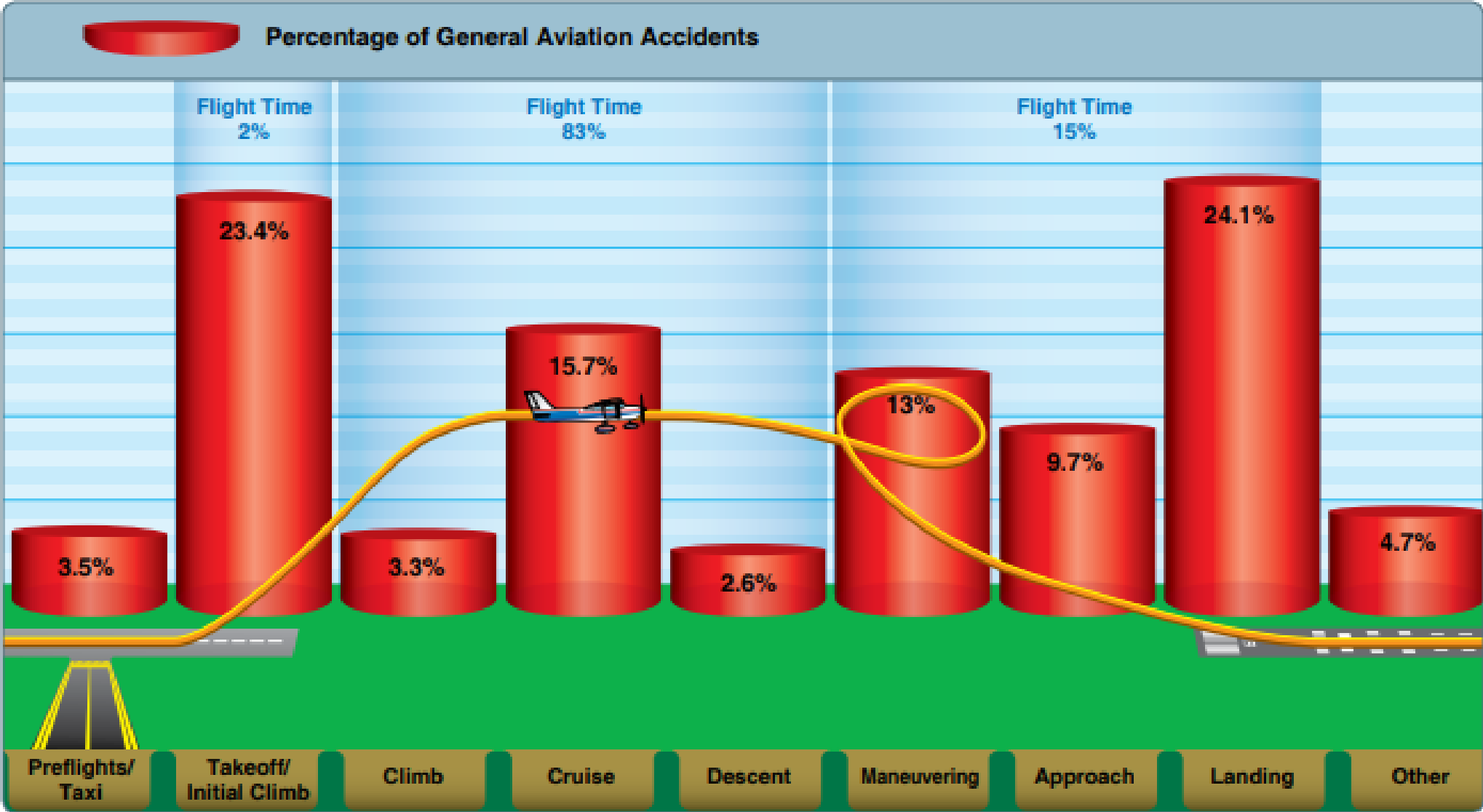


PRIVATE PILOT COURSE

AERONAUTICAL DECISION MAKING



GA ACCIDENTS



FIVE P'S CHECK

PLAN – The mission or task

PLANE – Aircraft, instruments and equipment

PILOT – Your knowledge, experience and currency

PASSENGERS – Passengers needs and pressure

PROGRAMMING – Avionics and EFBs

RISK MANAGEMENT



PAVE MODEL

- P** Pilot – IMSAFE
- A** Aircraft – Condition, Performance, Equipment
- V** enVironment – Day/Night, Weather Terrain
- E** External pressures – Schedule, Image, Passengers

