

February 12, 1986

SCIENTISTS

5-21-86
postmark

T. D. Jeffrey Mishlove

(1) Years ago, while living in Philadelphia with Martha, my wife, and Beau, our baby...one night a roaring fire sprang up on the floor below and the firemen came and extinguished it. The Fire Chief came to me and told me that the fire had been deliberately set...in the room directly underneath our room...and if it had not been discovered when it was then we'd have been burned up. (This happened at the time when Saga magazine was doing articles about me and Dr. Zakow, of the U.S. Government, came to our apartment and investigated my work and warned me that the U.S. Govt. would have me killed considering my work with UFOs and attacking NASA with psi-force). Several days later Astronauts Grissom, White and Chaffee were burned up on the pad at NASA. My UFOs telepathd and explained that they had caused it because of my great value to them, the UFOs, and because of the U.S. Govt's effort to assassinate us. (There were two other blatant attempts to murder me at that time on the streets...but I am pointing out the fire connection.) I passed along this information to the scientists that I was dealing with at that time.

(2) In 1969 I was in a court-reporting office in Norfolk, Virginia, and Apollo 12 was just getting ready to lift off at NASA. The court reporters were all listening to the proceedings on the radio. I called out to them: "How would you like to see me hit that spacecraft with lightning?" They all stopped talking and stared at me incredulously. Minutes later the spacecraft lifted from the ground then all was pandemonium at NASA. One of the astronauts aboard the spacecraft, still ascending, said to ground control "We don't know what happened but it seems that we were struck by lightning!"

(3) This last November, 1985, my UFOs telepathd to me unexpectedly one night and told me that (1) they intended to cause an earthquake on the West Coast 8-10 on the Richter Scale, and (2) they were going to explode a space shuttle of NASA while it was in action. They were going to do it because their request for a ten million dollar UFO Base from the U.S. had not been taken seriously...also that for a long while they had deliberately harassed shuttle flights, ruining experiments etc., but not harming the astronauts. They had finally decided that they would have to destroy astronauts to get the U.S. Govt's serious attention. I explained all this to my son, Beau...then picked up the phone and called Dr. Mishlove in San Francisco and gave him the message. The result, of course, is in this file. You probably saw it yourself on TV.

Re (2) above...I have an affidavit signed by all the court reporters who were present attesting to the validity of the matter.

Re (3) above...I would not be presumptuous enough to ask Dr. Mishlove for an affidavit to that effect, for my files...but if anyone is interested in checking it out they can contact Dr. Mishlove. I do not believe that he would double-cross me and lie about the matter as Dr. Hynek did some years ago. *I think that Dr. Mishlove is a finer scientist, in every sense of the word, than is Hynek. And I could know - have worked with scientists.*

After the shuttle exploded my UFOs telepathd to me (I was as saddened and shocked as anyone who witnessed the event) and explained why they had deliberately chosen this particular flight and shuttle. Follow this now.

p. 4 -- "It's a setback. The tragedy is that so many kids were watching

0,SB 4/30/86 Re Hynek The Hyend

J. Allen Hynek Dies, Leading UFO Expert

PHOENIX, Ariz. (AP) — J. Allen Hynek, a leading authority on unidentified flying objects and former director of the Air Force's Project Blue Book that investigated UFOs, has died at age 75.

Hynek, a professor of astronomy who died Sunday at Scottsdale Memorial Hospital, directed Project Blue Book from 1948 to 1969.

He eventually became disenchanted with the Air Force's approach to the study, contending the service was not conducting a scientific experiment. The Air Force concluded there was no evidence of extraterrestrial craft.

Hynek coined the phrase, "close encounters of the third kind," in his 1972 book, "The UFO Experience."

THE TAMPA TRIBUNE, Thursday, May 1, 1986 11-B

Astronomer Hynek, UFO expert, dies

Although he criticized Blue Book's approach to UFOs, Hynek felt they warranted serious study.

SCOTTSDALE, Ariz. (UPI) — J. Allen Hynek, an astronomer who headed an Air Force study into unidentified flying objects but rejected its findings, has died at age 75.

Hynek died Sunday at Scottsdale Memorial Hospital.

He directed the Air Force's Project Blue Book from 1948 to 1969, but he criticized the project for not taking a scientific approach. He said he stayed with the program so he would have access to the Air Force data and would not be considered a "UFO nut."

The Air Force concluded there was no evidence to support the existence of UFOs. But Hynek said in 1985 he was more convinced than ever that UFOs deserved serious study.

Hynek founded the Center for UFO Studies in Evanston, Ill., in

1973 and moved it to Scottsdale a year ago.

In a 1972 book, "The UFO Experience," Hynek coined the phrase "close encounters of the third kind," saying those would be humans encountering alien beings. The phrase became the title of a 1977 Steven Spielberg movie in which Hynek made a cameo appearance.

Tina Choate, administrative director of the Center for UFO Research, said, "UFO research has centered around him (Hynek) as long as they have been looking at UFOs in this day and age. He's left a legacy for everyone who's interested in the subject and we're very grateful."

George Rieke, deputy director of Steward Observatory at the University of Arizona, said Hynek "was distinguished by having a very open mind and a sense of fairness." HA

Hynek, a native of Chicago, received a doctorate degree from the University of Chicago. He was head of the department of astronomy at Northwestern University for 18 years until his retirement in 1978. Since then, he had been a professor emeritus at Northwestern.

May 9, 1986

SCIENTISTS

→ "NASA IS SNAKEBIT!" (CNN TV NEWS)
→ "A SPACE PINX?" (MARCIA SMITH, PRES., A.A.S.)
P. 2

→ "IS SOMEBODY TRYING TO TELL US SOMETHING?" (DONALD REGAN)

A scientist who double-crossed me, and my UFOs...and did his best to damage my reputation and work for my UFOs...now no longer is in a position to do so. I am, of course, alluding to Hynek the Hyena (my own name for him). On p. 1 you will note "a sense of fairness" and my inserted "ha ha." Why? Years ago, in Cape Charles, I departed from my usual modus operandi of notifying scientists in advance that I was going to teamwork with my UFOs to keep lava flowing down the sides of Mt. Etna in Sicily from striking any of the three towns on the side of the mountain. (At the time lava was streaming right toward them). I had the bright idea of calling Dr. Hynek, one of my regular contacts, long distance, and telling him in detail of what I was going to do. It never occurred to me that he, being a scientist, would deny it and lie about it later on. My UFOs and I stopped or diverted the lava and saved the three villages. It was called a miracle in the newspapers (you have it all in your files). Later I was on a TV show or radio show...I disremember which...and when I described the miracle they contacted Dr. Hynek to confirm it and he said that he "had no memory of my call to him." Several years ago I told my contacts in writing that I would make hurricanes and run them into Florida, as a demonstration. A weekly news mag from West Palm Beach, Florida, dug up a weather expert who laughed at what I said I would do. They also interviewed Hynek about it. "Owens can't make hurricanes," he said, "he's just a dealer in coincidences." Well, I made, and ran, two hurricanes and ran one up the west coast of Florida and ran one up the East Coast of Florida. Then I made another one, a regular horror of a hurricane, and guided it right to the tip of Florida, aimed right up the throat of Miami. While it was stalled, building up power prior to charging directly north into Miami...a good friend of mine called me in Vancouver from Lantana, Florida, and said that he had a house full of people scared to death. "Do you realize, Ted," he said, "that if that hurricane charges ahead it will kill 15,000 to 25,000 people in Miami?" After the call I thought about that. My UFOs and I give demonstrations. We have no wish to kill or hurt humans. I contacted my UFO "control" (telepathd) and the hurricane then mysteriously vanished, to the amazement of weather experts and scientists. Well, so Hynek had been wrong in his statement in that magazine...so had the weather expert. But then, some years later, I made another shocking discovery about Hynek. A prominent scientist, within the scientific community, tipped me off about Hynek. "Ted," he told me, "for years Hynek has been acting friendly toward you...but whenever anyone else checks with him about you...he talks about you like you were a dog." First I found out that he was a liar. Then found out he was a two-faced hypocrite. Naturally, I discontinued sending Hynek further information re my work with my UFOs.

So now you have seen what my UFOs can do (p. 2, etc.) (also p. 4 1/2) They have knocked down the space shuttle plus three space rockets...in a row. All...different kinds...so that it cannot be blamed on malfunction of one kind of space equipment. One TV newsmen on Ch. 12 (CNN) said: "There is only one thing to say...NASA is snakebit!" (This after the Delta loss. Wonder what he would say now, after the further loss of the Titan and Nike-Orion shots?) p. 2: "People within NASA and without are puzzled by the recent problems with space launches. The odds of having three different launch vehicles (four, really) made by three

see p. 4 1/2

different prime contractors and three different launch crews fail, and all of this happening at the same time -- it's incredible that could happen," said Rep. Don Fuqua, D-Fla., chairman of the House Science and Technology Committee.

"There's clearly something in the air that's causing these failures," says Marcia Smith, president of the American Astronautical Society.

"It's not just NASA; the Air Force is not so lucky either."

Then the article states: "A space jinx?" She continues: "This whole sequence of events... (and she mentions Chernobyl, which was UFO-caused and which I will explain shortly) gives new meaning to the word unbelievable." (p. 2)

Ch. 12 TV (CNN): "The main engine shut down almost as if it were a command shutdown." Then a few minutes later: "It's just as if it were commanded."

p. 3 mentions two "mysterious" electrical surges. Then: "...in light of the discovery of the short, "outside interference...and other subtle possibilities..."

p. 4: "This has been a very uncanny, strange series of events." So did Donald T. Regan, the White House chief of staff, attempt to summarize the three consecutive failures that have befallen the U.S. space program. To put that another way, is somebody trying to tell us something?" ← Well, "they" certainly are...PK Man has been trying to tell the U.S. govt. and scientists for years that my (and UFOs) demonstrations are quite real. But I, and my UFOs, have wearied of it...thus this dramatic multi-demonstration. p. 4 sums up what my UFOs are bringing about:
 (1) "If we can't count on perfect Delta and Titan launches every time, the technological premise behind Star Wars is plainly preposterous."
 (2) "As offensive weapons become more powerful, more accurate and more numerous, the respective heads of state come under increasing pressure to shoot first in a crisis. The Star Wars scheme increases that danger!"
 (3) "The smoke clouds over Vandenberg Air Force Base and Cape Canaveral suggest the folly of relying on technology at the expense of arms control. By delaying the further testing of much of the Star Wars technology, they also give the Congress and the American people some more time to think... about the brink where Mr. Reagan's unbounded faith in technology could be leading them." (p. 4)

There it is. Not only have my UFOs demonstrated what they can do, whenever they wish...but more importantly, they have relaxed the pressure on Russia's trigger finger by paralyzing NASA and holding off the Star Wars progress for quite a long while. Maybe until Reagan resigns or drops out from illness and a new President comes in who will abandon putting such pressure on the Russians...thus possibly averting a nuclear war, all out.

p. 4. Very interesting. After the first three incredible failures...there is a fourth. But NASA and the govt. covers up, so that the American people will not know. To make matters worse for NASA's space work...the Centaur rocket, key shuttle satellite rocket, is now on freeze.

p. 5: illustrates how completely NASA has been wrecked and paralyzed by my UFOs!

p. 6: "Two "abnormal" surges of power occurred in the electrical system of a Delta rocket's main engine just before the spacecraft lost power..." Then: "We feel this is quite a significant find, said William Russell, NASA's Delta project manager."

Then: "The Delta, which was considered one of the more dependable rockets

in NASA's inventory, now has been sidelined indefinitely. A ~~XXXX~~ similar suspension of Atlas-Centaur flights, if it is ordered, would bring a total halt to the launching of military and civilian satellites. (Then came the Centaur failure, covered up...and this has now come about...)

Remember...the only difference between my knocking out the power in five States (while I was in Philadelphia...it's in your files) and paralyzing NASA...is in mass. Little effect or big effect...it makes no difference to me and my UFOs. The same amount of power is employed, and techniques.

p. 9: It is brought out that the U.S. wishes to place nuclear rockets in space. This is one reason...my UFOs have determined to stop humans from space work.

p. 10: to add to NASA's woes, it has now been discovered that NASA has wasted billions and billions of dollars.

This is a good time to bring up Chernobyl. You probably have not connected that nuclear accident with the woes of NASA. On p. 10: "The accident developed in an unusual way, not as scientific knowledge would have predicted." Then, further: "Circumstances are changing because of Chernobyl." Yes, absolutely. By paralyzing NASA, the UFOs probably have moved the "nuclear clock" back from 2-minutes-until-12 to 11:30, ^{PERHAPS EVEN 11.} Simply because Russia now does not feel as threatened or pressured and thus is much much less likely to pull the nuclear trigger against us.

And if that accident at Chernobyl did not develop as scientific knowledge would have predicted; in an unusual way...that is the same thing that has just stricken NASA, is it not? Of course, and I will tell you why.

As I have previously pointed out, it was necessary for me to go to Hong Kong...to enable my UFOs to operate in Russia and China to try to prevent a nuclear war. That is just what they have done, with the Chernobyl action. The nuclear accident brought the Russians, and many

many other countries, back to their senses...because it scared the ^{SPECTIVE} dickens out of them. Before Chernobyl, these countries had no ~~perspective~~ ^{perspective} which to measure a nuclear war. After Chernobyl, now, they have ^{AGAINST} that perspective. Thus an all-out nuclear war now is much, much less

probable than before Chernobyl. My UFOs have done well. Chernobyl gave the entire world, on a relatively tiny scale, an idea of what a real nuclear war would be like...and now the entire world, ^{HAS BEEN SHOCKED BY} what they have seen on TV, and ^{HAS} learned. I say, thank God for Chernobyl.

Even more than all of that...Chernobyl brought Russia out of its shell.

See p. 13. Russia appealed to European nations for food. Actually asked for help from its neighbors. That...is a new Russia. Add to all of that...the Chernobyl accident has cost Russia billions and billions of dollars...which will bring Russia to a screeching halt in its military buildup and ^{HAS} help for foreign terrorist forces.

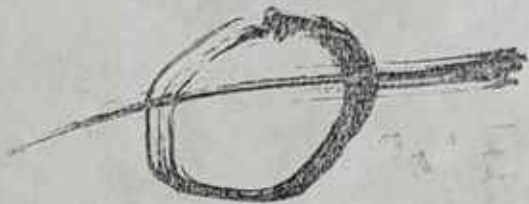
p. 15 points out that astronauts...with priceless training for space work...are leaving NASA. You can be sure that there will be more. And it takes a lot of time to train new astronauts. My UFOs are buying time, against war in space and war on Earth.

p. 18: Recently there have been two 7 on the Richter earthquakes. One in Mexico City and one around Alaska. My UFOs have warned that they will cause an 8 to 10 on the Richter in California unless their Base is forthcoming soon. So, you can expect it, since nothing is happening at this end, from the Govt. ALSO, MY UFOs ARE GREATLY "ANGERED" (IN THEIR OWN WAY) BECAUSE THE BOOK ABOUT THEIR WORK AND MINE (BY DR. MISHLOVE AND D. SCOTT RAGO) HAS NOT BEEN PUBLISHED. THIS WILL ADD TO THEIR EARTHQUAKE MOTIVATION.

Now we are getting into the area of the Sun Attack from the UFOs.
p. 20. The "bad squirrel" report emphasizes the effect upon animals that the Sun Attack is having. Therefore we can also assume that it is having a like effect upon humans. As we proceed through these pages you can see the record of tornado attacks; freak storms; record cold; record heat...and so on. (PLUS VOLCANIC UPHEAVALS).

In closing...I would personally strongly recommend that the UFO base be provided...soon.

Ted Owens (PK Man)



PS... haven't the funds now to xerox this for all contacts then mail out (\$100) so will have to wait a week until I can get some money to do it — then ^{THE \$100 WILL} ~~have~~ have to come out of the family's sparse food money.

PPS See p. 3 re "mysterious electrical surges," re Tella rocket. Then today, later, Gorbachev said from Russia that the nuclear plant at Chernobyl blew up because of "an abnormal surge of power."

Any Questions?

The shuttle Challenger also was struck by wind shear or some kind of power that caused its destruction. The unknown force speeded it up tremendously then it slowed down tremendously — and the damage was done.

Fletcher Confirmed To Take Over Ailing Space Agency

UFO or Space Work 5/7/86
 WASHINGTON (AP) — James C. Fletcher is taking over NASA at a time when the space agency is grounded, in low esteem, and uncertain about how to soar again.

He returns to the job he held from 1971 to 1977 with an 89-9 vote of confidence from the Senate, but also with carping from one senator that "he is a NASA retread who ... is not the man for this job."

Fletcher, who was confirmed Tuesday but has no swearing-in date yet, takes over from William Graham, acting administrator of the National Aeronautics and Space Administration, while the United States finds itself with little capability to launch anything other than weapons of war.

Space shuttles Columbia, Discovery

and Atlantis are locked in hangars awaiting fixes made necessary by Challenger's Jan. 28 destruction. Their next flight, by all estimates, is more than a year off.

A Delta rocket, the workhorse of America's expendable rocket stable, exploded last Saturday shortly after liftoff from Cape Canaveral, Fla., while attempting to carry a vital \$57.5 million weather satellite into orbit. Three remaining Deltas in the inventory won't be used until the cause of Saturday's failure is found.

The Delta was the third straight space launch failure. The Air Force lost a Titan 34D, carrying a \$500 million Big Bird spy satellite, on April 18 after it exploded on liftoff from Vandenberg Air Force Base in California. Future Titan rocket launches

also are on hold for an investigation.

The only other NASA vehicle capable of lifting payloads into orbit, the Atlas-Centaur, was scheduled for launch from Florida on May 22, carrying a Navy communications satellite. But because its engines are manufactured by the same company as Delta's, the Atlas-Centaur may be put on hold.

NASA's remaining launch vehicle, the Scout, is a slender rocket used for very light payloads.

In the debate that preceded Fletcher's confirmation, Sen. William Proxmire, D-Wis., said the 66-year-old space executive had shown an unwillingness in his previous stint as administrator to face up to the shuttle's serious difficulties.

"Dr. Fletcher, for all his sterling quali-

ties, is, quite simply, a NASA retread," Proxmire said. "He is not the man for the job."

Sen. Ernest Hollings, D-S.C., praised Fletcher as just what the doctor ordered, prompting Sen. Thomas Eagleton, D-Mo., to say: "If we want to continue the malpractices of the past, then Dr. Fletcher is our man. His nostrums and his pills will mean more of the same — and more trouble in the future for NASA."

Sen. Paul Simon, D-Ill., who also opposed Fletcher, said "NASA needs a chief with a critical eye, not a chief who was part of any of the decisions of the past."

People within NASA and without are puzzled by the recent problems with space launches.

"The odds of having three different

launch vehicles made by three different prime contractors and three different launch crews fail, and all of this happening at the same time — it's incredible that could happen," said Rep. Don Fuqua, D-Fla., chairman of the House Science and Technology Committee.

"There's clearly something in the air that's causing these failures," says Marcia Smith, president of the American Astronautical Society. "It's not just NASA, the Air Force is not so lucky either."

A space jinx?

"This whole sequence of events — the launch failures, Chernobyl, Willie Shoemaker winning the Kentucky Derby — gives new meaning to the word unbelievable," she said.

Electrical surges are blamed for Delta rocket loss

NASA: All launchers off line

UFO vs Space Month
By PHIL LONGMAN
Herald Staff Writer 5/6/86

CAPE CANAVERAL — Two flickering electrical shorts may have shut down critical fuel valves, killing the main engines and triggering the fiery destruction of a Delta rocket that exploded miles above Cape Canaveral last weekend, NASA investigators said Monday.

The announcement of what is beginning to look more and more like an equipment failure forced NASA to ground all its Delta and Atlas Centaur rockets pending an investigation, effectively crippling the nation's ability to lift commercial, military and scientific satellites into orbit at least for the near future. The Titan, the only other launcher, was grounded after one blew up on liftoff in California last month.

And, in a further blow to NASA's prestige and morale, Monday's press conference to discuss a spectacular failure came on the very day the space agency had set aside to celebrate the 25th anniversary of America's first manned space flight.

The day began with 250 past and present NASA engineers, some wiping tears from their eyes, gathering for a quiet but emotional ceremony at the base of a model of the 83-foot-tall black-and-white

ROCKET / from LA 7/1/86

Redstone missile that Alan Shepard rode into orbit at 9:34 a.m., May 5, 1961, in his windowless Freedom 7 capsule.

"We like to think that we are infallible. But we are not. We proved that Jan. 28 and underscored it last Saturday," shuttle astronaut Robert Crippen said as the gusty wind off the nearby Atlantic sent his dark red tie flapping across the right shoulder of his Navy blue blazer.

The destruction of the Delta rocket, workhorse of NASA's dwindling fleet, left the agency hustling to explain three disasters in a row. It began with the latest one.

Two mysterious electrical surges, each lasting less than a quarter of a second, were followed by two significant voltage drops that occurred between 70 and 71 seconds after liftoff, Delta project manager William Russell explained at a press conference.

"If you don't have voltage ... there is nothing to hold the two main fuel valves open. When they close, there is no more fuel," said Russell.

Now the probe is focusing on what could have caused the electrical failure. Faulty wiring, improper grounding and damage during liftoff are possibilities, investigators say.

Sabotage has still not been ruled out, but in light of the discovery of the short, "outside interference" ... and other subtle possibilities are being downplayed, NASA officials said.

But as a result of Monday's revelation, this month's Atlas Centaur launch of an Air Force satellite has been postponed, as have all future Delta rocket launches. Both the Atlas and the other Deltas have nearly identical Rocketdyne engines.

The next Delta launch was scheduled for this fall and was to have carried a weather satellite nearly identical to the \$57.5-million GOES-G satellite that was destroyed during Saturday's aborted launch. The GOES satellite would have given South Florida weather forecasters a much better look at the eastern Atlantic where hurricanes are born.

When the Delta's main engines shut down, the missile spiraled out of control, Russell said. It catapulted through the air, tumbling wildly nine miles above the Atlantic for about 20 seconds before it was destroyed by a built-in self-destruct system.

"Of course what we want to know is what caused the shorts," said Lawrence J. Ross, chairman of an eight-member investigation board probing the cause of the Saturday night failure of Delta 178.

Monday's announcement put a damper on festivities planned to celebrate Shepard's first ride into space.

The spectators, including John and Emily Snipes of Sebastian, were all involved in Shepard's historic 15-minute suborbital sojourn. Snipes, now retired, once helped install the igniter that sets off the rocket, the explosive bolts that separated the three stages of the rocket and the explosive charges that would have propelled Shepard to safety in the event of an accident on the launch pad.

"People have become complacent about the space program," Snipes said.

Twenty-five years ago, the mood was one of concern because of the unknown," said Marion Edwards, a telemetry expert on the Shepard flight and now a space station planner for NASA. As failures diminished and success became the norm, Edwards said, the mood became "confidence."

"Now what has happened makes you realize that it will always be dangerous," Edwards said.

