

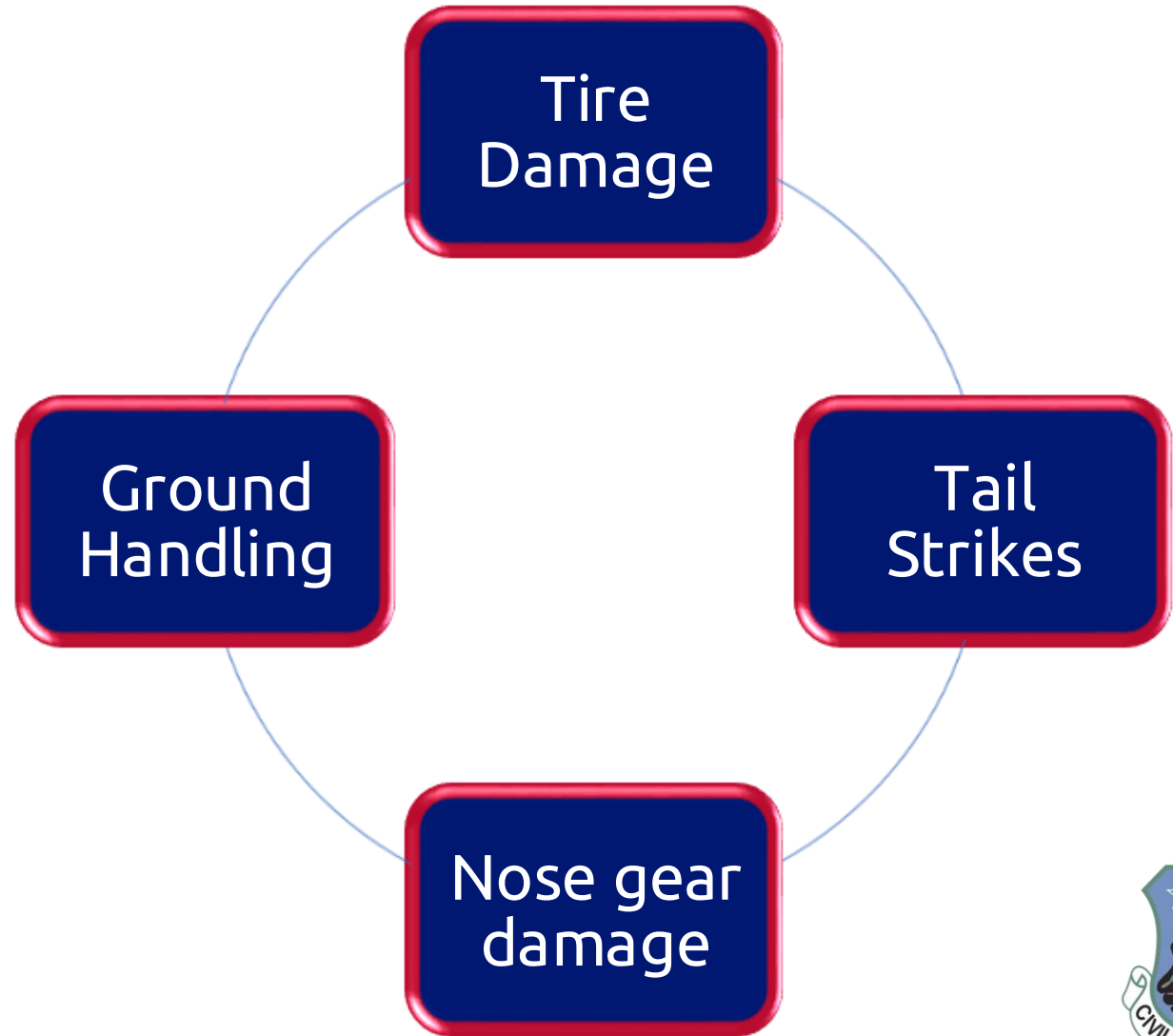


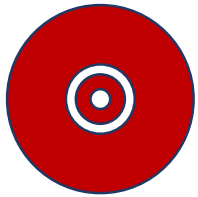
# 2025 Safety Focus Areas Airplane





## Required Topics & Top Areas for Improvement





# #1. Tires

## Overapplication of brakes

- Foot position at landing
- Pressure to exit at earliest taxiway
- Short field landing technique

