

Why You Hate your Flight Review (and what you can do about it)

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Currency Requirements

- **FAR 61.56 - Flight Review**
 - Every 24 calendar months
 - 1 hour of ground instruction + 1 hour, or 3 flights, of flight training
- **FAR 61.57 - Recent Flight Experience**
 - 3 take-off's and landing within 90 days to carry passengers
 - Same category, class
 - Tailwheel airplane and Night flight have additional requirements

Tackling the Flight Review

- **Who needs a flight review?**
 - **Everyone! (Private, Commercial, ATP, FI)**
- **What category/class of aircraft is the review good for?**
 - **A single flight review covers a pilot for all ratings**

Tackling the Flight Review

- **This is a flight review, NOT a flight test**
 - Engage the applicant in the learning process
 - Use PTS to define standards
 - Cover FAR #91 and deficient flight maneuvers
 - Make appropriate logbook entry

Tackling the Flight Review

- **Alternative approaches**
 - Obtain a new rating or certificate
 - Use the FAA Wings program
 - Combine with spring check-out
 - Combine with new glider check-out
 - Learn a new skill or maneuver

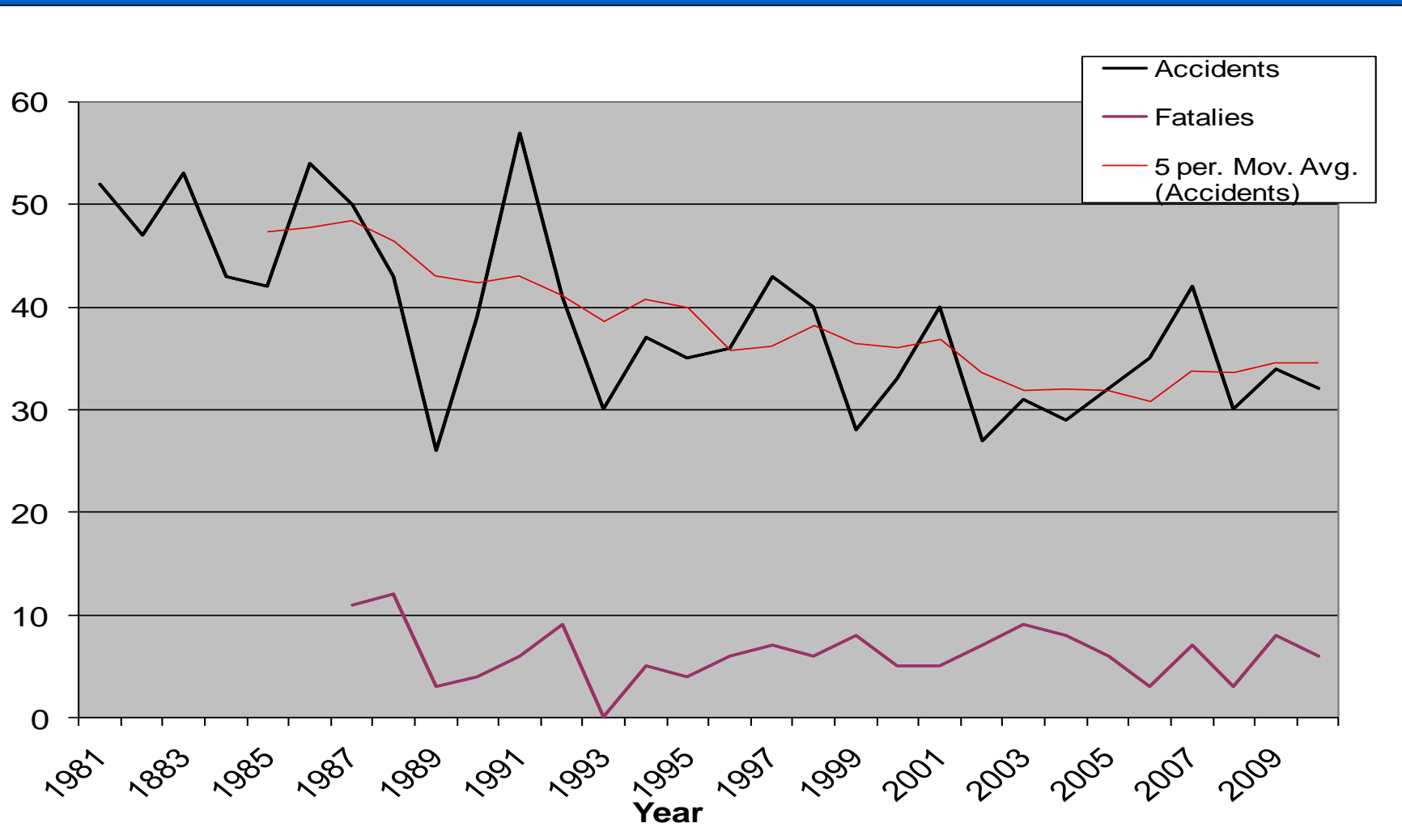
Why take Recurrent Training?

