

# Hand-Propping Checklist

The FAA's *Airplane Flying Handbook* (AFH), FAA-H-8083-3A, includes a discussion of hand-propping, admonishing its readers, "this method of starting should be used only when absolutely necessary and when proper precautions have been taken." This article's main text covers the major points raised in the AFH, but the following items are worth emphasizing.

## REQUIRED PERSONNEL

An engine should not be hand-propped unless two people, both familiar with the airplane and hand propping techniques, are available to perform the procedure. The person pulling the propeller blades through directs all activity and is in charge of the procedure. The other person, thoroughly familiar with the controls, must be seated in the airplane with the brakes set. As an additional precaution, chocks may be placed in front of the main wheels. If this is not feasible, the airplane's tail may be securely tied.

## FIRM FOOTING

When hand propping is necessary, the ground surface near the propeller should be stable and free of debris. Unless a firm footing is available, consider relocating the airplane. Loose gravel, wet grass, mud, oil, ice, or snow might cause the person pulling the propeller through to slip into the rotating blades as the engine starts.

## COMMUNICATION/PLANNING

Both participants should discuss the procedure and agree on voice commands and expected action. To begin the procedure, the fuel system and engine controls (tank selector, primer, pump, throttle, and mixture) are set for a normal start. The ignition/magneto switch should be checked to be sure that it is OFF. Then the descending propeller blade should be rotated so that it assumes a position slightly above the horizontal.

## PHRASEOLOGY

The words CONTACT (mags ON) and SWITCH OFF (mags OFF) are used because they are significantly different from each other. Under noisy conditions or high winds, the words CONTACT and SWITCH OFF are less likely to be misunderstood than SWITCH ON and SWITCH OFF.

