or outlays, to pick only two of several options. Authorities are the maximum amount of money an agency can legally spend—a ceiling. Outlays are the numbers of dollars they will actually spend in cash during any given year. The two figures are not necessarily the same. In past years, the health budget has been discussed in terms of authorities. This year, the Administration chose to deal with outlays too. Thus, one gets the following sort of exchange:

Reporter, asking about an item in the health budget. What shall I do with this outlay figure?

HEW official. Ignore it.

Another reporter. Last week Secretary Weinberger testified that the NIH budget would show an increase of 8 percent and he was basing that on outlay figures. Isn't that the figure you just told us to ignore?

HEW official. Yes.

So it went.

After the health briefing came to a merciful close in midafternoon, there was yet one more briefing for those who cared, an NIH briefing. By then, the overheated room which had been full to overflowing had emptied out, everyone's capacity to argue about the Administration's philosophy in supporting this or cutting that was spent and the focus was on facts.

There was one more lesson on the difference between authorities and outlays and a consensus to discuss the NIH budget in terms of authorities. Then, everyone got down to business. The briefing was run by Leon Schwartz, NIH associate director for administration, who came armed with a pocket calculator and reams of information. Deftly avoiding questions that would have required him to say whether he agreed or disagreed with policy, he presented all the facts for which he was asked and left their interpretation to his questioners. Much of the information he provided is summarized in the accompanying table.—BARBARA J. CULLITON

To sort out the vagaries of the NIH budget for the last three fiscal years, in order to compare the President's requests for 1975 with other years, one must take impounded funds and congressional add-ons into account. In this table, there is a figure in italics above the total figure listed for each institute for 1973 and 1974. In the 1973 column, that figure represents impounded funds that have been released by the courts. (One HEW official has dubbed them "courtfalls.") In the 1974 column, the italicized figure represents the amount of money Congress appropriated to each institute above that which the President originally requested. (Nixon reluctantly accepted these congressional additions.) In each case, the totals given for each institute *include* the courtfall or add-on funds.

Budget authority (in thousands of dollars)

Institute or division	FY 1973	FY 1974	FY 1975 request	Change 1974–1975
Cancer	*58,900*	*27,300*		
	492,250	527,306	600,000	+ 72,694
Heart and Lung	*44,200*	*21,500*		
	300,042	286,465	309,299	+ 22,834
Dental Research	*6,100*	*5,100*		
	46,998	43,949	43,959	+ 10
Arthritis, Metabolism and Digestive Diseases	*24,000*	*19,300*		
	167,348	152,941	152,961	+ 20
Neurological Diseases and Stroke	*22,700*	*18,700*		
	130,694	119,903	119,958	+ 55
Allergy and Infectious Diseases	*10,400*	*11,700*		
	113,434	110,369	110,404	+ 35
General Medical Sciences	*29,000*	*29,700*		
	183,212	168,329	168,329	
Child Health and Human Development	*19,000*	*18,200*		
	130,450	124,867	124,897	+ 30
Eye	*4,100*	*7,800*		
	38,570	39,938	39,947	+ 9
Environmental Health	*4,700*	*3,100*		
	30,960	28,386	28,684	+ 298
Research Resources	*2,200*	*38,300*		
	75,091	126,935	82,700	— 44,235
Fogarty International Center		*1,200*		
	4,666	4,762	4,784	+ 22
Total research	1,713,715	1,734,150	1,785,922	+ 51,772
Other administrative		*1,300*		
	48,823	47,184	48,862	
Total, NIH	1,762,538	1,781,334	1,834,784	+ 53,450

Military

The Defense budget reached $80.5 billion at the height of the Second World War, and $75.6 billion in 1968, the peak year of the Vietnam war. This year, with the last troops withdrawn from Southeast Asia, the first SALT agreement in the bag, and a détente that has allowed defense planners to prepare only for one and a half wars at a time instead of two and a half, the Department of Defense is asking Congress to approve a budget of $92.6 billion. Payrolling a volunteer army, inflation, and the idea of overloading the SALT negotiating table with bargaining chips seem to be the principal reasons for the largest defense budget ever.

A Pentagon briefing to explain the budget to the press was devoted mainly to proving that this is one of the smallest military budgets of the last decade. (The proof depends on excluding what is probably the fastest increasing item—military pensions—and expressing all previous budgets in terms of 1975 dollars.) "In terms of real purchasing power," states the Department of Defense press release, the DOD budgets for the present and coming fiscal years represent "the lowest Defense budget levels since FY 1951."

With this lowest ever purchasing power the DOD's investment in the developing and procurement of new weapons has suffered an increase of $2.8 billion ($1.5 billion of which is ascribed to inflation). The RDT & E budget (research, development, test, and evaluation) has shared in this expansion, rising from $8.3 billion last year to $9.3 billion, or slightly more than 10 percent of total Defense Department spending. Almost all the increase goes to development rather than research, which at $1,862 million will be supported at essentially the same level as this year. The increased development spending is directed to "maintaining the technological lead," the President says in his budget message to Congress, in particular by continued emphasis on guidance technology for both tactical and strategic missiles, lasers, and "advanced reconnaissance technology" (satellites).

