#### Federal budget request

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termediate-energy physics funding. By this yardstick the budget for nuclear science at the Foundation has increased by \$3.16 million in FY 1977, seemingly off-setting the slump in nuclear funding at ERDA, to yield a net \$1-million increase. Bardon cautions, however, that this would mean only about a 1% rise in the FY 1977 nuclear-science budget overall, and inflation is sure to swallow up this meager increase for a net loss of several percent. It appears unlikely that NSF can rescue the nuclear-science programs slashed by ERDA.

Materials research. An increase of \$7.7 million, 16% over the FY 1976 total, for NSF's materials research division will be used to expand programs in condensed matter science, which includes solid-state physics, quantum liquids and solids, and low-temperature research. Ronald Kagarise, director of the division, pointed out to us the special importance of surface studies in the FY 1977 program, as well as continued efforts to relate superconductivity to the normal-state properties of metals. Helium superfludity, anisotropic materials, and optical properties of solids are other topics to be studied.

The division also supports the development of new magnet systems, such as a hybrid magnet that will combine superconducting and conventional elements. The materials research laboratories maintained by the division are to receive additional funds, particularly

cal properties of materials.

The new directorate of astronomical, atmospheric, earth and ocean sciences enjoys close to a 12% increase in funding for the fields in its domain. One beneficiary of the \$25.7-million boost over the previous year's budget is astronomy project support; the 43% increase in this area is to enhance new thrusts in astronomical instrumentation and in observational and theoretical progress toward understanding stellar evolution. Other initiatives include a look at energy-generating processes at galactic centers and a search for stars with planetary systems. The budget request for the National Radio Astronomy Observatory includes an increase for initial operating costs at the Very Large Array project in New Mexico. An allocation of \$13 million should keep VLA construction on schedule.

Money for NSF's RANN program is

## James Kane takes up new post at ERDA

James S. Kane has been appointed Deputy Assistant Administrator for Physical Research in the office of the

for studies that deal with the mechani-

down 12%, reduced from \$73.6 million in 1976 to \$64.9 million in the FY 1977 budget. The cutback reflects the transfer of responsibility for major RANN efforts to other agencies: studies of energy resources and related environmental effects are to shift to ERDA, fire research to the Department of Commerce.

Assistant Administrator for Solar, Geothermal and Advanced Energy Systems at ERDA. Kane, who received his doctorate in chemistry from the University of California at Berkeley, will serve concurrently as director of ERDA's Division of Physical Research.

Kane had been Deputy Assistant Administrator for Conservation at ERDA since January 1975, and earlier, following the passage of the 1974 Energy Reorganization Act which created ERDA, he coordinated transitional planning for the agency's non-nuclear aspects. Prior to his government work, Kane was head of the Chemistry and Materials Science Department at Lawrence Livermore Laboratory.

### Staff changes at new NSF physics division

The National Science Foundation's Physics Division was recently established during a reorganization as one of five in the Directorate for Mathematical and Physical Sciences and Engineering; Edward Creutz heads the directorate. Staff changes in the division, headed by William E. Wright, have been announced.

(Other divisions and their directors are as follows: Chemistry, Jack B. Kinsinger; Mathematical and Computer Sciences, John R. Pasta; Engineering, Thomas P. Meloy, and Materials Research, Ronald E. Kagarise.)

The Deputy Director for the Physics Division is Marcel Bardon. Howel G. Pugh of the University of Maryland replaces Stuart Meyer as program director for intermediate-energy physics; Meyer returns to Northwestern University. David Balamuth goes back to the University of Pennsylvania, and his position as program officer for nuclear physics is assumed by Michigan State University's Gerard Crawley. The program officer for atomic, molecular, and plasma physics for this year is Stephen J. Smith, from the Joint Institute for Laboratory Astrophysics of the University of Colorado and the National Bureau of Standards. The position of program officer for elementary particle physics will be occupied for an additional year by David Berley of Brookhaven National Laboratory.

#### Table 5. NSF astronomical, atmospheric, earth and ocean sciences directorate

Astronomy Program	(estimates in millions of dollars) Transition		
	FY 1976	Quarter	FY 1977
Project Support	11.30	2.50	16.20
Arecibo	3.85	1.10	4.00
Kitt Peak	8.40	2.15	8.90
Cerro Tololo	3.45	0.90	3.60
NRAO	21.55	5.85	22.00
Solar Eclipse	0.20	0	0
Subtotal	48.75	12.50	54.70
Atmospheric Program			
Project Support	14.40	2.80	18.70
GARP	4.00	1.00	4.80
Climate Dynamics	2.00	1.00	4.90
NCAR	23.80	5.00	23.00
Subtotal	44.20	9.80	51.40
Earth Program			
Project Support	13.60	4.20	18.80
Ocean Sediment Coring	12.00	3.50	13.40
Subtotal	25.60	7.70	32.20
Ocean Program			
Project Support	15.50	4.60	18.80
IDOE	15.80	3.40	18.50
Oceanographic facilities	16.50	1.00	19.20
Subtotal	47.80	9.00	56.50
Antarctic Research	48.90	13.10	45.00
Arctic Research	4.00	1.30	5.30
Total	219.25	53.40	245.10

# in brief

President Ford has nominated physicist John L. McLucas, Secretary of the Air Force since 1973, as head of the Federal Aviation Administration. McLucas had previously served in the State Department and as NATO assistant secretary general for scientific affairs.