

BACKGROUND



SPIRIT OF SPECTRUM

Tuesday 25 July must have seemed like any other summer afternoon for the 85 workers at Spanish Fork. The small team of engineers and support staff would have occasionally glanced out of their windows at the runway, which lies right by their building, to where the company's popular test pilots Glenn Maben and Nathan Forrest were pre-flighting the Spectrum 33 Independence for a routine sortie on a sunny day.

At around 16:00, shortly after take-off, anyone watching that routine sortie would have witnessed an unimaginable tragedy. The right wing dipped, clipped the runway and flipped the aircraft over. Hitting the ground at more than 100kt (185km/h), the wreckage barreled down the tarmac for 750ft (230m) before coming to rest, taking with it the lives of two men and the joy of a close-knit team.

Accident

Bryan Winkel, engineering manager at Spectrum's sister company Rocky Mountain Composites, says: "The accident happened just outside. We were all in disbelief and shock." Vice-president Austin Blue was in California and flew to Utah immediately. "Our initial feeling was one of utter sorrow and despair," he says, "Our first priority was to do what we could for the pilots' families and that is still our first priority. Our second priority was to determine the cause of the accident. We were fortunate that was determined conclusively and quickly working with the FAA and NTSB."

The NTSB report showed that part of the control linkage had been mis-rigged following a heavy landing – reversing the effect of aileron input. The pilots' actions to level the aircraft caused it to roll in the opposite direction and crash. Blue is deeply saddened. "The fact that we lost it in the way that we did is a tragedy. It

Earlier this year staff at Spectrum Aeronautical's Utah base watched helplessly as the only prototype of the jet they had been working on crashed and killed the two test pilots on board. Three months on, Liz Moscrop talks to the company about how it is healing its wounds and its determination to honour the pilots who died by bringing the aircraft to market.

was a simple preventable mechanical problem. We organized grief counseling immediately and have been supporting the families of our two lost pilots. This tragedy has brought our team closer and renewed our determination. Although there has always been excitement for the project, we have the same excitement, but it is infused with determination."

"Glenn and Nathan were everybody's heroes," says Blue, "They were wonderful to work with. Glenn was everything we were looking for in a director of flight operations. Nathan was a young man, 26 years old with phenomenal flying abilities and a great work ethic. He had an exceptional academic career and 3,000h of flight time logged. Both, as soon as you met them, were guys you wanted to know better and spend more time round."

Committed

The pilots were committed to the project. At around 6,000lb (2,720kg) lighter than competitors, the jet is projected to use about 40-50% less fuel than other aircraft in the same class. It has a range of 2,000nm (3,700km) and

can carry eight passengers. Only the week before the crash it had logged its 100h milestone after 46 flights, demonstrating stable handling characteristics and high performance, including climb rates above 5,000ft/min (25.5m/s). The next model will incorporate additional safety benefits (it will be impossible to mis-rig the controls) and is scheduled to come off the production line in summer 2007. It will be renamed the Spectrum Independence - 33

Blue has to lead the company into its next phase while dealing with his own grief. His voice softens. "We lost two wonderful pilots and gentlemen. I have to give credit to the team. Nobody has left. Our investors and management are firmly behind us. We have a long way to go, but we are well on our way. We had a careful look at how we run flight operations with lots of discussions to look at what we could do better. We are in this as a team and will work through it together."

He adds: "Experimental test flying of the kind we're doing is essential. That's how aviation progresses. We have to work in the airplane every day. It is in a

constant state of modification. We implement procedures to make sure everything is done correctly. Occasionally and tragically accidents happen. It is something you know that is possible, something you do everything you can to prevent, but it sometimes happens anyway and is a sobering experience. This has been a terrible setback, but also made us all look at why we're doing what we're doing."

Support

He continues: "The accident showed us how many people are behind us. We received a great deal of kind support from the local community and the aviation industry. We were touched. People said they hoped we would continue – even competitors. Everybody involved in aircraft development understands the tragedy of this kind of thing. People have been respectful of the profound reality of the situation."

As well as a memorial service, the company is creating a new building named after the pilots. Blue says: "These things are symbolic and don't bring them back, but honor their memories." According to Winkel the gesture is healing. "It is a way of keeping them in the forefront of our minds and honoring

them and their families for what they gave us."

He adds: "I am a man of faith and have deep religious beliefs. I believe what Glenn and Nathan accomplished is not in vain and does not end with their loss. Their legacy is continuing to drive the program. They were about designing a safe airplane in a timely manner. They both had a passion for flight and flying and were excellent practical engineers. What made the strongest impression was the way they felt about the aircraft. They were very excited about it."

Blue is at NBAA keen to express just why the late pilots were so excited about the program, compared with competitive aircraft "It has the cabin size of the Cessna CJ2+; a performance and load capability similar to a CJ3; An airframe constructed of materials similar to those used in the Boeing 787; the landing speeds and cabin comparable to the Beechcraft King Air 200 and the economy of operation and low fuel consumption of an Eclipse."

Glenn Maben and Nathan Forrest may have perished on that dreadful day last summer, but deep in the soul of Spectrum their spirits shine on.



Glenn Maben and Nathan Forrest, pilots who died during the Spectrum Crash.