HAZARDOUS ATTITUDES

The Five Hazardous Attitudes	Antidote
<p>Anti-authority: “Don’t tell me.”</p> <p>This attitude is found in people who do not like anyone telling them what to do. In a sense, they are saying, “No one can tell me what to do.” They may be resentful of having someone tell them what to do or may regard rules, regulations, and procedures as silly or unnecessary. However, it is always your prerogative to question authority if you feel it is in error.</p>	<p>Follow the rules. They are usually right.</p>
<p>Impulsivity: “Do it quickly.”</p> <p>This is the attitude of people who frequently feel the need to do something, anything, immediately. They do not stop to think about what they are about to do, they do not select the best alternative, and they do the first thing that comes to mind.</p>	<p>Not so fast. Think first.</p>
<p>Invulnerability: “It won’t happen to me.”</p> <p>Many people falsely believe that accidents happen to others, but never to them. They know accidents can happen, and they know that anyone can be affected. However, they never really feel or believe that they will be personally involved. Pilots who think this way are more likely to take chances and increase risk.</p>	<p>It could happen to me.</p>
<p>Macho: “I can do it.”</p> <p>Pilots who are always trying to prove that they are better than anyone else think, “I can do it—I’ll show them.” Pilots with this type of attitude will try to prove themselves by taking risks in order to impress others. While this pattern is thought to be a male characteristic, women are equally susceptible.</p>	<p>Taking chances is foolish.</p>
<p>Resignation: “What’s the use?”</p> <p>Pilots who think, “What’s the use?” do not see themselves as being able to make a great deal of difference in what happens to them. When things go well, the pilot is apt to think that it is good luck. When things go badly, the pilot may feel that someone is out to get them or attribute it to bad luck. The pilot will leave the action to others, for better or worse. Sometimes, such pilots will even go along with unreasonable requests just to be a “nice guy.”</p>	<p>I’m not helpless. I can make a difference.</p>

OPERATIONAL PITFALLS

Operational Pitfalls

Peer pressure

Poor decision-making may be based upon an emotional response to peers, rather than evaluating a situation objectively.

Mindset

A pilot displays mind set through an inability to recognize and cope with changes in a given situation.

Get-there-it-is

This disposition impairs pilot judgment through a fixation on the original goal or destination, combined with a disregard for any alternative course of action.

Duck-under syndrome

A pilot may be tempted to make it into an airport by descending below minimums during an approach. There may be a belief that there is a built-in margin of error in every approach procedure, or a pilot may want to admit that the landing cannot be completed and a missed approach must be initiated.

Scud running

This occurs when a pilot tries to maintain visual contact with the terrain at low altitudes while instrument conditions exist.

Continuing visual flight rules (VFR) into instrument conditions

Spatial disorientation or collision with ground/obstacles may occur when a pilot continues VFR into instrument conditions. This can be even more dangerous if the pilot is not instrument rated or current.

Getting behind the aircraft

This pitfall can be caused by allowing events or the situation to control pilot actions. A constant state of surprise at what happens next may be exhibited when the pilot is getting behind the aircraft.

OPERATIONAL PITFALLS

Loss of positional or situational awareness

In extreme cases, when a pilot gets behind the aircraft, a loss of positional or situational awareness may result. The pilot may not know the aircraft's geographical location or may be unable to recognize deteriorating circumstances.

Operating without adequate fuel reserves

Ignoring minimum fuel reserve requirements is generally the result of overconfidence, lack of flight planning, or disregarding applicable regulations.

Descent below the minimum en route altitude

The duck-under syndrome, as mentioned above, can also occur during the en route portion of an IFR flight.

