Why Won't NASA Talk to Scientists

To the astronomers it looks like a clear-cut case of bureaucratic arrogance: officials of the National Aeronautics and Space Administration are refusing even to talk about a bitterly contested issue that affects them directly.

But the officials themselves believe their reticence is eminently justified: "The reason I've stopped talking is because I don't want to go to jail," declares NASA astrophysics director Charles Pellerin.

Pellerin isn't exaggerating. He and his colleagues have been thoroughly spooked by the government's new ethics law, which took effect on 16 July and which has already triggered an exodus of high-level officials from the agency (*Science*, 21 July, p. 251). The law sets down Draconian rules restricting who government employees can talk to when making procurement decisions. And at least for now, says Pellerin, the forbidden list includes virtually all the scientists involved in AXAF, the Advanced X-ray Astrophysics Facility that NASA plans to launch in 1996.

The origin of this new rule of silence goes back to a controversy that has been simmering since April, when NASA released a draft of its plans for a new science center that would coordinate observations on AXAF. The astronomers who saw the plan were aghast. Instead of another top-quality research institute like NSF's Kitt Peak National Observatory or NASA's own Space Telescope Science Institute, NASA seemed to want a glorified library: an AXAF "data center" in which final authority over the science program would remain at agency headquarters. The facility would not even be run by a scientist, but by a professional manager—a bureaucrat.

The astronomers contacted by *Science*, all of whom spoke not for attribution, see the issue as one of control. Indeed, they say, since AXAF may well set the pattern for all the rest of NASA's space observatories, the issue could be the future of space science. Will the AXAF center be run by scientists *for* scientists, as happens at non-NASA laboratories such as Kitt Peak and Fermilab? Or will it be forced into the civil-service mold of most NASA centers, where—they say—the intellectual quality is mediocre at best?

They also wonder if NASA has a hidden motive. The agency's one fling with an independent, Kitt Peak–style laboratory, the space telescope institute, has left it with a constant thorn in its side: the institute's brilliant but abrasive director Riccardo Giacconi, who has never missed an opportunity to point out NASA's failings. Is the AXAF plan just NASA's way of saying it's had a bellyful?

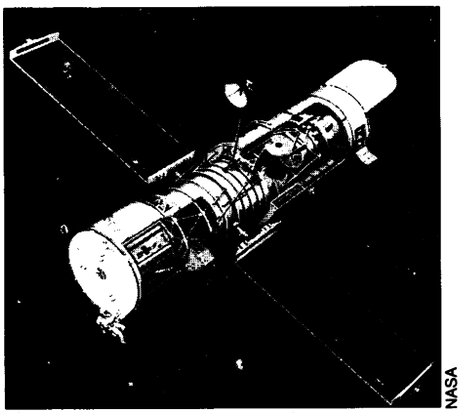
Not at all, says Pellerin. The intent of NASA's plan is to put service to the scientific community first, instead of building an endless series of new research fiefdoms. But whatever the merits of this argument, he has been forced by agency lawyers to cut off all debate—even with his own astrophysics advisory panel.

"From the government's perspective, we're going through the process of procuring a $100-million item [the AXAF data center]," Pellerin explains. And since many of the astronomers on the advisory panel also sit on the boards of such organizations as the Association of Universities for Research in Astronomy, which may well end up bidding to operate the data center, that's a potential conflict. "The NASA counsel has been very sticky about letting me take comments in an unstructured way from potential bidders," says Pellerin.

Not surprisingly, the astronomers see this as an excuse for not listening. Several high-ranking astronomers have written to National Academy of Sciences president Frank Press asking him to form a new academy committee to make its own recommendations on the AXAF institute. At last report, Press was still studying the matter.

Meanwhile, Pellerin promises that there will be plenty of chance for public comments on the proposal later, once it has been formalized. But for now, the new ethics rules are making an already fractious situation more bitter than it had to be.

■ M. MITCHELL WALDROP



NASA

Ground control. *Fight for the heart of AXAF.*

Caution Urged on DNA Fingerprinting

DNA fingerprinting, a technique of molecular biology that has been widely hailed as an infallible forensic tool, has failed its first serious judicial challenge. On 14 August, a New York judge threw out DNA evidence that apparently linked an accused man to his alleged victim, and he urged other courts to treat similar evidence with caution.

The ruling is expected to lead to intense scrutiny of DNA fingerprinting evidence in future cases and it could prompt a review of some of the estimated 200 cases in which the technique has played a role.

The judge, Gerald Sheindlin, reached his conclusions after a lengthy pretrial hearing (*Science*, 2 June, p. 1033). He ruled that DNA fingerprinting, if properly used, can produce admissible evidence in murder, rape, and other cases. But he warned that incorrect testing procedures can produce flawed data and recommended that courts hold pretrial hearings to assess the validity of DNA fingerprinting evidence before it is presented to a jury.

The litigation that prompted the ruling, widely known as the Castro case, involved data developed by Lifecodes Corporation of New York that purported to show that a blood spot on an accused man's watch matched that of a murder victim. The evidence was picked apart by a battery of scientific witnesses, however, who argued that Lifecodes had failed to use proper controls and employed inappropriate methods to calculate whether the match was due to mere chance. In the end, even the prosecution admitted that the tests were flawed, but asked Sheindlin to rule anyway.

Peter Neufeld, the defense counsel, says Sheindlin's ruling does not put sufficient limits on the technique. He argues that DNA fingerprinting evidence should not be permitted at all until rigorous testing standards have been developed and forensic labs are monitored to ensure they are performing the work properly. But Eric Lander of the Whitehead Institute, a key defense witness, praised Sheindlin's call for pretrial reviews as a constructive measure.

Neufeld argues that the Castro case should prompt attempts to reopen dozens of earlier cases. But Edward Imwinkelried of the University of California at Davis, an expert on the legal use of scientific data, notes that such appeals would have to prove not only that the DNA data were flawed but that they were also crucial to the outcome of a particular case. He believes that it is "highly unlikely" that both conditions would be met in many cases. ■ COLIN NORMAN