put in the hands of bureaus which have their own interests involved quite independent of the interests of advancing the scientific knowledge that may be the concern of groups. . . .

"I would take this as a typical example: Suppose a man is employed by the National Bureau of Standards on study of a problem in radioactivity. He will presumably have been cleared for work on this problem in Washington on this job. We may well suppose that in Los Alamos there comes to be a problem which needs investigation by a person of his ability, and the director of the Los Alamos scientific laboratory makes arrangements with the director of the Bureau of Standards to have this man transferred.

"But before he can be transferred, he will have to go through channels of clearance which will involve perhaps many weeks before the transfer can be made. And it may well be that his usefulness is over, that the job which he was supposed to do will already have been done by some other method with the expenditure of considerably more time and effort.

"This is the kind of thing to which I refer as the security techniques frequently destroying their own objective, because they become too highly organized.

"This seems to me to be at the moment one of the major problems that we face as a nation in connection with the security problem—namely, making it possible to make available to the part of the nation involved the skills of people in other parts of the nation, but, more generally, developing our security system in such a way that the essentials of secrecy, insofar as they are essential, can be maintained while transfers are made of individuals from one place to another for work. . . .

"[There should be] a greater centralization [of the security system], but with this thing kept in mind: That the responsibility for getting the job done is the thing that must be maintained as the matter of top importance. . . .

"I would personally like to see an office of security so developed that it can be used as a source of reference and advice to the individuals who are concerned with getting jobs done. . . ."

# AAAS-Westinghouse

#### Science Writing Awards

The American Association for the Advancement of Science has announced the establishment of two \$1000 AAAS– Westinghouse Science Writing Awards to recognize outstanding science writing in the nation's newspapers and magaIn making the announcement, Dael Wolfle, executive officer of the AAAS, said that the new awards program is intended "to recognize and encourage outstanding popular science writing, to stimulate public interest, and to foster a deeper understanding of the significance of science by the general public." He observed:

"Science and technology play a dominant role in human affairs today. Therefore, a broadly informed citizenry is essential, not only to continued scientific progress through public support of science but also to the solution of problems of major public concern which arise from such progress.

"Clear, accurate, impartial science writing in magazines and newspapers is an effective force in scientific communication to the nation as a whole. In administering the Westinghouse Science Writing Awards, the AAAS helps fulfill its purpose of advancing science directly and indirectly, and aids in discharging the responsibility all scientists feel toward building a broader public understanding of scientific developments and their implications to society."

The first of the new awards will be made during the winter meeting of the AAAS at Chicago in December 1959. The awards will be presented at the annual dinner of the National Association of Science Writers, an affiliate of the AAAS. Graham DuShane, editor of *Science*, will act as the administrator for the awards program.

To be eligible for the 1959 awards, a magazine article or a newspaper or press association report must have appeared in print between 1 October 1958 and 30 September 1959 in publications within the United States. Either a single article or a series of articles is eligible for an award.

In addition to the \$1000 cash prizes for the authors, citations will be awarded to the newspaper and magazine in which the prize-winning articles appeared. At the discretion of the judges, special citations also may be awarded for distinguished service in science journalism.

Persons prominent in journalism, science, and public affairs will serve as the board of judges for the new program. The judges will be selected in the near future.

Entries in the Westinghouse Science Writing Awards competition will be judged on the basis of their initiative, originality, scientific accuracy, clarity of interpretation, and their value in promoting a better understanding of science by the layman. Deadline for entries in the 1959 competition is *10 October*.

The new competition is open to all who are engaged in science writing, irrespective of their professional employment or what previous awards they may have won in other competitions. However, only articles that have appeared in magazines directed to the general public are eligible. This excludes work that has appeared in trade journals or professional magazines.

# International Atomic Agency Plans New Activities

At the end of its April meetings, the board of governors of the International Atomic Energy Agency decided that the agency should make a study of problems involved in the setting up of one or more isotope training centers in Arab and other countries in Africa and the Middle East. The director general was authorized to send experts to carry out surveys on the spot. Requests for IAEA's assistance in establishing such training centers had been received from several member countries. Letters from member countries had suggested that the existing facilities in Cairo and Ankara be used as a basis for such centers.

The board also accepted a United States offer of \$600,000 for the agency's functional laboratory to be built at Seibersdorf near Vienna; the Netherlands will contribute a gamma spectrometer for the laboratory.

During its 2-week session, the board dealt with several other issues concerning major sectors of the agency's activities. It approved draft agreements with the U.S.S.R., the United Kingdom, and the United States for the supply of nuclear materials and authorized the director general to sign the agreements. The U.S.S.R. has agreed to supply 50 kilograms of uranium-235, the U.K. 20 kilograms, and the U.S. 5000 kilograms. The agreement with the U.S. also provides for the supply of additional quantities of nuclear materials matching the total of such supplies provided by other member states prior to 1 July 1960.

Another important subject before the IAEA governors was the agency's technical assistance activities. The group approved the sending of two preliminary assistance missions—one to Argentina, Brazil, and Venezuela, and the other to China (Taiwan), Japan, Korea, the Philippines, and Viet-Nam—to make detailed surveys for determining possible lines of agency assistance to these countries. A third mission will visit Argentina and Brazil to investigate the possibilities of utilizing nuclear power at certain specific locations. In addition, the agency will provide ten experts for Burma, Greece, and the United Arab Republic.