Flying outside the envelope

The assumed high performance capability of a particular aircraft may cause a mistaken belief that it can meet the demands imposed by a pilot's overestimated flying skills.

Neglect of flight planning, preflight inspections, and checklists

A pilot may rely on short- and long-term memory, regular flying skills, and familiar routes instead of established procedures and published checklists. This can be particularly true of experienced pilots.

ASSESSING RISK

CARE CHECKLIST: CONSEQUENCES, ALTERNATIVES, REALITY, EXTERNAL FACTORS

PILOT

Consequences: Inexperience in 172

Alternatives: Get an instructor

Reality: Flying without instructor is risk

External Factors: Pride

AIRCRAFT

Consequences: Excellent Condition

Alternatives: Other aircraft available

Reality: Problem could exist

External Factors: Hassle in switching

ENVIRONMENT

Consequences: Inexperience in MVFR

Alternatives: Postpone flight

Reality: MVFR more risk than VFR

External Factors: 'Get There ITIS'

EXTERNAL FACTORS

Consequences: Family Expectations

Alternatives: Drive Instead

Reality: Self awareness

External Factors: All above

MITIGATING RISK

TEAM CHECKLIST: TRANSFER, ELIMINATE, ACCEPT, MITIGATE

PILOT

Transfer: Have another pilot fly

Eliminate: Cancel flight

Accept: Fly anyway

Mitigate: Fly with instructor

AIRCRAFT

Transfer: Fly a different airplane

Eliminate: Cancel flight

Accept: Fly anyway

Mitigate: Experienced assessment

ENVIRONMENT

Transfer: Have IFR pilot fly

Eliminate: Cancel flight

Accept: Fly anyway

Mitigate: Flight plan, flight following, etc.

EXTERNAL FACTORS

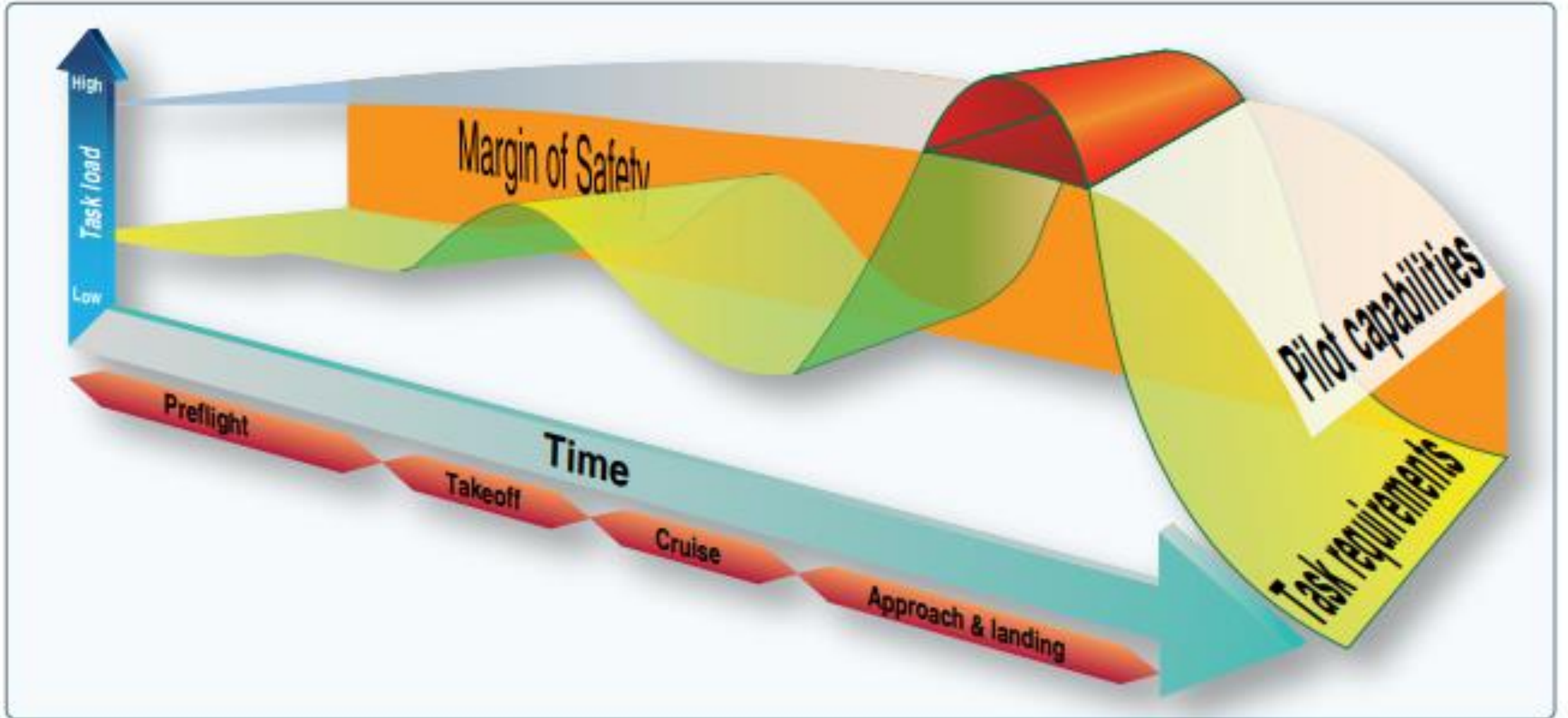
Transfer: Have someone else make decision