2000s Space Work 5/6/86 St. Pete Times

No perfection in space

"This has been a very uncanny, strange series of events." So did Donald T. Regan, the White House chief of staff, attempt to summarize the three consecutive failures that have befallen the U.S. space program. To put that another way, is somebody trying to tell us something? ←

The space shuttle disaster could be attributed to negligence and overconfidence in the use of new technology. But not the loss of a Titan or a Delta, which were among the oldest and most reliable of U.S. launch vehicles. Barring sabotage, NASA seems finally to have been caught by the law of averages. Everything fails sooner or later, whether it's a \$30-million rocket or the family car.

The tangible loss this time is limited to the rocket and its payload, a \$57.5-million weather satellite, which is affordable. But what if the loss consisted of New York, Washington or St. Petersburg? Such is the inherent risk in President Reagan's Star Wars defense scheme, and it is not affordable.

Star Wars presupposes an exotic array of defensive weapons and computer technology that could never be tested under combat conditions and which would have to work perfectly the first time. If we can't count on perfect Delta and Titan launches every time, the technological premise behind Star Wars is plainly preposterous.

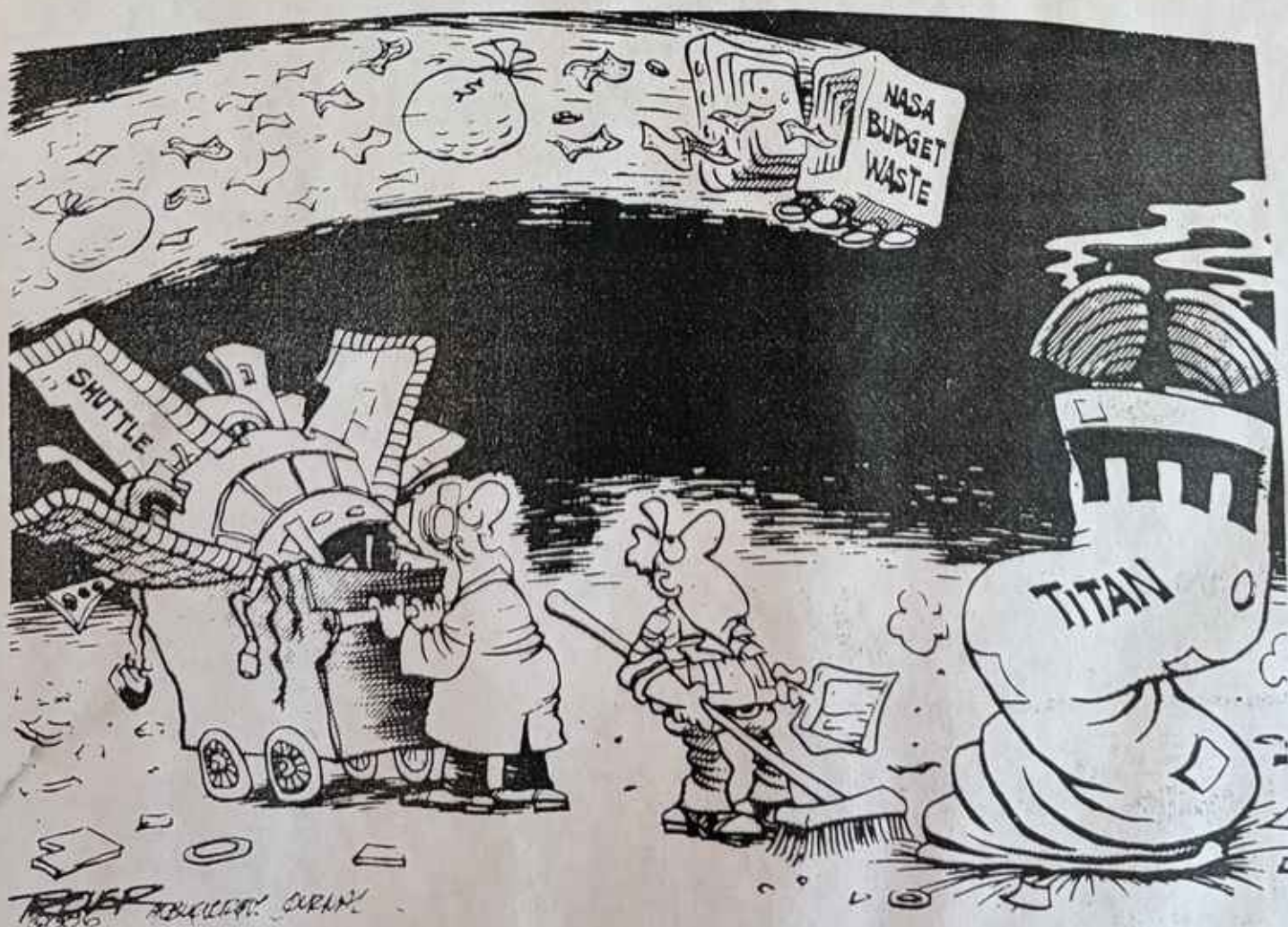
The political justification is equally flawed. For four decades, global nuclear war has been deterred by the knowledge that the United States and the Soviet Union have the power to destroy each other in retaliation. This works so long as neither side fears the other has acquired enough strength to strike first and survive the consequences. As offen-

sive weapons become more powerful, more accurate and more numerous, the respective heads of state come under increasing pressure to shoot first in a crisis. The Star Wars scheme increases that danger. (2)

In Soviet eyes, the existence of a U.S. space defense system would tempt some future American president to run the risk of starting — or at least threatening — a nuclear war. Mr. Reagan says that's not the purpose at all, but even he concedes that the Soviets would have to do something in response. He assumes that they would simply build their own space defense system. Few if any U.S. defense officials share his optimism.

The Soviets have no incentive to invest in new technology that is costly, exorbitantly expensive, untested and in many major respects uninvented. They could defeat Star Wars simply by building more offensive missiles, which is something they already know how to do very well, and by surrounding this country with submarines carrying cruise missiles, which Star Wars is not designed to intercept. Which is easier and cheaper? A globe-girdling network of space satellites bearing reflecting mirrors, directed-energy weapons and nuclear reactors? Or a few hundred more ICBMs with multiple warheads?

(3) The smoke clouds over Vandenberg Air Force Base and Cape Canaveral suggest the folly of relying on technology at the expense of arms control. By delaying the further testing of much of the Star Wars technology, they also give the Congress and the American people some more time to think about the brink where Mr. Reagan's unbounded faith in technology could be leading them. (4)



"HEY, LOOK - WE GOT SOMETHING INTO ORBIT!"

UFOs vs Space Work

U.S. Rocket Failed In April, Reports Say

NSB 5/10/86
WASHINGTON (AP) — A NASA research rocket that had flown successfully 120 consecutive times misfired over the New Mexico desert two weeks ago — the fourth U.S. space launch vehicle to fail this year.

The government, whose space program is under pressure because of the explosions of recent explosions of the much larger Titan and Delta rockets and the space shuttle, did not announce the April 25 failure of a Nike Orion rocket carrying a pollution-sampling device.

In response to questions from The Associated Press on Friday, the malfunction was described by Debbie Bingham, a spokeswoman for the U.S. Army Missile Range in White Sands, N.M., and by Dr. Edward C. Zipf, a geophysicist of the University of Pittsburgh, who was conducting the experiment for NASA.

"This was very rare. I think this particular series of rockets, the so-called Orion family, had flown 120 times and this was the first failure," Zipf said in a telephone interview. "This system of rockets has been flying for about six or seven years."

The Nike rocket dates back to the early 1950s when it was developed as a ground-based missile against aircraft. It was used in different military versions until the last one was retired last year from Nike Hercules batteries in Europe.

NASA has been using the surplus, solid-fuel Nike booster in combination with another solid-fuel, military surplus rocket, the Orion. In the configuration that failed last month, the rocket and payload combination was 30 feet long.

Fourth NASA rocket fails in launch try last month

This time it was a Nike Orion that exploded.

UFOs vs Space Work
Tribune Wires 5/10/86

WASHINGTON — A NASA research rocket that had flown successfully 120 consecutive times misfired over the New Mexico desert two weeks ago — the fourth U.S. space launch vehicle to fail this year.

The government, whose space program is under pressure because of the recent explosions of the much larger Titan and Delta rockets and

the space shuttle, did not announce the April 25 failure of a Nike Orion rocket carrying a pollution-sampling device.

At Cape Canaveral, meanwhile, engineers are investigating whether a design decision approved by NASA 12 years ago may have doomed the Delta rocket that became the nation's third 1985 space accident last Saturday, agency officials said Friday.

The Nike-Orion malfunction was described by Debbie Bingham, a spokeswoman for the U.S. Army Missile Range in White Sands, N.M., and by Dr. Edward C. Zipf, a geophysicist.

1986 See ROCKET, Page 6A

UFOs vs Space Work

Safety, cost problems threaten Centaur rocket

NSB 5/10/86
CAPE CANAVERAL (UPI) — Serious safety concerns and ballooning cost overruns threaten the future of a key shuttle satellite rocket, which could further hamper America's ability to launch heavy payloads, an aerospace magazine reported Friday.

Citing internal NASA documents, Aviation Week & Space Technology magazine reported portions of the Centaur rocket program have been put on hold by NASA pending extensive reviews and a decision on "whether to proceed with or cancel the \$1 billion effort."

The rocket, built by General Dynamics Convair division, is crucial to NASA's plans to launch three interplanetary probes, one of them built by the European Space Agency, and at least six military spacecraft through the end of the decade.

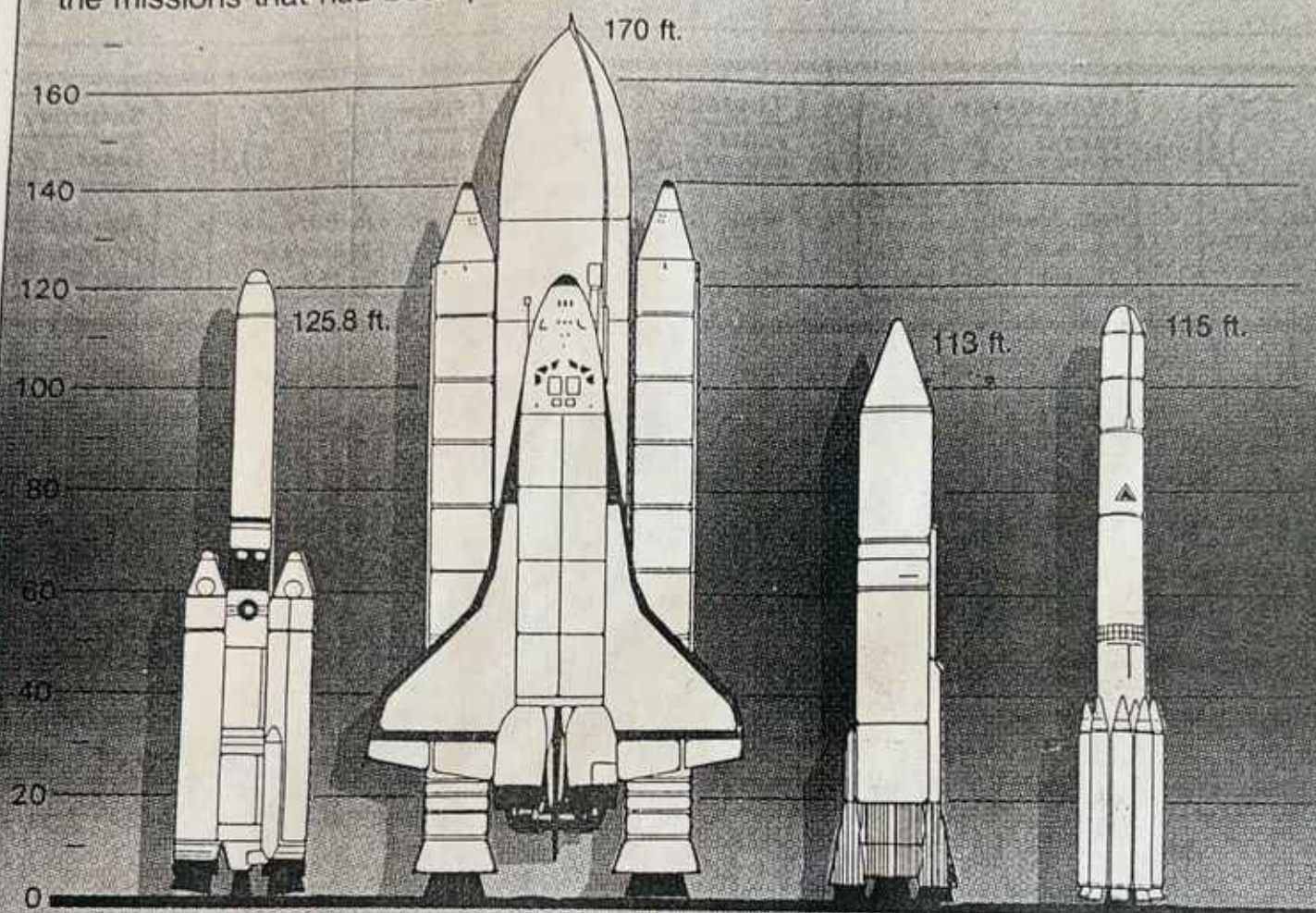
Unlike previous shuttle satellite rockets, Centaur is the first such booster designed to be carried in the shuttle's payload bay that burns explosive liquid hydrogen fuel.

That greatly complicates engineering for flight safety and NASA estimates that \$160 million to \$180 million would be required to correct Centaur safety issues.

Before the Challenger disaster Jan. 28, the first Centaur had been scheduled for launch May 20 to carry the Galileo probe to Jupiter. The flight now is on hold indefinitely.

America's crippled space fleet

The U.S. uses four types of missiles to put payloads in orbit. Three have failed this year and have been grounded. Here is a breakdown of the missile types and the missions that had been planned for them this year.



Titan 34-D

Flight status:
Grounded

Vehicles left: 7

Launches planned
for rest of '86:

Secret

Payloads delayed:
Secret

Shuttle

Flight status:
Grounded

Vehicles left: 3*

Launches planned
for rest of '86: 13

Payloads delayed:
3 communication
satellites
7 science
experiments
4 military missions

* reusable

Atlas-Centaur

Flight status:
Uncertain

Vehicles left: 3

Launches planned
for rest of '86: 2

Payloads delayed:
2 communications
satellites

Delta

Flight status:
Grounded

Vehicles left: 3

Launches planned
for rest of '86: 2

Payloads delayed:
1 weather satellite
1 military mission

St. Petersburg Times — FRANK PETERS

Launch switched from NASA

LOS ANGELES — A Japanese communications satellite due to be launched next year by a U.S. space shuttle will instead be carried into space aboard a European Ariane rocket in 1988, said the Japanese Communications Satellite Company.

The switch was made because of the grounding of the shuttle fleet following the Challenger disaster, the owners said Thursday.

Feb 5/9/86

Short circuit possible cause of Delta failure

Editorial, 16-A
By JON NORDHEIMER
© New York Times

CAPE CANAVERAL — Two (abnormal) surges of power occurred in the electrical system of a Delta rocket's main engine just before the spacecraft lost power after launching Saturday, officials said Monday.

The evidence of a short circuit in the system could explain the premature shutdown of the rocket's main engine, which sent the vehicle spinning out of control until it was destroyed by a command signal from the ground, the officials said. The electrical system used in the rocket has not been modified since 1960, but the officials said there had been no previous reported cases of power surges.

"We feel this is quite a significant find," said William Russell, NASA's Delta project manager.

He said an official board of investigation named Sunday to find the cause of the loss of the rocket and its \$57.5-million weather satellite payload still had not analyzed all the data and had not ruled out any possible cause for the accident, including sabotage.

Lawrence J. Ross, head of the investigation board, said the Delta loss created "a high probability" that NASA would postpone the scheduled May 22 launching of an Atlas-Centaur rocket that was to place a military satellite in orbit.

The Delta, which was considered one of the more dependable rockets in NASA's inventory, now has been sidelined indefinitely. A similar suspension of Atlas-Centaur flights, if it is ordered, would bring a total halt to the launching of military and civilian satellites.

The American space program has sustained three consecutive failed launchings this year, and four since August. On Jan. 28 the space shuttle Challenger exploded, killing the crew and forcing a suspension of flights until at least 1987.

Last month an Air Force Titan rocket carrying a classified payload, believed to be a spy satellite, exploded after liftoff in California. Another Titan rocket also believed to be carrying a spy satellite exploded in August.

Technicians reported all systems in the Delta rocket were operating normally until 71 seconds after liftoff, Russell said. "Everything was markedly normal — just like clockwork," he said.

Within the next second, however, a sequence was recorded that showed two abnormal surges of amplitude on the rocket's battery currents, he said. Russell compared the malfunction to "an electrical wire, with the insulation off, drawing a spark." This was followed by the immediate shutdown of the craft's main engine.

He said the two electrical "spikes" could have reduced voltage from batteries aboard the rocket to a point where an automatic system would shut down the rocket's first-stage engine.

The delay will provide time to review the manufacture, handling, transportation and assembly history of the Atlas-Centaur vehicle and its spacecraft to ensure that all items critical to a successful launch have been thoroughly analyzed," a NASA statement said.

The Atlas-Centaur, like the Delta, is a workhorse of the NASA fleet, and has logged 59 successes in 65 launches. The Delta has recorded 167 successes in 178 flights.

The Atlas first stage has an engine similar to the Delta main engine that failed Saturday, and the space agency said it wants to learn more about what happened to the Delta before it commits the Atlas-Centaur to flight.

The Atlas-Centaur is to lift a military communications satellite into orbit.

The Titan 34D explosion also was caused by a problem with a solid fuel booster rocket, possibly a burn-through of the rocket casing.

The shuttle is not expected to fly again for at least a year, and the Air Force does not expect to launch another Titan 34D for at least six months.

The groundings could be especially crippling if critical military surveillance satellites now in orbit should fail. They are large and can be lifted by only the shuttle or the Titan 34D.

The only non-grounded American rockets now capable of lifting satellites are the Scout and Atlas-H, and they hoist only small payloads.

Russell said that the problem could have been caused by a number of defects, such as faulty wiring or a loose piece of material coming in contact with the electrical system during the ascent of the rocket.

In a related matter, the Senate debated the nomination of James Fletcher to a second stint as head of NASA on Monday, but delayed a vote until today.

— Information from AP was used in this report.

NASA postpones rocket launch

CAPE CANAVERAL (AP) — NASA on Wednesday postponed the May 22 liftoff of an Atlas-Centaur rocket for about four weeks, leaving the United States with no heavy satellite launch capability for that period.

The nation's other three vehicles capable of carrying large satellites have suffered failures in the last three months and are grounded for periods up to a year or more.

They are the space shuttle, halted by the Jan. 28 Challenger explosion; the Air Force Titan 34D, which exploded April 18 seconds after lifting off from a California base with a military spy satellite, and NASA's Delta, which was destroyed Saturday night while hoisting a weather satellite from Cape Canaveral.

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flights, and had run off a string of 43 straight successes before Saturday's failure.

Lawrence J. Ross, head of an eight-member panel investigating the Delta accident, reported Monday that the failure appeared to have been an electrical short that shut off the engine.

All Deltas have been grounded for at least six months while the failure is analyzed.

The shuttle disaster that killed seven astronauts was triggered by a faulty joint that spewed flame from the right solid-fuel booster rocket. The exact cause of the failure has not been pinpointed, but a presidential commission investigating the accident is expected to recommend a complete redesign of the joint when it submits its report early next month.

The Titan 34D explosion also was caused by a problem with a solid fuel booster rocket, possibly a burn-through of the rocket casing.

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NASA Panel Probing Rocket Failure

CAPE CANAVERAL (AP) — A NASA panel is looking into the failure 71 seconds after blastoff of a Delta rocket's main engine, while officials assess how the unmanned launcher's destruction will affect the space program.

Acting NASA Administrator William Graham spent Sunday at Kennedy Space Center conferring with center Director Richard G. Smith and managers of the Delta project to "discuss the options for the immediate future," according to a space agency source who spoke on condition of anonymity.

Neither Graham nor Smith would discuss what steps may result from the third major launch failure this year.

Distinctly different spacecraft were involved in the three disasters, which included the space shuttle Challenger, in which seven astronauts died on Jan. 28, and an unmanned Air Force Titan 34D on April 18 in California.

Richard G. Truly, the National Aeronautics and Space Administration's associate administrator for space flight, announced the appointment of an eight-member investigative panel, headed by Lawrence J. Ross of the Lewis Research Center in Cleveland.

The panel's mission is to find the cause of the failure of Saturday's Delta-178 mission and recommend corrective action by July 2. The NASA group helping the presidential commission with its study of the Challenger accident will assist the new panel, Truly said.

A NASA statement said the Delta flight, carrying the \$57.5 million Geostationary Operational Environmental Satellite (GOES-7), ended just over a minute after a normal liftoff at 6:18 p.m.

"At about 71 seconds into the flight, the mission was

See NASA Looks on page 8A

Short circuit probed in Delta rocket failure

The incident clouds the future of U.S. satellite launches.

Tribune Wires

CAPE CANAVERAL — Two flickering electrical shorts may have shut down critical fuel valves, killing the main engines and triggering the fiery destruction of a Delta rocket that exploded miles above Cape Canaveral last weekend, NASA investigators said Monday.

The announcement of what is beginning to look like an equipment failure forced the National Aeronautics and Space Administration to ground all of its Delta and Atlas Centaur rockets pending an investigation. The move effectively cripples the nation's ability to lift commercial, military and scientific satellites into orbit at least for the near future.

The Titan, the only other launcher, was grounded after one blew up on liftoff in California last month.

The destruction of the Delta rocket, workhorse of NASA's dwindling fleet, left the agency hustling to explain three consecutive disasters. It began with the latest one.

Two mysterious electrical surges, each lasting less than a quarter of a second, were followed by two significant voltage drops that occurred between 70 and 71 seconds after liftoff, Delta project manager William Russell said at a press conference.

"If you don't have voltage ... there is nothing to hold the two main fuel valves open. When they close, there is no more fuel," said Russell.

Now the probe is focusing on what could have caused the electrical failure. Faulty wiring, improper grounding and damage during liftoff are possibilities, investigators say.

See ROCKET, Page 4A

Rocket

• From Page 1A

Sabotage has not been ruled out, but in light of the discovery of the short, "outside interference" and other subtle possibilities are being downplayed, NASA officials said.

As a result of Monday's revelation, this month's Atlas Centaur launch of an Air Force satellite has been postponed, as have all future Delta rocket launches. Both the Atlas and the other Deltas have nearly identical Rocketdyne engines.

The next Delta launch had been scheduled for this fall and was to have carried a weather satellite nearly identical to the \$57.5-million GOES-7 satellite that was destroyed during Saturday's aborted launch. The GOES satellite would have given weather forecasters a much better look at the eastern Atlantic where hurricanes are born.

