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AERONAUTICAL LIGHT NOMENCLATURE

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Aeronautical Light

Any light which, by reason of its characteristics or location, serves as an aid to air navigation.

Airplane Lights

Lights mounted on an airplane. See

"Instrument Lights"; "Lending Lights"; "Navigation Lights", "Passing Lights"; "Position Lights".

Airport Beacon

See "Beacon".

Alrway Beacon

See "Beacon".

Approach Lane

A line of approach lights marking the approach to a lighted runway. Approach Light

A light, serving as a unit in an approach lane, and outside the limits of an airport, so located as to indicate a favored direction of approach. This term is sometimes applied to a range light (q.v.) but should be restricted to the above defined application.

Apron Floodlighting

A system of floodlighting for illuminating the apron or loading area. Auxiliary Beacon

See "Beacon".

Beacons

<u>Airport Beacon.</u> A high intensity light, rotated or occulted, and having standard characteristics indicating a lighted airport. Such beacons generally have alternating white and green beams.

<u>Airway Beacon.</u> A high intensity light, rotated or occulted, and having standard characteristics marking a lighted airway. Such beacons generally have alternating white and red beams.

<u>Auxiliary Beacon.</u> A beacon, generally a code beacon, installed at an airport where the airport beacon is installed some distance from the landing area. This term is also used for a code beacon, located at the airport, and used to produce an identification signal, supplementing an airport beacon.

<u>Code Beacon.</u> A high intensity beam light occulted to give a morse code identification signal, by means of light flashes.

Flasher Beacon. A beacon whose eclipse intervals are produced by extinguishing or obscuring the light source.

Intermediate Beacon. A type of airport beacon having lower candlepower characteristics than are required for an airport beacon. These are no longer approved for installation at airports.

Oscillating Beacon. A beacon whose light source is oscillated in an optical assembly, to produce changes in the direction and intensity of the beam.

Rotating Beacon. An airport or airway beacon whose projector head is rotated about a vertical axis.

Boundary Light.

One of a series of lights installed around the landable area of an airport in order to mark its limits. Boundary lights are usually mounted on cone shaped boundary markers, but in some instances flush units are used.

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Building Floodlighting.

A system of floodlighting designed to illuminate the exterior of an administration building, hangar, or other building, in order togive perspective.

Ceiling Indicator.

A narrow beam projector which projects a lighted spot on the bottom of a stratum of cloud, allowing the height of the spot to be measured by a simple method of triangulation.

Code Beacon.

See "Beacon".

Circle Lights.

Flush lights (q.v.) set in a large circle on the landing area and used to identify an airport, or to aid in traffic control.

Contact Lights.

Flush lighting units located along the edges of a runway to mark its location and direction, and to assist landings.

Course Light.

A light unit producing a fixed beam of light, mounted away from an airport, with the beam directed towards an airport or along an airway. Course lights, when mounted on airway beacons, usually flash a code signal, to identify the beacon location.

Directional Floodlighting.

See "Floodlighting".

Distributed Floodlighting.

See "Floodlighting".

Explosion Proof Fixture.

An enclosed lighting or wiring unit designed to have sufficient mechanical strength and adequate sealing to restrict any explosion resulting from inflammable gases, dust, etc., to the interior of the fixture. Such fixtures should be used in dope and paint rooms and hydrogen storage space.

Flasher Beacon.

See "Beacons".

Flashing Light.

A light designed to be lighted and extinguished in rapid sequence. Such lights may be individually controlled, or may be flashed in groups. Floodlighting.

<u>Directional Floodlight.</u> A floodlight which illuminates an area for landing, in such a way that an airplane lands nearly parallel with the axis of the beam.

<u>Distributed Floodlighting.</u> A system of floodlighting used where the contour of the field or the design of the units requires simultaneous lighting from several locations.

<u>General Field Floodlighting.</u> A system of floodlighting in which the entire landing area is lighted from one or two banks of lights.

Landing Area Floodlight. A large capacity light designed to illuminate a sufficient portion of a landing area, to permit an airplane to make a safe landing after dark.

<u>Runway Floodlighting.</u> A system of floodlighting illuminating only the runway on which a landing is to be made, and in the direction of the airplane travel.

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Flush Lights.

Lights designed to be mounted flush with the ground, in such a way that an airplane or a tractor can run over them. See "Contact Lights", "Range Lights", "Circle Lights".

General Field Floodlighting.

See "Floodlighting".

Hazard Lights.

See "Obstruction Lights".

Instrument Lights.

Any type of direct or indirect lighting in the cockpit of an airplane, and used for illuminating the instruments.

Landing Area Floodlight.

See "Floodlighting".

Landing Light.

