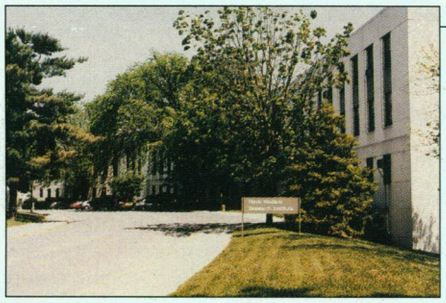
edited by RICHARD STONE



NMRI

Military relic. The Navy Medical Research Institute may be a victim of downsizing, but its scientists are headed to new digs down the road.

Navy Scientists Spared Ax in Downsizing

Congress may call it "downsizing," but for hundreds of Navy scientists, the latest round of military base closures means something different: modernization. Over the next few years, the military expects to open new facilities for medical and undersea research just in time to employ Navy scientists who might otherwise have lost their jobs due to military downsizing.

Last June, Congress's Defense Base Closure and Realignment Commission recommended, among other moves, that the Navy close three aging facilities: the Navy Medical Research Institute (NMRI) in Bethesda, Maryland; a sonar lab of the Naval Undersea Warfare Center (NUWC) in New London, Connecticut; and the Underwater Sound Reference Lab in Orlando, Florida. The White House approved the plan in July, and Congress is unlikely to fight the recommendations, which would be enacted this fall.

But the Navy has no intention of cutting loose about 350 staff at NMRI, who study everything from viral diseases to artificial blood. Instead, the scientists will relocate to a new lab being built a few miles down the road, at a suburban annex to Washington, D.C.'s Walter Reed Army Institute of Research. The $147 million lab, named after Senator Daniel Inouye (D–HI), will accommodate some 800 Army and Navy scientists when it opens in 1998 or 1999.

A similarly gentle fate awaits more than 400 undersea physicists and engineers who develop sonar systems at the undersea facilities in New London and Orlando. The Navy is expected to offer positions to these scientists in a new facility opening next year on NUWC's main base in Newport, Connecticut.

British Observatories Under Scrutiny—Again

When in doubt, launch a review. That seems to be the motif in British astronomy these days, as the U.K. government announced last week the third review in a year of its astronomy network. "We're being reviewed to death," says Jasper Wall, head of the Royal Greenwich Observatory (RGO) in Cambridge, England.

The problem is Britain's 25% share of Gemini, an international project to build telescopes in Hawaii and Chile. Operating costs must be squeezed from the budget of the U.K.'s Particle Physics and Astronomy Research Council (PPARC); at up to $3 million a year, these costs are about the same as running one of Britain's existing large telescopes.

The choice appeared to come down to funding Gemini or closing a telescope. However, a review panel led by University of Hertfordshire's Jim Hough suggested preserving the telescopes by merging the facilities of the RGO and the Royal Observatory, Edinburgh. The review degenerated into a Scots-English squabble.

Now PPARC's new master, the Department of Trade and Industry, has started its review. "We are in the process of putting flesh on the structure Hough has built," says Paul Murdin, PPARC's head of astronomy. Staffers worry, however, that one or both royal observatories could be closed or shunted to a university. The staff, says Wall, is "not happy about the whole process."

Fusion Milestone Could Become Budget Victim

Like a baseball team owner tired of paying for a high-priced star, Congress seems ready to cut its support for the once-glamorous fusion program to the point that Princeton University's Tokamak Fusion Test Reactor (TFTR) might have to hang up its cleats. Yet, after a summer of hot results, TFTR seems poised to hit an unprecedented home run—a self-sustained plasma burn called "ignition." The question now becomes whether the possibility of ignition—a milestone that was not expected to be achieved in any existing U.S. fusion reactor—is enough to keep fusion research on Congress's roster.

Over the past year, TFTR scientists have succeeded in quelling plasma instabilities that have limited the potential power output of fusion devices (*Science*, 28 July, p. 478). Reining in unruly plasma might yield a big payoff: Computer simulations at the Princeton Plasma Physics Laboratory (PPPL), *Science* has learned, suggest that a stabilized mixture of deuterium and tritium—a composition likely to power a working reactor—might soon ignite in TFTR's core.

Next week TFTR will launch experiments to test this theory. Uncharted instabilities or other unforeseen stumbling blocks could still block ignition, cautions PPPL physicist Mike Zarnstorff. However, he says, "the amazing thing is that we're anywhere near ignition," given that nearly a year ago TFTR surpassed design goals that made no mention of ignition.

But TFTR may never get the chance to run its test. Earlier this week, the Senate began debating an appropriations bill that would give the Department of Energy a $225 million fusion budget in 1996, a 38% cut from 1995. If Congress doesn't change its tune, says plasma physicist Michael Mauel of Columbia University, the ignition experiment could be something "we lose forever if we don't do it on TFTR."

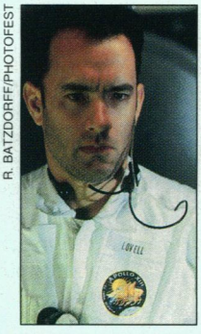
Curtains for OTA

A House-Senate conference panel agreed last week to close the Office of Technology Assessment (OTA), despite attempts to broker a compromise that would keep the think tank alive. OTA's death knell is in the appropriations bill for the legislative branch. Both houses must approve the final bill before it is sent to the White House—but don't count on a veto from President Clinton. "It's unlikely we're going to tell Congress how to run its own shop," says a White House official.

Tom Hanks: NASA's Secret Weapon

In politics as well as drama, timing is everything. So officials at the National Aeronautics and Space Administration (NASA) were in seventh heaven when actor Tom Hanks added glamour to a Capitol Hill reception just 1 day before the House debated whether or not to kill the space station.

About 100 lawmakers and Vice President Al Gore came to hear Hanks, who plays the commander of the lunar module in the movie *Apollo 13*. Hanks praised the space program and made a pitch to continue support for the station, while insisting that he was not lobbying for NASA. "I am not here to influence policy any more than your average American taxpayer would want to," Hanks told the crowd. But the station, he says, is "an incredible inspiration. ... I would like to be able to stand out in my backyard one night with my kids and look up at the space station Freedom as it goes by."



R. BATZDORFF/PHOTOFEST

The Hollywood actor, winked one White House official, is our "secret weapon." It apparently worked. On 27 July, the House defeated an attempt to kill the station by 299 to 126. Another amendment the next day failed 287 to 132—the widest victory margin for the station in years.