A message from ATCA President and CEO Peter F. Dumont

Aviation’s Future: Blue Skies on the Horizon

I wish I could go back in time and speak to ATCA members at key periods of air traffic control and air traffic management change. I would certainly travel back in time to discuss the challenges in 1956 when our association was established. That same year, two planes collided over the Grand Canyon, killing 128 passengers. After that crash, Congress appropriated $250 million to upgrade the air traffic system and the radar surveillance technology. Two years later, Congress created the Federal Aviation Administration (FAA). I would love to discuss with ATCA’s first members their vision for the association and the future of air traffic management.

Of course, the establishment of the FAA was just the first of many modernization efforts. Fortunately, I don’t need a time machine for that as some of our long-time members remember many of the FAA’s first modernization campaigns. What we expect from modernization programs today is very different from modernization efforts in years past. Most of us remember the launching of NextGen and the expectations we had at the beginning of that initiative. It took us a long time to try to understand where the lines of NextGen started and stopped, and the need for that definition certainly grew as soon as NextGen was identified as a funding priority.

One characteristic about NextGen we all understand now is that modernization is not an end goal; it’s a continuous pursuit. Our community has been using the term “tech refresh” for a long time, but regular, full-scale modernization efforts need to also be part of the future air traffic control system.

Many of our members – myself included – believe that we are ready for the next conversation about air traffic control. New entrants, including unmanned aviation systems (UAS) and commercial space, and the growing realization that autonomous passenger flights will populate our national airspace make it imperative that we start developing our next air traffic modernization strategies now.

Tomorrow’s air traffic management solutions are a far cry from a “tech refresh,” and more a re-envisioning of the way we manage the airspace altogether. New entrants will use the airspace differently and will need alternative services. For instance, some UAS will fly in low-altitude airspace and self-separate, some will use very high altitudes, and some will not fly point-to-point but in a serpentine pattern for observation. The size, altitudes, and flight patterns of UAS will determine the type of air traffic services they need. Commercial space will need vertical shafts of space equivalent to their calculated flight path and their possible alternative path in the event of a catastrophic launch. Autonomous air taxis in a future
with urban flight mobility will need even more specified air traffic services and a whole lot of policy to boot.

The future needs for air traffic services are varied; the requirements will continue to develop as new entrant technology rapidly evolves. It is that in mind that an active and vocal group of ATCA members – with Gene Hayman of CACI taking the lead – decided it was time to discuss the future of air traffic management in a new way. After a lively discussion at the ATCA Technical Symposium in May, we decided to extend the conversation into a series. With support from our membership, ATCA is holding its first Blue Skies discussion tomorrow at the Grand Hyatt Washington in Washington, D.C. (visit [www.atca.org/blue-skies](http://www.atca.org/blue-skies) to view the agenda and to register).

Hayman and several other ATCA members decided the discussion should be called “Blue Skies: Moving Beyond NextGen” because we need to think about air traffic management differently and with an open mind. New entrants with new technology, new demands, and new expectations are coming to the airspace, and soon! It has become clear that the way we control airspace for today’s general aviation and commercial aviation users will not be the best way to accommodate the changes coming in aviation.

I am very excited about tomorrow’s Blue Skies discussion as it is certainly relevant, but it also reflects the strong health of the ATCA organization. ATCA is here to serve the needs of its membership. Obviously, the ATCA membership needs to be active in articulating what they think will be important for the stakeholders. In this case, the membership wanted a new event exploring an emerging discussion topic focusing on one of the core principles of ATCA – “to progress the science of air traffic control and the preservation of a safe flight environment.” If in 30 years the ATCA leadership wonders what the ATCA membership thought about accommodating new entrants in 2018 and the vision for the future air traffic management system, we will have an answer.

We will continue to build on the Blue Skies discussion at the [ATCA Annual Conference and Exposition](https://www.atca.org/events/conferences-and-expositions) (September 30 - October 3 in National Harbor, Md.). Please join us at ATCA’s Blue Skies: Moving Beyond NextGen to participate in a critical discussion to shape our future air traffic management system.

We have all been saying things like “What is the next NextGen?” or “NextGen will never be completed because that is not how modernization works anymore.” It is time to evolve and progress the future of air traffic management conversation, not just because we are moving beyond NextGen, but because we are also seeing new entrant demands on the system, and the private sector bringing a sense of urgency to support these new commercial opportunities. The rules of air traffic management from “see and be seen” to new technology to how users pay for the air traffic system should be up for discussion. The NAS can’t wait and neither can this conversation.