DISCLAIMER

The views expressed in the presentation are our own and do not reflect the views of our employer.

Gulfstream Aerospace Corporation is not attempting to set training policy within the Industry. This presentation is to highlight an approach to identify and implement training requirements and are being shared for informational purposes.
DEFINE THE HAZARD
THE HAZARD

Lack of trained and/or proficient Flight Test Engineers

- Flight Test Engineers are an integral and essential part of safe and effective test conduct
- Shortage of Engineers trained in Flight Testing
FLIGHT TEST ISSUES

- Major Flight Test programs, less frequent
- Relied heavily on OJT with a small cadre of experienced FTEs
- Small set of formalized safety/proficiency training
- Less complex aircraft systems

These issues identified opportunity for improvement
ESTABLISH MINIMIZATION PROCEDURES
SO HOW DO WE TAKE A NEW ENGINEER AND GET THEM TO BE A PROFICIENT FTE
The Baseline

• Medical fitness to fly as crew member
• FT emergency and egress procedures
• Proficient crew coordination regardless of personalities
• Knowledge and awareness of physiological impacts likely during Flight Testing
• Sufficient first aid or emergency response

The Training

• FAA Class III Medical
• New Aircrew Brief/Cabin Safety
• CRM/TM
• Aviation Physiology
• CPR/AED

• OJT (yes, still a thing and that’s a good thing) paired with Formalized Evaluation Process

• Need to establish recurrency plan and a means to track training quickly became evident
SOURCE FTE TRAINING SOLUTIONS

FAA Class III Medical - External
Cabin Safety – External/Internal
Aviation Physiology – External / Internal
CRM/Fatigue – Internal
TM – Internal
CPR/AED – External

MedAire
Embry - Riddle
Flight Safety
Gulfstream
FTE TRAINING
TRAINING THE TRAINERS

• Flight Test Engineer Instructor Selection
  • Relevant experience
  • Willingness to be trainer

• Train the Trainer Course
  • General presentational skills
  • Group engagement techniques

• CRM Instructor Course
  • EASA/FAA approved
  • Facilitative instructional techniques

• Aviation Physiology Instructor
  • Aviation physiology knowledge
  • Experience of disorientation/decompression
CHALLENGES
CHALLENGES – PERCEPTION AND CULTURE

**Corporate Dilemma**

**What if we train them and they leave?**

**What if we don’t... and they stay?**

**Investing in Employees**

"Our training program was too successful. Twenty employees used their new skills to leave the company for better jobs."

The most dangerous phrase in the language is, "We've always done it this way."

Rear Admiral Grace Hopper
Pioneering Computer Scientist
1906-1992
CHALLENGES – TIME AND RESOURCES

No thanks!

We are too busy

Benefits

Costs

Money & TIME
CONTINUOUS IMPROVEMENT
WHAT NOW

Continue…

• Financial commitment
• Prioritizing training over schedule
• Examining currency requirements

Expand….

• Training tracking capabilities to include core Engineering
• Appoint Training and Standards Focal (Senior FTE)
• Increasing trainer cadre (identify future trainers and develop)
EXPAND THE SKILLS

Provide optional learning opportunities

• FIT Flight Test Engineering Certification/Masters Program
• NTPS Flight Test Engineering Masters Program
• USN TPS Short Courses