When the Delta's main engines shut down, the missile spiraled out of control, Russell said. It catapulted through the air, tumbling wildly nine miles above the Atlantic for about 20 seconds before it was destroyed by a built-in self-destruct system.

"Of course, what we want to know is what caused the shorts,"

said Lawrence J. Ross, chairman of an investigation board probing the cause of the Saturday night failure of Delta 178.

The loss of the Delta and its weather satellite was the third setback for the nation's space program this year. The first was the Jan. 28 explosion of the space shuttle Challenger, which killed its crew of seven.

In February, the Air Force successfully launched an Atlas missile with a secret payload from Vandenberg Air Force Base in California. But three weeks ago, the Air Force lost a secret spy satellite when a Titan rocket blew up just after blast-off.

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NASA panel to probe failure of Delta rocket

Safety officers blew up the rocket when the main engine shut down shortly after launch. The rocket was carrying a weather satellite.

UFOs vs Space Work 5/5/86 Trib

CAPE CANAVERAL (UPI) — An eight-member panel was named Sunday to investigate the flaming destruction of a Delta rocket as engineers groped for clues to what caused America's third crushing space failure this year.

Rear Adm. Richard Truly, NASA's associate administrator for space flight, said the board was instructed to present its findings on the cause of the disaster "not later than July 2."

Delta No. 178 was blown up by Air Force safety officers 91 seconds after blastoff Saturday, 20 seconds after its first-stage main engine suddenly shut down prematurely for unknown reasons, throwing the rocket into a destructive high-speed tumble.

Space agency officials said no clear failure point has emerged from early analysis of the telemetry beamed down from the rocket before it careened out of control and even sabotage has not been ruled out.

"At this point, nothing has jumped out of the data to say ah ha, here is exactly what happened and here is the cause," said NASA spokesman Hugh Harris.

As for the possibility of sabotage, Harris said, "You cannot rule out anything. However, nobody has indicated any reason to think that was likely."

The failure, coupled with the Challenger disaster Jan. 28 and the explosion of an Air Force Titan 34D on April 18, has crippled America's ability to launch military and civilian payloads into space. A military Atlas rocket launched Feb. 9 marks the nation's only space success since Challenger exploded.

Acting NASA Administrator William Graham flew to the Kennedy Space Center at 3 a.m. EDT Sunday for briefings on the progress of the investigation and Truly set up the investigation board.

Lawrence Ross, director of space flight systems at NASA's Lewis Research Center, flew to Florida Sunday to chair the panel. Seven of its members are space agency engineers and one is director of the Air Force Rocket Propulsion Laboratory. None of the board members had any connection with the Delta launch.

"The board will investigate and recommend corrective action for the Delta 178 flight failure and will report its findings and recommendations not later than July 2, 1986," a NASA statement said.

A swift investigation is important to NASA because the next Delta is scheduled for blastoff Aug. 14 to carry a classified Star Wars payload into orbit.

The shuttle, Delta and Titan programs are all grounded for investigations. Only the unmanned Atlas Centaur remains in NASA's inventory and just three of those vener-

able rockets are left, the result of decisions years ago to make the shuttle America's primary satellite launcher.

The next Atlas Centaur is scheduled for launch May 22 and countdown clocks at the Kennedy Space Center were dutifully ticking toward zero Sunday but the blastoff could be delayed as a result of the Delta failure.

Delta No. 178 took off at 6:18 p.m. EDT Saturday in what appeared to be a routine launching. The previous 43 Deltas in a row were successful and the program overall had suffered only 11 failures in 177 flights for a 94 percent success record.

But the rocket's first stage engine, built by Rocketdyne, suddenly shut down 71 seconds after launch. The engine's nozzle is used to steer the spacecraft and with the shutdown, the speeding rocket was unable to stay on course.

Tracking cameras showed the 116-foot-tall rocket's nose drift off course and aerodynamic pressure shattered the protective fairing around the GOES-7 weather satellite at the tip of the spacecraft as it began swapping ends, tumbling violently out of control.

Twenty seconds after the shutdown, Air Force safety officers sent radio self-destruct commands to destroy the rocket, a standard procedure to ensure out-of-control rockets do not make it back to populated areas.

Lost along with the \$42 million rocket was the \$57.5 million GOES-7 weather satellite that was to provide television monitoring of hurricanes and storms in the Atlantic Ocean.

Launch director Charles Gay said he had no idea what caused the failure and all data beamed down from the rocket before it broke apart indicated the first stage engine and its solid-fuel boosters were operating properly.

The failure has heightened the quandary faced by the nation's military and civilian space programs.

Only three Delta rockets remain on the books. Two more are scheduled for launch in 1986 to carry another GOES weather satellite into orbit and to ferry a Star Wars payload into space. The final NASA Delta launch is set for August 1987 to launch another Strategic Defense Initiative payload.

The McDonnell Douglas production line is closed and there are currently no orders for additional rockets. Even if new orders come in, the company estimates it would take 17 months to build the first one.

Likewise, the agency's Atlas Centaur program is scheduled to come to an end in early 1987 after three more flights, each to launch Navy

Pioneer Expects NASA Rebound

UFOs vs Space Work 5/5/86
By HOWARD BENEDICT
AP Aerospace Writer

CAPE CANAVERAL — The U.S. space program is in disarray, grounded for at least a year because of the Challenger disaster, with NASA struggling to put the pieces back together.



Shepard poses in his office with model of Mercury capsule.

But 25 years ago today, the nation's spirits soared as the first American rocketed across the threshold of space.

On May 5, 1961, astronaut Alan Bartlett Shepard Jr., a 37-year-old native of New Hampshire, rode a Redstone rocket and his Freedom 7 Mercury capsule on a 15-minute, 302-mile lob down the Atlantic Missile Range.

By current standards, it wasn't much of a show. Back then, it was spectacular.

That brief suborbital mission thrust the United States into a space race, a competition until then dominated by the Soviet Union. It opened the gateway to out there and the many remarkable

UFO or Space Work Official: U.S. exploded reactor

5/8/86
LOS ANGELES (AP) — A small U.S. nuclear reactor was allowed to explode in 1965 as part of a test of what would happen during a runaway chain reaction, according to a scientist involved in the experiment.

Fallout was measured at non-dangerous levels in three Southern California communities 200 to 250 miles from the blast, but very little was found nearby, radiation biologist Stewart Black told The Los Angeles Times in an interview published today.

Black, chief of the dose assessment branch of the Environmental Protection Agency's Environmental Monitoring Systems Laboratory in Las Vegas, Nev., was with the U.S. Public Health Service at the time.

The experiment showed that in an accident like the one in the Soviet Union, radioactive fallout can be carried far from the site while nearby areas are spared, Stewart said.

Discovery of small amounts of radiation in milk from cows fed hay left near the test explosion showed such an accident can release radiation that travels up the food chain, he said.

The test in January 1965 at Jackass Flats, northwest of Las Vegas, was part of a program by the old Atomic Energy Commission to develop nuclear rockets for use in space, an idea abandoned in the 1970s. (Sure it was!)

Shepard Predicts NASA Will Rebound

Continued from page 1A

things that have happened since: Moon landings, space walks, orbiting stations and reusable spaceships.

Last Jan. 28, another 37-year-old native of New Hampshire, schoolteacher Christa McAuliffe, had her eyes fixed on the stars as the first ordinary citizen selected for space flight.

Her dream was shattered when the space shuttle Challenger blew apart 73 seconds after launching, killing her and her six crewmates.

And on Saturday, an unmanned Delta rocket, carrying a weather satellite, went out of control and was destroyed from the ground shortly after launch. The rocket was destroyed after its main engine shut down, leaving it without guidance and careening out of control. The cause was under investigation.

Shepard, who has maintained close contacts with old friends in NASA and the astronaut corps, called the shuttle explosion a severe setback to the U.S. effort.

"It was a terrible thing," he said.

"It's going to be a long, tough process for NASA to recover. Even if the engineers find an obvious fault rather quickly, everyone will have to go through all the systems all over again to make certain everything is right before flying again."

The former astronaut, now a millionaire Houston businessman, reflected in an interview with The Associated Press on his pathfinding flight, his battle back from medical oblivion to earn a trip to the moon and his hopes for the shuttle and the future of space flight.

He might have been the first human in space if a chimpanzee named Ham had not overshot his Atlantic Ocean target by 112 miles because of a faulty electrical relay. Ham's journey, in January 1961, was a dress rehearsal for Shepard's flight, which had been set for March.

NASA decided to launch another Mercury capsule, unmanned, to check its systems and put Shepard's flight off until May. Russia's Yuri Gagarin beat him into space on April 12.

UFO or Space Work Rocket ordered recovered

5/7/86
CAPE CANAVERAL — NASA on Tuesday ordered shuttle salvage crews at work off shore to attempt recovery of the first stage engine of a Delta rocket that exploded Saturday to help investigators pin down what went wrong.

Lawrence Ross, chairman of the Delta accident investigation, said Monday engineers believe a short circuit in the electronic system that controlled the first stage engine may have caused the premature cut off.

5/5/86 NASA Looks Into Failure Of Rocket

Continued from page 1A

proceeding normally when ... the first-stage engine shut down abruptly. With loss of thrust and attitude control, the vehicle entered a tumble and approximately 20 seconds later, the range safety office sent a destruct signal to destroy the system," the statement said.

NASA officials refused to answer all queries as to whether preliminary studies of launch control data indicated what might have caused the main engine to quit suddenly.

The shutdown sent the \$30 million rocket shuddering out of control so violently that the nose containing the GOES satellite broke off before the destruct signal "finished the job," in the words of Delta project manager Bill Russell.

A team from the Los Angeles-based Rocketdyne, a division of North American Rockwell, is also in Florida investigating the incident. The company builds engines for the Delta.

Russell and Air Force Col. Albert Thomas, deputy commander of the Eastern Space and Missile Command, said shortly after the accident that they could not speculate about questions of possible sabotage raised by reporters.

Asked about the possibility of a spurious shutdown command, possibly from a ship, Russell would say only that "it did not appear to have come from the command procedure" at launch control.

But he added that investigators would "look at our internal electrical systems" to see if a shutdown command could have gone up to the rocket accidentally. "We don't think so," he said.

NASA sources, who spoke on condition of anonymity, said the Delta investigation would postpone a May 22 Atlas-Centaur mission to put a Navy communications satellite into orbit. Also jeopardized, depending on the findings, was an Aug. 14 Delta flight for the Defense Department and a Delta flight Oct. 9 to take up another weather satellite.

Gerald Longanecker, manager of NASA's meteorological satellite program, said the GOES satellites are vital to the nation's ability to monitor the weather. Only one is in orbit, and it is approaching the end of its five-year life cycle.

Another Newspaper's View

Foolishly Bringing Back NASA's Spendthrift for an Encore

MFD 2 v2 Space Shuttle
An editorial from The Los Angeles Times: Feb- 5/3/86

Nothing succeeds like success, it has been said, which is an accurate description of the National Aeronautics and Space Administration before the Challenger accident three months ago. While it was running up an unparalleled string of breathtaking space spectacles, few noticed that it was also running up a bill that was padded with waste, fraud and abuse.

As detailed in two articles last week in the New York Times, federal auditors throughout the 1970s and '80s told the agency repeatedly that millions of dollars were being wasted, that management controls were inadequate and that NASA contractors made defense contractors look like

pickers. Millions of dollars of equipment disappeared. Work was done by contractors before a price was agreed on, and the government then paid what the contractors asked for. Spare parts were bought from subcontractors who bought them from other vendors and then jacked up the price. The Rocketdyne Division of Rockwell International, which makes the shuttle engines, was paid \$120 each for bolt assemblies worth \$3.28, \$315 each for metal loops that cost 3 cents, \$80 for \$1 washers, \$1,621 for a \$78 bolt, and on and on.

The auditors documented waste of at least \$3.5 billion, which the attorney for the space agency's inspector general calls "the tip of the iceberg," adding, "There is probably much more out there."

But the agency sloughed it all off. After all, every time it lit up one of the shuttles, the thing took off, didn't it? So what's a little vigorish here and there to assure good contractor relations?

One effect of the waste of money was that the space agency tried to economize by cutting back its testing program. It saved \$68 million, the auditors found, by not testing the shuttle's solid-fuel booster rockets, the failure of which caused the Challenger disaster.

The absence of financial controls at NASA greatly increased the cost of the shuttle program. Congress originally approved it on the strength of the argument that a reusable vehicle would be cheap and that these remarkable spaceplanes would pay for

themselves and make money for the government to boot. But the shuttle wound up costing more and flying less than the rosy predictions made to Congress promised. Everyone, including NASA, has known for years that the shuttle will never make a profit.

The man who ran NASA from 1971 to 1977, while the shuttle was being developed and the taxpayers were being robbed, was James C. Fletcher. He is the James C. Fletcher who is now being brought back with great fanfare to pick up the space agency's tattered reins.

There must be somebody better for the rudderless agency to turn to. Fletcher's nomination is now before the Senate. His previous stewardship should fill all of the senators with misgivings about his ability to straighten things out.

Feb 5/9/86
International nuclear safety experts said Thursday they expect a renewed drive for worldwide cooperation, including mandatory notification of nuclear emergencies, in light of the Chernobyl disaster and its far-reaching radioactive cloud.

"Circumstances are changing because of Chernobyl," said Allan Mendelowitz, author of a General Accounting Office study on international nuclear safety. "It's a propitious time to raise the issue of a convention again."

There is no international agreement governing the reporting of nuclear accidents now.

Lyashko's statements seemed to contradict those of Deputy Soviet Premier Boris Y. Shcherbina, who said Tuesday that the government inquiry he heads arrived at the scene within hours of the initial explosion.

Shcherbina said workers at the plant initially underestimated the scope of the accident.

Asked about delays in evacuation, Lyashko said: "The accident developed in an unusual way, not as scientific knowledge would have predicted. First, there was a small explosion and a small radioactive emission."

"The measurements at first showed there was nothing to fear," he added, saying the later decision to clear an 18-mile zone was "insurance."

UFOs vs Space Work

THE TAMPA TRIBUNE, Wednesday, May 7, 1986 • 5-

Study faults NASA maintenance

WASHINGTON (AP) — The Air Force concluded last fall that the U.S. space agency's ground-support operations for the shuttle fleet were flawed by poor record-keeping, disorganized maintenance work and other shortcomings.

The internal study, first disclosed Tuesday by The Washington Post and later released by the Air Force, concluded that the problems would hinder the National Aeronautics and Space Administration's ability to prepare space shuttles for launch.

The report also concluded, however, that a "highly ambitious, but sound and workable" plan to correct the problems had been formulated and could be implemented over the next 12 to 18 months.

The study was completed last October by the Air Force Operational Test and Evaluation Team. The Air Force agreed late Tuesday to release a copy of the study but declined additional comment on its conclusions.

The study was performed at the Kennedy Space Center at Cape Canaveral and circulated primarily to Air Force officials involved in preparing a new military spaceport at the Vandenberg Air Force Base in California.

The NASA team that prepares the shuttles for launch from Cape Canaveral will perform similar work at Van-

denberg before military space missions.

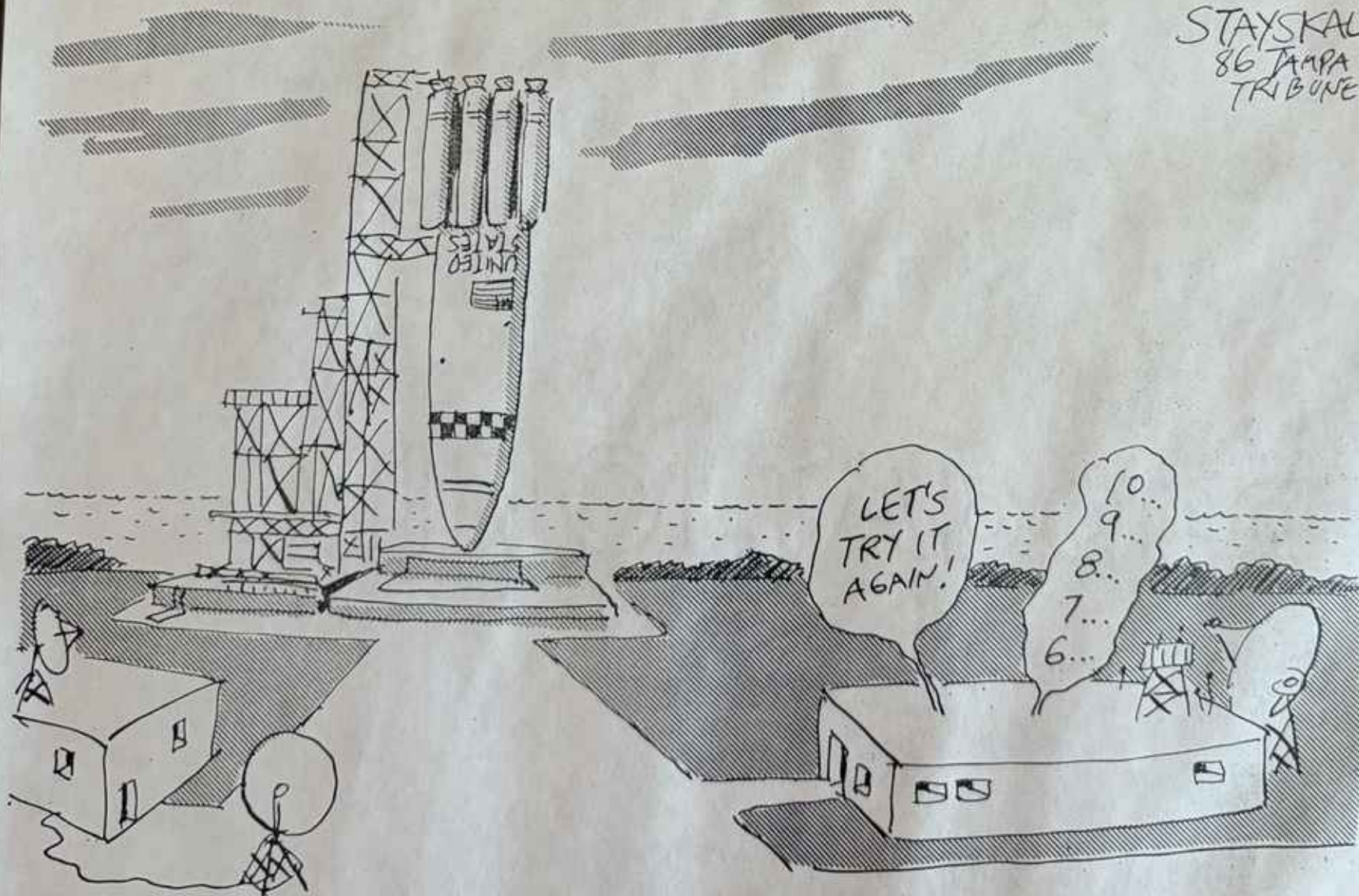
The Air Force study focused on the way NASA was maintaining and repairing the ground equipment that moves, loads, fuels and services the shuttle, not repair work on the shuttles themselves.

The study concluded that data systems used to monitor maintenance and repair work on ground-support equipment were "so ineffective and inconsistent" that their use for long-range planning for "equipment update, manpower, spares and funding is not possible."

The report also found that workers were taking more time to fix certain problems than they had during the previous year.

Release of the Air Force study comes at a time the United States has suffered three catastrophic rocket failures, including the Jan. 28 explosion of the shuttle Challenger and the loss of its seven-member crew.

Investigations following that accident have focused in part on time pressures placed on Kennedy Space Center personnel as NASA began to increase the pace of shuttle launches. The Air Force study reinforces those concerns, concluding the ground-support operations initially functioned as well as they did because flights were at least 50 days apart.



STAYSKAL
86 TAMPA
TRIBUNE

CRITICS BLAME A BREAKDOWN IN QUALITY CONTROL.
"NONSENSE!," SAYS NASA. Trib 5/2/86



A Delta 178 rocket is exploded shortly after launch from Complex 17 at Cape Canaveral Air Force Station.

Delta Rocket Destroyed After Takeoff

UFDs vs Space Shuttle 0.5B 5/4/86

CAPE CANAVERAL (AP) — An unmanned rocket carrying a weather satellite went out of control and was blown up by command from the ground shortly after launch Saturday, the second failure of a U.S. spacecraft since the explosion of the space shuttle Challenger.

Just over a minute after liftoff, the Delta rocket's main engine shut down, leaving it without guidance and careening out of control at 1,400 mph, said Bill Russell, NASA's Delta manager.

Safety officers then sent a destruct command "and finished the job," Russell said at a news conference about an hour after the launch.

A fuel leak in the rocket's main engine, which had caused a two-day delay in the liftoff, apparently was not the cause of the trouble, he said.

Saturday's launching of the space agency's most used and most dependable rocket took on added significance

because of the Jan. 28 space shuttle explosion that killed its seven crew members and the explosion of an Air Force Titan 34D rocket in California on April 18.

"We have had a loss of the vehicle. There is a breakup of the vehicle," launch commenter Lisa Malone said as the 116-foot rocket broke apart.

The flight appeared normal through the first minute, with the first set of solid rockets being jettisoned at 64 and 65 seconds, Russell said.

"We were flying along, and at about 71 seconds the main engine . . . shut down," he said. "It's a very sharp shutdown, almost as though it were a commanded shutdown. Once you lose that, of course, the rocket has no stability control."

After the shutdown, the rocket began drifting, creating an angle of attack great enough that the faring, or shield, that covers its nose tore off.

See Delta on page 12A

Delta Rocket Destroyed

Continued from page 1A

There was no indication that a command had been sent to shut down the engines, he said. Preliminary data, such as turbine speed and temperatures in and around the engines, "all appeared to be very normal," Russell said.

"The three solid (boosters) were burning very well" after the main engine shut down, he said.

The three-stage Delta is assisted into space by nine solid-propellant boosters strapped to its bottom stage. The boosters are similar to those that help power the space shuttle and Titan 34D, but are much smaller and made in one section, rather than segmented like the others.

Investigators believe that the Challenger and Titan rocket explosions were caused by failures of joints between segments.

Morton Thiokol makes both the solid-fuel boosters used for the shuttle and the Delta.

The debris from the rocket landed in the Atlantic about 30 miles off Cape Canaveral, said Air Force Col. Elbert M. Thomas. There were no immediate plans to try to recover the debris, he said.

NASA could not immediately say how high the rocket was when it blew up.

The last 43 Delta launches, dating to September 1977, had been successful.

Earlier Saturday, engineers reported no sign of any further fuel leakage in the rocket's main engine, a condition that resulted in the scrub of the mission three hours before Thursday's scheduled liftoff.

The space agency said Thursday's launch would have been postponed even without the Challenger and Titan failures, but extra precautions at the Delta's launch pad and the two-day delay over the main-engine leak indicated the concern that everything go well.

Top-level NASA officials had participated in extensive flight-readiness review sessions here and in Washington.

