SUBJECT: DoD Research and Development Laboratories

(b) Office of the Under Secretary of Defense (Research and Engineering) Report, "Required In-house Capabilities for Department of Defense Research, Development, Test and Evaluation," October 1, 1980
(c) Report of the DoD Laboratory Management Task Force, July 1980\(^1\)

1. PURPOSE

This Instruction supplements references (a) and (b) by amplifying the long-term goals and objectives of DoD research and development (R&D) laboratories.

2. APPLICABILITY AND SCOPE

2.1. The provisions of this Instruction apply to the Office of the Secretary of Defense and the Military Departments (hereafter called "DoD Components").

2.2. Its provisions encompass those DoD Components that control and monitor the programs, personnel, and facilities of DoD laboratories.

\(^1\)Available from the Office of the Under Secretary of Defense for Research and Engineering (Research and Advanced Technology).
3. POLICY AND PROCEDURES

3.1. The DoD laboratories represent a critical and unique resource for solving the scientific and engineering problems, deficiencies, and needs of the Military Departments. It is the policy of the Department of Defense to preserve and efficiently utilize this resource.

3.2. To fulfill this policy objective, DoD laboratories shall:

   3.2.1. Be assigned challenging program responsibilities that reflect their unique capabilities, responsibilities and experience. In deciding these program assignments, their sponsors should, of course, give careful consideration to the work that can be effectively and efficiently performed by the private sector.

   3.2.2. Be delegated as much authority, responsibility, and flexibility as is practicable for the management and utilization of their manpower resources.

   3.2.3. Determine the mix of skills, experience, and grade levels required to accomplish their missions efficiently and effectively.

   3.2.4. Tailor their personnel policies and practices to satisfy the particular needs of the laboratories, within statutes and regulations that apply.

   3.2.5. Recruit, develop, promote, and make strong efforts to retain the high quality, creative scientific, and engineering talent vital to their operations.

   3.2.6. Maintain and modernize their facilities and equipment to meet anticipated in-house R&D program needs.

3.3. DoD laboratories exist to achieve -- in cooperation with universities and industry -- a level of technological leadership that shall enable the United States to develop, acquire, and maintain military capabilities needed for national security. In this regard, they shall meet the following specific goals and objectives:

   3.3.1. Ensure the maintenance and improvement of national competency in technological areas essential to military needs.

   3.3.2. Avoid technological surprise and ensure technological innovation.

   3.3.3. Maintain a continuity of effort directed toward the conception and evolution of advanced military materiel and support technologies.
3.3.4. Pursue technology initiatives through the planning, programming, and budgeting process; and allocate work among private sector organizations and Government elements.

3.3.5. Act as principal agents in maintaining the technological base of the Department of Defense.

3.3.6. Provide materiel acquisition and operating system support.

3.3.7. Have available a fast-reaction capability to solve critical, immediate technical problems that arise when unexpected operational situations are encountered.

3.3.8. Use demonstrations and prototypes to mature and exploit U.S. and allied technologies.

3.3.9. Carry out activities having high technological risk or requiring intensive resource investment not available from the private sector.

3.3.10. Interface with the worldwide scientific community; and provide support to other governmental agencies.

3.3.11. Respond to national defense needs by undertaking action to:

3.3.11.1. Achieve timely improvements in military systems and develop techniques for increasing their effectiveness.

3.3.11.2. Reduce manpower and skill constraints on materiel performance.

3.3.11.3. Lower materiel production, operation, and support costs.

3.3.11.4. Extend the life of operational systems.

3.3.12. Continue intensive user and developer relationships to:

3.3.12.1. Achieve greater laboratory sensitivity to potential combat requirements and operating environments.

3.3.12.2. Integrate technological objectives with materiel readiness, modernization, and sustainability requirements.
3.3.12.3. Evolve the effective balance between technology push and requirements pull.

3.3.13. Continue vigorous partnership with industry and the academic community.

3.3.14. Distribute efforts appropriately across short, mid, and long-term opportunities and requirements.

3.3.15. Participate actively in the defense planning processes carried out by the respective Military Departments.

3.3.16. Provide managers within the laboratories with the responsibility, authority, and flexibility to manage resources and program through use of broad guidelines and without overlapping controls.

3.3.17. Ensure competency of personnel by taking action to:

3.3.17.1. Recognize that the most valuable resource of the laboratories is the capability, skill, and creativity of their personnel.

3.3.17.2. Provide for personnel stability, challenging work, and meaningful incentives.

3.3.17.3. Provide for equal opportunity for development, training, promotion, recognition, and reward.

3.3.18. Upgrade facilities and equipment to:

3.3.18.1. Remove limitations that constrain modernization of laboratories.

3.3.18.2. Promote productivity, energy efficiency, and cost avoidance through policies that provide for modern facilities and equipment.

3.3.18.3. Base replacement policies on practice that benefits the business venture nature of R&D activities.

3.3.19. Provide effective procedures for procurement and acquisition in order to:

3.3.19.1. Provide laboratories with the authority and capability to make procurements and acquisition in a timely and efficient manner.
3.3.19.2. Ensure technical excellence in contractor performance.

3.3.20. Carry out continuing assessment of programs and ascertain accountability for outcomes.

4. RESPONSIBILITIES

4.1. The Secretaries of the Military Departments shall:

4.1.1. Promulgate the policy and procedures in section 3. to the DoD Components having management and operational responsibilities for the laboratories.

4.1.2. Incorporate the policy and procedures in section 3. into the performance appraisal criteria for military and civilian laboratory managers and into long-term management plans.

4.2. The Heads of the DoD Components shall incorporate these procedures in appropriate management and policy guidance to the Military Departments, consistent with the responsibility established in DoD Directive 3201.1 (reference (a)).

4.2.1. Promulgate, with the assistance of the DoD Laboratory Task Force (reference (c)), criteria for monitoring progress toward meeting the policy and procedures in section 3.

4.2.2. Review the Military Departments long-term management plans (DoD Directive 3201.1, reference (a)) in the light of the policy and procedures in this Instruction.
5. EFFECTIVE DATE AND IMPLEMENTATION

This Instruction is effective immediately. Forward one copy of implementing documents to the Under Secretary of Defense for Research and Engineering within 120 days.

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(Acquisition and Logistics)