



A Regulator Perspective on Producing Better-Trained Pilots with Technology

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Regulator Role in Contributing to New Technology Use

- ▶ Philosophy - Create rules or guidance considering:
 - safety benefits versus the costs
 - balance of stakeholder views
- ▶ Example - stall recovery modeling
 - train recoveries without matching flight data

How On-Going Research May Help

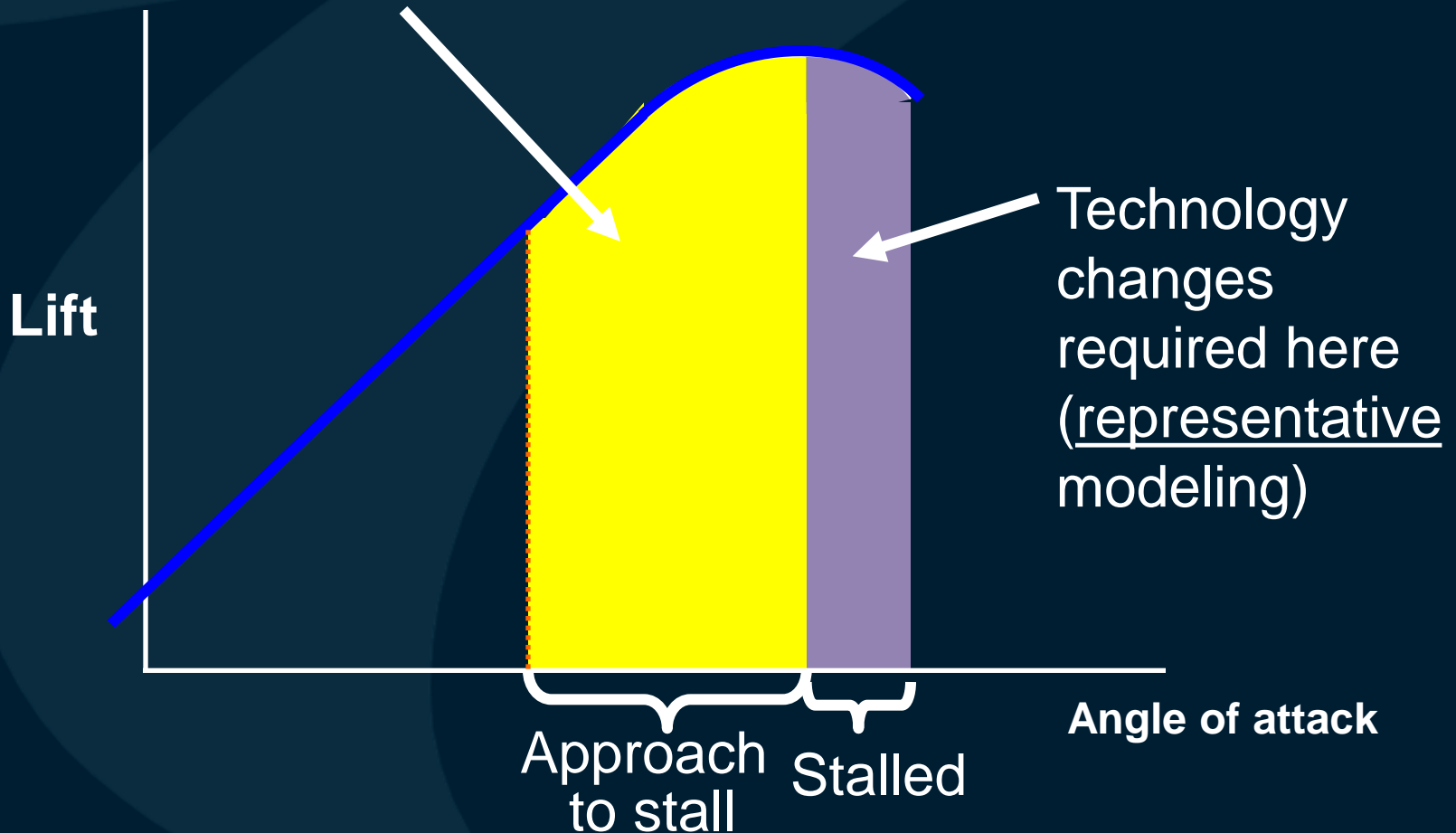
- ▶ Philosophy - Research reduces conjecture
- ▶ Example - Upset recovery training
 - Three FAA research projects are:
 - ▶ identifying required upset recovery knowledge, skills, attributes
 - ▶ comparing “representative” and “type-specific” stall models
 - ▶ evaluating applicability NASA/Boeing post-stall modeling

Challenges of Implementing Research

- ▶ Philosophy - Implementing research is easy...
 - except when it results in change...
 - ▶ which it almost always does
- ▶ Example - stall modeling
 - a “representative” stall model
 - ▶ not based exclusively on flight data

Representative Stall Modeling

Most problems fixed here (type-specific modeling)



Measuring Training Effectiveness

▶ Philosophy -

- “If you can’t measure it, you can’t manage it”
- *anonymous*

versus

- “Not everything that counts can be measured;
not everything that can be measured counts”
- *A. Einstein*

▶ Example - full stall training

- plan is train-to-proficiency
 - ▶ not conduct proficiency checks

Want to Teach and Measure This

- ▶ Autopilot and autothrottle... disconnect
- ▶ Nose down pitch control...
 - apply until stall warning eliminated
 - Nose-down pitch trim... as needed
- ▶ Bank... wings level
- ▶ Thrust... as needed
- ▶ Speed brake/spoilers... retract
- ▶ Return to desired flightpath