Soviets appeal to European nations for food

Reuters News Service

File 5/9/86

LONDON — The Soviet Union wants to buy substantial amounts of grain and other foods from the European Community, or EC, to make up for food contaminated by the nuclear reactor accident in the Ukraine, a member of the European Parliament said Thursday.

In Brussels, the EC banned imports of East European meat and animals, effectively barring the bulk of products likely to carry radioactive contamination from the Chernobyl nuclear accident.

The ban was imposed by the EC Executive Commission while awaiting a decision by the 12 EC governments on a proposed halt to all fresh-food imports from the seven nations believed affected by the Soviet accident — the Soviet Union, Yugoslavia, Hungary, Czechoslovakia, Poland,

Bulgaria and Romania.

A commission spokesman said the meat and animal ban would last through the end of the month.

As for the Soviet purchases of EC products and meats, "Information reaching me suggests that the Soviet Union, using diplomatic channels, has approached Brussels with a view to purchasing substantial quantities of surplus community food, including grain, butter, beef and skimmed milk powder," said Richard Cotterill, a British member of the European Parliament.

"All these commodities would be purchased far in excess of the relatively modest amounts we have sold to the Soviet Union in recent years," he told the British Broadcasting Corp.

The Ukraine is the breadbasket of the Soviet Union. "There's no doubt at all that crops and the cattle have been extensively contaminated by

radioactive fallout. This now poses the Russians with a problem which will arise with considerable severity this winter," Cotterill said.

He said sales of EC food to Moscow are traditionally handled through food brokers, mainly based in Paris.

"I think one of the reasons the Russians have made this unusual approach to the (EC) Commission is to talk about not only payment but also a question of scale, because if substantial quantities of food are going to be shipped eastward across the Iron Curtain there is a transport problem," he added.

In Brussels, the commission said it had not been approached directly about urgent supplies from Moscow or from traders who normally handle such approaches.



A cloud from exploded missile is seen over Lompoc Valley, Calif.

AP

UFO vs Space Truck 0.5B 4/19/86

Titan Space Rocket Explodes; May Have Carried Spy Satellite

VANDENBERG AIR FORCE BASE, Calif. (AP) — A Titan rocket believed carrying a top-secret spy satellite exploded in a huge orange cloud seconds after launch Friday, the second such incident in eight months.

No injuries were reported and the National Weather Service said there was no danger to civilians because the cloud was floating to sea.

Air Force officials would not say exactly what the cloud was. But schoolchildren were told to stay inside, and about 120 oil workers were evacuated from two drilling platforms in the Santa Barbara Channel. The National Park Service ordered the evacuation of rangers, campers and tourists from the offshore Channel Islands National Park.

The feared loss of the spy satellite would hamper America's ability to monitor Soviet activities, with only one other such satellite in orbit, experts said.

"This will create major problems in the photographic reconnaissance program, in our confidence in monitoring Soviet military activities at a critical time," said Paul Stares, a military space expert at the Brookings Institution in Washington.

The rocket, a Titan 34D, exploded after launch from the Western Space and Missile Center, said Maj. Ken St. John. "Damage was confined to the immediate launch area," he said.

"A great red-orange puff of smoke came up," said Victor A. Sanchez, who was working nearby. "It shook

the whole ground."

St. John would not speculate about the booster's payload. An Air Force statement released in Washington said the payload was classified.

But it was almost certain the rocket was carrying a refurbished model of the KH-11 photographic reconnaissance satellite or a previously unknown satellite, said Stares and Jeffrey Richelson, a military reconnaissance expert at American University in Washington.

The KH-11 believed aboard was intended to be a test model but was refurbished after another Titan blew up after launch at Vandenberg on Aug. 28, destroying a KH-11 and leaving only one of the satellites in orbit, said Richelson and Stares.

The loss Friday of another KH-11 would put America's ability to monitor Soviet troop movements, other military activities and compliance with nuclear treaties "in a very precarious position," Richelson said.

A newer, more sophisticated spy satellite, the KH-12, is too big to be launched on expendable rockets and can be put into orbit only by a space shuttle, Richelson said. The shuttle program was halted in January after the Challenger exploded, killing seven astronauts.

"It would appear that we have at present no means of putting any more photographic reconnaissance satellites into orbit until the shuttle is operating again," Richelson said, adding that the KH-11 in orbit has 1½ years left in its useful lifespan.

NASA Critical Of Reports

The New York Times

WASHINGTON — The space agency asserted Friday that two New York Times articles depicting waste and mismanagement in the space program were "inaccurate" in some respects and gave "a misleading impression" of the agency's performance.

The agency did not address the great majority of the specific allegations reported in the articles, which were based on more than 500 government audits and other government documents. But it said the audits were management tools being effectively used to uncover and correct deficiencies. It said the audits had enabled NASA to save almost \$750 million over an eight-year period.

However, Harry R. Finley, a top official of the General Accounting Office, an investigative arm of Congress that conducted many of the critical audits, said Friday that his agency's findings were portrayed accurately in the articles. He also asserted that the National Aeronautics and Space Administration had not

been responsive to auditors' suggestions for managerial improvements.

The space agency's first detailed response to the articles came as sentiment rose in Congress to watch the agency more closely to prevent the kind of management defects depicted in the official government audits.

The audits identified instances of waste and gave dollar figures that totaled at least \$3.5 billion. The audits attributed the waste to bad management. At the same time, the agency cut or delayed \$500 million in safety tests and programs, according to the audits.

Rep. Manuel J. Lujan of New Mexico, the senior Republican on the House Science and Technology Committee, said Friday that the articles "brought up problems that need investigating by the committee."

Aides to Lujan, who is recovering from heart surgery, said he was "very concerned" by allegations of waste and mismanagement raised by the audits. He See NASA on page 8A

Emergency shuttle launch may be tried

Experts say the U.S. is concerned about having only one spy satellite in orbit.

UFOs vs Space Work
New York Times 4/22/86

VANDENBERG AIR FORCE BASE, Calif. — The crisis in the nation's ability to launch key reconnaissance satellites has spurred speculation among aerospace experts that the government might attempt an emergency mission of the space shuttle from a new launching facility here.

Air Force officials say the \$2.8 billion complex is ready to launch a shuttle, even though minor construction remains to be finished. The spaceport's huge concrete and steel structures dominate a brushy, windswept mountainside high above the Pacific Ocean.

Quietly under construction since 1979, this Western shuttle site might be called into service because of the explosion here last Friday of a Titan rocket carrying a secret military payload, which was widely believed to be a KH-11 photo reconnaissance satellite. Experts say the spy satellite was to join an aging KH-11 currently in orbit, the nation's last in space.

"As long as that's operating, there's no compelling

Report: Titan carried spy satellite

WASHINGTON — The Titan rocket that exploded seconds after launch from Vandenberg Air Force Base, Calif., on April 18 was carrying an Air Force "Big Bird" reconnaissance satellite, which returns its information by dropping off film pods that are then retrieved by airplanes, Aviation Week and Space Technology said in its April 28 issue.

The report also said investigators are trying to determine why one of the rocket boosters exploded.

24 hurt in chemical explosion

WOBBURN, Mass. — Two chemical tanks at CVD Inc., a high-tech space research laboratory, exploded Wednesday, blowing a hole in the roof and releasing noxious but non-toxic hydrogen chloride fumes that sickened at least 24 people. No one was seriously hurt.

The blast in the block-long factory building apparently was sparked when a high-pressure hydrogen line ruptured during experiments on mirrors for NASA satellites, setting off the chemical tanks, fire officials said.

Astronaut Overmyer Is 2nd To Retire Since Explosion

Robert F. Overmyer, who flew on two space shuttle missions, including a Spacelab flight, has become the second astronaut to announce retirement plans since the Challenger explosion, NASA officials said.

The 49-year-old Marine Corps colonel will retire June 1, John Lawrence, spokesman for the National Aeronautics and Space Administration's astronaut office, said Monday.

Don L. Lind announced in mid-March that he was retiring as of June.

Veteran astronaut retires

SPACE CENTER, Houston — Col. Robert Overmyer, a veteran astronaut who piloted two space shuttle missions, will retire June 1 from NASA and the Marine Corps, the space agency said Monday.

Overmyer, 49, did not give a reason for his decision to retire and did not specify his post-retirement plans, said John Lawrence of Johnson Space Center. Sources have said the astronaut plans to work as a network television consultant.

Charges shock ex-NASA chief

UFOs or Space Work Trib 4/24/86
WASHINGTON (UPI) — Former

NASA chief James Fletcher, nominated to return to the agency's head at the time of its greatest crisis, said Wednesday he was shocked by charges that NASA had wasted billions of dollars over the years.

Fletcher also said if his nomination is confirmed by the Senate he will try to put NASA back on course following the Challenger disaster and promised to find the agency's weak spots and make changes to fix

them.

"We have to get on with the job," he told the Senate Commerce Committee. "We have to get flying again safely. There's no excuse for another accident."

Sen. Slade Gorton, R-Wash., opened the late afternoon hearing, saying he was disturbed by a report in Wednesday's New York Times, based on NASA audits, that the space agency had wasted at least \$3.5 billion despite repeated warnings by government inspectors.

"This article described in frightening detail a litany of practices over a period of many years that gives the appearance of waste, fraud and mismanagement within NASA," Gorton said.

"Needless to say, I was a little bit shocked," Fletcher said. "I wasn't sure that (the report) was talking about the same agency that I used to be the administrator of."

Fletcher said there "is something to" the auditors' reports, and that the statements were not inaccurate.

"I think, however, that a summary of my quick review of it, and checking with the inspector general that wrote some of those reports, I'm under the impression that NASA is still one of the best managed agencies of the federal government."

Sen. Albert Gore, D-Tenn., later asked Fletcher if he challenged the

figures cited by the newspaper. Fletcher replied he had not had a chance to see "if those numbers are even in the right ballpark."

"The cumulative impression is not a good one and I'm quite concerned about it," Gore told Fletcher.

Fletcher, who served as NASA administrator for six years ending in 1977, was nominated by President Reagan on March 6 to replace James Beggs, who resigned to fight federal fraud charges not related to NASA.

As a result of the Challenger explosion, Fletcher said, "We have all suffered a loss of confidence, a disordering of the sense of certainty and purpose and progress which we have all associated with this country's efforts in space."

In addition to outlining charges of waste in NASA, The Times said auditors charged Fletcher misled Congress and the public about the shuttle program's costs.

Fletcher told the panel he did his best to estimate the program's costs and said the one area where estimates were off significantly concerned the number of flights shuttles.

"We may have overestimated the number of flights for the five orbiter fleet which was required at that time," he said. "That had a lot to do with increasing the cost of the flights."

UFOs or Space Work Trib 4/21/86 General: NASA Has Lost Control Of Program

HUNTSVILLE, Ala. (AP) — NASA has lost control of its space shuttle program because of poor internal communication and shortcomings in quality control, says the former commander of the Army's Ballistic Missile Agency.

"The way they have structured their work, nobody is really able to have the clean lines of communication that we had and thereby pick up immediately anything that may be wrong," said retired Maj. Gen. John B. Medaris.

He said National Aeronautics and Space Administration managers at the Marshall Space Flight Center and other installations failed to share critical information with employees and the resulting communication problems contributed to the Jan. 28 explosion of the space shuttle Challenger.

Medaris also told The Birmingham News in a weekend interview during the Army Ballistic Missile Agency's 30th reunion that NASA has no real inspection system of its own to monitor the quality control of materials it purchases from contractors.

"What they call quality assurance is shuffling a bunch of papers, reports from contractors, but that isn't quality control, that's nonsense," he said.

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Titan probe to include O-rings, fuel, sabotage

NFD on Space Work 4/21/86

VANDENBERG AIR FORCE BASE, Calif. (AP) — O-rings in the solid fuel boosters of a Titan rocket that exploded just after liftoff last week will be scrutinized by military officials investigating the blast.

"We will be looking at everything ... (the solid fuel) boosters, rings, propellants and electronics," said Maj. Gen. Jack L. Watkins, commander of the 1st Strategic Aerospace Division at Vandenberg.

Sabotage is also "one of those things we must always take into consideration," he said, adding, "Things like terrorist activities and sabotage would probably not be discussed in public."

Watkins would not speculate about the cause of the explosion, but said one concern was the "ring connectors on the solid rocket booster."

It was the second failed Titan 34D launch in a row. A rocket carrying a KH-11 spy satellite exploded just after liftoff Aug. 28.

Titan launches from the missile test center will be halted until the cause of the explosion is known, said Air Force Capt. Rick Sanford, a base spokesman.

The accident will lower confidence in the government's ability to monitor Soviet military activities, said Paul Stares, a military expert at the Brookings Institution.

Public awareness of the critical role of O-rings, which seal the segments of the solid rockets, has been heightened since the destruction of the space shuttle Challenger in January.

Rings in one of Challenger's solid boosters are believed to have failed, allowing searing rocket gases to burn through the side.

The \$65 million Titan 34D blew up five seconds into launch Friday morning with its classified payload, believed to be a spy satellite. The failure, coupled with the shuttle disaster, interrupts the launch programs of the United States' two principal satellite launch vehicles.

"Coming hard on the heels of the Challenger loss, there was more apprehension. ... It's a setback," Watkins said Saturday.

The solid rockets used for Titan launches are manufactured by United Technologies, Chemical Systems Division of Sunnyvale, Calif. Those used by the space shuttle are made by Morton Thiokol Inc. of Brigham City, Utah.

Calls to United Technologies' offices were not answered Sunday. On Friday, spokesman Jim Mackin said there would be no comment and referred inquiries to the Air Force.

Solid rockets provide tremendous thrust to assist the liquid-fueled main engines in putting heavy payloads into space.

The Titan's two solid booster nite first, providing about 2.5 million pounds of thrust. The main liquid fuel engine of the first stage ignites about 97 seconds after liftoff and seconds later the boosters are jettisoned. The Titan 34D also has a second-stage liquid fuel engine.

Col. Nathaniel Lindsey will lead the missile mishap board investigation.



AP photo

A Titan missile explodes seconds after launch Friday.

ing the Titan blast. Lindsey is commander of the Eastern Space and Missile Center at Patrick Air Force Base in Coco Beach, Fla.

The Titan explosion created a huge cloud of toxic smoke and fuel, and 74 people at or near the launch site were taken to the base hospital for examination and treatment of skin and eye irritations.

Launch

• From Page 1A 4/21/86

reason for a Vandenberg shuttle launch," said Jeffrey Richelson, a military expert at American University in Washington, D.C. "If it went out, however, that would certainly be an emergency situation."

Richelson said the payload destroyed last Friday was apparently the nation's last KH-11, another KH-11 having been lost in a fiery launching accident in August. The only other advanced spy satellite ready to be launched, he added, is the KH-12, which is believed to be too big for a rocket and must be boosted by the space shuttle.

The launching pads along the California coastline here are meant to boost shuttles and satellites into polar orbits, from which they can view the majority of the Earth's surface. In contrast, the Kennedy Space Center in Florida puts objects into more limited equatorial orbits.

American spy satellites in polar orbits are crucial for keeping an eye on global "hot spots," for monitoring the Soviet military, for counting missiles, and in general for verifying compliance with arms control treaties.

The KH-11s are movable in orbit and have powerful cameras that can

zoom in on almost any area of the Earth. The KH-11 now in orbit was launched in late 1984, and is believed to be halfway through its life expectancy. It is also believed to be the only American spy satellite in orbit.

Dr. William R. Graham, the acting administrator of the National Aeronautics and Space Administration, has said the shuttle might be launched on an emergency basis if it was deemed necessary for purposes of national security. Since the Challenger exploded and its crew of seven astronauts was killed last Jan. 28, the nation's shuttle fleet has been grounded, pending the outcome of an inquiry into the cause of the disaster.

Aerospace experts outside the government caution, however, that the untried Vandenberg site poses so many uncertainties that an emergency launching would truly be a last-ditch effort.

Air Force officials here refuse to discuss the nature of the Titan payload or whether they are anticipating an emergency launching of the shuttle. They will say, however, that work on the shuttle launching site is forging ahead despite the Titan explosion and the Challenger disaster.

"There's been no impact on shuttle preparations, none at all," Maj. Gen. Jack L. Watkins, commander of Vandenberg, said.

U.S. must launch plan to restore space image

Experts say a manned Mars flight would recapture American imaginations.

UFO vs Space Work
By GIL KLEIN 5/14/86
Tribune-Media General Bureau

WASHINGTON — America's space program is a shambles. After four accidents — including January's shuttle disaster — the United States would have a hard time launching a Sputnik.

But space experts say after all the investigations and retooling are completed, to get America back into the launch business, Americans are going to have to decide what kind of space program they want.

The Europeans, Japanese, Chinese and Indians either already have or soon will have

their own launch capability, they say, and if the United States wants to remain the leader in space, it must get back onto the edge of exploration.

That would require serious work toward a manned Mars flight, they say, and a budget about twice as large for the National Aeronautics and Space Administration.

"What these accidents have done for us is make us rethink what we are doing in space," said Dr. John Logsdon, director of George Washington University's graduate program of science, technology and public policy. "If other countries are going to be operating with humans in space, then it is inconceivable that the U.S. will not be the leader."

All the talk in the past two years that the United States is in space because of the commercial benefits of initiating a space industry miss the point of what space is all about, he said.

See SPACE, Page 4A

Space

• From Page 1A 5/14/86

"I don't find the economic rationale plausible," he said. "Space will remain a government activity for science and politics. The image of space exploration and world leadership is not a perishable commodity. What Europe, Japan and China are doing has little to do with economics and more to do with national image. We are in competition at that level."

The first order of business is to clean up the mess left by the shuttle accident and the loss of the last two Titan missiles by the Air Force and a Delta rocket by NASA. The succession of accidents has left space officials stunned.

Not only are each of those rockets grounded for a year and a half or more while investigations go on, but few of the remaining types of rockets are suitable for launching key military and communications satellites, and the supply of such rockets is low.

The United States had decided to depend on the space shuttle for most of its launches, so the supply of rockets has dwindled. Now it will take more than three years to produce new ones.

"The worst fears of the space community have been realized," said Charles W. Cook, deputy assistant secretary of the Air Force for space plans and policy. "We're down and we can't get up."

For the Defense Department alone, he said, one year without the

shuttle means 10 payloads will not be launched. Two years will put it 21 payloads behind.

NASA is facing three problems, said Philip Culbertson, NASA's general manager. It first must determine the causes of the failures and figure out why they had been allowed. Then it must find \$2.5 billion to pay for an orbiter to replace the Challenger.

That money cannot come from NASA's budget alone without crippling the space agency's research and development and scientific exploration plans, space experts say. The cost will have to be shared with other government agencies, especially the Defense Department.

But the third problem may be the most important, Culbertson said.

In assessing what should be done following the accidents, "We found it was the young people (in NASA) who were extremely conservative," he said. "They are saying that even if the shuttle is down for years, they want it that way. They see their careers on the line."

Such a conservative philosophy, he said, will not get a man to Mars.

The National Space Commission, appointed by President Reagan to look into space priorities, is expected to recommend a return to the moon and trips to Mars and the asteroids with the establishment of permanent bases on Mars in the 2020s. That would cost about \$700 billion during the next 35 years, which amounts to \$20 billion a year, compared to \$7.5 billion NASA is now spending.

Committing the nation to a manned journey to Mars would get NASA out of the doldrums into which it has declined, said Dr. Fred Singer, a professor at George Mason University who has become an authority on a Martian expedition. Simply launching satellites and building a space station for commercial use will not fire the imagination.

17/4

24 Feb 5/14/86
24 Feb 5/14/86

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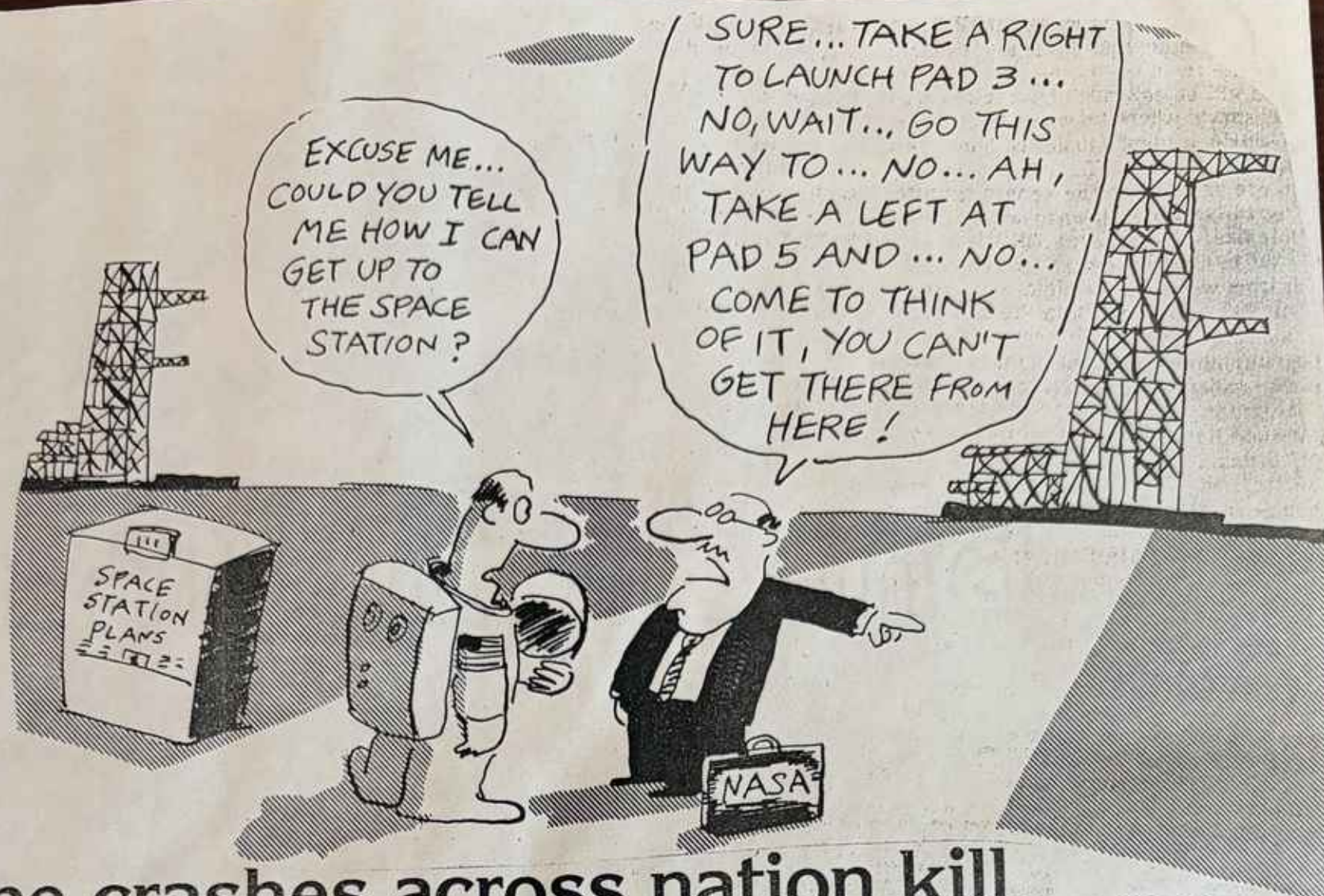


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1712



Plane crashes across nation kill at least 17, including man in car

STAYSKAL
86 TAMPA
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5/19/86

The accidents killed people in California, New Jersey, Georgia, Oregon and Indiana.

