# Hazardous Attitudes Can cost you your life

The periodic use of this workbook can help you identify and correct the hazardous attitude tendencies that may exist in you

This booklet contains hazardous attitude examples for Airplane pilots





#### **HAZARDOUS ATTITUDES**

#### FACTORS AFFECTING DECISION MAKING

The exercises contained herein are drawn from the FAA book entitled *Aeronautical Decision Making for Student and Private Pilots*. They provide an attitude inventory, followed by scenarios, which allow you to identify the most likely actions of a person who is using a particular hazardous thought pattern. Instructions for each area precede the appropriate exercises.

#### ATTITUDE INVENTORY

This assessment asks you to decide why you, as a pilot, might have made certain decisions. Ten situations are presented each involving a flight decision. After each situation, you will find a list of five possible reasons for a decision. No "correct" answer is provided for any of the situations. You may indeed be correct in believing that a safe pilot would not choose any of the five alternatives. Be assured that most people know better than to act as described in the situations. Just recognize that the inventory presents extreme cases of incorrect pilot decision making to help introduce you to the five special types of hazardous attitudes. Use the following instructions:

- 1. Use the accompanying Attitude Inventory Answer Sheet
- 2. Read over each of the situations and the five choices. Decide which one is *the most likely reason* why you might make the choice that is described. Place a numeral 5 in the space provided on the answer sheet.
- 3. Continue by placing a numeral 4 by the next most probable reason, and so on, until you have filled in all five blanks with ratings of 5, 4, 3, 2, and 1.
- 4. Do all 10 situations and *fill in each blank*, even though you may disagree with the choices listed. Remember; there are no *correct* or *best* answers.

#### **EXAMPLE:**

a. <u>1</u>	( your least likely response)
b. <u>3</u>	
c. <u>5</u>	(your most likely response)
d. <u>2</u>	
e. <u>4</u>	



### ATTITUDE INVENTORY ANSWER SHEET

Situation 1	Situation 6
a	a
b	b
c	c
d	d
e	e
Situation 2	Situation 7
a	a
b	b
c	c
d	d
e	e
Situation 3	Situation 8
a	a
b	b
c	c
d	d
e	e
Situation 4	Situation 9
a	a
b	b
c	c
d	d
e	e
Situation 5	Situation 10
a	a
b	b
c	c
d	d
Α	Δ



#### **SITUATION 1**

Nearing the end of a long flight, your destination airport is reporting a ceiling of 600 feet and ½ mile visibility, in fog and haze. You have just heard another aircraft miss the approach (ILS minimums are 200 and ½). You decide to attempt the ILS approach. Why do you make the attempt?

- a. Ceiling and visibility estimates are often not accurate.
- b. You are a better pilot than the one who just missed the approach.
- c. You might as well try, you can't change the weather.
- d. You are tired and just want to land
- e. You've always been able to complete approaches under these circumstances in the past.

#### **SITUATION 2**

You plan an important business flight under instrument conditions in an aircraft with no deicing equipment. You'll be flying through an area in which light to moderate rime or mixed icing in clouds, and precipitation above the freezing level has been forecast. You decide to make the trip, thinking:

- a. You believe that your altitudes en route can be adjusted to avoid ice accumulation.
- b. You've been in this situation many times and nothing has happened.
- c. You must get to the business meeting in two hours and can't wait.
- d. You do not allow an icing forecast to stop you; weather briefers are usually overly cautious.
- e. There's nothing you can do about atmospheric conditions.

#### **SITUATION 3**

You arrive at the airport for a flight with a friend and plan to meet his friend who is arriving on a commercial airplane at your destination. The airplane you scheduled has been grounded for avionics repairs. You are offered another airplane equipped with unfamiliar avionics. You depart on an instrument flight without a briefing on the unfamiliar equipment. Why?

- a. If the avionics are so difficult to operate, the FBO would not have offered the plane as a substitute.
- b. You are in a hurry to make the scheduled arrival.
- c. Avionics checkouts are not usually necessary.
- d. You do not want to admit that you are not familiar with the avionics.
- e. You probably won't need to use those radios anyway.



#### **SITUATION 4**

You arrive at your destination airport to pick up a passenger after the fuel pumps have closed. Your calculations before departing determined that there would be enough fuel to complete the trip with the required reserves. The winds on the trip were stronger than anticipated, and you are not certain of the exact fuel consumption. You decide to return home without refueling since:

- a. You can't remain overnight because you and your passenger have to be at the office in the morning.
- b. The required fuel reserves are overly conservative.
- c. The winds will probably diminish for the return trip.
- d. You don't want to admit to your lack of planning in front of anyone else.
- e. It's not your fault the airport services are not available; you will just have to try to make it home.

