Hanscom Aero Club
Safety Meeting

16 November 2022

Outline

- **USAF Aero Club Night Flying Regs**

- **Runway Lighting Systems Review**

USAF Aero Club Night Flying Regs: AFI 34-101

- **10.35.5: To fly as PIC at night, pilots must have:**
  - 3 takeoffs and landings
  - To a full stop
  - At night
  - Within the last 90 days
  - In each category and class of aircraft
  - If lost, regain with a night-current Aero Club CFI

- **10.38: Night VFR Weather Minimums**
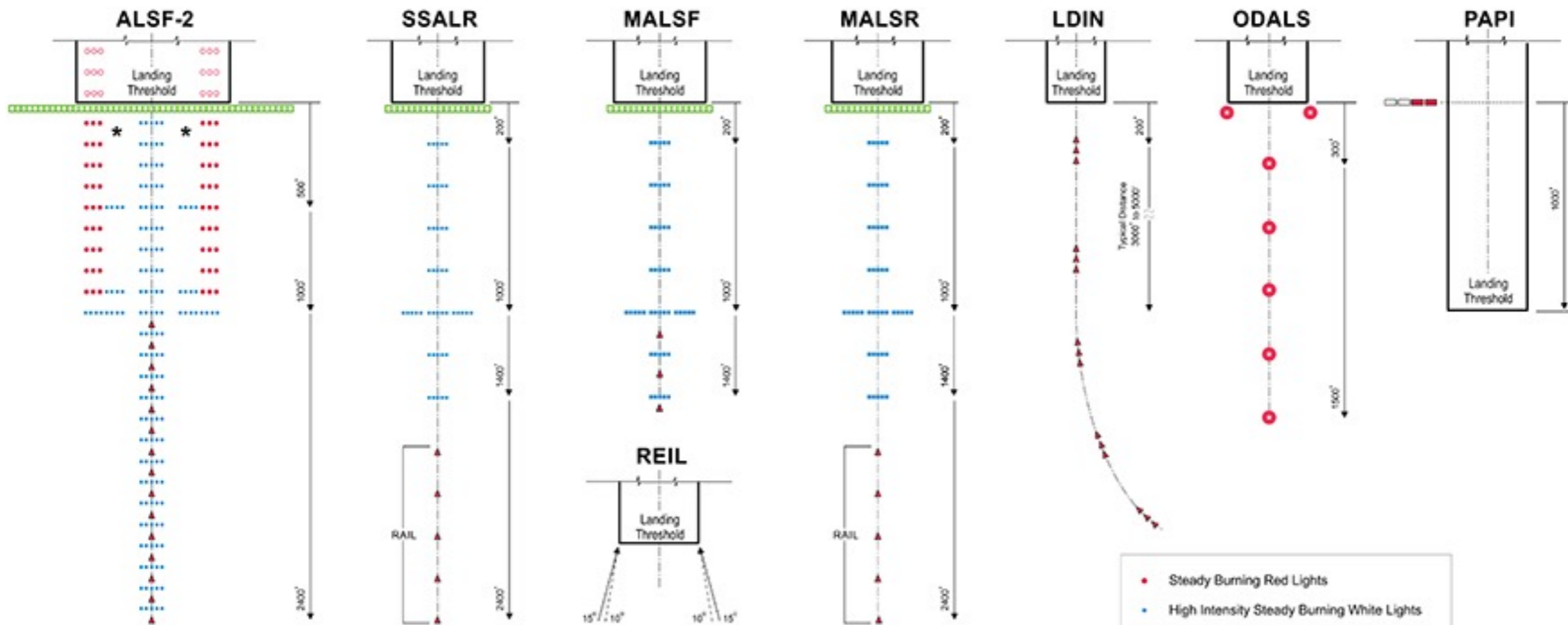 - 2500 ft ceiling
  - 5 sm visibility

