



AABI and UAA Meeting with Administrator Babbitt **The Value & Impact of Collegiate Aviation**

On Tuesday, April 6, 2010, the Aviation Accreditation Board International (AABI) and the University Aviation Association (UAA) met with Federal Aviation Administration (FAA) representatives in Washington, DC. AABI Past-President Don Skiados, who was instrumental in scheduling the meeting, opened with introductions. President Thomas Carney and Executive Director Gary Kiteley represented AABI, and President David NewMyer and Executive Director Carolyn Williamson represented UAA. Administrator J. Randolph Babbitt welcomed the group and introduced the FAA staff in attendance: Acting Deputy Administrator David Grizzle; Associate Administrator Margaret Gilligan; Chief of Staff David Weingart; and Director of Emergency Operations, Communications and Investigations Chris Rocheleau.

Carney very briefly described the goals of the meeting:

- To discuss how AABI and UAA are working together to provide Collegiate Aviation support for the Administrator's goals on Pilot Qualification regulatory initiatives.
- To brief the Administrator on plans and activities of the Collegiate Aviation community to prepare the Next Generation of Aviation Professionals for career excellence.

The presentation was a condensed subset of a larger file with expanded information; AABI and UAA provided the Administrator with both presentation files and a number of other files to assist him and his team as they consider increased opportunities for working with our academic communities.

Kiteley explained AABI's role as a specialized accreditor of two- and four-year aviation degree-granting programs with options in management, maintenance, avionics/electronics, aviation studies, flight education, safety science and air traffic control. He noted that AABI currently accredits 89 programs at 31 institutions in North America and Asia; and converted to an outcomes-based accreditation model in 2007.

Williamson gave an overview of UAA stating its history since 1947 of representing the various degree programs cited by Kiteley. She reported the UAA membership at 522, which includes 100 regionally accredited two- and four-year colleges and universities. This represents more than 20,000 students, including more than 11,000 professional flight majors. Williamson emphasized the organization's large body of expertise with proven research capabilities as well as its long history of working with the FAA on a variety of programs and projects.

Carney then described the Collegiate Aviation community, represented by the memberships of AABI and UAA, and its responsibility for preparing a significant portion of the future aviation workforce, including NextGen. This community has been focused on the recommendations to require additional flight hours and training for initial hiring of First Officers at FAR Part 121 carriers. Carney clearly stated that AABI/UAA's position is in agreement with and is supportive of the Administrator's general statement on the subject, summarized as "Quality Not Quantity," when it comes to mandated flight hours for FAR 121 First Officers. We fully support and agree strongly with the Administrator's position that it is the quality and depth of education, training, and experience, not the age of the pilot or the number of flight hours accrued, that affects their ability to function as a professional aviator. Carney noted that the members, staff, officers, and Boards of Trustees of both AABI and UAA have been

working diligently since last summer to respond to the many discussions and potential Congressional actions regarding minimum experience requirements for cockpit crewmembers in air carrier operations.

Fundamental to our long success in producing aviation professionals who are not only technically-qualified and highly-competent, but who also possess a foundational knowledge that assures lifelong career excellence, is our focus on competency-based education. Essentially, this means that we are concerned not just with what is taught, but rather what the student has learned, utilizing focused outcomes, and an increasing requirement for evidence that these learning outcomes have been met. We very strongly believe that the aviation student who graduates from an AABI-accredited two- or four-year degree program or a collegiate aviation flight program that meets aviation-specific academic criteria, will be well-prepared to serve as an air carrier pilot. Again, it is the depth and quality of the graduate's total educational experience that matters, not simply the number of hours in his or her logbook, Carney noted.

Carney advocated collegiate competency-based education as a first choice for Part 121 First Officers, and offered to support the Administrator in creating rational rules to qualify Part 121 First Officer candidates. AABI/UAA's vision is to encourage "airline pilot" as a career choice—to support the industry with a strong pilot supply chain, and thereby enhance the performance of First Officer candidates. This approach also will aid the United States in avoiding conflicts with ICAO and Next Generation of Aviation Professionals (NGAP) initiatives.

NewMyer discussed the strategy and tools the organizations can provide to the Administrator that will lead to rational rulemaking, promoting safety and the public interest:

1. Expert opinion through AABI and UAA responses to the ANPRM
2. *2010 Pilot Source Study*: 2,156 new First Officers at six (6) regional airlines
3. *UAA Professional Pilot Curriculum Survey*
4. Testimony, anecdote, and success stories
5. Damage Consequence Analysis

These assets will be made available to the Administrator and/or an Aviation Rulemaking Committee (ARC) in a time frame consistent with current legislative proposals and rulemaking.



FAA Administrator
J. Randolph Babbitt

NewMyer went on to detail the summary and results of the *2010 Pilot Source Study*, which is institution and airline independent—unbranded, unsponsored and unfunded. Five independent university researchers gathered data from six regional airlines from 2,156 pilots. Pilot subjects and airline sources were de-identified. The results: best performing pilots from this cohort demonstrated fewer extra training events and fewer non-completions in regional airline training.

