

## SPACE

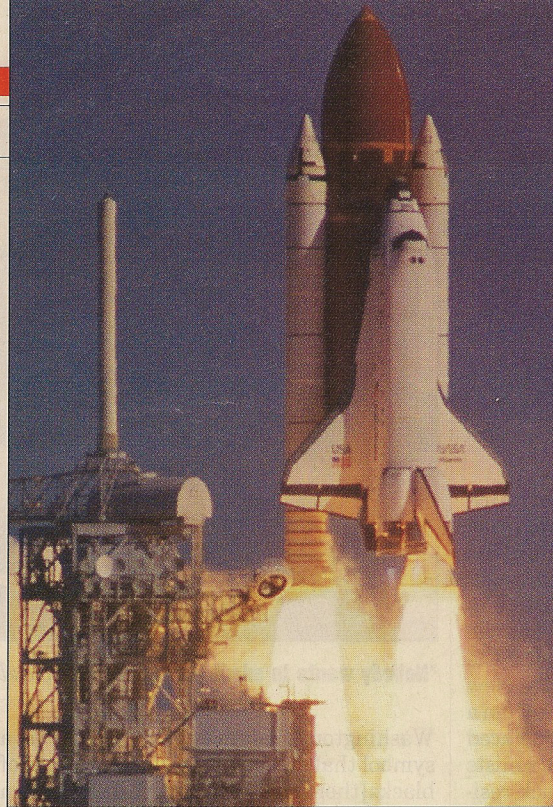
# The Flight of Atlantis

## A satellite gets shuttled

**D**on't tell the Russians, but the United States launched a top-secret space-shuttle payload last week. In the second mission since the 1986 Challenger disaster, the Atlantis shuttle placed a Defense Department satellite into orbit. NASA was very circumspect about the whole thing, providing only a general idea of when liftoff would occur and terse bulletins about problematic weather conditions. Wives of the four married astronauts weren't told when their husbands would return. Launch officials on Cape Canaveral and in Houston worked in rooms insulated to prevent electronic snooping. Unlike the September launch of Discovery, which took place in a public outburst of flag-waving and best wishes, spectators were not allowed to watch from Kennedy Space Center properly this time. Adding to the low-key atmosphere was a reduced media presence at the cape: only 560 journalists, compared with more than 2,500 for Discovery. NASA's media escorts, who normally scurry from reporter to reporter, stood around with their hands in their pockets.

Still, there was drama to the liftoff of Atlantis. Upper-atmosphere winds of more than 100 miles per hour on Thursday had delayed the countdown for a day. When Atlantis finally blasted off the next morning just after 9:30, it came less than two minutes before the "launch window" was going to close. Once the shuttle was aloft, NASA continued to provide a minimum of information. From eight minutes into the mission, when the main engine cut off, until an hour later, when Atlantis had reached its proper orbit, mission control said nothing. Instead of status reports being given every eight hours, no updates were given at all. And no specific details about the length of the mission were forthcoming.

This veil of secrecy didn't hide much. A Soviet intelligence ship was stationed off the cape, and Paul Stares of the Brookings Institution predicted that "the Soviets would be able to determine the general



DAN HELMS

Orbiting Earth, yet under a cloud: *Launch at Canaveral*

function of the satellite within a few days." Still, as one intelligence official put it, "Why make it easy for them?" Among space-industry insiders, the identity of Atlantis's precious cargo seemed like an open secret. They believed the payload to be the brand-new Lacrosse satellite, which creates fairly precise images—details down to about nine feet in size—through the use of radar. The Lacrosse has a distinct advantage over higher-resolution photosatellites

many of those five-year satellites have been there for eight years," says Air Force Chief of Staff Larry Welch. But the Air Force has begun to hedge against shuttle difficulties by developing rockets that would launch satellites from Vandenberg Air Force Base in California. And that could put NASA out of the spy business altogether.

RON GIVENS with FRANK GIBNEY Jr. in Houston and RICHARD SANDZA in Washington

## ENVIRONMENT

## Feed a Meter, Save a Forest

**T**wo thirds of the world's living species inhabit tropical rain forests. But according to Stanford University's Center for Conservation Biology, an estimated 74,000 acres of the lush land are destroyed every day. Staggered by those statistics, the San Francisco Bay Area chapter of the American Association of Zoo Keepers has devised an "Ecosystem Survival Plan" to buy up and preserve the world's tropical habitats. The plan depends on an unlikely ecological device: the little-loved parking meter.

The San Francisco Depart-

ment of Public Works is donating to Bay Area zoos old meters that will be transformed into "interactive conservation tools." Each meter will bear the slogan: "Give Your Change to Make a Change." When someone deposits a coin, a picture of an anteater or a jaguar will pop up instead of a time arrow and sprint across the meter.

The plan has real earning potential. About 114 million people visit U.S. zoos each year. "If every visitor put 50 cents in the meter instead of buying a bag of peanuts, we could purchase and protect

because it produces "pictures" despite cloudy conditions or darkness. This is especially important for such strategic areas as the Kola Peninsula, where much of the Russian fleet of ballistic-missile submarines is based. Located north of the Arctic Circle, the Kola Peninsula is dark for much of the winter. And, in general, points out one defense official, "The weather in the Soviet Union is crappy all the time."

**Hedging against difficulties:** The successful launch couldn't help but improve NASA's relations with an important client, the military. The three-year delay in satellite launches by the shuttle has caused fears of an "intelligence gap." The Air Force has more than 25 satellites waiting to go, a backlog that won't be taken care of until 1992 at the earliest. Fortunately, older satellites have held up longer than expected. "We've had no gaps because a good

4.8 million acres in the tropics every year—forever," says San Francisco zoo keeper Norm Gershenz. Five zoos in northern California have already agreed to install the meters, and other parks have expressed interest. For their first undertaking, zoo keepers want to buy land in the Guanacaste National Park project in Costa Rica, which will eventually preserve 293 square miles of dry rain forest. They calculate that \$300 will buy 2.5 acres; the 200 orchids, 10,000 mushrooms, 200 frogs, 1 million ants and 4.7 billion raindrops that come with the land—along with anteaters, tapirs and jaguars—will make the deal a steal.