Associated Press

At least 17 people died in plane crashes nationwide over the weekend, including an off-duty policeman killed by a plane that plowed across a six-lane New Jersey highway and into his car.

Two other people were killed in a balloon crash in Southern California.

Seven people were injured in the accidents, in California, New Jersey, Georgia, Oregon and Indiana. The highest single death toll came in Van Nuys, Calif., where six people died in a twin-engine Cessna that plowed into a field near the airport.

In Atlantic City, N.J., the pilot of another twin-engine Cessna told police he tried unsuccessfully to take off Saturday on a charter flight to Farmingdale, N.Y., and crashed through a fence at the end of the runway, said police Detective Sgt. Steven Mangam.

The plane skidded across a field and a wide boulevard, becoming entangled with three or four cars before hitting a car waiting at a stop sign and setting it afire, he said. The plane came to rest against a building.

The dead were identified as Thomas Burns, 25, a rookie police officer who was in the burned car, and plane passenger Michael Saal, 42, of Dix Hills, N.Y. Saal's wife, Linda, was critically injured, and the pilot and co-pilot suffered minor injuries.

Mangam said Burns had dropped his fiancée at her house and had driven only a few blocks when he was

killed. Several other cars and buildings caught fire but the flames were quickly extinguished.

In Angola, Ind., a twin-engine Seneca piloted by a Michigan doctor clipped a house Saturday and crashed into a ditch.

Dr. Winston B. Cenac, 61, of Battle Creek, Mich., had radioed tower personnel in Fort Wayne that he was having mechanical problems with the aircraft and would try to land at an airport three miles west of Angola.

John Disbro, a Steuben County sheriff's dispatcher, said Cenac pulled himself from the wreckage. He later died at a hospital, officials said.

In Van Nuys, the Cessna carrying five men and a woman began wavering about 150 feet above the ground, said witness Bill Schneiders.

"The wings were going back and forth and it went down," he said.

Two hours earlier, one person was killed when a single-engine, French-built Trinidad TB20 went down while making a final approach at the airport, officials said.

Two people were killed and two seriously injured when a small private plane crashed Saturday in a field near Chino Airport, 35 miles east of Los Angeles.

A Cessna 172 crashed Saturday into the carport of a home in Douglasville, Ga., killing one person aboard the plane and seriously injuring its other occupant, according to the Douglas County Sheriff's Department.

In Oregon, a small plane crashed in a mining area in the rugged Cascade Mountains east of Eugene, killing four people, authorities said.

The hot air balloon struck a powerline in Temecula, 80 miles southeast of Los Angeles, severing the gondola, which fell about 60 feet to the ground. Two occupants were killed and the third was critically injured, authorities said.

Ind 5/15/86

Expert says survey state for radon

GAINESVILLE (AP) — All of Florida, not just the areas with phosphate that can be mined, needs to be surveyed for potentially dangerous deposits of radium deposits, says an environmental engineer.

"We need a complete map of where underground radium deposits are in Florida, because when developers recontour the land, they could inadvertently bring radium to the surface," said Charles Roessler of the University of Florida.

Roessler said he knows of at least one instance, in Sarasota County, in which a developer planned to move earth on a site which was judged free from phosphate deposits. But later studies revealed there were high enough levels of radium in the soil to require careful regrading of the land.

"We need more information on areas that could have higher levels of radium and hence produce radon gas," Roessler said in a Wednesday news release.

Radium produces radon as it decays. It is found around the nation in various types of rocks and soils, including Florida's rich phosphate deposits.

Radon is a radioactive gas, and high levels of its decay products can cause lung cancer. Recent media reports have quoted Environmental Protection Agency officials and medical researchers who say that radon is one of the most serious environmental problems in the nation.

Radon, sometimes in excess of acceptable levels, can seep into a house through seams in the foundation and through spaces around pipes.

Radon is measured in units called working levels, and the average indoor level in Florida is 0.004, Roessler said.

When indoor levels of radon gas reach 0.02 working levels or above, this is considered a health risk, according to Harlan Keaton, manager of the environmental radiation program for the Florida Department of Health and Rehabilitative Services in Orlando.

The EPA estimates that radon decay products cause between 5,000 to 20,000 deaths due to lung cancer in the nation each year.

State officials plan to survey 100 homes in each of Florida's 67 counties for indoor radon levels but Roessler feels, in addition to that, the state needs a survey of land to develop a more accurate map of potential radon trouble spots.

"We need studies that will give us a better tool to estimate what radon levels will be in a future home, based on radon measurements from the site where the home is to be built.

"If we find there are areas with no radon measurements, that will give people peace of mind. But if there are areas with problems, people will need to know so they can decide what steps to take," he said.

When building houses with foundations flat on the ground, contractors can prevent radon from seeping into homes by pouring seamless foundations and by putting gaskets around pipes that pass through foundations.

To reduce the risk from radon decay products in existing homes, Keaton said people can install electrostatic precipitators, which draw these particles from the air much the same way magnets attract iron.

UFO & Sun Attack

Earthquake triggers 2nd tsunami watch

Ind 5/18/86

ANCHORAGE, Alaska — A strong earthquake in the Aleutian Island chain triggered a tsunami watch Saturday for the second time in 10 days along coastal Alaska and the Pacific Coast south to California, but no large waves developed.

The quake, which registered 6.5 on the Richter scale, struck about 12:20 p.m. EDT about 85 miles northeast of the Aleutian island of Adak, according to the U.S. Geological Survey in Golden, Colo.

The Alaska Tsunami Warning Center issued a

UFO & Sun Attack

Storms Bang Southwest; Girl Killed

By The Associated Press *2.5B 5/18/86*

Waves of violent thunderstorms hammered western Arkansas and central Texas Saturday, spinning off tornadoes and killing a 14-year-old girl who died when a tree toppled by high winds slammed into her home while she slept.

In southeast Missouri, meanwhile, the National Guard patrolled streets in Sikeston and Vanduser on Saturday as crews cleaned up after tornadoes and flash floods earlier in the week that left four people dead, one woman critically injured and caused millions of dollars in damage.

Tornadoes were spotted Saturday across central Texas and near Sparta, Ohio.

In Killeen, Texas, high winds hit the central business district, lifting the roof off a cement mixing company and damaging fire department vehicles across the street, officials said.

No injuries were reported.

A funnel cloud dropped down in front of the fire station shortly before 10:45 a.m., uprooting several trees and pulling down power lines, said fire Capt. Bill Cave.

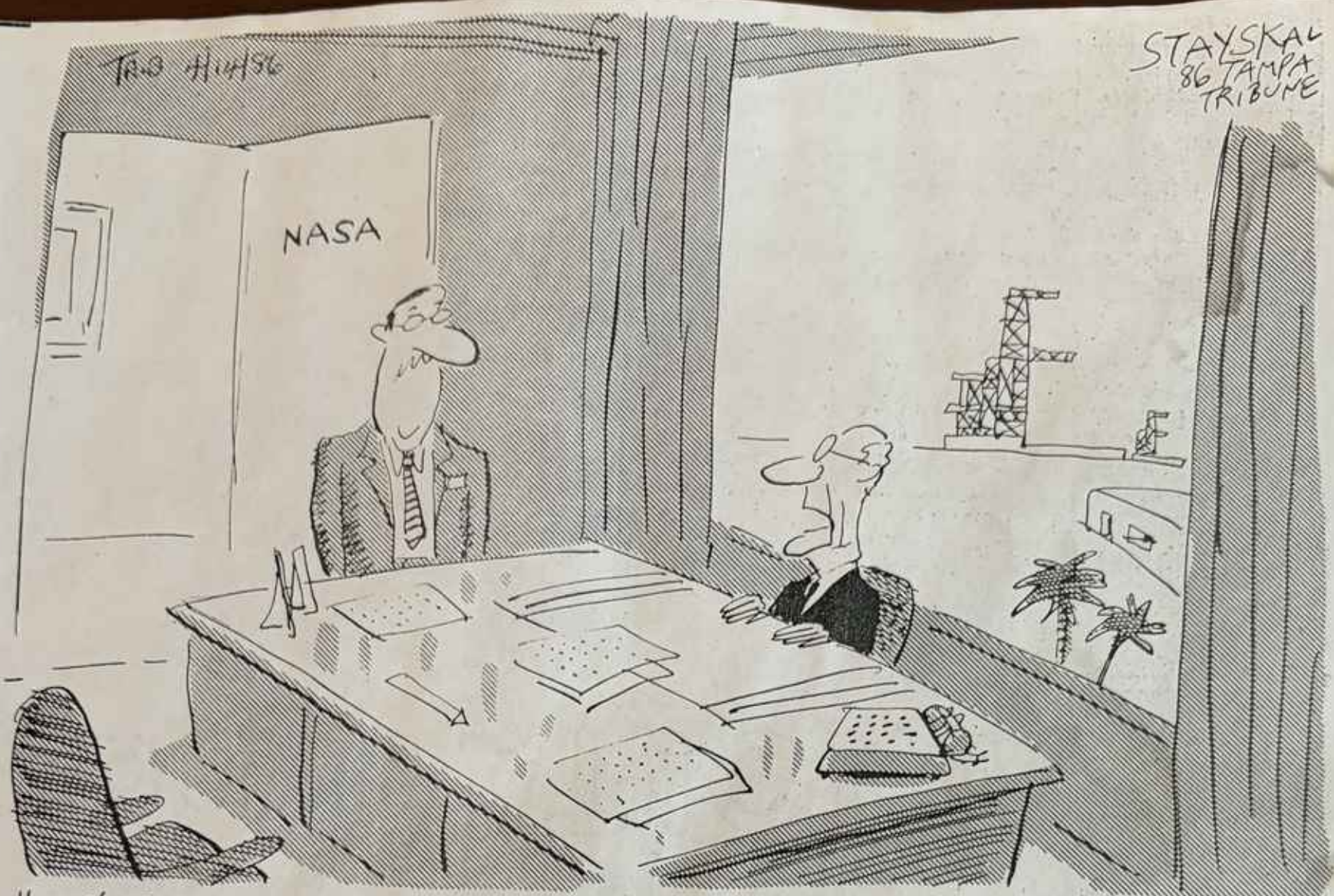
Workers at the cement mixing company said they were using one of their mixers when they saw the twister and ran.

Four tornadoes were sighted elsewhere in central Texas, but no damage was reported.

In Fort Smith, Ark., rescuers spent more than three hours trying to lift the tree from the house where the girl was trapped inside, said police Sgt. Danny Honeycutt.

The winds knocked out power in Fort Smith, a city of 71,000 on the Oklahoma border, but Oklahoma Gas and Electric Co. crews had restored lights by mid-morning, Honeycutt said.

In Hempstead County, in southwest Arkansas, an 87-year-old man was cut by flying glass when a possible tornado lifted his house from its foundation Friday night.



"WE'VE GOT TO REASSURE THE PUBLIC ON SPACE TRAVEL, HANSON ...
GET OUT THERE AND DIG UP SOME GOOD UFO SIGHTINGS! "



"...THREE...TWO...ONE...ZERO."

D.S.B.
5/18/86

China-Russia-U.S.A.

U.S. Experts Advance Accident Theories

O.S.B. 5/4/86 -
WASHINGTON (AP) — U.S. experts believe interruption of a vital flow of cooling water to the Chernobyl nuclear reactor triggered last week's meltdown, and they have several theories on how the flow could have been cut off.

A leading theory is loss of electrical power to run pumps, instruments and other equipment, but scientists also say water flow could have been cut off if a portion of the 1,661 three-inch pipes running through the reactor became clogged or by a chemical explosion.

The Soviets have implied the accident was triggered by human error. In an interview Friday night with West Germany's ARD national television network, Moscow Communist Party chief Boris Yeltsin, said the cause of the disaster "lies apparently in the subjective realm, in human error."

Thomas Cochran, scientist on the staff of the Natural Resources Defense Council, said the

electrical theory is the most likely.

"To get a whole-core accident, it seems the most probable way is to lose coolant flow before the manifold, which means pump failure, which means loss of power to the pumps," he said.

Ed Zebroski, chief nuclear scientist for the Electric Power Research Institute, agreed, saying that with about 1,000 workers at the four-reactor Chernobyl site, "the chance that someone knocked down part of the (electrical) switchyard . . . is at least one of the plausible scenarios."

John Auxier, nuclear engineer and director of the Oak Ridge, Tenn., Radiological Sciences Laboratory of IT Corp., said "A piece of something that got loose," perhaps part of a pump blade, could clog cooling tubes. "Unlikely — but it's possible."

James N. Landis, senior vice president of Stone & Webster, the Boston-based construction company that has built several nuclear plants,

theorized "maybe they didn't have instrumentation to detect" small blockages.

"The radiochemical and nuclear people I talk to are looking toward a chemical explosion that disabled the cooling system and perhaps the control system, too," Auxier said. Such an explosion could come from improperly vented hydrogen from batteries, or from a solvent spilled in the wrong place.

The post-accident photo of the reactor building released by the Soviets shows the high bay section with about 30 feet of the top missing, Zebroski said. "A steam rupture could do it" and simultaneously cut the water flow, he said.

If a simple power loss caused the accident, "the shocking thing is . . . you still have an hour or two before things go to hell, and you ought to be able to run a line in" to run pumps, valves and instruments, Zebroski said.

O.S.B. 5/4/86
"The Soviet accident has provided the United States and the rest of the world a stark reminder that nuclear power is a dangerous technology and that the consequences of an accident are enormous," said Joshua Gordon, author of the Critical Mass report.

He said the United States should re-evaluate its nuclear policy and begin planning for the orderly phase-out of nuclear power.

of a nuclear bomb, and insisted that radiation levels were not dangerous in Kiev, the Soviet Union's third-largest city, with 2.4 million residents.

Feoktistov said the accident and its aftermath surprised top Soviet scientists. Asked by commentator Alexander Bovin what he would have thought before the accident if someone had described such a series of events, Feoktistov replied, "I would have thought it was completely incredible."

He said it may take a long time to determine the exact cause.

Journalist

Gorbachev: 9 died at Chernobyl

He chided the West for a "mountain" of lies about the nuclear disaster.

- Nuclear officials say accident may benefit industry — 5A
- Soviets expel U.S. envoy — 8A

Tribune Wires 5/15/86

MOSCOW — Soviet leader Mikhail S. Gorbachev said Wednesday night that casualties from the Chernobyl nuclear disaster had risen to nine dead and 299 hospitalized, but declared, "The worst is behind us."

He accused the West of telling "a veritable mountain" of lies about the accident.

Reaction to the speech included White House denials that the West tried to exploit the tragedy and blamed any incorrect reports on Soviet secrecy.

But, White House spokesman Larry Speakes said, the United States is "comforted by Mr. Gorbachev's assurances that the 'worst is behind us.'"

Gorbachev's 25-minute speech on state television was his first public comment on the explosion and fire April 26 that spewed radioactivity over Europe and forced the evacuation of 92,000 people from the vicinity of the Ukrainian power plant.

He said radiation still was dangerous around the plant, 80 miles north of Kiev.

Gorbachev said the probable cause of the accident, which he repeatedly referred to as "our misfortune," was a power surge and hydrogen explosion.



Gorbachev invited Reagan to meet on a nuclear test ban.

He also announced the Soviet Union would extend its moratorium on nuclear testing to Aug. 6 and invited President Reagan to meet him in Europe or Hiroshima, Japan, to discuss halting all nuclear tests.

"The accident at Chernobyl showed again what an abyss will open if nuclear war befalls mankind, for inherent in the nuclear arsenals stockpiled are thousands upon thousands of disasters far more horrible than the Chernobyl one," he said.

But the White House only reiterated U.S. opposition to the proposed nuclear test ban and contended Gorbachev's speech misstated the Western position toward arms control.

Previous official statements said about 200 people were hospitalized. Gorbachev's total of nine

See GORBACHEV, Page 5A

Major earthquake jolts Mexico City; no injuries or damage reported

24FD Sun Attack File 5/1/86

MEXICO CITY (UPI) — A major earthquake measuring 7.0 on the Richter scale jolted Mexico City and nearby areas early Wednesday, panicking thousands of residents who survived last September's killer quakes. Two smaller shocks followed, but no injuries or major damages were reported. Buildings swayed and groaned as the first tremor struck at 1:07 a.m., but none suffered major damage. Electricity and telephone lines serving thousands of people were cut but utility officials said service would be quickly restored.

The first quake, which registered 7.0 on the open-ended Richter scale, lasted for more than one minute, the National University Geophysical Institute said.

A smaller jolt, measuring 5.0 on the Richter scale, followed at 2:10 a.m., and a third came four minutes later, measuring 4.8, the institute reported.

As the ground shook, thousands of Mexicans, many clad only in nightgowns or underwear, fled into the streets.

Police Wednesday reported no injuries or serious damage in Mexico City, and there

were no immediate reports of deaths or major damage in outlying areas.

Later Wednesday, an earthquake measuring 5.9 on the Richter scale jolted a mountainous region in southern Peru, and earth tremors were reported in the northern Chilean town of Arica. No injuries or major damage was reported.

Mexico City was devastated in September by two killer quakes that killed at least 8,000 people, damaged or destroyed 3,000 buildings and leaving 300,000 people homeless. The city of 18 million people was

brought to a standstill for several weeks in the wake of the quake.

The city is still in the midst of a demolition program to tear down buildings damaged in September.

In the capital Wednesday, radio stations urged residents throughout the night to "go back to bed — everything is calm." But many people remained in the streets for hours, afraid to return to their homes.

Jimmy Osmond of Los Angeles, the youngest of the Osmond family entertainers, was staying at the downtown Holiday Inn

Crowne Plaza when the quake struck.

"I ran 18 flights of stairs all the way down to the lobby. Everything was moving and shaking," the still-trembling Osmond said as he stood outside.

Donald Law, of Melbourne, Fla., was on the seventh floor of the Crowne Plaza when the ground shook.

"We left very frightened. We ran through the lobby into the street, thinking all the time of the September earthquakes," Law said.

Experts said it will shake their nuclear power confidence.

File 5/1/86

By GIL KLEIN
and STEVE GOLDBERG
Tribune-Media General Bureau

WASHINGTON — The nuclear power accident near Kiev probably will destroy Premier Mikhail S. Gorbachev's five-year economic plan and cripple the Soviet Union's economy for years to come, experts said Wednesday.

Even without knowing the extent of damage, these experts agreed that it will cost the Soviets billions of dollars. It also will shake Soviet confidence in similar nuclear reactors near other cities, they say, and it will drain the nation's supply of "hard currency" used to buy foreign goods while hobbling efforts to modernize industry.

"This takes care of Gorbachev's five-year plan; that's for sure," said Dr. Joseph Pelzman, a Soviet economics expert at George Washington University and a native of the Ukraine where the accident occurred. "The Ukraine is crucial to agricultural reform, and if you kill off that part of the country, there goes your agricultural reform."

The Soviets plan their economy in five-year increments, and each

five-year plan focuses on a certain segment of the economy to be improved. The current plan took effect in February.

"This five-year plan called for a large investment in machinery, but instead all of the investment money will be going to cleaning up after this accident," said Caron Cooper, a research associate at the Georgetown Center for Strategic and International Studies. "And that means that five or 10 years later, the accident will have a secondary impact because the investment in machinery had not been made."

Cleaning up will cost "at least 100 times" what it cost to clean up

Disaster to cost Soviets billions

See BILLIONS, Page 13A

UFO or Space Work

Satellite Spy Set-Up In Danger?

VANDENBERG AIR FORCE BASE, Calif. (AP) — The U.S. military spy satellite program has been jeopardized by an explosion that destroyed a \$65 million unmanned Titan rocket and its classified payload, experts said as an investigation began Saturday into the cause of the blast.

The big rocket was about 1,000 feet up when it exploded in a fireball that showered the seaside launch pad with flaming debris and spread a huge toxic cloud of rocket propellants over the Santa Barbara County coast.

It was the second failed Titan 34D launch in a row. A rocket carrying a KH-11 spy satellite exploded just after liftoff Aug. 28.

"This will create major problems in the photographic reconnaissance program, in our confidence in monitoring Soviet military activities at a critical time," said Paul Stares, a military expert at the Brookings Institution.

The Titan booster cost \$65 million.

Twisters Thrash Texas City

UFO or Space Work 0.53 4/20/86

SWEETWATER, Texas (AP) — Two tornadoes spawned by fast-moving thunderstorms hit this west Texas city without warning Saturday, killing at least one person, injuring 80 people and causing millions of dollars in damage, authorities said.

Two twisters dipped from the clouds in succession at about 7:30 a.m., came together and cut a swath of destruction a half-mile wide and two miles long, cutting power and some phone lines, said Mayor Rick Rhodes.

It caused extensive damage to businesses and homes and "some of the apartment complexes that were built on the east side of town have been completely destroyed," said Nolan County Sheriff Jim Blackley.

Authorities started "a house-to-house search for possible trapped victims," said Wendell Rehm of the state Department of Public Safety, adding he did not know how many houses were hit.

Public Safety spokesman David Wells said an 87-year-old man was killed in a retirement community, and 80 people had been injured. Rehm said the injured were taken to Rolling Plains Hospital here and to a hospital in Abilene, 47 miles to the east.

"There's debris everywhere. The windows are out, buildings are torn down, houses have some of the roofs off them," said Blackley.

Emergency efforts were hampered by power outages, said sheriff's Depu-



David Shumaker looks at what's left of his home.

ty Marvin Cole. "We are working but we are in the dark. All our phone lines are tied up." The sheriff added that people were warned not to drink the water because the town filtration plant was without power.

The tornado was "a total surprise," Blackley told Associated Press Radio. "I believe as it was going down we re-

ceived a call from the national weather bureau in Abilene, telling us that there was a tornado over Sweetwater.

"But it was already in progress and tearing things up at that time."

An undetermined number of homes were without power in a 12-block area of the city and water service was cut, officials said.

Texas governor promises aid for 1,500 twister victims

Not in Sun Attack
By MEDE NIX *trib- 4/21/86*
United Press International

SWEETWATER, Texas — Standing amid debris that once was a housing project for the elderly, Gov. Mark White on Sunday promised state loans and a plea for federal disaster aid for the estimated 1,500 residents of this West Texas town left homeless by a killer tornado.

"I don't see how anybody could have lived through this," White said. "It's as bad as I've seen."

Two twisters converged just before touching down at about 7 a.m. Saturday, cutting a path two miles long and a half-mile wide through the southeastern section of the

west Texas town of 12,000. No warning was issued of the twister, which the National Weather Service said did not show up on radar.

