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Soviets admit downing jet, but still fault United States

By The Associated Press

The Soviet Union, just minutes after the United States brought "definitive proof" before the world community, admitted officially for the first time yesterday that its warplanes shot down a South Korean

But the Soviets said their interceptor pilots were convinced the civilian Boeing 747 was a U.S. spy plane, and the "entire responsibility" for the tragedy rests with the United States.

The Kremlin continued to claim the Korean jet may, indeed, have been flying an intelligence mission for the United States, and issued a blunt warning: The Soviet air force acted in accordance with Soviet law and would do the same again.

It was "a lengthy, gross and obviously pre-planned violation of the airspace of the Soviet Union," Soviet Ambassador Oleg A. Troyanovsky alleged at the U.N. Security Council.

In Washington, Undersecretary of State Lawrence Eagleburger demanded a full accounting of the tragedy from Moscow

'The world community still needs straight answers," he said in a statement. "We are tired of lies and half-truths."

The Soviet admission came six days after Korean Air Lines Flight 007 was downed over the Sea of Japan after crossing into Soviet territory on a flight from New York to Seoul, South Korea. All 269 people aboard were

Before yesterday, official Soviet statements had either ignored or rejected U.S., Japanese and South Korean reports that the giant jetliner was destroyed by a heat-seeking missile fired by a Soviet fighter-

But at about 1 p.m. EDT yesterday, less than an hour after U.S. Ambassador Jeane J. Kirkpatrick presented tapes of the Soviet pilots' radio conversations to the U.N. Security Council, the Soviet government statement admitting the plane was shot down was read on the Moscow nightly television news.

Kirkpatrick later said the Soviets had been forced to make the admission because "the definitive proof was finally put on the record for the whole world to see."

While the U.N. council debated possible international sanctions, the governing body of the International Federation of Airline Pilots' Associations, meeting in Britain, called for a 60-day ban on flights to Moscow to demonstrate "revulsion" at the Soviet action.

That retaliatory step is expected to be limited, however, since many governments may not allow their pilots to comply.

In other developments:

• Canadian Foreign Secretary Allan MacEachen said his government, which has temporarily suspended landing rights for the Soviet airline Aeroflot, wanted Moscow "to accept responsibility" for the tragedy. He said Canada would be formally seeking compensation

from the Soviet Union for the loss of life. • The International Civil Aviation Organization, the United Nations' aviation agency, scheduled a meeting of its governing council for next week to discuss the downing of the Korean airliner.

 South Korean civic, religious and business organizations prepared a massive memorial service for today at a Seoul stadium for the victims. More than 100,000 people were expected to be present for the Buddhist, Protestant and Roman Catholic rites.

 A firebomb was hurled at the Soviet consulate in Sapporo, northern Japan, last night, police reported. No injuries or damage were reported. Two dozen Japanese were among the victims of the downing of

Any U.N. Security Council vote to adopt sanctions against the Soviet Union is sure to be vetoed.

But Kirkpatrick said it was conceivable the Soviets would accept a resolution dealing with methods to prevent a repetition of such incidents.

Japanese officials said their military forces provided the tape of the Soviet pilots' radio transmissions, part of which was broadcast Monday night in President Reagan's nationally televised speech. Russian and English-translation transcripts of the tape were shown on five video terminals in the Security Council

The recorded radio transmissions showed that at least one of the Soviet fighter pilots pursuing the big commercial jet closed in and reported, "I am going around it. I'm already moving in front of the target."

Then he said, "I am dropping back. Now I will try a

A short time later the pilot of what the United States said was a Su-15 pursuit plane reported: "I have executed the launch . . . the target is destroyed."

Kirkpatrick said: "Perhaps the most shocking fact learned from the transcript" was that "at no point did the pilots raise the question of the identity of the target aircraft." She called it a "shocking disregard for human life and international norms."

"... No nation has the sovereign right to shoot down y person or vehicle that may stray across its border in peacetime."

Troyanovsky, responding, said the Soviets twice tried to establish contact with the aircraft, but it "ignored every attempt made by Soviet ground services and air forces to identify it" and "was not willing to land at the nearest airport."

The government statement issued in Moscow said the Soviet military decided the plane was on a spy mission after "radio control services picked up coded radio signals transmitted from time to time, such signals that are usually used in transmitting intelligence

Fighters were scrambled, it said, and "made warning shots with tracer shells along the route of the intruder plane. Such a measure is envisaged by

"Since even after this the intruder plane did not obey the demand to fly to a Soviet airfield and tried to evade pursuit, the interceptor-fighter plane of the antiaircraft defenses fulfilled the order of the command post to stop the flight."



Rise and shine

Two workmen at the Agricultural Arena Complex, being constructed on campus, work on the structure as the early morning sun peers through the steel girders.

More Marines joining peacekeeping force in Lebanon

By MAUREEN SANTINI Associated Press Writer

WASHINGTON — With 2,000 U.S. Marines and a heavily armed amphibious force headed for waters off Lebanon, the United States pointedly warned Syria yesterday against instigating new violence in the face of "considerable firepower" of American forces poised offshore.

White House spokesman Larry Speakes said the deaths of two more Marines in Beirut — bringing the total of American casualties to four in recent fighting there — would not prompt the United States to withdraw the 1,200 Marines who have served with a multinational peacekeeping mission in Lebanon for more than a year.

The Pentagon yesterday identified the dead Marines as Cpl. Pedro J. Valle, 25, of San Juan, Puerto Rico, and Lance Cpl. Randy W. Clark, 19, of Minong, Wis.

"We know that should this multinational force pull out, there's a distinct possibility of a reinstitution of full-scale war in

Lebanon with a possibility of a . . . wider spread effort and certainly a strong deterrent of any move toward a peaceful resolution," Speakes said.

