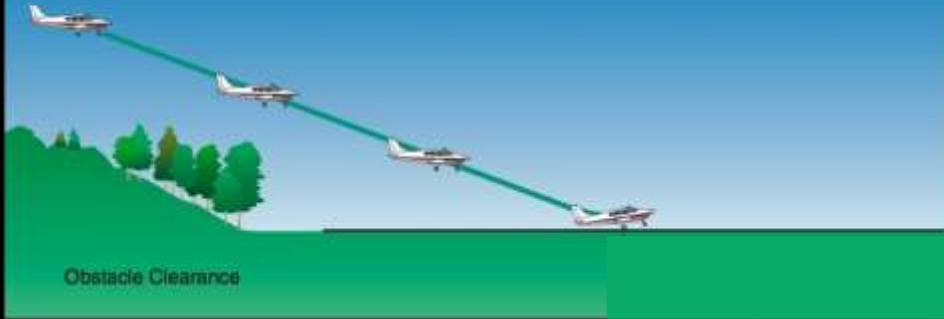


Pennsylvania 'VFR' Requirements

'VFR' 20:1



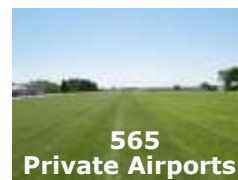
John Melville
Aviation Safety Specialist Supervisor



Pennsylvania Airports

All Airports/Heliports Licensed

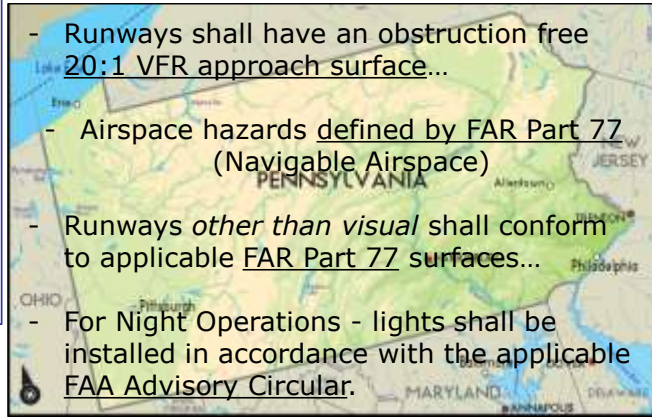
- 130 Public Facilities
 - 16 - Part 139 Certificated
 - 63 NPIAS
 - 51 General Aviation
- Airports inspected annually
- Inspection findings used in programming \$\$\$
- Update FAA database



Pennsylvania VFR Safety Standards



- Runways shall have an obstruction free 20:1 VFR approach surface...
- Airspace hazards defined by FAR Part 77 (Navigable Airspace)
- Runways *other than visual* shall conform to applicable FAR Part 77 surfaces...
- For Night Operations - lights shall be installed in accordance with the applicable FAA Advisory Circular.



Licensing Expectations



d. Protection of Approaches:

(2) Obligation: **To prevent**, insofar as it is reasonably possible, **the growth or establishment of obstructions** in the aerial approaches to the airport.

(The term "obstruction" refers to natural or man-made objects **that penetrate the imaginary surfaces as defined in FAR Part 77...**

