GA22
Brief for SCP Meetings, BAE Systems Warton, December 2008
The Vision

To provide long endurance, low cost surveillance, deployed incrementally in line with emerging air space regulations.
GA22 – Lighter Than Air
Unique Advantages

- Much smaller than rival airships offering similar payload capacity
- Reduced ground crew requirements
- Easily transportable by any conventional freight method
- Adaptable to different sensor packages
Suitable Roles

- Planned Major Event Surveillance
- Major Incident Surveillance
- Forest Fire Detection and Monitoring
- Communications Relay
- Border Security
- Flood Detection and Monitoring
- Marine and Fisheries Protection
- Earth Observation
Who Are Lindstrand Technologies?

- Long established Lighter Than Air specialists.
- Proven track record with both hot air balloons and helium filled vehicles.
- Formed by Per Lindstrand and based in Oswestry.
Timeline

- Contract signed with Lindstrand Technologies Dec 07.
- Design Review held early July 08.
- Envelope material delivered to LTL 11th July 08.
- First Material Cut 16th July 08.
- Engines delivered to LTL 29th July 08.
- Envelope first inflation 16th Sept 08.
- Gondola delivered to LTL 24th Sept 08.
- First Fin delivered to LTL 26th Sept 08.
- Fins 2 - 4 delivered to LTL 29th Sept 08.
- **FIRST FLIGHT 30th SEPT 08 at Cammell Laird, Birkenhead**
First Flight Video
Phase 1 Flight Trials
GA22 Conceptual Plan to Autonomy
Baseline Payload – PolyTech COBOLT 350 Turret

- State of the art electro-optical sensors in a gimbal designed specifically for missions such as:
  - Search and Rescue
  - Law Enforcement
  - Surveillance

- Optical Bench sensors include:
  - IR Large Format Camera
  - High Definition Video Colour CCD Camera
  - Video Auto-Tracker

- Proven system in service with many police forces worldwide

- Weight approx. 26kg