

Daring work over the Atlantic brought this tanker crew the 1986 Mackay Trophy.

White Knuckles To the Azores

By Braxton Eisel

Of all the Air Force's capabilities, air refueling is the one most regularly taken for granted. Everyone simply assumes the tanker will be there when needed. During one long day more than two decades ago, that assumption was put to the acid test.

It was on this March 1986 flight that the crews of two Air Force KC-10 refuelers and eight Marine Corps A-4 Skyhawk fighters nearly made unplanned landings in the Atlantic Ocean. It was a day on which the fuel nearly ran out. For its extraordinary work to keep that from

happening, the crew of one KC-10 received the Mackay Trophy, for the year's most meritorious military flight.

It began as a routine fighter drag—with the Air Force's then-new Extenders providing the navigation and fuel for fighters to cross from the US East Coast to Lajes Field, Portugal, on the Azores. The mission had even started on a lighthearted note from the weather briefer, who chirped, "Hope you guys brought your golf clubs."

Good weather or its alternative, extra gas, was key to getting to the Azores. It is one of only a few spots in the



world in which arriving aircraft have no ready "divert" alternate; the nearest land is more than 1,000 miles away. If the weather forecast is bad, one simply waits for another day.

Mission planners had gassed up the tankers with what was assumed to be more than enough fuel to get the fighters to Lajes and allow for contingencies, but the KC-10s were not flying with full tanks since it costs gas to carry gas.

Launching from Pease AFB, N.H., Capt. Marc D. Felman's KC-10 Gold 11 was to rendezvous with five A-4s (call signs Retro 61 through Retro 65) from MCAS Cherry Point, N.C. The marines would join up with the tanker over Nantucket and off everyone would go.

This same scenario was to occur for Gold 12 and its five Skyhawks, Retros

Photo courtesy Marc Felman



Gen. John Chain (middle), then commander in chief of SAC, congratulated the crew of Gold 11 for winning the 1986 Mackay Trophy.



The Azores, an island chain in the Atlantic Ocean, are more than 1,000 miles away from the nearest land.

71 to 75, then again with Gold 13 and the five final A-4s, Retros 81 to 85.

Upon reaching the join-up point, Gold 11 found his set of fighters had maintenance issues back at Cherry Point. The tanker had to hold.

After more than an hour, the first set of fighters canceled and Gold 11 was ordered to take the second set of fighters, Retro 71 to 75. Gold 12 would follow with six fighters, now numbered as Retro 81 to 86, an hour or so later. The third tanker was no longer needed.

Shortly thereafter, the A-4s arrived and each fighter in turn stuck its refueling probe into the drogue Gold 11 trailed to verify the fighters could actually take gas before setting across the ocean. If the refueling system malfunctioned, it was far better to discover that fact near land.

Proving the point, the flight lead's wing tanks would not accept gas. Retro 71 had no choice but to abort his mission and return home, taking his wingman, Retro 72, with him for insurance. Retros 73 to 75 got fuel just fine.

Without Training Wheels

The giant tanker and its three "chicks" then headed across the Atlantic.

During most of the flight, all went well. Felman, the aircraft commander and pilot, was on nearly his first KC-10 mission without "training wheels"—either an instructor or evaluator over his shoulder. He had more than 2,500 hours as a tanker pilot, but most of those hours were in the venerable KC-135.

The marine aviators, wedged into the tiny cockpits of the A-4s, were in for a long day no matter what. Besides being

crammed atop an unyielding ejection seat, their immersion-protection "poopy suits" were like wearing a thick body condom for hours on end.

Due to the real chance that nature could call, most of the A-4 drivers were probably also slightly dehydrated. It is no fun having to work one's "equipment" through layers of clothing, poopy suit, parachute harness, etc., to then try to perform near-Olympic caliber gymnastics to answer a call of nature. Many fighter pilots instead choose to forgo fluids in the hours before a long flight to avoid just such an uncomfortable scenario. Better to rehydrate after the aircraft is safely on the ground.

Passing the go-no go point—the spot on the flight where the aircraft had enough fuel to make it back to the US, the abort base in Greenland, or continue to Lajes—the flight continued. The updated weather forecast was still calling for Lajes to be in the clear.

Each A-4 regularly cycled through the refueling station, taking gas after performing the aerial ballet needed to plug the refueling probe jutting out to the right of the jet aircraft's nose into the 18-inch diameter drogue of the tanker. Driving the aircraft into the precontact position, about 15 feet aft of the drogue, the A-4 pilot crept forward with about two to three knots of overtake. He then concentrated on the drogue and drove the probe in with a solid, but not too aggressive, click.