Aero Club Night Flying Regs (Don'ts): AFI 34-101

- **10.38.2: What Pilots Must NOT do at night:**
  - Aerobatics
  - Unusual attitudes, stalls, approaches to stalls, slow flight EXCEPT as part of 141 training with an instrument-current CFI onboard
  - VFR flight < 2000 ft AGL (except during takeoff and landing)
  - Operations at airports without runway lighting
  - Visual or non-precision approaches to runways outside local training area without visual glideslope guidance
  - Simulated emergency / forced landings except to lighted runways
  - Power off approaches UNLESS a night and instrument current CFI aboard
  - Power off approaches unless conducted as a 90º or 180º power off approach
  - Flight outside local area unless IFR or VFR with a night-current CFI
  - Local VFR flight unless logged 50 hours PIC and maintains visual contact with a night-ops airport, or is IFR current
  - Simulated night IFR practice in local area UNLESS a night current safety pilot is is aboard

Visual Guidance Lighting Systems

Other Runway Lights

Symbol and color letters	Description
G ●●●● R	Runway threshold / End lights Green (G) / Red (R)
Y ◗ W	Runway edge light (see note 3) Yellow (Y) / White (W)
W ●	Runway edge light White (W)
W ⬟	Runway edge light (in-pavement) White (W)
R ●	Runway threshold / End light Red (R)
B ●	Taxiway edge light Blue (B)
Y ◗ R	Runway edge light at displaced threshold Yellow (Y) / Red (R)
G ◗ Y	Threshold / Runway edge lights at displaced threshold Green (G) / Yellow (Y)
G UNI ◗	Runway threshold light with a unidirectional green (G UNI)

