

Safety Officer Has Responsibility For Putting Missiles Out Of Action

CAPE CANAVERAL, Fla. — (UPI) — The big missile vaulted from its launching stand and seemed to be off to a smooth start. But suddenly it began skidding crazily a few hundred feet above the Cape.

"Programming red!" crackled the report over the Cape's "hot loop."

Lt. Col. Raymond D. Stephens, stationed in a windowless concrete building several hundred yards from the missile's launching stand, took a fleeting glance at the maze of instruments surrounding him. The he moved a

half-step and tripped a pair of switches that ended the flight in a brilliant explosion over the edge of the Cape.

It was just a routine "destruct" job for Steve Stephens, 43, range safety officer at the Air Force missile test center for the past year and a half. But he was well aware that the lives of thousands of Florida east coast residents depended on his reflexes.

There's no guesswork involved when Stephens has to destroy a missile — "bust it," as he describes the act. Although the final decision is up to him, Stephens

has half a dozen assistants and as many instruments to work with in a launching.

Long before any firing, however, the safety planning begins with a conference in Stephens' office at nearby Patrick Air Force Base, headquarters of the test center.

This meeting is attended by representatives of the contractor whose missile is to be fired, and by the assistant Stephens has chosen to learn the weapon from nose cone to exhaust nozzle. "He's supposed to be the wizard on that bird," says Stephens.

The contractor representatives brief Stephens on how the missile is supposed to behave, and show him a chart depicting the planned flight path.

"Destruct lines" are drawn on the same chart, which is later transferred to an instrument known as the "electronic sky-sweeper" at Stephens' post on the Cape. When this device shows the missile is straying from its predetermined trajectory and is approaching a destruct line, Stephens knows he has to blow it up.

Stephens also must huddle with

other missile specialists on the design and placement of the missile's "destruct package," which blows up the bird on his ground signal. It was a faulty destruct package that led to a near-tragedy recently when half of a Polaris test rocket ran wild and plummeted into a lagoon near a residential area.

It's not always necessary to blow up a runaway missile, Stephens says. Sometimes he can merely hit the "arm" switch to cut off the bird's fuel flow, allowing it to fall harmlessly into the Atlantic. On other missiles, the "arm" switch prepares the destruct package for ignition, and if the bird veers perilously close to a destruct line — and thus poses a threat to a land area or ships Stephens "busts" it by flipping the destruct switch.

In addition to the electronic sky-sweeper — known to the safety crew as "Elsie" — Stephens also relies on radar, a device called the optical skyscreen, two TV monitors and another gadget called the impact predictor, which shows exactly where a missile would fall if its power were cut off at a given instant.

But Stephens' first report often comes from an assistant manning a relatively simple device called the "wire skyscreen," which is nothing more than a wire stretched taut at a 90-degree angle to the ground.

If the missile climbs straight up as it should in the initial phase of flight, the wire skyscreen man reports that it is "climbing the wire." But if the bird falters or deviates from the proper course, it's "programming red."

The destruct mission described above involved an Army intermediate range Jupiter. But a few days later Stephens blew up an Air Force Thor just as quickly. Interservice rivalry has no place in this delicate operation.

A native of Collinsville, Ill., Stephens has had a variety of jobs during his 18 years of commissioned service in the Army and later in the Air Force. A veteran of more than 250 launchings, he admits that the strain is "about as rough as when I was flying B-26's over Europe during World War II."

"They all accuse me of not having a nerve in my body," he said, "But I still get butterflies."

Air Power Was Born The Day A Ship Sank

WASHINGTON (UPI)—American air power was born on July 21, 1921. That was the day a brash, blunt-talking Air Corps general named William Mitchell pitted the bomber against the battleship—and won.

It was a World Series of experimental warfare.

On one side, Billy Mitchell and 16 ancient Martin bombers made of wood and canvas. On the other, the captured German battleship Ostfriesland, seared by the rust of neglect but still a tough old steel buldog.

Four separate layers of bulky armor plate protected her hide. Not even a telephone wire pierced her watertight compartments. There was nothing on board . . . no explosives, no ballast. She drew only 28 feet of water, and an unloaded ship is harder to sink than one with munitions and fuel aboard.

The Navy had agreed to let Mitchell test his controversial theory that planes could sink the strongest battleship built. The attacks were to take two days, starting with small bombs and progressing to one-tonners which Mitchell had Army Ordnance produce just for the occasion. After each attack, experts were to board the Ostfriesland and report the damage—if any.

The stage was set. Units of the Atlantic fleet converged off the Virginia capes. Feeling was running so high that Mitchell's pilots wanted the Navy to man the battleship with anti-aircraft gunners so the bombing could be made under actual battle conditions. Navy Secretary Josephus Daniels offered to stand on the Ostfriesland's bridge during the attacks—he was that confident the bombers would flop.

On July 20, a windy, overcast day, the planes dropped their smallest bombs. They might as well have dropped ping pong balls. No damage. The Navy was jubilant.

The next day, eight bombers, each carrying two 1,000-pound bombs, swept over the old battleship and unloaded three hits. Naval observers boarded the Ostfriesland and again happily reported no significant damage.

Then came a second flight of airborne killers, this time with the new 2,000-pound bombs. The first ton of explosives landed 100 feet from the ship. The effect was like a giant hammer swung through the water. Witnesses thousands of feet away could feel the concussion.

The second bomb went wide. The third hit the battleship and glanced off into the water to explode. The Ostfriesland seemed to lift itself in the air.

The fourth bomb landed on the other side of the ship. She rocked like a giant sea monster trying to shake off pain. A fifth bomb landed only 25 feet from the hull. The dreadnought rose almost completely out of the water. Then she settled back, obviously hurt.

Bomb number six. It landed just behind the stern. It literally broke the battleship's back.

Aboard the observing warships, Navy men looked at each other in disbelief.

The Ostfriesland's nose lifted in the air. A jagged hole was plainly visible. She rolled to port and the watchers saw the gaping, ugly wounds in her underbelly. Slowly, almost majestically, the 27,000-ton

warship sank, stern first.

Exactly 21 minutes and 30 seconds after the first one-ton bomb had been dropped, \$40 million worth of supposedly indestructible seapower had been destroyed by a handful of planes costing 1-40th as much.

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Tuesday, March 24

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CRATER LAKE BUTTER
MILK PANCAKES
HILLS BROS. COFFEE
CRATER LAKE MILK
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Schedule For J. W. Kerns Open House

MONDAY, MARCH 23

5:30 p.m.—All pies must be turned in for judging

7:00 p.m.—Pies will be judged by Miss Bev Lyons, No pecking . . . winner will be announced at Open House.

TUESDAY, MARCH 24

9:00 to 2:30—Crater Lake Buttermilk Pancakes, Hills Bros. Coffee and Crater Lake Milk will be served FREE.

9:00 to 12:00—Movies of I-H equipment

12:00—Doors Prizes for those in attendance

12:00 to 5:30—I-H Machinery Demonstrations

2:30—Bev Lyons Washer-Dryer Show . . . Door Prizes for the ladies here.

3:30—Announcement of winners of PIE CONTEST

4:00—Serving of pies and Hills Bros. Coffee

PRIZES

DOOR PRIZES:

\$45 Electric Lawn Trimmer—Edger

Oaks Garden Sprayer

Rainbird Lawn Sprinkler

Firestone Picnic Basket

WOMEN'S SHOW PRIZES

Toastermaster Toaster

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PIE CONTEST PRIZES

ELECTRIC FRY PAN . . . Best open-faced pie

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Tues., March 24th

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