#### **SITUATION 5**

You have been cleared for the approach on an IFR practice flight with a friend acting as safety pilot. At the outer marker, ATC informs you of a low-level windshear reported for your intended runway. Why do you continue the approach?

- a. You have to demonstrate to your friend that you can make this approach in spite of the wind.
- b. It has been a perfect approach so far; nothing is likely to go wrong.
- c. These alerts are for less experienced pilots.
- d. You need two more approaches to be current and want to get this one completed.
- e. The tower cleared you for the approach, so it must be safe.

#### SITUATION 6

You are about to fly some business associates in a multi-engine aircraft. You notice a vibration during run-up of the left engine. Leaning the mixture does not reduce the vibration. You take off without further diagnosis of the problem. Why?

- a. You need to be at your destination by five o'clock and are behind schedule. The aircraft can be checked there.
- b. You have encountered the vibration before without any problem.
- c. You don't want your business associates to think you can't handle the aircraft.
- d. The requirement for two perfectly running engines is overly conservative.
- e. The shop just checked this plane yesterday. The mechanics would not have released if there were a problem.



#### **SITUATION 7**

You are in IMC and receiving conflicting information from the two VOR receivers. You determine that the radios are out-of-tolerance and cannot determine your position. You believe ATC will soon suggest that you are off course and request a correction. You are thinking:

- a. Try to determine your position so ATC won't find out that you are lost
- b. You will continue to navigate on the newer VOR receiver. It should work just fine.
- c. You will get out of this jam somehow; you always do.
- d. If ATC calls, you can be noncommittal. If they knew all, they would only make things worse.
- e. Inform ATC immediately that you are lost and wait impatiently for a response.

#### **SITUATION 8**

During an instrument approach, ATC calls and asks how much fuel you have remaining. You have only two minutes before reaching the missed approach point, and wonder why they have inquired as to your fuel status. You are concerned about severe thunderstorm activity nearby and assume that you might be required to hold. You believe that:

- a. Your fuel status is fine, but you want to land as soon as possible before the thunderstorm arrives.
- b. You are in line with the runway and believe that you can land, even in any crosswind that might come up.
- c. You will have to complete this approach; the weather won't improve.
- d. You won't allow ATC to make you hold in potentially severe weather; it's not their neck.
- e. The pilot who landed ahead of you completed the approach without any problems.

#### SITUATION 9

You are a new instrument pilot conducting an instrument flight of only 20 miles. The turn coordinator in your airplane is malfunctioning. The visibility is deteriorating, nearing approach minimums at your destination. You continue this trip thinking:

- a. You've never had a need to use the turn coordinator.
- b. You recently passed the instrument flight-test and believe you can handle this weather.
- c. Why worry about it; ATC will get you out of a bad situation.
- d. You had better get going now before you get stuck here.
- e. Back-up systems are not needed for such a short trip.

#### **SITUATION 10**

You encounter clear-air turbulence. You are not wearing a shoulder harness and do not put it on. Why not?

- a. Putting on a shoulder harness might give the appearance that you are afraid—you don't want to alarm your passengers.
- b. Shoulder harness regulations are unnecessary for en route operations.
- c. You haven't been hurt thus far by not wearing your shoulder harness.
- d. What's the use in putting on a shoulder harness, if it's your time, it's your time.
- e. You need to maintain aircraft control, there's no time for shoulder harnesses.



#### SCORING INSTRUCTIONS FOR ATTITUDE INVENTORY

Now that you have completed taking the inventory, the next step is to score it to determine your hazardous attitude profile. You will need to use your answer sheet, as well as the scoring keys, inventory totals form, and profile graph found later in this section.

- 1. Place the left side of the answer sheet on top of the first scoring key (Anti-Authority) so that it is lined up with the scoring key blanks for situations 1 through 5. Add the numbers written on your answer sheet which appear next to the "x's" on the scoring key. Keep these totals on a separate piece of paper.
- 2. When you have done this for situations 1 through 5, move the answer sheet so that its right edge now lines up with the blanks for situations 6 through 10. Add the numbers next to the "x's" for situations 6 through 10 to the first total, which you recorded on a separate piece of paper.
- 3. Write this sum on the appropriate line of the Attitude Inventory Form.
- 4. Repeat this procedure for all five scoring keys.
- 5. Enter the totals on the Hazardous Attitude Profile Graph

See the following example for the use of the scoring key.

