

ABLES
OF
WIND, CLOUDINESS, RELATIVE HUMIDITY AND VISIBILITY

Wind is defined as air in motion. The conception of wind as the motion of the air and the invention of the wind-vane go back to before the Christian era. It was recognized by the Greeks that different types of weather were associated with the winds from different directions. To give a full expression of the wind, account has to be taken of its force, as well as its direction. The direction is measured in a horizontal plane and is easily indicated by the familiar weather-cock, which points in the direction from which the air is flowing past it. In the stations of the Weather Bureau, the direction of the wind is observed to 16 points of the compass. The force or speed of the wind is either estimated by the observer and expressed in terms of the Beaufort scale or is measured by special instruments, called anemometers. A scale based on the experience of sailors was put into numerical form by the English Admiral Beaufort, but was not finally adapted for use on land until 1906. A sequence of twelve grades of wind was enumerated from 0, flat calm, to 12, the force of a hurricane and is still in use as the Beaufort scale. The practical unit of speed which has been adopted by the International Commission for Aerial Navigation is the kilometer per hour and is used in the Publications of the Weather Bureau. In publications using British units, velocities are often given in miles per hour and sometimes even in feet per second and British ships invariably use the knot as a measure of