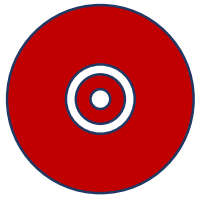
## Underinflation

- Accelerated wear and tear, premature failure
- Other wheel component stress/failure

## Non-stabilized approach to landing

- Higher than normal landing speed
- Side-load; crosswind technique

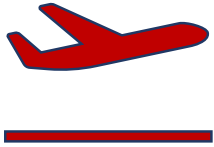




## Tire Damage Mitigations

- Easy on the brakes – teach and use **proper technique** to avoid skidding
- **No pressure** to exit the runway as quickly as possible or at a particular taxiway
- Check and correct **tire inflation** regularly
- Teach **stabilized approach and landing** and command go arounds when not stable





## #2. Tail Strikes

### **Over-rotation on takeoff**

- Excessive pitch/power on soft-field takeoff

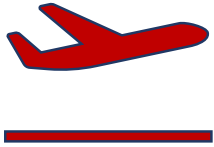
### **Nose-high pitch attitude during landing**

- Accelerated wear and tear, premature failure
- Other wheel component stress/failure

### **Non-stabilized approach to landing**

- Higher than normal landing speed
- Side-load; crosswind technique





## Tail Strike Mitigations

- Teach and use proper pitch/power technique to manage pitch on soft-field takeoff
- Teach and use proper pitch/power management during landing
- Follow POH for approach and landing speeds
- Teach and use proper alignment technique during crosswind landings
- Go around when approach/landing is not stabilized





### #3. Nose Gear Damage

#### **Porpoising on landing / loss of aircraft control**

- Attempt to salvage porpoised landing
- Can lead to nose gear collapse, propeller, engine, structural damage

#### **Landing on nose gear first**

- Under-controlled pitch/power management during landing flare





## Nose Gear Damage Mitigations

### Go Around!

- Do not attempt to salvage porpoised landing

### Manage pitch/power to

- Ensure correct pitch attitude for landing

### Report any nose gear first or porpoised landings

- Request that the airplane be inspect for damage and serviceability





## #4. Ground Handling

### Spotters

- Not used
- Communication/coordination between members during airplane ground handling needs improvement

### Speed of task accomplishment

- Moving too quickly to "catch" issues
- Landing gear unevenly contacting door railing

### Inadequate clearance from hazards

- Hangar doors
- Clutter, housekeeping/organization

### Hangar risk assessments not conducted or communicated

- Alignment/clearance markings
- "Tug" or similar equipment training and checking





