SUBJECT: Scientific and Engineering Integrity

References: See Enclosure 1

1. PURPOSE. This Instruction establishes policy and assigns responsibilities concerning the integrity of scientific and engineering activities that the DoD conducts, and science and engineering information it uses to support public policy and management decisions in accordance with the authority in DoD Directive (DoDD) 5134.01 (Reference (a)), and the guidance in Presidential Memorandum (Reference (b)) and Director, Office of Science and Technology Policy Memorandum (Reference (c)).

2. APPLICABILITY. This Instruction applies to OSD, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the DoD.

3. DEFINITIONS. See Glossary.

4. POLICY. It is DoD policy to support a culture of scientific and engineering integrity. Science and engineering play a vital role in the DoD’s mission, providing one of several critical inputs to policy and systems acquisition decision making. The DoD recognizes the importance of scientific and engineering information, and science and engineering as methods for maintaining and enhancing its effectiveness and its credibility with the public. The DoD is dedicated to preserving the integrity of the scientific and engineering activities it conducts. To this end, the DoD shall (unless restricted by applicable Federal statutes or Executive orders):

   a. Assure that relevant scientific and engineering information and recommendations, including the underlying assumptions and uncertainties, are made available to senior DoD policy and acquisition leaders making decisions potentially impacted by that information.
b. Maximize the free flow to the public of scientific and engineering information developed or used by DoD, consistent with applicable law and regulation, including DoDDs 3200.12, 5230.09, 5230.25, 5535.02, and 5535.3 (References (d) through (h)); DoD Instructions (DoDI)s 2040.02, 3020.46, 3200.14, 5200.39, and 5230.27 (References (i) through (m)); and DoD Manuals 5200.01 and 5200.1-M (References (n) and (o)), by:

(1) Permitting publication of fundamental research results in accordance with National Security Decision Directive 189 (Reference (p)) and Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) Memorandum (Reference (q)).

(2) Making scientific and engineering information available on the Internet, consistent with Office of Management and Budget Memorandum M-10-06 (Reference (r)).

(3) Making articulate and knowledgeable spokespersons available to the media upon request for interviews on science and engineering.

   (a) Federal scientists and engineers may speak to the media and to the public about scientific and technical matters based on their official work with appropriate coordination with the scientists’ or engineers’ organizations.

   (b) DoD approval to speak to the media or the public shall not be unreasonably delayed or withheld.

   (c) In no circumstance may DoD personnel ask or direct scientists or engineers to alter or suppress their professional findings, although they may suggest that factual errors be corrected.

c. Assure that Federal Advisory Committees (FACs) providing advice to the DoD on scientific, engineering, and other technical matters are technically well qualified and selected in a transparent manner. Recommendations provided by such a FAC shall be treated as solely the findings of that FAC rather than of the DoD and, with the exception of security reviews, not subject to DoD or interagency revision.

d. Strengthen actual and perceived credibility of DoD use of scientific and engineering information in decision making by:

(1) Selecting scientist and engineer employees based in substantial part on their scientific and engineering credentials.

(2) Ensuring that data and research used to support DoD policy and acquisition decisions undergo review by qualified independent experts when feasible and consistent with law.

(3) Maintaining clear standards concerning conflicts of interest, as specified in DoD 5500.07-R (Reference (s)).

e. Support professional development of DoD scientists and engineers by encouraging:
(1) Professional presentations and peer-reviewed publications.

(2) Participation in professional societies (including as officers or members of governing boards and as editors or members of editorial boards of professional journals, although not as DoD representatives).

(3) Acceptance of professional honors and awards.

f. Provide whistleblower protection, as required by sections 1221 and 2302(b)(8) of title 5, United States Code (Reference (t)); section 1034 of title 10, United States Code (Reference (u)); DoDD 7050.06 (Reference (v)); and other relevant laws and regulations, to DoD employees who make reasonable allegations of scientific and engineering misconduct.

5. RESPONSIBILITIES. See Enclosure 2.

6. RELEASABILITY. UNLIMITED. This Instruction is approved for public release and is available on the Internet from the DoD Issuances Website at http://www.dtic.mil/whs/directives.

7. EFFECTIVE DATE. This Instruction:


b. Must be reissued, cancelled, or certified current within 5 years of its publication in accordance with DoD Instruction 5025.01 (Reference (w)). If not, it will expire effective July 26, 2022 and be removed from the DoD Issuances Website.