- On Dec 28, 1978 a DC-8 ran out of fuel while circling in clear weather within 20 miles of Portland International Airport
 - 3 man crew on board properly trained and certified, yet they failed to operate as a crew
 - At 8,000 ft, the crew lowered the landing gear heard loud 'thump' and airplane yawed
 - Captain decided to orbit the area at 5,000 ft to burn off excess fuel
 - The plane flew for approximately 60 minutes before running out of fuel and crashing 6 miles short of the airport

Soaring Community Reaction

- **Aeronautical Decision Making**
- **Risk Management**
- **Crew Resource Management**
- **Single Pilot Resource Management**
- **Scenario based Training**

Number of Soaring Accidents



Flight Safety

- Look at glider accidents (fatal and non-fatal) reported to the NTSB

Year	Accidents	Fatals	Other	TO	In-flight	Landing
2006	35	3	8.3	19.4	13.9	61.1
2007	46	7	6.9	20.5	11.4	65.9
2008	30	3	3.3	23.3	20.0	53.3
2009	34	8	9.1	33.3	18.2	39.4
2010	32	6	9.4	12.5	18.8	59.4

Major Accidents

- **Launch PT3 events – 12.5%**
 - Intentional vs unintentional release
- **Mid-air collisions – 12.5%**
 - Glider and Towplane collide turning final
 - Airplane collides with Towplane towing Glider
 - Two Gliders collide during cruise flight (contest)
 - Two Gliders collide while thermaling (contest)
 - ‘04-1, ‘05-0, ‘06-1, ‘07-0, ‘08-2, ‘09-0, ‘10-4

Major Accidents

- **Crashed Gliders – 9.4%**
 - Glider crashed in mountainous terrain
 - Glider crashed in field
- **Approach and Landing – 59.4%**
 - Hit object on approach -- 10
 - Stall/spin on approach -- 1
 - Hit object on ground -- 3
 - Hard landing -- 3
 - Land short (undershoot) -- 0
 - Land long (overshoot) -- 1

1 Hour of Ground Instruction

- **Typical Topics**
 - FAR's
 - Airspace
 - Aircraft limitations & paperwork

Airspace

- **Hierarchical layout**

- **Class A** Most restrictive, no VFR operations
- **Class B** Very restrictive, 31 airports
- **Class C** Restrictive, need radio & mode 'C'
- **Class D** Minor restrictive, control tower
- **Class E** Few restrictions, most glider flights
- **Class G** Least restrictive, close to ground

Teaching the NAS

- Use simple (Class G) to complex (Class A) method
 - Pilot, Aircraft, Environment
- Introduce basics and then add exceptions (grammar rules)
- Use mnemonic's to aid in learning
 - G for Ground, B for Busy

Learning Airspace

- **Rote memorization**
 - Visibility and Cloud separation for class G & E airspace
- **Skill base tools**
 - Almost everything else

Basic Airspace VFR Weather Minimums

- 700/1,200 feet or less above the surface (regardless of MSL altitude):
 - **Minimum visibility:**
 - 1 statute mile
 - **Cloud clearance:**
 - Clear of clouds
- **Above 700/1,200 feet and below 10,000 feet MSL:**
 - **Minimum visibility:**
 - 3 statute miles
 - **Cloud clearance:**
 - 500 feet below
 - 1,000 feet above
 - 2,000 feet horizontal



High Altitude Class “G” Airspace VFR

Weather Minimums

- **More than 1,200 feet above the surface and at or above 10,000 feet MSL:**

- **Minimum visibility:**

- 5 statute miles

- **Minimum cloud clearance:**

- 1,000 feet below
 - 1,000 feet above
 - One mile horizontal

More than 1,200 feet above the surface but less than 10,000 feet MSL:

- **Minimum visibility:**

- 1 statute mile

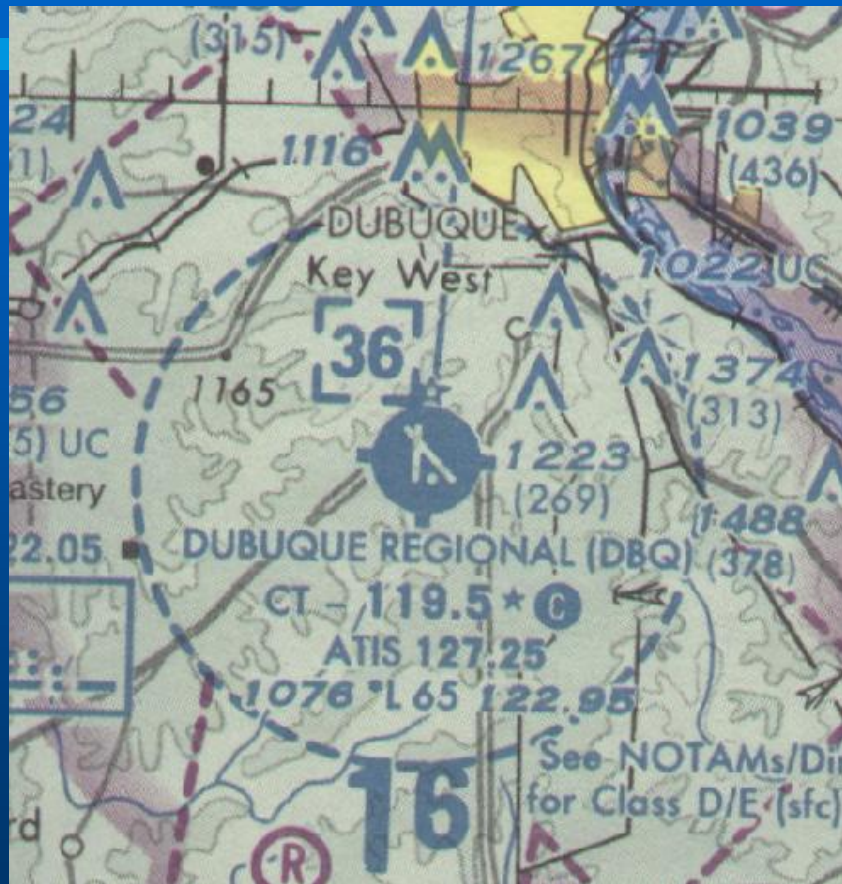
- **Cloud clearance:**

- 500 feet below
 - 1,000 feet above
 - 2,000 feet horizontal

High Altitude Class “E” Airspace VFR Weather Minimums

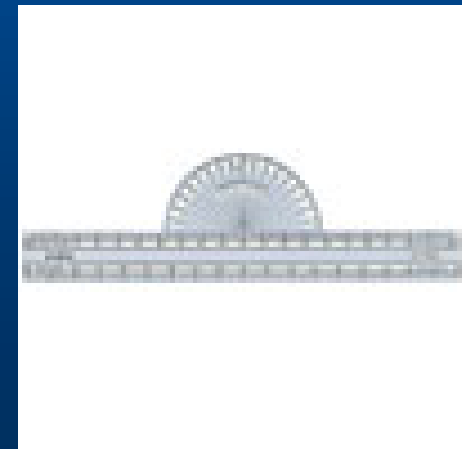
- **Above 10,000 feet MSL:**
 - **Minimum visibility:**
 - 5 statute miles
 - **Cloud clearance:**
 - 1,000 feet below
 - 1,000 feet above
 - One mile horizontal

Class “D” Airspace



Basic Questions

- What information is printed on the chart?
 - CT 119.5
 - ATIS 127.25
 - 1076 *L65 122.95
- What are the limits (height and radius of this Class D)?
 - Read the height off the chart!
 - Measure the radius!



What should you say to the Controller?

1. Dubuque tower, Schempp-Hirth Ventus 2Bx 1l, six miles inbound landing with information 'tango'
2. Dubuque tower, Glider 1l, six miles inbound landing with information 'tango'
3. Dubuque tower, Glider N355RC, six miles inbound landing with 'tango'

What should the controller say?

