

Operating Tips . . .

FOR BETTER NAVION FLYING

HERE'S HOW TO PROVIDE ADDITIONAL TAIL TIE-DOWN FITTING

The main leaf in the tail skid on the rearmost bulkhead of your Navion provides an excellent place to install an extra tiedown ring. This ring makes it possible to do a more effective job of tying down the aircraft in the event of a heavy wind. One of the 143-14051 tiedown rings used on the underside of the Navion wings may be installed in the tail skid by drilling a 3/8 inch diameter hole as high up on the main

leaf as possible and still leave room for an elastic stop nut and washer to be installed. The eye-bolt should be inserted from the underside of the skid so that the tiedown ring will be in the most convenient position. The threaded shank of the eye-bolt is somewhat longer than necessary for this application and should be cut off flush with the top of the nut after installation.

IMPORTANCE OF MAIN LANDING GEAR BUMPER WASHER MAINTENANCE

Ryan field representatives have recently observed that many Navions are being flown with badly deteriorated, or missing, bumper washers on the main landing gear extension stop rods. The maintenance of these composition washers in good condition is rather important as over-extension of the main gear struts may cause damage to, or malfunction of, the up-lock hooks.

Damage to these hooks can cause the gear to drop during flight, or stick in the wheel well when it comes time to lower the gear preparatory to landing. In view of these consequences, it is recommended that owners get in the habit of checking the condition of the washers before each flight and replacing them promptly whenever any appreciable deterioration is noted.

CONDITION OF ANTENNA WIRE HAS DEFINITE EFFECT ON RADIO PERFORMANCE

The wire used in making up the standard Navion radio antenna system is composed of a steel wire core coated with a layer of copper. This type of wire is used in the interests of obtaining maximum strength together with best radio frequency current conductivity.

Radio experts tell us that Radio Frequency Current travels only on the outer surface of the wire; therefore, the copper coating does an effective job of serving as a conductor for this current. It is quite obvious that a high strength wire with as little stretch as possible is also desirable and the steel wire core imparts these characteristics to the wire.

It has been noted that after this wire has been in service on an airplane for some time, the copper coating may oxidize or corrode to the extent that it can no longer function as an effective low resistance conductor of Radio Frequency Current. When this happens,

the operating efficiency of the radio equipment is lowered; in which case, installing new antenna wire will give some increase in radio operating efficiency.

The time interval between wire changes will vary with local air conditions, i.e. the wire might have to be changed annually on a Navion operated in a coastal area and stored outdoors when not in service. It has also been found that the atmosphere around large industrial areas may contain impurities that will hasten the corrosion of the copper coating on the antennas of airplanes operated regularly in these areas. It should however, be understood that a slight coating of surface oxidation is normal and has little if any, effect on operating efficiency; however, complete oxidation of the copper coating will necessitate wire replacement for best results.