Airport Lighting

- **Taxiway Lights** : **Blue**.
- **Runway End lights:** **Red**.
- **Runway Edge Lights: White** (single row on either side of runway edge).
- **Center line lights:**
  - **White** until 3000 ft.
  - 3000 – 1000 ft. alternating **Red** and **White**.
  - Last 1000 ft. **Red**.
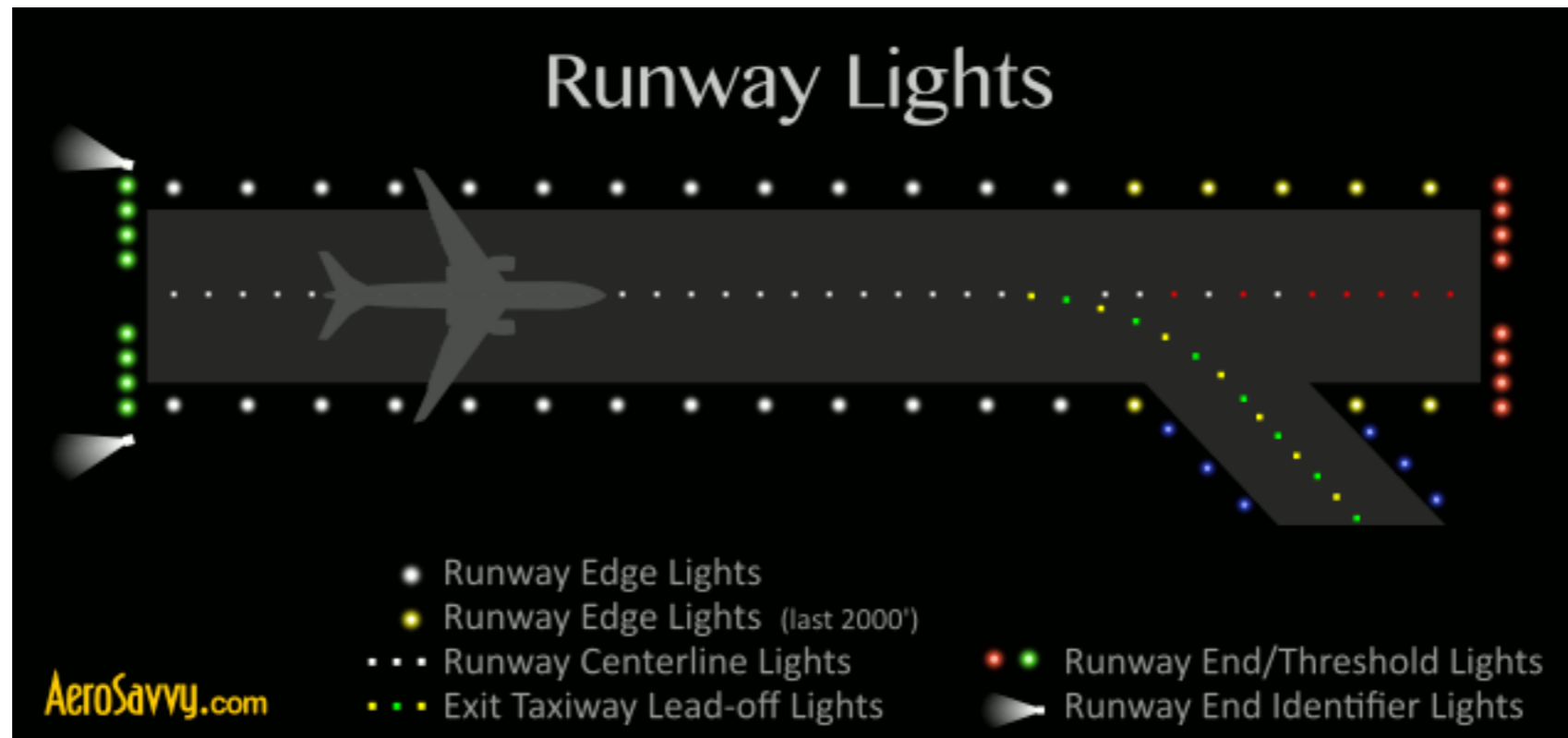- **Runway Threshold Lights: Green**.
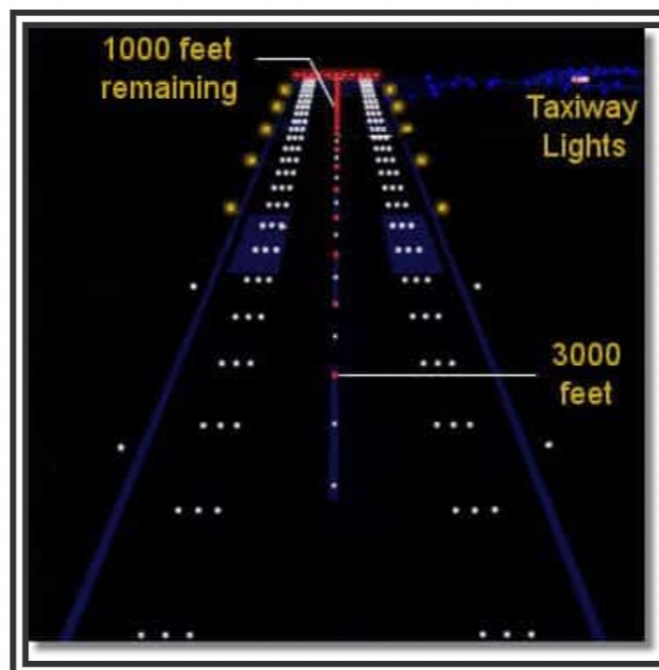
- **ARCAL: Aircraft Radio Control of Aerodrome Lighting**
  - Type J: Click microphone 5x in 5 min
  - Type K: [7, 5, 3] clicks withing 5 seconds for [High, Med, Low] intensity

Runway Lighting Examples Video

- **https://www.youtube.com/watch?v=2lMxSdFkYzo**

Runway Lights

- Runway Edge Lights
- Runway Edge Lights (last 2000')
- Runway Centerline Lights
- Exit Taxiway Lead-off Lights
- Runway End/Threshold Lights
- Runway End Identifier Lights

AeroSavvy.com

Final Thoughts

- **Days are short, night is early**

- **Now is a great time to get night current**

- **Bring the right gear (flashlight, headlamp)**

- **Appearances deceiving at night, keep your scan going (e.g. altimeter)**