Boom operator MSgt. Patrick S. Kennedy pumped the fighter full and directed the sequence for the next receiver.

About an hour from Lajes, the tranquil day ended. An unexpected warm weather front blew in, dropping Lajes to zero visibility in heavy fog. This was bad news, especially for the A-4s, which didn't carry any high-tech navigation gear to get them down through a thick soup.

Arriving overhead Lajes, the tower informed Felman that a commercial 707 had just gone around due to not being able to see the runway.

The A-4s made an approach and hoped for the best. Retro 73 spotted the runway through a pinhole in the clouds and safely made it down. The next two Skyhawks weren't so fortunate on their attempts, so they rejoined the tanker on top of the fog.



A KC-10 like Gold 11 prepares to take gas from the boom of another KC-10. This “give and pass” capability is unique in the tanker world.

For Gold 11, this should have been merely inconvenient. A tanker was normally kept on alert in Spain for just such a contingency. A quick call would launch that tanker to take over feeding the fighters, and Gold 11’s crew would divert to Rota, Spain.

Except, on this unfortunate day, there was no alert tanker. Now Felman was in a bind; with the delay waiting for the fighters at the start of the mission, he only had enough fuel to get his tanker to Rota. If he refueled the fighters, then neither he nor they would have enough gas to make it there.

But if he didn’t refuel the A-4s, they would go swimming pretty quickly.

He chose for everyone to keep flying while the crews explored other options.

“I decided to get up high and try to make Rota anyway,” Felman said. “With the fighters flying formation on us, we climbed to [31,000 feet] with the intention of getting as close to Spain as we could. I told the Retros to keep cycling through and we’d give them 1,000 pounds each time until we all were out of gas, and then [we would] do the best we could.

“With some luck,” he said, the flight might have “a shot of at least getting out over the coast instead of the water.”

An officer at Santa Maria Airport, about 200 miles southeast of Lajes on another Azores island, called to say the flight might make it there, but the weather was quickly deteriorating. Mission control diverted the aircraft to the alternate field.

Scrambling for the approach plates to Santa Maria, Felman saw it had a

7,000-foot runway. That was plenty long enough for the A-4s, but it was the minimum for getting a KC-10 in and out. The only navigation aid was a nondirectional beacon, something the A-4s lacked.

Some Got Down

Since the A-4s had no radar and nothing more than a TACAN nav system, he asked the marines what their approach speed was and “told them to fly tight on me and I’d take them down until they saw the runway,” relates Felman today.

The Skyhawks perched off the wing-tips of the KC-10 until “at the very last second, we saw a glimpse of the runway, poured the coals to the -10, and had the A-4s land.”

Unfortunately, there was a strong crosswind, which blew the fighters wide. Retro 74 made it down, but 75,

flying on 74’s right side, had to go around—there was no asphalt left on his side.

The second approach, again off the wing of the KC-10, successfully brought the fighter down. The third approach put the tanker down, using up every last foot of the runway to stop.

After a 180-degree turn at the end of the runway, the tanker taxied back to the terminal and began to gas up, but the worst part of the day was still to come. Gold 12, and its batch of fighters, was still in-bound and unaware of the situation in the Azores.

By the time a cumbersome high-frequency radio patch was made, it was too late. Gold 12 was low on gas, as were Retros 81 through 86.

In the meantime, a Marine Corps KC-130 at Lajes heard of the predicament and, despite not being fully fueled itself, launched into the smothering weather to try and rescue the inbound aircraft.

The KC-130 met up with Gold 12 and “took the chicks,” Felman explained. The tanker would replicate Gold 11’s approach to Santa Maria with the fighters in tight formation.

Gold 12 climbed for the gas-saving higher altitudes needed to make Rota.

Felman heard the roar but never saw the KC-130 missing its approach in the thick clouds. The A-4s, realizing they probably only had one shot to get down, tried a section landing with three aircraft while the others held up high.

Unfortunately, the three A-4s set down on the absolute end of the runway. The first and second landed OK but wide to the right, which meant the third Skyhawk simply ran out of



A KC-10 of the 22nd Air Refueling Wing, March AFB, Calif., roars away after refueling another aircraft.

room as it landed on the right edge of the runway.

The landing gear on this A-4 sheared off as the fighter took out the visual approach system indicator lights, spewing debris all along the runway end. The pilot got out all right, but the runway was now unusable.

