ROMDAS™

AIRFIELD LASER FOREIGN OBJECT DEBRIS (LFOD) DETECTION SYSTEM

As an Airfield Operator, one of your many challenges is the effective management of Foreign Object Debris (FOD) across your airfield.

This challenge is getting harder, and the impact of FOD events is getting worse:

- Airfields are already busy, and traffic levels are increasing – improving airfield operational efficiency is key
- Aircraft engines are becoming more advanced, for improved power, noise-reduction and efficiency – but it makes them more vulnerable to FOD damage and more expensive to repair
- Aging pavements are generating FOD exactly where you don't want it – on the runways and taxiways
- Changes in labor markets is leading to smaller, less experienced teams trying their best to keep the airfield safe

Existing manual FOD management methods are being shown to be insufficient for keeping the consequences of FOD events at acceptable levels. The chain of events that lead to the emergence of FOD in high risk areas can be difficult to understand and mitigate. Systematic, objective data is key to observing and performing effective root-cause analysis.

Technological solutions exist to help with these challenges, and many airfield operators are already on this journey – will you join them?

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ROMDAS™ AIRFIELD LFOD DETECTION SYSTEM

Our proven, vehicle-mounted FOD detection system is ready to augment your existing FOD management processes.

CONCEPT-OF-OPERATIONS

ROMDAS uses a dual laser system to profile the pavement surface. This data is analysed in real-time, with FOD 'hits' displayed on an in-vehicle user interface. Most ROMDAS operators prefer to perform the FOD detection sweep first, and collect the identified FOD on a return pass (other CONOPS are viable). ROMDAS is specifically designed to fit around busy airfield operations: it is driven at highway speeds, and can operate in complete darkness.

As well as tactical FOD Detection and removal, the data collected by ROMDAS can also be used to identify FOD 'hotspots' around an airfield. These 'hotspots' can change over time – for example, an aging FOD-generating runway, that is eventually rehabilitated – so having high quality and up-to-date FOD detection data is crucial to delivering a dynamic, effective FOD management program.
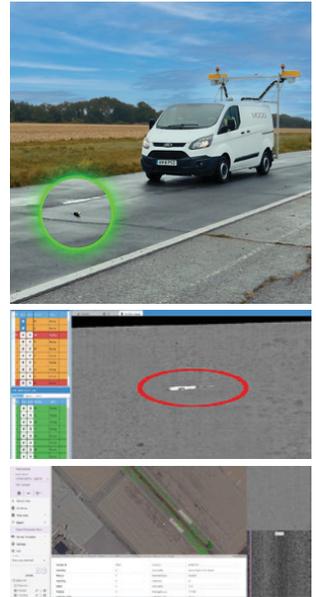
Software Interface

BENEFITS

- Improve airfield efficiency without compromising on safety

- Reduce impact of FOD events on aircraft readiness and availability

- Eliminate the need for manual FOD walks, unlocking significant resource

- Reduce cost of FOD events

- Increase reliability of FOD detection process, increasing airfield safety

- Identify FOD hotspots across the airfield

FEATURES AND OUTPUTS

- Operating speed 0-100km/h (0-60mph)

- Scanning width of 5m (15ft) per pass

- Detects FOD as small as 5mm (~1/4in)

- Live map interface shows location of FOD

- Operate in day or night conditions

- Usable across the airfield: runways, taxiways, aprons, etc.

- FOD GPS location and dimensions

- Non-proprietary data formats: easy conversion to Excel, for GIS mapping or asset management systems

ADDITIONAL CAPABILITIES

Pavement Measurement: ROMDAS collects very high resolution pavement profile data, and analyses this data to identify and measure pavement defects. The origin of the ROMDAS technology is in pavement scanning – please contact us for more information about how ROMDAS can help to maximise the life of your airfield pavements.

Digital Airfield Solutions: ROMDAS is integrated into our Digital Airfield Solutions portfolio, which includes our world-class Tarsier® FOD Radar system; please contact us for more information on how our integrated portfolio delivers additional value to airfield operators.

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www.moog.com/DAS