g. Ltr (C), 1 Oct 64, Edgewood Arsenal, same subject as e., to USAMUCOM, w/Incl (Comments - Corrective Action Taken), (Inclosure 3).

h. Draft (S), TB 9-1300-XXX-53/1, Jul 63, SERGEANT E21 Warhead Section Support Plan (U), APSA, USAMUCOM.

i. Draft (S), POMM 9-1300-XXX-12, Preliminary Operating & Maintenance Manual, Operator & Organizational Maintenance, E21 & E24 Warhead Sections, undated.

j. Rpt (S), CMLCD 61-13, Concepts for Employment of Chemical Warheads for the SERGEANT Missile (U), Apr 1964, USACDC CBR Agency, Ft. McClellan, Ala, (Approved by USACDC in Ltr, CDCCD-F, 21 Nov 63, to CDC Combined Arms Gp, Ft. Leavenworth, Kan.).

k. Technical Note No. 13 (S), CRD Labs, Sep 64, Effectiveness of the SERGEANT Missile with the E21 Warhead Section (GB) when Fired Singly or in a Salvo of Two (U).

l. Draft Spec MIL-W-60081 (MU), Warhead, Guided Missile, Chemical Agent, 1500-lb., E9, 23 Sep 64.

m. Security Checklist (C), Picatinny Arsenal, 17 Jun 64, Fuzing Section, Guided Missile Warhead, M71 (U).

n. In-Process Review Meeting, E21 GB Warhead Section, held at Edgewood Arsenal, 21 Oct 64.

2. (C) Discussion:

a. The SERGEANT Missile is an inertially-guided, solid propellant, surface-to-surface weapon designed to augment field artillery fire and deliver a 1500 lb. payload within a range of 25 to 75 nautical miles. The system (XM15) consists of the missile proper, launching station, organizational test station, field maintenance test station, and the necessary transport vehicles. The missile is approximately 34 ft long, 31" in diameter and weighs about 10,000 lbs. Components are the warhead section, guidance section, rocket motor, and a set of four control surface assemblies (fins). Each section has its own shipping and storage container with separate containers for the control surface assemblies. In flight, the missile follows a ballistic trajectory with drag brakes, employed to adjust range, programmed to operate three times during flight. The first provides range reduction, followed by vernier corrections from the other two. Design of the missile provides for a CEP of 300 meters. The SERGEANT system was classified LP type by OTCM 37042, and extended under OTCM 37867, 11 Aug 61. This report reviews the development and evaluation of the E21 GB Warhead Section in support of type classification. The biological counterpart, M210 Section, was so classified by the action of AMCTC Item 2630, 30 Sep 64.