Proposal to the Small Aircraft Aviation Rulemaking Committee

Creation and Implementation of a new "Non-Commercial" use Category under 14 CFR Part 23

Proposal:

Create a new "Non-Commercial" use Category under Part 23.

The Non-Commercial Category is intended for the private owner to operate his or her aircraft in a substantially less burdensome and costly manner by reducing the level of compliance to FAA maintenance and alteration requirements to a level more appropriate for a privately owned vehicle.

As envisioned, owners of standard category aircraft could elect to redesignate their aircraft as "non commercial (TC)" use. This would enable owners to maintain their aircraft as if it was an experimental amateur built aircraft. This would include owner maintenance privileges, use of non PMA / TSO parts and the ability to "opt-out" of Airworthiness Directives. Aircraft would be subject to a yearly "condition inspection" by an A&P mechanic which certifies the aircraft are in a condition for safe operation, similar to the requirements for Amateur Built Experimental Aircraft.

With the creation of this new category, it would also be beneficial to include "Experimental Amateur Built Aircraft" under the new name "Non Commercial (AB)." Combining Experimental Amateur Built Aircraft and Owner Maintained Standard Category aircraft in a single Category under Part 23 would have many far reaching benefits. Foremost, this would create a single community of Sport Aviation aircraft where each side could leverage the strengths of the other. Secondly, as Experimental Amateur Built Aircraft could, at the owners discretion, be designated Non Commercial (AB), the sometimes contentious operating limitations could be dispensed with, replaced by one set of Operating Rules codified within Part 23 which would apply to all the Non Commercial aircraft regardless if they are (AB) or (TC). Lastly, removing the sometimes divisive "experimental" name would help change any misperceptions of these aircraft by categorizing them with the Cessnas and Pipers commonly seen at the airport.

While some may argue anecdotally that the creation of a Non Commercial class with it's associated privileges will detrimentally effect safety, factual data indicates otherwise. First, this concept leverages the principles of the highly successful LSA/ELSA program which has proven safety record. Secondly, this class follows International Precedent by emulating the Canadian Owner Maintenance Category. Incorporation of this new class by the ARC offers the FAA a rare "clean sheet" opportunity for international harmonization. In addition, by allowing a practical and workable path to return Non Commercial (TC) aircraft to Standard Category by allowing dual airworthiness certificates, owners will have a Large Financial Incentive to keep their aircraft near to the type design and to comply with ADs to avoiding devaluing their aircraft. This is a Safety Advantage over the Canadian System where it is difficult to impossible to return to Standard Category. Finally, these principles have been followed by the FAA for over 50 years for Experimental AB aircraft with little or no change, so the basic premise is



Non-Commercial (TC) Category Overview

Applicability

• The owner of any Part 23 aircraft, or heritage Part 23 aircraft (CAR3 etc) regardless of weight, number of engines or horsepower may elect to redesignate his or her aircraft as a Non-Commercial (TC).

Privileges

- Aircraft in this category can be maintained by the owner using the same procedures that have been established for Experimental AB aircraft.
- Replacement or Alteration Parts should be appropriate for aircraft use, however need not be PMA / TSO authorized.
- Owners can "opt out" of Airworthiness Directives at their discretion.
- Owners can alter their own aircraft without the requirement for a Field Approval or STC. (however, some alterations may require "phase 1" flight testing similar to Experimental AB requirements)

Requirements

- Before conversion, all applicable ADs must be complied with, i.e. it must an airworthy aircraft.
- Airplane owners must affix a "non-commercial" placard readily visible to all passengers
- The aircraft must have a yearly condition inspection by an A&P Mechanic noting the fact that the aircraft is "in condition for safe operation." (similar to Experimental AB requirements)
- The above will be codified within Part 23 as a set of "Operating Rules"

Limitations

- Aircraft <u>can not</u> be used to carry persons for hire, this includes aircraft rental for flight instruction.
- Aircraft owners must maintain a list in the aircraft logbook of ALL applicable ADs and their compliance status. This
 list would be used to highlight the owners awareness of the ADs existence and document their choice of whether to
 comply or not.
- Aircraft owners must maintain a list in the aircraft logbook of ALL alterations performed that are not FAA approved and ALL non PMAed / TSO parts installed. This list would be used to facilitate the conversion of the aircraft back to normal category.

