

# Maintenance Technician Survival in the Classroom

# Ryan Thomas

- ▶ Ground Instructor Leonardo Helicopter 2013 - present
- ▶ FAA Part 142 Type Rating Ground Course AW139
- ▶ AW119 Pilot Ground Course
- ▶ AW139/AW169/AW109/AW119 Technician Courses
- ▶ B.S. Aeronautics, Embry-Riddle Aeronautical University
- ▶ FAA Licenses : Private Pilot, Control Tower Operator, Advanced Ground Instructor

# Where does the technician live in the classroom?



Certification requirements keep pilots in the classroom

Type Rating/Initial

Recurrent

CRM

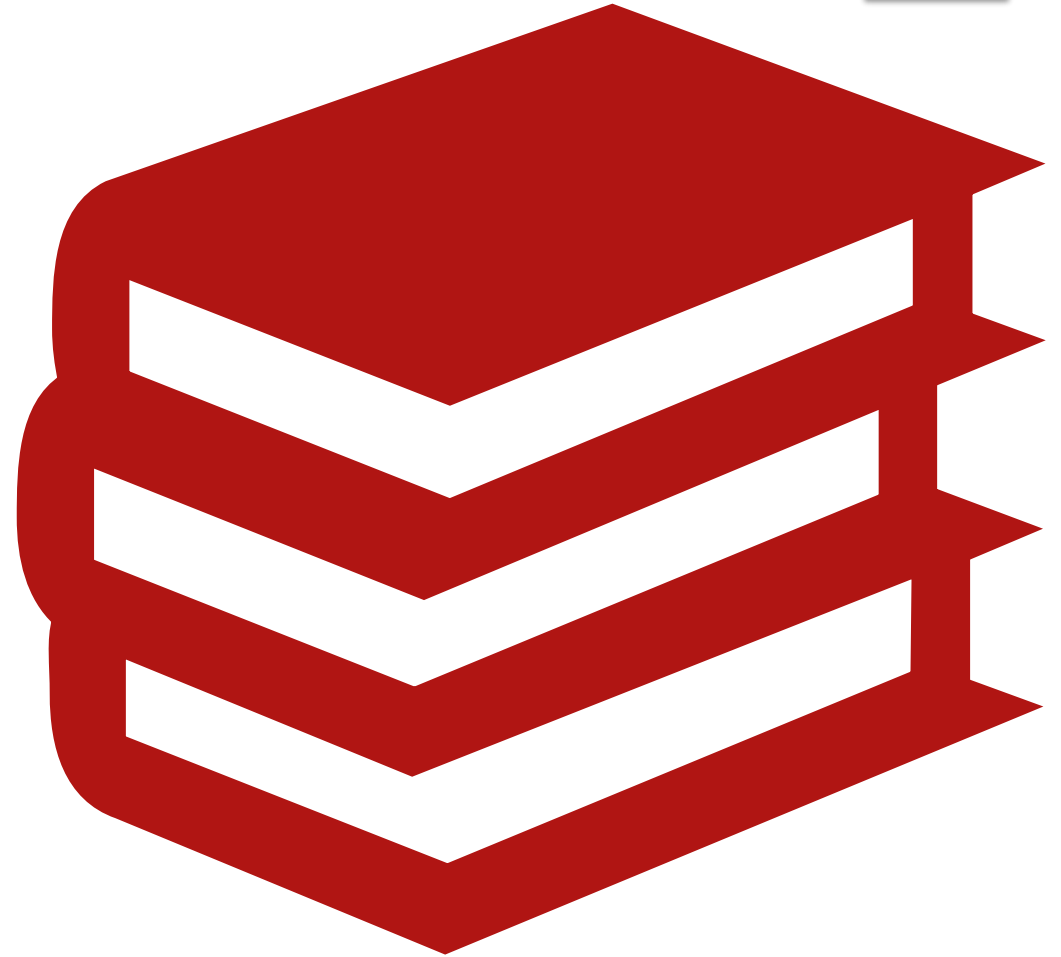
Aviation authorities vary on what training is required for technicians

Certified license

A&P/B1.3

# Three Factors affecting Technicians in the classroom

- ▶ Adult Learners
- ▶ Diversity in Technical Background
- ▶ English as a second Language



# Adult Learning

AGE

MOTIVATION

EXPERIENCE

# Adult learning in the aviation classroom



The aircraft can make the student feel their age

Modern aircraft can broaden the age gap



How long am I going to be working on this aircraft?

Changing companies  
Retirement



From their experience, they learn more by doing as opposed to lecturing

Introduces a level of anxiety while removing a level of comfort

# Diversity in technical background

- ▶ Technical Experience
- ▶ Culture





# Is this training for me?

- ▶ Training Spectrum
  - ▶ Training standards for technicians across discipline fields
- ▶ Deserve has nothing to do with it
  - ▶ New technician's responsibility towards senior counterparts



# English as a second language

Having to  
learn through  
a nonnative  
language

Mercy of the  
interpreter

- 
- Technical drawing of a mechanical part, likely a wheel hub or flange, showing various views and dimensions. The drawing includes a top view, a side view, and a cross-section view. Key dimensions and features include:
- Top View:** Shows a circular flange with a central hole and eight radial slots. Dimensions include  $\phi 25.5 \pm 0.1$ ,  $\phi 26.5 \pm 0.1$ , and a central hole diameter of  $\phi 6 \times 60$ .
  - Side View:** Shows the profile of the flange with a thickness of  $12 \times 30$  and a fillet radius of  $R0.3$ .
  - Cross-section View:** Shows the internal structure of the flange, including a central bore and a flange with a thickness of  $12 \times 30$ . Dimensions include  $6.1 \pm 0.05$ ,  $0.85 \pm 0.05$ ,  $120^\circ$ ,  $0.4$ ,  $0.6$ ,  $30^\circ$ , and  $R0.5$ .
  - Annotations:** The drawing includes various annotations such as "NUR ZUR INFORMATION FÜR DIE KUNDEN", "FÜR INFORMATION ONLY", "WITHOUT AUTOMATIC CHANGE SERVICE", "12.11.10", "ROLLAX", "Kugellager 100 10", "12-Nuten 12 x 30", and "Entwicklung".
- A digital depth gauge (Mitutoyo MAS-90) and a wooden wedge are placed on the drawing for scale and measurement. The depth gauge shows a reading of  $0.00$  mm.

# Conclusion

- ▶ Exposure to theoretical training environment
- ▶ Anticipate the audience
- ▶ Own the training atmosphere

## Works Cited

Dr. Deepika Dabke, Prof. Vandana Chakrabarti,  
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[www.lvp.digitalpromiseglobal.org](http://www.lvp.digitalpromiseglobal.org) , January 25,  
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George Smith, What Factors Influence Language  
Learning, [www.mangolanguages.com](http://www.mangolanguages.com)