ion beams at the Oak Ridge Isochronous Cyclotron. Georgia Tech, Louisiana State, University of Tennessee, Vanderbilt, and the State of Tennessee have pledged support, other universities are planning to participate, and federal funds will also be sought. Other groups are invited to join the project. Details are available from Joseph H. Hamilton, Physics Department, Vanderbilt University, Nashville, Tenn.

Suggestion for graduate aid in exchange for national service

Philip Handler, president of the National Academy of Sciences, has suggested a plan under which the Government would offer financial support to all graduate students in all fields in exchange for two, three or more years of national service. The suggestion was made as Handler testified, on 21 July, at the science-policy hearings of the House Subcommittee on Science, Research and Development. "I can think of no program," said Handler of his proposed National Youth Service Program, "which would find a warmer welcome among the highly motivated young people of our time." Handler suggested that humanities graduates could teach, especially in disadvantaged areas; social scientists and lawyers could teach or serve in local or federal government; doctors could work in "a modernized Public Health Service;" natural scientists and engineers could serve in Federal laboratories or multidisciplinary university laboratories.

"The impact of this flow of motivated, highly trained young men and women throughout the diverse elements of our national life would be profound, exhilarating and undoubtedly effective . . . And it would surely more than compensate for the cost of their graduate educations." Handler noted that limited precedents for his proposal were to be found in the GI Bill and in the draft liability of doctors. But, "I know that this would be a major change in our national life, and I appreciate the unlikelihood of such legislation in the very near future. But if we open such discussions today, we shorten the time until this becomes 'an idea whose time has come,' the next extension of the historic process which began with publicly funded primary-school education for all."

Among views on science policy presented to the Subcommittee, Handler's statement was notably specific on various points. Handler would continue the post-World War II tradition of mission-agency research support, and give up the search for "a rational formula by which to establish how much science should be supported . . . This now seems an intrinsically unanswerable and probably meaningless question." For "fundamental research, whose relevance to agency missions is not immediately discernible," Handler suggested that the main funding level criterion be simply the cost of utilizing fully the research talents of the "national pool of available, truly competent scientists . . . I can only advocate support of all the competent research of which we are capable."

Handler would like to see universities undertake multidisciplinary, problem-oriented research on campus, but in separate physical and administrative units, and without damage to their traditional disciplinary structures.

Handler opposes a "Department of Science," but favors a federal agency, built on NSF as a cornerstone, whose principal mission is research and higher education.

UPI

EDWARD E. DAVID, JR (left) who was chosen by President Nixon to succeed Lee A. DuBridge (right) as the President's science adviser, has been a Bell Labs' administrator with interests in computers, acoustics and communications. DuBridge, 69, retired from his post (effective 31 August) after 19 months of service, saying "I have always been convinced I should retire well in advance of my 70th birthday in 1971."

David, 45, was most recently executive director of Bell Labs' Research, Communication Principles Division, which made him responsible for the Electronic Systems Research Laboratory, the Computing Science Research Center and the Communication Principles Research Laboratory. He has worked in communication theory, speech, hearing, speech recognition and processing, vocoders and computing.

David joined Bell Labs after receiving an ScD in electrical engineering from MIT. Last April he was elected to the National Academy of Sciences.

the physics community

Indians and Americans evaluate physics education in India

Less rigidity in physics curricula and teaching and more applied research are the prevailing recommendations of about 60 Indian and US physicists meeting to discuss physics education in India. Norman Ramsey of Harvard University headed the 18-member US delegation attending the July conference in Kashmir, which was sponsored by the Indian University Grants Commission, its National Council for Science Education, the US Agency for International Development and the National Science Foundation. The Indian delegates were headed by B. Ramachandra Rao of Andhra University.

