

ADS-B Ground Station Simple, Reliable, Maintainable and Affordable



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ADS-B Meeting & Seminar – October 2005

Thales AS680 ADS-B Ground Station – Advantages

- Low Maintenance
- Low Power Requirements
- Complete Remote Monitoring and Maintenance
- Transportable
- Compact
- Plug and Play ability
- Affordable
- Long Range Coverage
- Use Existing Remote Sites

ADS-B Ground Stations – Low Maintenance

- No Moving Parts
- No Routine Maintenance Required
- Maintenance Requirements Comparable to Remote VHF Sites (can be done simultaneously)



ADS-B Ground Stations – Low Power Requirements

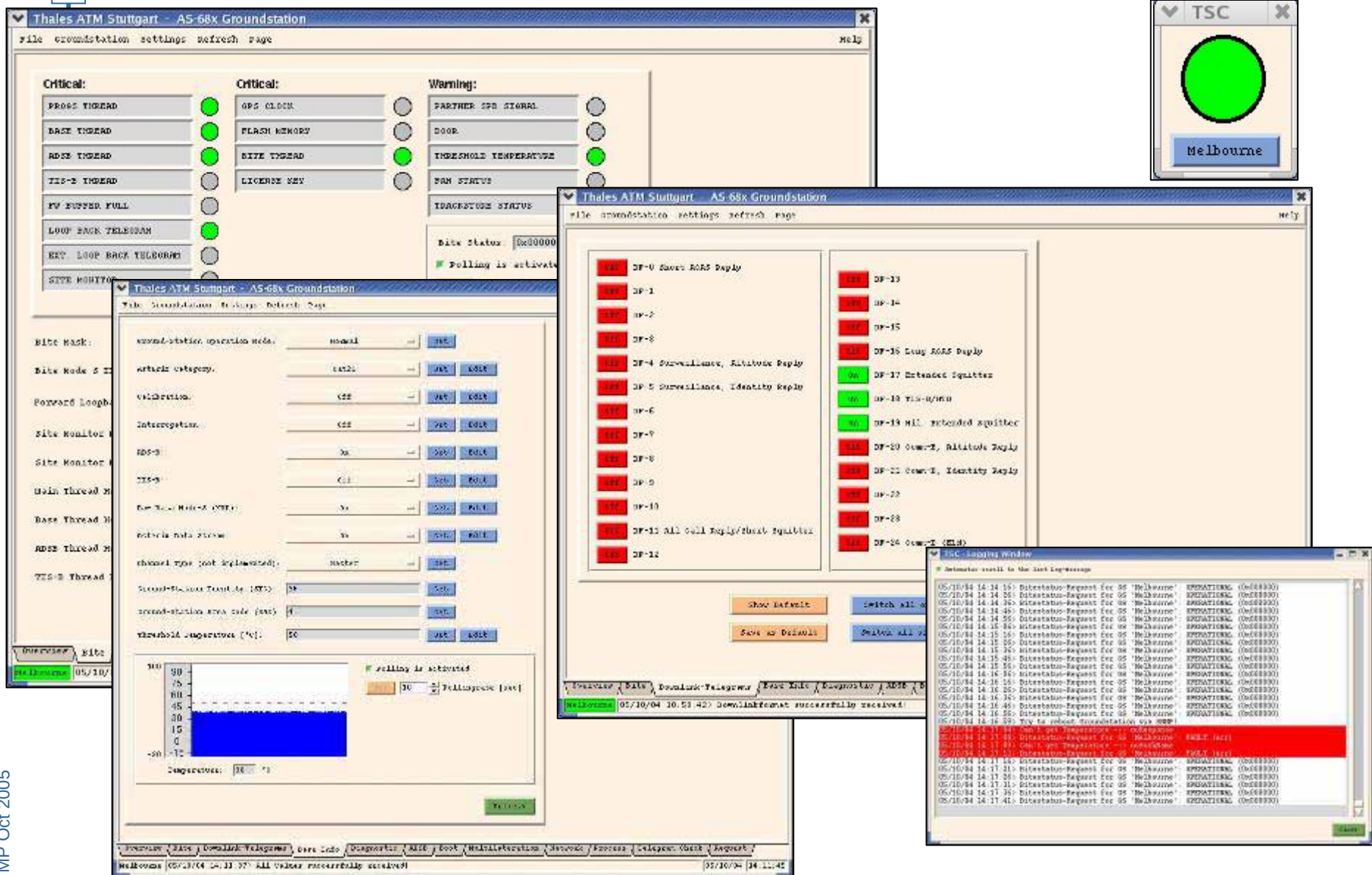
- Voltage 20 – 28 V DC or 85 – 255 V AC
- Very Low Power Consumption < 80W
- Capable of being run from Solar Power



