

THE VILLAGES AVIATION CLUB

November 2014

SAFETY BRIEF



“IT WAS DARK, VERY DARK...”

SO LETS GO FLYING

DAYLIGHT SAVINGS ENDS

**IT'S
OVER!**

*Fall
Back*



**SURE, YOU GET AN EXTRA HOURS SLEEP, BUT
WHEN DO YOU GO FLYING?**

REVIEW OF NIGHT FLYING REGS AND TIPS

Night Landing Currency: 14CFR 61.57(b) (emphasis added).

- No person may act as pilot in command of an aircraft *carrying passengers* during the period beginning *1 hour after sunset* and ending *1 hour before sunrise*, unless within the *preceding 90 days* that person has made at least three takeoffs and *three landings to a full stop* during the period beginning *1 hour after sunset* and ending *1 hour before sunrise ...*“

Flight Operations

- **FAR 91.151**—You must carry enough gas to reach your first point of intended landing, and then an additional 45 minutes at normal cruising speed.
- **FAR 91.155**—VFR visibility requirements in Class G airspace increase from 1 mile in daytime to 3 miles at night.
- **FAR 91.157**— Special VFR clearance at night, you must have an instrument rating, an instrument-equipped airplane, 1 mile visibility, be able to remain clear of clouds, and a Special VFR clearance from air traffic control.
- **FAR 91.209**—You must use position and anti-collision lights between sunset and sunrise, but this regulation says you can turn off the anti-collision lights for safety, such as when flying in precipitation.

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REQUIRED AIRCRAFT EQUIPMENT

FAR 91.205—In addition to the day requirements, your airplane needs:

- position lights;
- anti-collision/strobe lights;
- a landing light if operated for hire;
- adequate source of electrical energy to operate the required equipment;
- spare fuses (one spare set, or three of each kind.) or Circuit Breakers

DO YOU STILL HAVE TO HAVE A FLASHLIGHT WITH 2 D CELL BATTERIES?



FAR 91.503 (A) SAYS...

§91.503 Flying equipment and operating information.

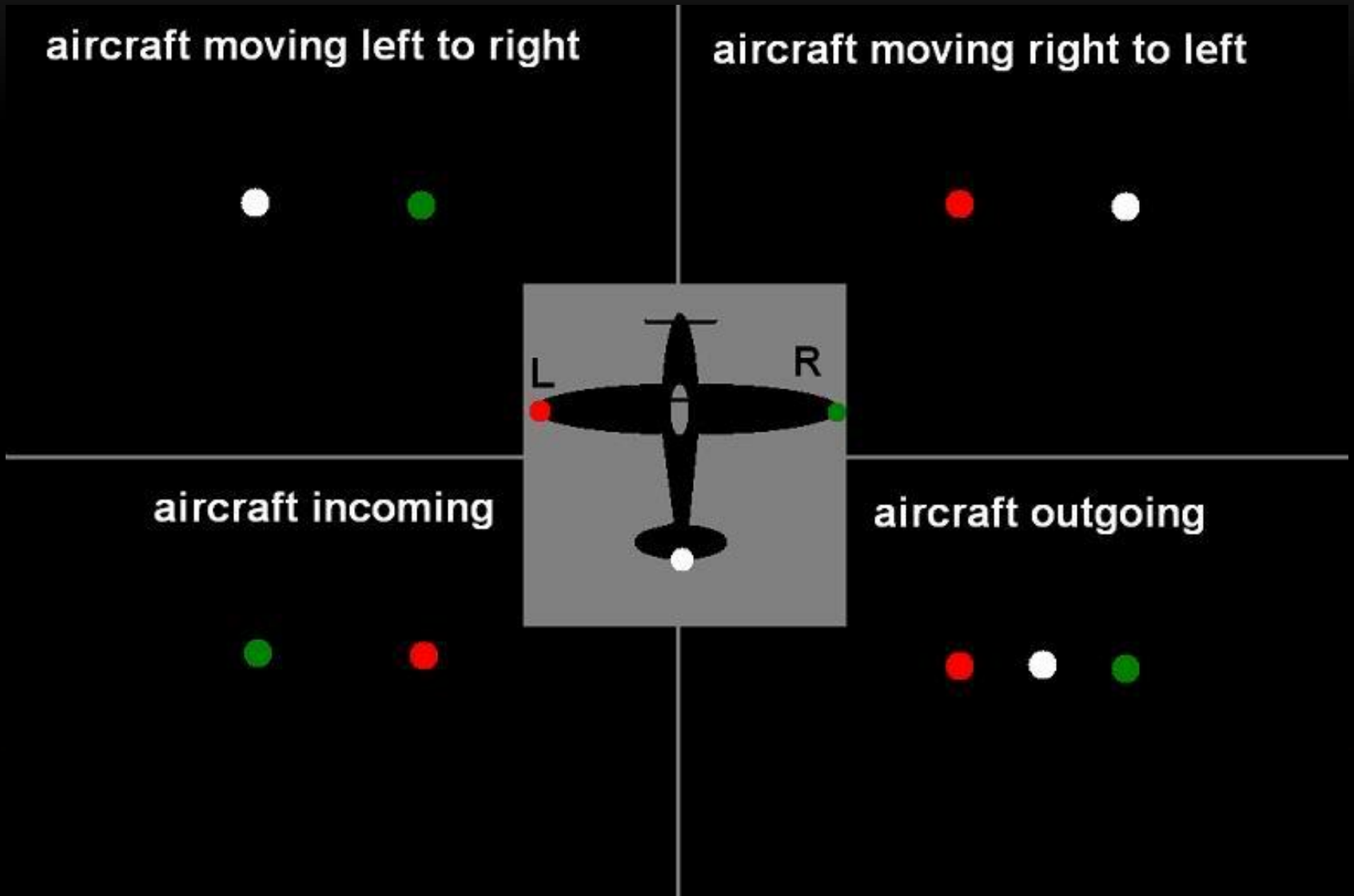
(a) The pilot in command of an airplane shall ensure that the following flying equipment and aeronautical charts and data, in current and appropriate form, are accessible for each flight at the pilot station of the airplane:

- (1) A flashlight having at least two size "D" cells, or the equivalent, that is in good working order.
- (2) A cockpit checklist containing the procedures required by paragraph (b) of this section.
- (3) Pertinent aeronautical charts.

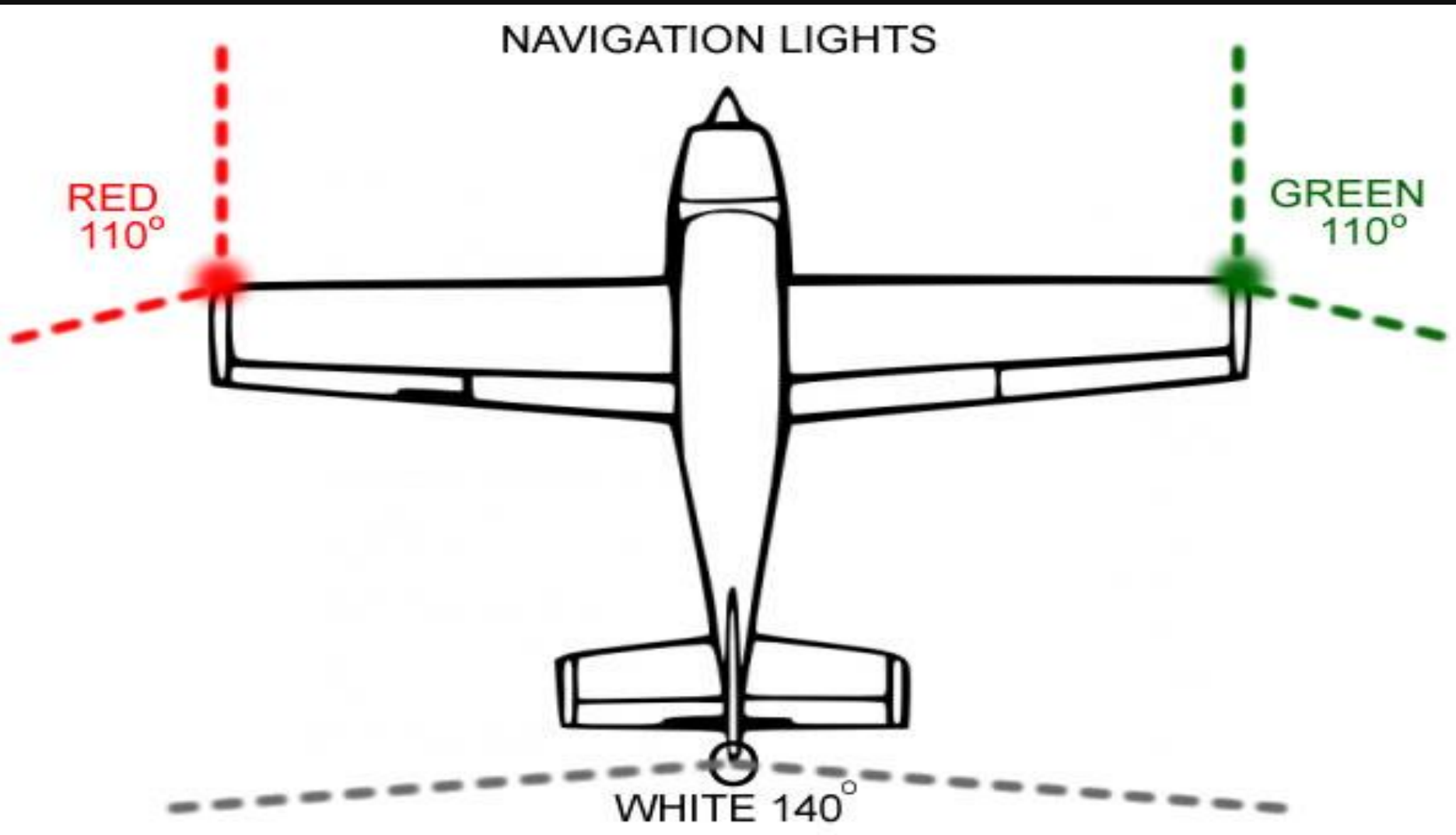
THOSE WHO ARE RESTRICTED FROM FLYING AT NIGHT.

