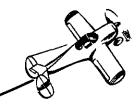
Ercoupe MEMORANDUM

ERCOUPE SERVICE MEMORANDUM

No. 40

SUBJECT: Control Column Cable Assemblies
Inspection of



- 1. This Memorandum is applicable to Ercoupe Serial Nos. 113 to 4729 inclusive.
- 2. Recent reports have noted the fraying of the control column cable assemblies resulting from contact of the cable assemblies with the set screw in the aileron stops or wear on the periphery of the cable assemblies where they ride in the quadrant radius. Although fraying of the cables is not considered general, in the interest of safety, it is recommended that the cables be inspected as soon as possible, but no later than the next 25-hour inspection and each 100 hours thereafter unless control column assembly is modified in accordance with paragraph 4 below.
- 3. When inspection reveals damaged cables, replacement of the cables is recommended. If only the lower left cable is damaged (damage is generally limited to the lower left cable), this cable may be replaced by removing the nut from the bolt which secures the quadrant to the inner shaft, then cut the safety wire from the upper right turnbuckle and release cable. The old cable can be removed and a new one installed without permitting the chain to slip from the sprocket. This will permit easy alignment of the control wheels in drawing up the turnbuckle. If the opposite cable or both cables are damaged, the bolt that attaches the guadrant to the inner shaft must be driven out before the upper right cable can be removed. To check for proper installation when either of both cables have been replaced, secure the control surfaces in neutral by clamping the ailerons to the center section trailing edge with wooden blocks and "C" clamps.

The control wheel center spoke should then be in vertical position. If the control wheels are out of line, re-set by adjusting the proper turnbuckles (see Service Bulletin No. 13 and Service Memorandum No. 35). When correct neutral alignment has been obtained, check for maximum aileron travel. With the control wheels full left or right, there must be 1-1/2 chain lengths between sprocket and turnbuckle eye. Safety turnbuckles with .051 brass wire and place a cotter key in the quadrant bolt when all installation and adjustments are completed.

- 4. In order to avoid the necessity of periodic checks, the control column assembly may be modified to incorporate the new style quadrant, cables, and stop bolts. The new style quadrant, Part No. 415-52122, is designed with wider and deeper grooves which precludes the possibility of the cable assemblies from making contact with the stop bolts. If the new style quadrant is installed, it is necessary that the cable assemblies be replaced with new cable assemblies, Part No. 415-52172S, of a shorter length which are required due to the change in quadrant design. At the time that the new quadrant and cable assemblies are installed, it is recommended that the aileron stop screws be replaced with the new type stop bolts, Part No. 415-52169-2.
- **5.** Rigging of controls should follow the procedures outlined in Service Department Bulletin No. 13 and Service Department Memorandum No. 35.
- 6. Your cooperation in disseminating this information to Ercoupe owners is requested.