(3) Tests to determine penetration of toxic aerosols through gas mask canisters.

(4) Tests on storage stability of E10R2 attenuation agent.

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

(5) Tests of E40R3 colored smoke rocket.

(6) Vibration and rough-handling tests of E50 plastic cluster adapter.

(7) Drop tests of E118 cluster.

(8) Flight tests of E135 and E136 750-lb. clusters with inert E104 and E105 bombs.

(9) Flight test of warhead for MATADOR at White Sands Proving Ground.

(10) Critical loading test of warhead for RASCAL.

(11) Centrifuge tests on warheads.

(12) Comparative evaluation of bomblets for 750-lb. nonpersistent cluster.

(13) Preliminary tests of two T68 mechanized flame throwers.

3. Radiological Division

a. Planning is continuing in connection with four projects to be conducted at Operation TEAPOT.

b. Two types of tests were conducted at Dugway Proving Ground to determine the attenuation of thermal radiation by smoke. One test used thermal radiation; the other used radiation from aerial flash bombs dropped from an airplane at night. These tests are continuing at Dugway.

c. Analysis to determine beta activity of radioactive samples from Operation CASTLE is continuing. Other CASTLE fall-out samples have also undergone chemical and radiochemical analyses for fission products and induced activities.

4. Test Division.

a. The following nonagent-type items were tested during the report period:

(1) E101, E115, and E117 bomb clusters to determine over-all functioning and dispersion.

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

(2) E53 and M5 cluster adapters to determine ground dispersion pattern.

(3) E50, E54, E71, E90, E95, E110, and M50 bombs to determine individual functioning, ballistics, and static firing.

b. The following agent-type items were tested during the report period:

(1) 3.5-in. Gb shaped-charge HEAT rocket.

(2) C42 filter.

(3) Wind-tunnel tests on E111 bombs and capsule-type grenades.

(4) HCN-filled balloon.

(5) E33 rocket (toxic-filled).

(6) 4.5-in. rocket (toxic-filled).

c. Final development tests were completed on E15 contaminant.

d. Evaluations were made on tests of the following items:

(1) T164 4.5-in. gas rocket (one test-airburst).

(2) E111 -filled bomb (four tests).

e. The following special studies were completed or in progress during the report period:

(1) Evaluation of munition expenditure calculation system proposed by Training Command.

(2) Evaluation of Suffield comments on GB munition performance.

(3) Explanation for Air Force of methods of determining GB agent-to-burster ratios.

(4) Evaluation of Dugway Proving Ground trials of E91 and E105 bomblets.

(5) Evaluation of Dugway Proving Ground trials of E64 bomblet at various functioning angles.

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

[redacted]
UNCLASSIFIED

(6) Continuing evaluation of dosage-area trials from CRL, Dugway Proving Ground, Suffield, Porton, and Obanakoro to determine behavior characteristics.

(7) Evaluation of cold-weather liquid-contamination trial.

(8) Detailed analysis and evaluation of present and future meteorological equipment requirements.

B. Major Developments in Operating Technique.

A cooperative development by the Chemical Corps Engineering Agency and these Laboratories has resulted in the establishment of the position of Alternate Project Engineer (see CRL Policy File Item 150-7). It is deemed that progress on research and development projects can, in this fashion, be expedited by closer coordination between the two organizations.

C. Performance.

Progress of all research and development undertaken by these Laboratories is reported in detail in the Chemical Corps Research and Development Project Report published annually and is highlighted at the end of the fiscal year in Significant Accomplishments. ~~A copy of this latter report will be forwarded as an addendum when completed.~~ A statistical summary of activities (Review and Analysis, F.Y. 54) is included as appendix B.