The board also approved a project for the preparation, in conjunction with UNESCO, of a manual on atomic energy and its peaceful applications for use in secondary schools in member countries. The next series of board meetings will begin on 16 June.

# **Final Report of Advisory**

### **Committee for Aeronautics**

The 44th and final report of the National Advisory Committee for Aeronautics was released at the end of April. The NACA, established by Congress in 1915 to coordinate and conduct aeronautical research, was absorbed by the National Aeronautics and Space Administration under legislation enacted last year. The NASA took over facilities, property, equipment, and staff of the NACA on 1 October 1958.

NACA's concluding annual report contains a history of the agency, written by its last two chairmen, Jerome C. Hunsaker and James H. Doolittle. Hunsaker traced the NACA history for the first 40 years; Doolittle covered the final 4 years. In addition to the history, the 115-page report contains financial, personnel, and publications reports, plus a series of word and photo essays on various research projects.

#### Academic Freedom Declines

The decline of academic freedom in American universities during the 1950's is indicated by a survey that was undertaken at the request of the Fund for the Republic. Paul F. Lazarsfeld and Wagner Thielens, Jr., of Columbia University conducted the study and have recently published their findings in a volume entitled *The Academic Mind*: *Social Scientists in a Time of Crisis*. The report is based on questionnaire answers by 2451 social scientists associated with 165 college-level institutions.

Those queried listed 990 different instances of administrative action—most of them concerned with political conduct or belief—that resulted in 188 discharges at 102 of the 165 institutions, 40 forced resignations, 118 withheld promotions, and 99 instances of other kinds of discipline. Because of these incidents, it was found, both academic freedom and teacher morale suffered. It was reported that, while some instructors showed defiance by joining so-called controversial groups or reading controversial publications, more compromised by qualifying their classroom statements. The latter also stopped taking part in political work, making public appearances, subscribing to certain magazines, or belonging to certain organizations.

#### **Identification Method**

A new method for rapidly identifying war or disaster victims has been developed by V. Sassouni [*Temple Law Quart.* **31**, 1 (1958); *J. Forensic Sci.* **4**, 1 (Jan. 1959)]. This involves eight different cranial and facial measurements taken from standard x-ray negatives. These are fed to an electronic computer, which selects the card for the proper individual from a coded file.

The great disadvantage of this novel and apparently accurate method of identification is the fact that an extensive catalog of coded individual measurements would have to be kept on file at some central agency. This might be feasible on a limited scale—for example, for the armed forces—but it seems unlikely that the method could ever be successfully applied to the population at large.

#### Advanced Degrees Earned, 1957–58

The Office of Education has recently released figures on the number of degrees earned in institutions of higher education during 1957–58. A comparison of these totals with those of the preceding year is provided in Table 1.

The compilation shows that, in all fields considered together, the number of degrees earned has increased by 7.5 percent as compared with 1956–57. Science registered a gain of 9.5 percent in bachelor's degrees; engineering, a gain of 13.1 percent.

There was an increase of 322 in the number of master's degrees granted in science but no significant change in the number of doctorates. Perhaps it should also be noted that biology barely retained its lead over the physical sciences in degrees granted at the bachelor level.

#### List of International Meetings

The National Science Foundation has announced that the first issue of the World List of Future International *Meetings* will be released in June by the International Organizations Section of the Library of Congress. This monthly calendar, which is supported by an NSF grant, will furnish a record of all meetings drawing on three or more nations that are to be held anywhere in the world during the next 3 years, giving the sponsors and the addresses of organizing committees wherever possible. The subjects will be indexed for convenient use. The new list will supersede NSF's List of International and Foreign Scientific and Technical Meetings, which ceased publication with the January 1959 issue.

The World List will be issued in two parts. Part I will be devoted to science, technology, medicine, and agriculture. Part II will record meetings in the social, cultural, humanistic, and commercial fields. The World List will be available from the Superintendent of Documents, Washington 25, D.C., at a subscription price to be announced.

The Library of Congress will welcome notices of any forthcoming international meetings. Please send the information, together with all inquiries about the *World List*, to: International Organizations Section, General Reference and Bibliography Division, Library of Congress, Washington 25, D.C.

# Cockcroft Calls Space Program Extravagant

Sir John Cockcroft, chief of Britain's atomic research program is reported to have said that the "fantastic amounts" spent by the United States and the Soviet Union in trying to put a man into space could be better employed in medical and biological research on earth. The 1 May New York Times described a news conference in Melbourne, Australia, at which Sir John commented that "normal" space research was not a waste

Table 1. Earned degrees, 1956-1957 and 1957-1958.

Field —	Bachelor		Master		Doctor	
	1956–57	1957–58	1956–57	1957–58	1956–57	1957–58
All	340,347	365,748	61,955	65,614	8,756	8,942
Agriculture	7,943	8,312	1,549	1,480	353	353
Biology	17,868	14,408	1,801	1,852	1,103	1.125
Mathematics	5,546	6,924	965	1,234	249	247
Physical sciences	12,934	14,352	2,704	3,034	1.674	1.655
Psychology	6,191	6,930	1,095	836	550	572
Subtotals	46,482	50,926	8,114	8,436	3,929	3,952
Engineering	31,211	35,332	5,233	5,788	596	647
Totals	77,693	86,258	13,347	14,224	4,525	4,599