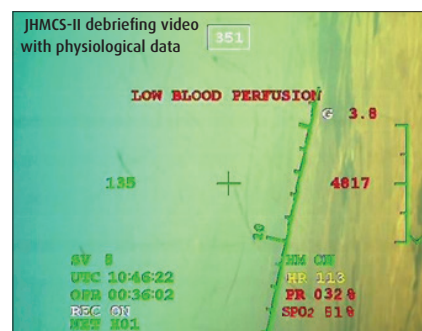
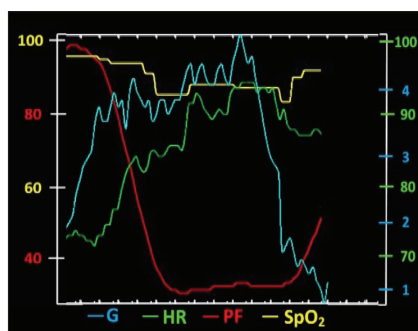
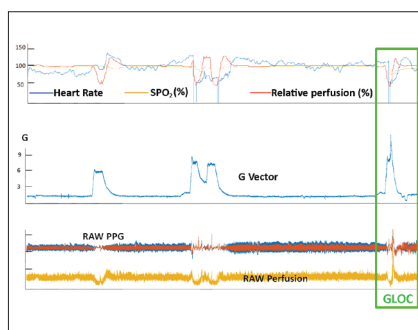


## Critical Early Warnings Require Cutting Edge Technology

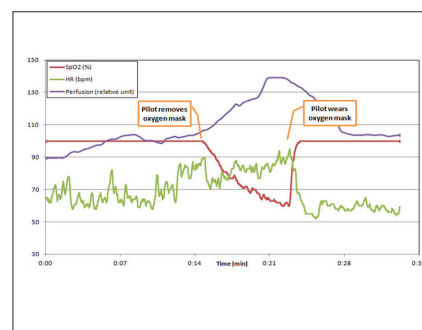
### Integration into HMDs delivers excellent in-flight results



## Data from blood flow monitoring enables in-flight G-LOC warning and training



## Clear hypoxia pattern identified in hypobaric chamber tests



## Implementation Options

**Canary enables three levels of implementation, all supporting warnings and training mode:**

- **HMD** – Monitoring, analysis and warning display. This option requires no change to aircraft hardware or software and supports data recording, personal calibration and event debriefing
- **Integration into aircraft** – Monitoring and analysis results are transmitted from the HMD to the aircraft mission computer where data is recorded and audio-visual warnings are generated
- **Integration with aircraft flight controls** – Enabling autopilot engagement in the event that the pilot loses consciousness

## Canary™

## Pilot Physiological Monitoring System





# Canary™

## Pilot Physiological Monitoring System



### It's All About Saving Lives

Canary, Elbit Systems' revolutionary new product, utilizes innovative technology to introduce non-invasive, real-time monitoring of pilot physiology.

### Challenges to Today's Aviation

- The significant increase in hypoxia cases witnessed over the past few years poses a great threat to pilots
- Hypoxia and G-Force Induced Loss of Consciousness (G-LOC) cause casualties and great financial losses
- There is currently no effective tool available to warn pilots about or to train them to cope with these conditions

### Canary - A Breakthrough Solution

- Measures blood perfusion, heart rate and oxygen saturation
- Non-invasive
- Fully integrated into the Helmet Mounted Display (HMD) system, supporting JHMCS-II, Digital-JHMCS and the Targo™ families
- No external hardware or wiring modification required
- Provides pilots with early warning of developing hypoxia conditions
- Provides feedback on the quality of pilots' Anti-G Straining Maneuver (AGSM) and G-LOC hazard levels
- Detects and helps prevent G-LOC, and enables autopilot recovery

Canary is compatible with JHMCS-II, Digital-JHMCS and the Targo™ families

### Smart Helmets Are About to Get Smarter

- Innovative optical technology provides continuous physiological monitoring
- Clear and precise signal uninterrupted by extreme fighter environment
- Advanced algorithms process physiological signals
- Wide range of additional information significantly reduces false alarms

