the requirement is not contained in the FAR, and proposed that dynamic stalls be removed from JAR–25. Some of the concerns with the JAR-25 dynamic stall requirement include: (1) A significant number of flight test demonstrations for compliance used inappropriate piloting techniques considering the capabilities of transport category airplanes; (2) the stated test procedures depend, to a large extent, on pilot interpretation, resulting in test demonstrations that could vary significantly for different test pilots; (3) the safety objective of the requirement is not well understood within the aviation community; and (4) the flight test procedures that are provided are inconsistent with the flight characteristics being evaluated. As a result, applicants are unable to ensure that their designs will comply with the JAR-25 dynamic stall requirement prior to the certification flight test.

In practice, FAA certification testing has typically included stall demonstrations at entry rates higher than 1 knot per second. For airplanes with certain special features, such as systems designed to prevent a stall or that are needed to provide an acceptable stall indication, higher entry rates are demonstrated to show that the system will continue to safely perform its intended function under such conditions. These higher entry rate stalls are different, however, from the JAR–25 dynamic stalls.

Rather than simply deleting the dynamic stall requirements from JAR-25, or adding this requirement to part 25, the ARAC recommended harmonizing the two standards by requiring turning flight stalls be demonstrated at steady airspeed deceleration rates up to 3 knots per second. The FAA agrees with this recommendation and proposed to add the requirement for a higher entry rate stall demonstration to part 25 as § 25.201(c)(2). The current § 25.201(c)(2) would be redesignated § 25.201(c)(3). The JAA would replace the JAR-25 dynamic stall requirement with the ARAC recommendation.

The proposed higher entry rate stall demonstration is a controlled and repeatable maneuver that meets the objective of evaluating stall characteristics over a range of entry conditions that might reasonably be encountered by transport category airplanes in operational service. Some degradation in characteristics would be accepted at the higher entry rates, as long as it does not present a major threat to recovery from the point at which the pilot has recognized the stall. Guidance material was proposed for AC 25–7 to point out that the specified deceleration rate, and associated rate of increase in angle of attack, should be established from the trim speed specified in $\S 25.103(b)(1)$ and maintained up to the point at which the airplane stalls.

The FAA proposed to revise § 25.203(c) to specify a bank angle that must not be exceeded during the recovery from the turning flight stall demonstrations. Currently, § 25.203(c) provides only a qualitative statement that a prompt recovery must be easily attainable using normal piloting skill. By specifying a maximum bank angle limit, the FAA proposed to augment this qualitative requirement with a quantitative one.

For deceleration rates up to 1 knot per second, the maximum bank angle would be approximately 60 degrees in the original direction of the turn, or 30 degrees in the opposite direction. These bank angle limits are currently contained in JAR-25 guidance material, and have been used informally during FAA certification programs as well. For deceleration rates higher than 1 knot per second, the FAA proposed to allow a greater maximum bank angleapproximately 90 degrees in the original direction of the turn, or 60 degrees in the opposite direction. These are the same acceptance criteria currently used by the JAA to evaluate dynamic stall demonstrations.

In addition to the amendments to part 25 adopted by this final rule, AC 25–7 is being revised to ensure that these harmonized standards will be interpreted and applied consistently. AC 25–7 provides guidelines that the FAA has found acceptable regarding flight testing transport category airplanes to demonstrate compliance with the applicable airworthiness requirements. The changes to AC 25-7 are described in a separate notice published elsewhere in this issue of the Federal Register. Copies of the affected pages will be available for distribution shortly after publication of this final rule.

Discussion of the Comments

Five commenters responded to the request for comments contained in NPRM 94–15. All five commenters support the proposals, with two of the commenters requesting that the FAA and JAA concurrently adopt the proposed amendments soon. One of the commenters supports the proposals as long as they apply only to future airplane certification programs, and not to existing fleets.

The FAA appreciates the widespread support for these proposals, which the FAA attributes to the use of the ARAC process. As a result of this support, the FAA is adopting the proposed rules with only a few minor clarifying changes. These changes, which do not affect the intended application of the requirements, were made to prevent any confusion that may have resulted from the proposed wording.

In § 25.125(a)(2), the FAA has added the words "whichever is greater" in reference to the two constraints on the stabilized approach speed used to determine the landing distance. This addition provides consistency with other sections of part 25 containing multiple constraints, and clarifies that the more critical of the two constraints must be satisfied.

In §25.143(c), the FAA proposed to replace the term "temporary" with the term "transient" to refer to those control forces that the pilot is assumed to take immediate action to reduce or eliminate. Examples of such forces are those resulting from raising or lowering the flaps or landing gear, changing altitude or speed, or recovering from some type of failure. The intended requirement relates to the initial stabilized force resulting from these events, not to any force peaks that may occur instantaneously. The term "transient," however, could too easily be misinterpreted to refer to an instantaneous peaking of the force level. Therefore, the FAA is replacing "temporary" with "short term" rather than "transient" in §25.143(c). For consistent terminology, the FAA is also replacing the term "prolonged" in §25.143(c) with "long term." These changes are carried through to the other sections of the proposal in which the terms "temporary" and "prolonged" appear (§§ 25.143(d) and (e) and 25.145(b)). The accompanying advisory material that was proposed for AC 25-7 will also be revised accordingly.

Due to a comment on the revisions proposed for AC 25-7 associated with the proposed rule changes, the FAA finds it necessary to clarify the requirements for the position of the propeller on the engine suddenly made inoperative during the V_{MCL} and V_{MCL-2} determination of §§ 25.149(f) and 25.149(g). A windmilling propeller creates significantly more drag than a feathered propeller, and hence is the more critical position relative to maintaining control of the airplane after an engine failure. Since § 25.149(a) requires V_{MCL} and V_{MCL-2} to be determined using the most critical mode of powerplant failure with respect to controllability, the windmilling position must be assumed. Subsequent feathering of the propeller would be accomplished either by an automatic system that