Conversion back to Normal Category

- Aircraft operated in the Non Commercial (TC) class would be dual certificated in both the standard and non commercial classes, as is common place for Restricted Category aircraft.
- Aircraft in the Non-Commercial (TC) category can be operated in the Standard category, provided the aircraft reasonably meets it type design data including compliance with all ADs, removal of all Non PMA / TSO parts and replacement with certified units and the removal of all non-certified alterations
- The conversion can be accomplished by an IA mechanic with a complete and thorough annual inspection and log book audit. Upon successful completion the aircraft could be operated under it's Standard Airworthiness Certificate. The Procedure is very common with Restricted Category aircraft and has proven both safe and successful.

Non-Commercial (AB) Category Overview

• All privileges and limitations remain the same as under Experimental AB except individual aircraft serial number specific operating limitations would no longer exist, being replaced by a set of Operating Rules Codified in Part 23 that would apply to all "Non-Commercial" aircraft.



Proposed Draft of Regulatory structure and changes to implement the Non Commercial Category

Notes:

- $1. \ All \ Changes \ are \ to \ Part \ 23 \ rules there \ is \ NO \ CHANGES \ NEEDED \ to \ Part \ 21 \ or \ Part \ 43$
- 2. Proposed changes to 43.3 are highlighted in Yellow
- 3. 43.4 is a new section defining the class

Part 23 AIRWORTHINESS STANDARDS: NORMAL, UTILITY, ACROBATIC, AND COMMUTER CATEGORY AIRPLANES

Sec. 23.3

Airplane categories.

Subpart A--General

- (a) The normal category is limited to airplanes that have a seating configuration, excluding pilot seats, of nine or less, a maximum certificated takeoff of 12,500 pounds or less, and intended for nonacrobatic operation. Nonacrobatic operation includes:
 - (1) Any maneuver incident to normal flying;
 - (2) Stalls (except whip stalls); and
 - (3) Lazy eights, chandelles, and steep turns, in which the angle of bank is not more than 60 degrees.
- (b) The utility category is limited to airplanes that have a seating configuration, excluding pilot seats, of nine or less, a maximum certificated takeoff weight of 12,500 pounds or less, and intended for limited acrobatic operation. Airplanes certificated in the utility category may be used in any of the operations covered under paragraph (a) of this section and in limited acrobatic operations. Limited acrobatic operation includes:
 - (1) Spins (if approved for the particular type of airplane); and
 - (2) Lazy eights, chandelles, and steep turns, or similar maneuvers, in which the angle of bank is more than 60 degrees but not more than 90 degrees.
- (c) The acrobatic category is limited to airplanes that have a seating configuration, excluding pilot seats, of nine or less, a maximum certificated takeoff weight of 12,500 pounds or less, and intended for use without restrictions, other than those shown to be necessary as a result of required flight tests.
- (d) The Non Commercial Category is limited to airplanes which are not used to carry persons for hire and is composed of two subgroups:
 - (1) (AB) Aircraft the major portion of which has been fabricated and assembled by persons who undertook the construction project solely for their own education or recreation.
 - (2) (TC) Aircraft which hold a Type Certificate in another Category defined by this part.
 - (3) Privileges and Limitations of the Non Commercial Category are defined in Section 23.4 of this Part.
- (e) The commuter category is limited to multiengine airplanes that have a seating configuration, excluding pilot seats, of 19 or less, and a maximum certificated takeoff weight of 19,000 pounds or less. The commuter category operation is limited to any maneuver incident to normal flying, stalls (except whip stalls), and steep turns, in which the angle of bank is not more than 60 degrees.
- (f) Except for commuter category, airplanes may be type certificated in more than one category if the requirements of each requested category are met.