1. **Glider calling Dubuque, altimeter 2998, report right downwind runway 18**
2. **Glider 355RC, altimeter 2998, report right downwind runway 18**
3. **Glider 355RC, altimeter 2998, wind 170@10, fly heading 360, descend and maintain 1900, expect left downwind runway 18**

Other questions

- Who determines the flight path to the entry point?
- Can you change your mind?
- Who gets to decide, you or the controller?

Class “C” Airspace

What's different about Class C?

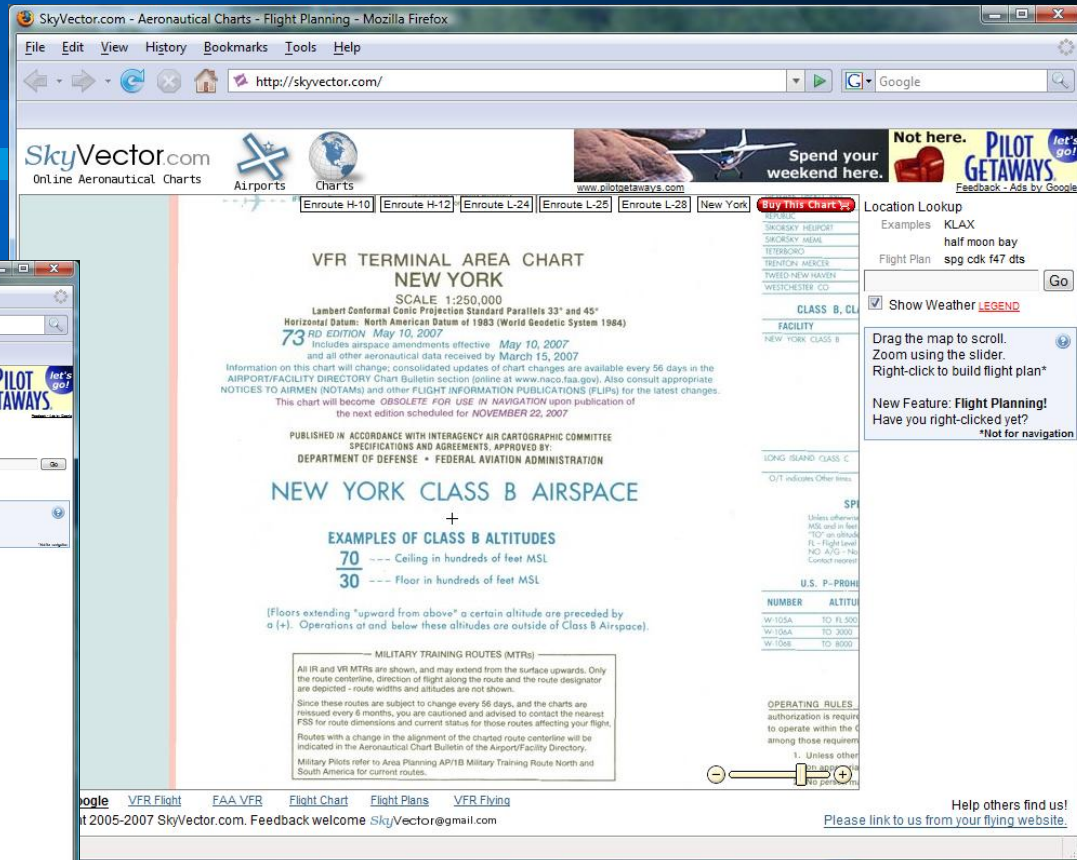
- **Need Transponder with Mode C**
 - Controller will assign code
 - If transiting Class C, controller might try to hand you off to next sector, can you decline?

Class “B” Airspace



What's different about Class B?

- **Lots of things!**
 - **Need Private pilot certificate or better for 12 of them**
 - **Student pilots need logbook endorsement for 19 of them**
 - **Controller will give specific instructions**