#### EXAMPLE OF SCORING KEY USE

Scoring Key for Anti-Authority Situation 1	Answer Sheet: Situation 1			
a	a <u>4</u>			
b <u>x</u>	b <u>3</u>			
c	c <u>1</u>			
d	d <u>5</u>			
e	e. <u>2</u>			
Situation 2	Situation 2			
a.	a <u>3</u>			
a				
	b <u>2</u>			
b				
	b. <u>2</u> c. <u>5</u> d. <u>1</u>			

3 (number next to "x" on scoring key at 1-b)

Continue until you have a total for all 10 numbers next to the "x's." Transfer this total to the "Anti-Authority" blank at the top of the Attitude Inventory Totals Form.



<sup>+ 1</sup> (number next to "x" on scoring key at 2-d)

<sup>=</sup> 4 sub-total for situations 1 and 2

<sup>= ... (</sup>numbers next to "x's" for situations 3 through 10)

## Scoring Key For ANTI-AUTHORITY

## Scoring Key For IMPULSIVITY

Situation 1	Situation 6	Situation 1	Situation 6		
a	a	a	ax		
b. <u>x</u>	b	b	b		
c	c. <u>x</u>	c	c		
d	d	d	d		
e	e	e. <u>x</u>	e		
Situation 2	Situation 7	Situation 2	Situation 7		
a <u>x</u>	a	a	a		
b	b. <u>x</u>	b	b		
c	c	c	c		
d	d	d. <u>x</u>	d		
e	e	e	e. <u>x</u>		
Situation 3	Situation 8	Situation 3	Situation 8		
a	a	a	a		
b	b	b	b		
c	c	c. <u>x</u>	c. <u>x</u>		
d	d	d	d		
e. <u>x</u>	e. <u>x</u>	e	e		
Situation 4	Situation 9	Situation 4	Situation 9		
a	a	a	a		
b	b. <u>x</u>	b. <u>x</u>	b		
c	c	c	c		
d. <u>x</u>	d	d	d <u>x</u>		
e	e	e	e		
Situation 5	Situation 10	Situation 5	Situation 10		
a	a	a. <u>x</u>	a		
b	b	b	b <u>x</u>		
c. <u>x</u>	c	c	c		
d	d. <u>x</u>	d	d		
e	e	e	e		



## Scoring Key For INVULNERABILITY

## Scoring Key For MACHO

Situation 1	Situation 6	Situation 1	Situation 6		
a	a	a. <u> </u>	a		
b	b	b	b <u>x</u>		
c. <u>x</u>	c	c	c		
d	d. <u>x</u>	d	d		
e	e	e	e		
Situation 2	Situation 7	Situation 2	Situation 7		
a	a	a	a. <u>x</u>		
b <u>x</u>	b	b	b		
c	c. <u>x</u>	c	c		
d	d	d	d		
e	e	e. <u>x</u>	e		
Situation 3	Situation 8	Situation 3	Situation 8		
a <u>x</u>	a <u>x</u>	a	a		
b	b	b	b		
c	c	c	c		
d	d	d. <u>x</u>	d <u>x</u>		
e	e	e	e		
Situation 4	Situation 9	Situation 4	Situation 9		
a	a	a	a. <u>x</u>		
b	b	b	b		
c	c. <u> </u>	c. <u>x</u>	c		
d	d	d	d		
e. <u>x</u>	e	e	e		
Situation 5	Situation 10	Situation 5	Situation 10		
a	a	a	a		
b	b	b. <u>x</u>	b		
c	c	c	c. <u>x</u>		
d <u>x</u>	d	d	d		
e	e. <u>x</u>	e	e		



## Scoring Key For RESIGNATION

Situation 1	Situation 6				
a	a				
b	b				
c	c				
d. <u>x</u>	d				
e	e. <u>x</u>				
Situation 2	Situation 7				
a	a				
b	b				
c. <u>x</u>	c				
d	d <u>x</u>				
e	e				
Situation 3	Situation 8				
a	a				
b. <u>x</u>	b. <u>x</u>				
c	c				
d	d				
e	e				
Situation 4	Situation 9				
a <u>x</u>	a				
b	b				
c	c				
d	d				
e	e. <u>x</u>				
Situation 5	Situation 10				
a	a <u>x</u>				
b	b				
c	c				
d	d				
e. x	e.				