Part 23 AIRWORTHINESS STANDARDS: NORMAL, UTILITY, ACROBATIC, AND COMMUTER CATEGORY AIRPLANES	
Subpart AGeneral	

Sec 23.4

Non Commercial Category

- (a) The Non Commercial consists of two groups:
 - (1) Amateur Built (AB). Aircraft the major portion of which has been fabricated and assembled by persons who undertook the construction project solely for their own education or recreation.
 - (a) Owners of currently certificated Experimental Amateur Built under 14 CFR 21.191(g) may elect to recertificate their aircraft under this part.
 - (2) Type Certificated (TC). Aircraft which hold a Type Certificate in another Category defined by 14 CFR 23.3. Aircraft owners may elect to operate their Aircraft as a Non Commercial (TC) subject to the privileges and limitations outlined by this part.
 - (a) Aircraft certificated in the Non Commercial (TC) are dual certificated in both the original Type Certificated Category and the Non Commercial (TC) category as defined 14 CFR 23.3 (f). However, the privileges of the Standard Category Airworthiness Certificate may not be utilized unless the aircraft meets the type design and maintenance requirements required for that certificate.
- (b) Aircraft Certificated in the Non Commercial Category are exempt from the requirements of 14 CFR 21.9, 91.319, 91.409, 14 CFR Part 43 and Airworthiness Directives except as noted below:
 - (1) Aircraft Certificated in the Non Commercial Category require a condition inspection, performed at intervals not to exceed 12 calendar months, by a certified Airframe and Powerplant Mechanic, which incorporates the scope and detail of 14 CFR 43 Appendix D.
 - (2) Aircraft Certificated in the Non Commercial Category require the following logbook entries in the format specified in 14 CFR 43.9. Entries made under this subsection must be permanently retained as part of the aircraft maintenance records:
 - a) The completion of the condition inspection required by (a) (1)
 Condition inspections must be recorded in the aircraft logbook and maintenance
 records showing the following, or a similarly worded, statement: "I certify that this aircraft has been
 inspected on [insert date] in accordance with the scope and detail of 14 CFR part 43, appendix D,
 and was found to be in a condition for safe operation."
 - **NOTE:** An experimental aircraft builder certificated as a repairman for this aircraft under 14 CFR § 65.104 or an appropriately rated FAA-certificated mechanic may perform the condition inspection required by this section.
 - b) The completion of the ATC Transponder inspection required by 14 CFR 91.215 and the ELT inspection required by 14 CFR 91.207.

Part 23 AIRWORTHINESS STANDARDS: NORMAL, UTILITY, ACROBATIC, AND COMMUTER CATEGORY AIRPLANES

Subpart A—General Continued

Sec 23.4 (continued)

- c) Aircraft Certificated in the Non Commercial (TC) Category only require all applicable Airworthiness Directives (AD) be logged within the time frame for compliance with the AD. If the aircraft owner chooses not to comply with the AD, the aircraft owner must sign the logbook entry indicating their election not to comply.
- d) Aircraft Certificated in the Non Commercial (TC) Category only, require a logbook entry at the time of installation of all parts and alterations which would not eligible for installation on a Standard Category Aircraft.
- (3) Aircraft Certificated in the Non Commercial Category are subject only to the following operating limitations:
 - (1) Non Commercial (TC) Aircraft are required to observe the FAA Approved Aircraft Flight Manual limitations and or required placard limitations established for the Standard Category aircraft unless otherwise FAA Approved via a Supplemental Type Certificate, Field Approval or other means acceptable to the administrator.
 - (2) No person may operate Non Commercial aircraft for carrying persons for compensation or hire.
 - (3) The pilot in command a Non Commercial aircraft must advise each passenger of the Non Commercial nature of the aircraft, and explain that it does not meet the certification requirements of a standard certificated aircraft.
 - (4) This aircraft must contain the placards or markings, as required by 14 CFR § 91.9.
 - (5) The aircraft must display, near each entrance to the cabin, cockpit, or pilot station, in letters not less than 2 inches nor more than 6 inches high, the words "Non Commercial"
 - (6) The pilot in command of a Non Commercial aircraft must hold a pilot certificate or an authorized instructor's logbook endorsement. The pilot in command also must meet the requirements of 14 CFR § 61.31(e), (f), (g), (h), (i), and (j), as appropriate. If required, the pilot in command also must hold a type rating in accordance with 14 CFR part 61, or an LOA issued by an FAA Flight Standards Operations Inspector.
 - (6) The pilot in command of a Non Commercial aircraft must notify air traffic control when operating into or out of airports with an operational control tower of the Non Commercial nature of the aircraft by appending the aircraft's call sign with the word "Experimental." When filing Instrument Flight Rules (IFR), the Non Commercial category of this aircraft must be listed in the remarks section of the flight plan.
 - (7) Non Commercial (AB) Aircraft require a Phase I flight test program as detailed in 14 CFR 91.319 (b) and 14 CFR 91.305.
 - (8) Non Commercial (TC) Aircraft that have been altered an extent that would be considered a Major Change to Type Design as defined by 14 CFR 21.93 require a Phase I flight test program as detailed in 14 CFR 91.319 (b) and 14 CFR 91.305.