- First officers with flight instructor experience at a very high significance level
- First officers who graduated from collegiate accredited flight programs at a very high significance level
- First officers who graduated with collegiate aviation degrees (any aviation discipline) at a high significance level
- First officers who received advanced pilot training in college at a very high significance level
- Effect of pre-employment flight hours, in order of fewest extra training events and comparatively fewer incompletes in training
 - 1st group: 500 to 1,000 hours
 - 2nd group: 178 to 500 hours
 - 3rd group: 1,000 to 1,500 hours
 - 4th group: more than 1,500 hours

Mr. Grizzle asked about the correlation between First Officer significance levels and pre-employment flight hours. NewMyer explained there was no correlation in the data as compiled.

Carney reported on the Damage Consequence Analysis, as published in the *International Supply and Demand for U.S. Trained Commercial Airline Pilots* (Duggar, Smith and Harrison, 2009). The Analysis points to a potential catastrophic impact on aviation substituting logged time for the current or a future competency-based First Officer qualification model. If arbitrary hours (1,500; 800; 750) are required for Second In Command (SIC), qualitative and quantitative analyses predict:

- Severe adverse effect of pilot education economics on First Officer supply
- Trainees will seek the least expensive (also least relevant) path to arbitrary hours
- Cost of training will escalate x2 to x4, depending on training aircraft chosen
- Pilot aspirants will opt out of a flight career
- Pilot training is an eight or more year phenomenon, starting with STEM content and young people's aspirations in middle and high school

The results: crew scarcity for operational availability; parked airplanes at regionals; interrupted supply chain for majors; and a severe disruption of travel in the U.S.

The unintended consequences of using accrued flight hours as a proxy for the ability to function safely and professionally in air carrier operations, particularly for graduates of Collegiate Aviation flight programs, is an important topic that deserves expert analysis and explanation. Carney noted that AABI and UAA have access to experts on the subject, and we included it in our presentation because we believe there is already a pilot scarcity looming that will impact the industry during the next economic upturn. If that condition is exacerbated by creating a flight hour requirement for first officers that will further discourage pilot supply, we fear that severe unintended consequences will occur; not just to the organizations, institutions, and systems that provide new pilots, but to the entire U.S. travel industry model. The regional airlines to which the majors outsource much of their feeder routes will suffer an immediate scarcity of pilots to the extent that it will ground airliners. The impact on the American public will be serious. And we hypothesize that interest on the part of young people in becoming pilots occurs long before enrollment in universities and

flight schools, so that restarting this supply chain will take a great deal of time. In particular, we must positively impact STEM (Science, Technology, Engineering, and Mathematics) education for our discipline, from middle school through college graduation.

Together, Carney and NewMyer described key overall interests of the collegiate aviation community: NextGen, Safety Management Systems (SMS), collaborative research potential and capabilities in aviation safety, aviation operations, airports and aviation training. They asked the Administrator several pointed questions: What does the FAA plan to do in order to guide the preparation of the aviation workforce in general? What can our organizations and institutions do to assist the FAA in its support of the development of key industry workforce segments?

In closing, the organizations' presidents requested at least one position each for AABI and UAA on any Aviation Rulemaking Committees (ARC) or Aviation Rulemaking Advisory Committees (ARAC) that address aviation pilot training and initial airline pilot hiring requirements. They further requested FAA support in conducting research related to education and training effectiveness—the information gathered will be provided to the FAA. Carney respectfully requested that a follow-up letter from the FAA Administrator to the 34 Airway Science institutions with programs that are not yet AABI-accredited, advising them that FAA recognition has been replaced by AABI accreditation and encouraging them to seek AABI accreditation. Additional requested actions included:

- Continued assignment of FAA liaison representation to AABI, and continued support of FAA membership on the UAA Board.
- Offers to further assist FAA with the AT-CTI program, and suggested AABI accreditation as a worthy consideration.
- FAA collaboration to establish a 2+2+2 aviation curriculum to promote teaching of aviation subject matter in high schools, community colleges, and four-year, degree-granting institutions. It is vital that we seek out, recruit, and enroll in high-quality collegiate aviation programs the “best and the brightest” young people. We believe a successful strategy for doing this is to provide dual-credit coursework for students still in high school, and request FAA collaboration in developing and implementing this type of program.
- The two presidents made the following invitations:
 - AABI invited the Administrator to be a keynote speaker at the [AABI Annual Meeting in Kent, Ohio, on July 15th, 2010](#).
 - UAA invited the Administrator to be a keynote speaker at the [UAA Fall Education Conference in St. Paul, Minnesota, on October 6th or 7th, 2010](#).

Administrator Babbitt complemented the group for the research and presentation. He suggested that our organizations share this information with the Congressional representatives addressing this rulemaking issue.

With respect to the AT-CTI program, Babbitt stated that he believes graduates should get credit for completion of the program towards FAA employment and the FAA will address this issue. NewMyer asked when we might expect an announcement of the programs approved in 2009. Weingart responded that an announcement would be made in the next two weeks (this announcement was made April 12, 2010).

At the conclusion of the meeting, all parties expressed appreciation and interest in continuing the dialogue with another meeting next year.