

JEPPESEN PILOT'S WEATHER COMPUTER, CK-1

1. The Weather Computer contains the following types of information and data:

(a.) One side of the computer covers frontal and air mass weather in the following detail: Cross-sections, descriptions, cloud systems, and typical flight conditions stressing ceilings, visibilities and turbulence. Fronts covered are cold fronts, warm fronts, stationary fronts, cold front type occlusions, and warm front type occlusions. Air Masses covered are continental polar, maritime polar (Pacific), maritime polar (East of Rockies), maritime polar (Atlantic), and maritime tropical. Both winter and summer air mass weather are covered, also a teletype sequence weather report which is broken down and explained. A complete list of all sequence report symbols are arranged so that they can be easily interpreted. A weather map and map symbols are illustrated enabling interpretation of surface weather conditions.

(b.) The other side of this computer contains the cross sections of five general types of thunderstorms and five general types of icing conditions. The dial can be turned to any one of these flight hazards and indicate a simplified explanation of the phenomena with its accompanying conditions and recommended action to be taken.

2. Uses of Pilot's Weather Computer.

(a.) The Pilot's Weather Computer may be used in pre-flight planning, as a training aid, as a quick weather reference, weather refresher aid and in actual flight.

(b.) As a pre-flight aid, the Pilot would refer to the weather map and note the air masses and fronts which he will encounter in flight. Referring to the computer he would be cognizant of the typical flight conditions prevailing in the masses and across the front. Specific in-flight weather conditions at specific flight altitudes would require the services of a trained forecaster.

(c.) This computer can be used in conjunction with weather courses in all aviation flight and ground schools. It is not intended that this computer will replace formal weather instruction for aviation trainees, but act as an assist by making available a simple weather learning device.

(d.) Active, experienced pilots can retain or regain their weather knowledge by continuing reference to this computer. Also, those pilots now holding desk or staff positions and who fly only infrequently can retain their weather knowledge by use of this computer.

(e.) In actual flight, pilots may refer to the weather computer when encountering or anticipating weather hazards, such as fronts or icing conditions.

3. How to "Dial" Weather on the Weather Computer.

(a.) Assume that a pilot is planning a flight during a summer day from Airport "A" (Dannelly Airport, Montgomery, Alabama) to Airport "B" (Teterboro Airport, Teterboro, New Jersey). The weather map for that day indicates that he will fly in Maritime Tropical Air Mass, through a Warm Front and finally in a Maritime Polar Air Mass. By checking the Weather Computer, he will know the source and characteristics of each air mass, the type cloud system to be encountered, and the typical flight conditions including ceilings, visibilities, turbulence and possible hazards that he will encounter in-flight. If the weather map or the computer indicates the presence or possibility of a hazard enroute, the pilot can check the hazard on the computer and know the reasons for the hazard to be encountered, and the recommended action to be taken. If the hazard is encountered unexpectedly, the pilot may associate the hazard with the cross section on the computer and dial to the identified "type" hazard. This also brings into view a brief explanation of the weather conditions, and safe action to follow.