- sport pilots
 - recreational pilots
 - student pilots (unless they have a separate night flying endorsement from their instructor)
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AIRCRAFT POSITION LIGHTS

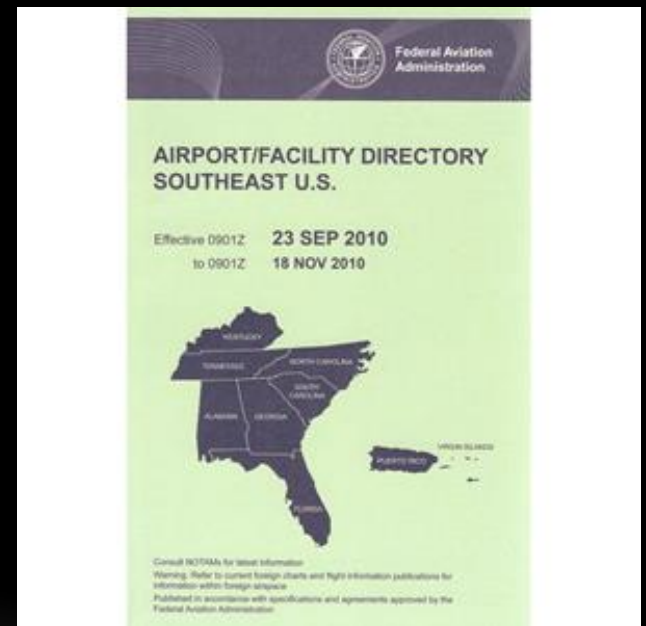


AIRCRAFT POSITION LIGHTS, VIEW

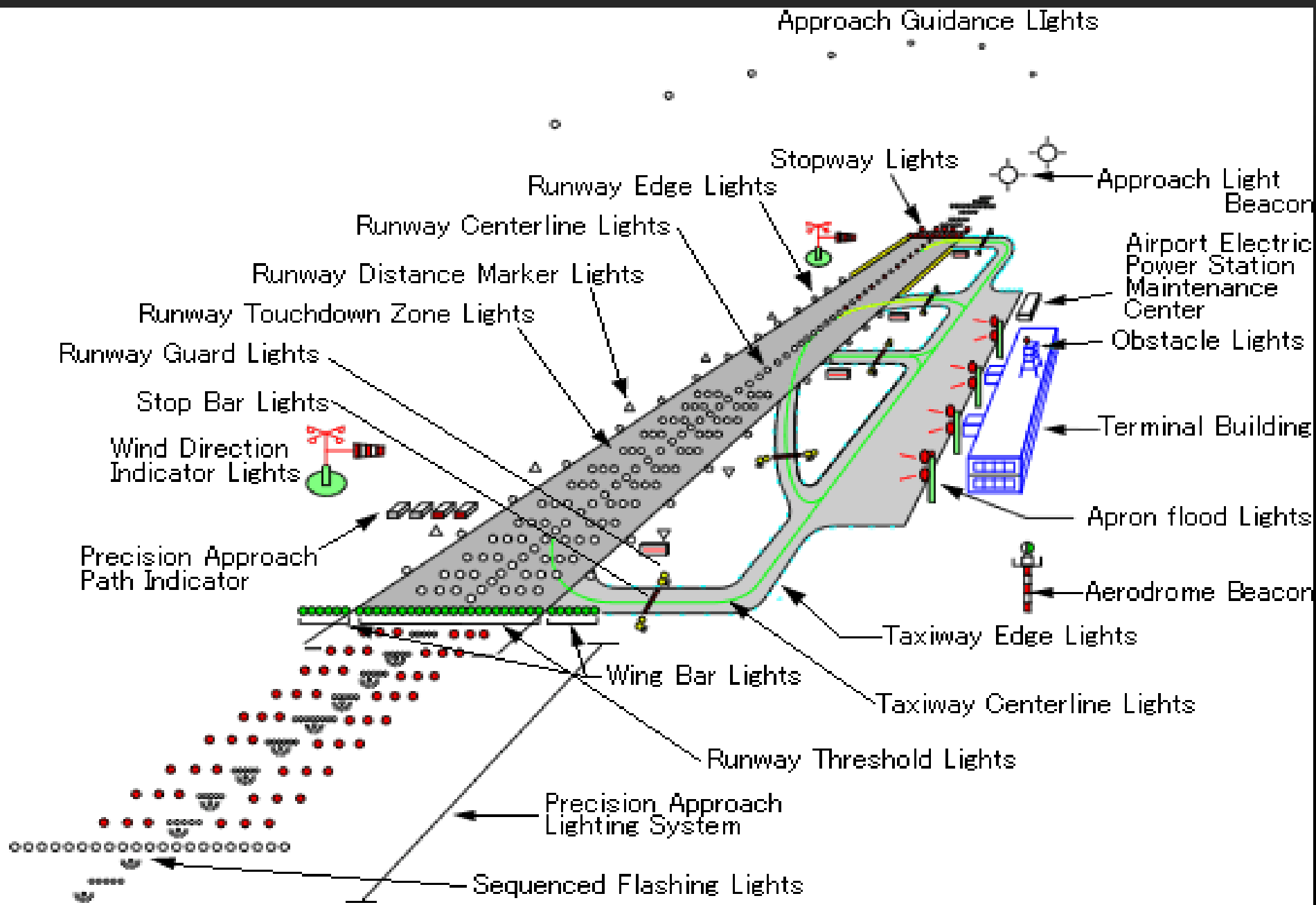


AIRPORT LIGHTING

- How do I know if an airport has lighting?

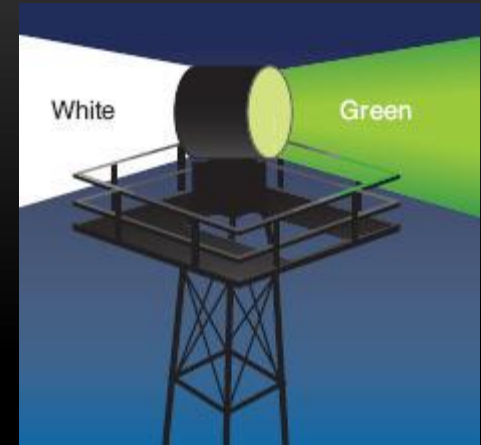


What do the colors mean?



