Lewis report recommendations would have an impact on Fiscal Year 1979 and 1980 NRC programs.

▸ Send a copy of the Lewis report to the 3000 to 3500 prior recipients of WASH-1400.

In the longer term, Hendrie said that NRC is "trying to familiarize more of its staff with the techniques used in risk assessment in order to be able to make some application of this in due time in the licensing process," as the Lewis report recommends. "Even where the data base is not really adequate to give you any sort of decent precision in the final probability number or consequence number it is a very useful technique for looking at relative risks." Hendrie also added that the NRC's risk-assessment group in its office of research, which has existed since WASH-1400 was published, has been active in the development of risk-assessment methodology. This effort is expected to be amplified now.

Some feel the "damage" of the Rasmussen report has already been done. "It was widely used as a propaganda item by AEC and NRC," said Lewis. The study was timed, for example, to come out during the Congressional review of the Price–Anderson Act in 1975, which sets a limit of liability for owners of nuclear reactors in case of an accident. William Anders, then chairman of the NRC, wrote to Congress at that time, "The Commission believes that the Reactor Safety Study report provides an objective and meaningful estimate of the public risks associated with the operation of present-day light-water reactors in the United States." Rasmussen himself also appeared before the Congress to plead his case.

Other responses. The reaction to the Lewis report outside the NRC is mixed. Rasmussen generally agrees with the findings of the Lewis group, but feels that some of the conclusions may have been "overstated" and attributes the few areas where he actually disagrees with the report to individual judgement.

The most outspoken critic of the Rasmussen study is the Union of Concerned Scientists, a Cambridge-based antinuclear organization. The UCS published a 200-page critique of the Reactor Safety Study last year and was given the opportunity to address the Lewis committee several months ago. At that time Daniel Ford, executive director of UCS, asked that the committee look into certain documents in the Rasmussen study files that he believes support his claim that the Reactor Safety Study was systematically designed and performed to reach the predetermined conclusion of reactor safety. During the course of his testimony Ford singled out as an example the charge that the Rasmussen study team considered a dishonest approach to the treatment of the quality-assurance/quality-control problem and then suppressed a controversial chapter on the subject that had been intended for inclusion in the final report. The Lewis committee dismissed these charges saying that this incident was atypical of the general level of integrity of the Rasmussen study and that there was insufficient evidence to support the claim that the omitted chapter was, in fact, supressed.

The NRC currently has no plans to redo the Reactor Safety Study, mainly because it was the conclusion of the Lewis group that a new study would not be much more useful than WASH-1400. Frank von Hippel, a Princeton University physicist who served on the review team, went beyond this and expressed doubt that the risk-assessment technique could yield a credible upper bound on the probability of a reactor-core meltdown that is any more reliable than experience has shown.

Exactly what effect the publication of the Lewis report will have on present attitudes toward nuclear reactor safety is unclear. John Lamarsh, head of the department of nuclear engineering at Polytechnic Institute of New York, where he teaches a course on reactor safety, feels that WASH-1400 was a valuable first effort, and that criticizing it in the light of our present knowledge is like finding fault with the Wright brothers' airplane. "The study of reactor safety is an ongoing effort," he said. At the other extreme, Ford believes that it is like taking the bible away from the religion. Lewis himself feels that "the entire [nuclear] industry and the entire policy-making apparatus has been influenced by the results of the [Rasmussen] report." And yet, asked whether he can learn if reactors are acceptably safe from WASH-1400, he responded, "I can't; I don't learn it from WASH-1400." —MEJ

Leon Lederman to be director of Fermilab

Leon Lederman of Columbia University, a noted high-energy experimenter, is to be the new director of Fermilab. Because of previous commitments, Lederman will not be at Fermilab full time until 1 June 1979. Meanwhile, he will be Director Designate and expects to be involved in major policy questions right away.

Lederman succeeds Robert R. Wilson, who resigned in February (PHYSICS TODAY, March 1978, page 102) because he felt Fermilab funding was inadequate. Wilson had served as director from the beginning of the lab. He intends to continue active participation in Fermilab while at the same time holding an appointment at the University of Chicago where he was recently named the first Peter B. Ritzma Professor in the College. Wilson says he expects to devote his efforts as Ritzma professor "to the search for a deeper understanding of the human

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origins and relationships of science." At Fermilab Wilson will continue to work on the design and construction of the Energy Doubler/Saver (also known as the "Tevatron;" see PHYSICS TODAY, October 1977, page 23).

Philip V. Livdahl will continue to serve as Acting Director of Fermilab until Lederman joins Fermilab full time.

Lederman is the Higgins Professor of Physics at Columbia and director of Nevis Laboratories in Irvington, N.Y. In 1977 he and his collaborators, working at Fermilab, reported the discovery of the Υ particle and Υ' particles (PHYSICS TODAY, October 1977, page 17); their existence suggests the existence of a fifth kind of quark. This year, both the Υ and Υ' have been observed at the DORIS storage ring at DESY in Hamburg. One of Lederman's commitments for this winter and the following spring is to prepare a new experiment to be run at the new Cornell storage ring (expected to operate next summer); the equipment now being built at Nevis is designed to search for excited states of the Υ.