Rec Chang 1

UNCLASSIFIED
[redacted]

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

VI. GENERAL.

A. Unusual Activities.

1. Visits to Installation.

a. On 29 June, Dr. Bernard Charles Saunders, member of the University Chemical Laboratory, Cambridge, England, visited these Laboratories to discuss the chemistry of organic phosphorus compounds and the process for manufacturing GB. *

b. On 7 July, 55 Air Force ROTC cadets visited the Chemical Corps Museum for the purpose of orientation.

c. On 13 July, Col. R. A. Gwyn and Col. H. J. G. Weld, Infantry and Armour Representatives of the British Army Staff, respectively, visited these Laboratories for the purpose of general orientation on chemical warfare research and development.

d. On 11 August, 160 reserve officers and enlisted men of the 310th Logistical Command visited this organization. This group was commanded by Brig. Gen. John M. Andrews. Orientation lectures were delivered by Col. Delmore and Lt. Col. Talbot. Later, a smoke and flame demonstration was conducted in the field by Munitions Division, under the supervision of Lt. Col. Miller.

e. On 9 and 10 September, Dr. Norman Shepherd, Department of Colloid Science, Cambridge University, England, visited these Laboratories to discuss infrared spectroscopy of incendiary gels. Differences in experimental results were resolved, and future work was planned.

f. Col. T. F. Hoffman, Assistant Commandant of the CIC School, Fort Holabird, Md., and Lt. Col. W. A. Strickland, Jr., of the school faculty, visited on 16 September for a general orientation on Chemical Corps items and a detailed examination of items of special interest.

g. On 30 September, a visit was made by a class in Graduate Air Ordnance of the U. S. Air Force Institute of Technology. This group consisted of two instructors and five student officers, who were given a general orientation on Chemical Corps research and development items with particular emphasis on air munitions.

* Not previously reported.

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

2. Seminars.

The following meetings were conducted in the physics seminar during the report period:

15 July - Cpl. Louis S. Nidus, Nucleonics Branch, Radiological Division, CRL.
Subject: "Liquid Helium Phenomena"

28 July - Pvt. David Wilson, Analytical Branch, Chemical Division, CRL
Subject: "The Collision Theory of Monomolecular Homogeneous Gas Reactions"

10 Aug.- Pvt. James Friend, Detection Branch, Protective Division, CRL
Subject: "The Microwave Spectra of Asymmetric Rotors"

25 Aug. - Pfc. Donald Fitzwater, Incendiary and Aerosol Branch, Chemical Division, CRL
Subject: "The Interpretation of X-Ray Crystallographic Data"

14 Sep. - Pfc. Herman Eldering, Applied Research Branch, Munitions Division, CRL
Subject: "Infrared Phenomena and Infrared Spectroscopy"

3. Operations Other Than Normal Military Functions.

During the period 22 to 25 August, the Marine Section of Test Division conducted a search for a National Guard jet plane and its pilot, believed to have crashed in the Chesapeake Bay. After four days of dragging the bay, both the plane and pilot were located.

4. Special Events.

a. A meeting was held at this organization on 30 and 31 August to discuss the present status of rheology as related to flame thrower fuels. Such prominent authorities as Drs. Debye, Mooney, Phillipoff, and Marvin were present.

b. On 24 September, a smoke and flame demonstration was held at Aberdeen Proving Ground for the Industrial War College.

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954

c. A demonstration of visibility of the E115 colored smoke grenade was held on 24 September and was witnessed by personnel of the Army Field Forces.

B. Inspections.

The annual general inspection of this organization was conducted during the period 2 to 6 August by Lt. Col. Lucius F. Lincoln, IG; Major Joseph P. Ilardi, IG; Major Louis P. Stephens, IG; CWO William M. Cease, Jr., Office of the CmlC Inspector General; and Mr. John Caponiti, OC Cml O. Activities included in this inspection were: administration, supply, buildings and grounds, records, training, and all organizational elements. In addition, a follow-up inspection was made of the discrepancies in physical security noted in a previous inspection by the Provost Marshal General. The over-all conclusion reached was that this organization was performing its mission in a SUPERIOR manner.

Edgewood Arsenal Historian's Office; Edgewood, MD
Chem. Corps, Chem. and Radiological Laboratories,
Quarterly Historical Report July 1 → Sept. 30 1954