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DEVELOPMENT OF METHODS FOR PROTECTION OF PERSONNEL AGAINST RADIOACTIVITY  
OSD1.950123.033  
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1. Military Goal:

a. to protect military personnel against contamination and radioactive materials and against excessive exposure to penetrating radiation and

b. to provide persons actually or potentially exposed to radioactivity or radiation and proper prophylactic or therapeutic medication.

1. immediate goal - improvement of present protective clothing, masks, mobile shielding units etc.

2. ultimate goal - development of prophylactic and therapeutic medication for persons actually or potentially exposed to radiations.

2. Deficiency in Present Equipment:

Protection methods now in use existing in Atomic Energy Installations (military and AEC) are effective, but can be improved, made more readily available and more practical. The long range aspects of the program (pharmacological agents) presumably will be a by-product of a study of the biological effects and treatment of radiation.

3. Present Research & Development.

1. Work on masks, fitters, etc. now in progress technically possible.

There is a limit to the effectiveness of these methods which should not be too difficult to achieve.

2. Work on protective clothing - goal is limited in effectiveness, can be combined and other features of clothing useful in atomic warfare.

3. Work on shielding proceeding in other parts of Atomic Energy program (reaction, NEDA, etc) but should be applied to military operating conditions (slit tenders, etc, mobile shielding units. Goal should not be difficult to achieve. Other aspects of prevention of personnel from over exposure to penetrating radiation is largely a matter of having proper radiation detection equipment available, trained personnel and in indoctrination in radiological discipline.

4. Prophylactic drugs for persons potentially exposed to radiation will be a by-product of the fundamental study of radiation action.

4. Conclusion:

Practical problems (immediate goal) must be continued.

Ultimate goal will probably be achieved as a result of work in other fields.

Interim Manual for protection of personnel as well as decontamination, etc. should be requested of NRLD and should be properly disseminated.