Lederman is also involved in maintaining the vitality of the Nevis lab, which until this year had large efforts in medium- and high-energy physics. With the shutting down of the Nevis synchrocyclotron last July, Lederman told us that Nevis is suffering from a certain lack of flexibility in supporting its operations. However some funds have been requested for medium-energy physics from NSF, and NSF support for high-energy physics is continuing at essentially the same level it has been. —GBL

Soviet dissidents' mail fails to go through

Growing concern over the fate of dissident scientists in the Soviet Union has prompted many American scientists to

take up correspondence with their Soviet colleagues. But recent testimony before the House Subcommittee on Postal Operation and Service indicates that much of this correspondence never reaches its addressee, and that which does get through may be censored.

In testifying before the subcommittee, Mark Mellman, executive director of the Committee of Concerned Scientists, argued that, because "free communication is the lifeblood of scientific progress . . . if any scientist is prevented from conducting his research or communicating it to others, scientific progress as a whole suffers." Mellman feels that the Soviet government uses interference with the mail as a means of isolating refusnik scientists from the "outside world." For example, Mellman testified that letters of invitation inviting refusniks to participate in international scientific conferences rarely arrive at their destination, and when they do, they usually arrive after the conference has already ended.

Although the extent of the problem is hard to measure—no one keeps tabs on the number of letters that arrive without interference—a 1975 project initiated by the Federation of American Scientists gives some indication. The December 1975 *FAS Newsletter* urged its members to choose a refusnik scientist from a list it provided and initiate correspondence with that scientist. Of 140 letters sent by registered mail (return receipt requested), only 76 were received by the addressee, as evidenced by the return of a signed card.

The problem is not limited to personal correspondence, as is shown by the case of *Physical Review Letters*. In November 1974 The American Physical Society began sending PRL to the Moscow Sunday Seminar every week by registered airmail. During the periods when no copies were getting through, APS temporarily discontinued sending the journal. Between November 1974 and July 1978, the APS mailed 204 issues to the USSR. Only in 85 cases were advice of delivery cards returned to the senders.

According to Mellman, the problem may go even deeper than nondelivery of mail. He has collected evidence that he feels shows that Soviet postal authorities are sending return receipts to the sender when the article in question has, in fact, not been delivered. This is a direct violation of the Universal Postal Convention, which sets the international laws governing the handling of mail.

The US Postal Service has apparently found the matter of Soviet postal delivery sufficiently involved to have produced a booklet, *Guidelines for Mailing to the Soviet Union*. Copies can be requested at no charge by writing E. Walker, General Manager, International Mail Classification Division, Room 1610, 475 L'Enfant Plaza, Washington, D. C. 20260.

—MEJ

the physics community

Acoustical Society elects von Gierke

Henning von Gierke of the Aerospace Medical Research Laboratory, Wright–Patterson Air Force Base has been chosen president-elect of the Acoustical Society of America, and Edith Corliss, a physicist at the National Bureau of Standards, was selected vice president-elect. Both will serve in these posts until June, when they will assume the offices of president and vice president, respectively.

Von Gierke was born in Karlsruhe, Germany and received his doctorate in engineering from the Technical University there in 1944. He joined the Aerospace Medical Research Laboratory as a consultant in 1947, became chief of the bioacoustic branch in 1954 and in 1963 became director of the biodynamics and bionics division there, the post he currently holds. Von Gierke also became an associate professor at Ohio State University's department of preventive medicine in 1963. His major research interests have been physical, physiological and psychological acoustics, biodynamics, the effects of noise on man, communication biophysics and bionics. In accordance with the new bylaws adopted by the ASA last May, the Executive Council also appointed von Gierke as standards director for a one-year term.

Corliss attended MIT, from which she received her master's degree in 1941. She was hired as a junior physicist by the National Bureau of Standards in 1941 and then by the US Weather Bureau in 1942. From 1943 to 1944 she worked at the US Naval Observatory as a junior astronomer. She is currently a physicist at NBS, a position she has held since 1944.

VON GIERKE

In the same election James E. Barger, vice president and chief scientist at Bolt Beranek and Newman, Inc., Cambridge, Massachusetts, and W. Dixon Ward, a professor of environmental health and of otolaryngological and communicable diseases at the University of Minnesota in Minneapolis, were voted new members of the Executive Council of the ASA.

Employment outlook for new grads improves

The employment outlook for recent physics graduates is continuing to improve, according to *Employment Survey 1977*, a report recently released by the AIP Manpower Statistics Division. The report, a compilation of data from a survey of 1387 recent physics and astronomy degree recipients, found a lower rate of unemployment this year (3–6%) for doctoral, master's and bachelor's degree recipients than last year (6–8%).

The survey dispels the commonly held belief that a postdoctoral fellowship is a graduate's "last resort" when he or she is unable to secure potentially permanent employment. ". . .Only during the early 1970's was this assumption correct . . . not only did two-thirds of the 'postdocs' specifically seek those temporary positions, but 17% of them turned down offers with potential permanence to accept postdoctoral fellowships."

Also addressed is the question of how much time the graduates required to secure employment. For example, after seven months of searching, 12% of the PhD's seeking permanent positions still had not found jobs.

The report is available at no charge from Susanne D. Ellis, American Institute of Physics, Manpower Statistics Division, 335 East 45th Street, New York, N.Y. 10017. Request AIP publication number R-282.1.

in brief

National Patterns of R&D Resources; Funds and Manpower in the United States, 1953–1977 (NSF 77-310) may be ordered for $1.50 per copy from the US Government Printing Office, Washington, D.C. 20402. □