Pennsylvania Law

Pennsylvania Laws Relating to Aviation

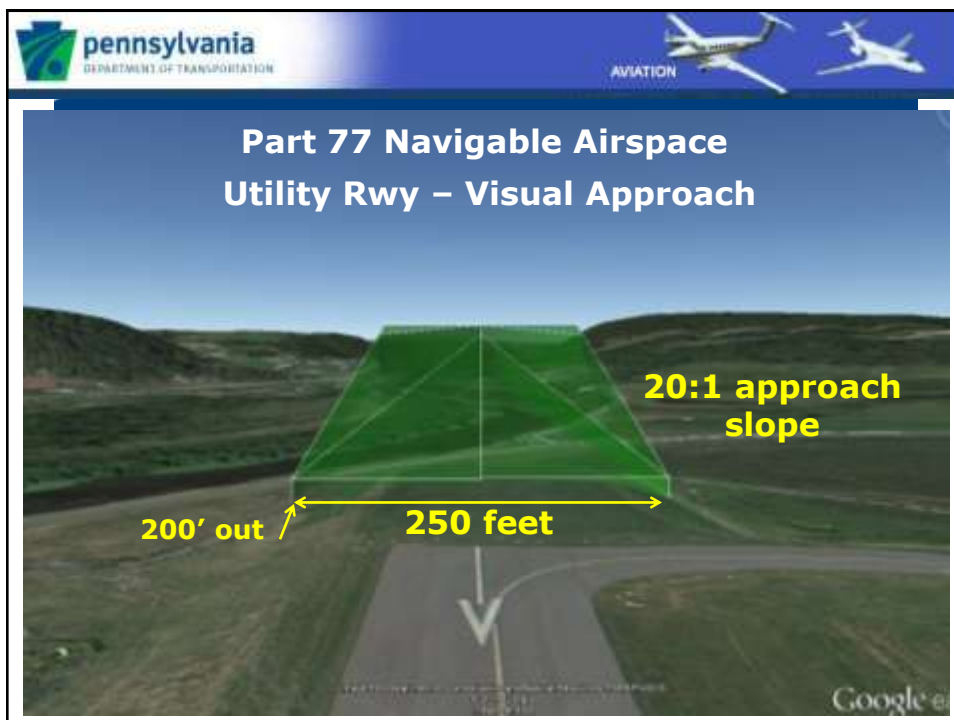


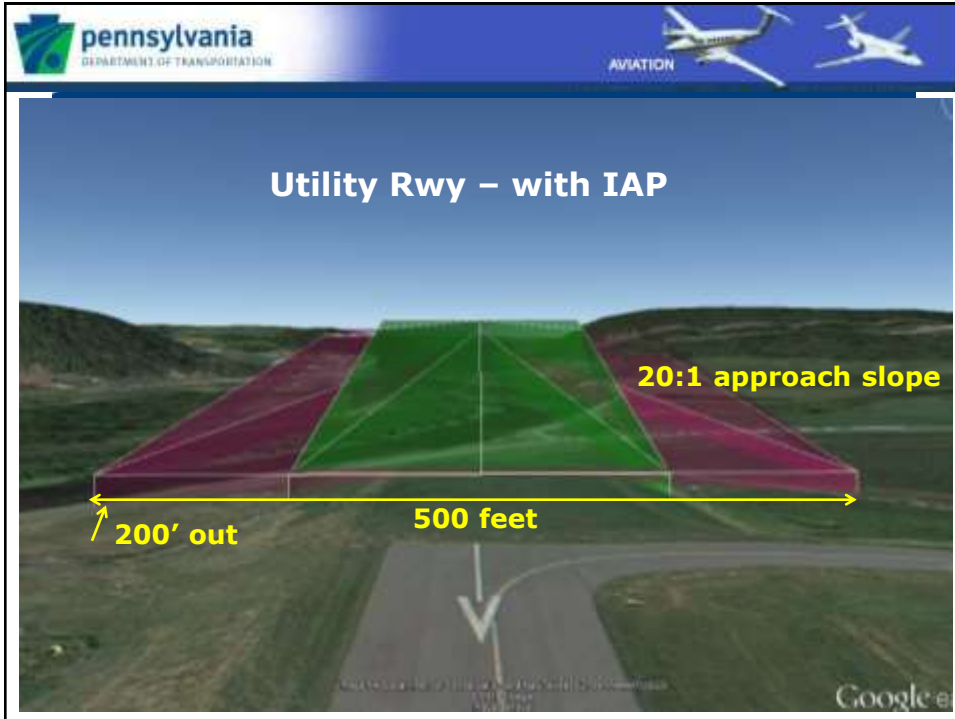
§5912. Power to adopt Airport Zoning Regulations:

(a) General Rule. In order to prevent the creation or establishment of airport hazards, every **municipality** having a [public] airport... **shall adopt... airport zoning regulations...**

