



A new law calls for an increase in the minimum flight time required of pilots hired by U.S. air carriers.

# Counting the Hours

BY LINDA WERFELMAN

A new law requiring pilots in U.S. Federal Aviation Regulations (FARs) Part 121 operations to have at least 1,500 flight hours might not have the safety-enhancing effects that its supporters had hoped for, some aviation safety specialists say.

Backers of the new law, however, say it will result in significant improvements in aviation safety.

Provisions of the Airline Safety and Federal Aviation Administration (FAA) Extension Act of 2010, signed into law by President Barack Obama on Aug. 1, will require Part 121 pilots to hold an airline transport pilot (ATP) certificate — which is issued only to those who have

accumulated at least 1,500 flight hours and meet other specific criteria. The provision will take effect in August 2013.

However, the act also says that the FAA may allow “specific academic training courses ... to be credited toward the total flight hours,” if the FAA administrator has determined that these courses “will enhance safety more than requiring the pilot to fully comply with the flight hours requirement.”

“It remains to be seen how that exception will be applied,” said Flight Safety Foundation President and CEO William R. Voss. “Overall, I can certainly understand the intent of

the 1,500-hour minimum to ensure that the airlines are hiring pilots with more experience and sharper skills, but I'm not sure this new requirement is going to have the effect that was desired."

Instead, Voss said, airlines may be forced to bypass pilots who possess excellent flight skills but lack the flight time requirement established by the new law.

"Ideally, we should be better able to understand the skills that are needed and how to measure them," Voss said.

### Dramatic Upgrade

Rep. James Oberstar, a Minnesota Democrat who chairs the U.S. House Committee on Transportation and Infrastructure, said the new law will "dramatically upgrade the training and experience necessary to be an airline pilot."

Obama signed the law as an FAA panel was considering public response to an advance notice of proposed rulemaking (ANPRM) on possible changes in regulations involving training and qualifications of commercially rated copilots in Part 121 operations.<sup>1</sup> In the ANPRM, published in February 2010, the FAA specifically requested comments in several areas, including:

- Should all Part 121 air carrier pilots be required to hold an ATP certificate?
- Should the FAA create a new endorsement for "second-in-command (SIC)" privileges in Part 121 operations?
- Should the FAA accept specific academic studies in lieu of some of the flight hours required before a pilot is issued an ATP certificate?
- Should required training include "operating experience in a crew environment, in icing conditions and at high-altitude operations?"

The aviation rulemaking committee (ARC) that reviewed comments generated by the ANPRM was expected to recommend in late September that the FAA increase the training required for new Part 121 copilots — and perhaps require

them to obtain a type rating before being permitted to operate the controls while passengers are aboard their aircraft. The FAA currently requires only captains to possess type ratings; some large airlines, however, already require type ratings for copilots.

An FAA spokeswoman said the ARC's recommendations would "help [the FAA] comply with the recent safety bill and strengthen pilot experience." The ARC's recommendations will be used as the FAA drafts an NPRM dealing with pilot qualifications and training, she said.

The ANPRM was published in the aftermath of the fatal Feb. 12, 2009, crash of a Colgan Air Bombardier Q400 during approach to Buffalo Niagara (New York, U.S.) International Airport (ASW, 3/10, p. 20). All 49 people in the airplane and one person on the ground were killed in the accident and the airplane was destroyed.<sup>2</sup>

In the ANPRM, the FAA noted the first officer's experience level — when hired by Colgan, she had less than 1,500 flight hours, including six hours of actual instrument time and 86 hours of simulated instrument time, although by the time of the accident, she had accumulated 2,244 hours — and said that the crash "focused attention on whether a commercially rated copilot in Part 121 operations receives adequate training."

### Considering Options

When the ANPRM was published in February 2010, FAA Administrator Randy Babbitt said in testimony before a congressional subcommittee that he did not believe "that simply raising ... the total number of hours of flying time or experience without regard to the quality and nature of that time and experience is an appropriate method by which to improve a pilot's proficiency in commercial operations."

Instead, Babbitt said, the FAA planned to consider other options.

"For example, a newly certificated commercial pilot might be limited to certain activities until he or she could accumulate the type of experience deemed potentially necessary to serve as a first officer for an air carrier. We are looking at ways to enhance the existing process

**‘The U.S. pilot training and assessment system urgently needs an update.’**

for pilot certification to identify discrete areas where an individual pilot receives and successfully completes training, thus establishing operational experience in areas such as the multi-pilot environment, exposure to icing, high altitude operations and other areas common to commercial air carrier operations. We view this option as being more targeted than merely increasing the number of total flight hours required because it will be obvious to the carrier what skills an individual pilot has.”

In comments submitted in response to the ANPRM, pilot organizations and airlines agreed

that the current requirements are in need of an overhaul and that simply increasing the minimum required flight time for new first officers could prove counterproductive.

“The U.S. pilot training and assessment system urgently needs an update ... especially in the field of multi-crew operations,” said the International Air Transport Association (IATA), calling for creation of a special panel to “review current requirements and to include best practices from other parts of the world, especially Europe.”

Not all members of a Part 121 air carrier crew should be required to hold an ATP, IATA said.

“For the SIC ... it is sufficient to undergo a solid and structured training program that enables [him or her] to act safely as copilot in a multi-crew transport airplane environment in all regimes of flight,” the organization added.