#### **PROFILE GRAPH**

Enter the raw scores obtained from each scoring key in the correct blank space on the Attitude inventory Totals Form. The sum of the five scores should equal 150. If it does not, go back and check your work. Next, look at the Hazardous Attitude Profile Graph. Notice that there are five columns, one for each of the raw scores. Place a mark on each line at the height that matches your score. Now, draw lines connecting the five marks.

ATTITUDE INVENTORY TOTALS		HAZARDOUS ATTITUDE PROFILE GRAPH						
		50						
Anti-Authority								
		40						
Impulsivity								
		30						
Invulnerability								
		20						
Macho								
		10						
Resignation								
		0						
TOTAL			Anti- Authority	Impul- sivity	Invulner- ability	Macho	Resig- nation	

#### PROFILE EXPLANATION

You now have a profile graph which indicates the comparative strength of each of the five hazardous attitudes for you. The higher the relative number, the greater the likelihood that you will respond with that hazardous attitude. Keep the results in mind as you read further.

If you have not already done so, look back at your profile to see which hazardous attitudes most often matched your own thinking when you answered the questions. This shows which patterns you tend to use when your judgement becomes influenced by hazardous thinking. The inventory does not show that you are bound to act in the manner of one or more of the hazardous thoughts,. Having thoughts similar to the ones described is common and normal. But as you progress in your flight training, you will find yourself thinking fewer and fewer hazardous thoughts as you become able to identify and counteract them. The important thing to learn is to balance all your thoughts against possible outcomes so that you act only in a safe manner.

A critical part of your training, then, is learning to examine your own thinking and control hazardous attitudes. Whether you now engage in one or more of these thought patterns often or only rarely, learning to control them will be worthwhile; you will become a safer pilot the less often you act upon a hazardous thought. When you work on all five attitudes in the next section, pay particular attention to the ones on which you scored the highest.



#### IDENTIFYING HAZARDOUS THOUGHT PATTERNS

This portion is designed to help you identify and understand the five hazardous attitudes and to see how they can influence your reactions. As you recall, these attitudes are: anti-authority, impulsivity, invulnerability, macho, and resignation.

Following these instructions, you will find another series of situations. At the end of each situation, you will be asked to select an alternative which best illustrates the reactions of a pilot who is thinking a particular hazardous attitude. After you select what you feel is the best alternative, look immediately at the following response list for the proper response. This will tell you if your answer is correct or incorrect. If you answered correctly, go on to the next situation. If you answered incorrectly, you will be told why. Then, go back to the situation and select another alternative. Keep selecting alternatives until you select the correct one.

#### SAMPLE SITUATION

You arrive at the airport late, and decide to take off without cleaning the canopy. On final approach, you are barely able to see the landing area, due to the sun's glare on the dirty canopy. Which of the following alternatives best illustrates the anti-authority hazardous attitude?

- a. You feel that it's the lineman's job to clean the canopy.
- b. You refuse to clean the canopy because your flight instructor always insisted that you do so.
- c. You just wanted to get going—now!
- d. You feel that your vision is sharp enough to see through the dirty canopy.
- e. You've flown with a dirty canopy before without any problems.

#### SAMPLE SITUATION RESPONSE

#### Alternative a:

No. Assigning responsibility for cleaning the canopy to someone else is an example of the hazardous attitude resignation. Go back to the sample situation and select another alternative.

#### Alternative b:

This is the correct hazardous attitude involved. The pilot obviously resented the authority of the instructor.

#### **Alternative c:**

This is the impulsivity hazardous attitude. Go back and select another alternative.

#### Alternative d:

This clearly is an example of the macho hazardous attitude. Select another alternative.

#### Alternative e:

No. This is the invulnerability hazardous attitude. Just because you got away with it before doesn't mean you can get away with it again. Select another alternative.



#### THE ANTI-AUTHORITY HAZARDOUS ATTITUDE

You do not conduct a thorough preflight. On takeoff, you notice that the airspeed indicator is not working. Nevertheless, you continue the departure. You passenger fells strongly that you should discontinue the flight and return to the airfield. You then become upset with your friend. Which of the following alternatives best illustrates the anti-authority reaction?

- a. You tell your passenger to "cool it" for butting in.
- b. You start banging the indicator to get it working.
- c. You think that the preflight check is something thought up by bureaucrats just to waste a pilot's time.
- d. You tell the passenger that nothing dangerous will happen on the flight.
- e. Your passenger continues to become upset, but you do nothing, because you feel there is no use trying to calm the fellow down.

