R.I.P Orson Nebeker and The Crash of United 227

By Steve Lutz

On Veterans Day, November 11th 1965, former president Ike Eisenhower was in the hospital suffering an apparent heart attack, President Lyndon Johnson announced he was sending more troops to Vietnam to reinforce the 160,000 already on the ground. This marked a major escalation in that long and difficult war. While he was speaking, United Airlines Flight 227, a Boeing 727, with ninety people were on board, was on a routine flight from New York to San Francisco with stops in Chicago, Denver and Salt Lake. At about 5:30 pm it was nearing the Salt Lake Municipal Airport under the command of Captain Gale C. Kehmeier. First Officer Phillip Spicer had the controls. At 5:47, under the direction of terminal control, the plane was cleared to approach. At 5:48, in response to the controller's request for the plane's altitude, the pilot replied "Okay we've slowed to two fifty (knots) and we're at ten (10,000 feet) we have the runway in sight now, we'll cancel and standby with you for traffic." The plane began to descend, but its rate of descent was approximately 2,300 feet per minute, nearly three times the recommended rate of descent.

At approximately 5:49:30, the plane passed the outer marker beacon, 5.7 miles from the runway at an altitude of approximately 8,200 feet, this was over 2,000 feet above the normal glideslope. At approximately 5:51 the plane had descended to 6,300 feet; it was still 1,300 feet above the normal glide slope and still descending at 2,300 feet per minute. Around this time the first officer reached toward the controls to advance the thrust levers to increase thrust, but the
captain brushed his hand aside and said "Not yet."

On board among the passengers was a man in a neat brown suit who gazed out at the peaceful Salt Lake Valley. Salt Lake City firefighter, Orson Nebeker, like many of his colleagues, had a side job, he sold insurance and was returning from a company meeting in Denver on United Flight 227. As the plane glided towards the runway, Nebeker probably thought about getting back to work at the fire department and getting home to his wife, Margaret. He felt the bump as the landing gear lowered. He watched with a little concern as the plane seemed to be descending at an abnormally rapid rate and then suddenly felt the engines surge. Ten seconds later it crashed to the ground 335 feet short of the runway. One of the landing gear was driven up into the fuselage from the force and the plane shuddered to a stop after sliding almost 3,000 feet. The damage was extensive, the fuselage and wings were twisted and broken, one engine broke off completely, the fuel tanks were leaking. The fuel ignited near where the landing gear broke the fuel lines. The uninjured crewmembers, Firefighter Nebeker, and a few other passengers reacted quickly. As soon as the plane stopped moving, he was up and trying to calm the passengers and, being seated near an exit, he quickly opened an escape route. He carried some of the injured to safety and despite having no PPE, he re-entered the cabin with a hose line and only his neat brown suit and a respirator handed to him by a firefighter for protection. His amazing heroism saved many lives. The crew got the other functioning emergency exits open and started getting the ambulatory passengers out of the plane. Incredibly all the passengers were alive after the crash but that changed
quickly as the fire spread. Air traffic control quickly called for fire and ambulance response. The Aircraft Rescue and Fire Fighting (ARFF) crew called for more units. A young firefighter, Harold Turner was assigned to the foam truck in the city and his heart raced as the rig approached the black plume of smoke. He saw the airport crash rig foaming down the plane and people, some of them on fire, fleeing the crash. He saw a man in a brown suit calmly helping passengers and then the man grabbed an attack line and dragged it inside the plane. Smoke and steam billowed out of the openings and more passengers climbed or crawled out of the wreckage. The scene was pure pandemonium, the injured screaming and moaning, some crying, some sitting on the ground in shock. The man in the brown suit shouted to the firefighters that there were still people in the burning plane.

Turner and the rest of his crew donned silver suits and entered the fuselage. Turner recalls that as he made his way through the twisted burning wreckage he bumped the arm of a dead man. The body was so incinerated that the arm broke off. He hosed down the interior and went outside. He heard pounding at the back of the plane and pried open the rear door. A stewardess and several others were in the rear compartment, and without rescue they would surely die. When Turner freed the door, the stewardess leapt onto him and clung to him like a terrified cat. She would live, as would more than half of the passengers.

Ralph Nesbitt, a 59-year-old salesman from Santa Monica, California didn’t notice anything wrong until the plane hit the ground hard. “The plane swerved sideways and people were thrown all over the place.” There was fire coming from
behind him as he crawled out a broken window onto the wing and through a sheet of flame. “I didn’t even know what was on the other side,” he said, “It was horrible. The heat was terrible.”