Eliminate: Cancel flight

Accept: Fly anyway

Mitigate: Alternative arrangements

SITUATIONAL AWARENESS



EVENT MANAGEMENT

DECIDE Model

Detect the fact that change has occurred

Estimate the need to counter or react to change

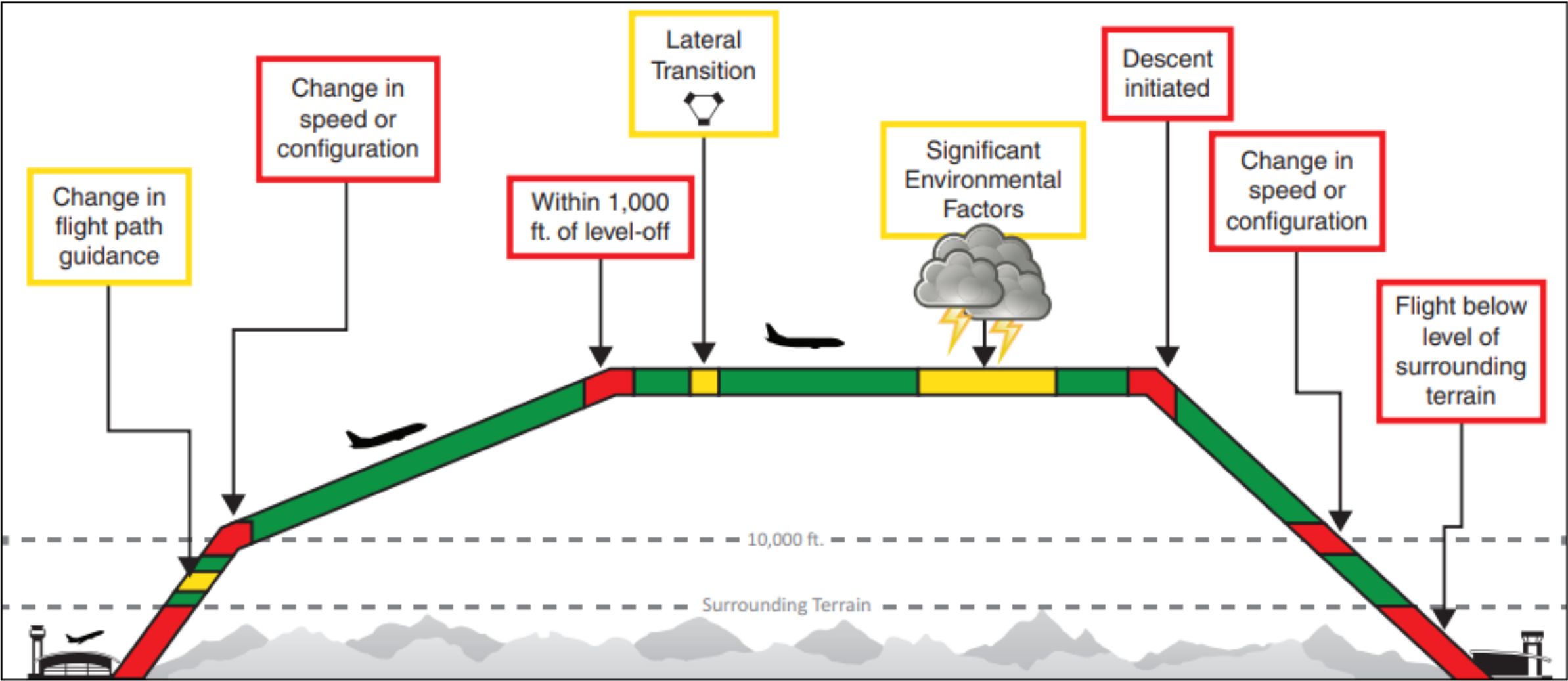
Choose a desirable outcome for the flight

