Icarus Ascending

By Rodney O. Rogers

Each time I watch a Shuttle launch from my backyard on the Halifax River in Ormond Beach, Florida, two images sear my brain: *Columbia’s* ruins falling like stars from the edge of space, and stratospheric plumes of smoke from *Challenger* as it disintegrated shortly after launch from Cape Canaveral. These two mishaps inevitably bring to mind another fall from the sky, a third poignant reminder of the risks aviators have always accepted to dare the heavens.

It happened nearly half a century ago, and involved a Chance-Vought F–8 Crusader, the United States Navy’s first 1,000-mile per hour, carrier-based jet, a Vietnam War champion celebrated as the “last of the gunfighters.” For all its prowess as a war plane, however, the Crusader was challenging to handle, especially aboard ship, and it had a long history of periodically claiming the lives of pilots who flew it.

In August 1962, a flight of four Crusaders from the Fighter Squadron Sixty-Two *Boomerangs* took off from Naval Air Station Cecil Field in Jacksonville, Florida. Headed for the Guantanamo Bay Naval Base in eastern Cuba, the flight was led by the squadron’s Skipper. The second most senior pilot would later fly for the Blue Angels Flight Demonstration Team. Both of these men survived the dramatic mishap fate had in store for their flight that day, although the Blue Angel to-be later would die in a Grumman F–11 Tiger ground impact during a Team air show. One of the other two pilots, Lieutenant Junior Grade Thomas J. “TJ” Malloy,
would not live to fly another day.

I went through flight training with TJ, who was the regimental commander and top cadet in our Pre-Flight Class. I remember him—a quiet, handsome man, of medium height, tough of mind and body—for his reverence of God, his love of flying, and his dedication to the Navy and to his country. Most of all I remember TJ because in my imagination he embodies the courage and frailty of aviators who operate aircraft near the limits of the flight envelope.

The Boomerangs’ four Crusaders are in loose formation over south Florida above 40,000 feet. Florida’s usual summer thunderstorms, huge and building rapidly, are already reaching above the Crusaders’ flight path. Beautiful when viewed from a distance, in the proximity these storms are deadly. The Skipper begins a gradual ascent in an effort to top the storms. Preoccupied perhaps with the cumulonimbus, he allows the airspeed to dwindle as he climbs. Crossing the Florida Straits between Key West and Cuba, the four Crusaders—now well on the back side of the thrust curve—are skimming the tops of the building storms. Suddenly, the steel-gray birds encounter what must have been an extraordinarily powerful wind shear.

Rodney O. Rogers is a former Navy jet pilot with six years active duty and eight years reserve flying, during which he logged 247 carrier landings and 2500 hours of flight time, including 1500 in the F–8 Crusader and 500 in the A–4 Skyhawk. He holds the Ph.D. degree in Computer Science from the University of Central Florida and in English and American Literature from the University of Virginia, and has taught literature, aeronautics, and computer science at a number of American universities. Currently he is a faculty member in the Department of Aeronautical Science at Embry-Riddle Aeronautical University in Daytona Beach, Florida, where he teaches aerodynamics, aircraft performance, and simulator-based upset recovery maneuvering to aspiring airline pilots. Over the past few years, Rogers has published the results of three federally-funded research experiments to assess the effectiveness of upset recovery training using desktop flight simulation. He is currently a member of the International Committee for Aeronautical Training in the Extended Envelope (ICATEE). The efforts of ICATEE, sponsored by the Royal Aeronautical Society of London, are focused on reducing lost-of-control in-flight accidents by improving air transport pilot upset prevention and recovery training.
Of an instant, three of the pilots experience flameouts. The fourth continues unimpeded and lands safely in Gitmo. The other three planes are gliding powerless into the heart of the thunder. Chance casts the dice. One of the three stricken pilots obtains a relight, flies out of the storms intact, and limps into Cuba. The Skipper and TJ, however, must ride the whirlwinds into the sea. In retrospect, the one pilot unaffected by the wind shear reports hearing a final radio transmission from TJ, who has entered a spin and is initiating an ejection. Then silence.

