

OCULAR ROBOTICS LIMITED (ASSOB: OCR)

- **Ocular Technology Applied to Solve Structural Fatigue Testing Limitations**



One of the most exciting features of the OCR business for the team at Ocular is the way our customers regularly bring to us completely new applications of the Company's technology that had not previously been contemplated.

One such example came from the Australian Defence Department's research group the Defence Science & Technology Group (DSTG). In 2015 the DSTG engaged Ocular Robotics to build a proof of concept system leveraging the company's RobotEye technology to demonstrate an effective thermographic stress analysis (TSA) system. Yes a complicated name, but it basically means being able to view with a thermal camera the effects of stressing (stretching & twisting) structures to predict when and where they will fail. In the case of the DSTG project these structures are large pieces of aircraft.

Following the successful development of the proof of concept system, DSTG has now asked Ocular Robotics in the next phase to develop and refine the system for practical application. Such a TSA system has eluded the fatigue testing industry worldwide not just for defence related items but for all structures that undergo similar testing to ensure their long term reliability.

- The current alternatives to TSA are laborious, costly and provide a low level of information.
- Practical implementation of TSA to structures that are under motion (stretching & twisting) during testing has not been possible because the thermal images are blurred due to the motion.
- Ocular Robotics' RobotEye technology provides a solution by enabling the close following of an area of the structure under test as it moves to provide clear thermal images that can be used for TSA.
- The TSA system using the Company's RobotEye technology developed for the DSTG will be relevant to all such facilities around the world undertaking the fatigue testing of structures.

● **March a Busy Time for Exhibition of Ocular Products Around the World**

The company's Korean distributor Novitec showcased OCR's 3D scanner and vision products at the recent SECOM 2016 an international security conference and exhibition in Seoul, Korea.

Our Japanese distributor ViewPlus introduced the Company's REHS25 Hyperspectral product and also displayed OCR's 3D scanner and vision products at DIA2016 Dynamic Image Processing for Real Application workshop in Tokyo, Japan.

The Company's technology will be showcased at DEFEXPO in Goa, India later in the month, the region's largest defence exhibition, by a Singaporean partner promoting products they have developed with RobotEye at their core.



Mark Bishop - Director, CEO