AIRPORT BEACON LIGHTS

- 1. White and Green– Lighted land airport.
- 2. *Green alone– Lighted land airport.
- 3. White and Yellow– Lighted water airport.
- 4. *Yellow alone– Lighted water airport.
- 5. Green, Yellow, and White– Lighted heliport.

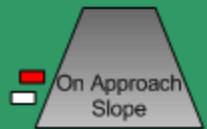


- **NOTE–** *Green alone or yellow alone is used only in connection with a white-and-green or white-and-yellow beacon display, respectively.
- Military airport beacons flash alternately white and green, but are differentiated from civil beacons by dual peaked (two quick) white flashes between the green flashes.

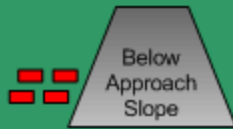
(Civil Airports Flash every 2 to 3 Seconds)

VASI OR PAPI?

Abbreviated VASIS



2-Bar VASIS



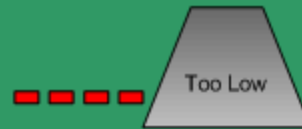
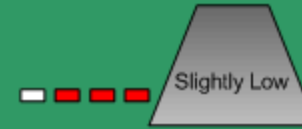
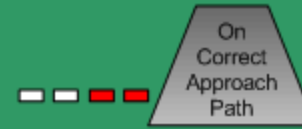
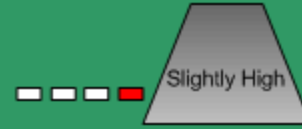
3-Bar VASIS for Normal Aircraft
(Ignore Upwind Bars)



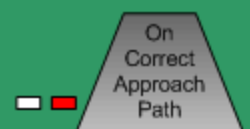
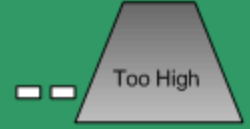
3-Bar VASIS for Wide Body Aircraft
(Ignore Downwind Bars)



