**SPACE SCIENCE**

**NASA Chief Blasts Science Advisers, Widening Split With Researchers**

NASA Administrator Michael Griffin this week read the riot act to the outside scientists who advise him, accusing them of thinking more of themselves and their research than of the agency’s mission. Griffin’s harsh comments come on the heels of the resignation of three distinguished scientists from the NASA Advisory Council (NAC), two of whom have questioned Griffin’s plan to dramatically scale back a host of science projects (Science, 12 May, p. 824).

“The scientific community … expects to have far too large a role in prescribing what work NASA should do,” Griffin wrote council members in a blistering 21 August message. “By ‘effectiveness,’ what the scientific community really means is ‘the extent to which we are able to get NASA to do what we want to do.’ ”

The outside engineers, scientists, and educators on the council traditionally offer advice on the agency’s policies, budget, and projects. Placed in limbo for nearly a year after Griffin took over as NASA chief in spring 2005, NAC was reorganized this spring under the leadership of geologist Harrison Schmitt, a former U.S. senator and Apollo astronaut who is very enthusiastic about President George W. Bush’s plans to send humans back to the moon and to Mars. Schmitt replaced Charles Kennel, director of the Scripps Institution of Oceanography in San Diego, California, who resigned last week from his post as chair of the council’s science committee. Two other NAC members—former NASA space science chief Wesley Huntress and Provost Eugene Levy of Rice University in Houston, Texas—resigned last week in response to a direct request from Griffin that they step down.

Schmitt and members of that committee have clashed repeatedly in recent months over the role of science at the space agency. In a pointed 24 July memo to science committee members, Schmitt complained that they lacked “willingness to provide the best advice possible to Mike,” refused to back Griffin’s decision to cut research funds for astrobiology or recommend an alternative cut, and resisted considering the science component of future human missions to the moon. “Some members of the committee,” he concluded, “are not willing to offer positive assistance to Mike.”

Both Levy, a physicist, and Huntress, an astrochemist now at the Carnegie Institution of Washington, D.C., say they support human space exploration but fear that science is now taking a back seat after years of a careful balance between human and robotic efforts. NASA spokesperson Dean Acosta acknowledged that the scientists and Schmitt “weren’t working well together,” and that Griffin telephoned Huntress and Levy last week to ask for their resignations. Griffin’s memo points to what he calls “the inherent and long-standing conflict of interest” of giving advice to an agency on which members depend for funding. And he offers them a clear way out. “The most appropriate recourse for NAC members who believe the NASA program should be something other than what it is, is to resign.”

Huntress says Griffin told him that his advice exceeded the council’s charge. “This is a different NAC. Our advice was simply not required nor desired,” Huntress told Science. The current council, he adds, “has no understanding or patience for the science community process.” Kennel, who had been named chair of NAC’s science committee, was unavailable for comment, but Norine Noonan, a former NAC member and dean of math and science at the College of Charleston in South Carolina, called Griffin’s action “very distressing” for scientists. “If we can’t have a robust debate at the NAC level,” she says, “then where in the heck is it supposed to happen?”

—ANDREW LAWLER

**CHEMISTRY**

**New in Nanotech: Self-Folding Delivery Boxes**

“Some assembly required.” Those words on a box from the store spell agony for a parent. Chemists face similar headaches while designing new drug-delivery agents or trying to control their actions in the body. But researchers in Maryland may have found a pain reliever.

In a paper published online last week in the Journal of the American Chemical Society, researchers at Johns Hopkins University in Baltimore, Maryland, reported creating tiny two-dimensional cutouts that fold themselves up into porous cubical and other 3D containers. The containers can then be used to ferry compounds to a site where chemists want them to react. Metal versions can even be steered there using magnetic fields.

Researchers say the new nanocontainers could be useful as novel drug-delivery vehicles and in tiny lab-on-a-chip reactors. “This is very elegant work,” says Mauro Ferrari, a nanomedicine expert at the University of Texas Health Science Center in Houston. “It brings an innovative element to the field of controlled release of drugs. [But] it has a long way to go” before it can help patients, he warns.

Team leader David Gracias, a chemical ...