

Panel discusses nuclear winter

By DONNA LEINWAND
Staff Writer

The long-term effects of a nuclear war may be as devastating as the immediate effects, a panel of scientists told about 100 people Thursday during a symposium on the environmental consequences of nuclear war.

The UNC School of Journalism co-sponsored the event with the Scientists' Institute for Public Information.

Thomas Ackerman, a research scientist at NASA, said a nuclear war could reduce sunlight by 95 percent, causing sub-freezing temperatures in some areas, producing a "nuclear winter."

"Smoke from the fires goes into the atmosphere and absorbs the sunlight," Ackerman said. "This changes the

surface energy balance and causes surface cooling. The sunlight doesn't reach the ground. It is deposited on smoke and radiated back into the atmosphere."

Ackerman said the atmosphere would cleanse the smoke, but a long recovery time would be needed.

Barbara Levi, a member of the research staff of the Center for Energy and Environmental Studies at Princeton University, said there was a wide range of uncertainty associated with predicting the effect of a nuclear war.

"Generally, we recognize that climatic changes will occur," she said. "It's a matter of degrees."

Dust and smoke remain in the

atmosphere after a nuclear explosion, Levi said. Dust comes from nuclear explosions that are close to the surface of the earth and smoke comes from large-scale fires, she said.

Mark Harwell, associate director of Ecosystems Research Center at Cornell University, said nuclear war would cause chronic atmospheric problems such as drops in temperature, light levels and amount of precipitation. Radiation and fallout would also pose a problem, he added.

Harwell said agriculture would be especially vulnerable to the lack of sunlight and the absorption of radiation.

"The growing season would be shortened at both ends," he said. "Less

than 1 percent of the current global population would survive."

The United States, Canada and Australia would have enough stored food to last about three years, but India would have only enough food for one to three months, Harwell said. Japan, without direct impact from nuclear weapons, could support about half the population, he said.

"The risks of nuclear war would be exported far beyond the combating countries," Harwell said.

"The direct casualties ... (would have an) upper limit of about half a million people," he said. "One to four billion are vulnerable to food disruption."

NASA safety warnings belittled

From Associated Press reports

WASHINGTON — Astronaut Robert Crippen, who has flown more space shuttle flights than anyone else, told the presidential Challenger commission Thursday he once was told about a problem with a booster rocket seal but he did not consider it "that big a deal."

But Crippen said he was unaware that a waiver had been issued that, in effect, acknowledged that catastrophe could result if the seal failed.

"If I had been aware of the change," he said, "I would have

State & National

taken the problem much more seriously."

Integrated government discussed

JOHANNESBURG, South Africa — White and black leaders in Natal Province on Thursday began debating a proposal to create the nation's first racially integrated government.

Reagan foreign policy promotes strong U.S. image, speaker says

By JEANNIE FARIS
Staff Writer

President Reagan has taken an approach to foreign policy with the "Reagan Doctrine" that actively extends U.S. influence and power for democratic freedom into the rest of the world, said Charles M. Lichenstein to an audience of about 50 people in Hamilton Hall Thursday night.

Lichenstein was Deputy U.S. Ambassador to the United Nations from 1981 to 1984. His speech, entitled "The Reagan Doctrine: Intervening on Behalf of Freedom" was sponsored by the UNC College Republicans and the UNC Political Science Department.

"The United States has become a global power with global interests," Lichenstein said. "We have particular values, human dignity and civil dignity, that should be protected."

He added that any foreign policy, even Reagan's, would be hard to define.

"Any president, including President Reagan, has had enormous difficulty putting a particular stamp on United States foreign policy," he said.

Foreign policy is often generated spontaneously, such as it was in 1983 in Grenada, Lichenstein said. "Seventy-two hours earlier, the operation was not even a gleam in the eye of the president,"

he said.

"Reagan's foreign policy was characterized by a conscious and deliberate military build-up to counteract the devastating consequences of (President Jimmy) Carter's build-down," he said.

