



## **NEW TEST LAB TACKLES SPORTS INJURIES "HEAD-ON"**

***Media release, 7 May 2008, Nightside Test Design Ltd, Christchurch, New Zealand:***  
**Christchurch based test engineering company Nightside Test Design is showcasing slow motion video clips of their latest vision and data project at the EMEX trade show currently running in Auckland, demonstrating the impact of cricket and hockey balls on standard sports helmets.**

Nightside's managing director, Peter Brown, says the sports equipment test laboratory recently completed for Palmerston North manufacturers OBO is designed to reduce the number of head injuries among players of ball sports.

OBO specialise in protective equipment for field hockey goalies and have a 65% share of the world market, exporting to 61 countries.

"In the last fifteen years, the speed of balls being hit, thrown or bowled at players has increased exponentially, as a result of the improving technologies involved in surfaces and materials in bats, racquets, and hockey sticks.

"We have also seen a number of serious head injuries to sportspeople resulting from balls hitting the head at high speeds.

"Unfortunately the technology around testing to make sure protective helmets are up to par has not increased at the same speed – until now," Brown says.

The new OBO test laboratory will start to address the issue, by providing a state of the art facility equipped with a high speed video camera and sensor equipment that captures and analyses the impact of balls shot by a high pressure cannon at up to 160km/h towards a test dummy head.

The shock attenuation of the impact is recorded frame by frame by the high speed Mikrotron video camera and other sensors at over 2,000 frames per second, allowing highly detailed analysis of the data and images around the impact zone.

To date, most similar testing has been limited to the automotive industry (using crash test dummies) and the military sector and is specific to the requirements of those industries.

Reuben Parr from OBO says the system has been very successful to date in testing a range of helmets and masks from different sporting codes, including cricket, softball and field hockey.

Results show a large difference in the performance of different products and different materials, for example, polycarbonate face masks proved to be far stronger than steel wire face masks used in a number of sports.

## **About OBO**

New Zealand manufacturer and exporter OBO is in the business of making protective gear for field hockey goalies. Based in Palmerston North, the company designs and manufactures a range of padding, masks, helmets, sticks and protective clothing primarily made from closed cell polyethylene foam.

OBO currently has more than 65% worldwide market share, exporting products to 61 countries.

More about OBO and their product range can be found at [www.obo.co.nz](http://www.obo.co.nz) .

## **About Nightside Test Design**

Founded in 2001, Nightside Test Design provides independent embedded software test solutions as an alternative to having an in-house testing department. Accurate and timely testing can help streamline the development cycle while improving time to market, product reliability and efficiency.

Nightside's professional services cover the full product development lifecycle from design to production, including Software Testing, Production Testing, Embedded Development, Industrial Control, Measurement and Data Logging.

Nightside is a member of the National Instruments Alliance Partner Program – an international network of consultants, systems integrators, and product developers that help bring NI technology to new applications and markets.

As one of only two Certified Alliance Partners in New Zealand, Nightside uses NI LabVIEW, LabWindows/CVI, and TestStand, along with the NI data acquisition and control hardware to provide automated solutions for manufacturing production test applications.

Nightside Test Design's range of services and products can be found at [www.nightside.co.nz](http://www.nightside.co.nz)

Ends

For further information and still or video images, please contact:

Karen Brown, Communicate IT  
PR for Nightside Test Design  
Ph 03 381 6655  
Mob 027 339 0051  
Email: [karen@communicateit.co.nz](mailto:karen@communicateit.co.nz)

Peter Brown  
Managing Director, Nightside Test Design  
Ph 03 338 0034  
Email: [peter@nightside.co.nz](mailto:peter@nightside.co.nz)