The final death toll among the passengers and crew would be 43.

By the end of the fire, Nebeker seemed mostly ok to other firefighters, apparently suffering only minor injuries and some shortness of breath. But the damage to his lungs was deep. He was hospitalized and recovered enough to go home but he had difficulty breathing and the damp winter air in Salt Lake made him worse.

Nebeker was forced to take a disability retirement from the job he loved and was told by his doctors to move to a drier, warmer climate. Moving to St. George helped him somewhat but ten years later on March 2nd 1975, he died of his injuries.

Investigation Conclusions

This accident was blamed entirely on the bad judgment of the Captain, Gale C. Kehmeier, for conducting the final approach from a position that was too high and too close to the airport to permit a descent at the normal and safe rate. He allowed the plane to fly the final approach segment (in visual conditions) at a descent rate of 2,300 feet per minute (3 times the safe descent rate). When the plane crossed the outer marker, which marks the final approach segment, it was 2,000 feet too high.

The first officer, who was flying the aircraft under the Captain’s direction,
attempted to add engine thrust. But the Captain told him no and brushed his hands off the thrust levers. The Captain took over the controls during the last few seconds, but it was too late to avoid crashing short of the runway. The plane impacted with a vertical acceleration force of 14.7-g.

That severe impact force broke off the left main landing gear and caused the right main gear to thrust up through the fuselage, rupturing pressurized fuel lines in the process. While the plane continued to slide down the runway on the nose gear and fuselage, pressurized fuel ignited inside the cabin. That turned a survivable accident into a fatal accident. Many of the people who were successfully evacuated were severely burned.

The Civil Aeronautics Board accident investigation revealed that the Captain had a problematic training and qualifications history. He had failed his initial jet transition training course, and was returned to flying the propeller driven DC-6. Later on, he also failed to pass a routine annual instrument proficiency check. According to Federal Aviation Administration inspector, Rodney Stich, the high sink-rate technique used by Captain Kehmeier was not an uncommon practice among United pilots. Stich’s warnings that the FAA itself was responsible for creating an environment where unsafe practices were allowed to continue were actually punished. Stich says he was suspended for reporting the problem after officials of the pilots union objected. He recommended that Kehmeier receive corrective training on the 727. That never happened, and a few months later the results were deadly.

Orson Nebeker has not been the only firefighter to die in an off-duty crash. Tim
Hynes, a 45 year old Salt Lake City Battalion Chief and Paramedic, died along with a patient and other Air Med crew members after taking off from Little Cottonwood Canyon in rapidly deteriorating weather on January 11th, 1998. They were attempting to evacuate a skier who had been seriously injured in an avalanche. The rescue had taken longer than expected and a storm caught the crew on the ground. Poor visibility and turbulence caused them to hit the side of the mountain. Provo Fire Department Paramedic Mario Guererro and LDS hospital Life Flight pilot Craig Bingham died when they crashed in heavy fog near the Salt Lake airport on January 10th, 2003. The University of Utah Hospital Air Med ship had already scrubbed the same call because of the weather.

Nebeker was also not the only Utah firefighter to die during an off-duty rescue. Sandy firefighter Don Ahrends died in Hawaii when he attempted to rescue a man swept off of a rocky ledge into raging surf. The victim lived while Ahrends drowned.

A month after the crash of Flight 227, United Airlines, in an apparent appreciative gesture, sent a check for $200 to most of the Salt Lake firefighters who worked the crash. Chief Albert Thompson reported the payments to the City Commission and stated that although it was generous, it was also inappropriate. He thought it could affect litigation and seemed to represent a conflict of interest. The Commission ordered that the checks be returned. It seemed that nobody at that meeting thought United should get off that easily.

Questions remain to this day among the official and non-official records relating to this crash. Why was Captain Kehmeier allowed to fly a 727 when he failed his
check ride? Why didn’t the FAA exercise the degree of control they should have over repeated United Airlines safety issues? Was there collusion between regulators and the regulated industry? If so, it wouldn’t be the first time and unfortunately for the Flight 227 victims and others it wasn’t the last. One thing is sure, Nebeker and the others died because someone else failed to make safety the top priority.

(Authors note: To find out more about an insider’s views on airline safety issues read Rodney Stich’s *Real Unfriendly Skies: a Saga of Corruption*. Beware, after reading it, you may not feel so safe the next time you fly.)