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Foreign Medical Materiel Exploitation Annual Report (U)

December 1991



**ARMED FORCES
MEDICAL
INTELLIGENCE CENTER**

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Armed Forces Medical Intelligence Center (AFMIC)
Foreign Materiel Exploitation Program

Foreign Materiel Exploitation Annual Report (U)

December 1991

AFMIC's fifth annual report on the status and value of exploitation projects
ongoing or completed during the previous year.

*DENIED
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~~Classified by Director, AFMIC~~

~~Declassify OADR~~

~~Not Releasable to Foreign Nationals~~

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PREFACE

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(U) For each project, the scope and status are described, the intelligence production and/or medical materiel development programs supported are listed, and the achieved or anticipated value is provided.

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(U) Foreign medical materiel exploitation is a Department of Defense/Defense Intelligence Agency-assigned mission of AFMIC.

(U) Each classified paragraph, caption, and title in this report has been properly marked; those unmarked are unclassified.

(U) Consumers interested in further details on the projects listed in this publication or on any foreign medical products, including the acquisition and exploitation of such products, should contact (b)(3):10 USC 424 AFMIC Foreign Materiel Exploitation Program, (b)(3):10 USC 424

(U) Request any amplification of subject matter, constructive criticism, comments, or suggested changes be forwarded to the Director, Armed Forces Medical Intelligence Center, Fort Detrick, Frederick, MD 21702-5004.

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KEY JUDGMENTS

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(U) The following Department of Defense (DOD) materiel development organizations or planning units participated in one or more of the projects.

- US Army Medical Research Institute of Infectious Diseases
- US Army Medical Research Institute of Chemical Defense
- US Army Institute of Surgical Research
- US Army Biomedical Research and Development Laboratory
- Walter Reed Army Medical Center
- US Army Academy of Health Sciences
- US Army Science and Technology Center, Europe
- Naval Medical Research Institute
- US Air Force Human Systems Division
- Uniformed Services University of the Health Services
- Armed Forces Radiobiology Research Institute

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GLOSSARY

AFMIC.....Armed Forces Medical Intelligence Center

AFRRI.....Armed Forces Radiobiology Research Institute

AHS United States Army Academy of Health Sciences

BWbiological warfare

CWchemical warfare

DoD.....Department of Defense

HSD United States Air Force's Human Systems Division

ICD United States Army Medical Research Institute of Chemical Defense

ISR United States Army Institute of Surgical Research

NBC Nuclear, Biological, and Chemical

NMRI Naval Medical Research Institute

USABRDL..... United States Army Biomedical Research and Development Laboratory

USAMRIID United States Army Medical Research Institute of Infectious Diseases

USUHS Uniformed Services University of the Health Sciences

SECTION I

Exploitations Ongoing

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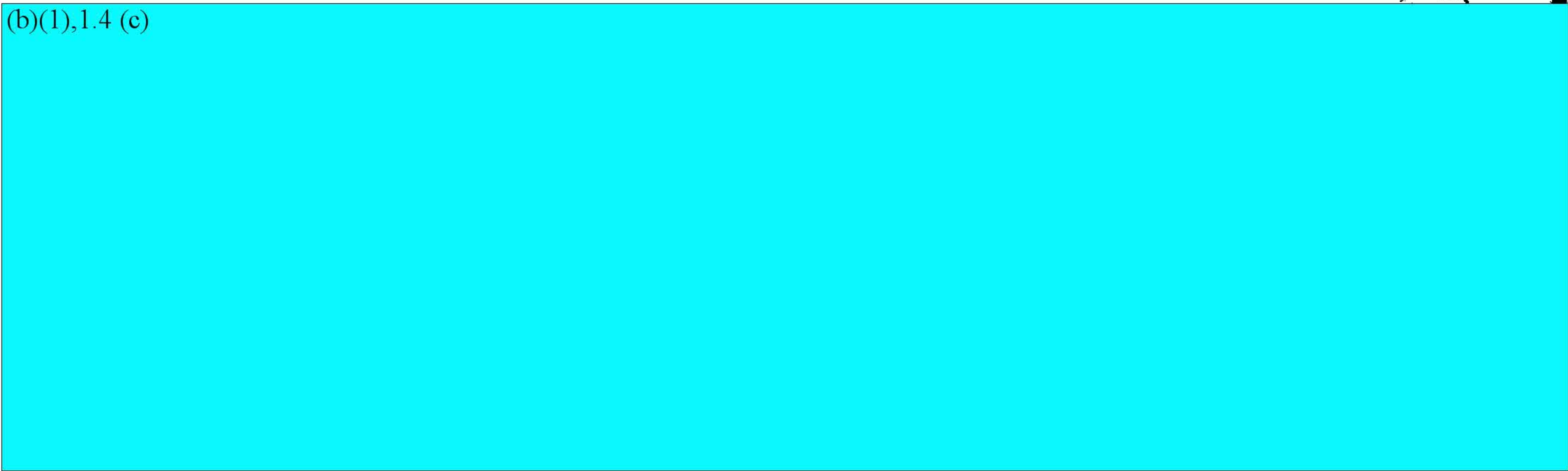
(U) **Programs Supported.** This exploitation supports AFMIC's general medical intelligence assessments and pharmaceutical production data bases.

(U) **Value.** Pharmaceutical production site names, locations, and products are valuable in assessing a country's medical industry. Comparing the sites with suspected biological warfare (BW) agent production sites supports assessments on the suspected BW sites.

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(U) *Programs Supported.* This exploitation supports AFMIC's general medical intelligence assessments and pharmaceutical production data bases.

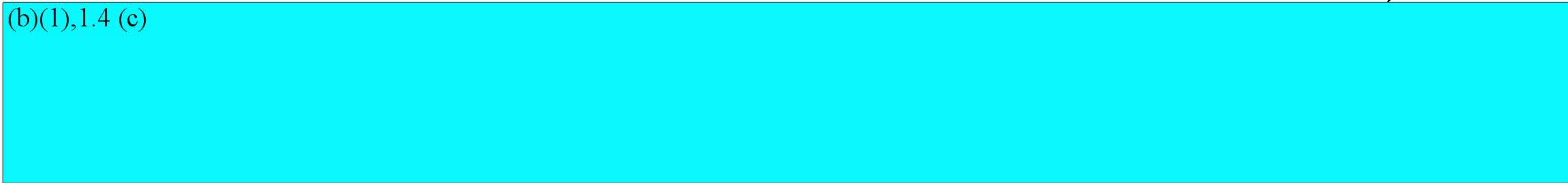
(U) *Value.* Pharmaceutical production site names, locations, and products are valuable in assessing a country's medical industry. Comparing these sites with suspected BW agent production sites supports assessments concerning the suspected BW sites.

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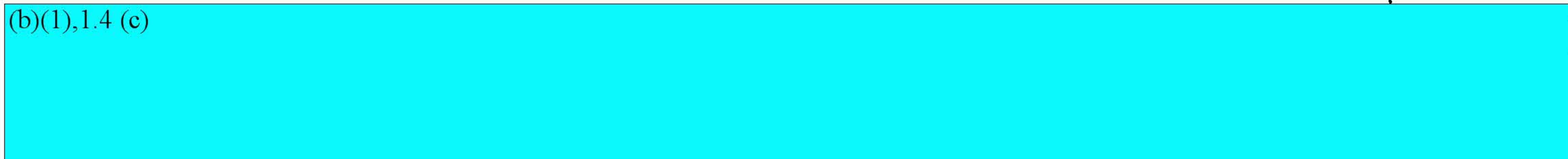
(b)(1),1.4 (c)



(U) *Project Status.* The evaluation is continuing.