1 Hour, or 3 flights

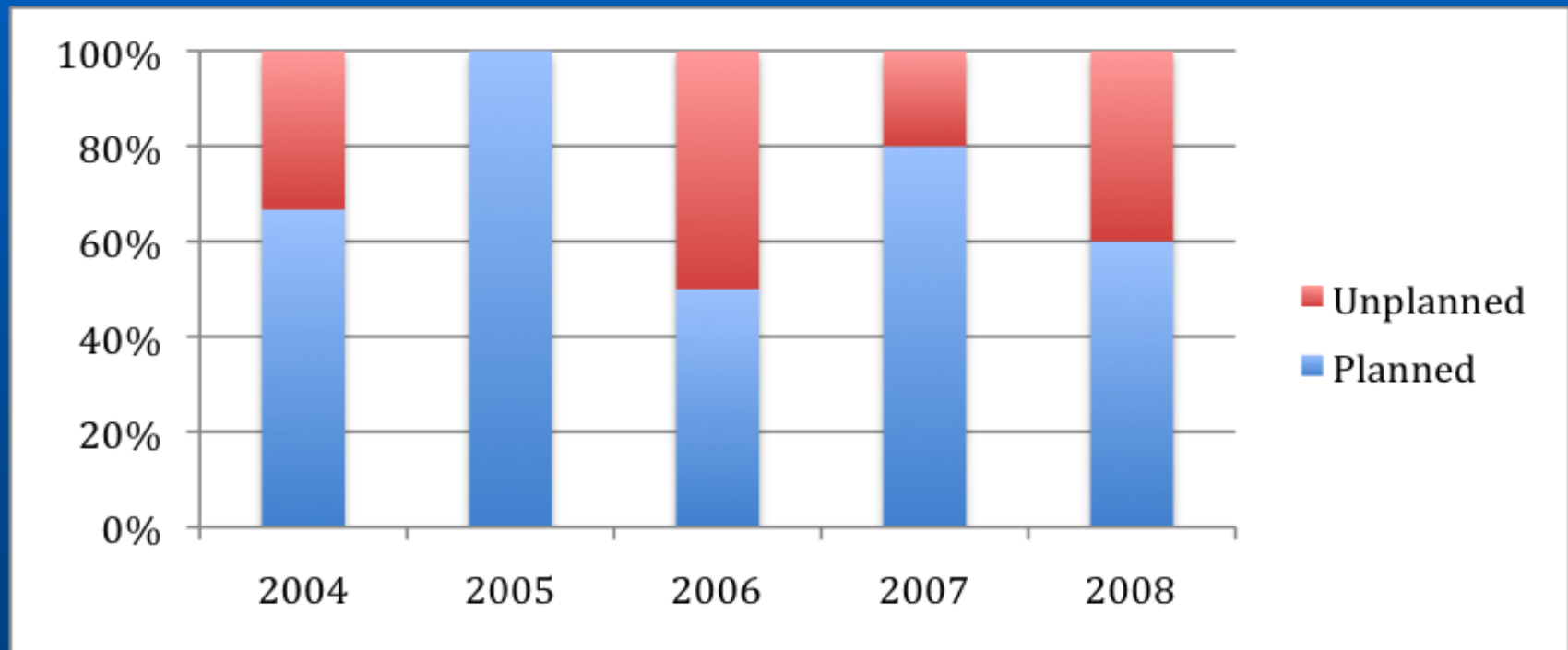
- What is the minimum tow height for the flight to count?
 - Emergency training and Decision Making Skills
 - Practice with a competent instructor
- What maneuvers are listed in the FAR's for your certificate?
- What proficiency did you demonstrate to the DPE?

Sample Flight Proficiency

- **A. TASK: STRAIGHT GLIDES**
- **REFERENCE: Soaring Flight Manual.**
- **Objective. To determine that the applicant:**
 - **1. Exhibits knowledge of the elements related to straight glides, including the relationship of pitch attitude and airspeed.**
 - **2. Tracks toward a prominent landmark at a specified airspeed.**
 - **3. Demonstrates the effect of flaps, spoilers, or dive brakes, if equipped, in relation to pitch attitude and airspeed.**
 - **4. Exhibits smooth, coordinated control, and planning.**
 - **5. Maintains the specified heading, $\pm 10^\circ$, and the specified airspeed, ± 10 knots.**

Launch Emergencies

● Premature Termination of The Tow (PT3)



