

Chapter One

One last thought: when the aircraft is being repainted, great care should be taken to protect the transparencies and sealant. Use high-quality masking material to assure that no paint product comes into contact with the transparency at any time. An open can of paint stripper should not even be put in proximity to an aircraft transparency. Acrylic absorbs stripper fumes, resulting in rapid crazing.

Window Restoration

The restoration of crazed transparencies is definitely possible and even can be done by the pilot, but it is not your typical home project. You must know the panel's exact thickness, as the existing thickness must be compared to the minimum allowable thickness, which varies from manufacturer to manufacturer. The kit will come with an appropriate technical manual that will help you make the determination. The restoration process removes some of the windshield, and it is possible that your transparencies are already too thin for refinishing. Ultrasonic measurement is the best method for the novice, but not many novices have access to ultrasound equipment. After completion, the transparency must again be checked for thickness and compared to assure compliance with the minimum requirement. Some transparencies may be refinished several times, greatly increasing their useful life. All things considered, unless you have a lot of mechanical experience, this process is best left to the experts.

EMERGENCY LOCATOR TRANSMITTERS

At best, search and rescue (SAR) is a hit-or-miss proposition. It wasn't all that long ago when the search sometimes claimed more lives than the downed aircraft. Rescue was often delayed by poor reporting procedures, and the actual search often had airplanes flying haphazardly over suspected areas, sometimes into each other!

The FAA sought to shorten the time between accident and rescue because many victims survived the crash only to die of exposure and hunger. At one point it was determined that 50% of the people who were successfully rescued were found in the first 12 hours; 25% were found within the next 12 hours. The odds weren't good if you had to wait longer.

On December 29, 1970, an amendment to the Federal Aviation Act of 1958 went into effect. It required most U.S. civil aircraft to have an FAA-approved emergency locator transmitter (ELT) installed and operating.

The exceptions, as they pertain to general aviation, are listed in Federal Aviation Regulation 91.207, and are as follows:

1. Turbojet-powered aircraft.
2. Aircraft while engaged in scheduled flights by scheduled air carriers.
3. Aircraft while engaged in training operations conducted entirely within a 50-nautical mile radius of the airport from which such local flight operations began.
4. Aircraft while engaged in flight operations incident to design and testing.