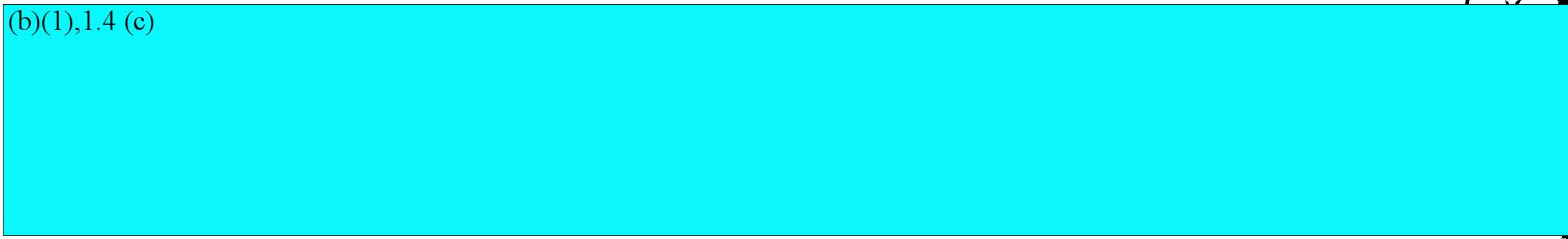
(U) *Programs Supported.* This exploitation supports USAMRIID's programs to develop vaccines and drugs against BW agents. Anthrax is considered to be a likely BW threat agent. Iraq was developing anthrax as a weapon.

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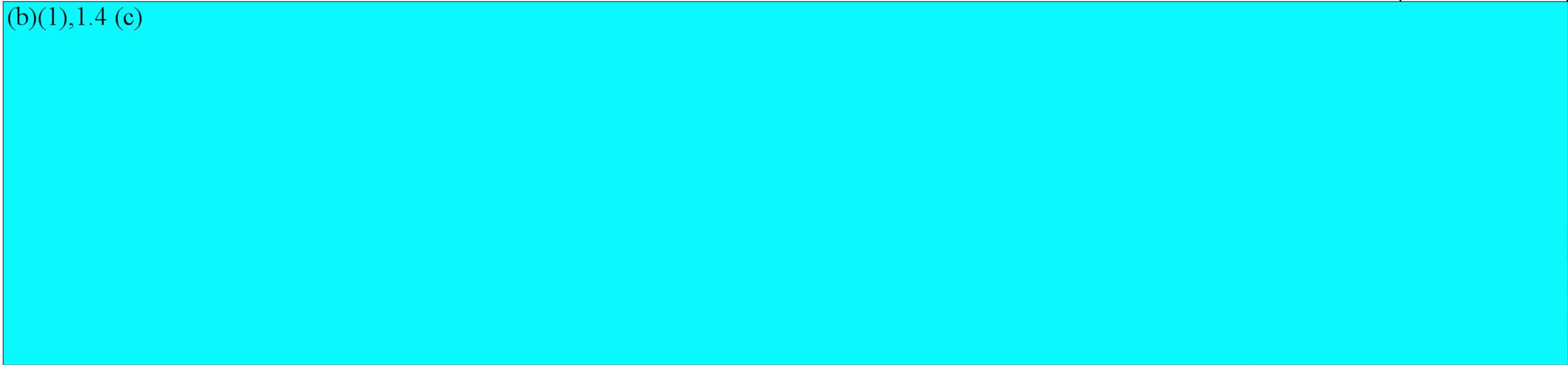


(U) *Project Status.* The analysis is being planned.

(U) *Programs Supported.* This exploitation supports assessments related to foreign narcotics trade and consumption.

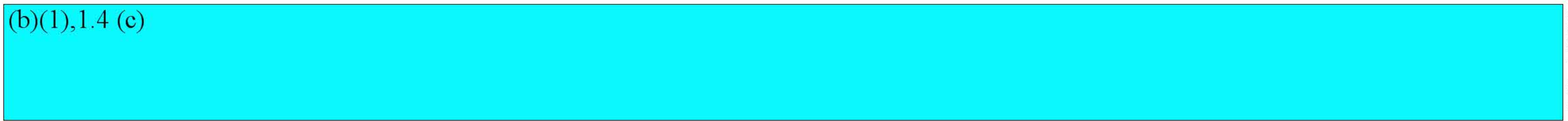
(U) *Value.* The identification of the composition of a cocaine "antagonist" is of interest to counter-drug analysts and medical personnel.

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(U) *Programs Supported.* This system would support US Army medical personnel training.

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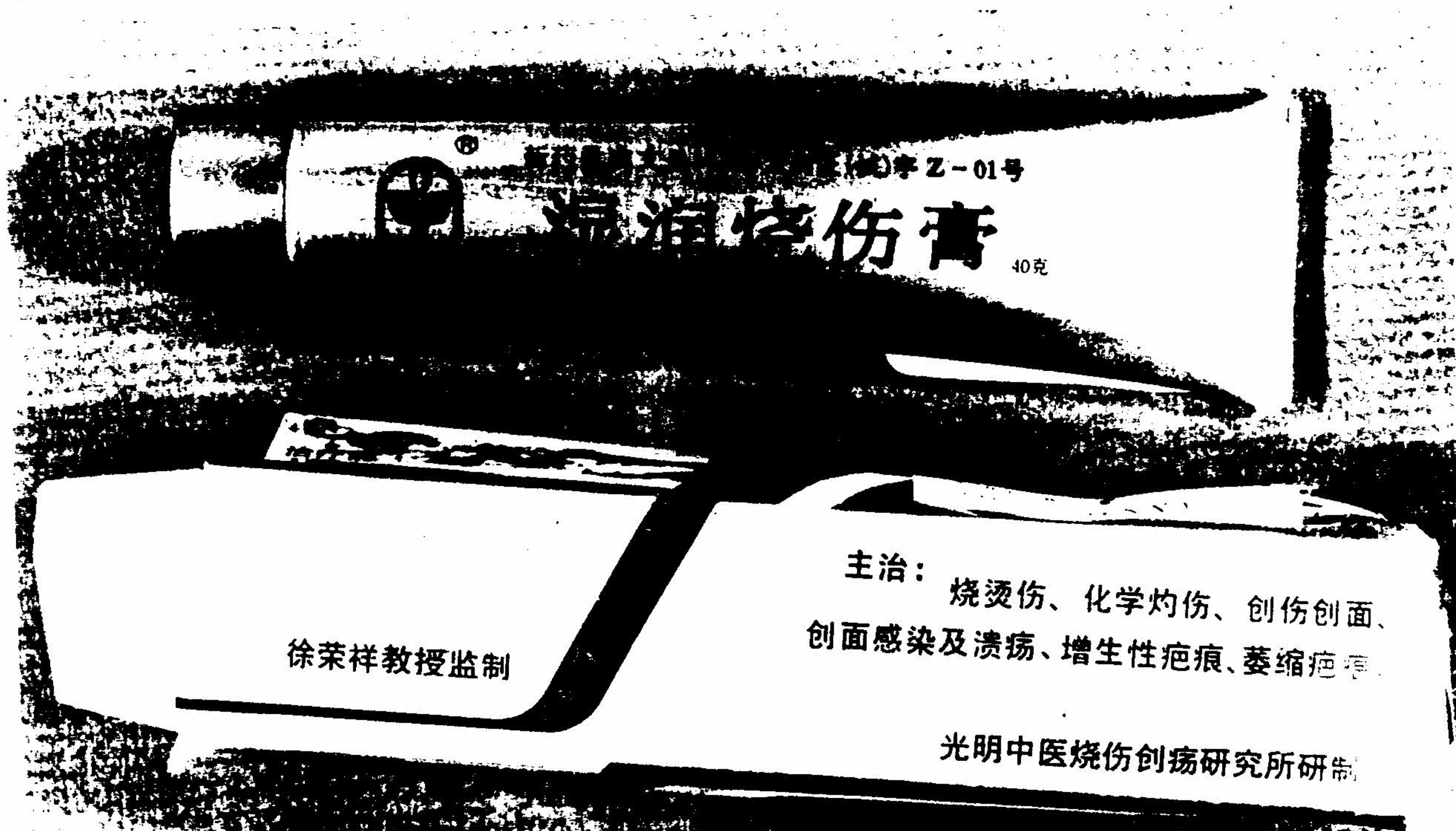
(b)(1), 1.4 (c)

(U) *Project Status.* Package inserts are being translated.