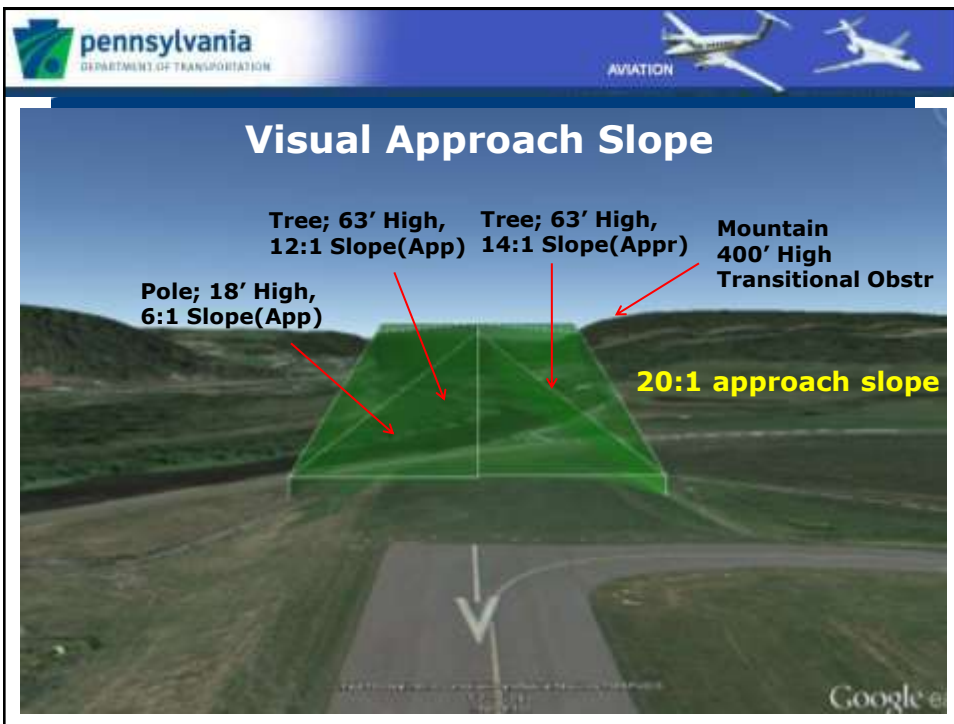
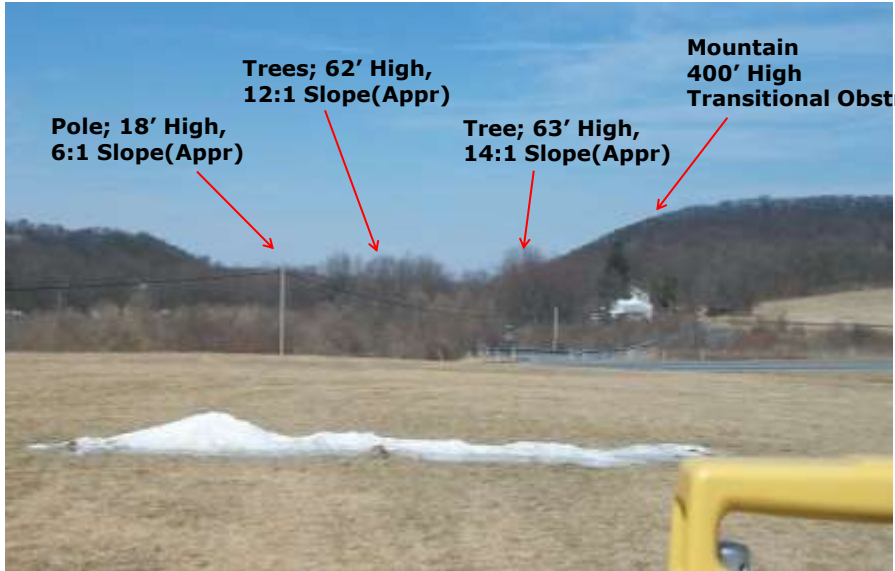
...and restrict the height to which structures may be erected or objects of natural growth may be allowed to grow.”