#### ANTI-AUTHORITY RESPONSE LIST

#### Alternative a:

By acting in a superior way, you are being macho. You are thinking, "I can do it." Reread the situation and select another alternative.

#### Alternative b:

By becoming upset and banging the airspeed indicator and by not thinking about the situation, you are being impulsive. You are telling yourself, "do something—quickly!" Reread the situation and select another alternative.

#### Alternative c:

You have correctly identified the hazardous attitude involved. Looking on rules and procedures as just a "waste of time" instead of taking them seriously is an indication of the anti-authority hazardous thought, "Don't tell me." Go on to the next situation.

#### Alternative d:

Thinking that nothing will happen to you illustrates the hazardous attitude of invulnerability, "It won't happen to me." Reread the situation and select another alternative.

#### Alternative e:

By assuming that what you do has no effect on the passenger, you are illustrating the resignation hazardous attitude, "What's the use?" Reread the situation and select another alternative.

#### A good attitude . . .

If your airspeed indicator is not "alive" on departure, abort and return to the departure area.



#### THE IMPULSIVITY HAZARDOUS ATTITUDE

As you enter the pattern, you normally lower the flaps. The tower suddenly changes the active runway. Distracted, you forget to use the before-landing checklist. On short final you find yourself dangerously low with a high sink rate. Glancing back, you realize that you forgot to extend the flaps. Which of the following options best illustrates the Impulsivity reaction

- a. You feel that nothing is going to happen because you've made intentional no flap landings before.
- b. You laugh and think, "Boy, this low approach will impress people on the ground."
- c. You think that using a checklist is a stupid requirement.
- d. You immediately grab the flap handle and add full flaps.
- e. You think, "Its all up to whether I get an updraft or downdraft now."

#### IMPULSIVITY RESPONSE LIST

#### Alternative a:

Feeling that nothing bad can happen suggests the invulnerability hazardous attitude. Select another alternative.

#### **Alternative b:**

When you are thinking about impressing people on the ground, watch out for the macho hazardous attitude. This can cost you dearly. Select another alternative

#### Alternative c:

Thinking that checklists are stupid suggests that you feel the aircraft designers, the government, and your instructor – all of whom urge the use of checklists – are wrong. This suggests a "Don't tell me" reaction which is the anti-authority hazardous attitude. Select another alternative.

#### Alternative d:

Right! Immediately adding flaps without thinking about the consequences is an example of the impulsivity hazardous attitude. Unfortunately, this type of situation can lead to settling with power and a possible emergency. Go on to the next situation.

#### Alternative e:

The answer is not blowing in the wind, this implies hazardous attitude resignation, "What's the use." Select another alternative.

#### A good attitude . . .

Distractions can be dangerous – always use your checklist!



#### THE INVULNERABILITY HAZARDOUS ATTITUDE

You are making a pleasure flight with a friend, who is drinking. You refuse to drink, but your friend reminds you that you have flown this route many times and that the weather conditions are excellent. He begins to mock you for not drinking with him. Which of the following alternatives best illustrates the invulnerability reaction?

- a. You decide to drink, thinking that a little liquor will not have any bad effect on you.
- b. You believe that the government is far too rigid in its regulations about drinking.
- c. You resent your friend's insults and start drinking, saying to yourself, "I'll show him."
- d. You bend to his will, saying to yourself, "If my time is up, it's up whether I drink or not."
- e. You suddenly decide to take a drink.

#### INVULNERABILITY RESPONSE LIST

#### Alternative a:

This is the correct response. Liquor affects everybody, and a pilot who believes that it will not affect him considers himself invulnerable. He thinks, "It won't happen to me." Go on to the next situation.

#### Alternative b:

Regarding the authority of the government as too rigid is one way of thinking, "Those rules are much more strict than they need to be, so I can disregard them." That is the hazardous attitude of anti-authority. Select another alternative.

#### Alternative c:

The desire to show somebody how great you are – the need to prove your self – represents the macho hazardous attitude, "I can do it." Select another alternative.

#### Alternative d:

You are thinking what will happen is determined by fate, that you have nothing to do with it. That is the resignation hazardous attitude. Select another alternative.

#### Alternative e:

The sudden decision to drink, omitting any serious thought about the situation, is an example of impulsivity, "Do something – quickly!" Select another alternative.

#### A good attitude . . .

If you drink, don't fly.