An 87-year-old man was killed and 92 people were injured, three critically. The five people who were reported missing Saturday had all been accounted for Sunday.

Twisters that struck Hill, McLennan and Limestone counties Saturday night, about 100 miles east of Sweetwater, injured at least nine people. Two remained hospitalized in fair condition Sunday in Waco.

White sent 115 Texas National Guard troops to keep order in Sweetwater, about 215 miles west of Dallas, Saturday night and

flew in Sunday morning to assess the damage.

The governor toured the wreckage for an hour and a half, talking to survivors who were picking through the rubble.

The governor promised to seek federal disaster aid for the area and said the county already had been approved for state housing loans, the processing of which would be accelerated.

He made a stop at Sun Village, the housing project for the elderly, where Henry Earl Tatom was killed and 124 residents, ranging in age from 65 to 96, had lived.

"We easily could have seen 100 to 150 lives lost," White said.

Kathleen Lewis, director of the housing

project, said few of the elderly had returned to their apartments Sunday.

"Most are with their families today," she said. "They aren't out here because the shock has been pretty hard on them."

About 600 homes were damaged by the twister, more than half of those demolished, said Mayor Rick Rhodes. None of the units in the housing project was livable.

While most of the streets had been cleared by Sunday and scattered debris picked up, there were still cars protruding from homes and a trash dumpster in the middle of one house that had lost its roof.

On one roofless home someone had painted in large red letters, "House for Sale Cheap!"

Rhodes gave a rough damage estimate of \$15 million to \$20 million and said the tornado had damaged about one-sixth of the city, hitting hardest lower to lower-middle class residential areas.

"Today, reality has finally hit, and we see what a devastating blow it really was," Rhodes said. "This is an economically depressed area anyway, with oil and farming. We had a lot of people unemployed anyway. This is the worst disaster ever in our town."

At Broadway Baptist Church, one of two churches used as shelters Saturday, few people attended services, opting instead to help with a barbecue for the homeless, National Guardsmen, DPS troopers and other workers.

'One bad squirrel' terrorizes community

UFO - Sun Attack Trib 4/13/86
LA PUENTE, Calif. (UPI) — A possibly rabid squirrel terrorized a quiet neighborhood for three days, biting four women, charging a firefighter and holding a pit bull at bay before it was captured and died.

The rodent was subdued Friday after a wild 10-minute chase by several firefighters, a sheriff's deputy, and an animal control officer, Deputy Roxanna Schuchman said. "He was one bad squirrel."

The attacks began Wednesday, when the rodent jumped on a 65-year-old woman and bit her on both arms as she hung out washing in her back yard, Schuchman said. Thursday, the squirrel reappeared, biting

an 18-year-old woman on the finger and then biting the woman's mother.

Friday morning, the chase ended after the squirrel bit a 54-year-old woman. Officials captured the beast, which later died. A necropsy was slated for evidence of rabies.

UFO 2 Sun Attack on SB 4/21/86

National Guard Patrols Streets Of Texas Town Hit By Twister

SWEETWATER, Texas (AP) — National Guard troops patrolled today against looters after tornadoes carved a two-mile-long, half-mile-wide swath through this west Texas town, killing one person, injuring about 100 others and leaving 1,500 people homeless.

Despite the destruction, estimated at up to \$20 million, officials said the human toll could have been much worse.

"After I saw the extent of the damage, I thought we'd have many more injuries and certainly more deaths," City Manager David Maddox said. "It was luck. It was a miracle."

As National Guardsmen patrolled the streets early today to watch for looting, volunteers and Salvation Army workers served more than 2,000 meals to people left homeless by the disaster, said Dewey Alderson, public relations director for the Salvation Army's Texas division.

"Sweetwater is still in a mess. People are cleaning up but it will be a long time," he said. "People are sifting through the debris by hand. That's all that is left from some of these trailer homes."

The National Weather Service said two tornadoes smashed into the southern part of the city of 12,000 early Saturday after merging in the air.

Mayor Rick Rhodes estimated property damage at between \$15 million and \$20 million and said about 100 people were injured.

Trb 4/20/86

Power and telephone lines were knocked out, but most of the power had been restored by noon.

All available emergency personnel from surrounding counties and cities were sent to Sweetwater and hospitals in Abilene were put on alert.

A spokeswoman for Hendrick Hospital said 13 people were transferred there, including a 10-month-old girl in serious condition, a 6-year-old boy in critical condition, and two young women who suffered critical head injuries. Three others were in the critical care unit for head or internal injuries.

A second tornado touched down just before 1 p.m. EST in Roscoe, about eight miles west of Sweetwater, destroying three barns and four farmhouses, a Roscoe fire department dispatcher said. The homes were occupied but no one was injured, he said.

A short time later, a third twister struck in Palo Pinto County, more than 100 miles northeast of Sweetwater. Authorities confirmed the tornado touched down but no damage or injuries were reported.

Storms in Mississippi Valley swell South Dakota, Iowa rivers

UFO 2 Sun Attack on SB 4/21/86

Tribune Staff and Wires

Thunderstorms that spawned killer tornadoes in the Plains rumbled into the Mississippi Valley Sunday with relentless downpours that swelled South Dakota and Iowa rivers and prompted flash flood warnings.

Flood warnings were posted for the James River, north of Huron, S.D. The river rose to nearly 14 feet in Columbia, 3 feet above flood stage, and Columbia, Stratford and Ashton braced for possible flooding.

A cluster of thunderstorms producing heavy rain in northwest Missouri pushed over southwest Iowa Sunday, prompting officials in five counties to go on alert for possible flooding.

The Great Lakes region basked in sunshine and balmy temperatures. In Marquette, Mich., which set a record low of 11 degrees last Tuesday, the temperature soared to 77, breaking the previous record of 74 set in 1970.

Great weather also continues in the Tampa Bay area.

Today the National Weather Service is predicting mostly sunny and warm, with a high in the mid to upper 80s and an overnight low in the low 60s. Expect west winds at 10 mph.

"It looks like it's going to continue mostly sunny and dry" the rest of the week, said meteorologist Chuck Eggleton. He said the upper 80s are a bit higher than normal and the low 60s are slightly lower than usual temperatures for this time.

Meanwhile, severe thunderstorm watches were posted for parts of Texas and Oklahoma, and forecasters warned of the possibility of tornadoes like those that struck Iowa, South Dakota and Minnesota Saturday.

The tornadoes flattened homes and barns, downed power lines and killed a 4-year-old girl.

Spring snowstorm is creating 'three-ring circus' in Wyoming

Tribune Staff and Wires

A dangerous spring snowstorm plunged temperatures into the teens, drifted snow up to 6 feet and created blizzard conditions in Wyoming and Montana Sunday as the Dakotas braced for the oncoming storm.

The snowstorm dumped a foot of new snow at the Alta and Snowbird ski resorts in Utah, and winds gusting to 75 mph knocked down trees and some power lines.

The gusting winds and cold temperatures made for dangerous conditions in Montana and Wyoming, said meteorologist Bill Barlow.

"It is unusual to be this cold and have this large a snow in mid-April," Barlow said, adding that travelers' advisories were posted throughout both states and in the Dakotas.

The storm closed the northbound lane of Interstate 25 between Buffalo and Kaycee, Wyo., officials said, creating a "three-ring circus" of confusion because of stranded motorists

and truckers at the Parkway Plaza Truck Stop in Buffalo, said Jan Carlson.

No serious accidents were reported, State Highway Patrol officials said.

Drifts up to 6 feet were reported in Wyoming and Montana, Barlow said.

In Tampa, today's weather should be mostly sunny and warm with high temperatures in the low to mid-80s, according to the National Weather Service. East winds are expected at up to 10 mph.

Tonight, the forecast calls for continued fair weather with lows in the low to mid-60s. Expect Tuesday's high temperature to reach the mid-80s.

There is a chance of showers Wednesday. The extended forecast calls for partly cloudy and slightly cooler weather Thursday and fair weather Friday, meteorologist Jim Lebda said.

Experts predict stormy return of El Nino in '86

WFO Sun Attack Trib 4/14/86

If history repeats itself, the Southeast will have spells of cool and soggy weather. Gulf states will get rainstorms in the winter.

By ALAN SVERDLIK
Tribune Staff Writer

MIAMI — El Nino is coming. The Pacific Ocean phenomenon that disrupts the world's weather for a year or longer is almost certain to strike in 1986, cooling off the southeastern United States and keeping hurricanes to a minimum, meteorologists predict.

"Everybody remembers the El Nino of 1982-83 because it was so powerful and dominant," notes Eugene Rasmusson, the National Weather Service's resident expert on the phenomenon.

"Most of them tend to be more benign than that, but the timing, intensity and global impact are very hard to predict."

About every four years or so, ocean temperatures off the South American coast climb to abnormal levels. Believed to be the curtain raiser for the mischievous El Nino, these warm currents appear to be forming today in the waters off Peru, scientists report.

And for reasons unknown to forecasters, the hot spots in the South Pacific can affect the weather continents away.

El Nino's last appearance touched off a series of climactic events that left 1,000 dead.

Parts of Africa and Asia suffered devastating droughts while heavy storms struck California. The tropical storm season produced few big blows in the Atlantic in either 1982 or 1983, but a band of typhoons assaulted Tahiti both years.

"It was probably the most severe El Nino we've seen in the last 100 years," says Rasmusson, an official with the weather service's Climate Analysis Center.

Meteorologists anticipate milder and less sustained effects from the

upcoming episode.

- If historic patterns persist, the Southeast will experience spells of cool and soggy weather. Rainstorms will plague the Gulf states in the winter months. The West Coast will get hit hard either by storms or drought.

- The hurricane season — June 1 to Nov. 30 — spawns much fewer storms in the Atlantic during the periodic warming of the seas off Peru and Ecuador. The number of hurricanes drops 40 percent below the seasonal average.

"There have been 16 strong and moderate El Ninos in this century," says William Gray, a professor of atmospheric sciences at Colorado State University. "In a statistical sense, they all have reduced hurricane activity."

Some experts believe the lull in tropical storms induced by El Nino usually precedes an active — if not devastating — hurricane season. They point to Hurricanes Donna and Audrey, which caused staggering losses after the climate in the tropical Pacific returned to normal. The potent El Nino of 1982 is believed to have suppressed storm formation for two seasons, after which hurricanes came in bunches.

The forecasters at the National Hurricane Center in Coral Gables credit El Nino with inhibiting storm development but won't say what may happen when the phenomenon subsides.

"That relationship between El Nino and hurricanes has not been tied down yet," insists forecaster Miles Lawrence.

Such debates over the scope of El Nino have persisted since scientists first linked unusual weather around the world to shifts in Pacific

See EL NINO, Page 6B

4/24/86
WFO Sun Attack

Record shivers

Bay area residents felt a record nip in the air, but up North, cold wreaked havoc.

Tribune Staff and Wires

Late-season coolness brought a chilly overnight low of 51 Wednesday at Tampa International Airport, breaking the previous record of 53.

It was 1950 the last time Tampa Bay area temperatures fell low enough to set a record on April 23, the National Weather Service said.

Forecasters had thought temperatures — cooled off further by winds — might dip below historic lows.

The rest of the eastern United States also shivered Wednesday as arctic air shattered century-old temperature records from the Great Lakes to the southern tip of the Sunshine State, forecasters said.

Don McGlynn, a weather service specialist who works out of the agency's Ruskin office, said the Bay area's sunny but nippy weather would continue today, marked by mid-70s temperatures in the afternoon and a cool but not unusually chilly evening.

A warming trend should be evident by Friday, with highs near 80 and lows about 60. Saturday and Sunday should be about the same, with no prediction of rain for the entire weekend.

Up North, the cold wreaked havoc, causing up to \$25 million damage to tender young fruit crops in Ohio and dumping up to 2 feet of snow in places.

Schools were closed in parts of New York state, and snow and slush sent many vehicles skidding off highways there and in parts of northeastern Pennsylvania where snowplows had been put away for the season.

"Drive as if it was midwinter," the National Weather Service in Albany, N.Y., warned as the snowfall in parts of the state mounted well past the forecast of just a few inches to as much as 2 feet.

Orchard owners hired helicopters, fired up blowers and smudge pots and sprayed water to protect their crops.

But Richard Funt of Ohio's Coop-

13 states chilled by record lows; ice, slush blamed for 2 deaths

UFO's Sun Attack
Associated Press
Trib 4/23/86

- Cool in Bay area — 1B

Temperatures dropped to record lows in 13 states Tuesday from the Great Lakes to the Gulf Coast, leaving Montana warmer than Alabama, and two traffic deaths were blamed on ice- or slush-covered roads.

Snow fell over parts of Michigan, the upper Ohio Valley and the central Appalachians. An inch of snow fell overnight at Flint, Mich., Alpena, Mich., Pittsburgh, and parts of north-central Ohio, the National Weather Service said.

Two people were killed in separate traffic accidents on icy or slush-covered roads in Michigan.

By afternoon, unseasonably cold air covered most of the eastern half of the nation, except for the southern Atlantic Coast states and the coast of New England.

Morning lows were only in the teens over parts of Wisconsin, north-eastern Minnesota and Upper Michi-

gan and in the 30s and 40s across the Tennessee Valley and the central Gulf Coast.

Behind the high pressure system pulling the cold air down from Canada, mild southerly wind gave parts of central and eastern Montana lows in the 50s. Billings, Mont., had a low of 55 while Mobile, Ala., dipped to a record 43 degrees.

A record that had stood since 1873 fell at Chicago with a low of 24, five degrees below the former mark.

Duluth, Minn., hit a record low of 18, Eau Claire, Wis., had a record low 19, and Marquette, Mich., bottomed out at a record 14.

In the Gulf states, records for Tuesday's date were set at Birmingham, Ala., at 36 degrees; Lake Charles, La., at 49; Meridian, Miss., at 37 and Montgomery, Ala., at 40.

Other states with record lows set or tied were Iowa, Ohio, Missouri, Indiana, Nebraska and Kansas.

Wintry storm chills East, dumps surprise snow on Appalachians

UFO's Sun Attack
United Press International
4/14/86 Trib

A wintry storm, chilled spring fever in the East on Thursday, blanketing the Appalachians with up to a foot of record-breaking snow and pushing temperatures into the 30s as far south as Florida.

Snow and cold temperatures stretched from the Great Lakes across the central Appalachians into northern New England, the National Weather Service said.

The snowstorm dumped 12 inches of snow on Terra Alta in the northern mountains of West Virginia. Beth Colville, sales director at Alpine Lake Resort, said the snow shocked residents, who were enjoying an unseasonably warm spring.

"It really changed all of our moods. Everyone here had a serious case of spring fever," she said.

Elkins, W.Va., which received nearly 8 inches, shattered its seasonal snowfall with a total of 114.1 inches, breaking the previous record of 107.7 set during the 1970-71 season.

Dailey measured 11 inches of snow, and up to 8 inches fell at Snowshoe. Two to 3 inches of snow fell during the night in western Pennsylvania. Travelers' advisories were posted for most of the area.

Temperatures were unseasonably cold overnight across the eastern third of the nation. It was warmer in parts of the northern Plains than it was in the Southeast. The low temperature of 41 degrees at Boise, Idaho, topped a low of 35 at Tallahassee, Fla.

Temperatures dropped to freezing or below throughout the Great Lakes. It was 25 degrees in Hibbing, Minn., and 27 at Escanaba, Mich.

"Most of the nation will have calm, cooler weather," said Harry Gordon, weather service meteorologist. "It's just a general cooling trend from the unseasonably warm weather we saw last week."

"It's just nature's way of trying to return to normal."

Trib 4/16/86 (I told Beau two days ago.) Breeding More Vengeance

An editorial from The Los Angeles Times:
Was the attack on Libya a victory over terrorism? Or did American bombs spilling from F-111 fighter-bombers over Tripoli blow open a Pandora's box of terrorism that will make Europe, and perhaps America, yearn for quieter times? The answers may come slowly, but they will come.

The West would shed no tears over the fall of Moammar Khadafy, nor would Arab governments that live even closer to the psychotic tyrant. But will the shadowy, hit-men of Middle Eastern terrorism, not always given to following the rules even of their own governments, shed blood over an attack on him?

That is the chance that President Reagan took Monday. He said that he had no illusions that the attack would put an end to terrorism, only a hope that it would be a step toward a safer world.

He and Secretary of State George P. Shultz made their case as simply as it could be made. Doing nothing was no deterrent to Khadafy, and doing nothing seemed worse than doing something.

If the president was right, Europe can go back to the "painstaking police work" that the U.S. State Department's anti-terrorist chief, Robert B. Oakley, said recently had proved could "pay off, even if it provides no instant answers."

Recent history provides no assurance that it will be that easy. It says instead that vengeance breeds vengeance. Terrorism stems from the kinds of dark roots that lead to random shootings on European streets to force governments to release other terrorists from jail.

Meantime, the decision has been made, the act is done. There is nothing for us, or any Americans, to do but hope that the cycle of terror can be broken with a single, complicated sortie of high-tech aircraft. History, unfortunately, provides no assurance that those hopes will be fulfilled.

UFO's Sun Attack 0.5B 4/23/86 Brazilian Mudslides, Floods Leave 11 Killed, Two Missing

RIO DE JANEIRO, Brazil (AP) — At least 11 people have been killed and two children are missing in mudslides and flooding caused by 36 hours of torrential rains in northeast Brazil, police say.

Sgt. Joao Evangelista Gomes said Tuesday that floods and mudslides hit the towns of Mombaca, Procoto and Cavalos in a remote section of Pernambuco state. Forecasters said more rain was expected.

"Eleven bodies have been buried so far, and rescue workers are looking for two children who are missing," Gomes said in a telephone interview from Civil Defense headquarters in Recife, 1500 miles northeast of Rio de Janeiro.

Texas Storms Kill 2, Snow Threatens West

UFO 2 Sun Attack + Texas PK
By The Associated Press
0.5B 4/18/86

Fast-moving thunderstorms that killed two people whipped parts of Texas and Louisiana with high wind, hail as big as softballs, tornadoes and heavy rain during the night, and a snow storm developed Saturday over Montana.

Thunderstorms also blew across parts of Mississippi and Arkansas. Travelers' advisories were issued for the mountains of the Northwest, and snow also fell over parts of North Dakota and Maine.

High wind from the thunderstorms downed trees and power lines in Dallas and in northeastern Texas late Friday and early Saturday, and rain flooded freeway underpasses, causing numerous accidents, authorities said.

A 14-year-old girl was killed when a tree fell on her mobile home east of Kilgore, Texas, said Rusk County sheriff's dispatcher Elaine Mitchell.

Another person was killed when his single-engine plane went out of control during a hailstorm and crashed on a residential driveway early Saturday in the Dallas suburb of Addison, said police Lt. John Sullivan.

Air traffic controllers in Fort Worth reported that the last radio message from the pilot was that hail had broken out his windshield, said Justice of the Peace Kenneth

Bangs.

Residents didn't know a plane had crashed because "there was so much thunder and lightning," Bangs said.

Hail as big as softballs bombed Oak Cliff, near Dallas, and baseball-sized hailstones fell at Denton.

Wind tore the roof off a store in downtown Kilgore, overturned mobile homes and caused a fire in one mobile home.

Parts of Dallas County got 1.94 inches of rain in 45 minutes during the morning, the National Weather Service said.

The thunderstorms spawned a few tornadoes early Saturday in northern Louisiana, including one that destroyed a couple mobile homes and injured three people in Franklin Parish. And wind gusting to 60 mph blew out windows at St. Joseph.

"We had some turbulent weather come through our parish," said J.W. Dean, Franklin Parish assistant coordinator for Emergency Preparedness.

"At one time the ground around the courthouse here (Winnsboro) was completely covered by the hail," he said.

Dean said downed trees knocked out power for a time in parts of the parish, but most service was restored before dawn.

1986

Cold Snap Damage Is Surveyed

UFO 2 Sun Attack
0.5B 4/25/86
By The Associated Press

From the potato fields of Alabama to the apple orchards of Michigan, farmers and agriculture officials who went out to see the results of the week's record cold snap say prospective harvests have been cut by up to 90 percent.

"The heart's killed. It's dead," said Bob MacQueen as he toured his 200-acre apple orchard in Holland, Ohio, on Thursday. "This was a real record. In '56 was the last time it was that severe."

He estimated the freeze, which broke records in 14 states early Wednesday from the Gulf of Mexico to the Great Lakes and continued to chill much of the region Thursday, killed half the buds on his trees. He put his losses at \$250,000 to \$300,000.

Richard Funt of the Ohio Extension Service said Wednesday that the damage statewide could reach \$20 million to \$25 million, while officials in Michigan estimated that a quarter of the state's apple crop was damaged. Officials in Indiana, Kentucky and other states were still counting their losses.

In northern Alabama, farm experts said the cold would result in smaller potatoes, making each pound that farmers grow worth only a fraction of the value of full-sized spuds.

Red Delicious apples in five southwestern Michigan counties, which make up about 25 percent of the state's crop, were "pretty well cleaned out," said Mike Thomas, of the Michigan State University Cooperative Extension Service.

Later-blooming varieties of apples "still have good potential," he said.

Thomas also estimated that only about 60 percent of the region's tart cherry crop would come in.

UFO 2 Sun Attack 0.5B 4/23/86

Storm Hits Southwestern Idaho, Levels Some 1,500 Acres Of Trees

BOISE, Idaho (AP) — A storm ripped through two southwestern Idaho counties Tuesday evening, with wind gusts to 58 mph and possible tornadoes that leveled up to 1,500 acres of trees, threw a mobile home 60 feet and left 10,000 people without electricity, authorities said.

Two minor injuries were reported in connection with the storm that hit Boise and Ada counties before blowing itself out in the Boise National Forest, authorities said.

An apparent tornado was spotted on radar at Mountain Home Air Force Base southeast of Boise, said National Weather Service spokesman Gerry Burdwell, and Boise County Sheriff's Deputy Chuck Richards said another may have hit the Lowman area northeast of Boise in the national forest.

U.S. Forest Service Ranger Charlie Vaughn estimated Tuesday night that up to 1,500 acres of trees were snapped in the forest, but that an aerial survey would be made Wednesday, Richards said.

Cold

• From Page 1A

ervative Extension Service estimated the monetary loss to the state's apple and grape crops at \$20 million to \$25 million. He said Ohio's apple crop usually ranks seventh or eighth largest in the nation.

In Ohio's Licking County, Mitch Lynd said he hired four helicopters at \$350 an hour each to push warm air down on his 50,000 apple trees on 530 acres, but said it would be worth it if he could raise the temperature just three or four degrees.

In Athens County in southeastern Ohio, Extension Agent Bill Twarogowski said fruit growers may have lost as much as 90 percent of their crops.

In Indiana, "We would expect extensive damage," said Richard Hayden, a fruit expert at Purdue University.

Some farmers may have used smudge pots to save their crop but the rising cost of oil has all but eliminated that as a viable option to most growers, Hayden said.

