

EXHIBIT 3 - 1964: THE ROME CENTER TANK EXPLOSION

Source: Captain Howard Mann

Captain Howard Mann personally investigated and found the cause of a mishap that occurred in November of 1964. A Boeing 707 skidded into a heavy piece of construction equipment during an aborted take off in Rome. Within seconds of the aircraft coming to a halt, fire broke out from a fuel spill underneath the damaged number 4 engine.

This aircraft had a near empty center wing tank that contained a mixture of highly volatile and highly shaken JP4 fuel and fumes. Within seconds, the under-wing fire ignited the fumes in the right wing surge tank vents, flashed back down the wing to the center tank, causing it to explode.

The Flight Data Recorder recorded the explosive pressure wave from the altimeter (a 950 ft. altitude drop).

This mishap should not be directly compared to TWA Flight 800 without knowing these differences:

1. JP4 vs. Jet-A. JP4 is a highly volatile fuel (explosion produced far higher pressures in the tank) increasing the pressure spike.
2. The aircraft was at rest vs. in flight, increasing the pressure spike.
3. The 707 static pressure ports are very close to the center tank on the fuselage side vs. the 747's static port location 75' forward of the tank center, increasing the pressure spike.
4. Because the 707 was on the ground, the normal explosive pressure sphere was reduced to a hemisphere. This doubles the pressure at any specific distance from the explosion center compared to a free atmosphere burst at the same range, increasing the pressure spike.

It should be noted that, once again, (see previous exhibit) despite all of the pressure generating multipliers of the Rome 707 tank mishap over TWA Flight 800, FL800's recorded pressure spikes were still 3.7 times higher.

Because of the 1964 mishap, TWA went beyond government requirements and equipped their early 747's with a surge tank fire protection system to preclude any repeat of the Rome accident. It must be bitterly ironic to TWA officials that the FL800 aircraft, so equipped and safer than government standards, is now being accused by that government of mysteriously blowing itself up!