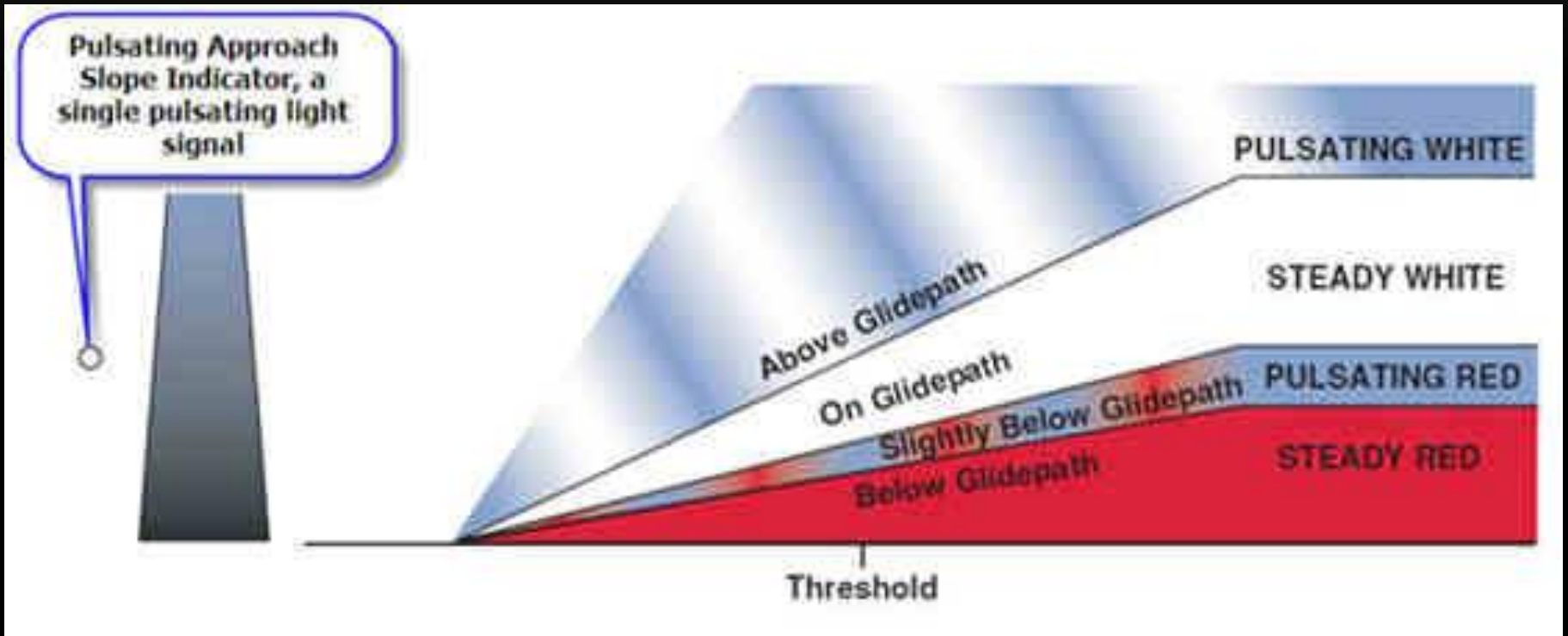
PAPI



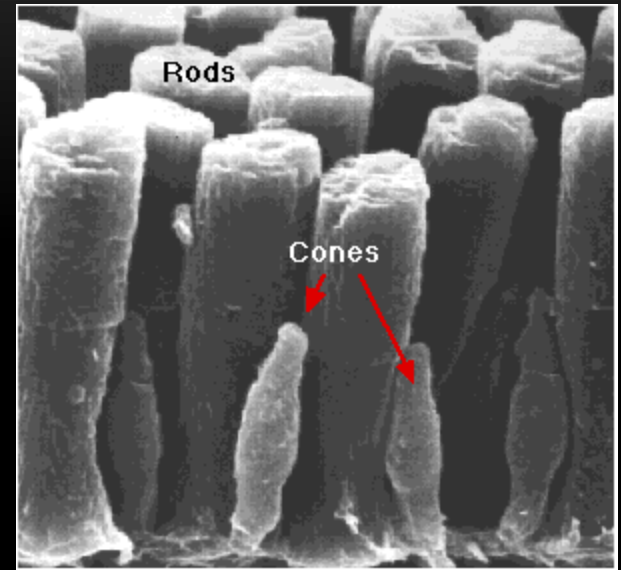
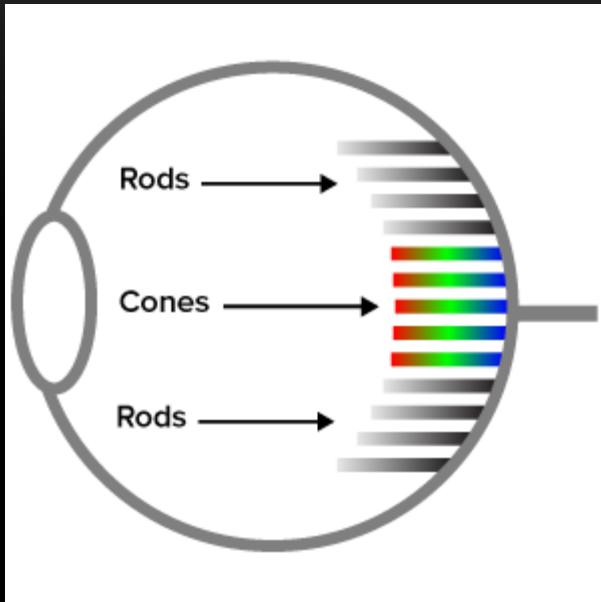
Abbreviated PAPI



OR PASI



NIGHT VISION



- Light-sensitive nerves, called “cones” and “rods,” are located at the back of the eye. Cones are located in the center of the retina, and the rods are concentrated in a ring around the cones.
- Rods make night vision possible. They detect objects, particularly those that are moving, but do not give detail or color—only shades of gray.
- About 30 minutes is needed for the rods to become adjusted to darkness

NIGHT VISION TIPS

- Adapt the eyes to darkness prior to flight
- About 30 minutes is needed to adjust the eyes to maximum efficiency
- Close one eye when exposed to bright light.
- Do not wear sunglasses after sunset.
- Move the eyes more slowly than in daylight.
- Blink the eyes if they become blurred.
- Concentrate on seeing objects
- Force the eyes to view off center.
- Train yourself to use the eyes correctly (Scan-Stop-Scan)

