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Classification Approved:

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2 July 1959

SUBJECT: New Incapacitating Agent, CS (U)

1. PROBLEM.

(U) To provide information on the new incapacitating agent CS, for use by DA Staff Briefing Team on trip to Europe 6-21 August 1959.

2. DISCUSSION.

a. (S) The Chemical Corps recently completed a crash program to supply 20,000 pounds of the new incapacitating agent CS, together with suitable disseminating devices, to USAREUR. All materiel was shipped from CONUS to Europe prior to target date of 1 May 1959.

b. (S) Agent CS (Ortho-chlorobenzylidene malononitrile) was developed by the British for use as a riot control agent and was used very successfully by them in quelling riots on Cyprus in the Summer of 1958. This agent is a short term rapid acting incapacitating agent which is extremely effective in low concentrations.

c. (C) Effects are severe burning of the eyes with lacrimation irritation of the nose, throat and chest; coughing; difficult breathing; and nasal evacuation. Symptoms appear almost immediately with incapacitation occurring within 6 - 60 seconds. Effects last for 5 - 20 minutes after exposure. After first effects of the agent are noted, it is too late to mask for you already have received an incapacitating dose.

d. (S) Indications are that this agent will be useful not only in riot control situations but also in limited and total war. Exposed combat personnel have declared that they were unable to maintain any resistance after exposure to this agent.

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3. COMMENT.

(U) Also see separate item entitled "Incapacitating Agent Program (U)."

4. RECOMMENDATIONS.

(U) That above information be noted.

Subject to provisions of para 60a, AR 380-5

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Classification Approved:

Carl R. Brewer

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2 July 1959

SUBJECT: Incapacitating Agent Program (U)

1. PROBLEM.

(U) To provide information on the Chemical Corps Incapacitating Agent Program for use by DA Staff Briefing Team on visit to Europe 6-21 August 1959.

2. DISCUSSION.

a. (U) An incapacitating agent is one which makes it impossible for the exposed individual to perform his assigned duties over a period of time which is militarily significant and which produces no permanent after effects.

b. (C) The present CW incapacitating agent program is primarily in the research stage and is designed to discover and evaluate chemical compounds which cause mental or physical incapacitation in order to develop a capability in agents of both types.

c. (U) The desired criteria for a chemical incapacitating agent are: (1) it must be biologically effective; (2) it must be economically producible in militarily significant quantities from non-critical raw materials; (3) it must be stable in storage, and (4) it must be capable of being delivered to military targets by use of suitable munitions.

d. (U) Incapacitating agents generally are divided into two categories: those which function essentially by their effect on mental processes and those which function primarily by their effect on physical mechanisms. Compounds in both categories are being investigated.

e. (C) Generally speaking, compounds which affect the mental processes take from 15 or 20 minutes to a few hours for their effects to be widespread among exposed individuals.

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f. (C) The second category of incapacitating agents is the physical incapacitators; they affect exposed individuals much more rapidly than do the mental type. Effects from some candidate agents of this type may be evident in less than one minute. Agents of this category will have primary application in tactical situations where it is desired that unfriendly forces be promptly physically incapacitated.

3. COMMENTS.

a. (C) In order to attain an early capability in this category of chemical agents, the Chemical Corps is selecting the several most promising candidate agents (of both types) which most nearly meet the optimum balance of all desired criteria. These agents will undergo further study in order to accomplish type classification of an incapacitating agent early in 1960.

b. (U) Also see separate item entitled "New Incapacitating Agent, CS (U)."

4. RECOMMENDATIONS.

(U) That the above information be noted.

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