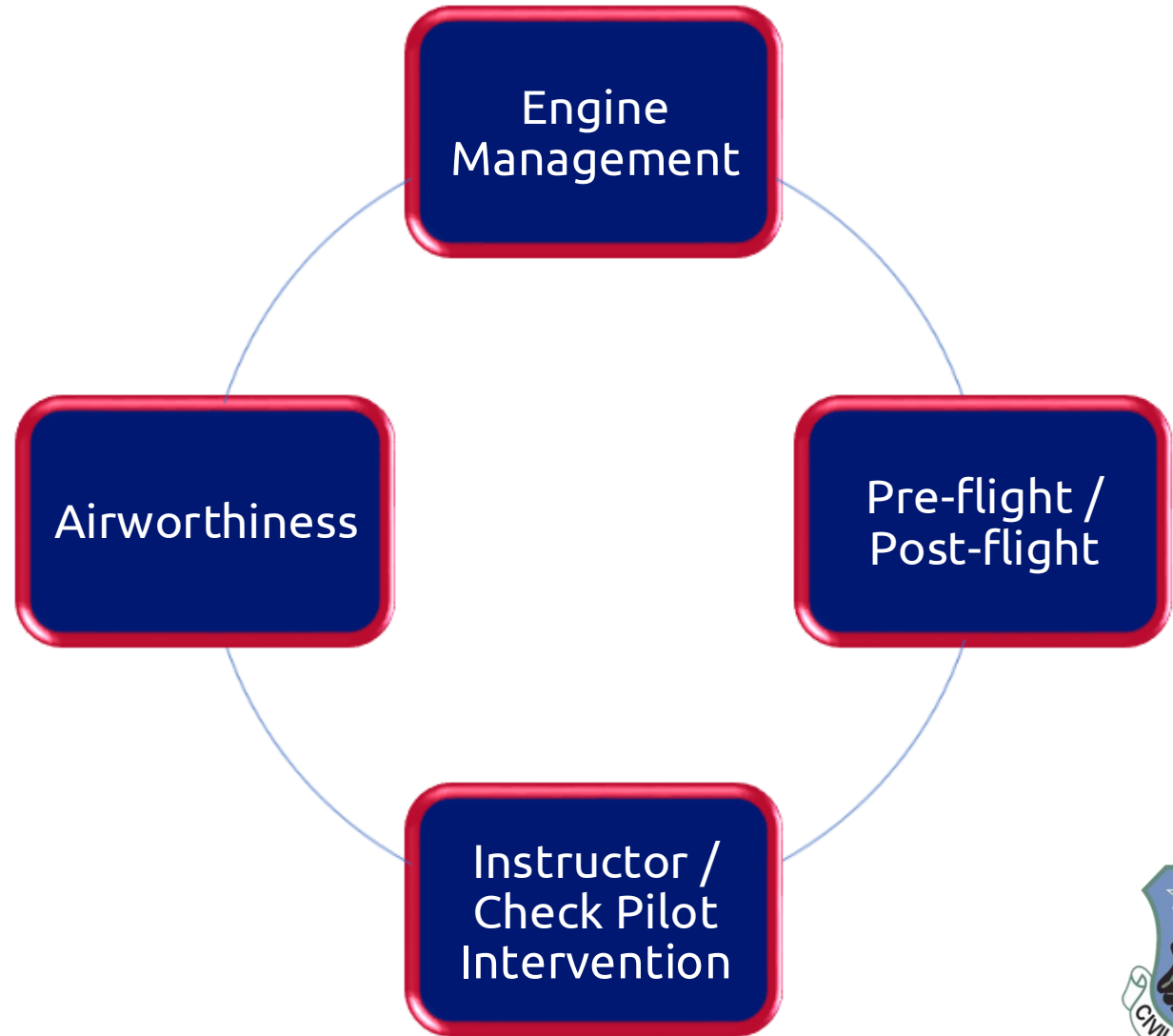
## Ground Handling Mitigations

- Use spotters
- Brief all members involved in aircraft movement on steps and when to speak up
- Slow down! Stop and ask spotter(s) to move around and check critical areas
- Add alignment/clearance markings
- Fully open hangar doors before movement
- Conduct and communicate annual risk assessments on hangar space per CAPP 130-3 (AMO Guide) 2.2.1





## Recommended Additional Topics





## Engine Management



- Follow POH mixture leaning recommendations
- Avoid “lean-of-peak” leaning
- Manage cowl flaps per checklist/POH, when applicable
- Report **any** engine issues as discrepancies and **ground the aircraft**; noted anomalies to be inspected for fuel/cylinder issues





## Preflight and Postflight

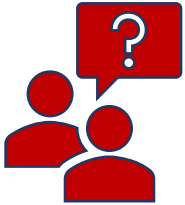


- A thorough preflight assures that people and equipment are at their best capability for a safe outcome.
- A good postflight assessment assures that the equipment is in good working order for the next mission.
- Don't leave out these critical steps! Report issues immediately!





## Instructor / Check Pilot Intervention



- As an instructor pilot, check pilot, or check pilot examiner, be prepared to intervene at any time during a flight, and **don't wait for things to go too far before taking action.**
- Ensure pilots can operate CAP aircraft safely in crosswinds, gusty conditions.
- All approaches must be stable approaches (on speed, glidepath, descent rate, etc.), otherwise, command a go around
- As an IP, CP, or CPE YOU are a critical layer of safety assurance that pilots can operate CAP's aircraft safely





## Airworthiness

- Report all aircraft discrepancies immediately and be sure to call your local maintenance officer when equipment is damaged.
- Except in accordance with 14 CFR 91.213(d), discrepancies require the aircraft be inspected and/or repaired and returned to service – **this requires a maintenance logbook entry!**
- Damaged or broken components may appear “safe” but may still not meet the regulatory airworthiness requirement.
- Pay attention to inspection intervals and avoid overflying them!

