on a new aircraft. It also increases the likelihood of pairing inexperienced pilots on the same flight.

Also, in recent years manufacturers have introduced a greater number of new aircraft containing more equipment and systems variations within type. Pilots must not only learn different aircraft handling characteristics but they must also be able to work with a variety of aircraft equipment such as automated flight control and flight management systems.

In response to these concerns about the experience level of crews, the FAA requested the Joint Government/ industry Task Force on Flight Crew Performance, which was established in 1987, to form a committee to develop recommendations for establishing crew pairing requirements. 1 On September 13, 1990, the committee recommended requiring all certificate holders operating under part 121 to provide a minimum level of experience for pilot crews. Specifically, the committee recommended the consolidation requirements, operating restrictions, and crew pairing restrictions. The FAA has incorporated, with some modifications, those recommendations in this rulemaking.

Comments Discussion

The FAA received 14 comments on the proposed rule. These comments were from air carriers, pilot organizations, the NTSB, and one individual. Most of the commenters voice general support for the rule as a whole but have suggestions for changes to specific requirements. The following is a discussion of general comments and specific comments on each requirement in the rule.

General Comments

NTSB says that the proposed rule effectively responds to its safety recommendations following two accidents involving the pairing of inexperienced pilots (Safety Recommendations A–88–107 and A–90–107 and –108).

The Air Transport Association (ATA) and an individual airline say that the proposed rule is not justified because Air Carrier Operations Bulletin 8–88–1 (issued in 1988 and revised in 1991) effectively provides guidelines in the scheduling and pairing of pilots as well as recommended actions for pilots with low experience levels. ATA says that

the proposed rule would add further, unjustified restrictions to this ACOB.

The Boeing Company (Boeing) generally agrees with the proposed rule but says that the changes do not address the practice whereby commercial transport manufacturers' pilots help air carriers to introduce new airplane models into revenue service. Boeing says that the proposed rule would prevent manufacturers from providing this support to air carriers and that this support is needed for safe initial line operations when air carriers do not have pilots with significant experience in airplane models new to carriers.

FAA Response

While the FAA recognizes that many air carriers have initiated crew pairing policies based on the ACOB, the guidance is not mandatory. The FAA intended the guidance as an interim action to be followed by mandatory rules. The FAA believes that the seriousness of the situation warrants rulemaking. Since most air carriers are already complying with the guidance, the FAA does not believe the rulemaking will be an excessive burden to the industry as a whole.

The FAA does not believe this rulemaking will interfere with commercial transport airplane manufacturers providing pilots to assist air carriers during the introduction of new airplane types into revenue service. The FAA believes that this can be accomplished within the rule as proposed and adopted. Sections 121.434(h)(5) and 121.438(b) provide for the Administrator to issue deviations to certificate holders from the line operating experience requirements of § 121.434(g) and the crew pairing limitations of § 121.438(b) if special circumstances warrant.

Comments on Specific Sections

Section 121.431(b)—Applicability

Currently, § 121.431(b) states that the airplane groups and definitions prescribed in § 121.400 apply to subpart O. The amended paragraph (b) adds definitions for the terms "consolidation," "line operating flight time," and "operating cycle."

Four comments were received on the definitions and applicability. One commenter says that rather than use the term "line operating flight time," the term "flight time" should be used so that all flight time (not just FAR part 121 flying) is counted towards consolidation. Two commenters say that the term "consolidation" is misleading in the NPRM because it describes a process by which proficiency is gained

through practice and practical experience. Since, currently, pilots take proficiency checks prior to consolidation, commenters suggest that a different term be used.

The Air Line Pilots Association (ALPA) says that the proposed rule should apply to part 135 operations as well. According to ALPA, this would be responsive to NTSB recommendation A–88–137 which recommends minimum experience levels for PICs and SICs in part 135 operations.

FAA Response

The FAA intended that only line operating flight time, which is flight time performed in part 121 operations, be counted towards consolidation. The purpose of consolidation is to provide pilots flight experience in line operations in the airplane type that the pilot is newly qualified within a reasonable time after training in order to consolidate their skills and knowledge. Other flight time outside of a certificate holder's line operations may not provide the same experience.

As stated in the NPRM, the FAA used the term "consolidation," as recommended by the task force committee, with some reservation because the term is used in psychology books to identify a period of time that is part of the training/learning process or that occurs almost immediately after a training or teaching session. While it is true that a defined consolidation period may begin after a pilot has completed a proficiency check, proficiency is increased throughout a pilot's line operating flying experience and proficiency checks are conducted regularly throughout a pilot's career. The FAA believes that "consolidation" is an acceptable term for the concept but to avoid any confusion the definition has been revised by changing the words "becomes proficient" to "increases proficiency.'

The FAA is not extending these requirements to part 135 in this rulemaking since it is beyond the scope of the notice. However, the FAA has issued a notice of proposed rulemaking proposing to require that part 135 certificate holders who conduct commuter operations with airplanes for which two pilots are required, or have a passenger seating configuration of 10 or more seats, train and qualify crewmembers in accordance with the requirements of part 121, subparts N and O. [See **Federal Register** 59 FR 64272, dated December 13, 1994.]

¹ This task force was later subsumed by the Air Transportation Personnel Training and Qualifications Advisory Committee, established by FAA Order 1110.115, May 2, 1990, which committee was subsequently subsumed under the Aviation Rulemaking Advisory Committee.