(U) *Programs Supported.* ISR's programs to identify and develop better burn ointments are supported by this exploitation.

(U) *Value.* Improved burn ointments would be of value because the potential for burn injuries is high in modern warfare.

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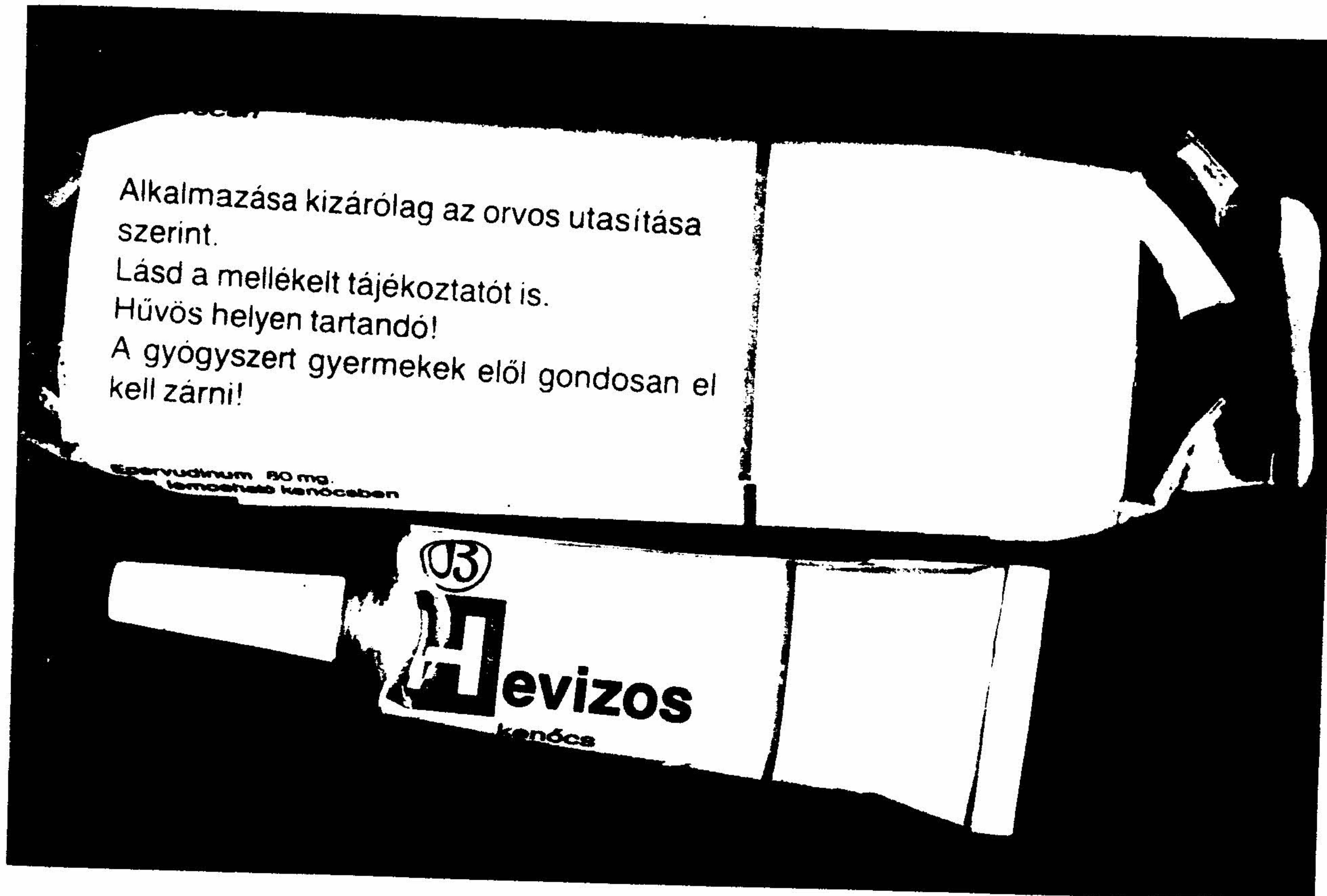
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(U) *Project Status.* USAMRIID, which has a sample of the drug, is evaluating literature on the drug.

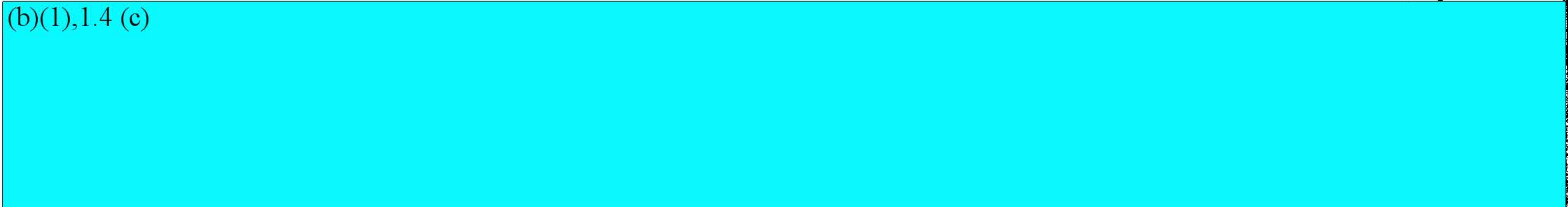
(U) *Programs Supported.* USAMRIID's program to screen for new anti-viral drugs is supported by this program.

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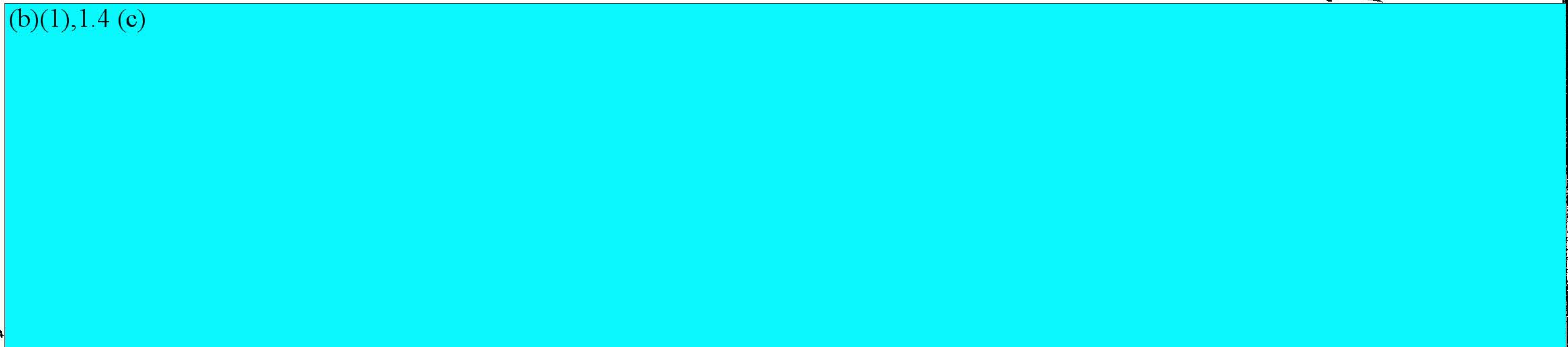
(U) *Project Status*. The label on the drug has been translated.

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(U) *Value*. The exploitation helps materiel developers become aware of an interesting foreign product.

