



Welcome to CBAA 2017!

Canada's Premier Business Aviation Event

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Canada's Voice For Business Aviation

TRAINING NEEDS ASSESSMENTS

Scott Macpherson



Why assess training?

- The CARs Require it:
 - **604.167** “A private operator shall design its training program so that a person ... will... acquire ... and maintain the competency ... to perform ... duties.”

Why assess training?

- The CARs Require it:
 - **704.115 (1)** “Every air operator ... training program ... [shall] ... ensure that each person ... acquires the competence to perform ... assigned duties.”

Why assess training?

- Guidance expects it:
 - **AC 604-004, Section 13.1 (7)** “...it is expected that operators will use their Safety Management and Quality Assurance systems to identify any needed training...”

Why assess training?

- No two operators are identical
- Any one operator has changing risks over time
- No two trainees are identical
- Any one trainee has varying competency over time

Why assess training?

- Instructional Design and QA Maximize Efficacy
 - Assessment Methods
 - Gap Identification and Filling (Multi-modal design)
 - Content Validity
 - Necessary Changes, Based on Data
- Due Diligence... A Systematic and Thorough Tool

What is Needed to do a TNA?

- Regulations, Standards (724, IS-BAO, etc.), Special Authorisations List,
- Manuals and Training Records, and
- Risk Data: Profile, HITS Summary, *Root Causes*, Mitigations.

What is the Output of a TNA?

Simple, a document showing:

1. Which Topics,
2. Which Training Modes, and
3. Periodicities.

How to do a TNA

- Develop a template format:
 - Start with the regs and standards,
 - List S.A.- driven topics,
 - Add company commitments from manuals,

How to do a TNA

- Develop a template format:
 - Adjust periodicity according to real risk data (+/-),
 - Allow for additional desired topics,
 - Provide note space.

How to do a TNA

- Using Your Template:
 - Review periodic operation-wide needs
 - Add focus areas for a period
 - Add individual trainee requirements

When to do a TNA

- Periodic – Biennial? Annual?
 - Often enough to ensure efficacy
- Change Management Planning
 - New Aircraft, Base, Personnel, etc.
- Individualised Needs
 - Experience, Readiness, Currency, etc.

What's Coming:

- Audits
- Big Data: AI and Expert Systems- Based TNAs
- Diligent Leadership

THANK YOU, QUESTIONS?

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