A strong clear floodlight mounted on an airplane, to assist landings after dark. Landing lights are generally located in the leading edges of the wings, but are sometimes located in the nose or even in the landing gear.

Intermediate Beacon.

See "Beacon".

Marker Lights.

A general term for any airport lights marking a definite object or area, such as boundary lights, range lights, contact lights, obstruction lights, etc.

Multiple Light.

A' lighting unit using a high resistance lamp designed to be operated at a constant voltage, and connected on a constant voltage circuit.

Navigation Lights.

See "Position Lights".

Obstruction Lights.

Red lights on or adjacent to obstructions, and arranged to indicate the height and extent of the obstruction. In some cases, especially in lighting tall stacks, obstruction lighting is accomplished by means of floodlighting with white light.

Oscillating Beacon.

See "Beacons".

Passing Light.

A strong red light on an airplane flying after dark, to warn passing aircraft. Passing lights are generally located in the leading edge about the mid section of the port wing, but in some cases, are placed in the nose. In some instances a similar green passing light is similarly located in the starboard wing.

Position Lights.

Lights mounted on an airplane flying after dark, to serve as warnings to other aircraft. A red light is located on the port wing tip, and a green light on the starboard wing tip, and a white light aft, on either the rudder, the fin, or the trailing end of the fuselage.

Pistol Light.

A portable lighting projector, producing a narrow concentrated beam of light, of which the color can be controlled by a trigger, and which can be directed on an individual airplane in flight, or on the ground, and be used to signal the pilot. /6/14

Range Lights.

Green lights grouped at opposite ends of runways or landing strips, to permit ranging in the runways from the air. Range lights may be either flush or mounted on cones, and should be so grouped or coded as to indicate individual runways.

Rotating Beacon.

See "Beacon".

Runway Floodlighting.

See "Floodlighting".

Series Light.

A lighting unit using a low resistance lamp designed to be operated at a constant current value, and connected in series with other such units on a constant current circuit.

Shadow Bar.

A device used with a wide angle single source floodlight (q.v.) whereby a controllable shadow is projected across an airplane landing on or taking off from the lighted area. This prevents the floodlight from producing glare in the eyes of the pilot.

Sign Floodlighting.

A system of floodlighting designed to illuminate an identification sign or marker, painted on or constructed upon a roof or on the ground. Traffic Lights.

Colored lights, arranged in a circle or in the form of an arrow upon the ground, on a building, or at runway ends, and used, by means of separate color control, to regulate airplane traffic. See also "Pistol light".

Runway Lights.

See "Contact Lights".

Vapor Proof Lights.

Enclosed lighting fixtures so sealed as to prevent access of dust or vapor. Such lights are generally used in auxiliary hangar space and repair shops.

Wind Cone.

A fabric cone or sock swinging freely from a vertical support, in such a way as to indicate the direction and approximate velocity of the wind. Wind cones are generally floodlighted for visibility at night.

Wind Tee.

A tee-shaped marker designed to indicate the direction of the ground wind. A wind tee is generally outlined by lights for visibility at night. ////

APPENDIX

GENERAL DEFINITION OF TERMS RELATING TO AFRONAUTICAL ILLUMINATION

As Approved by the International Commission on Illumination and the U. S. National Committee

<u>Light - feu - Luftfahrtfeuer.</u>-

A light is any luminous signal designed to be used for air navigation.

Fixed Light - feu fixe - Festes feuer:-

A fixed light is any light which is constant in luminous intensity when observed from a fixed point.

Intermittent Light - feu intermittent - Taktfeuer:-

An intermittent light is any light which is interrupted in cadence as viewed from a single direction.

Flashing Light - feu a eclat - Blinkfeuer .-

A flashing light is any intermittent light in which the duration of the light period is shorter than the duration of the dark period. Note. The standard rotating airway beacon gives flashing lights since from a single direction it is seen as an intermittent signal with the duration of the light period shorter than the duration of the dark period. Occulting Light - feu a eclipse - Unterbrochenes feuer:-

An occulting light is any intermittent light in which the duration of the light period is longer than the duration of the dark period. Blinker Light.-

A blinker light is any intermittent light giving more than twenty flashes per minute.

<u>Code Light ~ Morsefeuer ~</u>

A code light is any intermittent light having a recognizable characteristic of dots and/or dashes by which its individual identity can be established.

Projector - projecteur - Scheinwerfer:-

Definition to be agreed on later.

Beacon - phare - Leuchtfeuer:-

A beacon is any luminous device emitting a signal for the purpose of indicating a geographical position.

Code Beacon:-

A code beacon is any flashing beacon designed to show a code light. <u>Obstruction Light - feu d'obstacle - Hindernisfeuer:</u>

An obstruction light is any light indicating the presence of an object that is dangerous to aircraft in motion.