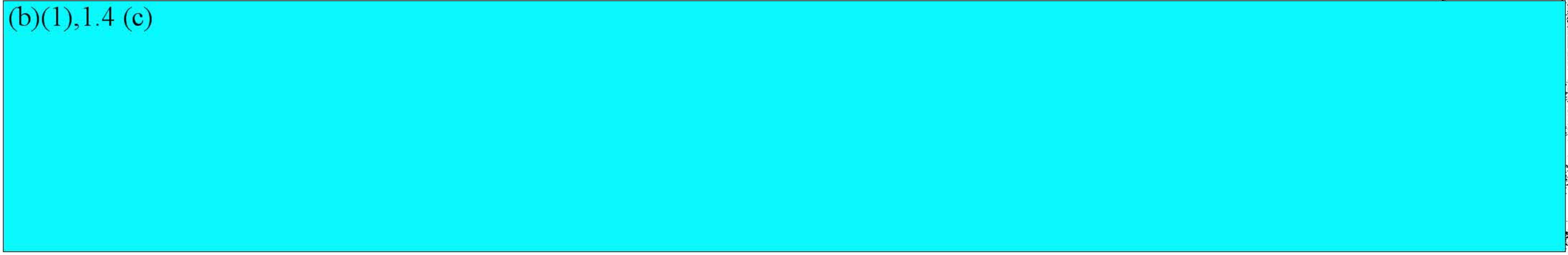
(b)(1),1.4 (c)



(U) **Programs Supported.** HSD programs to develop effective treatment for laser-induced ocular injuries are supported by this exploitation.

(U) **Value.** The exploitation alerts medical materiel developers to a potentially interesting and unique drug.

(b)(1),1.4 (c)



(U) **Project Status.** Analysis is being conducted.

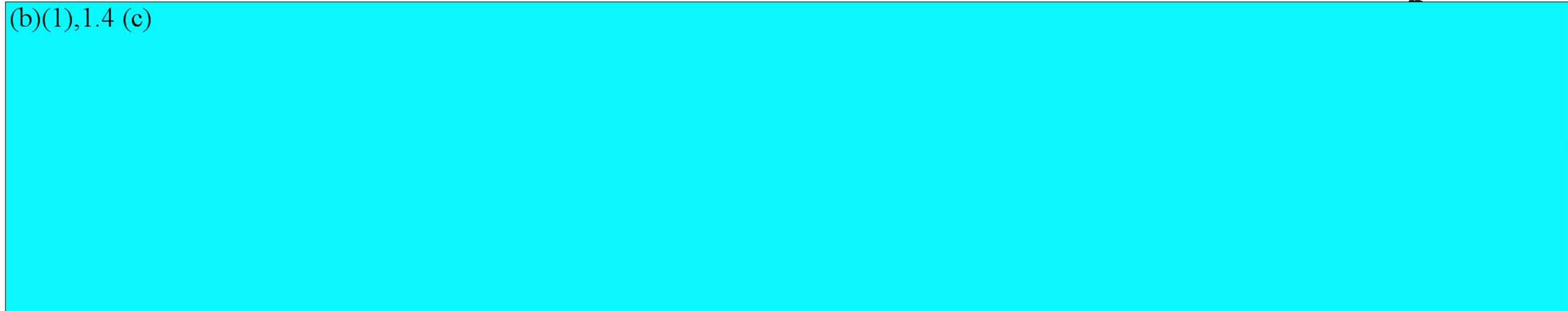
(U) **Programs Supported.** This exploitation supports AFMIC's program to assess the chemical warfare (CW) treatment capabilities of foreign countries. It also supports ICD's programs to develop antidotes and other medications for CW agents.

(U) **Value.** Knowing the composition of antidotes used by other countries is of value to the military and supports the technical data bases.

SECTION II

Exploitations Completed

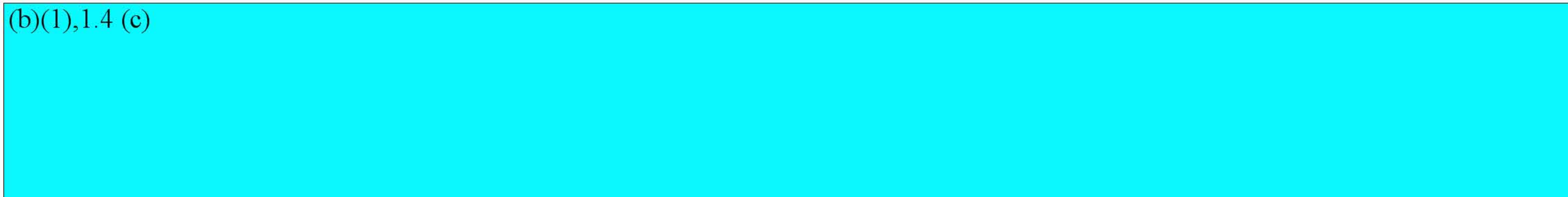
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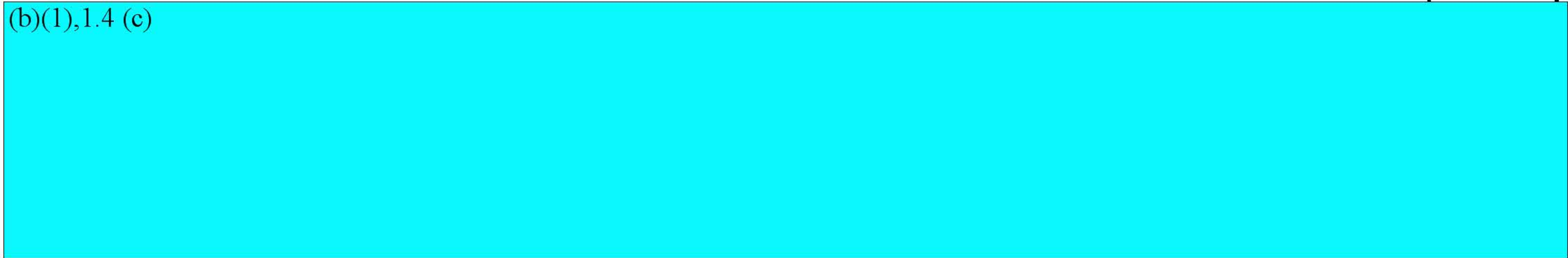
(U) *Project Status.* Completed.

(U) *Programs Supported.* This exploitation supported USAMRIID's program to develop toxin detection technology.

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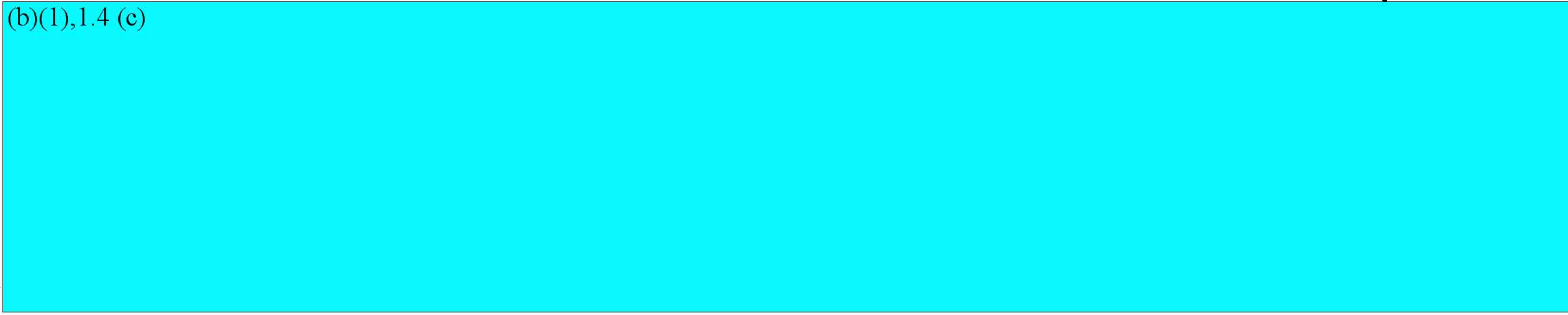
(U) ***Project Status.*** Completed.

