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**It's that time of year again and like you we need a break!**

Our Offices and Warehouses will be officially [closed from 4pm on Wednesday 21st December, 2005 and re-open on Monday 16th January, 2006 at 8am.](#)

For any urgent requirements during this time please call either :

Darren Sandars  
0412 277 886

Dennis Hanson  
0428 356 190

Anthony Jones  
0421 277 889

Peter Sandars  
0411 275 195

We take this opportunity to thank all our Customers and Suppliers for your continued loyalty and support and we wish you all a very Merry Xmas together with a prosperous and fulfilling year ahead in 2006.




## HOTSHOT/HOT STUFF

**Hot/Shot Radar Inspections** is an asset inspection services company, of Denver, Colorado, USA that is the owner and developer of patented imaging radar platform technology providing accurate, non-destructive inspection services that identifies anomalies, below and above ground, in wood structures including Poles and Crossarms.



The patented polSAR<sub>sm</sub> ( Synthetic Aperture Radar) imaging radar platform leverages US military imaging radar technology which is deployed from a flexible ground based platform, and in the near future, having aerial based capability. The system supports a condition based asset management approach and affords all utilities both near and long term benefits, not previously available. Following release at E21C in Brisbane during August this year and more recent visitations to USA with Hot/Shot Radar Inspections, ADAPT are most pleased to announce it's Representative appointment, under a signed MOU agreement, to Hot/Shot for Australia, New Zealand and the nearby markets within the Pacific Islands region.

The polSAR<sub>sm</sub> system, a patented diagnostic service based on advanced imaging radar, enables utilities to substantially improve their asset management capabilities through greater, more accurate information on the condition of a key component of their Transmission and Distribution networks.

*Value and Benefits continued on page 4.*



*New HotShot 4WD Inspection vehicle fitted with Mattrack treads*



# LineTroll®3100

## Fault Passage Indicator for Overhead Lines: 6 to 400kV

There are many approaches to improving network reliability and the capital investment required can be quite significant, especially when all of the easy fixes are completed.

There is a clear need to be able to target network reliability investment and dependably achieve the required performance outcome. New generation intelligent fault current indicators are a cost effective tool to assist network operators efficiently manage reliability performance outcomes.

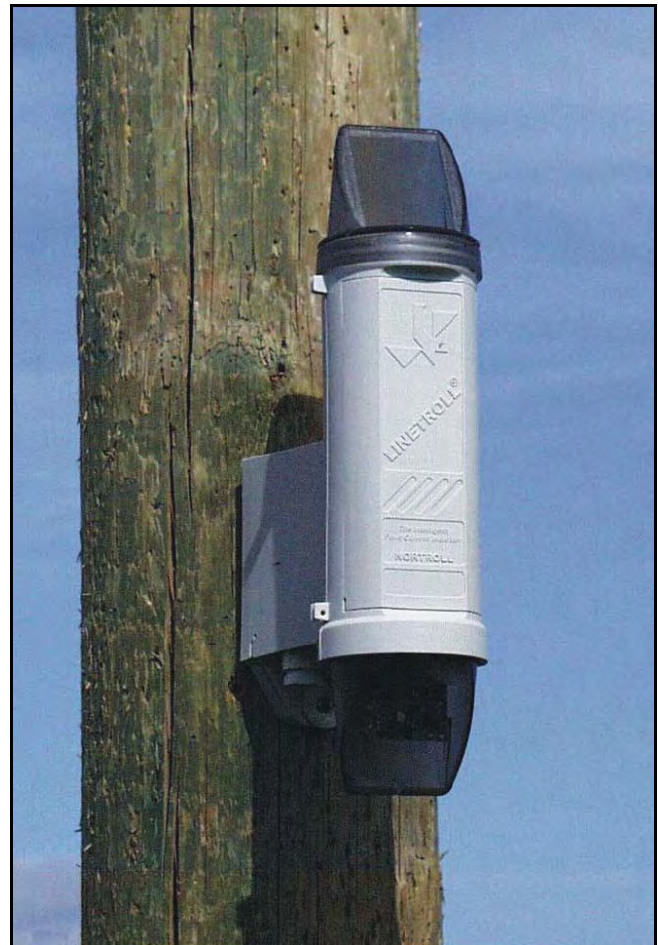
Nortroll have recently released the LineTroll 3100 Fault Indicator. This is a pole mounted unit that operates for both earth and phase faults by detection of changes in the magnetic field set up by the fault current. The indicator can detect and independently indicate both permanent and transient faults. A high visibility cluster of red LED's show a permanent fault and one green LED for a transient fault. Features of the LineTroll 3100 are:

