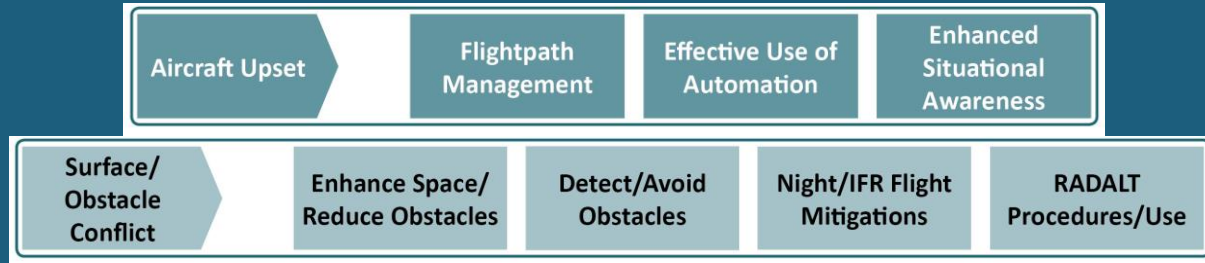


# Operational Effectiveness



*Jonathan Baliff,  
Bristow Group*



**HeliOffshore**  
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# Introduction to Operational Effectiveness: Seeking answers to the question: “How do you really know?”

Jonathan E. Baliff  
President & CEO, Bristow Group

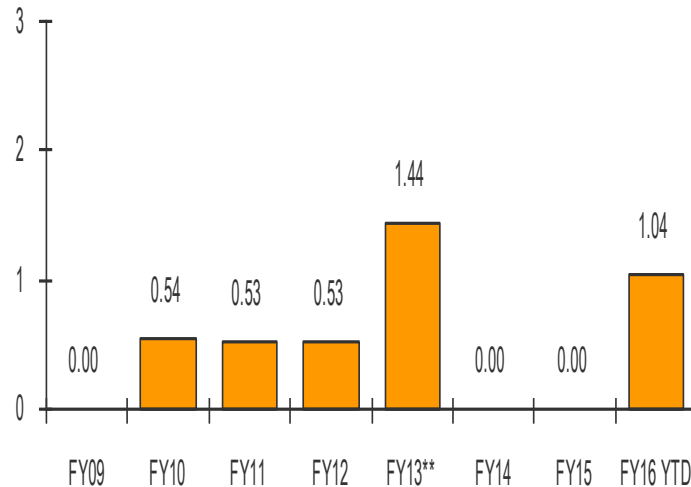


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# Desired safety performance leads to the question: How do you really know where problems exist?

- When introduced in 2008, Target Zero was aspirational and, to many employees, unattainable
- Until August of 2015, Bristow had experienced desired safety outcomes with extended periods of absolute Target Zero performance
- The absence of undesirable safety outcomes raises questions:
  - Are we good or just lucky?
  - Are we improving?
  - How do we set new safety priorities?

\*Air Accident Rate per 100,000 Flight Hours  
Global Aviation Operations (Fiscal Year)