Talking Points

- The First and Foremost, this proposal is about Fairness
 - 1. If the owner of a Type Certificated aircraft is willing to except the same operating limitations as a Homebuilt owner, why shouldn't he or she be able to maintain their aircraft the same way with the same cost savings?
 - 2. As written today, a Type Certificated aircraft owner CAN NOT elect to maintain an aircraft themselves Even if moved to Experimental Exhibition, policy dictates that it still must be maintained by A&P / IA Mechanics. In addition the exhibition class would require far more burdensome operating limitations then those specified for home built aircraft. (program letter etc)
 - 3. The above is unfair and inconsistent with safety management principles. It is intuitively obvious that a Type Certificated aircraft would be as least as Safe as a comparable Home Built under the same maintenance program. So why do we penalize Type Certificated aircraft owners by not allowing them the same options as others?
 - 4. This Proposal is intended to correct this discrepancy.
- The name "non-commercial" was chosen deliberately to accomplish several goals.
 - 1. It does not carry the same connotation or public stigma as "Experimental" the general public does not have the same fear of 'non- commercial" aircraft flying over their neighborhoods as they do experimental aircraft.
 - 2. It would make it far more difficult for municipalities to ban Experimental AB aircraft with this change of designation they would have to ban all Non Commercial aircraft. This would be considerable harder if not impossible because the new name does not invoke the same level of public reaction.
 - 3. This same concept carries over to Non-Commercial (TC) aircraft there is very little public fear to leverage to require unwarranted operational restrictions.
- It is *extremely* unwise, undesirable and unnecessary to place any restrictions on the type of aircraft that can be converted to Non-Commercial (TC) use beyond simply a Part 23 aircraft.
 - As these principles closely follow the Experimental AB philosophy, to voluntarily submit restrictions would be tantamount to admitting that restrictions should be placed on the size or complexity of Experimental AB aircraft.
 - 2. The argument should be framed as one of Safety. We have not seen any trend of larger more complex AB aircraft having a higher accident rate than smaller ones. In fact the opposite is true, accident rates are higher for less complex AB aircraft. Therefore there is no logical argument for any restrictions.
 - 3. Reread number 1. If one agrees with the logic of limiting Non-Commercial (TC) eligible aircraft to certain types, sizes or power, you are agreeing for the need to limit Experimental AB eligibilities. Do not go there. There is no technical or safety need to offer concessions here This is our proposal after all, let us ask for what we want and are entitled to, not what we think the FAA will accept.
 - There is no technical reason that an aircraft operated as a Non-Commercial (TC) can not be converted back
 to its original type design. Allowing for a reasonable transition process has HUGE SAFETY BENEFITS.
 - 1. It is certain that converting an Aircraft to the Non-Commercial (TC) class will devalue the aircraft. Airplane owners will likely lose considerable resale value by doing so.