IATA endorsed a plan to introduce an “ATP-SIC” pilot certificate that, in most cases, would require applicants to have at least 750 flight hours.

The Air Line Pilots Association, International (ALPA), which represents 53,000 pilots who work for 38 airlines in North America, agreed that current pilot training regulations “have failed to keep pace with the dynamic airline industry.”

The current regulations “were first published in an era in which common business practices, driven not by regulation but by the supply of pilots and equipment in use, dictated that low-time, commercial-certificated pilots could only get airline jobs flying small, slow, propeller-driven aircraft and as flight engineers on jet transports,” ALPA said. “Pilots would traditionally fly several years and thousands of hours before even being given an opportunity to upgrade to first officers on high-performance jet transports. Today, it is not uncommon for new-hire pilots to be employed as first officers of high-altitude, high-performance aircraft carrying 50 or more passengers in highly complex Part 121 operations. This reality demands that airlines hire pilots with *more* knowledge and *greater* skills than the new-hire



airline pilots of the past, but in fact, just the opposite is happening at some airlines.”

ALPA endorsed creation of a new “restricted” ATP certificate for otherwise qualified pilots with fewer than 1,500 flight hours or for those younger than age 23. To be issued this new restricted ATP, pilots should have at least 750 flight hours, ALPA said.

### Exam Revision?

JetBlue Airways said that all pilots in Part 121 operations should demonstrate the ATP knowledge requirements described in the FARs and pass the ATP written exam. The airline added, however, that the written exam is outdated and should be revised to “mirror the evolution of the industry.”

“Fundamentally, JetBlue believes the correlation of knowledge and experience to a pilot’s total flight time is unjustified,” the airline said. “Our proposal centers on the *quality* — not *quantity* — of experience.”

Any flight time requirement that might be intended as an indication of strong aeronautical knowledge and experience is “without basis, and is merely an unsound, arbitrary guess,” JetBlue said.

The airline’s written statement said that a pilot with a commercial certificate, an instrument rating, 500 flight hours and 250 hours performing the duties of pilot-in-command “would have a sufficient level of experience to operate as second-in-command” in a Part 121 operation, and therefore, those requirements should be imposed for an ATP-SIC certificate for pilots in FARs Part 121, 125 and 135 operations.

JetBlue also challenged the current requirement that ATP applicants must be at least 23 years old, noting that the airline “is not aware of any data that suggest that age is a contributing factor

in successful and competent completion of the job functions required of a second-in-command.”

### No New Avenues

Continental Airlines endorsed the 750-hour minimum in the form of a “commercial transport certificate” for Part 121 SIC pilots, adding, “We envision this to be a full certification effort with detailed training requirements and formal knowledge and skills testing. We would expect it to be administered only by accredited aviation academic institutions or by AQP [advanced qualification program] qualified carriers.”<sup>3</sup>

Continental said that a 1,500-hour minimum for all Part 121 pilots is “unrealistic,” in part because of the limited opportunities for future pilots to accumulate flight time.

“Historically, commuter carriers (now regionals) have been the primary opportunity for a non-military pilot to gain experience,” the airline said. “If regional airline hiring minimums are raised significantly, another avenue must replace it. There simply isn’t one.

“The inference is made that a general aviation track pilot can achieve the required 1,500 hours of experience. The reality is that there is simply not enough general aviation activity to provide 1,500 hours of experience for each of the potential number of non-military pilots the industry will require.”

Boeing, which endorsed “focused training” to produce well-qualified SIC pilots and argued against specifying a minimum flight hour requirement, estimated in mid-September that the commercial airplane industry in North America will need 97,350 new pilots over the next 20 years.

The company added, “Focused training in the form of targeted foundational training and education offers an

alternative path to produce a well-qualified SIC in a Part 121 program. This is preferred in lieu of simply requiring more flight hours to meet the new requirement, which adds significant cost to obtain the minimum qualification without guaranteeing a commensurate safety enhancement.”

In fact, Boeing cautioned, a move to increase the minimum flight hours might “adversely impact the flow of available pilots to support Part 121 operations and potentially negatively affect the quality as well, as pilots become more interested in acquiring flight time rather than ensuring the value of the experience.”

Under the new law, the FAA has 36 months to issue a final rule spelling out exactly how the training requirements will be implemented. The ARC’s input on the ANPRM will be considered in drafting a final rule. 🌀

*FlightSafety International kindly provided access to simulators for ASW photographer Chris Sorensen.*

### Notes

1. FAA. “New Pilot Certification Requirements for Air Carrier Operations.” *Federal Register*, Docket No. FAA-2010-0100. Feb. 8, 2010.
2. NTSB. Accident Report NTSB/AAR-10/01, *Loss of Control on Approach; Colgan Air, Inc., Operating as Continental Connection Flight 3407; Bombardier DHC-8-400, N200WQ; Clarence Center, New York, February 12, 2009*. The NTSB identified the probable cause as “the captain’s inappropriate response to the activation of the stick shaker, which led to an aerodynamic stall from which the airplane did not recover.”
3. Under an AQP, the FAA may approve what it considers “significant departures from traditional requirements” for Part 121 and Part 135 pilot training and checking, “subject to justification of an equivalent or better level of safety.”