Teaching procedures in undergraduate and graduate school dominated the meeting. In the present system, a board of studies outside each school determines course content and an annual uniform final, given by external examiners, evaluates each student. To create greater flexibility, the conference advo-

Delegates at Indo–US conference. In left foreground Eric Rogers talks with L. S. Kothari. Center front is R. S. Krishnan with Shri Chandrakant at his left shoulder. Talking in right foreground are B. S. Chandrasekhar and Harry F. Meiners. At rear, left to right: B. S. Sood, Rais Ahmed, Max Hellman and Gordon Hiebert.

cated periodic, in-house exams given by the faculty. In this way, the delegates felt the teacher or department could improve the curricula and teaching methods, and the student could choose from different courses. In the present system a 24–34 class-hour week leaves little time for independent study and research by teacher or student.

PhD specialization and its emphasis on pure research were also regarded as roadblocks; yet even this research was considered weak in personnel and facilities. As remedies, the conference recommended not only more financial support but "academic recognition of applied research" that would be more beneficial for a developing country. Trained PhD's would then be prepared for industrial jobs, and ties, which are presently nonexistent, could develop between industrial and university research.

Other recommendations called for strengthening the physics community as a whole by establishing an Indian physics association, science-teaching centers, a journal on physics education and research, plus regional libraries and meetings.

AIP raises journal rates; APS drops 20% subsidy

Some 1971 nonmember subscription rates have been increased for journals of the AIP and also for some of the journals it distributes; yet some foreign member subscriptions have been cut (for a partial listing see below). Most member prices remain the same. The American Physical Society has decided to drop the 20% subsidy for its members' 1971 subscriptions to AIP journals. Now APS members pay the same as other AIP society members.

The higher subscriptions, says AIP director, H. William Koch, are caused by increased publishing costs. In cutting foreign-member subscription rates, he explained, the difference between foreign and domestic rates is now only the transportation costs. *Applied Optics*, distributed by AIP for the Optical Society of America, will for 1971 be offered on membership; OSA membership dues have been raised to $25.00.

The APS decision to drop the 20% subsidy for AIP journals will save about $40 000, all of which has been appropriated for APS programs dealing with the employment problem. The journals affected are *The Review of Scientific Instruments, The Journal of Chemical Physics, Journal of Applied Physics, Applied Physics Letters, the Physics of Fluids* and *Journal of Mathematical Physics.*

FAS expanding operations; plans to boost membership

The Federation of American Scientists is planning to expand its operations and to increase its membership, according to Jeremy J. Stone, new FAS executive director.

The new plans, says Stone, are to "set up tens of three-man issue committees to keep abreast of a variety of issues in the science and public policy area, for example, offensive weapons, science and privacy, drug abuse, the Atomic Energy Commission, right to legislative lobbying, public education and the PhD surplus. The FAS is also attempting to live up to its name of a federation by bringing under its umbrella a large variety of like-minded organizations." A recent affiliate is the Union of Concerned Scientists at MIT. During this fall the federation hopes to boost its membership of 2000 with mail solicitations and visits to chapter locations.

Stone was named the first executive director in a decade on 1 July and is located in a new office in Washington, D.C. At the same time, Herbert F. York was elected chairman. Trained as a mathematician, Stone was an international affairs fellow at the Council of Foreign Relations and is the author of *Containing the Arms Race.* York is presently dean of the graduate program and physics chairman at the University of California, San Diego. He was formerly chancellor of the university and served as director of defense research and engineering for President Eisenhower. □

Some Subscription Prices of Journals

	NON MEMBER				MEMBER			
	Domestic		Foreign		Domestic		Foreign	
	1970	1971	1970	1971	1970	1971	1970	1971
The Review of Scientific Instruments	$15.00	$22.00	no change		no change		$18.50	$13.50
The Journal of Chemical Physics	70.00	105.00	no change		no change		59.50	42.00
Journal of the Optical Society of America	30.00	35.00	$32.00	$37.00	on membership			
Applied Optics	24.00	35.00	24.00	38.00	on membership			
American Journal of Physics	12.50	18.00	14.50	20.00	choice of one			
The Physics Teacher	5.00	8.00	7.00	10.00	on membership			