Identify actions which could successfully control change

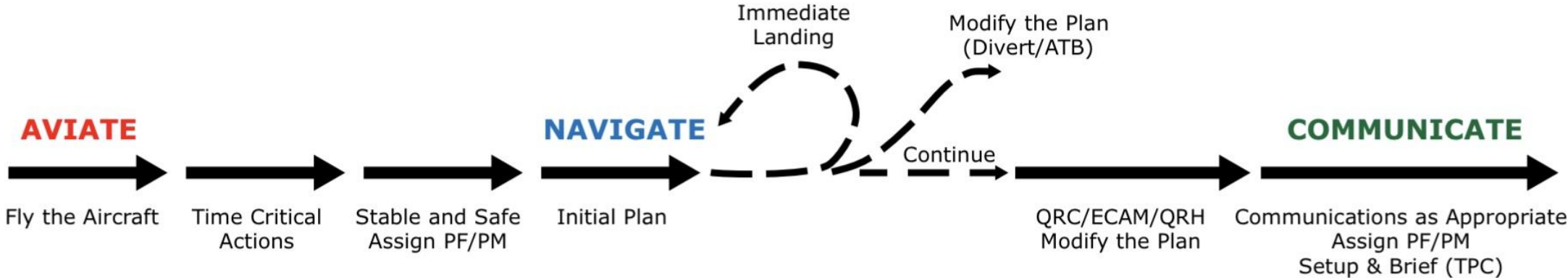
Do the necessary action

Evaluate the effect(s) of action countering change

FLIGHT PATH VULNERABILITY



PUTTING IT ALL TOGETHER



IN TOO DEEP – ACCIDENT CASE STUDY



The video player displays the AOPA logo on the left, which includes the text "AIR SAFETY" and "INSTITUTE" around a central emblem. The main title "ACCIDENT CASE STUDY: IN TOO DEEP" is centered in white and black text against a dark, cloudy background. At the bottom, a control bar shows a play button, a volume icon, and a progress indicator at "0:05 / 15:05". On the right side of the control bar are icons for closed captions (CC), settings (gear), a square icon, a window icon, and a full-screen icon. A small AOPA logo is also visible in the bottom right corner of the video frame.

TPC BRIEFINGS

THREATS

THREATS

PLAN

CONSIDERATIONS

AIRPORT

Contamination
Construction
Hotspots

WEATHER

Visibility
Ceilings
Winds
Precipitation
Turbulence

AIR TRAFFIC CONTROL

Runway Changes
Reroutes
Delays

ENVIRONMENT

Terrain
Night
Traffic

EXTERNAL PRESSURES

Schedule
Passengers
Image

AIRCRAFT

Discrepancies
Scheduled Mx
Performance

PILOT

IMSAFE
Currency
Recency
Personal Mins

WRAP UP...

How to schedule written test.
Must set up IACRA account.
Must have FTN.