ADS-B Ground Stations – Complete Remote Monitoring

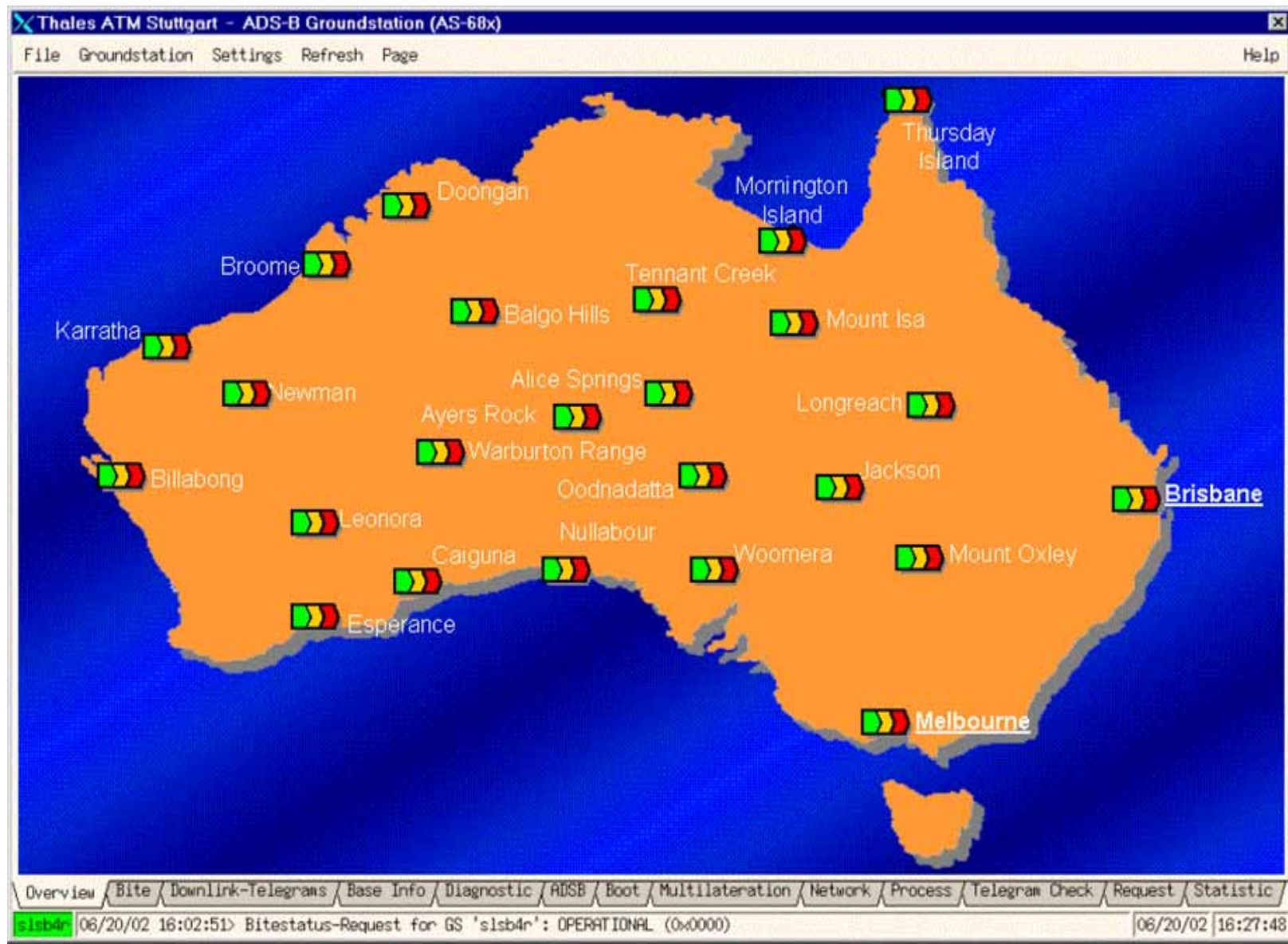
- Full remote access to all AS-680 parameters and status
- Remote login via encrypted link
- Remote Reset/Reboot
- Remote software upgrade
- HW watchdog and failsafe logic to automatically recover from failures
- Local and Remote Configuration and Supervision of GS and network components by SNMP