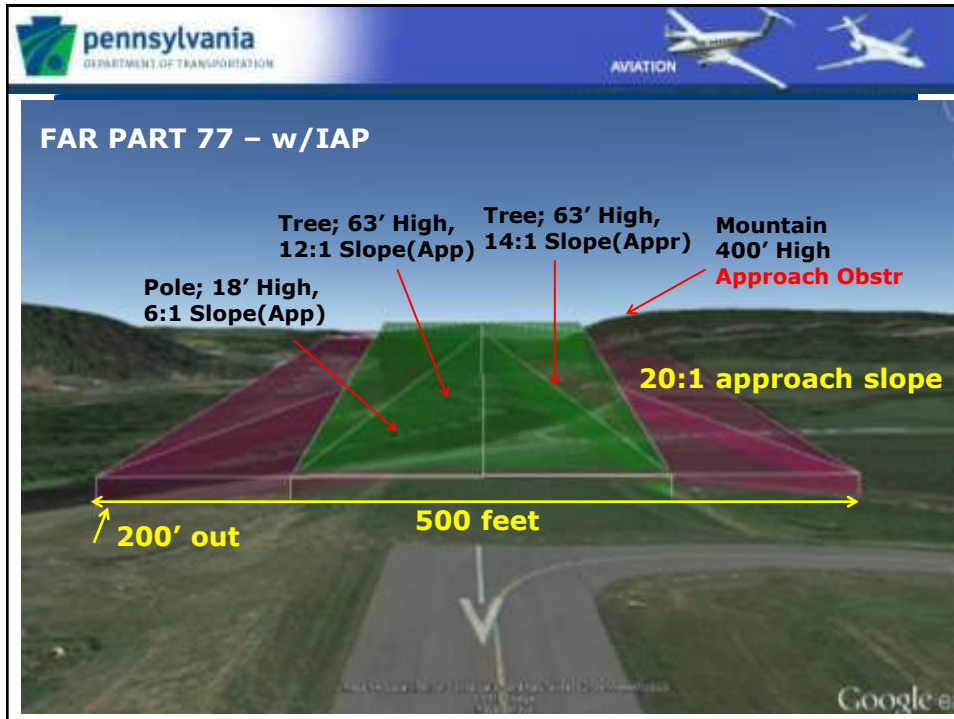
Model Zoning Ordinance references FAR Part 77 to define the protected 'Navigable Airspace'.