QUICK REVIEW, AIRPORT LIGHTING - VFR

- 1. Taxiway edge lights are ____ in color.
 - Blue
 - Green
 - White
 - Red
- 2. While taxiing for takeoff at night you see two pairs of flashing yellow lights on each side of the taxiway. These are ____ lights.
 - Clearance Bar
 - Runway Guard
 - Stop Bar
- 3. Pilot-controlled lighting frequencies are listed on sectional charts.
 - True
 - False
- 4. When using pilot-controlled lighting, keying the microphone 7 times within 5 seconds activates ____ -intensity lighting.
 - Low
 - Medium
 - High
- 5. The glide path provided by a Visual Approach Slope Indicator (VASI), assures obstacle clearance on a 6-mile final.
 - True
 - False

AIRPORT LIGHTING - VFR

- 6. When using a 3-bar Visual Approach Slope Indicator (VASI), you see two red bars above one white bar, you are _____.
 - On the lower glide path
 - On the upper glide path
 - Above both glide paths
- 7. Precision Approach Path Indicator (PAPI) lights are typically visible about 5 miles from the airport during the day and up to 20 miles at night.
 - True
 - False
- 8. Runway End Identifier Lights (REILs) are a pair of synchronized flashing lights located on each side of some runway thresholds for:
 - Identification of a runway surrounded by other ground lighting
 - Identification of a runway which lacks contrast with the surrounding terrain
 - Identification of a runway during reduced visibility conditions
 - All of the above
- 9. On a VFR Sectional Chart, what symbol indicates that an airport has a rotating beacon?
 - A solid magenta circle
 - A blue or magenta star with an open circle in the center
 - A small dot next to the airport icon
 - An "R" next to the airport identifier
- 10. While on a night flight, you see a rotating beacon flashing green and white. This is a(n) _____.
 - Military airport
 - Hospital heliport
 - Seaplane base
 - Civilian land airport
- For more information, check the AIM























**KEEP
CALM**

you just

**PASSED
YOUR TEST!**

UPCOMING SEMINARS Within 60 Miles of The Villages

Date	Title and Description 	Type	Cost	Location
11/11/2014 19:00 EDT NR0357867 TUESDAY	Real World Weather Real World Weather Weather is the single biggest variable in flying. It can turn a long-awaited vacation into a long wait at the...  1 Credit for Basic Knowledge Topic 3	Seminar	Free	Daytona Beach, FL See Seminar details for registration info.
11/11/2014 19:00 EST SO1558695 TUESDAY	Loss of Control! When Crosswind Landings Go Wrong! Our speaker Joe Kemmerer will take us through a discussion of Loss of Control including difficult crosswind...  1 Credit for Basic Knowledge Topic 3	Seminar	Free	Apopka, FL    19 seats remaining.
11/13/2014 19:00 EST SO1558799 WEDNESDAY	Risk Management for G/A Pilots Risk Management for General Aviation Pilots Review of common accident causal factors, review of elements of risk in aeronautical decision making, and...  1 Credit for Basic Knowledge Topic 3	Seminar	Free	Orlando, FL    41 seats remaining.
11/13/2014 19:00 EDT NR0357869 WEDNESDAY	Real World Weather Real World Weather Weather is the single biggest variable in flying. It can turn a long-awaited vacation into a long wait at the...  1 Credit for Basic Knowledge Topic 3	Seminar	Free	Ocala, FL See Seminar details for registration info.
11/19/2014 19:00 EDT SO1558868 WEDNESDAY	Introduction to IFR (Instrument Flight Rules) Learn what it takes to operate your aircraft... Instrument flight rules permit an aircraft to operate in instrument meteorological conditions (IMC) in...  1 Credit for Basic Knowledge Topic 3	Seminar	Free	Oviedo, FL   7 seats remaining.
11/25/2014 19:00 EST SO1558609 WEDNESDAY	Flying High Performance Aircraft Flying High Performance Aircraft by... There are many aspects of piloting high performance aircraft that are sometimes overlooked or misunderstood....  1 Credit for Basic Knowledge Topic 3	Seminar	Free	Daytona Beach, FL    85 seats remaining.

****Come see Rock Rockcastle and Rich at Leesburg Airport for comprehensive review of Night Flying. December 11 (Thursday) at 7 pm.**

THANKS FOR COMING. FLY SAFE