Complete Remote Monitoring



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Complete Remote Monitoring



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Germany

ADS-B Ground Stations – Transportable

- No extensive preparations required
- Moveable, no need for fixed position
- Simple Environmental Conditions
 - Temperature +4° to +50° C Indoor Parts
 - Temperature -40° to +70° C Outdoor Parts
 - Up to 95% humidity



Kenya

Singapore



Dakar



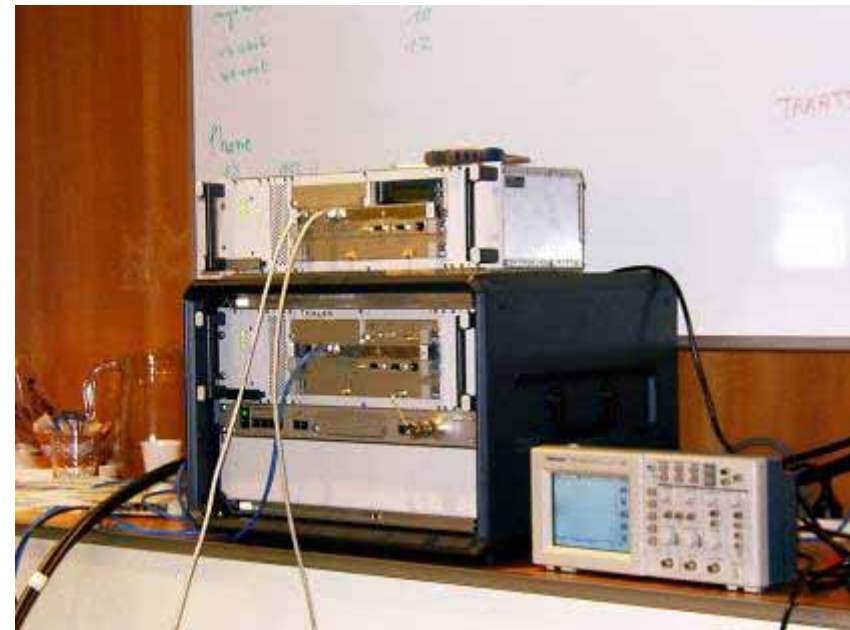
Korea



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ADS-B Ground Stations – Compact

- Small and Simple Rack Mounted Ground Station
 - Height 133mm
 - Width 483mm
 - Depth 300mm