Obstructions to Air Navigation



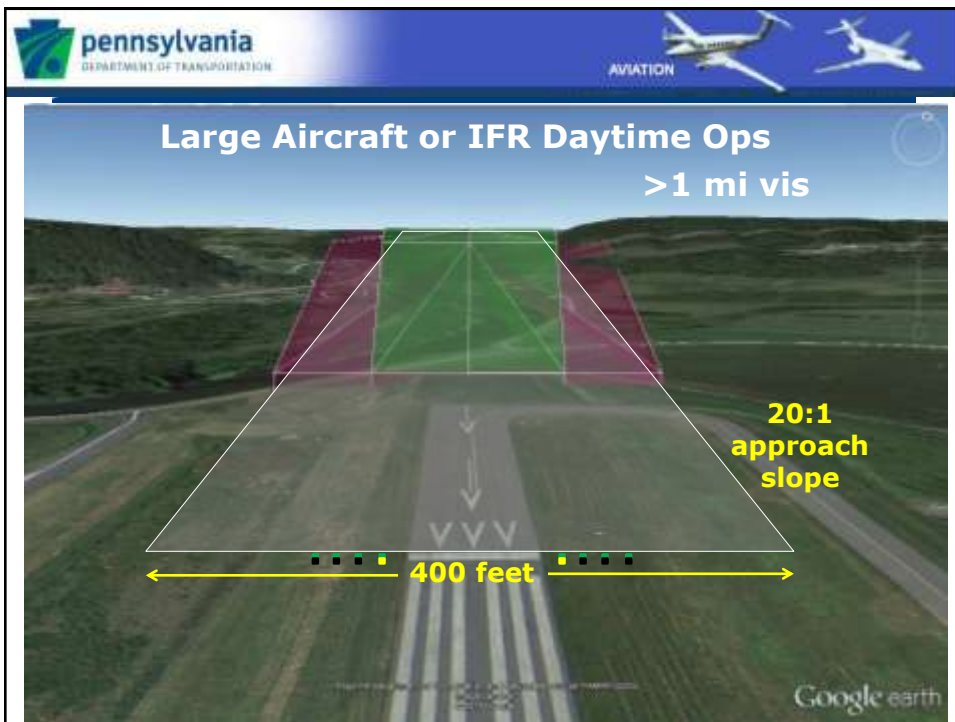
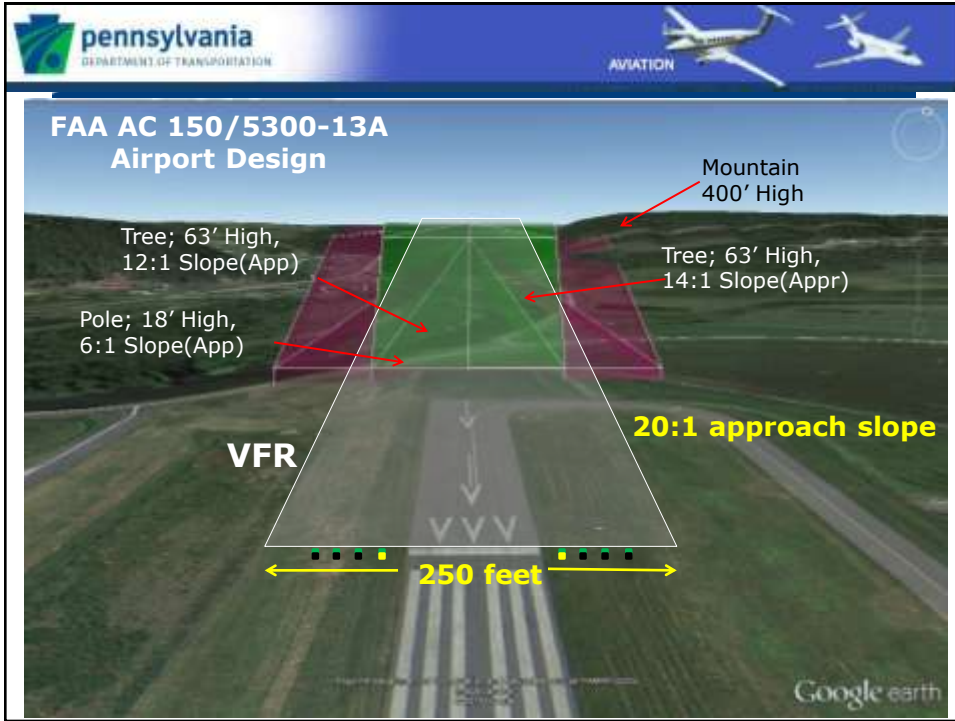


