

Slip.—Difference between mean geometrical pitch and effective pitch.

Slip may be expressed as a percentage of the mean geometrical pitch or as a linear dimension.

Slip function.—Ratio of speed of advance through undisturbed air to the product of propeller diameter by number of revolutions in unit time, that is, $\frac{V}{ND}$. Slip function is the primary factor controlling propeller performance. It is π times ratio of forward speed to tip speed of propeller.

Slipstream.—Stream of air driven astern by propeller. (The indraft is sometimes included also.)

Speed, ground.—Horizontal component of velocity of aircraft relative to the earth.

Stability.—That property of a body which causes it, when disturbed from a condition of equilibrium or steady motion, to develop forces or moments which tend to restore the body to its original condition.

Automatic.—Stability dependent upon movable control surfaces automatically operated by mechanical means.

Directional.—Stability with reference to rotations about the normal axis, that is, an airship possesses directional stability in its simplest form if a restoring moment comes into action when it is given a small angle of yaw. Owing to symmetry, directional stability is closely associated with lateral stability.

Inherent.—Stability of an aircraft due solely to disposition and arrangement of its fixed parts, that is, that property which causes it when disturbed to return to its normal attitude of flight without use of controls or interposition of any mechanical devices.

Lateral.—Stability with reference to disturbances involving rolling, yawing, or side slipping, that is, disturbances in which position of the plane of symmetry of the aircraft is affected.

Longitudinal.—Stability with reference to disturbances in the plane of symmetry, that is, disturbances involving pitching and variation of longitudinal and normal velocities.

Static.—Stability of such a character that, if the airship is displaced slightly from its normal attitude by rotation about an axis through its center of gravity (as may be done in wind tunnel experiments), moments come into play which tend to return the airship toward its original attitude.

Streamline.—Path of a small portion of a fluid relative to a solid body with respect to which the fluid is moving. The term is com-