Rostow Nominated to Head ACDA

President Reagan's choice for director of the Arms Control and Disarmament Agency is Eugene Rostow, Yale law school professor and a State Department official during Lyndon Johnson's Administration. The Rostow nomination apparently signals the breaking of a stalemate over authority in arms control matters in the Administration.

Rostow's confirmation could still encounter opposition in the Senate from Republican conservatives, led by North Carolina Senator Jesse Helms, who has questioned several Administration nominations in the foreign policy field.

Rostow is one of eight nominees upon whose confirmation Helms has placed "holds." In a recent letter to Senator Charles H. Percy (R–Ill.), chairman of the Foreign Relations Committee, Helms expressed specific reservations about the eight. In the letter, Helms wrote, "Needless to say, I hope that Mr. Rostow will staff ACDA with individuals who fully reflect the President's views on SALT II and arms control issues. If he does so, it is my intent to support his confirmation."

Helms was known to favor retired Army General Edward L. Rowny for the post of ACDA director and Rowny had gained the approval of other Republican Senate leaders and was rumored to have won the job.

Unexpectedly in early April, the White House leaked the Rostow selection. After behind-the-scenes bargaining, Republican senators agreed to the Rostow appointment if Rowny were named chief strategic arms negotiator with the Soviet Union.

The issue then became whether Rowny would be subordinate to Rostow or, as Rowny preferred, operate outside ACDA and report directly to President Reagan. Comments by Rostow at the time of his nomination indicate that Rowny would be based in ACDA and not have the independent status sought for him.

Both Rostow and Rowny are classified as hawks on arms control matters. Rowny was Joint Chiefs of Staff representative at the SALT II negotiations and resigned after the treaty was signed, protesting that the terms had been too favorable to the Soviets. Rostow, a Democrat who supported Reagan in the 1980 campaign, has been a vocal critic of the U.S. loss of nuclear superiority over the Soviet Union and was a founder of the Committee on the Present Danger founded to alert the public to what its members see as a decline in U.S. military strength compared to that of the Soviet Union.—***John Walsh***

Reagan Fills Top NASA Posts

The Reagan Administration's nominee for NASA administrator is James M. Beggs, vice president in charge of aerospace and a director of the General Dynamics Corp., St. Louis. The nominee for deputy administrator is nuclear physicist Hans Mark, Secretary of the Air Force under Jimmy Carter and a former director of NASA's Ames Research Center in Mountain View, California.

The nominations, announced last week, have been widely expected. Indeed, Beggs and Mark have spent much of the last month in briefings and interviews at NASA headquarters.

Both men are previous employees of NASA. Beggs, 55, was associate administrator for advanced research and technology in 1968–1969, and then served 4 years as under secretary of the Department of Transportation. In his 7 years at General Dynamics he gained a reputation as an effective manager on such projects as the F-16 fighter.

Mark, 51, is an old hand at NASA, having spent 11 years as director of Ames. "He'll be the best friend that (space science) has ever had in that office," says one NASA spokesman. He enjoyed a strong endorsement for the post from an old friend, Senator Harrison Schmitt (R–N.M.), chairman of the Senate subcommittee on science, technology and space. No congressional opposition is expected to either nominee.

Beggs' personal views on space policy are not known. Spokesmen for General Dynamics could not recall a single public utterance on the subject. Still, the recent history of both men —Beggs as vice president of the nation's largest defense contractor, Mark as former Air Force secretary— have underscored recent concerns about the militarization of space (*Science*, 1 May, p. 520). Neither Beggs nor Mark was available for comment on the matter last week. However, as Air Force Secretary, Mark was a strong advocate of increased spending on satellite communications and reconnaissance; he also supported research into space early-warning systems for possible use in an antiballistic missile system, and he has suggested that the Department of Defense might consider operating its own fleet of space shuttles instead of sharing them with NASA.

—M. Mitchell Waldrop

R & D Spending: The Military's Growing Bite

The Reagan Administration's budget proposals would boost spending on military R & D from $13.9 billion in fiscal year (FY) 1980 to $21.5 billion in FY 1982. This massive increase would raise the military share of the federal R & D budget from 44 percent to 53 percent in just 2 years.

These figures are given in a new analysis by the Office of Management and Budget (OMB), which confirms that basic research would be relatively well protected but that most other areas of nonmilitary R & D would be slashed.

Obligations for R & D supported by agencies other than the Department of Defense (DOD) would rise from $17.8 billion in FY 1980 to $19.1 billion in FY 1982. This increase would fall well short of the level needed to stay abreast of inflation, with energy programs suffering the deepest cuts.

DOD will also be reasserting itself on university campuses if the Reagan budget proposals are adopted by Congress. According to the OMB figures, DOD intends to increase its expenditures on R & D at colleges and universities from $451 million in FY 1980 to $639 million in FY 1982. Its share of academic research expenditures would expand from 10.8 percent to 13.6 percent in this period.