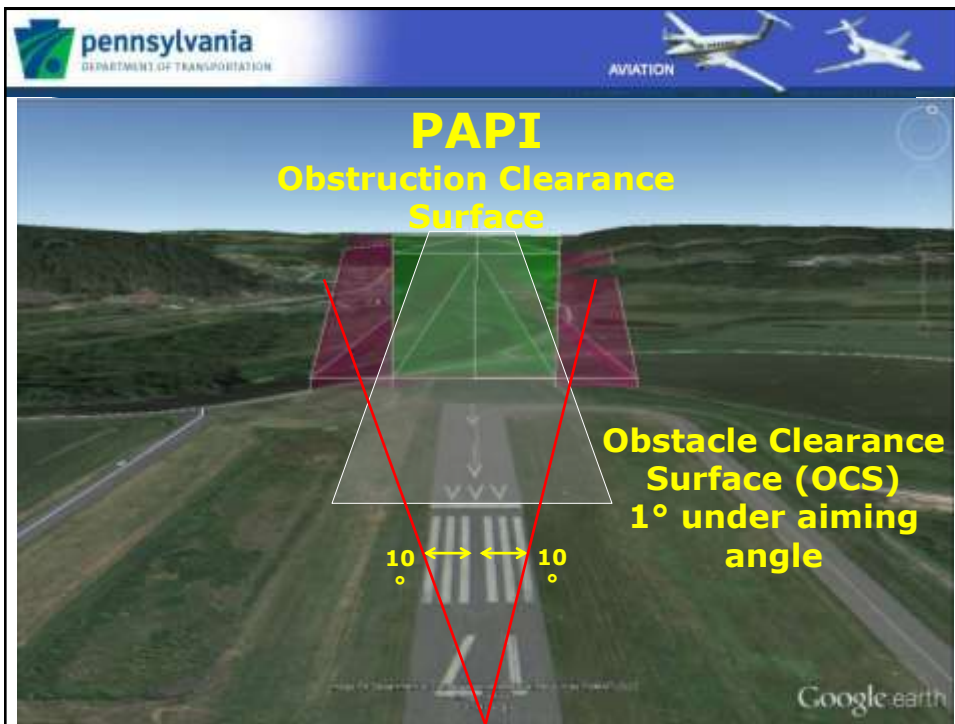
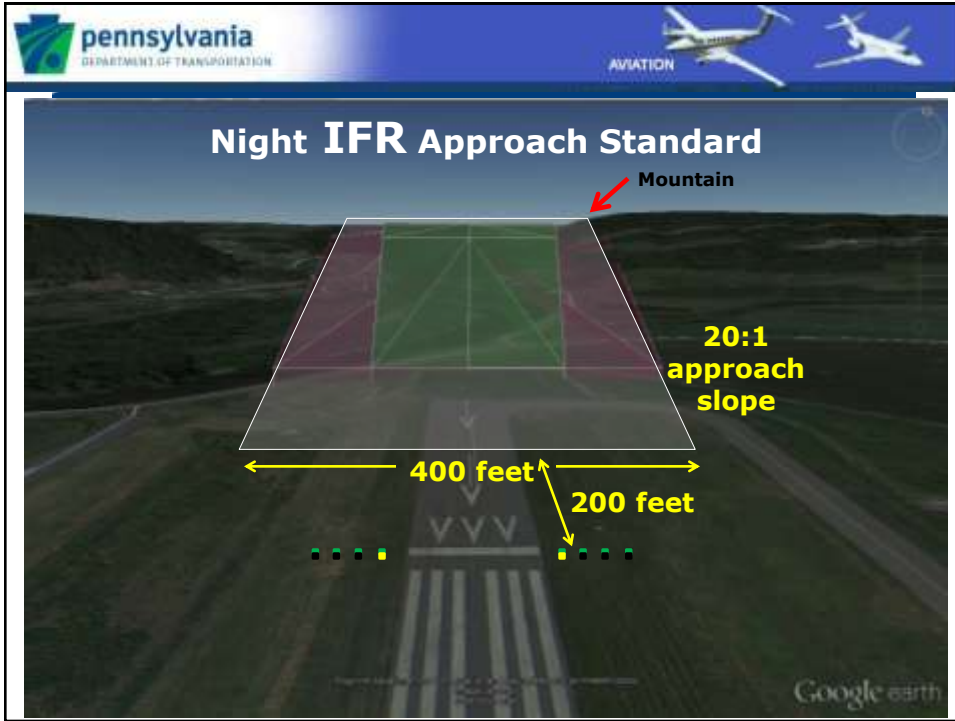
Different Airspace Standards

FAR Part 77 'Navigable Airspace'

FAA Advisory Circular
'Airport Design'

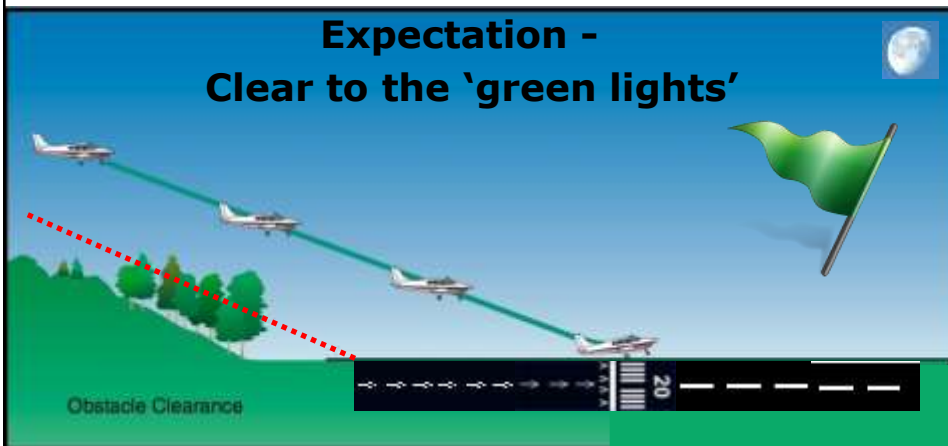
Terminal Instrument Procedures
(TERPS)





