knowledge and skills in actual line operations may lose proficiency in the newly acquired knowledge and skills.

The FAA recognizes that the 120-day consolidation period may not start at the same time for every pilot since it either begins after the satisfactory completion of a § 121.441 proficiency check or after the satisfactory completion of any part of the flight maneuvers and procedures portion of either an airline transport pilot certificate with type rating practical test or an additional type rating practical test. The purpose in stating the rule this way with respect to a practical test is to ensure that a pilot certificate rating program will not be extended to the point that a loss of knowledge and skills would occur. By requiring the consolidation period to begin at the completion of any portion of the program, the carrier has an incentive to complete the pilot's rating program within a reasonable period.

The FAA recognizes that the consolidation requirement may affect crew scheduling. How much it will affect scheduling depends on the way carriers are now scheduling pilots who have recently acquired a type rating. The FAA recognizes that there may be some incremental increase in costs to comply with this final rule. However given that carriers have 120 days to complete the consolidation period for its pilots, and that a 30-day extension is available in certain circumstances, with careful scheduling, this consolidation can be accomplished without an excessive burden. It is in the interests of the air carrier, the pilots, and the public that these pilots obtain experience in the airplane within a reasonable time after being qualified.

In response to Alaska Airlines, the FAA notes that although senior pilots may require compensation, reserve pilots normally are paid on a fixed base salary; thus, the total cost of remuneration for both pilots should be the same.

In response to RAA, the FAA has no knowledge of a Task Force recommendation that included a 75-hour consolidation period.

A 100-day consolidation period suggested by ALPA would be beyond the scope of this rulemaking. In addition, the FAA notes that this suggestion was not part of ALPA's minority opinion filed with the Task Force recommendations.

Section 121.434(h)—Exceptions (Pilots Who Have Completed Line Operating Flight Time as an SIC on a Particular Type Airplane)

In the NPRM paragraph (h)(1) said that pilots who have qualified and

served as second in command on a particular type airplane (before the effective date of the rule) are not required to complete line operating flight time for consolidation as pilot in command. Similarly, paragraph (h)(2) said that pilots who have completed line operating flight time for consolidation of knowledge and skills while serving as second in command on a particular type airplane (after the effective date) are not required to meet consolidation requirements on the same type airplane.

The one comment received on these requirements does not agree with the proposal. ALPA says that the knowledge and skills required of PICs and SICs differ, and that there may also be substantial differences between aircraft even though they have common type ratings. ALPA also comments that there could be a considerable lapse of time between flying as SIC and PIC with another aircraft flown in between. Thus, ALPA believes that all crewmembers should go through the consolidation process.

## FAA Response

The exception permitted by § 121.434(h) addresses upgrade training, specifically, upgrading from SIC to PIC in the same airplane type. It does not include upgrading from flight engineer to SIC in the same type airplane. By definition, upgrade training is that training required for crewmembers who have qualified and served on a particular type airplane before they can serve in another duty position on the same type airplane. In other words, the upgrading pilot would by definition be familiar with that airplane, and the FAA believes that the operational experience requirement along with previous experience on that type airplane adequately addresses consolidation.

The FAA has determined that the language in proposed § 121.434(h)(1) unintentionally limited the grandfathering of current pilots to SICs who may upgrade to PIC at some future point. The FAA intended that all PICs and SICs who have qualified for their positions before the effective date of the final rule would not need to complete consolidation. The rule language has been changed to reflect this intent.

## Section 121.434(h)(3)—Refresher Training

New paragraph (h)(3) requires a pilot who flies another airplane type before completing the required 100 hours of line operating flight time to complete refresher training in the airplane for which the pilot has newly qualified.

The NPRM states that training must be conducted by a qualified check pilot.

Four comments were received on this requirement. One commenter says that the proposal is not necessary, but if it is kept, then it should also include restrictions from flying other types of aircraft including military reserve aircraft.

Alaska Airlines says that the term "refresher training" is vague and could result in inconsistent requirements that were minimal in some cases and stringent in others. Alaska points out that "re-qualification programs" are designed to provide students with training to reacquaint them with an aircraft type from which they have been absent for a specific period of time, such as extended military leaves. Alaska says that the proposed rule, in contrast, would deal with students who are current with no appreciable lapses in exposure to the equipment type they would be trained on. This commenter adds that its own re-qualification training program does not require additional flight training for those absent less than 90 days

United Airlines and ATA say that refresher training should not require a check airman and that it should be conducted by a qualified flight instructor. Thus, the proposed rule should be modified accordingly.

## FAA Response

The amount of refresher training depends on the extent of the lapse and what skills and knowledge have been lost during the lapse. As the FAA stated in the NPRM preamble, each certificate holder must develop training objectives for refresher training for each make and model airplane used in part 121 operations. Refresher training should ensure that pilots have retained, or are allowed to regain, the level or proficiency needed to serve in part 121 operations. This qualification training should focus on, among other things, procedural knowledge regarding the operation of the aircraft (e.g., programming the aircraft's flight management system) and other critical skills such as engine inoperative approaches and missed approaches. Refresher training may consist of special purpose operational training or an airplane flight training period when a flight simulator or flight training device is unavailable. Special purpose operational training is described in AC 120-35b, "Line Operational Simulations: Line-Oriented Flight Training, Special Purpose Operational Training, and Line Operational Evaluation.'