- 2. If there is a practical and workable method of returning the aircraft to Standard Category, the majority of owners will do so before selling the aircraft to avoid losing considerable money.
- 3. Given the above, most owners will likely not stray too far from the Type Design of the aircraft to allow an easy transition back to Standard Category. In a nutshell, there will be a large Financial Incentive for owners to incorporate ADs and limit alterations to those economically removable.
- 4. The Safety Benefits are obvious. Upon aircraft sale most will incorporate all ADs and remove noncertified parts and alterations, therefore the fleet will largely stay in some semblance of compliance. However this is now accomplished through Financial Incentive, rather than regulation –
- 5. Conversely, what if transition back to Standard was forbidden or made so burdensome as to be impossible. There would be NO INCENTIVE for owners to ever incorporate ADs or limit alterations to a reasonable level. Once one converts, in effect you already lost the money, so there are no Financial or Regulatory brakes on what could be done. This situation obviously less Safe than discussed above. A reasonable transition must be allowed if for nothing else Safety Grounds alone.
 - ---- How could the Transition back to Standard be accomplished?
 - 1. This procedure is copied from how we handle aircraft in Restricted Category today this is not a new procedure for the FAA!!!!!
 - IAs are currently REQUIRED during annual inspections to ensure that the aircraft
 complies with type design. This is a normal annual function and we often find issues
 today that would be common under a transition, such as incorrect engine, propeller
 types, uncertified interior materials, non PMA components etc.
 - 3. From the above, tasking IA to certify an airplane meets it's type design during a conversion back to Standard Category is not a new or novel task it is simply what the do today during an annual and how we allow Restricted Category aircraft to also operate with a Standard Airworthiness Certificate.
 - 4. The logbook requirements outlining AD compliance and alterations will greatly aid in this conversion.
 - 5. In effect, a reasonable Transition Process would simply consist of a very thorough annual by an IA.
 - 6. There are those that would argue that a Transition back to Standard should require a Conformity Check by a DAR. This would not be as effective as the above and cost far more. DARs and MIDO Inspectors are often QA inspectors, who excel at detailed inspections to drawing requirements however that skill set is not ideal for this purpose. Often DARs have little experience with an aircraft as a whole or field experience as a mechanic. What is needed are people that work these type of aircraft everyday, and know from experience what is installed on a particular aircraft type. This does not describe a DAR or MIDO inspector it describes an IA.

--- other factors

6. The most basic purpose in proposing this new class is to give an aircraft owner choices. If the aircraft complies to it's original type design, there is no technical or safety reason to prevent from operating as standard category aircraft.

- 7. By the same token, we do not require Experimental Amateur Built aircraft to make the transition. We simply allow it as an option.
- 8. Use of DARs for a "conformity check" is a HUGE red herring. It adds no safety value when compare to a check by an IA and costs many times more. This burden will make the system less safe by discouraging conversion. It is also far more than we require today for an IDENTICAL OPERATION for Restricted Category. It would be an expensive, non value added anchor.
- 9. This point is an important one to hold firm on. There likely be a push to make the transistion "one way" to forbid going back to Standard category once an airplane is maintained in the Non-Commercial class. The motives for this will not be safety related, but will be done purely to limit the utility of the class.
- 10. If this transition is one way, owners will be VERY reluctant to move their aircraft to the Non-Commercial class because of the financial loss due to the likely devaluation of aircraft.
- 11. Conversely, allowing moving between classes has a safety benefit. We must insist on the safety benefit.
- The establishment of the Non-Commercial (AB) class has huge potential benefits for Experimental Amateur Built aircraft.
 - 1. It would remove the need for custom operating limitations for each aircraft. As the aircraft would no longer be experimental, there would no longer be a PART 21 requirement for such limitations. Individual limitations would be replaced by standard set of "operating rules" codified under Part 23.
 - 2. These operating rules would apply to both Amateur Built and Type Certificated Aircraft operating Non-Commercially. This will effectively establish Amateur Built aircraft on the same par as type certificated aircraft.
 - 3. What value is this? Practically speaking, the FAA "controls" the experimental homebuilts through operating limitations. Operating limitations are easily changed, while regulations under Part 23 are extremely difficult to change. Once under codified under Part 23, there is very little chance of capricious changes to the ability to certify or operate homebuilt aircraft. In fact, when so closely tied to the Non-Commercial Type Certificated airplanes effectively one would have to restrict both which would be far harder and less likely than the situation today. In word this gives you stability.
 - 4. This stability will encourage growth in the industry.
 - 5. It would make it far more difficult for municipalities to ban Experimental AB aircraft with this change of designation they would have to ban all Non Commercial aircraft. This would be considerable harder if not impossible because the new name does not invoke the same level of public reaction.