(U) ***Programs Supported.*** This exploitation supports ICD's program to develop better antidotes and AFMIC's program to assess the chemical warfare medical treatment capabilities of foreign countries.

(b)(1),1.4 (c)

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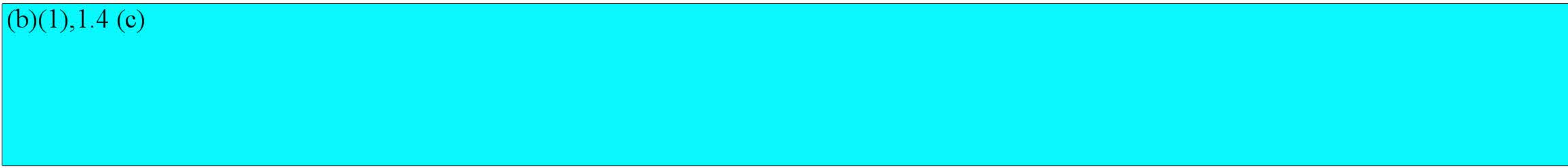
(b)(1),1.4 (c)

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(U) *Project Status.* Completed.

(U) *Programs Supported.* ICD's program to develop improved CW agent treatment and skin decontamination materiel and AFMIC's program to assess foreign CW treatment capabilities are supported by this exploitation.

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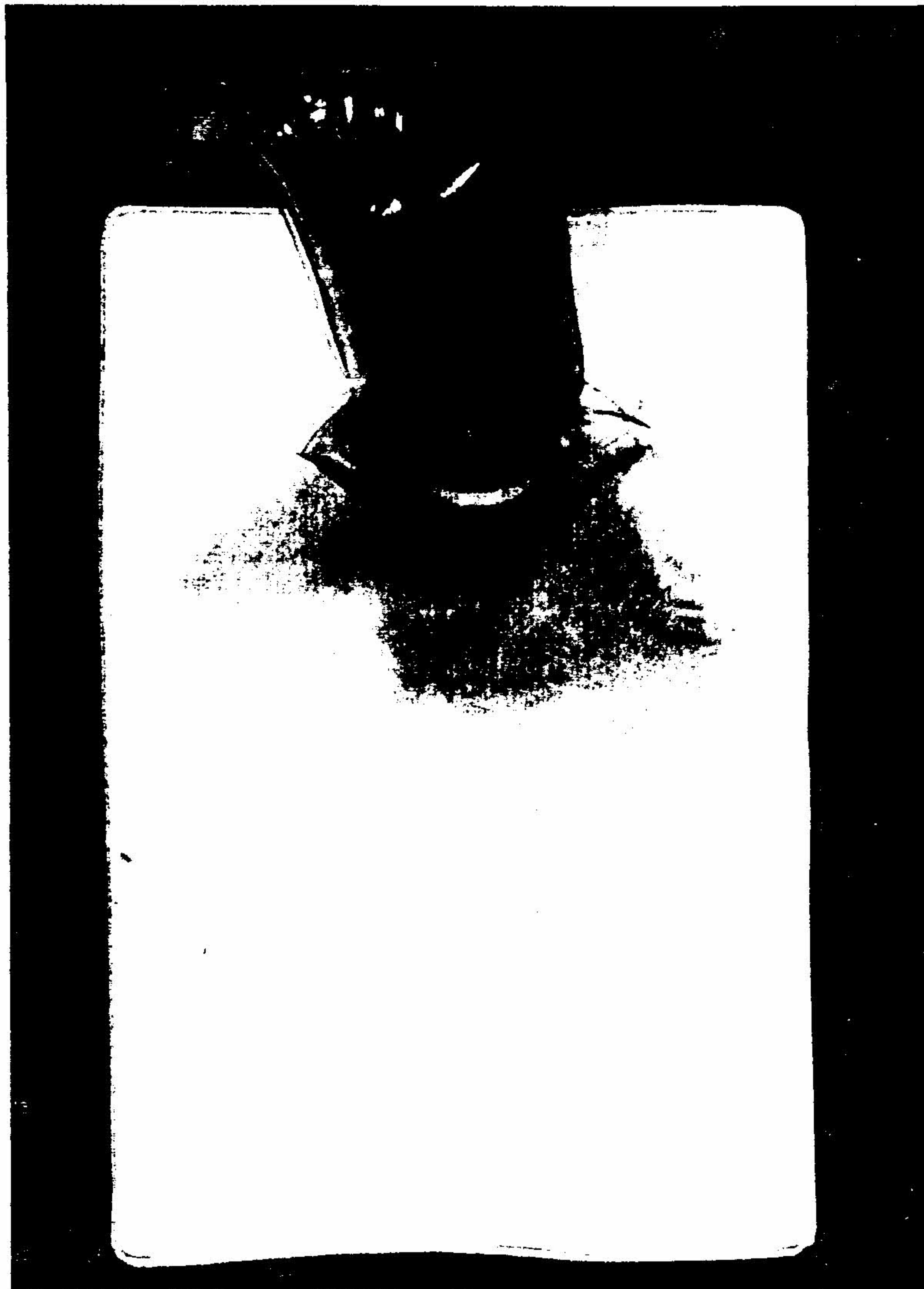


(U) *Project Status.* Completed.


(U) *Programs Supported.* The exploitations supported USABRDL's program entitled "Technical Feasibility of Medical Equipment."

(U) *Value.* Comparing the effectiveness of these systems to US systems assisted USABRDL in characterizing the limitations and advantages of US Army systems. Fluid freezing in transfusion bags has been a problem.

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(U) *Project Status.* Completed.

(U) *Programs Supported.* This exploitation supported NMRI's program to provide information on the clinical and pathologic problems caused by soil and sand in wounds.

(U) *Value.* Results were obtained on the physical characteristics of Saudi Arabian soil and sand, and on the irritation and infectious effects on rat's peritoneal cavities. A report is available.

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(U) *Project Status.* Completed.

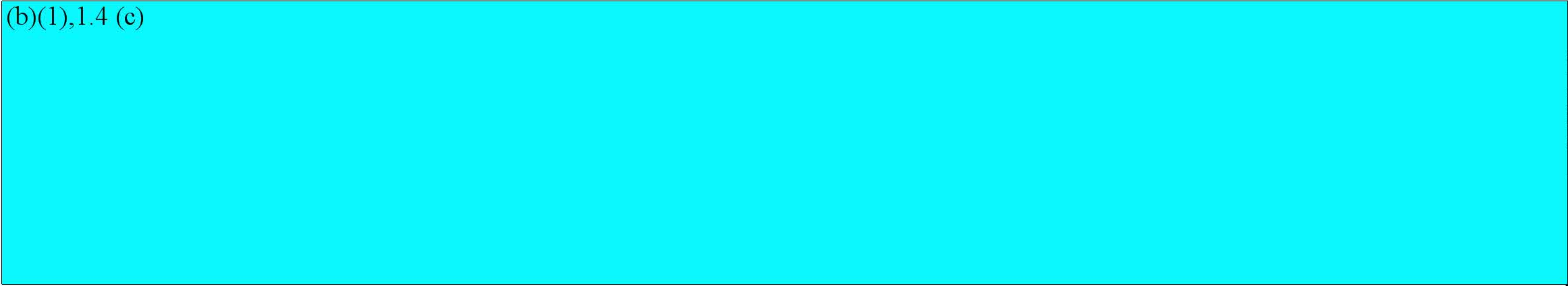
(U) *Programs Supported.* This exploitation supports USAMRIID's program to develop effective anti-viral drugs. Interferons are anti-viral drugs. Disease-causing viruses can be difficult to treat. Some viruses are potential BW agents. This exploitation also supports AFMIC's program to assess foreign biotechnology capabilities.

