Briefings

edited by FAYE FLAM

Back to the Future

Fill a White House panel with aerospace experts and former astronauts and charge them with finding new approaches to a joint Moon/Mars mission. Have them cast their net wide, garnering 2500 suggestions from academia and industry. After 10 months of study, let them write a glossy, 150-page report. Their conclusions?

You guessed it: NASA's old ideas are best. For instance, the United States should develop a nuclear-powered spaceship to speed up the interplanetary voyage, the panel recommended. NASA researched and abandoned this technology long ago, in the 1960s and 1970s. For launching equipment into earth orbit, landing on Mars, and other tasks, the panel recommended revamping old moon-rocket technology—in particular, Saturn V engines. This suggestion will sit well with several members of the House science committee, who recently expressed interest in reviving the Saturn V (see *Science*, 15 February, p. 733).

The panel, chaired by retired Air Force general and astronaut Thomas Stafford, endorsed four alternative approaches to the mission: exploring both the moon and Mars, exploring Mars, developing a permanent moon base first and visiting Mars later, and exploiting lunar and Martian energy and minerals for terrestrial use.

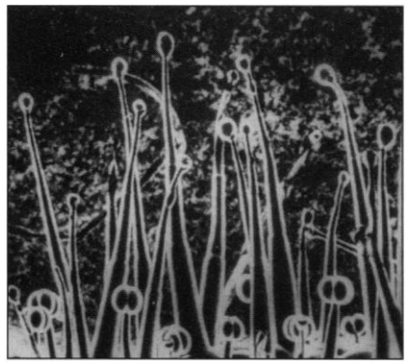
Although the panel did not make any cost estimate, outside experts said the new plan, while cheaper than previous NASA schemes, would still cost hundreds of billions of dollars. But with an estimated Mars arrival date around 2015, and even a decision between the four alternatives "a way down the road," according to Vice President Quayle, any congressional budget battles are probably years in the future.

A Tasty Tufted Tuber

An international collaboration of plant geneticists has bred a new "hairy potato" that reportedly resists the tuber's many devastating pests. From the name, you might think it would also resist consumers.

Actually, the hairs, which are tipped with sticky goo, grow not on the tuber itself but on the leaves and stems that appeal to pests, explains Cornell University biologist Robert Plaisted.

"Small insects get stuck to the leaves as if they were flypaper and then die of starvation," says Plaisted. Beetles and other large insects that make the mistake of attacking the hairy potato meet an even worse fate, he says. The hairs gum up their insides.



Insects beware. *The hairy potato leaves.*

Plaisted, along with John Dodds of the International Potato Center in Lima, Peru, and other colleagues, tinkered with potato genetics for 10 years to create the hairy potato. They did it by combining a nonedible wild strain from Peru with a domestic variety. The result: a potato that needs no chemical help to resist pests.

The scientists hope that worldwide introduction of the hairy potato could slash pesticide use, since farmers spray more pesticide on potatoes than on any other crop. Plaisted says he and his colleagues are still perfecting their new tuber by breeding out the undesirable wild traits such as small size and slow growth. But they are close. The few he has sampled do taste "pretty much like ordinary potatoes."

Women's Health: A World Crisis

Reproductive health problems are the world's biggest killer of women of childbearing age, according to a new report from the Worldwatch Institute in Washington, D.C. Pregnancy complications, including botched abortions, infections of the reproductive tract, and contraceptive side-effects, kill about 1 million women every year and injure hundreds of millions more, according to the report, entitled "Women's Reproductive Health: The Silent Emergency."

Author Jodi Jacobson reports that pregnancy complications are rampant in the developing countries of Asia, Africa, and Latin America. In Africa, a woman's lifetime risk of dying from a pregnancy-related cause is about one in 21, compared with one in 6366 in North America.

Though poverty and ignorance often prevent health care during pregnancy, Jacobson says cultural factors can exacerbate the problem. In many areas, a woman can seek medical help only with permission from her husband or a senior family member. In Zaria, Nigeria, for example, a woman suffering from obstructed labor often can't get help if her husband isn't around to give the okay. In some parts of Africa, South Asia, and the Middle East, pregnant women often have severely restricted diets, sometimes to conserve food for men, or in the superstitious belief it will lead to an easier delivery.

But efforts to prevent pregnancy have their own perils. In the struggle to control population growth, some governments are overlooking women's health. In Brazil, for example, contraceptive pills are widely available without a doctor's prescription. As a result, 40% of pill users in Brazil are smokers, a group usually advised against the pill because of the associated risk of stroke and heart disease. "There is a danger to reproductive health when you look only to limit population," Jacobson says.

Many other threats to reproductive health, including sexually transmitted diseases, are easy and cheap to cure, Jacobson says. But they go widely untreated in many countries—often developing into debilitating or deadly conditions.

Researcher's Legal Battle Ends

New York University medical researcher Jan Moor-Jankowski's career took a sudden turn in 1983, when an interview with *New Scientist* magazine and a letter in a medical journal thrust him into a million-dollar legal battle that would consume his career for 8 years. On 3 June his ordeal finally came to a close, when the Supreme Court refused to hear an appeal of a lower court's decision against the Austrian pharmaceutical giant Immuno AG, which had sued Moor-Jankowski for libel.

The legal odyssey began when the 1983 *New Scientist* article quoted Moor-Jankowski's criticism of Immuno plans to build a facility in Africa for doing hepatitis research on captured chimpanzees. The researcher had warned that Immuno's plans threatened to sidestep an international treaty to protect the endangered animals. Then, in the *Journal of Medical Primatology*, which he edits, Moor-Jankowski ran an opinion letter written by another researcher warning of the dangers of returning potentially infected chimps to the wild.

Immuno responded by suing