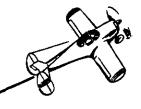
Ercoupe MEMORANDUM

SERVICE MEMORANDUM

^{No.} 28

ERCOUPE

SUBJECT: Engine Crankshaft
Affect of change



- 1. The Continental engines currently used in Ercoupes are furnished, in some cases, with the S.A.E. No. 1 flanged propeller mount. The transition from the tapered shaft to the flange shaft will not be applicable to any specific serial number of Ercoupe, or date. Maintenance operations will differ slightly depending upon which engine is employed. The model designation for the flange type engine is the same as for the taper shaft engine except for the addition of the letter "F", i.e., C-75-12F.
- 2. The interchangeability of the propeller and propeller spinner has been affected by this change for the following reasons:
 - The S.A.E. No. 1 flange requires that the propeller standard bolt holes be modified by counterboring each hole on the rear hub face to 5/8" diameter by 5/8" deep.
 - 2. The distance between the engine crankcase and forward face of the propeller mounting flange has been increased by 1/2".
- 3. The propeller, as modified by the addition of the counterbore, is identified by the model designation as 74FKT48, that is "K" is substituted for the letter "C" which appears on propellers originally intended for installation on the Continental "O" taper hub.
- 4. The propeller manufacturer has by Service Bulletin, dated July 8, 1946, released the necessary instructions to provide interchangeability for the propeller. A copy of that Service Bulletin is attached hereto as an appendix.

- 5. Because of the increase in the distance between the rear face of the propeller and the engine casting, it was necessary to increase the length of the propeller spinner. The new spinner bears the number 415-40593 and is 3/8" longer than the spinner (Part No. 415-40498) used with the taper shaft engines. The new spinner (Part No. 415-40593) may be used with the tapered shaft engines by trimming 3/8" from the after edge. The spinner (either type) is attached to the backplate with eight truss head PK screws 3/8 by 5/16, and eight Tinnerman nuts No. A6187-42-1 type "U". Two screws and nuts of the same description are used to attach the spinner to the support bracket located on the front of the propeller as referenced in our Service Memorandum Number 22. When installing a spinner it is imperative that there be clearance at all points between the spinner and propeller to prevent damage to either part.
- 6. Further, when fitting a spinner to flange shaft engines, it may be necessary to refit the engine cowling to obtain a satisfactory clearance between the spinner and cowling. This may be accomplished by shimming the Engine Nose Cowling Mount Assembly part number 415-40244 at its attachment points to the engine mount.

Propellers shipped as spares from Sander Aviation Inc., when circumstances permit, will be supplied with counterbored openings and bushings, making them usable with either engine.

Appendix: Sensenich Service Bulletin dated July 8, 1946

SENSENICH SERVICE BULLETIN

TO: All Distributors and Branches, Wholesalers, Aircraft Factory Service Departments

SUBJECT: Interchangeability of Propellers for the A65, C75, and C85 Continental Engines.

The diameter of the bore, diameter of bolt circle, diameter and number of bolts are the same for all propellers that fit the Continental hub (Nos. A3599 and A3482) or the SAE No. 1 flange.

The only difference between the two is the SAE No. 1 flange requires the bolt holes be counterbored 5/8 inch diameter by 5/8 inch deep from the rear face of the propeller.

The letter K is used as the second letter of our model designation to indicate the propeller is counterbored to fit the SAE No. 1 flange.

Example: 74FCT 72C Continental hub 74FKT 72CK SAE No. 1 flange

If necessary the above propellers may be made interchangeable as follows:

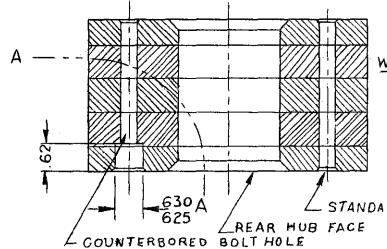
- (a) The model 72CK propeller may be used on the Continental hub provided steel bushings are installed. See the attached drawing for dimensions.
- (b) The model 72C may be reworked to fit the SAE No. I flange provided care is exercised so that the counterbore is centered and the dimensions are as shown on the attached drawing.

The counterbore must be sealed with several coats of a high grade spar varnish and the letter K must be stamped on the side of the hub either between the letter C and the pitch designation, or directly above this position.

Example: 72CK42 or 72CK42.

SENSENICH BROTHERS
Dick Bomberger
R. N. Bomberger
Sales Manager

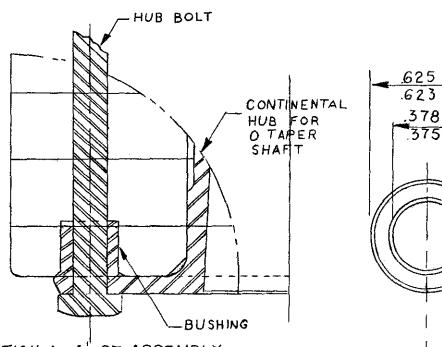
MODIFICATION FOR INTERCHANGEABILITY OF PROPELLERS FOR THE A65, C75, AND C85 CONTINENTAL ENGINES. SENSENICH BROTHERS - LANCASTER , PA.



CROSS-SECTION OF WOODEN PROPELLER HUB

SHOWING A STANDARD BOLT HOLE AND A COUNTER-BORED BOLT HOLE WITH DIMENSIONS TO FIT THE DRIVING BUSHINGS OF SA.E. No.1 FLANGE

- STANDARD BOLT HOLE



SECTION A - A' OF ASSEMBLY

SHOWING BUSHING INSTALLED ON TAPER SHAFT HUB BOLT

56. S BUSHING .

DOUBLE SIZE

02 X45° CHAMPER NUMBER REQUIRED: 6 PER PROPELLER

MATERIAL

STEEL