Grower George Adrian of Indianapolis had relatives, employees and friends work through the night filling about 500 five-gallon burners with oil. But, he noted, the oil was left over from 1976 and said if they hadn't had it, "We would have sat back and just taken the loss."

The two days of record cold may have killed any chance of bumper crops this summer in the heart of Michigan's fruit belt, said Mike Thomas, a state district horticultural agent.

"I anticipate upwards of 90 percent grape damage," said grower

Dwight Brown of Lawton, Mich. "We had some tart cherries in blossom and I assume it destroyed them. Sweet cherries also were in bloom and it appears they are gone, too."

For the second day in a row, low temperature records for the date were tied or broken at more than 50 cities in 14 states from Michigan to Florida, the Weather Service said.

Many cities had their coldest readings on record for so late in the season, including the latest freezing temperature on record at Birmingham, Ala., which hit 30 degrees.

Tallahassee dropped to a record 35 degrees, and Miami chilled to a record 57.

Chicago's low of 25 tied a record on the books since 1873. The lows of 23 at Cincinnati and Detroit broke records which had stood since 1875. The low of 34 at Macon, Ga., cut a full 7 degrees off the former record, set in 1903.

To the west of the cold air mass, mild temperatures were common across the Plains, and the low at Minot, N.D., was 56 degrees.

Heavy snow fell overnight in the mountains of southern New York state and northeastern Pennsylvania. Eldred, N.Y., in the Catskills near the Pennsylvania border, got two feet and 18 inches fell at Promised Land State Park near Greentown, Pa., in the Poconos, with 19 inches at Slide Mountain. The New York State Thruway east of Utica was closed for an hour by jackknifed tractor-trailer rigs.

Light snow and snow mixed with rain fell as far south as the Virginias and Washington, D.C. New York City had persistent heavy flurries into the afternoon, but the flakes melted as they fell in the city.

30s In Midwest Spawn Twisters

By The Associated Press

A cold front across the nation's midsection dropped temperatures into the 30s and 40s early today after sending sometimes-violent storms through an area from Texas to Wisconsin.

Damage was reported in Texas, Minnesota and Nebraska, but no injuries were reported from the Sunday storms, which came a day after a 4-year-old girl was killed and seven people were injured, one critically, from tornadoes in Iowa and Minnesota.

Authorities in Cass County, Texas, near the Arkansas border, reported high winds blew the roof off one house and damaged two or three others Sunday evening.

In Nebraska, thunderstorms spread through the eastern part of the state Sunday night, downing power lines, breaking windows and damaging trees in Omaha. Heavy rain and wind gusts up to 45 mph were reported from Omaha to Nebraska City, while gusts of up to 61 mph were reported at Topeka, Kan.

The National Weather Service said tornadoes were seen Sunday near Cleveland, Texas, and Clear Lake, Minn., but no damage was reported in Texas and only minor damage in Minnesota. In Madison County, in south central Texas, flooding was reported late Sunday on a state highway.

In Minneapolis and St. Paul, Minn., more than an inch of rain fell in a half hour Sunday, flooding a part of Interstate 94 and bringing traffic to a standstill.

During the heaviest rain, planes were diverted into holding patterns away from Minneapolis-St. Paul

New rain clouds menace Bangkok

BANGKOK, Thailand — New rain clouds menaced Bangkok Saturday after the worst 24-hour downpour in 1,000 years flooded the city, killing nine people, leaving dozens of fishermen missing and causing widespread property damage.

A steady rain caused by a freak tropical depression began Thursday and continued until Saturday afternoon. A total of 15.2 inches of rain fell between Thursday and Friday.

Meteorologists warned that more rain could fall today and Monday throughout Thailand.

Bassett firm is focus of bankruptcy hearing

Tampa Bay Bandits PK
By JEFF SMITH 4/29/86
Tribune Business Writer *trib*

A hearing is scheduled in U.S. Bankruptcy Court today to determine whether John Bassett Enterprises Inc. will be forced into involuntary bankruptcy.

The corporation is owned by former Tampa Bay Bandits owner John Bassett, who is undergoing treatment for two brain tumors and has been unable to run his day-to-day business ventures.

Bankruptcy Judge Alexander Paskay said late Monday that he froze payment of an \$800,000 check until creditors of Bassett Enterprises and the corporation itself can present their evidence on the matter.

Paskay said the check from Bas-

north Hillsborough County. The check was sent to Bassett late last week, said Moore-Taggart partner Joseph Taggart on Monday.

Paskay said he disallowed payment of the check during an emergency hearing Monday, but also said he would not permit the involuntary bankruptcy until a formal hearing could be held.

"They (Bassett Enterprises) have the right to fight it," he said.

Saying the issue is unresolved, Paskay said the company had not been properly served on the involuntary bankruptcy.

"We bought him out," said Taggart when asked about the check that was sent to Bassett. Taggart said Bassett had been ill and wanted to sell his ownership in the park. The

check represented payment for that interest, Taggart said.

In addition to his former ownership in the Bandits, Bassett has been involved in a number of real estate transactions, including a major project in the Bradenton-Sarasota area. He has been selling off several of his interests in recent months.

Company official Ralph Campbell, who handles much of Bassett's holdings, declined to comment late Monday.

Bassett has suffered from two brain tumors and has been involved in treatment for them. He has divorced himself from the daily business operations, with Campbell handling most of them. Bassett sold his interest in the Bandits to a group, including architect Lee Scarfone.

sett's former real estate partners was made payable to Bassett Enterprises, but was endorsed over to a Canadian bank.

Three Florida banks — First Florida Banks Inc., Florida National Banks of Florida Inc. and Regency Bank of Florida — sought to force the involuntary Chapter 7 bankruptcy, Paskay said.

In an involuntary bankruptcy, creditors attempt to force the company into liquidation in order to receive money from the sale of its assets.

A partner in Moore-Taggart Properties Inc. said the check represented a payment to Bassett to buy out his interest in Hidden River Properties Inc., whose major asset is a high-technology park planned in

Bassett dies

John Bassett, the man behind the Bandits in their most admired days, died of cancer in a Toronto hospital. *Bandits PK 5/15/86*

By TOM McEWEN
Tribune Sports Editor

Visionary John Bassett, vibrant John Bassett, a founder of the United States Football League and master-planner of the Tampa Bay Bandits as they were in their most admired days, died Wednesday.

The end of his life of 47 years and four months came shortly after noon in a Toronto hospital.

It came a year-and-a-half after two brain tumors were detected and the fight for life began — again. Previously he had overcome, for a time anyway, melanoma, the black mole cancer which appeared on his back.

Traditional, then radical treatment, including heated chemotherapy, followed. One tumor disappeared, he said months ago, then the other, the deeper one, was reduced to a speck.

Bassett, an optimist and a competitor all of his years, felt he was recovering and came to his Sarasota Players' condo in March to escape the Canadian cold and convalesce.

A kidney infection surfaced. It worsened, so he was flown in an emergency condition back to Toronto. He was in a serious condition that grew critical. Pneumonia last Monday joined the other infections in a body weakened by the medications used to fight the tumors.

When David Gershenson, the agent of Bassett's friend and former Bandits partner Burt Reynolds, called the hospital Tuesday on behalf of the actor-partner, Bassett was leaving intensive care.

Wave Of Twisters Tear Up Midwest

Thousands Left Powerless

By The Associated Press

Paramedics, police and firefighters scoured through wrecked communities in Missouri today, one of five states hit by tornadoes and high winds that killed one man, destroyed an apartment building and hammered barns and homes, leaving dozens homeless, authorities said.

The twisters Thursday night downed power and phone lines in towns in Indiana, Illinois, Missouri, Michigan and Ohio.

In Missouri, the twisters brought widespread damage to six counties.

Scott County Sheriff Bill Ferrell said the most extensive damage appeared to be in a mobile home park and business area in the southern and eastern sections of Sikeston, and in Vanduser, a town of 320 people about 10 miles to the northwest.

The east side of Vanduser was "just about wiped out," Ferrell said, and an elderly man there was killed. The victim's name was being withheld pending notification of relatives.

Ferrell said more than 100 homes and many

businesses appeared to have been damaged and about 30 people in Vanduser suffered cuts and bruises. At least two required hospitalization, he said.

The tornado caused extensive damage and numerous injuries in Sikeston, a city of 17,000, authorities said.

Hospital officials in Sikeston were asking hospitals in Cape Girardeau to send blood, said Martha Vandivort, an emergency preparedness official. Authorities in Cape Girardeau reported that many roads in the town were under water because of flooding caused by the storms.

Twisters also caused damage in Miner, a small town just east of Sikeston, and in Coldwater, about 35 miles to the northwest in Wayne County.

In Evansville, Ind., 26 residents of the Shamrock Apartments were taken to an emergency shelter after a twister smashed into their building.

"I was trying to look for the funnel cloud coming, and then it just hit the building and that was the end," said resident Dora Simpson.

Michael Roe, 22, who saw the tornado as it struck, said, "It started moving in a circle, with all the dust and debris in the center, just like in 'The Wizard of Oz.'"

As violent thunderstorms hammered southwest Indiana, See Twisters on page 10A

Continued from page 1A

diana, amateur radio operators and state police reported several tornadoes in and around Evansville, and a couple of twisters in Washington in Daviess County nearly 40 miles to the north, said Craig Carpenter of the National Weather Service.

Three adults and a 22-month child suffered minor injuries when a tornado ripped through Point Township in Posey County, destroying several mobile homes, said county jailor Gene Pate. The injured were taken to an Evansville hospital.

Another tornado touched down in the Posey County community of St. Phillips, causing an estimated \$3.5 million in property damage, Pate said.

The storm also tore the roof off one home and blew down several trees in Blairsville, Pate said.

In Illinois, tornadoes hit in several counties, causing damage but no serious injuries, authorities said.

Maurice Johnson, chief of police in Charleston, said perhaps a dozen homes were damaged by a tornado that touched down Thursday night.

In northern Illinois, a tornado touched down twice near Dixon, slightly injuring a farmer and destroying two barns and roof, officials said.

"It came right down out of nowhere," said Lee County Civil Defense Director Chuck Randall. "We didn't even have any severe thunderstorm warnings at the time, let alone a tornado watch. It was raining, but that was all."

Farmer James Carrington, 57, suffered facial cuts from flying debris, said a nursing supervisor at Katherine Shaw Bethea Hospital. He was treated and released.

Twisters also destroyed a mobile home and houses in Edgar and Coles counties.

Two homes were leveled and a car dealership and several homes were heavily damaged when a tornado touched down in Coldwater, Mich., said Sheriff Norman Heinemann.

"No one was injured as far as we know," Heinemann said shortly after touring the area. "People are starting to clean up their yards and get over the shock."

Authorities cordoned off the damaged area and called in reserve officers to prevent looting.

WFO's Sun Attack Hurricanes' costs fueled by growth

5/5/86
ORLANDO (UPI) — There is no way to forecast how severe the coming hurricane season will be, but unwise coastal development made the 1985 season the costliest in U.S. history, the director of the National Hurricane Center said Saturday.

"1985 is going to go down in history as the year that hurricanes returned to the United States," Neil Frank said. "It was an awesome year: eight named storms crossed our coastline, and of these four were significant as far as dollar damage is concerned."

"The four significant storms caused \$4 billion worth of damage," Frank said. "The last time we had eight named storms cross the coastline was 1916. Then there was \$33 million worth of damage," Frank said.

He discounted inflation as a major factor in the damage figure, saying, "I don't think this represents inflation. I think this represents exposure. The difference between having \$33 million worth of damage and having \$4 billion is the whole question of exposure."

Speaking at a joint convention of UPI Broadcasters and the Radio-Television-News Directors Association one month from the start of the 1986 hurricane season, Frank imagined what nature might have said at the beginning of last summer.

"Human beings and citizens of the United States, I have allowed you to develop my coastline. But enough is enough. You've abused the privilege. How much? I'm going to show you."

"I'm going to bring a few hurricanes by your coast this year. Now none of them are particularly threatening for life, but each one in its own right is capable of causing some damage."

"And it's going to illustrate for you just how inadequate you are to post the kind of lead times you need in your warnings if indeed you are going to get everyone back to the safety of the inland areas."

Frank said he is excited about the hurricane evacuation programs that have been developed in recent years, but he said there remain many uncertainties in predicting a storm's movement.

"When we have that meteorological surprise, we are not going to have that lead time we need," he said.

WFO's Sun Attack South parched

trib 5/8/86
Many farmers, already struggling, may be ruined by the devastating drought.

By DAVID SIMPSON
Associated Press

ATLANTA — Farmers who have weathered low prices and tight credit may not be able to sweat out this planting season, the driest ever recorded in parts of the South.

"Everybody is hurting. But for some of our farmers, the hope of hanging on for another year is about gone," said John Dorrill, executive director of the Alabama Farm Bureau Federation.

Georgia Agriculture Commissioner Tommy Irvin said even federal aid could not stave off disaster for some drought-ridden farmers.

"More disaster loans are not really going to solve our problems because low-interest loans do not help a man when he's already deeply in debt," Irvin said.

"What we really need is four or five days of rain."

The National Weather Service is offering little hope of that, with long-range outlooks for the area predicting no better than average rainfall.

"Late this winter and during the spring, we have not had the (weather) systems develop in the Southeast that circulate the Gulf moisture ... and the Atlantic moisture that we usually get," forecaster Claude Hall said Wednesday.

Instead, the South has been getting dry air from the Plains or has been under high-pressure systems that have kept out all other weather, he said.

The first four months of the year

See DROUGHT, Page 11A

2nd Quake in 5 Days Rattles Mexico Area

WFO's Sun Attack 5/5/86
GOLDEN, Colo. (AP) — An earthquake capable of causing considerable damage shook an area about 250 miles southwest of Mexico City late Sunday, the second tremor to hit the area in five days, U.S. officials said.

There were no immediate reports of damage or injuries.

The quake, which measured 5.4 on the Richter scale of ground movement, struck the south coast of Mexico at 1:47 a.m. Ocala time, said John Munsch, a geophysicist with the National Earthquake Information Center, part of the U.S. Geological Survey. The Red Cross in Mexico City said it immediately

mobilized its security network but found no damage or injury.

Some people in the Condessa district of the capital ran into the streets after the quake struck, but many people apparently didn't feel it elsewhere.

A quake measuring 7.0 on the Richter scale struck the area on April 30, causing minor damage in the Mexico City area.

In September 1985 a quake measuring 8.5 on the Richter scale killed 8,000 people and caused extensive damage in the Mexico City area.

The Richter scale is a measure of ground motion as recorded on seismographs.

Every increase of one number means a tenfold increase in magnitude. Thus a reading of 7.5 reflects an earthquake 10 times stronger than one of 6.5.

An earthquake of 3.5 on the Richter scale can cause slight damage in the local area, 4 moderate damage, 5 considerable damage, 6 severe damage. A 7 reading is a "major" earthquake, capable of widespread heavy damage; 8 is a "great" quake, capable of tremendous damage.

The San Francisco earthquake of 1906, which occurred before the Richter scale was devised, has been estimated at 8.3 on the Richter scale.

Wildfires spread across 6 states

UFOs Sun Attack

United Press International

File 5/8/86

Wildfires fed by tinder-dry forests and spread by 60 mph winds destroyed more than 30,000 acres in six states, authorities said Wednesday. Hundreds of firefighters battled blazes that destroyed 10 homes in Michigan.

Fires ravaged forests and grasslands in Michigan, Virginia, Pennsylvania, Wisconsin and New Jersey, and the biggest blaze struck North Carolina. Fire raged over 16,000 acres in eastern North Carolina swamps and woods.

"Every time we try to get this thing contained the wind shifts," Holly Ridge Police Chief Bob Rielly said of the North Carolina fire. "I believe if we don't get rain it probably will not be contained. Organic peat is burning and will continue to burn for weeks unless it rains."

"We had crews out here all night and they were able to contain some areas," state Forestry Division

spokesman Joe Hogue said.

One firefighter died of a heart attack while trying to free a mired tractor in North Carolina.

In the Upper Peninsula of Michigan, fires destroyed 8,000 acres of timberland and several resort homes before firefighters got the blazes under control. Authorities said the fires may have been ignited by wind-snapped power lines.

Nearly 200 homes had to be evacuated in the areas around Sawyer Air Force Base and the town of Ishpeming.

Michigan state police said the fires gutted 10 homes, mostly summer cottages.

In Virginia, firefighters who have been battling the state's worst wildfire of the season were reported to be bringing it under gradual control.

The blaze has destroyed nearly 5,000 acres of Shenandoah National Park and closed a 38-mile stretch of the scenic Skyline Drive highway. It

started with a campfire accident Friday and it took more than 300 firefighters, three planes and three helicopters to control it.

"The situation is still stable, still contained, but still burning despite the rain we had last night," said park spokesman Chuch Anibal.

Wisconsin authorities banned outdoor burning after an estimated 30 fires broke out in grass, brush and timber. Six hundred firefighters and volunteers managed to bring them under control.

In Pennsylvania, Environmental Resources spokesman John Bitzer said the fires that razed nearly 2,000 acres of woodland this week were under control, but unseasonable heat and lack of rain still posed a grave threat.

"Under control and out are worlds apart," Assistant Forester Sydney Kurtz said. "The men are still working on it. There have been little breakouts and flare-ups but nothing major."

UFOs Sun Attack Ocala * STAR-BANNER, MONDAY, MAY 5, 1986 Southwestern Turkey Shaken By Earthquake; 4 People Killed

ANKARA, Turkey (AP) — An earthquake shook the southeastern provinces of Turkey today, killing at least four people and destroying some houses, the

semi-official Anatolia news agency said. The news agency said the four people were killed when their houses collapsed on them in the province of Malatya and Adiyaman. The quake, which measured 5.8 on the Richter scale, also hit five other provinces, Anatolia said.

UFOs Sun Attack Major quake hits Aleutians

File 5/8/86

PALMER, Alaska — A major earthquake rocked the Aleutian Islands in Alaska Wednesday, causing minor damage at the Naval Air Station at Adak, triggering a tidal wave alert over a large part of the North Pacific, including as far south as California, and prompting the evacuation of 5,000 people to high ground.

The earthquake measured 7.7 on the Richter scale and struck at 6:47 p.m. EDT, the Tsunami Warning Center and the U.S. Geological Survey reported.

UFOs Sun Attack Washington volcano rumbles

File 5/6/86

VANCOUVER, Wash. — Higher levels of earthquake activity beneath Mount St. Helens could signal an eruption, but it is too early to make predictions, geologists say.

U.S. Geological Survey geologist Steve Brantley said the earthquakes beneath the volcano increased from slightly elevated levels Friday night to moderate levels by Sunday.

"This type of increase in earthquake activity usually precedes a dome-building type eruption," Brantley said. "But it is too early to make a prediction based on the information we have so far."

UFOs Sun Attack Colombia volcano spews ash

File 5/6/86

BOGOTA, Colombia — Colombia's killer Nevado del Ruiz volcano spewed ash Monday after sharply increased seismic activity and authorities declared a precautionary state of emergency.

Scientists monitoring the volcano around the clock since the November eruption and mudslides that killed an estimated 23,000 people reported "a high level of excitement" over the past 12 hours in the bowels of the 17,800 foot volcano.

"This could lead to an eruption and it could not," Eduardo Parra, a member of the monitoring committee, told Reuters by telephone from the central city of Manizales.

- ① **ERUPTION EXPECTED:** Mount St. Helens, located near Vancouver, Washington, sharply increased its rumbling noises Thursday and scientists said an explosive eruption can be expected within the next few days. ... **EDWARDS TRIAL:** Final arguments are almost complete in New Orleans in the second racketeering and fraud trial of Gov. Edwin Edwards and four others, and the jury began deliberations. ... **KILAUEA ERUPTS:** Kilauea volcano, the world's most active, shot glowing fountains of molten rock 800 feet high Thursday and oozed two harmless lava flows in the 45th major phase of its three-year-long eruption.
- ②

Expect sun, wind around Bay but showers may return Sunday

Tribune Staff and Wires

5/10/86

Today will be sunny and quite breezy in the Tampa Bay area, with temperatures in the low to mid-80s and little chance of rain, forecasters say.

But that may change Sunday, as forecasters with the National Weather Service are predicting the possibility of afternoon and evening thundershowers. The highs will climb to the upper 80s on Sunday, said weather service specialist Larry Horde.

Elsewhere, a slow-moving spring storm rolled thundershowers and snowshowers across the Plains on Friday as residents in six states cleared away debris from nearly a dozen tornadoes and drought continued to plague parts of the South.

Heavy rain from the weakening storm, centered over South Dakota, pushed streams and rivers over their banks, flooding fields, streets

and basements.

At least 11 tornadoes struck Thursday night in Texas, Oklahoma, Kansas, Iowa, Nebraska and South Dakota, battering houses and barns and knocking down power lines. No serious injuries were reported.

The Southeast endured another day of bone-dry weather that has sparked forest fires, forced water rationing and threatened to ruin farmers whose fields are too parched for planting.

Alabama Gov. George Wallace asked the federal government to declare the state a disaster area. Several towns in Georgia, Alabama and Virginia have restricted water use because of the drought.

The rainfall in Southern states has ranged from 10 to 20 inches below normal since Jan. 1.

Heavy rain overnight pushed streams in Kansas, Nebraska, Texas and Utah out of their banks. Up to 10 inches of rain fell in Bassett, Neb.

Rockies lashed with wind, rain; wildfire rages in North Carolina

Tribune Wires

UFO's Sun Attack
5/7/86
A Western storm lashed the Rockies with rain, snow and gusty winds Tuesday and heavy thunderstorms rolled through the Great Lakes region, churning up funnel clouds.

Meanwhile, a wind-whipped wildfire raged out of control across more than 10,000 acres in North Carolina's Onslow and Pender counties Tuesday, causing one death and forcing at least 12 families to evacuate.

The Division of Forestry Resources is fighting the blaze that started Monday in a swampy part of Pender County and spread northeast into Onslow County.

On Tuesday, a line of severe thunderstorms moved rapidly through the Detroit area causing scattered power outages. A tornado was spotted in Plymouth, Mich., and several funnel clouds were sighted around Detroit, the National Weather Service said.

No injuries or serious damage were reported.

Thunderstorms and showers were scattered from New England across the lower Great Lakes into the lower Mississippi Valley.

A storm off the northern Pacific Coast spread snow and rain across the higher elevations of northern California and western Nevada.

A light spring snow of 1 to 2 inches fell in the mountains west of Reno, Nev., and 2 to 5 inches of snow in the mountains around Lake Tahoe, the weather service said.

The unseasonably cold, wet and windy weather could endanger young livestock in Wyoming and Colorado, the weather service said.

High winds raked much of the West and northern Plains. Winds were clocked at 51 mph in Las Vegas and 35 mph at Kingman, Ariz.

Winterlike weather engulfed the northern Plains with temperatures in the 30s.

In Tampa, the temperature reached 91 degrees Tuesday — 3 degrees short of the record — and a series of muggy days are ahead, meteorologists said.

