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## Perth firm cracks Boeing maintenance

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PERTH-based Structural Monitoring Systems has claimed a world first after US manufacturer Boeing approved its Comparative Vacuum Monitoring technology for use in aircraft worldwide.

SMS is marketing a technology that uses alternating tubes of air and a constant vacuum to monitor structural health and detect cracks in aircraft before they become a problem.

One of its big advantages is that it can be used on aircraft that are still in service.

It was invented and refined over three decades by former pilot Ken Davey as a way to prevent a repeat of a 1968 aviation disaster that saw 26 people die when a MacRobertson Miller Airlines Vickers Viscount crashed near Port Hedland.

The Perth company said this

week that Boeing had agreed to include its technology in its non-destructive testing manual. The approval comes after a two-year validation program by the US Federal Aviation Administration, Boeing, several US airlines and two US universities.

It said the decision represented a major breakthrough in the commercialisation of its technology as well as a significant cost saving for operators of Boeing aircraft.

“As a result of this agreement the company’s CVM technology is available to be used as a validated means of performing some types of in-situ integrity inspections on Boeing aircraft, to address crack detection inspections in future service bulletins and as an alternative means of compliance for existing inspections,” company secretary Colin McDonald said.

“This is a significant develop-

ment for the company, which can now move towards revenue generation opportunities through marketing its CVM technology as an approved system to operators of Boeing commercial aircraft.”

SMS says the technology will reduce airframe maintenance and inspection costs by 35 per cent. With a typical ageing, narrow-body airliner attracting costs of \$750,000 a year for airframe structural maintenance, this can deliver savings of up to \$250,000 per plane. SMS also has a joint development agreement with Airbus scheduled to end later this year and the company expects to enter into licensing agreements with the European manufacturer.

The Airbus agreement is looking at an in-flight structural health monitoring system for its aircraft.

SMS envisions it will be used in both new and existing aircraft.



**Queued up for savings:** A typical ageing, narrow-body airliner attracts costs of \$750,000 a year for airframe structural maintenance