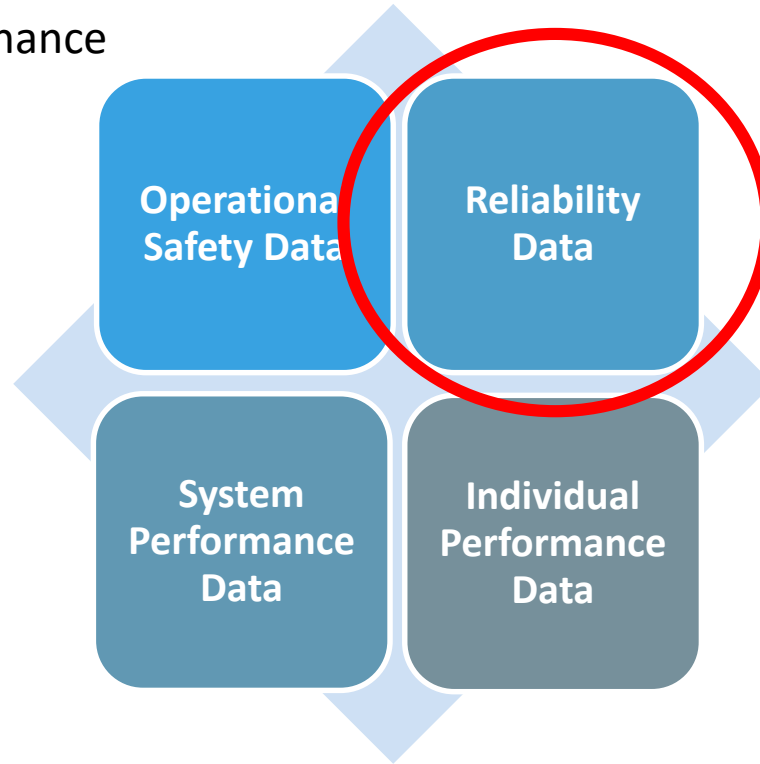
# We have to look for answers in *non-traditional* accident/incident data



- Report, investigate and **track elevated risk events**
- Identify and monitor leading indicators and safety reporting at all levels of leadership
- More effective internal auditing
- **External reviews of safety culture, processes, and evidence based performance (not just compliance)**
- **Open information sharing** with peers and clients
- Collaborative industry leadership on specific topics

# Building a broader safety picture to improve operational effectiveness

- Air Safety and Maintenance Safety Reporting
- LOSA
- **Maintenance-LOSA**
- HFDM
- Operator / OEM feedback
  
- Operational KPIs
- Safety Assurance data
- Event Investigations



- Failure rates
- Failure modes
- **Unscheduled maintenance intervention rates**
  
- Flight Crew and Maintenance staff competency assessments
- **Outside assessment** by highly qualified audit organization

# Questions that set context for this afternoon's discussion on Operational Effectiveness?

- How can we optimise, select, and use new technology?  
**(H-TAWS DISCUSSION)**
- How do we improve the transfer of information between operators, OEMs and regulators?  
**(FCOM PANEL DISCUSSION)**
- How can we enhance our training processes to drive what really happens on the front line?  
**(TRAINING DISCUSSION)**



# Safe Operations

# Safe Survival

Accident Events

Accident Prevention Goals

Accident Survival Goals

System Failure	Early Diagnosis of Potential Failures	Safety Equipment Operating	Enhanced Reliability	Airworthiness Management	Effective Maintenance/ Tool Control	Error Tolerant Designs	Supply Chain
Aircraft Upset	Flightpath Management	Effective Use of Automation	Enhanced Situational Awareness				
Surface/ Obstacle Conflict	Enhance Space/ Reduce Obstacles	Detect/Avoid Obstacles	Night/IFR Flight Mitigations	RADALT Procedures/Use			
Heliport/ Helideck	Vessel Deck, Roll Height Limits	Heliport Management	No. of Aircraft on Heliport/Deck	Heliport/ Helideck Design			
Weather	Effective Flight Planning	Regular Reports/ Forecasts	Adverse Weather Policy/Use	Aircraft Design	Weather Radar		
Collision in Air	Attitude Management	Air Traffic Control Oversight	Bird Strike Prevention	Airborne Collision Avoidance System	High Intensity Strobe Lights		
Ground Collision/ Handling	Weight and Balance	Passenger Briefing	Flight Handling	Dangerous Goods	Security Control		
Fuel Exhaustion/ Contamination	(Hot) Refuelling Procedures	Fuel Checks	Flight Planning	Fuel Reserves	Fuel Testing/ Inspection		

Impact Survival
Floatation
Underwater Escape
Sea Survival
Land/General Survival
Alerting
SAR/Emergency Response
Post-Accident

Enablers	Safety Leadership/ Culture	Effective SMS	Info Sharing	Competency	Multi-crew Operations	Personnel Readiness	Modern/Proven Technology	Standards & Oversight



## Safety Performance Model



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