



# NTSB Safety Forum on Professionalism in Aviation

## *Ab-Initio, University & Gateway Programs*



Captain Gary Morrison  
CAE Regulatory Affairs

# Professionalism

***“Professionalism can have a profound impact in only a matter of minutes.”***

Professionalism is not a birth right or inherited attribute.

Professionalism should be taught from day one just as the knowledge and skills are taught to the aviation professional.

# In search for the right answer

We have trained aviation professionals in about the same manner for over 40 years—

But the industry in recent years has endeavored to improve our training systems through such training initiatives as AQP, further iterations of CRM and TEM, the IATA Training and Qualification Initiative (ITQI) and various other efforts throughout the world with success.

Advances in technology have made great strides making the equipment we operate much safer.

Even with these advances recent heightened attention from the traveling public and the industry beg the question

***Is it good enough; are we doing enough?***

## Recent data shows:

“The major-accident rates for commercial jets since 2000 and the five year running average both have virtually leveled off.”

“The total fatalities for major accidents in all three industry segments was 745 in 2009, up from 688 in 2008....., but lower than 903 in 2006.”

*Quoted from the AeroSafety World magazine*

*December 2009-January 2010 Issue*

# Responses to the Training & Professionalism Issues

So far, the general response in many areas of the world has been to increase prescriptive measures:

- The hourly requirements
- The required maneuvers
- The testing processes necessary for qualification.

And yet, many believe that adding more prescriptive requirements does little to confirm that a trainee has obtained the knowledge and mastered the competencies and skills required for this or the next generation professional.

# Train to Competency

In almost every aviation country throughout the world regulatory requirements for training pilots and air traffic controllers, as well as other aviation professionals are based on prescriptive rules, i.e. total hours, mastering topical subjects and tests, etc.

Might it not be time to start from a blank design, use the best tools, scientific evidence, best practices and ISD processes available to define competencies required for that particular professional's tasks, the methods to train and evaluate those competencies.

# ICAO believed it was time

ICAO certainly believed this was possible and created the Flight Crew Licensing and Training Panel (FCLTP) and tasked them with exactly that. This 64 person multi-nation effort resulted in the Annex 1, PANS Training initiative completed and adopted by member states November 23, 2006.

And in that document competency is defined as

*“A combination of skills, knowledge and attitudes required to perform a task to the prescribed standard.”*

# Now is the time

We believe competency-based training might be the answer. It must be well designed; whether it is called AQP, MPL or some other term does not matter. It should be designed to integrate the entire spectrum of training for that type of professional from beginning to final authority to perform the duties and tasks of that job; and for the continuation of education and proficiency.

These programs need continuous detailed analysis over time for maintaining relevance and improvement.

Such programs can arm our pilots and air traffic personnel with the KSAs that would truly allow them to accomplish their duties in the most professional and safe manner.

# Ab-Initio & Gateway Programs

Just as we learned that leadership, CRM and TEM must be taught, do we not need to educate these individuals in professionalism as well?

Companies like mine, CAE, have just such training programs in progress that I have described and we continue to look for innovative ways and processes to improve the training of these as well as other aviation professionals.

Many other companies and universities, large and small, are creating new programs under the competency-based concepts.

We have much work to do, but we need the correct environment to enable this work.

# In Conclusion

Our clients, the traveling public, deserve and demand dedicated competent professional pilots and air traffic personnel who hold the very lives of the traveler in their hands.

And these professionals deserve and demand from our oversight bodies, such as this distinguished body and the FAA, rules and guidance that allow such innovative training methods to enable the industry to meet the safety challenges of ever changing technologies.

Thank you



**CAE**

one step ahead