

Approval of McCauley 1A90CF and 1B90CM Propellers on the 415-E & G per TC A-787 Rev. 33

Per Hal at McCauley; McCauley holds no STC for installation of a 1A90CF or 1B90CM prop on any model Ercoupe. There are only two STC for McCauley props for Ercoupes. SA1-336 which is for a CM7152 on a C90-14F engine and SA465WE for the 415-C, -CD and -D with a C90-14F engine. Both are help by individuals. There is no STC for a McCauley installation on a 415-E with a C85-12 or C85-12F engine.

Hal also suggested the following as an explanation on trying to resolve the question of an approval basis for the McCauley props per our T.C. A-787:

Ref. Pg. 1: The 415-D is eligible to have a C75-12, -12F or (C85-12, -12 F See NOTE 4 on pg. 11).

Ref. Pg. 11: NOTE 4 states:

Model 415-D eligible for installation of C85-12 or -12F engines provided:

(a) Item 1, 3, or 5 propeller or

(b) Item 4, 6, or 7 propeller and additional ERCO baffles (P/N 415-40487 left and right; 415-40488, one; 415-40597, two; 415-40598, two) installed.

Ref. Pg. 2: Item II; The "Model 415-E is similar to Model 415-D except for engine installation..." The engine specified is the Continental C85-12, C85-12F.

On the bottom of page 2 in the paragraph relating to Required Equipment, it states: "In addition to the pertinent required basic equipment specified in CR 3, the following items of equipment must be installed; 1, 101(a), 102, 201(a), 202(a), 205(b), 206(b), 401(b).

Ref Pg. 6: Listed under Propellers and Propeller Accessories, Item 1 states that the approved propeller is a Sensenich 74CT or 74KT48 for the Model 415-D with the C75 engine and the 415-D, E and G with C85 engine. **On face value this appears to be the only approved prop for the 415-E or -G.**

However, in the preceding paragraph under **Equipment**: is states in part: "...Approval for the installation of all items of equipment listed herein has been obtained by the aircraft manufacturer except those items preceded by an asterisk (*). The asterisk denotes that approval has been obtained by someone other than the aircraft manufacturer..."

NOTE 4(b) allows for the use of the McCauley metal props for use on 415-D aircraft with C85-12 or -12F engines.

Item II says that the 415-E is the same as the 415-D but has a C85-12 or -12F engine installed. Would not NOTE 4(b) also apply?

The note under "Equipment" on pg. 6 all inclusive for all "equipment listed herein" for aircraft produced under T.C. A-787 not just Item 1 in propellers but 1 through 8.

Item 4 under Propellers and Propeller Accessories states:

Fixed pitch metal, McCauley 1A90CF or 1B90CM
Eligible on Models M10, A2, A2-A, 415-D (per note 4(b)), E, G, F-1
and F-1A.

The Required Equipment note on the bottom of page 2 and Item 4 under Propeller and Propeller Accessories appear to be in direct conflict. However, taken into consideration with other information in the T.C., I think this is a reasonable explanation.

MDS
11/15/05