- Programmable operating parameters
- High visibility (> 10 lumens)
- Usable on distribution and transmission networks with nominal voltages of 6 to 400 kV
- Dual indications (permanent and transient faults)
- Display unit can be rotated for maximum visibility
- Built in log and fault counter
- Resistant to tough weather conditions
- Communication modules available
- Battery capacity monitoring

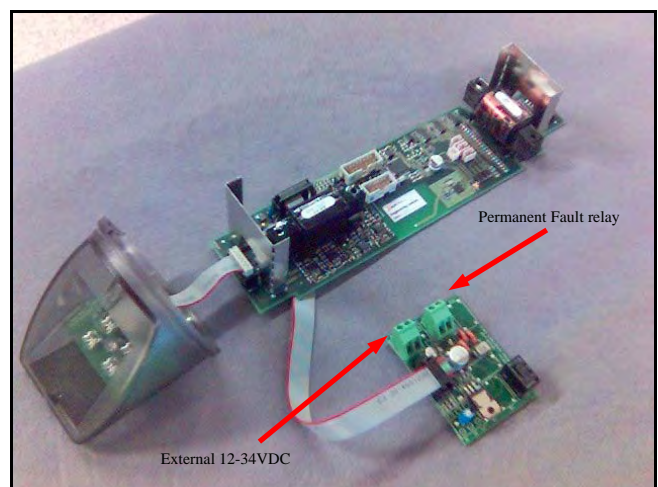
Enhanced data logging capability can be used to support fault anticipation approaches, that is detecting incipient faults to allow attending to the cause before they escalate into permanent faults and interruptions.

LineTroll 3100 can be equipped with a relay card, short-range radio or GSM communication module for remote indication. Interconnection with Nortroll's Lon-based MicroScada hardware relay interface-software protocol converter is available for integration with third-party SCADA systems.

The ComTroll 130 GSMLINK Messenger (GLM) is a general purpose GSM module for fault indicators or other devices with a digital output. The GLM will, when initiated by the fault indicator, send an SMS message to a GSMLINK Collector (GLC) and then to a GSM Router for input to Nortroll's or other network management systems. The GLM can be contained within the LineTroll 3100 and is also available in a separate housing for use with other devices such as the CableTroll series for underground network use.



**LineTroll 3100 Fault Indicator**



**Connections to SCADA RTU**

## The New Range of 'NH' DIN Fuse Links with Dual Indication.

In our June Newsletter we announced the appointment of Adapt Australia as Cooper-Bussmann's distributor for High Voltage, and Low-Voltage Fuses and accessories within Victoria, Tasmania and South Australia. As a result of this appointment, one of the feature Bussmann products now available from Adapt is the new range of 'NH' DIN Fuse Links with Dual Indication.

Today the majority of NH Fuse Links have two different types of indication system. The most common type has the indicator located on the top end plate of the fuse link. In most cases this is used for visual indication, although it can also be used to operate a micro-switch where remote indication is required. When used in conjunction with NH open style fuse bases, the top indicator provides the end-user with effective visual indication of operation of the fuse link. However, when used in Fuse Rails or Fuse Switch-Disconnectors, it is extremely difficult to identify the operated fuse link.



