Sketch OL2 – Bill of Material

Sketch OL2: Typical stack (solid structure) red lighting system.

These suggestions represent our opinion and interpretation of FAA obstruction lighting practices. The owner is responsible for the selection of lighting required to comply with FAA AC 70/7460-1 latest revision. If there exists an FAA site survey Letter of Determination, Point Lighting can provide an interpretation and suggest a bill of material.

A stack or other solid structure usually has two levels of red lighting assuming the height is between 150-ft and 350-ft. The top level of flashing red beacons can be up to 20-ft below the top of the stack typically at a platform. They should not be located at the very top. The mid-level of steady-burning red lights is at the mid-height but not below the 100-ft level +/- 10-ft. However, if it is determined that surrounding structure or all night ambient lighting renders the mid-level lights blocked or overwhelmed, they can be eliminated.

Note 1: The PFB beacons are mounted outside the platform deck with the railing gated for access. The junction box is mounted to be accessible from the platform. Beacons are positioned at equal angles around the stack. If the stack diameter is less than 20-ft, three (3) lights may be used at each level.

Note 2: The POL red side lights are steady-burning (flashing only applies to FAA A1 skeletal towers). Typically, each light is mounted on and supported by rigid steel conduit strapped to the outside of the platform railing. Each light is positioned directly below a PFB beacon.

Note 3: The required data cable is used as one (1) run from the POC system controller to the first PFB beacon junction box and then to each beacon junction box in turn ("daisy-chain") that terminates at the last beacon. The beacons are numbered in sequence and must be installed on the data cable in that sequence. This allows the POC system controller to identify and monitor each beacon and synchronize the flashing. The data cable is not used for the POL side lights. See the PFB data file for the data cable specification.

 Description Quantity Product Download Catalog

FAA L-864 Red LED Flashing Beacon 4 PFB-37002-R-1-F4-K OL213PFBv2

Steel Mounting Bracket with beacon hardware 4 PL11217

For welding in place; bolt-on brackets are available

Junction Box at each beacon 4 PL11220-94

Includes terminal blocks & data cable terminations

FAA L-810 Red LED Single Obstruction Light 4 POL-21006-1F-R-34B-S2.3 OL191POLv6

Includes alarm line and junction box

Junction Box at Mid-Level 1 PL11220-94

Includes terminal blocks & data cable terminations

FAA Photocontrol 1 PPC-40700-1-34T OL410PPC

Lighting System Controller NEMA 4X 1 POC-68003-94-1-LA OL302POC

Includes PPC override switch

Includes alarm light on the door

Includes lightning arrestor