The "Reagan Doctrine" reminded the American people and allies that there was an antagonist (the Soviet Union) who would take advantage of the United States' lack of confidence and resolve, Lichenstein said.

"In a sense, President Reagan represented a willingness to unleash the United States as an actor and an activist in many parts of the world" where it had been reluctant to use its influence previously, he said.

U.S. foreign policy had previously sought only to contain the advances of Soviet influence, which occurred in the 1970s at the time of decline in U.S. confidence and morale, he said.

Reagan's foreign policy doctrine now attempts to reverse the tide of Soviet expansionism by raising its price. For example, this could be done by refusing to do certain kinds of commercial business in Eastern European countries, Lichenstein said.

"(Previous administrations) had never considered ... chipping away at and even turning back this expansion and even reclaiming areas where the opportunity provided itself for the free world," he said.

He added that the doctrine reaffirmed that the United States had purposes and interests in the world that were legitimate and moral.

Lichenstein said the "Reagan Doctrine" could be applicable in Cambodia, Ethiopia, Afghanistan, Angola and Nicaragua.

In these instances, Reagan has committed American influence in the form of material and economic assistance to those already engaged in their own freedom fights, he said.

The Rambo image that some attach to Reagan's tactics is inappropriate, Lichenstein said.

"Reagan is committed to showing that U.S. support can have an impact on the worldwide enhancement and enlargement of freedom," he said.

Citizens protest proposed dump site

By TRACY HILL
Staff Writer

The U.S. Department of Energy should not bury the nation's highly radioactive nuclear waste under the soil of a three-county area near Raleigh, protesters said Wednesday at a public hearing in the Raleigh Civic Center.

"This is an action we cannot accept," Rep. William W. Cobey Jr., R-N.C., told DOE officials at the hearing. He said the nuclear waste repository would jeopardize the health and safety of thousands of people in the Triangle.

"It's not a remote, isolated area," said Cobey, whose congressional district includes the proposed waste site.

Tommy Rhodes, state secretary of the

Department of Natural Resources and Community Development, called the DOE's reasoning and research "seriously flawed."

Population growth and geological instability of the Rolesville pluton, the rock formation that would house the waste, were ignored when the DOE decided to include the area on a list of 12 potential storage sites in the eastern states, Rhodes said.

"We don't need a regiment of technicians and scientists sent from Washington to discover the obvious ... — that it doesn't make sense," he said.

The Elk River complex, a similar rock formation near Asheville, was also listed. Gov. Jim Martin plans to speak

at the public hearing to be held there Friday.

Members of the 500-person audience papered the walls with homemade banners reading, "Don't dump on North Carolina. Go Home DOE. You're Not Welcome Here!" and held signs of protest. High school students were painted blotched green to resemble radiation sickness victims, and a card section spelled out "200,000 people," referring to the number of people affected by the waste site.

Sixty-five public officials and private citizens signed up to speak at the DOE-sponsored hearing, scheduled to last seven hours.

The Nuclear Waste Policy Act, passed by Congress in 1982, charged the DOE to find two locations for the permanent storage of highly radioactive waste by 1998. Since the 1940s, spent fuel rods and other nuclear waste from reactors have been accumulating in temporary sites.

The Rolesville pluton and the Elk River complex are under study for the second site which would go into

operation by 2006. The facility would consist of deeply drilled tunnels and shafts designed to hold up to 70,000 metric tons of waste. It would have to be monitored for 10,000 years.

Rep. Tim Valentine, D-N.C., of the 2nd District, objected to the plan because N.C. geologists have found a fault in the pluton, "which would make the site potentially ineffective and very, very dangerous." If the rock fractured along that fault, he said, the waste could leak out, contaminating all water supplies in the area.

Louisville Mayor Lucy T. Allen said that merely being on the list could mean economic depression for her community because businessmen won't want to take the risk of investing there. Continued study by the DOE, she said, "will brand Franklin County with the specter of nuclear contamination."

The DOE announced its list of 12 proposed areas January 16 and gave local residents 90 days to present their objections. The deadline for submitting reports or comments is April 16.

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