

sistive one on the inside, to boost the field in the bore even higher. Cambridge is working on one for 29 tesla, Grenoble on one for 30 tesla. Thirty tesla is a figure of great interest to biologists, Schneider-Muntau says. At that point the energy of the magnetic field equals the internal energy of a cell, and with that balance they expect serious magnetobiological effects to occur. With more improvements they hope to achieve 40 tesla in 5 or 10 years.

—D. E. Thomsen

IWC sets commercial whaling moratorium

Ten years after the proposal first gained worldwide popularity, the International Whaling Commission last week voted for a cessation of all commercial whaling beginning in 1986, with a gradual phasedown of catch quotas until that date. The vote, 25 to 7 with five countries abstaining, passed this year because several new members gave the anti-whaling side its long-awaited three-quarters majority.

U.S. Commissioner to the IWC John V. Byrne, Administrator of the National Oceanic and Atmospheric Administration, hailed the vote as "a major accomplishment," but added that "we still have another inning or two to go." Under the terms of the 1946 convention, for example, a member may formally object to an IWC decision within 90 days and then legally refuse to comply. While Japan, the major commercial exploiter of whales, has not yet filed an objection, officials there have expressed dissatisfaction and "they probably will object," says U.S. Deputy Commissioner Tom Garrett.

If objections are filed and the moratorium ignored, the IWC can do nothing to enforce it. But the United States, under two amendments to domestic fisheries legislation, must restrict by at least 50 percent fishing rights within U.S. waters of any nation certified by the Secretary of Commerce to be disregarding an IWC recommendation. In addition, the Secretary of the Treasury may decide to embargo that nation's fisheries products.

Such actions could have an impact on Japan's decision to comply. In 1981, that country's catch of fish in U.S. waters totaled more than \$425 million, according to Craig Van Note, executive vice president of Monitor, a coalition of 35 conservation groups. "Japan's entire whale catch is worth only \$50 million annually," he says. Restricting access to U.S. waters "could knock out close to a quarter of all jobs in the Japanese offshore fishing industry," says Garrett, "a loss of jobs many times the loss if the whaling industry shuts down."

Byrne says it's "premature" to talk about sanctions yet because a nation must violate, not just object to, an IWC decision first and he believes that "whaling nations will honor the vote."

—L. Tanglely

New JPL director was USAF chief of staff

In a time of growing concerns about the shifting balance between the nation's civilian and military space programs, the Air Force's just-retired chief of staff has been named to head Jet Propulsion Laboratory, the California Institute of Technology facility that is the principal center of planetary exploration for the National Aeronautics and Space Administration. On Oct. 1, Lew Allen Jr., a Ph.D. nuclear physicist who held the rank of general prior to his June 30 retirement, will take over the post occupied for the previous six years by Bruce Murray, a Caltech professor of planetary science (SN: 4/17/82, p. 260).

Aware of possible fears among scientists who have seen the NASA planetary program dwindle while Defense Department space expenditures have grown, Caltech president Marvin L. Goldberger says that Allen "has a genuine interest in space science and space exploration." Although Allen's experience with space development has been almost entirely defense-related, it dates to the beginnings of the space age, Goldberger notes, and brought him into contact with satellites, launch vehicles, communications technology and other areas, as well as the administration of a force of a million people. For such reasons, says Goldberger, Allen was the Caltech selection committee's unanimous first choice, "and not because we intend to

turn the laboratory into a DOD installation. . . . The military thing, I'd like to emphasize, played essentially no role." If anything, he says, Allen's military background could give him additional credibility as an advocate for civilian programs.

Would Allen undertake such a role—to push for planetary missions? "Oh, yes," he told SCIENCE NEWS, "no reservations about that." Furthermore, he said, "the need for additional exploration of the planets should remain the prime focus of attention at JPL."

But not the only focus. JPL deals with energy projects and other earth-oriented applications, and last year Caltech's board of trustees authorized the lab to take up to 30 percent of its budget from conducting DOD-funded research—triple the university's previously imposed limit. And with such work often comes the requirement of secrecy, a constraint that Allen says should be approached by JPL "with great care—and with limitations, [so that] one doesn't significantly impede the openness to the work at JPL which has been felt by the Caltech faculty, and indeed by the students. . . . If that [classified] portion of the work got to be too large," he says, "I think it would be to the detriment of the total, combined institution. . . . And so I think one wants to be very careful about that."

—J. Eberhart

OCS oil-leasing plan cleared by Interior

Secretary of the Interior James Watt has approved a controversial program that offers for lease to oil and gas companies one billion acres of the outer continental shelf (OCS)—or nearly the entire U.S. coastline. The 41 separate sales are scheduled to begin next month and can continue until 1987. The plan's purpose, said Watt in a July 21 statement, is to accelerate OCS oil and gas development that "drastically declined" during the 1970s, "making America less dependent on foreign oil sources."

The 5-year plan replaces a Carter administration program that also encouraged OCS oil exploration but opened only 55 million acres to private leasing. The new program has been praised by oil company representatives. Environmentalists, however, reacted with dismay. "This is basically a giveaway to some of the richest institutions in the world the lands that should belong to all U.S. citizens," said Elliott A. Norse, director of science and policy for the Center for Environmental Education. "At the same time the administration is enacting this program, it is cutting back drastically on the research necessary to assess the impacts of oil and gas development on the marine environment."

More than a year ago when it was first proposed, Watt's plan met with similar criticism. Nevertheless, it was expected to

go into effect early this year. A court decision last October, however, stating that even the Carter administration's plan did not include sufficient environmental safeguards to comply with the law, forced Interior to delay and revise its proposal.

"But this program is practically identical to the one proposed last July," says Frances Beinecke, senior resource specialist with the Natural Resources Defense Council. NRDC, with six other environmental groups, has filed a petition for the court's review of the plan. The states of California and Alaska, as well as the local government of Alaska's north slope (where companies expect to find new oil reserves), have filed similar petitions.

The basis for the lawsuits, says Beinecke, is that the Outer Continental Shelf Lands Act requires the government to ensure a "balance between oil and gas exploration and protection of the marine coastal environment" in any leasing program and that Interior has failed to do this. Watt contends that such a balance is incorporated into his plan and that "new leasing will be carried out under rigorous environmental controls." He also stresses that the number of acres that actually will be leased by oil companies is a small fraction of the number he's making available.

—L. Tanglely