State Department spokesman Alan Romberg said the Marines were "performing a critical role in support of the efforts of the Lebanese government. No one should mistake our determination to

continue in this just cause." Nor did the deaths of the two Marines under Moslem shelling of their positions at Beirut

International Airport yesterday change the Reagan administration's insistence that there was no need for the president to invoke the War Powers Act of 1973.

Speakes said President Reagan was complying with the law by reporting periodically to Congress on the situation. Romberg said only that the question of invoking the law. which would give Congress a voice in deciding whether the Marines should be withdrawn or allowed to

stay, was under intensive study. Speakes told reporters that the

Syrians "should know that we do have considerable firepower offshore and they should be circumspect in their own active involvement in instigating any violence in the area.

Earlier yesterday, Defense Secretary Caspar Weinberger had said that the Marines in Lebanon will "just try to improve their defensive positions, and, of course, they are firing back. They are firing back from their own positions and they are firing back from our offshore naval units."

declined to be identifed, said later that the U.S. ships had not fired any shells since arriving off the Lebanese coast. The ships did fire last week in the shelling during which two Marines were killed, but those were "illumination rounds," which burst overhead like flares to provide light for Marines on the ground to return fire.

The official said Weinberger was apparently referring to the capability of the ships to return fire should they be ordered to do so.

Space Shuttle:

2 PSU professors investigating Challenger growth hormone experiments

By STEVE BENOWITZ Collegian Staff Writer

When the Space Shuttle Challenger touched down early Monday morning at Edwards Air Force Base in California, a University scientist was there to greet it.

Wesley C. Hymer, pròfessor of biochemistry, is the principal investigator of an experiment that was aboard the shuttle. He returned to his lab Monday afternoon

carrying what resembled a large Labor Day picnic cooler. Actually, the styrofoam container carried the results of an experiment to test how weightlessness may enhance the separation of pituitary gland cells which

produce growth hormone. 'The on-board procedures went smoothly and everything looks fine," Hymer said, "but we probably won't have any definite results

for several days." Growth hormone promotes muscle growth, breaks down fats and promotes long bone growth. Because it can facilitate tissue growth, it is in demand as a treatment for victims of burns and other injuries where there is tissue damage. However, scientists have had only partial success in isolating the growth hormone-producer cells from the nonproducers because of the effects of gravity,

Lt. Col. Guion S. Bluford Jr., mission specialist on the flight and the first black astronaut in space, performed key operations in the cell experiment. Bluford is also a 1964 University graduate in aeronautical engineering.

After the shuttle landed, officials from the National Aeronautics and Space Administration and McDonnell Douglas Corporation of St. Louis, co-sponsors of the project, retrieved the stored cells from the shuttle mid-deck and placed them in a cooler, Hymer said. Hymer then loaded the two trays of cells onto a waiting McDonnell Douglas Lear jet, and flew first to St. Louis and then to University Park.

Last year, another experiment — one designed by a research team that included University biophysicist Paul W. Todd — flew on the third shuttle mission, but was partially ruined due to mishandling on the ground. Todd's experiment, which tests for kidney cells that produce a medicine used to dissolve blood clots, was reflown this time along with Hymer's experiment. Todd is also coinvestigator on the pituitary cell project.

"Our holding procedures are better this

time," Todd said. "Unlike last time, the cells won't be frozen

when the test is over. We're going to bring them back alive," he said.

After processing, the live cells were placed in plastic bags and maintained in a buffer solution at 4 degrees Celsius. The buffer served as a life-support system for the cells, keeping them literally in a "suspended state,"

Todd said. The shuttle flight marked the first time that the cell separation apparatus - called the continuous flow electrophoretic separator has been used in orbit to purify living cells. On previous missions, the instrument processed enzymes and hormones.

The apparatus was developed by McDonnell Douglas Corporation in conjunction with NASA. Cells flow one way like a waterfall, and an electric field sweeps the cells out sideways as they pass by, separating them. The process divides highly charged cells from ones of lesser charge. Producer and non-producer cells are separated because of these differences in charge, Todd said.

Bluford used a syringe to inject the living cells into the bottom of the apparatus. After the cells flowed through the electric field, Bluford removed and stored them until after the shuttle landed.

Hymer explained that it is a painstaking

procedure to remove the cells from the "About 65 million cells are in each tray

distributed over about 50 separate groups," he

After the cells have been removed from the tray, the first step is to count them and determine how many are still alive. Then, Hymer and his research team will stain the cells and determine the purity of each fraction. Each fraction will then be tested for the six different hormones that pituitary cells produce and hormones will be extracted from the cells. Additional tests to determine the characteristics of the hormone molecules will also be completed.

Finally, Hymer said the researchers will grow the cells to make sure that they can still produce the growth hormone after their ride in space. Some of the cells also will be sent for analysis in the laboratories of Hymer's collaborators, including Richard Grindeland of Ames Research Center, Wayne Lanham of McDonnell Douglas Astronautics Corporation, and Todd.

A third cell-separation experiment on the flight, led by scientists from Washington University in St. Louis, and McDonnell Douglas, involves pancreas islet cells which produce insulin.

wednesday

inside

• Despite a "freer" attitude toward sexual activity and the increase in the number of women at the University, the number of pregnancy tests/performed at Ritenour has not risen during the past 11 years, said a Ritenour Health Center representative.

....Page 3 The Moody Blues have proved that Long Distance Voyager, their last album, was not a fluke.

index

Opinions..... Sports.....

weather

Becoming partly cloudy, breezy, and less humid today with a high of 82. Mostly clear tonight with a low of 54. Sunny and cool tomorrow with a high of 82. -by Glenn Rolph