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(b)(1),1.4 (c)




(U) **Project Status.** Completed.

(U) **Programs Supported.** This exploitation supports AFMIC's program to assess the CW medical treatment capabilities of foreign countries. It also supports ICD's program to develop protective creams for mustard agent.

(U) **Value.** Information on foreign-used medical and protective products for mustard is of value. Mustard is a likely CW agent for use against US forces. Iraq used mustard extensively in the Iran-Iraq War.

(b)(1),1.4 (c)



(U) *Project Status.* Completed.

(U) *Programs Supported.* This exploitation supports AFMIC's program to assess the CW treatment capabilities of foreign countries. It also supports ICD's programs to develop antidotes and other medications for CW agents.

(U) *Value.* Knowing the composition of foreign antidotes and other CW medications used by foreign militaries is of value and supports the technical data base.

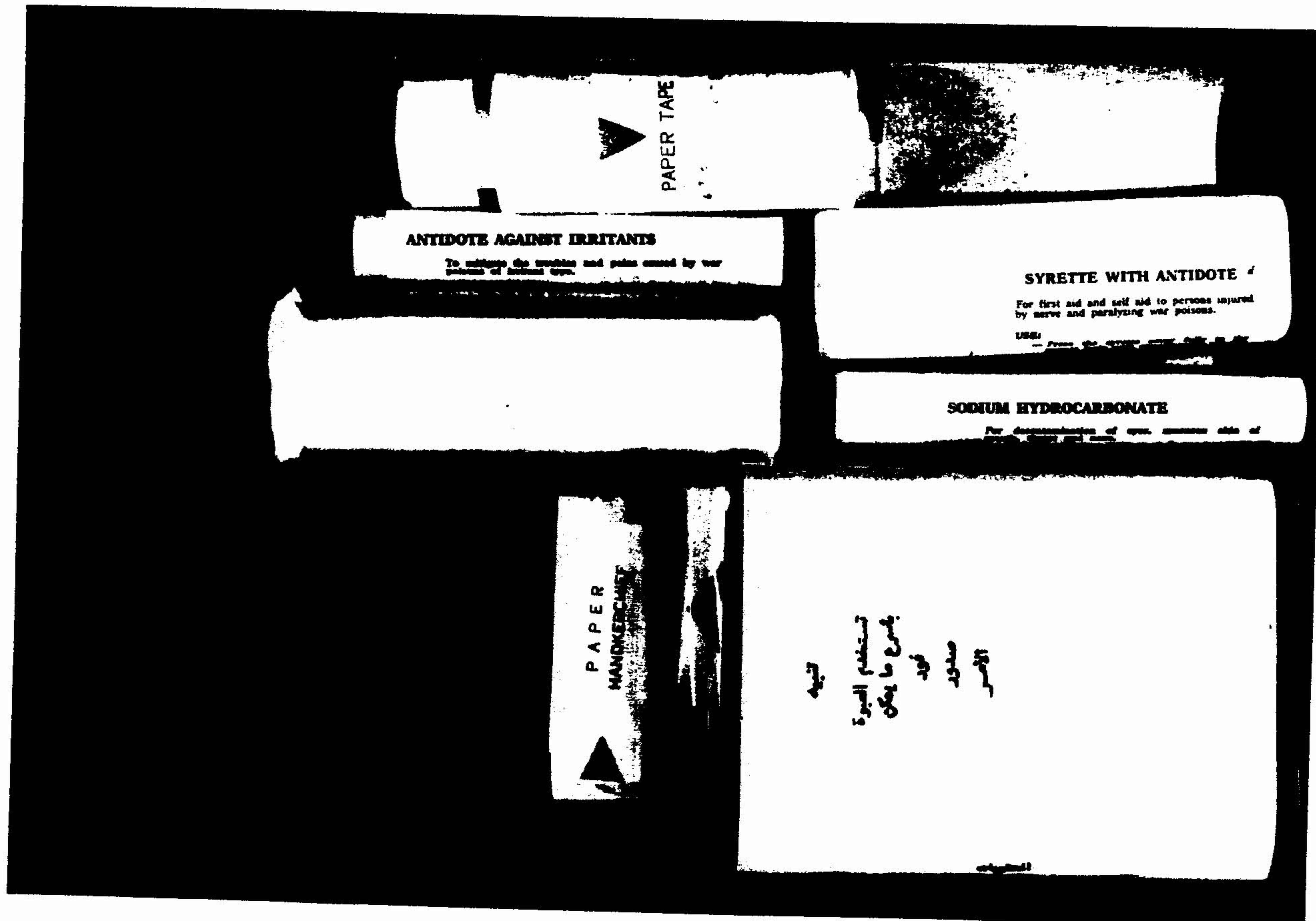
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(U) *Value.* Knowing the composition of antidotes and other CW medications used by foreign militaries is of value and supports our technical data base.

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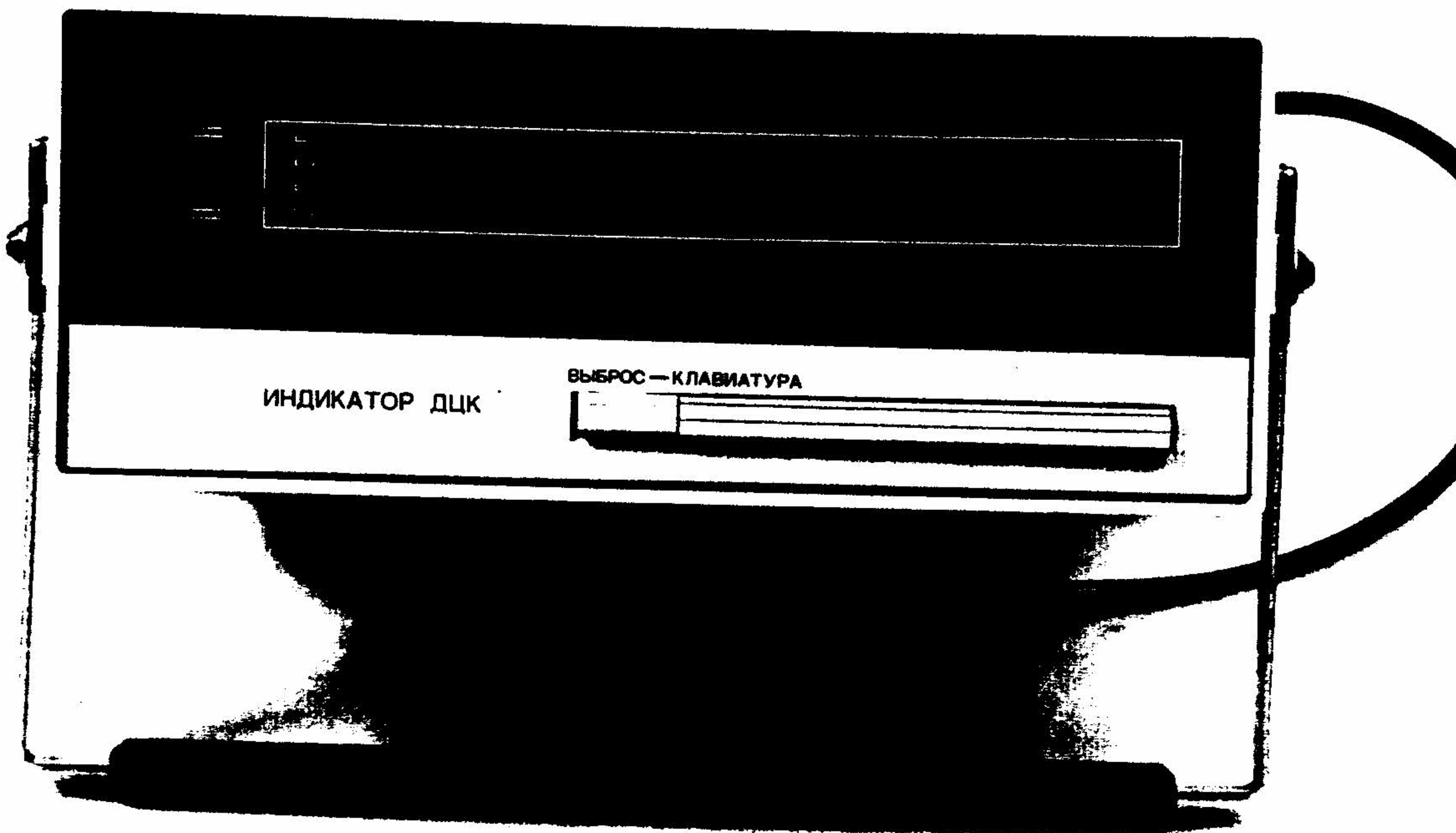
(b)(1),1.4 (c)

