

Smoke/Fire/Fumes Sensors - SwissAir 111

Captain Boomer Bombardi
Inflight Fire Team Leader, ALPA

SwissAir 111, a MD-11, crashed over 10 years ago. The cause was an uncontrollable fire onboard. The crew had no indication of the fire until it was too late. It has been debated whether the crew could have safely diverted to Halifax, Canada. My theory was that if the crew had known about the fire earlier, they could have made a successful divert to Halifax.

In order to prove my theory, I was able to get the use of a MD-11 simulator. We put the simulator at the same location that the SwissAir crew first notices that they may have had a problem. This time we assumed that the SwissAir crew had Smoke/Fire/fumes (SFF) sensors on board and knew the seriousness of the fire. From that point we told the simulator crew to divert to Halifax. Knowing now that they had a serious fire on board, the simulator crew 'expedited' their divert to Halifax and made a safe landing.

Next, we put the simulator at the point where the SwissAir crew realized they may have had a problem and began a divert to Halifax. Once again, assuming SFF sensors on board, we told the sim crew that they had a serious fire on board. Once again they made an 'expedited' divert to Halifax and landed safely.

The results showed that had the SwissAir 111 crew had SFF sensors they could have made a successful diversion to Halifax.