

# STRUCTURAL HEALTH MANAGEMENT AND PROGNOSTICS

BAE SYSTEMS AUSTRALIA



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## OUR FATIGUE AND CORROSION MONITORING TECHNOLOGY GIVES SUSTAINMENT PLANNERS A COMPLETE SYSTEM STRUCTURAL HEALTH PICTURE.

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BAE Systems Australia is leading the world in preventing aircraft structural fatigue and corrosion.

Our structural and engine health monitoring, management and prognostics systems accurately identify and monitor aircraft structural fatigue and engine health, ensuring effective aircraft management.

In conjunction with our corrosion monitoring technology, our fatigue capability gives sustainment planners a complete system structural health picture.

This technology isn't only applicable to aircraft. It can be used for any air, land, sea and sub-sea vehicle or structure, including ships, submarines, trucks, heavy equipment and pipelines, subjected to environmental and dynamic load effects.

### OUR CAPABILITIES

- Fatigue monitoring and analysis
- Engine health monitoring and fleet management
- Corrosion monitoring and analysis
- Degradation modelling for prognostic management
- Structural life calculations
- Australian Defence Force Technical Airworthiness Management System certified

### OUR EXPERIENCE

Since 1985, BAE Systems has been providing structural health management services for Australia's frontline jet fighters.

We manage the Health and Usage Monitoring System for the F/A-18 Classic Hornet and F/A-18 Super Hornet airframe and F404/414 engines, and provide prototype corrosion management to the Hawk Lead-In Fighter.

Our corrosion management expertise is now being used to sustain Australia's next fighter jet – the Joint Strike Fighter (JSF).

We're developing and integrating corrosion sensors for the JSF's Structural Prognostic Health Management system.

We continue to develop these technologies and processes, working in collaboration with the Defence Material Technology Centre, the Defence Science and Technology Organisation and our company research organisations.



FOR MORE INFORMATION CONTACT:

BAE Systems  
Taranaki Road  
Edinburgh Parks  
EDINBURGH SA 5111  
PO Box 1068 Salisbury SA 5108  
Telephone +61 (0)8 8480 8888  
Fax +61 (0)8 8480 8800  
[www.baesystems.com/australia](http://www.baesystems.com/australia)

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