Widely scattered afternoon or evening showers are on the Bay area forecast at least through the weekend, with high temperatures in the upper 80s.

Chilly Canadian blast shatters temperature records across East

UFO's Sun Attack
Trib 5/5/86

A blast of Canadian cold air swept along the East Coast Sunday, shattering low temperature records from Maine to the Carolinas.

The winter-like air mass, which hit the upper Great Lakes last Wednesday and then moved slowly eastward, dropped temperatures below freezing and created even lower wind chills with strong gusts.

Four boy scouts camping in a suburban Rochester, N.Y., park overnight were treated for mild cases of hypothermia as the mercury there dipped to 31 degrees.

Record low temperatures overnight were set in 18 cities across 10 states from Maine to South Carolina.

However, a warming trend was only a day away, as the cold air mass was expected to move out to sea, leaving in its wake normal temperatures by today.

The Bay area's weather is likely to remain "hot and dusty" for the

next few days, said Bill Seiler of the National Weather Service.

The hot weather, normal for this time of year, is caused by a high pressure system overhead, the meteorologist said. Layers of air are heated as they move down, Seiler explained.

Today and Tuesday, expect fair weather with high temperatures near 80 degrees and lows from near 60 to the mid-60s. Today's forecast calls for east and southeast winds at 10 to 15 mph.

Elsewhere, a storm system in the Plateau dumped 8 inches of snow at Austin in central Nevada. Forecasters called for up to 5 more inches, and a travelers advisory was posted across east central and northeast sections of the state for elevations above 6,000 feet.

A winter storm watch also was issued across the mountains and foothills of northwest and central Montana.

"The grass is dead and underbrush is a tinderbox," Snyder said. He described the vegetation as in "the

Service." The burn index is nearing the record of 113 a year ago this month when more than 10,000 acres in the Ocala National Forest were ravaged by fire.

The burn index is a measure of fire danger in which vegetation would ignite from dry conditions, reported Dean Snyder of the Florida Forest Service. He said the average burn index is about 50.

Despite spotted showers Tuesday, dry conditions in Marion County are considered critical with a burn index measured at 110, reported the Florida Forest Service.

By Ocala Star-Banner Staff
And the Associated Press

UFO's Sun Attack
0.88
5/7/86

Dry Weather Taking Toll On Parched Big Sun Area

Water Authority Considering Ban

Burning restrictions are in effect, with permits issued under conditions that require firefighting equipment to stand by, Snyder said.

With rainfall below average for April, water regulators may ask 16 southwest Florida counties today to impose a voluntary ban, according to a spokesman with the Southwest Florida Water Management District, which governs water usage in Marion County

west of Interstate 75. Rainfall in the district last month ranged from .5 to 1.8 inches, compared with the norm of 2.2 to 3 inches for April.

A trace of rainfall was recorded in Ocala and portion of Marion County on Tuesday, with one Star-Banner weather watcher in Rainbow Lakes Estates reporting two-tenths of an inch of precipitation. Thunderstorms reportedly drenched large areas of Citrus, Levy and Alachua counties.

One area east of Ocala measured just over one inch.

From March to April, lake levels, stream flows and ground water levels all declined. Pumpage, which is

See Drought Plagues on page 8A

Drought Plagues Big Sun; Voluntary Water Ban Eyed

Continued from page 1A 5/7/86
ground water withdrawal from major wellfields, increased almost 25 percent in April over March.

Last year's severe drought left deficits of up to 14 inches in certain areas such as the Alafia River and the northern Peace River Basin, said Jim Hunter, a spokesman for the water district, referred to as Swiftmud.

The conservation proposal, prepared by Swiftmud staff, was to be presented to the agency board today.

"The situation is not yet critical, but a matter of concern," said Gary Kuhl, the board's executive director.

A drought laying siege to the whole Southeast is withering hard-pressed farmers' crops, drying up reservoirs, turning forests tinder-dry, cutting hydroelectric power and forcing mandatory curbs on lawn watering, officials say.

"It's a bad situation that's getting worse fast," Carl Harker of the Southeast Agricultural Weather Service Center at Auburn University in Alabama, said Tuesday.

The dry spell is the worst in Tennessee since records were first kept in the 1890s and the worst in South Carolina since the 1900s, officials said. It is affecting Mississippi, Alabama, Florida, Georgia, the Carolinas and Tennessee with varying severity.

Pre-summer drought parches Southeast

UFA Sun Attack

New York Times

5/5/86

ATLANTA — The level of Lake Sidney Lanier, the 39,000-acre reservoir that supplies most of Atlanta's drinking water, is six feet below what it should be and still falling.

"If we don't get some rain soon, things are going to get a lot worse this summer," said Ron Blue, the manager of the Holiday Marina, where boaters are already being warned to look sharply for low spots in the lake. "The problem in the spring ought to be too much water, not too little."

In wide areas of the Southeast, including parts of Mississippi, Alabama, Georgia, Tennessee and the western Carolinas, rainfall levels since the first of the year are the lowest since forecasters began keeping records a century ago.

And there is little relief in sight. Forecasters predict no substantial rainfall through the middle of this week, and the 30- and 90-day extended forecasts from the National Weather Service call for near or below normal precipitation around much of the Southeast.

In most areas, where flooding, not drought, is more commonly the problem in spring, less than a quarter-inch of rain has fallen in the last 40 days. In Atlanta, for example, less than eight inches of rain has fallen since Jan. 1. That is nearly 12 inches less than the average for the same period.

Since officials ordinarily count on heavy spring rains to top off water reservoirs for the drier summer months, some counties and cities in northern Georgia and Alabama have already imposed mandatory restrictions on the watering of lawns. And in suburban Roswell, residents were asked last week to use water only for drinking and

flushing toilets.

Outside the city, livestock pastures are already brown and some streams have turned to mud. Farm fields are dry and crumbly, forcing many farmers to delay their planting of soybeans, cotton and peanuts.

"Farmers are really falling behind," said Rodger Getz, a meteorologist with the Southeast Agricultural Weather Service Center in Auburn, Ala. "Unlike the West, the South doesn't have many irrigated crops."

The lack of moisture also poses the danger of grass and forest fires. Fires this year have claimed 867,092 acres of public and private timberland in the South, according to Bruce Jewell, a spokesman for the National Forest Service.

Gary Beeley, a forecaster with the National Weather Service, says that upper atmosphere air patterns have been carrying storm tracks well to the north of Georgia. That has allowed high pressure to dominate the weather picture in the Southeast, keeping skies clear and the air dry.

The drought has already had some dramatic effects. In Etowah County in northeast Alabama, where only 3.5 inches of rain has fallen since Jan. 1, the wells that service the rural community of Burton Loop have gone bone dry.

As a result, state officials have had to dispatch a 400 gallon water tanker to provide drinking water to the 18 families who live there.

In Birmingham, water volume in Lake Purdy, the reservoir that provides a major part of the city's water supply, is 25 percent less than it should be. And at Lake Alatoona, 30 miles northwest of Atlanta, the water surface has dropped 12 feet below normal.

Drought

• From Page 1A

brought 6.47 inches of rain to Birmingham, Ala., 15.7 inches less than normal and the driest such period ever recorded by the National Weather Service.

Other record low amounts for January through April were set in Jackson, Miss., with 7.37 inches, and Atlanta, with 7.96 inches.

Southeastern Louisiana has had 3.38 inches of rain since March 1, giving that region a chance of breaking its March-through-May record low of 3.91 inches. Nashville has measured 6.66 inches of rain so far this year, 12.81 inches below normal. Rainfall is just 34 percent of its normal pace in Greensboro, N.C.

In southern Georgia and Florida, early year rainfall has 1986 levels near or above average, but April still parched the soil that farmers had hoped to seed.

About 41 percent of the U.S. pea-

nut crop comes from Georgia, mostly from the southern part of the state. The Georgia Crop Reporting Service says just 27 percent of the crop has been planted, compared with 60 percent at the same time last year and a five-year average of 35 percent.

Some farmers have had to use their irrigation systems to get the ground wet enough to accept seed, said John Beasley, a peanut specialist in the Tifton office of the Georgia Cooperative Extension Service.

"That's an expense they just don't normally count on," Beasley said. He said the irrigation cost will at least partially offset the advantages of higher production quotas and rates paid by the government in the peanut program.

"Peanuts was the only crop in the South that we could really make a profit on," Beasley said.

Some Florida cattle farmers are irrigating pastures just to provide grass for their stock, and it is "costing them out the ears," said Alachua County Agent Bill Brown.

Planting of Mississippi's cotton crop, one of the nation's largest, is being slowed by lack of rain, and plants in the ground are suffering from cool nights, said state Agriculture Commissioner Jim Buck Ross.

"Cotton needs to be up and growing with hot nights — something that has not happened," Ross said. "The situation is rapidly becoming very, very serious for farmers in Mississippi."

Tobacco planting is behind schedule in Tennessee and North Carolina.

"The wind does about as much damage as the dry weather," said Bladen County, N.C., Extension Chairman Keith Dennis. "When you put tender plants out and the wind blows, it's just like sandblasting them."

The drought also may cut the harvest of South Carolina's 300,000-acre wheat crop in half, said Clemson University Extension Service Director B.K. Webb.

The drought also has reduced levels in rivers and lakes. Alabama Power Co., which normally gets 7 percent of its electricity from its 14 dams, has shut down all hydroelectric generation because of lack of water.

Trib 5/9/86

STAYSKAL
86 TAMPA
TRIBUNE



12 Hurt, 35 Homes Leveled As Twister

WFO's Sun Attack 0.58 5/9/86

Hits Oklahoma

'Looked Like Big Ball Of Fire'

EDMOND, Okla. (AP) — A supertime tornado bounced through a neighborhood, injuring 12 people, destroying dozens of homes, and leaving residents amazed that no one was seriously hurt.

"I don't know how we kept from being killed, but we did," said 74-year-old Frances Forehand, who suffered cuts and bruises when the tornado tore through the home of her granddaughter Vicki Taylor on Thursday night. "It looked like a big ball of fire went through the house."

Police spokesman Lt. Mike Wooldridge, whose home was one of those damaged in southwestern Edmond, said 12 people were treated at a hospital for minor injuries.

Fire Marshal Ron Williamson said at least 35 homes were destroyed and at least 30 others damaged.

Although there were no reports of fatalities, Williamson said he could not be certain that everyone was accounted for.

"Of course that's always a concern," he said.

Authorities would make house-to-house checks to see that everyone got out of their homes, Williamson said.

Lt. Gov. Spencer Bernard arrived at the community of 35,000, just north of Oklahoma City, late Thursday and said he had asked Gov. George Nigh to put the National Guard on alert. But Bernard said the guardsmen would not be needed, if at all, until today.

He said all state agencies, including

the Civil Defense and state Department of Human Services, will be available to help.

Mrs. Forehand, sitting in a hospital robe at a Red Cross shelter at Edmond High School, said she was watching television with her granddaughter and two great-grandsons when the tornado shattered a pair of sliding glass windows.

"I started to say we better turn the TV off and it just blew in on us," she said. "There were sticks, pieces of metal, glass flying around ... but it didn't even break my glasses."

Mrs. Taylor said as the twister tore through her home, she grabbed her 8-month-old son and placed him in a bedroom closet.

"I tried to get back to get my grand-

mother and 4-year-old son, but the bedroom was already completely demolished," she said. "The storm had already gone through."

Mrs. Forehand said she and her grandson, who received stitches on his forehead, were buried by debris.

"We had to dig ourselves out," she said. Rescue workers later helped the four from the home.

"They didn't let us take anything with us, not our purses or anything," said Mrs. Taylor. "I don't even know if I could find them anyway."

The tornado touched down about 7:30 p.m. and hopscotched through the 7-year-old subdivision. The twister flattened four or five of the medium-sized brick homes in a row before lifting off the ground. It then touched down again, damaging or destroying the others homes.

The storm, accompanied by heavy rain and hail, left streets cluttered with wood and shingles from homes. Telephone poles were bent in half and power lines were strewn across lawns and streets.

The National Weather Service said the tornado in Edmond was part of a strong line of thunderstorms that moved through the metropolitan area.

2 tornadoes touch down in Polk County

The first twister swept through a small subdivision in a rural area between Dundee and Winter Haven while the second struck a business east of Mulberry. WFO's Sun Attack

By MIKE WOLNY
Tribune Staff Writer

5/10/86

MULBERRY — Tornadoes touched down in two places in Polk County Friday evening, causing minor damage to buildings but injuring no one, Polk sheriff's Communications Sgt. Gail Speer said.

The weather also kept firefighters around the county busy responding to reports of lightning strikes that caused minor fires but no injuries, county civil defense officials said.

The first twister swept through a small subdivision in a rural area between Dundee and Winter Haven off County Road 542 in the eastern part of the county about 3:45 p.m., Speer said.

"It did no structural damage," Speer said. "It messed up the roof on a storage shed on High Street. There were some downed telephone poles and power outages reported."

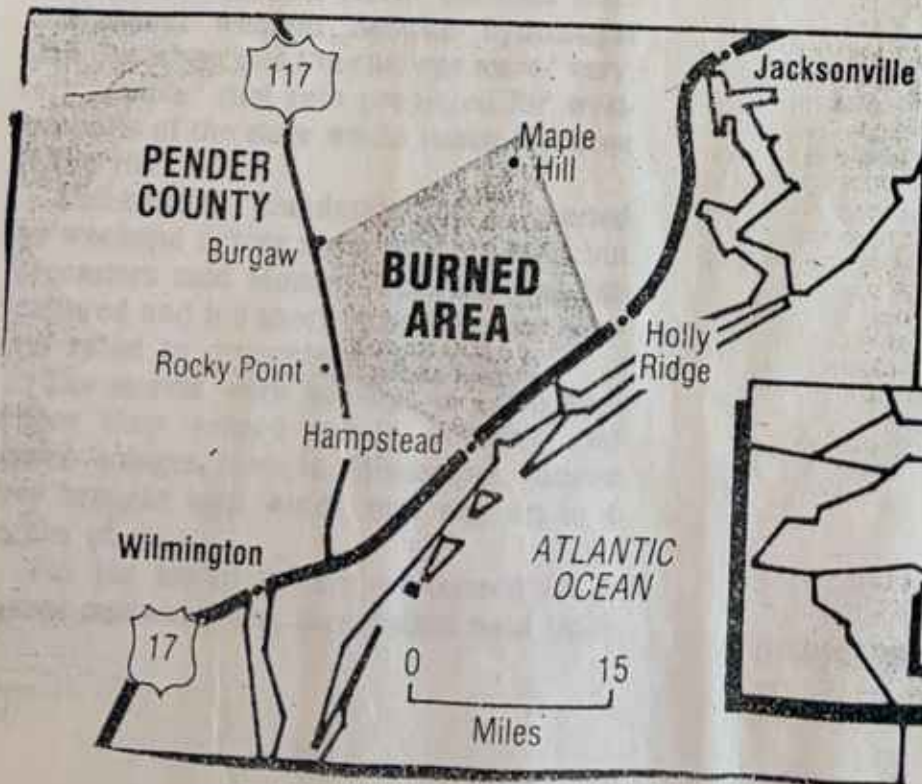
A second tornado struck shortly after 7 p.m., causing minor structural damage to Compressed Air Products, a business east of Mulberry on State Road 60, Speer said.

Mitch Carmack, assistant chief of the Mulberry Fire Department, said the tornado occurred just minutes after a power line fell across U.S. 60, forcing a semi to jackknife. A three-car accident resulted.

And shortly after 5:30 p.m. firefighters were called to a fire at the garage of Resource Recovery on U.S. 60 near the city's eastern boundary. Carmack said the blaze was contained to a tanker truck used by the firm in its waste recovery business. He said lightning was suspected as the cause of both the fire and the collapse of the power line.

The series of calls had Mulberry's seven firefighters on duty busy throughout the afternoon and evening.

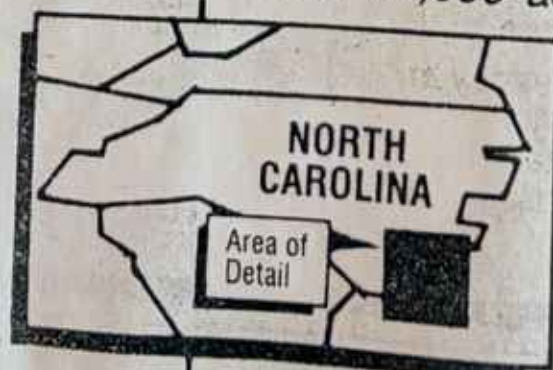
North Carolina inferno



UFO Sun Attack 5/14/86 Trib. AP photo

Firefighters gain upper hand

A 10,000-acre backfire broke the back of a raging blaze in North Carolina, but gusting winds and dry conditions continued Tuesday to plague the region that has lost more than 73,000 acres to flames. The wildfire has covered 110 square miles and has resulted in evacuations of residents, one death and 50 injuries. Unless rains occur, experts said, some of the ground fires could last for months.



Tribune map by
WARREN HUSKEY

Firefighters struggle to contain 75,000-acre N.C. blaze

UFO Sun Attack
Tribune Wires - 5/13/86

HAMPSTEAD, N.C. — Firefighters using aircraft, tractors and shovels inched closer Monday toward containing a 14-mile-long blaze that has consumed 75,000 acres in its weeklong, erratic path through swampy southeastern North Carolina.

As 75 fresh firefighters were rotated in, officials hoped steady winds would keep the flames away from populated areas to the north. More than 5,000 people have been evacuated but only two buildings have been destroyed.

"The fire didn't spread today," said Bob Grady of the state Forest Service. "There is not total containment on the perimeter, but we did hold the existing perimeter, which

we feel is very much in our favor. It's the first day that we've been able to do that."

"I would expect they should be able to contain it tomorrow," Grady said. "Tomorrow, I expect them to be putting in plow lines and getting all the roads completely burned out of any existing fuel so we'll have a fairly cool perimeter."

By afternoon, the fire had closed ranks with a smaller blaze. Feldman Corn of the state Division of Forest Resources at one point said the blaze had been contained inside lines, but officials later said it continued to burn out of control on two fronts.

Tom Hegele, spokesman for the state Department of Natural Resources and Community Development, said it was unlikely the fire could be extinguished until rain hit

the scorched eastern North Carolina soil.

National Weather Service hydrologist Alan Gustafson said the chances were "very, very remote" that rain predicted for western parts of the state would reach the area of the fire.

Hail-bearing thunderstorms dampened the weekend across some of the South, but forecasters said Monday the rain was too scattered and too short to provide any general relief to drought-stricken Dixie.

The storms were heaviest in Louisiana, where they caused minor flooding and power outages, and in Mississippi, where they brought high winds, hail and up to 4 inches of rain.

But the storm system weakened as it moved eastward, and forecasters held little

hope that North Carolina would get significant rainfall.

"The top soil is so dry it's difficult for plants to grow in many places," said National Weather Service hydrologist Alan Gustafson, who classified eastern sections of North Carolina as being in a "moderate drought."

"It's affecting farmers quite heavily," he said. "There's nothing but dust there."

Much of the Southeast is still more than a foot below normal rainfall for the year, and a drought alert was issued Friday for parts of Georgia, Florida and Alabama. In Atlanta, the first four months of 1986 were the driest on record.

A thick layer of gray smoke clung to smoldering remains of pine forests in

Pender County, N.C., obscuring the flames from spotter airplanes and prompting health warnings in surrounding areas of southeastern North Carolina.

At a forest service command post, a map showed the fire covered a rough, diamond-shaped area pointing north at Maple Hill and measuring about 14 miles from north to south. Officials said the area burned comprised about 110 square miles, or 10 percent of the county.

On Sunday, anticipating the direction of afternoon sea breezes, firefighters burned 5,000 to 10,000 acres to rob the fire of fuel.

"If we had not, we'd probably have a 100,000-acre fire out of control," said Tommy Thompson, incident commander for the state Division of Forest Resources.

UFO Sun Attack 26 missing in storms' aftermath

At least one drowned when the storm hit Texas during fishing tournaments.

Trib 5/14/86
HOUSTON (AP) — Rescue teams using a helicopter and boats searched a lake Sunday for more than 26 people reported missing after a storm and high winds struck during fishing tournaments, and at least one person drowned, authorities said.

Meanwhile, off Galveston, Coast Guard crews searched for at least three boats reported overdue since Saturday's storms.

The winds that whipped Lake Livingston forced people to abandon their boats and swim to shore. Hundreds of people were at the lake, about 80 miles north of Houston, participating in two fishing tournaments and a sailing race.

"We have 26 unaccounted for — that doesn't mean they're all drowned though," said Polk County Sheriff's Sgt. J.C. Robbins. The search ended about 2 p.m.

Some people may have left their boats during the storm, Robbins said, so police were calling homes. About 12 boats were recovered Sunday, and three people were rescued from an island.

The storms were part of a wave of violent thunderstorms and tornadoes that struck western Arkansas and central Texas.

In another incident, a 50-year-old man disappeared after his boat cap-

Twisters turn sky pink, cause power outage in Alabama town

UFOa Sun Attack
Tribune Staff and Wires

5/19/86
Two tornados buzzed Jackson, Ala., Sunday, turning the sky pink and then disappearing without touching down.

The twisters were part of slow-moving storm system that pushed high winds into southeast Texas Saturday.

The tornados rumbled through the southwest Alabama town shortly before and after noon, said police officer Bill Johnson.

"They never did touch down, but we did have a report of power outage on the east side of town," Johnson said.

The storm that struck Texas Saturday lost little of its intensity as it moved toward Arkansas, Mississippi, Tennessee, Kentucky and Louisiana on Sunday, prompting a severe thunderstorm watch and a tornado watch in those states, said meteorologist Harry Gordon in Kansas City.

"They're getting some rain, and it's making them (state meteorologists) nervous," Gordon said. "They-

're looking for heavy thundershowers and most indicate by radar that the storm is intense."

Chilly temperatures across Colorado, Kansas and western Texas tied or broke cold records in at least four cities.

A reading of 35 shattered the record of 39 set in 1888 in Dodge City, Kansas. El Paso, Texas, dipped to 41, breaking the 1983 record of 45. Midland, Texas, tied the record of 45 set in 1967. In Pueblo, Colo., the temperature dipped to 30, breaking the 1915 record of 34.

No injuries or serious damage was reported near Allegan and Hillsdale, Mich., from tornadoes that touched down Saturday. Strong thunderstorm winds uprooted trees and destroyed a mobile home and several barns at Algansee.

In the Tampa Bay area, the National Weather Service is predicting mostly cloudy skies with a 50 percent chance of afternoon thunderstorms today. Highs in the mid-80s and south winds at 10 to 15 mph are expected.

Tonight and Tuesday, expect showers and thunderstorms, lows in the mid to upper 60s and highs in the mid-80s. Rain chances are pegged at 60 percent tonight and Tuesday.

The rest of this week, temperatures won't change much, said meteorologist Bill Seiler. But there will be a fairly good chance of thunderstorms, especially in the afternoons.

Sediment 9
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