(U) *Project Status.* Completed.

(U) *Programs Supported.* This exploitation supported AFMIC's Foreign Materiel Exploitation Program's mission to identify foreign medical materiel of possible interest to consumers and to provide technical details on the materiel.

(U) *Value.* This exploitation supports the US Department of Defense medical technology data base.

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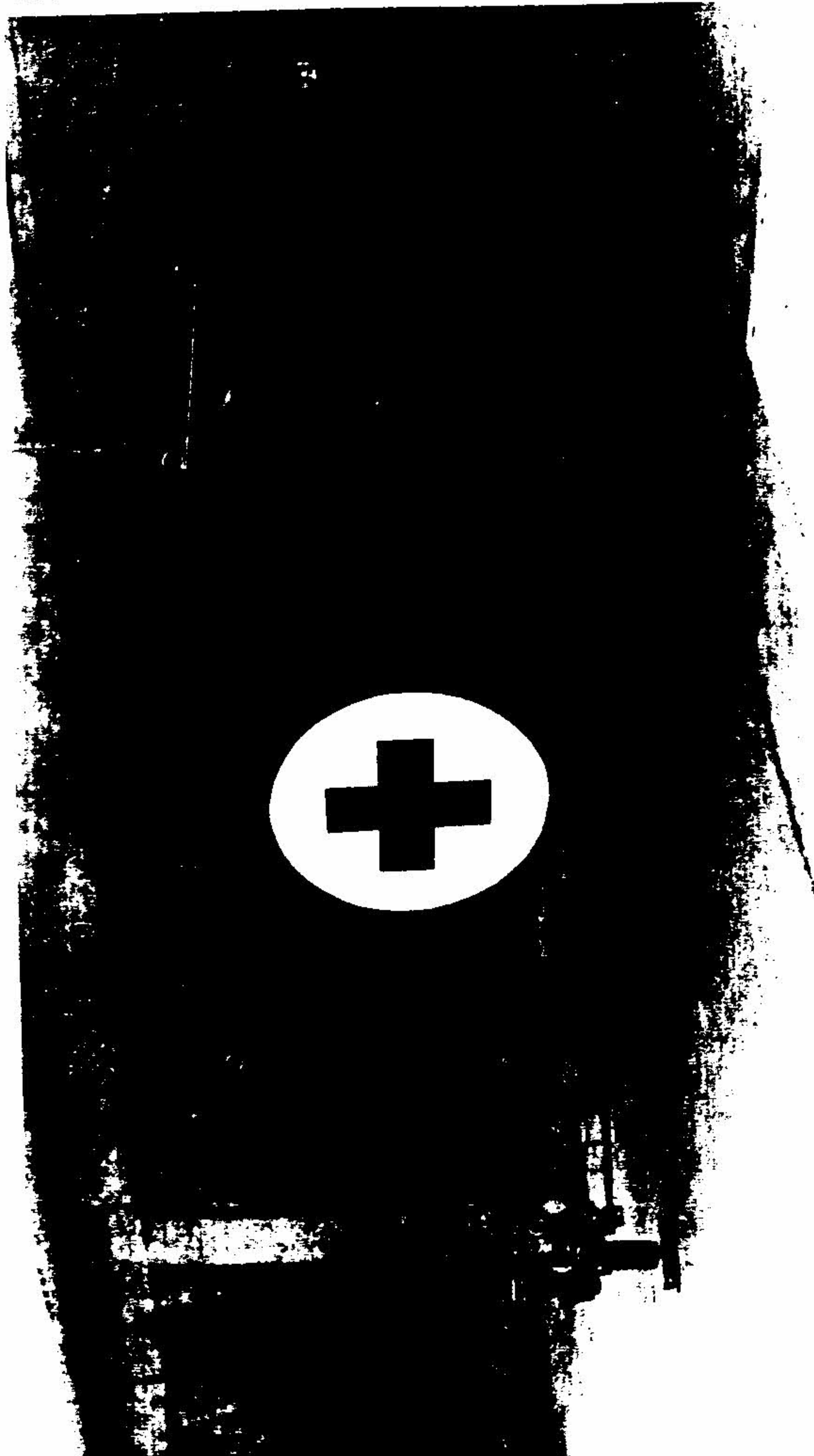
(b)(1),1.4 (c)

(U) *Project Status.* Completed.

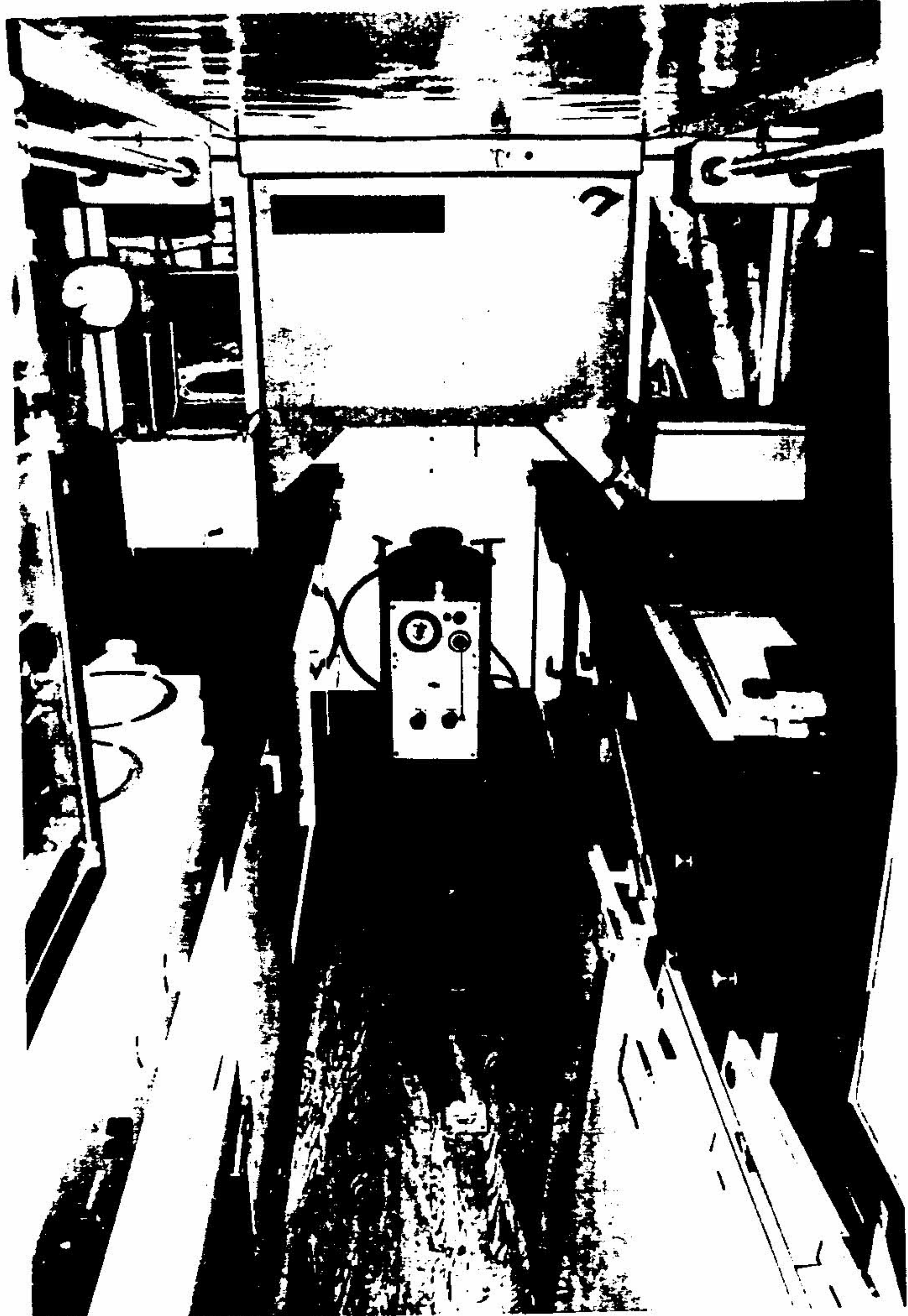
(U) *Programs Supported.* This exploitation supported AFMIC's mission to assess foreign BW capabilities.

