The fifth air safety seminar organized by Flight Safety Foundation, Inc., took place at the College of Aeronautics, Cranfield, from September 11th-13th. These seminars are held annually (the last was in Bermuda in 1952) and this, the first to be held in Great Britain, the support of the Services and of industry remained a guarantee of their success.

For three days experts in various aspects of air safety discussed informally recent developments in their subjects. Organizations represented included the main world airlines, the armed forces of several countries, the civil aeronautics authorities and the manufacturers of aircraft and accessories contributing to safety. Although the scope of "air safety" could well include consideration of the aircraft structural design and of meteorological factors the fifth seminar concentrated on: (i) the avoidance of mid-air collisions by improved lighting and by radar warnings; (ii) the protection of the passenger during a crash of ditching and his survival afterwards; and (iii) the study of the physical and psychosocial problems of the crew and passengers.

Mid-air collisions.—Reports on thirty-four mid-air collisions in America have shown that nearly all took place under Visual Flight Rules and that improved visibility of aircraft should be a helpful factor. The limited view from certain civil airplanes was criticized and the use of brighter, flashing lights and of surfaces painted with glow paints was recommended. The identification of helicopters, perhaps by rotor blade tip lights, was a special problem.

Take-off and landing speeds.—Lt. Col. McCann (U.S.A.F.) described a standardized card supplied to pilots listing certain important speeds computed before take-off for the particular aircraft, runway, air temperature and humidity, weight, etc. Besides listing the optimum speeds for unstick, three- and four-engined climb and emergency approach at various weights, a "line speed" was listed. This was the speed which should be reached before the aeroplane crosses a yellow line painted across the runway, say one-third of the way along. A pilot failing to achieve this speed should stop for investigation. Accidents which had occurred due to engine power loss and wrong wind information could have been avoided by the use of this "line speed."

Rescue.—The film produced by Ultra Electric entitled Sarah (Search and rescue and bomber)—reviewed in Flight some weeks ago—showed the functioning of a lightweight radio beacon carried by a passenger upon which an aircraft or a boat can home. The civil version, weighing only 20 ounces, is fitted to the life-jacket and, being powered by a seawater cell, comes into action automatically when the passenger finds himself in the water. The Service type can be used for rescue from either land or water.

Another film, Evacuation, made for United Air Lines by Mr. Carl Christiansen, showed volunteers abandoning a DC-4 after a simulated emergency landing with the aid of a canvas chute from the rear door. It was found that practice by the crew in their special roles greatly speeded evacuation, while tests in darkness showed the importance of emergency cabin lighting.

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