The so-called peace dividend that was to be earned from the ending of the Vietnam war was entirely consumed by increases in military pay and by inflation. The dividend from the 1972 SALT agreements to limit strategic arms and anti-ballistic missile (ABM) systems is proving equally evanescent. The Administration seems to have decided that a credible American threat to build an ABM system was what encouraged the Soviets to negotiate a limit on ABMs and that similar inducements should be offered for the second round of SALT talks. Secretary of Defense James R. Schlesinger was saber rattling last month about "counterforce strategy," a plan

whereby the United States will target some of its missiles at Soviet missile silos, instead of just at cities, the purpose being to facilitate a less than all-out nuclear exchange. To underline the message, the FY 1975 budget requests funds for "more accurate missile guidance systems, higher yield warheads, and a new stand-off cruise missile for air launched delivery. . . . Later decisions to produce and deploy these weapons will depend on the outcome of ongoing SALT negotiations." More accurate guidance systems and higher yield warheads are not needed for destroying Soviet cities; their only purpose can be to threaten the other side's missile silos.

Research and development expenditures for strategic weapons include $649 million for the Trident submarine's missile (up from $528 million last year), $143 million for the Minuteman III missile, a MIRVed version of the Minuteman I which it is fast replacing, and $40 million for a phase array radar to warn of a sea-launched missile attack. The SALT agreement limited ABM systems to two sites, an arrangement which proponents of a complete ban said would lead to intensified research on improving the allowed installations. So it has come about. In addition to $61 million being spent on RDT&E for the ABM system at Grand Forks, North Dakota, the Defense Department plans to lay out $160 million (up from $110 million last year) on general research for ABM defense of missile sites. This, presumably, is the insurance tab for seeing the Soviets have an interest in renewing the ABM agreement when its present term expires. The purpose of the research funds is described as being "to develop an option for a more effective defense of the Minuteman force, should such a defense be required in the future."

Building or threatening to build new and more frightening weapons may indeed encourage the Soviets to try and negotiate them away. On the other hand it may also encourage them to develop counter weapons of their own. According to former Assistant Secretary of the Treasury Murray L. Weidenbaum, between 1957 and 1970 81 major weapons were canceled after $12 billion had been spent on them. Waste apart, Weidenbaum says he "can think of nothing that reduces our national security more than building a new weapon that does not work or is abandoned, but which nevertheless evokes a strong response by a rival power."

The Pentagon budget briefing is more an occasion for window dressing and flip chart artistry than explanation of what the Defense Department is doing and why. This year's briefing was entrusted solely to accountants, headed by Assistant Secretary of Defense (comptroller) Terence E. McClary, who unanimously refused to address any questions about the significance of the figures they were purportedly explaining. Asked why the Trident submarine program had been slowed down and then speeded up again within the last few months, McClary gave the illuminating answer, "Yes, we have gone in two ways—these are the dynamics of decision-making in the Pentagon." The dynamics of public image making in the Pentagon have also gone two ways with this year's budget. To the public and Congress the Defense Department is claiming it has less real money than ever before; to the Russians the message is that they will have to match another costly round in the strategic arms race unless they behave well at the SALT negotiating table.—NICHOLAS WADE

Science Foundation

"The energy crisis has rallied attention to the importance of research and development to society," said H. Guyford Stever, director of the National Science Foundation (NSF) and the science adviser to the President, at a press briefing on the proposed 1975 budget for NSF. Indeed, the nation's basic research agency fared well during the budget preparation process; it is seeking a record $788.2 million in obligations, or 13.5 percent more than it was awarded last year, and $675 million in actual outlays, also a 13 percent increase. Energy, basic research, and science policy are to be the big gainers; other NSF programs are merely holding even or are getting minimal increases.

In recent years, NSF has often received increases when the research budgets of other agencies—such as those in defense and space—have been cut. Then, NSF's added funds were to pay for picking up projects discarded by these sponsors. This year, however, NSF seems to have won its increase on its own merits—and perhaps this has occurred in part because, for the first time, its director has had an inside track to the budget-makers through his new role as science adviser to the government. As someone at the briefing quipped on the favorable new NSF budget: "It appears that the director of the National Science Foundation has been talking with the President's science adviser."

The new budget would make a total of one-third, or 32 percent, of NSF's activities relate to energy. They would include programs for training students and technicians, expanded international energy research, energy policy studies, and an expansion of NSF's lead role in the solar energy field. But the energy increments would also boost NSF's principal basic research program of Scientific Research Project Support (SRPS). Of the proposed $363.7 million in obligated funds for SRPS, fully 36 percent would be for energy-related projects.

The politically visible applied program of Research Applied to National Needs (RANN) would receive a doubling of its 1974 obligations, or $148.9 million. Of this, 69 percent will go for energy-related projects. The new energy research and development policy office, set up last year to assist Stever in his science advisory role, would rise from $2.5 million in fiscal 1974 to $4.5 million. One-quarter of the $12.7 million obligation for graduate student support would be for additional energy fellowships. Finally, NSF claims an added $4 million to help administer its energy-related programs.

All this emphasis on energy has very much the air of a crash program, and it raises the question of whether the energy funds are being taken from other activities. NSF officials say that the energy thrust is not gouging other programs. First, in SRPS they say existing research projects will simply continue, with additional energy funds, because they have been magically labeled energy related. Second, SRPS's nonenergy research is receiving an independent increase of approximately 9 percent. Together, these raises result in very favorable increases in several basic science disciplines: chemistry (42 percent); earth sciences (29 percent); engineering (33 percent); materials (28 percent); and physics (24 percent). Independent of the energy budget, an increase of 20 percent is sought for astronomy. An additional $13 million