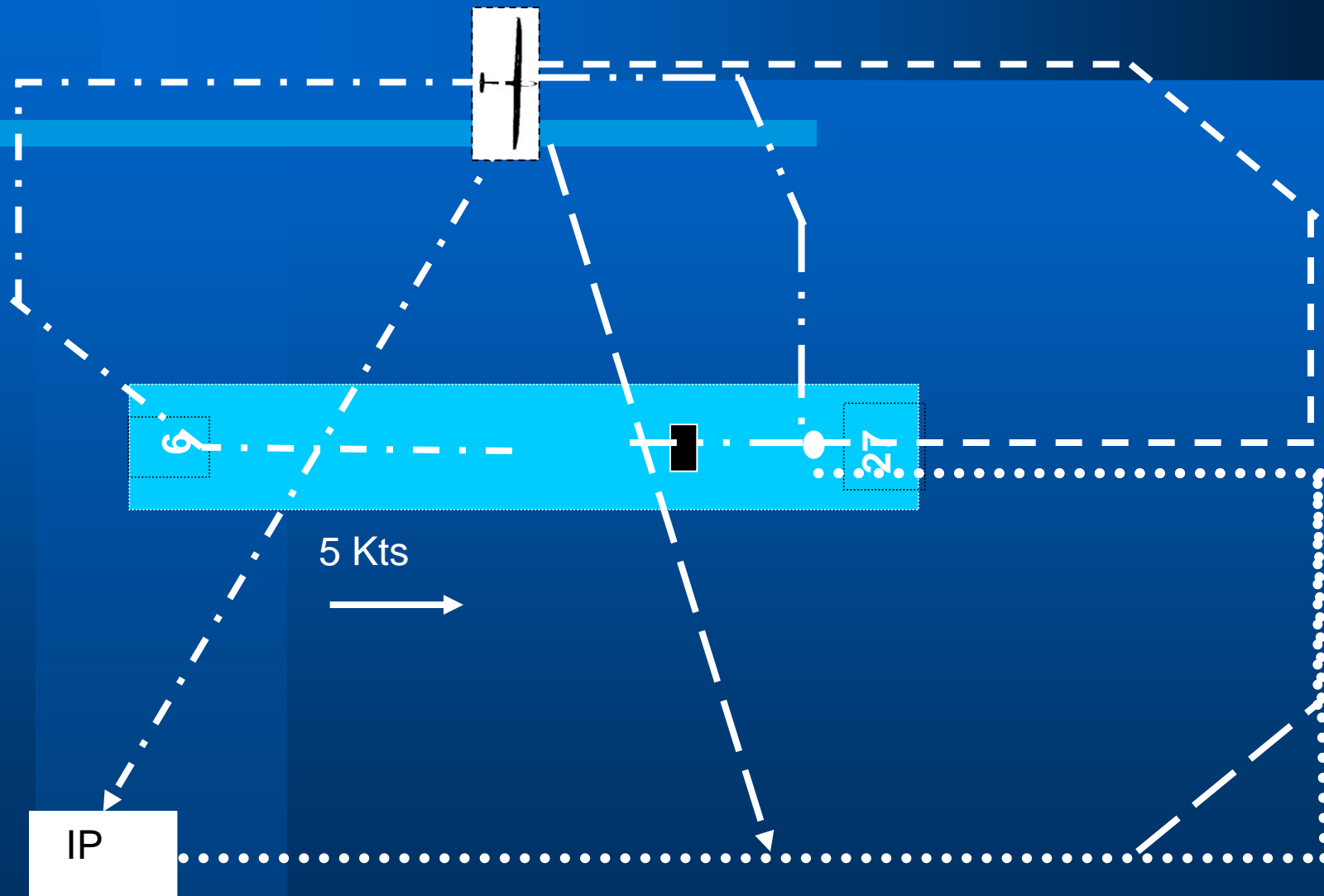
Planned = the glider pilot pulled the release,

Unplanned – The rope broke, the release failed, or the towpilot pulled the release

Pilot Planning and Evaluation

- **Pick 1 event, prepare a response, brief the tow-pilot, and execute your plan**
 - **Simulate you are getting out of position on tow**
 - **Simulate the glider is launching with spoiler open**
 - **Simulate that the tow-plane had an engine failure**

Which Approach would you use?



Augment the Flight Review

- **Learn a new skill**
 - Thermaling
 - X-C skills
 - Spins
- **Check-out in a new glider**

When can you get proficiency training?



Scenario Base Training

- **Start by generating a scenario**
 - 2-3 sentences that sets the stage
 - A single event per scenario
 - Make it plausible
- **Then list a set of discussion points**
 - What would the pilot do
 - List several options and discuss the pros and cons for each

Checklist Scenario

- You are giving rides to a group of friends. As you are getting settled in for the 4th launch, the wing runner says “another glider is on downwind”. You expedite this launch so the runway will be clear for that landing. During the ground roll you realize that your shoulder straps are not fastened. What actions to you take?