*New 'NH' Fuse Link offers Dual Indication and other valuable feature*

The second type of indicator is located in the centre of the ceramic body of the fuse link, however over the years since this style of indication first became available, it has tended to be an unreliable form of indication.

The new Dual Indicating NH fuse link from Cooper-Bussmann incorporates the top and centre indicator systems into a single fuse link body. All users can benefit from a reliable and effective NH fuse link complimented by a proven dual-indication system irrespective of whether the fuse is situated in a Fuse Base, Fuse Switch Disconnecter or Vertical Fuse Rail, and regardless of application.

In short, Bussmann's new NH fuse overcomes such difficulties and gives exactly what is wanted: reliable dual indication of fuse operation. This is because its indicator mechanism uses fewer parts than a standard centre indication fuse link, so improving mechanical reliability.

## Energy 21C

Energy 21C held in August this year, proved to be a success with ADAPT showcasing a Number of New Innovative Products including, HotShot Radar evaluations for timber poles and crossarms, Novinium HV cable rejuvenation and S&C Electric Purewave Power Quality Products. Along with the proven products from K-Line Insulators and Lucy Switchgear.

Left—Tony Carreira, President of K-Line Insulators presents the "Innovation and Challenge Award" to ADAPT's CEO, Peter Sandars for achieving excellent sales results in a difficult market environment.

Middle—The ADAPT display stand ready and waiting for the opening of the exhibition.

Right—Looking relaxed and awaiting the start of the conference reception are from Left to Right. Tony Carreira (K-Line Canada), Andrew Evans (Lucy UK), Howard Neilson (ADAPT), and Rich Brinton (Novinium USA).





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## Tim Bartlett re-locates to Brisbane



**Our Design and Development Engineer, Tim Bartlett has re-located back to his hometown of Ipswich, near Brisbane in Queensland.**

In addition to his National Technical role Tim's already busy schedule will now also include a Sales Support Role with selected Customer visits, together with the overall Technical Management responsibility of Special Projects and Associated Works involving ADAPT's Products and Services.

Tim's contact details are as follows:

Address - 18 Phyllis Street,  
Eastern Heights  
Queensland, 4305

Mobile - 0400 176 728

## HOTSHOT/HOT STUFF (CONTINUED FROM PAGE 1)

### Summary of *poSAR<sub>sm</sub>* Service Value Proposition

#### Value and Benefits to Utilities

- 1. Comprehensive structure inspection**
  - a. Ground line area
  - b. Below ground line
  - c. Top of structure
- 2. Structure integrity retained through non-destructive evaluation**
- 3. Substantial accuracy improvements over conventional inspection methods**
  - a. Verification of anomaly scope and location
  - b. Address current false negatives and positives
- 4. Supports preventative maintenance programs**
  - a. Condition-based asset management rather than time-based or run-to-failure based
  - b. Greater accuracy enhances existing condition-based programs
- 5. Near-term savings**
  - a. Compared to conventional inspection methodologies
  - b. Opportunity to capitalize inspection cost
  - c. Eliminate remediation and replacement costs associated with false positives
- 6. Long-term savings**
  - a. Reduced remediation
  - b. Reduced replacements
  - c. Extended asset life
  - d. Reduced lost energy sales and unscheduled repairs associated with false negatives
  - e. Reduced capital outlay costs due to regulatory "lag"
  - f. Improved asset management processes
- 7. Additional benefits**
  - a. Increased safety
  - b. Increased network reliability – customer and regulator goodwill
  - c. Reduced corporate liability
  - d. More timely inspections
- 8. Comprehensive report on all structures evaluated**
  - a. Inspector, date, time
  - b. Line and structure number, GPS coordinates
  - c. Color visible light digital photographs of structure
  - d. Schematic structure diagram including anomalies identified
  - e. Geo-referenced structure map
  - f. Strength assessment, if requested

#### Value and Benefits to Utility Customers

1. Improved reliability
2. Mitigate future rate increases
3. Safer environment