Thirty hours later, the evil weather has abated. Search and Rescue finally locates the Skipper floating in a life raft. Severe back injuries sustained in ejecting will cause him to be relieved of his duties. Nothing of TJ or his fallen Crusader is ever retrieved, save that after some days his battered hard hat is found floating in the crystal green waters of the Gulf Stream. A picture of the shattered helmet—its Boomerang paint scheme still discernable—appeared in the accident report disseminated months later to the F–8 community. When I read the report, I glimpsed TJ’s youthful face smiling at me from the broken shell of the hard hat. I can still see it stark and clear almost fifty years later.

What is one to make of such a mishap? Long before man’s first flights, the ancient Greeks, in a still famous myth, foresaw the risks of entering the realm of the gods. Daedalus and his son Icarus fashion wings of wood, wax, and feathers to escape the labyrinth of King Minos on the Mediterranean island of Crete. The father cautions the son not to ascend too high, lest the sun’s heat melt the wax holding his wings together, nor to fly too low lest the salt waves of the wine-dark sea ensnare him. Nevertheless the youthful Icarus, enthralled by the ecstasy of flight, soars higher and higher. Ultimately, his wings fail and he plunges to his death in the Aegean Sea, creating the Dodecanese island now known as Icaria. Daedalus, proceeding cautiously at a middle altitude, flies to safety.

The classical Greeks saw this old story of
Daedalus and Icarus as an example of the wisdom of following Aristotle’s golden mean, the middle way between two extremes that the Romans later called the via media. Icarus suffered from hubris, a sense of godlike power that leads a hero to fall through over-reaching.

Maybe so, but whom do we really admire in this ageless story of two aviators—the cautious father or the daring son? Pilots who push the limits of flight might well say Icarus. Was Icarus punished by the gods, or was he rewarded? Who can say what wonders this fearless youth glimpsed as he soared heavenward? To borrow a marvelous notion from the seventeenth-century English poet John Dryden, “None but the brave deserves the fair.” Never mind that the line between brave and reckless is not always distinct.

What motivates aviators to tempt Fate the Hunter cannot quite be explained. I suppose it will always remain something of a mystery. In a well-known poem by W. B. Yeats, an Irish airman killed in World War I foresees his death. He explains that “a lonely impulse of delight” drove him to risk his life in aerial combat. Despite the profound consequence of his choice, he still prefers a pilot’s brief life in the tumultuous clouds to a longer, more pedestrian existence on the ground:

I balanced all, brought all to mind,
The years to come seemed waste of breath,
A waste of breath the years behind
In balance with this life, this death.

Thomas J. Malloy is long dead, but whatever impulse drove him to dare the skies lives on. It is the same impulse that inspired—among countless aviators—Icarus; the crews of Columbia and Challenger; and Major Robert Gregory, the Irishman in Yeats’ poem. Surely, it is in the hearts of every Shuttle crewmember today. I believe it will continue to motivate aviators into the far distant future.

At Embry-Riddle Aeronautical University, I teach young men and women who aspire to flying careers. Ironically, in late 2002, shortly before the Columbia tragedy, I asked the twenty-five students in one of my classes if they would be willing to risk flying on a Shuttle mission. Virtually everyone in the class said yes. After Columbia’s fall, I posed the question a second time. Now more cautious, most of the students were, nevertheless, still willing to risk flight into space. Suppose, I asked, you knew the odds of dying were as unfavorable as one in ten, would you still go? Several adventurous students said they would. They considered a ninety percent probability of surviving acceptable, even favorable, given what they imagined the rewards of a Shuttle flight to be.

An aviator’s will is indomitable. Though unmanned space exploration now threatens to eclipse the Shuttle program, Icarus will forever be ascending in the human spirit. Godspeed and a following wind, TJ. You and your kind endure and are unforgotten. Your valor brings man closer to the stars.