#### THE MACHO HAZARDOUS ATTITUDE

Visibility is just over one mile in fog and rain, with an intermittent 500-foot ceiling. Earlier visibility was 3 miles in fog, but takeoff has been delayed for 15 minutes due to rain and snow. Visibility is again deteriorating, and you wonder if you will be able to take off. Which of the following alternatives best describes the macho reaction?

- a. You feel that there is no use in checking the weather again because there is nothing you can do about it.
- b. You believe that you can take off in these conditions and think of how impressed your friends will be when they hear of it.
- c. You take off immediately, thinking that any further delay will worsen the problem.
- d. You reason that you can do it, because other pilots have done so and nothing happened to them.
- e. You resent being delayed 15 minutes and decide you are not going to heed the advice of the weather specialist.

#### MACHO RESPONSE LIST

#### Alternative a:

When a pilot does not see himself as affecting what happens, he is illustrating the hazardous attitude of resignation. He thinks, "What's the use?" Select another alternative.

#### **Alternative b:**

Absolutely! This is the correct hazardous attitude involved. You want to prove yourself, to show off, to have others think that you are great. This is the hazardous attitude of macho, "I can do it." Go on to the next situation.

#### Alternative c:

You take off immediately. No thinking; no planning; no looking ahead. Action without thought illustrates impulsivity. Select another alternative.

#### Alternative d:

When you think, "Nothing happened to them," you are really saying, "it won't happen to me." That is the hazardous attitude of invulnerability. Select another alternative.

#### Alternative e:

Pilots who resent using appropriate safety procedures because they are prescribed by some authority are illustrating the anti-authority hazardous attitude. "Don't tell me." Select another alternative.

#### A good attitude . . .

There are times when safety overrides desire and flying should be delayed until more favorable conditions exist.



#### THE RESIGNATION HAZARDOUS ATTITUDE

You would like to arrive early for an important business meeting. If you stick to your flight plan, you will just about make it, assuming there are no problems. Or, you can take a route over the mountains, which will get you there much earlier. If you choose the route through the mountain passes, it means you might encounter low-hanging clouds, while good weather prevails over the planned route. Which of the following alternatives best illustrates the resignation reaction?

- a. You take the mountain route, even though the weather briefer has advised against it.
- b. You take the mountain route, thinking that a few clouds in the passes will not cause any trouble for this flight.
- c. You feel it will be a real victory for you if you can take the mountain route and arrive early.
- d. You tell yourself that there is no sense sticking to the planned route because, "There's nothing else to do to be sure to make it early."
- e. You quickly choose the mountain route, deciding that you just must get there early.

#### RESIGNATION RESPONSE LIST

#### Alternative a:

Not accepting the advice of the weather briefer is an example of the hazardous attitude of antiauthority. Rules do not apply to me, "Don't tell me." Select another alternative.

#### **Alternative b:**

This illustrates the hazardous attitude of invulnerability, "It won't happen to me." Select another alternative.

#### **Alternative c:**

Vying for victory means you are trying to prove you are better than others, making the situation a personal challenge rather than a problem to be solved with care. This illustrates the macho hazardous attitude, "I can do it." Select another alternative.

#### Alternative d:

Correct! Well done—you have identified the hazardous attitude involved. Thinking that there is nothing you can do is an illustration of the hazardous attitude of resignation, "What's the use?"

#### Alternative e:

A quick decision, without careful thought or consideration of the consequences, illustrates impulsivity, "Do something—quickly!" Select another alternative.

#### A good attitude . . .

Low-hanging clouds and flying through mountain passes don't mix.



#### THE DECISION-MAKING PROCESS

A DECIDE model has been used in many disciplines foe a lot of years, but the FAA has been able to adapt this technique to fit flying scenarios. This should not be confused with a logic tree, which forces the participant to think in a robotic, unrealistic flow. Rather, it breaks down the natural thinking pattern to illustrate the steps involved in a decision-making process.

You'll find this to be an interesting and thought-provoking exercise for analyzing an accident. It can also be a valuable tool for evaluating how errors are made during the course of any flight.

#### The steps to take

- **D—Detect:** The pilot detects the fact that a change has occurred that requires attention.
- **E—Estimate:** The pilot estimates the significance of the change to the flight.
- **C—Choose:** The pilot chooses a safe outcome for the flight.
- **I—Identify:** The pilot identifies plausible actions to the change.
- **D—Do:** The pilot acts on the best options.
- **E—Evaluate:** The pilot evaluates the effect of the action on the change and on the progress of the flight.

