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DEPARTMENT OF THE ARMY OFFICE OF THE CHIEF, CHEMICAL CORPS Chemical Corps Technical Committee

Army Chemical Center Marylandnenged to Classification Cancellary

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4=04-15-05 TSE/5190/blac 16 May 1949

Military Characteristics for 495 usterable G-Series Bomb SUBJECT:

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1. References:

Project 4-04-15-05, Munitions for G-Series Fillings, established 22 Jul 1947.

- Chemical Corps Quarterly Technical Progress Report, R&E Div, OCCmlC, 1 Apr 1949.
- Letter (s), CMLET-M Technical Command, A Cml C, Md. 22 Mar 1949, "Military Requirement and Proposed Military Characteristics for a Chemical Bomb GB Filled", to C-R&E Div, OCCmlC.
- d. D/F (s), CMLWR-D, R&E Div, OCCmlC, 11 May 1949, "Change in Title for Project 4-04-15-05", to Chm, CCTC.

2. Discussion:

a. Reference a. identifies the currently approved project in the Chemical Corps program which has as its long range objective the development of munitions for G-series agents which will be of such superiority that replacement of existing items will be justified. The more immediate goal of this work is the development of a satisfactory clusterable bomb which may utilize lower members of the series as fillings. Initial work on this project was concerned with preliminary exploration of the efficiency of various munitions with GA using modifications of the standard 115-1b. and 125-1b. gas bombs and the 4.2inch chemical mortar shell. Subsequent work utilized GB fillings and resulted in development of a 10-lb. clusterable bomb as a suitable vehicle. Field evaluation of these munitions has been accomplished and alternate methods of agent dissemination have been investigated in order to provide most efficient dispersion in aerosol form. More recently 10-lb. bombs employing high explosive bursters have been designed and procured for overall evaluation as components of a 1000-1b. cluster. Project 4-14-15-05 (ref. a.), under which this work is carried out is recommended for continuation in the 1950 project program and proposes completion of the work on the 10-1b. bombs and continuation of research on more efficient agent dissemination. Reference b. summarizes recent detailed progress on this project.

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2. Discussion continued:
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2. Discussion continued:

- c. It should be noted that the characteristics listed above do not specify the weight of the agent filling or that of the bomb. These characteristics were purposely left open until further tests now pending indicate the efficiency of current designs of the 10-1b. bomb which carries approximately 3-lbs. of agent. Concurrence of R&E Div, OCCmlC and the Chemical Corps Board with the characteristics listed above was indicated in separate correspondence. The latter agency suggested a periodic review of these characteristics in order to incorporate results of additional information which may be obtained relative to effective means of dispersing G-series agents. Reference d. requested appropriate Technical Committee action to approve the subject characteristics.
- d. The foregoing discussion summarized briefly the preliminary work and development directed toward utilization of G-series fillings in munitions and indicates that the more immediate effort of project 4-04-15-06 is centered on development of a small bomb that will be satisfactory for use in 1000-lb. clusters. In order that the work on this munition may be placed on a firm basis approval of the characteristics listed herewith together with establishment of the corollary military requirement is recommended.

3. Recommendations:

It is recommended that:

- a. A military requirement for a Clusterable G-Series Bomb be established and so noted in the Book of Standards.
- b. The military characteristics listed in paragraph 2.b.
 be approved.
- c. These military characteristics serve as a guide for the development of the subject bomb under project 4-04-15-05.

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Concurrence Signatures

- /s/ William R. Crook, Maj, CHAF for E. P. Mechling, Col, USAF Dir of Armament, USAF
- /s/ L. M. Johnson, Col, Cml C Field Chemical Officer
- /s/ W.J. Klepinger, Col, GSC Washington Deputy, AFF
- /s/ P.F. Dickens, Jr, Cmdr (MC) Bu Med & Surg, Navy Dept
- /s/ A.L. Russell for J.J. McGaraghan, Cmdr, CEC Bu Yds & Docks, Navy Dept
- /s/ C.H.M. Roberts, Col, Ord Ordnance Department
- /s/ W.J. Corcoran, Lt Cmdr, USN Bu Ord, Navy Dept
- /s/ L.M. Swanson for T.R. Cooley, Lt 6mdr, USN Bu Aeronautics, Navy Dept
- /s/ L. T. Fleming for J.M. Kollety, Lt Col, TC Transportation Corps.
- /s/ Wilton W. Smith for P.A. Price Signal Corps

ACCEPTED BY THE CHEMICAL .CORPS TECHNICAL COMMITTEE:

APPROVED FOR THE CHIEF. CHEMICAL CORPS:

OP:

APPROVED BY ORDER OF THE SECRE- /s/ Noel A Menard TARY OF THE ARMY, 16 June 1949:

- /s/ C. G. Christie, Capt, USN Naval Unit, A Cml C, Md.
- /s/ H. W. Rowan, Col, Cml C Cml C Board
- /s/ Walter A. Guild, Col, Cml C PTEI Div, OCCmlC
- /s/ T.H. James, Lt Col, Cml C Inspection Div, OCCmlC
- /s/ W. O. Krause, Maj, MSC Surgeon General's Office
- /s/ R. A. Bergseth S&P Div, OCCmlC
- /s/ L. Wilson Greene for J.A. MacLaughlin, Col, Cml C Technical Command
- /s/ David B. Dill for J.H. Wood, Col, MC Medical Division, Cml C
- /s/ LeRoy D. Fothergill for O. Woolpert Biological Depty Cml C
- /s/ J.M. Gray PMGO-6MP (concurred) E. L. Claussen Corps of Engineers
- /s/ T. S. Eckert Secy, CCTC
- /s/ William M. Creasy Colonel, Cml C Chairman, CCTC
- Lt. Col, G.S.C.

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