Utilizing RIEGL multi-platform LiDAR for efficient data capture – assisting public safety, streamlining forensic investigations

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OUTLINE: LIDAR IN PUBLIC SAFETY

- Specialist Public Safety & Forensics support
- Multi-platform tools
  TLS, UAV, MLS, ALS
- Proven advantages of RIEGL LiDAR
- Seamless Fusion of Data
- Worldwide Usage:
  - Expressway Authorities US,
  - Victoria Police, Australia
  - Swiss Police
  - Metropolitan Police, UK
  - ...
Documenting Crime scenes has moved on since this sketch was produced!
LIDAR FOR FORENSICS INVESTIGATIONS

- Versatile, robust, IP64 rated.
- Intuitive operation
- Simple, Targetless, one-touch workflows
- User customisable operation – good for road surfaces and detailed areas for evidence
- Fast initial set-up & scan position moves
- Rapid objective data capture, rapid imaging
- Options on range / speed to match application
- RiSOLVE software and On-board automatic registration
- Records poor quality returns e.g. Tyre Marks & black shiny surfaces...
- Faster scene clearence, reduced officer fatigue, free up resources earlier
- TIME IS MONEY – LIDAR is reducing road closure times
LIDAR FOR FORENSICS INVESTIGATIONS

• RiSOLVE: automatic target-less registration
• Simple to use – single buttons for main operations
• Rapid results from field to Office
• Useable tools (e.g. terrain filter, rain filter, etc.)
• Animation & screen shots to highlight the data
• Produced in 1000’s of court cases across UK, Switzerland, Australia, USA etc
DEPLOYMENT FOR SECURITY PLANNING

Swiss Police – security scanning ahead of major Skiing events
DEPLOYMENT VP-1 WITH VZ-400i

RIEGL VP-1 Helicopter Pod in action for disaster management and accident investigation

(photos by courtesy of KP Zürich)
DEPLOYMENT AT SCENES OF AIR CRASHES

Light aircraft crash scenes

Note the heavy rain and poor conditions
DEPLOYMENT AT SCENES OF RAIL CRASHES
Conclusion

• LiDAR has become a proven, accepted technology by authorities worldwide for forensic and public safety applications
• LiDAR is offering more complete scene capture for investigations, in less acquisition time
• Planning and Pre-Event Deployment increase public safety
• Time savings benefit the individual and the society as a whole