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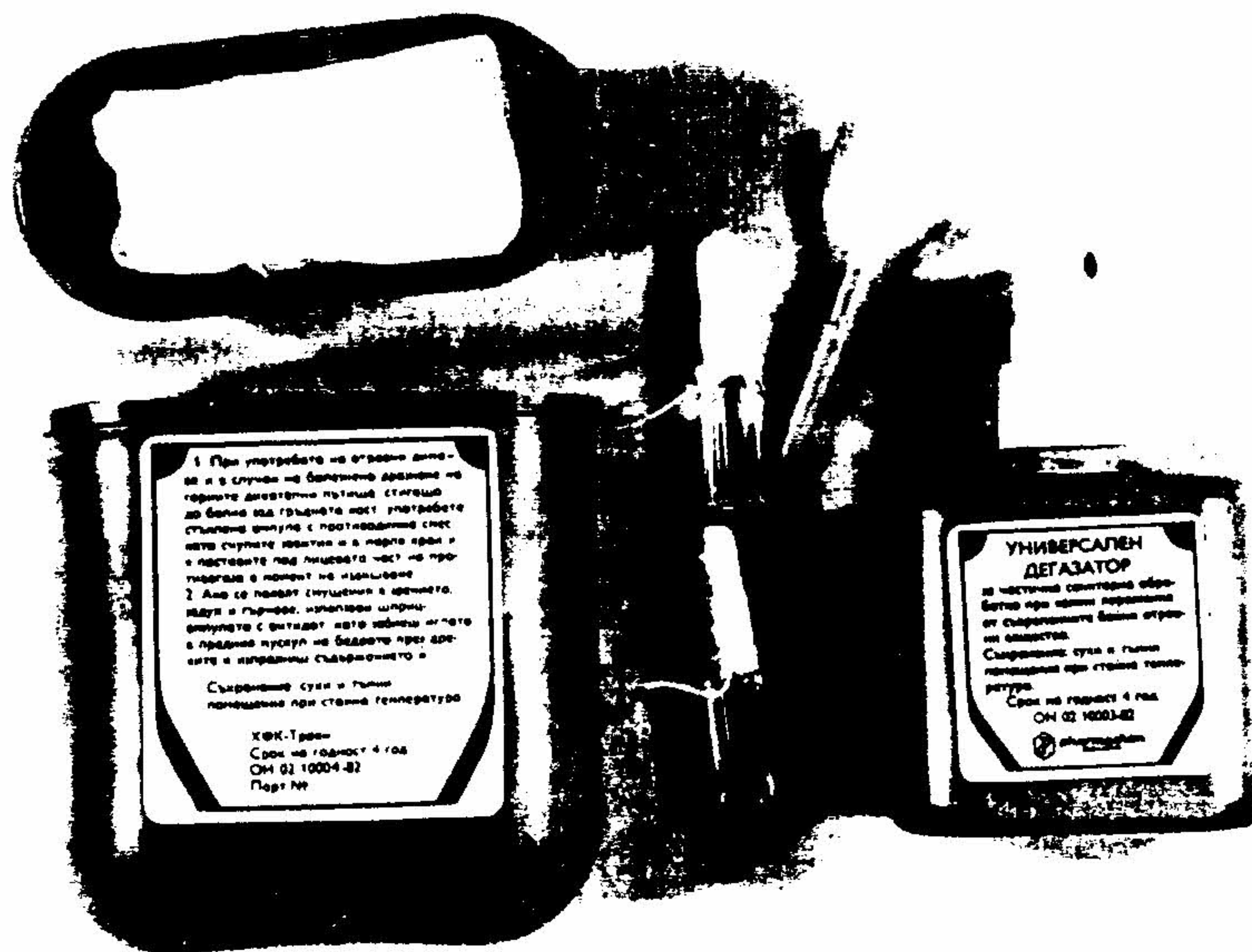
(b)(1),1.4 (c)

(U) *Project Status.* Completed.

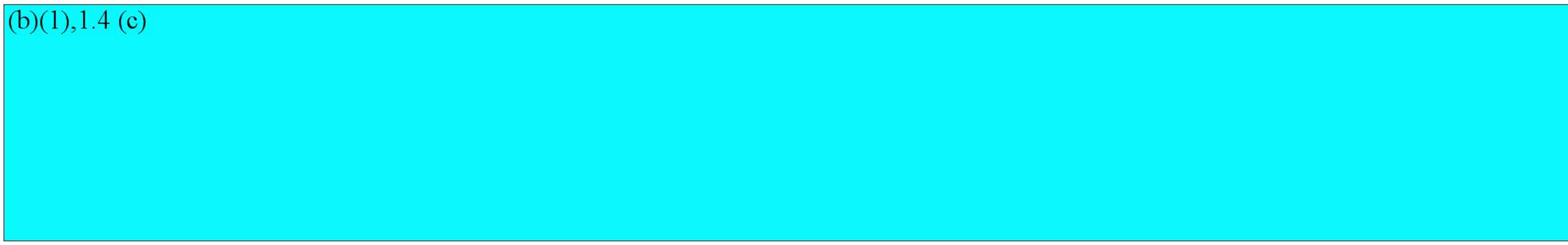
(U) *Programs Supported.* This exploitation supports AFMIC's program to assess the CW treatment capabilities of foreign countries. It also supports ICD programs to develop antidotes and other medications for CW agents.

(U) *Value.* Knowing the composition of antidotes and other CW medications used by foreign militaries is of value and supports our technical data base.

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(U) *Project Status.* Completed.

(U) *Programs Supported.* This exploitation supports ICD and AFRRI's programs to develop better treatments for mustard and other chemical burns and for radiation burns.

(U) *Value.* Mustard, other chemical, and radiation burns are not well treated with presently available ointments. An improved ointment would be valuable. Mustard agent was used extensively by Iraq in the Iran-Iraq war. The ointment was not effective.

(b)(1), 1.4 (c)

(U) *Project Status.* Completed.

(U) *Programs Supported.* This exploitation supports AFRRRI's programs to develop more effective radioprotective drugs.

(U) *Value.* Radioprotective drugs have important uses in medicine (such as during radiation treatments) and in occupation safety (such as workers at sites with unusual radiation levels). Effective drugs for these uses would be valuable.

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