VFR Night Operations

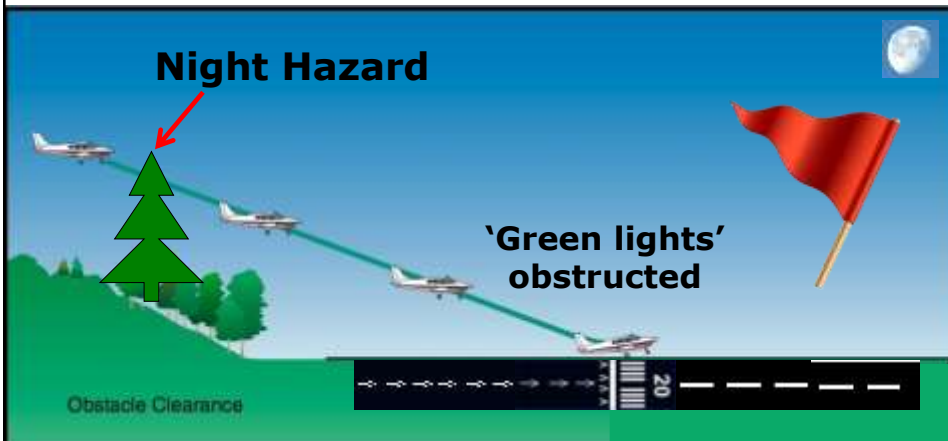
**Expectation -
Clear to the 'green lights'**



Restricted Night Operations

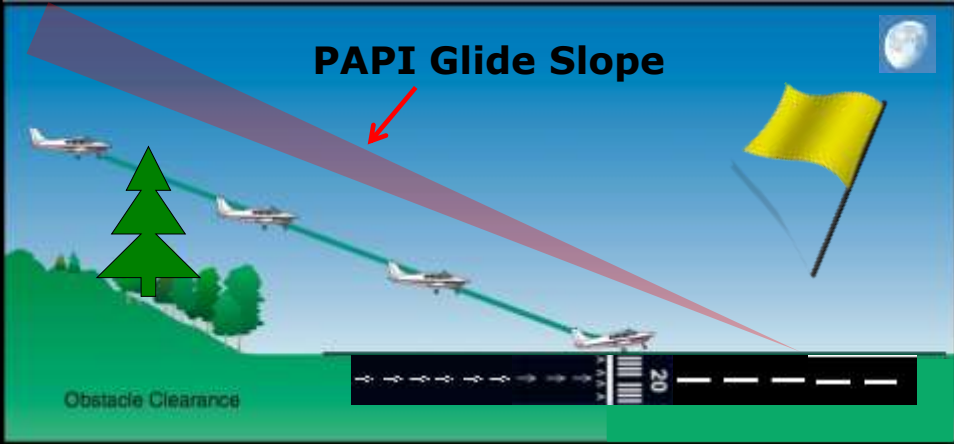
Night Hazard

**'Green lights'
obstructed**



- Rwy NOTAM'd Closed to night ops!

Night Operations **with Risk**



The diagram illustrates a night operation scenario. A runway is shown with a yellow flag on the right. A PAPI (Precision Approach Path Indicator) system is depicted as a purple and red beam sloping downwards from the runway. A red arrow points to the PAPI beam with the label "PAPI Glide Slope". Several aircraft are shown in a descending path along the PAPI beam. On the left, a green tree is labeled "Obstacle Clearance". A moon is visible in the sky.

- Temporary - With NOTAM!

VFR Airspace Standards

END



A 3D wireframe diagram showing a rectangular prism representing a volume of airspace. The bottom surface is a horizontal plane, and the top surface is a higher horizontal plane. The vertical distance between these two planes represents the minimum safe altitude for VFR operations. The diagram is used to illustrate the vertical clearance required for VFR flights.



pennsylvania
DEPARTMENT OF TRANSPORTATION

VFR Airspace Standards

EXTRA SLIDES



Standard for Determining Obstructions

FAR PART 77 (Navigable Airspace)



