Representative William Nelson (D–FL) pointed out that Congress had not authorized the little space lab, much less studied it in hearings. No one seemed to have a good fix on its cost or contents.

Meanwhile, a competing company joined the fray, pointing out that Space Industries Inc. was getting favored treatment. James Beggs, the former head of NASA who now runs a company called Spacehab, Inc., wrote to Nelson on 1 April saying that the proposed ministation "threatened the viability" of his own company. If the government committed $700-million worth of experiments to Space Industries' vehicle, "this might significantly reduce or eliminate any government usage for Spacehab, even though Spacehab could accommodate these experiments at greatly reduced cost. . . ."

By this time, Representative Edward Boland (D–MA), chairman of the space appropriations subcommittee in the House, had written to Nelson to confess that an error had been made. "Upon reflection, from a procedural point of view. . .perhaps we did have the cart before the horse" in committing funds to a project that was not authorized, he wrote on 16 March. Boland said he would ask to have the offending $25 million cut from the budget.

On 28 April, four senior members of the Senate authorization committee led by Hollings asked NASA to stop work on the Industrial Space Facility, which now bears a new generic name—the Commercially Developed Space Facility (CDSF). Hollings and company insist that the project must undergo a 9-month review, preferably at the National Research Council. They want to know what it will cost, what purpose it will serve, and what cheaper alternatives might be available.

The outlook for the little space station worsened last week. On 4 May, the chairman of House Science Committee, Robert Roe (D–NJ), estimated that the project would cost $2 billion if transportation fees were included, indicating he was not in favor of rushing forward. On the same day, Nelson's subcommittee voted to let NASA proceed with a request for proposals, but not to let NASA issue a contract without approval from Congress. The object is to see if companies can come up with "innovative financing" arrangements. In addition, the project cannot go forward unless NASA receives at least two "good faith" competitive proposals.

It is not clear whether the CDSF can survive this barrage of second thoughts. But it is clear, as one executive says, that all this "waffling. . .is going to make it very difficult for commercial space operations to attract investors." ■ **ELIOT MARSHALL**

# Duke, NSF Reach Accord

An unusual dispute involving the National Science Foundation, Duke University, and the National Institutes of Health apparently has been resolved with a nudge from Congress. NSF has agreed to give Duke $1.2 million for a new engineering research center at Duke that the foundation originally, and unilaterally, said was contingent on additional funds from NIH.

Last 1 October, NSF advanced $667,000 to begin the Duke–North Carolina Engineering Research Center (ERC) in Emerging Cardiovascular Technologies, based at Duke's Durham, North Carolina, campus. But that figure was only about one-third of the $2 million that Duke could have expected from NSF during the first fiscal year.

To get more NSF money, Duke officials were told they would have to obtain new matching grants from NIH. Existing NIH funds could not be counted toward the match, NSF insisted (*Science*, 13 November 1987, p. 882). Duke has now received three new NIH grants that are acceptable to NSF, a foundation spokesman said last week, adding that future NSF funding is now likely.

Duke's predicament began in March 1987 when the National Science Board conditionally approved the center with some unique strings attached. Although engineering research centers are an NSF program, the board stipulated that NIH should provide one-third of the anticipated $14-million federal support for this project over the first 5 years.

The demand apparently stemmed from the Duke center's marriage of engineering and medical research. But NIH Director James B. Wyngaarden, a former chief of staff at the Duke Medical Center, had not agreed to any such arrangement, though the idea did have some support at the White House. Negotiations continued during the spring and summer of 1987, culminating in NSF's reduced funding award in October.

The resolution of the dispute was announced recently by Senator Terry Sanford and Representatives I. T. "Tim" Valentine, Jr., and David E. Price—all North Carolina Democrats. Their announcement noted that during a 23 March congressional hearing, Price and Valentine had "questioned NSF Director Erich Bloch extensively about NSF's treatment of Duke."

Sources told *Science* that NSF officials balked at accepting the three new NIH grants as appropriate matches during most stages of the negotiations with Duke. NSF officials apparently wanted NIH to provide a large grant for research in cardiovascular technologies. The three grants were smaller ones, for related work.

In a letter to Bloch, Representatives Robert A. Roe (D–NJ) Manuel Lujan, Jr. (R–NM), and Doug Walgren (D–PA) suggested that NSF agree to recognize such "individual and multiinvestigator NIH grants that relate directly to research to be conducted at the ERC." The new NIH grants, totaling $465,000 a year, were reportedly applied for after Duke had sent in its proposal for an engineering research center; and none had been awarded when the National Science Board acted.

Duke now expects to get about $1 million a year from NSF for the first 2 years. If it is awarded additional center-related NIH research funds that are currently under application, NSF support could grow to $2 million by the third year, according to a current scenario.

Because of the protracted impasse, NSF officials have reportedly agreed to extend the initial 5-year engineering research center project to 6 years. By the end of the 6 years, NSF could have awarded close to two-thirds of the $14 million that had been initially anticipated, with the rest of the federal money coming from NIH.

Duke officials were careful last week to accent the positive. "We naturally are very pleased that 12½ months of extensive effort by NSF, NIH, key congressional members, and Duke University have produced an excellent and fair solution," said Theo C. Pilkington, a Duke professor of biomedical and electrical engineering who is the center's director. "Over the next 5 years the Duke [ERC] will earn about $15 million to $20 million of federal support: $10 [million] from NSF and $5 to $10 [million] from NIH. And it will receive an additional $5 million to $10 million from industry and private foundations." ■ **MONTE BASGALL**

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