



SAGA

Azimuth Guidance System for Approach

Manufacture Compliance:

- ICAO Annex 14, Volume II, 4th Edition, July, 2013
- French STAC

Applications:

- Combined signal of approach azimuth guidance and threshold identification.

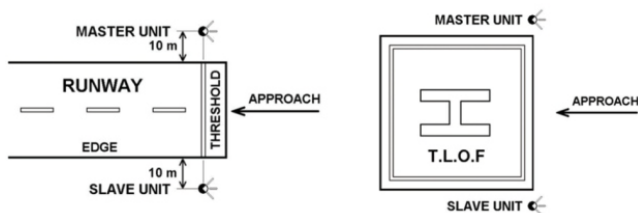
Key Features:

- Comprise of 2 “Flashing” Units (master and slave) lights.
- Powered in 110Vac-230Vac 50/60 Hz.
- Pre-focused reflector lamps 12 Vac 105 W.
- Remotely controlled in 48Vdc.
- Monitoring will be possible through 2 dedicated dry contacts(Contact capacity = 250 V / 1A maximum).
- Consumption: Less than 250Watts for total SAGA system.
- Visual range: 10 nautical miles in standard visibility condition.
- Angular sector: 15° on both side of approach axis.
- Axis accuracy: +/-0.45° in azimuth.
- Delay between flashes: 60 to 300 ms.
- “Flashes” frequency: 0.5Hz.

Construction&Physical:

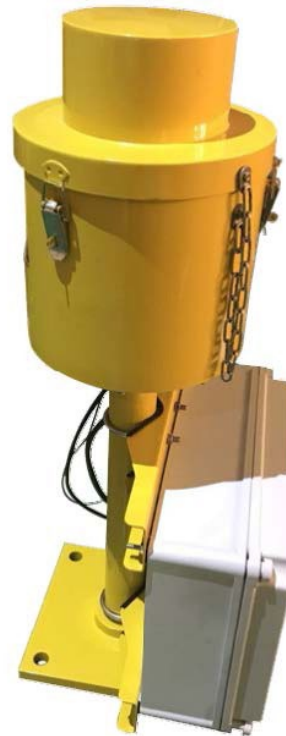
- Light: casting aluminum(body, cap, support) .
- Power Supply Box: reinforced polyester.
- Legs: frangible
- Fastenings: stainless steel.
- IP rating: IP65.
- Working temperature: -40°C to +50°C.

Location:



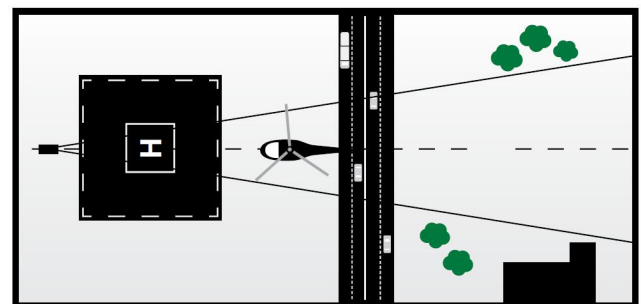
The two light units of a SAGA system must be installed at 10 metres from the runway Edge symmetrically on both sides of the Runway threshold (for TLOF the two units must be installed as close as possible to the threshold edges).

The Master unit must be installed on the right of the Threshold.



Many heliports are located in crowded or remote areas with few visual cues, many obstacles in the way and where traffic control requires a certain direction to be used.

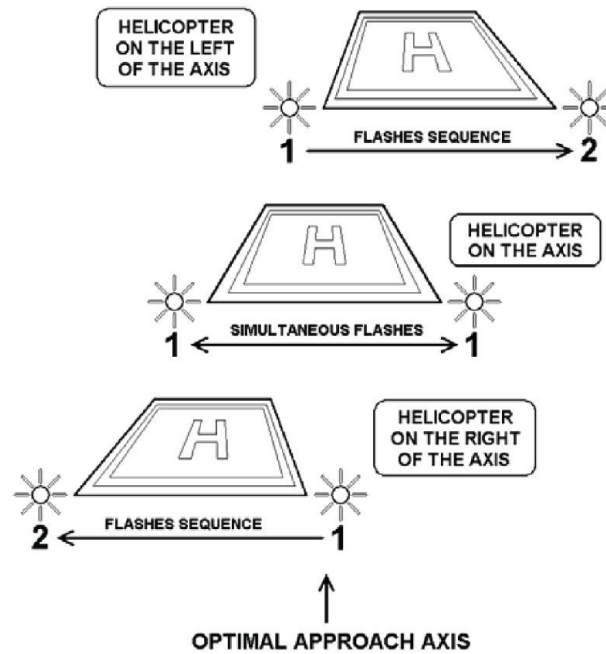
Under these conditions ICAO Annex 14 Vol.II recommends the helipad to be complemented with the aid of Visual Alignment Systems.



PLUSAFE unique Azimuth Guidance System for Approach (SAGA) guides the pilot with perfect precision clear of obstacles when a certain direction and azimuth angle is required by traffic control.

On the approach axis, the pilot will receive visual information of two “Flashes” supplied by the two “flashing” units of the SAGA.

Operation Principle



- When the aircraft flies inside a 9° width angular sector, centred on the approach axis, the pilot sees the two lights “flashing” simultaneously.
- When the aircraft flies inside a 30° width angular sector, centred on the approach axis and outside the previous one, the pilot sees the two lights “flashing” with a variable delay (60 to 330 ms) according to the position of the aircraft in the sector. The further the aircraft is from the axis, the greater the delay. The delay between the two “flashes” produces a sequence effect which shows the direction of the axis.
- The visual signal is not visible when the aircraft flies outside the 30° angular sector.