ADS-B Ground Stations – Plug and Play

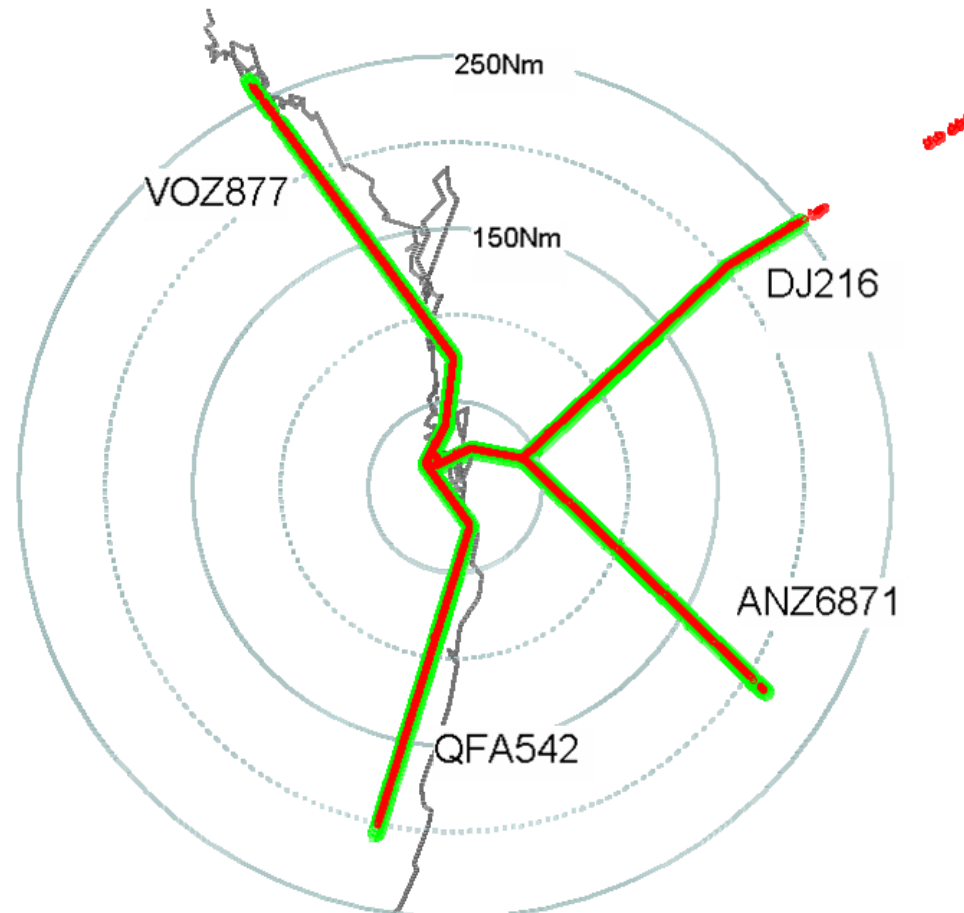
- Simple to add extra ground stations to network
 - Simply install and connect to TCP/IP Network
 - Add to Dataset
 - Add to remote maintenance system
- Expand or fill gaps in coverage as required
- No need to purchase complete system at once

ADS-B Ground Stations – Affordable

- **Low initial cost**
 - Approximately 1/10th the cost of Radar Installation
- **Low maintenance cost**
 - Low yearly Maintenance cost
 - Approximately 1/20th yearly radar maintenance cost
 - Similar maintenance cost as Remote VHF Site

ADS-B Ground Stations – Good Coverage

- 250 Nm Coverage from single site
- Coverage very close to Radar and VHF Coverage



Radar and ADS-B Coverage

ADS-B Ground Stations – Use Existing Remote Sites

- **Similar Requirements to Remote VHF Sites**
 - Coverage very similar to VHF Coverage
 - Low power requirements
 - Same maintenance requirements as remote VHF sites
 - Similar temperature requirements to VHF sites
- **Advantages of using Existing Remote VHF Sites**
 - No Civil works required – reduction in costs
 - Coverage of VHF sites known
 - No extra remote sites to maintain
 - Use existing (or upgraded existing) communications
 - Use existing power systems



➔ Questions?