As for basic research, the OMB analysis indicates that overall obligations would rise from $4.7 billion in FY

0036-8075/81/0508-0646$00.50/0

1980 to $5.5 billion in FY 1982, an increase that may be just about enough to provide a little real growth, barring a rapid surge in inflation.

—Colin Norman

Shuttle Astronauts Give Report

During a week of debriefings, astronauts John Young and Robert Crippen have told the engineers who designed the space shuttle Columbia that its maiden flight was nearly flawless and that the vehicle has better maneuvering and lift capability than anticipated. It used less fuel during liftoff than expected, lofted past its targeted initial altitude, and traveled smoothly at hypersonic speed for the first time. Young also predicted that it would traverse farther and more easily away from its natural path of flight in space, possibly providing the capability to launch and service satellites in more varied orbits.

On the much discussed topic of the shuttle's tiles, Crippen says he noticed that some were missing on the shuttle's aft when he first opened the payload bay doors. If it caused either him or Young any alarm, neither has admitted it. The most vital heat-sensitive areas are the forward edges of the wings, and the astronauts could see that the pyrolized carbon coating there was undisturbed. Young reported that he and Crippen had been told by engineers that at least one of the tiles on bottom of the shuttle would fall off on reentry—which is, of course, the reverse of what the National Aeronautics and Space Administration (NASA) had assured the public. They had also been told that heat in a tile gap "may burn a hole through something, but it doesn't hurt anything." In any event, no tiles fell off, to Young's obvious delight as he walked around inspecting the craft after landing.

The astronauts said that nothing surprising occurred during reentry except that NASA was unable to obtain critical temperature readings from the shuttle's skin during the period of greatest heating from atmospheric frictions. The data were missed both by a chase plane with an infrared camera and by a faulty tape recorder on board the shuttle. Until the next flight, NASA can only guess how much heat the tiles reflected during this period.

During later flights, temperatures on reentry will become even higher because of a new angle of descent. Aerodynamic pressures will increase by almost 20 percent. Also, additional power must be generated to support longer stays in space. The toilet must be made to work properly (it worked for only part of the first flight). The engines must be certified at greater levels of thrust, and the external fuel tank and solid rocket boosters must be modified so as to lose about 5000 pounds. Eventually, the ejection seats for the astronauts will be removed to lighten the load.

Most of the Columbia's tiles must be reexamined at Kennedy Space Center before the next launch. NASA expects to replace as many as 600 of the shuttle's 32,000 tiles routinely between flights. All of the tiles on orbiters now under construction will be strengthened and tested, unlike many of those on the Columbia. Meanwhile, the agency has budgeted $20 million over the next few years to develop an alternative heat protection system.

NASA also plans to examine the main engines of the Columbia with a boroscope, a tube containing a magnifying lens at one end. Ignoring the advice of an expert panel of the National Academy of Engineering, NASA has decided not to disassemble one of the engines before the next flight.

—R. Jeffrey Smith

New AAAS Panel in National Security Field

AAAS has established a panel on security and scientific communication. The move is prompted by the increase in recent years of cases in which national security considerations have conflicted with freedom of research or international scientific interchange.

Examples are restrictions on cryptography research and efforts to control information on advanced technology, for example, through enforcement of the International Traffic in Arms Regulations (ITAR).

Other scholarly and scientific organizations—such as the National Academy of Sciences, American Association of Universities, and American Council on Education—have addressed the problem on an ad hoc basis. The AAAS panel, however, will be a regular subcommittee of the standing Committee on Scientific Freedom and Responsibility. Chairman of the subcommittee is Stephen Unger, of the department of computer sciences at Columbia.

Formation of the subcommittee marks a new departure for AAAS, whose committees have heretofore not dealt on a regular basis with national security issues.***—John Walsh***

Jury Exonerates Bendectin in Mekdeci Case

On 9 April, a federal jury in Orlando, Florida, ruled unanimously that the antinausea drug Bendectin did not cause the birth defects of 6-year-old David Mekdeci. This was the first and most critical test of claims made against Richardson-Merrell Inc., manufacturer of Bendectin. Sixty other suits have been filed.

A number of lawyers have been placing newspaper ads for cases involving women who took Bendectin during pregnancy and subsequently bore deformed children. The drug has been called "a new thalidomide." Bendectin, on the market for more than 24 years, has been taken by more than 30 million women to suppress nausea during pregnancy.

Last September, a panel of the Food and Drug Administration determined that there is no demonstrated association between Bendectin and birth defects (*Science*, 31 October, 1980, p. 518). Nonetheless, lawsuits against Richardson-Merrell are going ahead as planned.

The Mekdeci case was originally tried in January 1980, but federal Judge Walter E. Hoffman ordered a retrial, saying that the jury's verdict was inconsistent. The jury on the first trial recognized no damages due to the use of Bendectin but gave the child's parents $20,000 anyway for medical expenses. The retrial lasted 9 weeks; the jury of five women and two men reached a unanimous verdict after 2 hours of deliberation. The Mekdecis will continue to press their case.

—Gina Bari Kolata