Frank Kendall
Under Secretary of Defense for Acquisition, Technology, and Logistics

Enclosures

1. References
2. Responsibilities
Glossary
ENCLOSURE 1

REFERENCES

(a) DoD Directive 5134.01, "Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L))," December 9, 2005
(b) Presidential Memorandum, "Scientific Integrity," March 9, 2009
(c) Director, Office of Science and Technology Policy Memorandum, "Scientific Integrity," December 17, 2010
(h) DoD Directive 5535.3, "DoD Domestic Technology Transfer (T2) Program," May 21, 1999
(j) DoD Instruction 3020.46, "The Militarily Critical Technologies List (MCTL)," October 24, 2008
(m) DoD Instruction 5230.27, "Presentation of DoD-Related Scientific and Technical Papers at Meetings," October 6, 1987
(q) Under Secretary of Defense for Acquisition, Technology, and Logistics Memorandum, "Fundamental Research," May 24, 2010
(s) DoD 5500.07-R, "Joint Ethics Regulation (JER)," August 1, 1993
(t) Sections 1221 and 2302(b)(8) of title 5, United States Code
(u) Section 1034 of title 10, United States Code
(w) DoD Instruction 5025.01, "DoD Directives Program," October 28, 2007
(x) DoD Directive 5143.01, "Under Secretary of Defense for Intelligence (USD(I))", November 23, 2005
(y) DoD Directive 5105.53, "Director of Administration and Management (DA&M),"

February 26, 2008

ENCLOSURE 2

RESPONSIBILITIES

1. ASSISTANT SECRETARY OF DEFENSE FOR RESEARCH AND ENGINEERING (ASD(R&E)). The ASD(R&E), under the authority, direction, and control of the USD(AT&L), shall:
   a. Provide leadership for the DoD on scientific and engineering integrity.
   b. Facilitate sharing best practices that promote the integrity of DoD scientific and engineering activities.
   c. Develop clear and specific DoD-wide definitions for the terms “scientific and technical advice,” “scientific assessment,” “scientific information,” “scientific integrity,” and “scientific product” as they pertain to scientific and technical advisory committees.

2. UNDER SECRETARY OF DEFENSE FOR INTELLIGENCE (USD(I)). The USD(I), in accordance with DoDD 5143.01 (Reference (x)) shall advise the USD(AT&L) and ASD(R&E) on issues concerning theft and diversion of sensitive scientific and engineering information, and on suitable protections.

3. DIRECTOR OF ADMINISTRATION AND MANAGEMENT (DA&M). The DA&M, in accordance with DoDD 5105.53 (Reference (y)) and DoDI 5105.04 (Reference (z)), shall ensure that the DoD and all advisory committees established or supported by the DoD that provide scientific and technical advice to the DoD shall conform to the provisions of this Instruction.

4. SECRETARIES OF THE MILITARY DEPARTMENTS AND DIRECTORS OF DEFENSE AGENCIES AND DoD FIELD ACTIVITIES. The Secretaries of the Military Departments and Directors of Defense Agencies and DoD Field Activities shall:
   a. Provide leadership for their department or agency on scientific and engineering integrity.
   b. Ensure their respective department or agency compliance with this Instruction.
   c. Educate department or agency scientists and engineers and their supervisors on their duties, rights, and protections with respect to scientific and engineering integrity.
GLOSSARY

PART I. ABBREVIATIONS AND ACRONYMS

ASD(R&E)  Assistant Secretary of Defense for Research and Engineering
DA&M  Director of Administration and Management
DoDD  DoD Directive
DoDI  DoD Instruction
FAC  Federal Advisory Committee
USD(AT&L)  Under Secretary of Defense for Acquisition, Technology, and Logistics
USD(I)  Under Secretary of Defense for Intelligence

PART II. DEFINITIONS

These terms and their definitions are for the purposes of this Instruction.

decision makers. DoD employees who develop policies or make determinations about policy or management; make determinations about expenditures of DoD funds; implement or manage activities that involve, or rely on, scientific and engineering activities; or supervise employees who engage in scientific and engineering activities.

employees who engage in scientific and engineering activities. Individuals who conduct or directly supervise scientific (to include mathematics, statistics, and medical research) or engineering activities, including but not limited to proposing, performing, reviewing, or monitoring research and engineering; assessing scientific or engineering findings, or reporting results of these activities; or directly supervising or personally performing work involving the compilation and translation of scientific and engineering data or information into formats used by DoD decision makers and non-scientist or non-engineer personnel.

scientific and engineering activities. Activities involving monitoring, experimentation, study, research, designing, modeling, and scientific and engineering assessments.

scientific and engineering information. Information relating to research, development, engineering, testing, and evaluation.

scientists and engineers. Synonymous with “employees who engage in scientific and engineering activities”.

supervisors and managers. Employees who manage people, funds, and resources of the DoD.