The Santa Maria tower, however, couldn't see the drama being played out at the runway's far end and cleared a civilian flight for landing. Gold 11 copilot Capt. Thomas M. Ferguson pre-empted and surprised the tower controller by radioing, "Negative, the runway is closed due to a crash."

That is how the airport found out about the accident.

Meanwhile, above the impenetrable clouds, the Marine Corps KC-130 had to leave. Using their more sophisticated nav gear, the crew made a white-knuckle landing back at the still-weathered-in Lajes. The three still-airborne A-4s did not have this option, and were out of luck.

With no fuel to spare, the crew of Gold 12 made a courageous decision to come back, knowing that all of them would go in the drink if some unknown miracle didn't happen.

"When I told Gold 12 that I could be airborne in five minutes and he said, 'Go for it,' I knew he was in real trouble," Felman recounted. "Later, I found out that he was below 8,000 pounds [of fuel] and running the ditching checklist."

A KC-10 can carry up to some 300,000 pounds of fuel, making 8,000 literally the dregs of the tanks.

The miracle would have to come in the form of Gold 11. It was nowhere near full, but had been reloaded with enough gas to buy everyone some more time. The crew prepared for a quick launch—so quick, in fact, that the crew chiefs had to be left behind as there wasn't time to get them back aboard after engine start.

The lightly loaded Gold 11 leapt from the runway using every foot available.

They were minutes away from having a KC-10 and three A-4s turn into submarines. If the aircraft went down, more than a dozen lives would probably be lost, as the search and rescue forces at Lajes couldn't take off in the miserable weather. Rescue forces arriving via ship wouldn't show up for hours.

He had Gold 12 dial up the air-to-air TACAN so that Gold 11 could get a fix on the other tanker.



Photo courtesy Marc Felman

Capt. Marc Felman at the controls of the Gold 11 KC-10.

Popping above the soup at about 3,000 feet, Felman rolled out in front of Gold 12 at two miles. Using the "give and pass" ability of the KC-10, Gold 11 gave enough fuel to the other tanker to keep it airborne long enough for the by-now-very-concerned A-4s also to fill up from Gold 11.

While this unbelievable series of events was occurring, a scratch tanker crew from whoever could be scrounged was launched from Spain to speed to the area in hopes that there would still be someone left to take on fuel.

High Honor

And that is exactly what happened. With the partially refueled Gold 11 on-scene, the other KC-10 and the three remaining Skyhawks were all able to remain airborne until the rescue tanker arrived. That hastily launched tanker was able to bring the two tankers and three fighters safely to Rota.

Upon landing, the marines taxied away to their spots and the heavies went to their side of the ramp.

It was then that the crew of Gold 11 realized how close to ditching Gold 12 had been. "That crew came aboard our jet and had unloaded our bags before we had even finished our shutdown checklists," Felman said. In the highly self-sufficient military

aviation world, having someone else tote your bags is a high honor.

Felman, who retired as a colonel, was glad to be done with that particular day. It was no doubt a sentiment shared by the marine pilots who almost witnessed what can happen if the tankers can't deliver the fuel everyone expects.

The significance of Gold 11's exploits was grasped by others, too. The Mackay Trophy is administered by the Air Force and the National Aeronautic Association. It is given for the "most meritorious flight of the year" under combat or noncombat conditions, and is on display at the National Air and Space Museum in Washington, D.C.

The 1986 trophy was awarded to the crew of Gold 11. The citation reads, "Following a precipitous and hazardous launch in near zero-zero weather, the crew of a KC-10 assigned to SAC's 68th Air Refueling Wing provided emergency refueling to a KC-10 and three A-4s over the Atlantic Ocean on 5 March [1986]."

The crew of Gold 11 consisted of: Capt. Marc D. Felman, Capt. Thomas M. Ferguson, MSgt. Clarence Bridges Jr., MSgt. Patrick S. Kennedy, MSgt. Gerald G. Treadwell, TSgt. Lester G. Boulter, TSgt. Gerald M. Lewis, SSgt. Samuel S. Flores, SSgt. Scott A. Helms, and SSgt. Gary L. Smith. ■

*Braxton Eisel is a retired USAF lieutenant colonel who previously served as a Minuteman III flight commander, an E-3 AWACS and E-8 Joint STARS weapons controller, and as a liaison to the FAA. He is the author of *Beaufighters in the Night: 417 Night Fighter Squadron USAF and a forthcoming history of F-4G Wild Weasel operations in Desert Storm*. His most recent article for *Air Force Magazine*, "Leave it to the Guard," appeared in the January 2007 issue.*