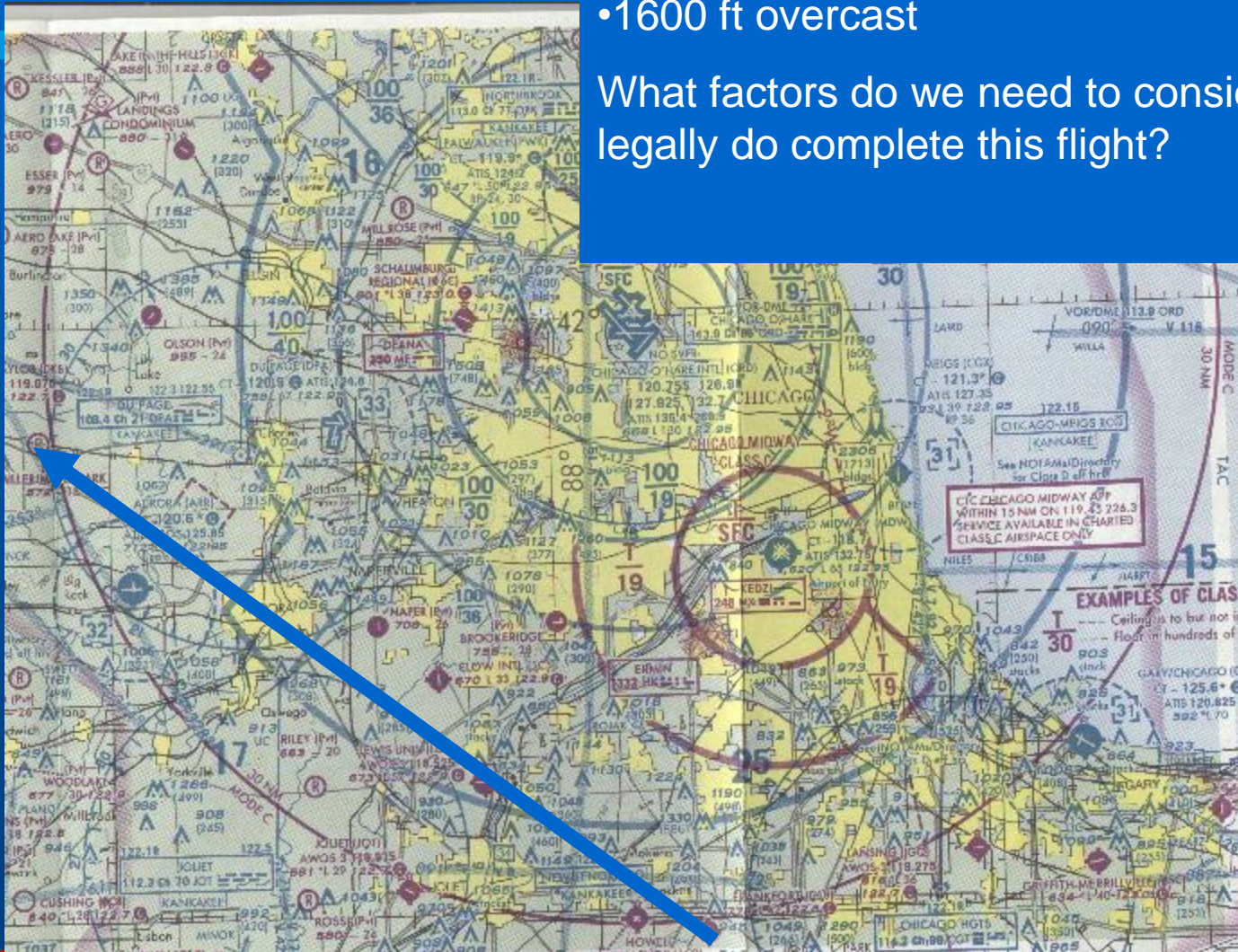
Checklist Factors

- Checklist item – belts and straps on and secure
- What other checklist items did you miss?
- Is the lap belt secured?
- Can you abort now?
- Where will the landing glider go?
- Where will the tow-plane go?
- What will your friend say if you release?

Scenario Based Airspace

- 4 miles visibility
- 1600 ft overcast

What factors do we need to consider to legally do complete this flight?



Pilot Action Plan

- Identify personal strength's and weaknesses
- Work with your instructor to develop a written action plan

Currency vs Proficiency

- **Definition of Currency**
- **Definition of Proficiency**
- **Reasons for lack of proficiency**
 - **Prolonged period of inactivity**
 - **Fear of maneuver**

Proficiency or Current?

