

CFI Bootcamp

Flight Instructor Training

WorkBook

-The New Industry Standard -
Miami Beach, Florida

REMOVE BEFORE FLIGHT!

Down

1. The teaching delivery method that is best for large groups.
2. A step in the Demonstration-Performance teaching
3. A well question has how many correct
6. An abbreviated term for a document that must be tested to for a certificate or rating
8. An abbreviation for a type of training that life problems or events for a student
9. One type of skill that is encompassed by
10. Using instructional aids increases this
12. A teaching skill that measures how a student is performing

6. Which delivery method uses lecture but then actively integrate students into the learning process

1. Multitasking is the simultaneous execution of _____ or more tasks.

2. Multitasking involves two different abilities that are a _____-switching and a _____ performance.

Left Brain	Right Brain
Responds well to verbal instruction	Responds well to demonstrated instructions
Likes to learn in step-by-step format	Likes to learn general concept and then specifics
	Prefers open

CFI Boot Camp - Flight Instructor Workbook



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South East, LLC

Foreword

This workbook is used in the Live and online course at CFI Boot Camp located at the Palo Alto Airport in Palo Alto, California (cfibootcamp.com)

There WILL be errors in the workbook as this is the first production version. To make it fair, if you send me any errors you find, I will send you the next version in iBook or Kindle for FREE. Just send me an email with the corrections to: mikeshiflett@cfibootcamp.com

Now, on with the current workbook: It is intended to fill in the blanks in the areas of knowledge a person studying for their Flight Instructor Certificate must know and master.

Most of the available training materials for Flight Instructor training are centered upon giving you information with some limited quizzing. Other efforts include oral exam guides filled with questions, answers, explanations and cited references.

This workbook is meant to provoke thought and consolidate information that you have learned and are learning. It is built in several parts. In most chapters there will be study questions that are meant to be answered as you read a particular chapter in a book or watch a video- also, in some chapters, you'll find scenario-based stories that need you to solve a problem buried within. Finally, in every chapter, there are multiple-choice questions to assess what you have learned. Through many of the chapters you will also find word-matching exercises to wire the right order of things in your brain-there are also crossword puzzles and word puzzles to help build your vocabulary and understanding in key areas. The scenarios and questions in the Fundamentals of Instructing chapters are oriented to align with the Aviation Instructor's Handbook chapter by chapter.

You will also find several flow charts that I designed to walk you through some of the most important steps a flight instructor has to do with regards to pilot training. These include; Soloing a student, letting them fly to other airports, determining what is needed to allow them to make cross-country flights; and there is even one to show you what to do to add a rating or category to an existing pilot certificate.

At the end of the book you'll also find a complete syllabus, organized for you to use as an independent instructor; and there is yet another section with a complete set of lesson plans that will integrate the syllabus to the lesson plans.

All in all, this is a powerful book that will help you master the material that gives so many such a hard time when studying for this certificate. I have been working on this workbook for a long time- it's been in my brain for years but finally it's come out and now can be read and used by everyone.

No matter where you are studying, which flight instructor you use or what other courseware you are using, this workbook will be your guide to understanding and re-enforcing what you know, and will help master the content by actually using it.



The bulk of this work was finished up while I have been visiting Coos Bay Oregon sitting in an RV in a marina called Charleston-it's a working fishing town, and I am here waiting for a very bad storm to come and go over the next day and a half. Fortunately, I upload all of my work to the cloud for safe keeping-I always write best when it's raining, so I'm ready to finish this now.

- Mike Shiflett (Coos Bay, Oregon – September 27, 2013 6:39pm)

Update:

The workbook has been updated to version 2.0, today August 26, 2016. It has new images, updated flow chart, updated lesson plans that include the new ACS elements on knowledge, skill and risk management. I also included selected ground training lesson plans on airspace, aerodynamics and more.

This version of the workbook has been in testing at CFI Boot Camp as well as other large schools to make it the strongest asset that you have while training for your Flight Instructor certificate.

I'm also happy to say that we have also ported the entire workbook to both the iBook and Kindle formats so you can get it from either the Apple store or Amazon.

- Mike Shiflett (CFI Boot Camp Campus, Palo Alto, CA – August 26, 2016)

Special thanks to:

This work is dedicated to many people. First there are my numerous CFI students who taught me what is important to teach them- Thank you Kedar and Kendall for your extended efforts in making your lesson plans and questions into a part of this.

Second, I want to thank Darlene Dunning at CSL San Jose for her words of wisdom and brilliant outlook on me. It helped me focus and get the job done.

Last, thanks to the full classes we have at CFI Boot Camp. Each class lets me update the workbook with better content and to fix any errors you find.

If you can find the time, join us for a live class. Its super fun and packed with content.

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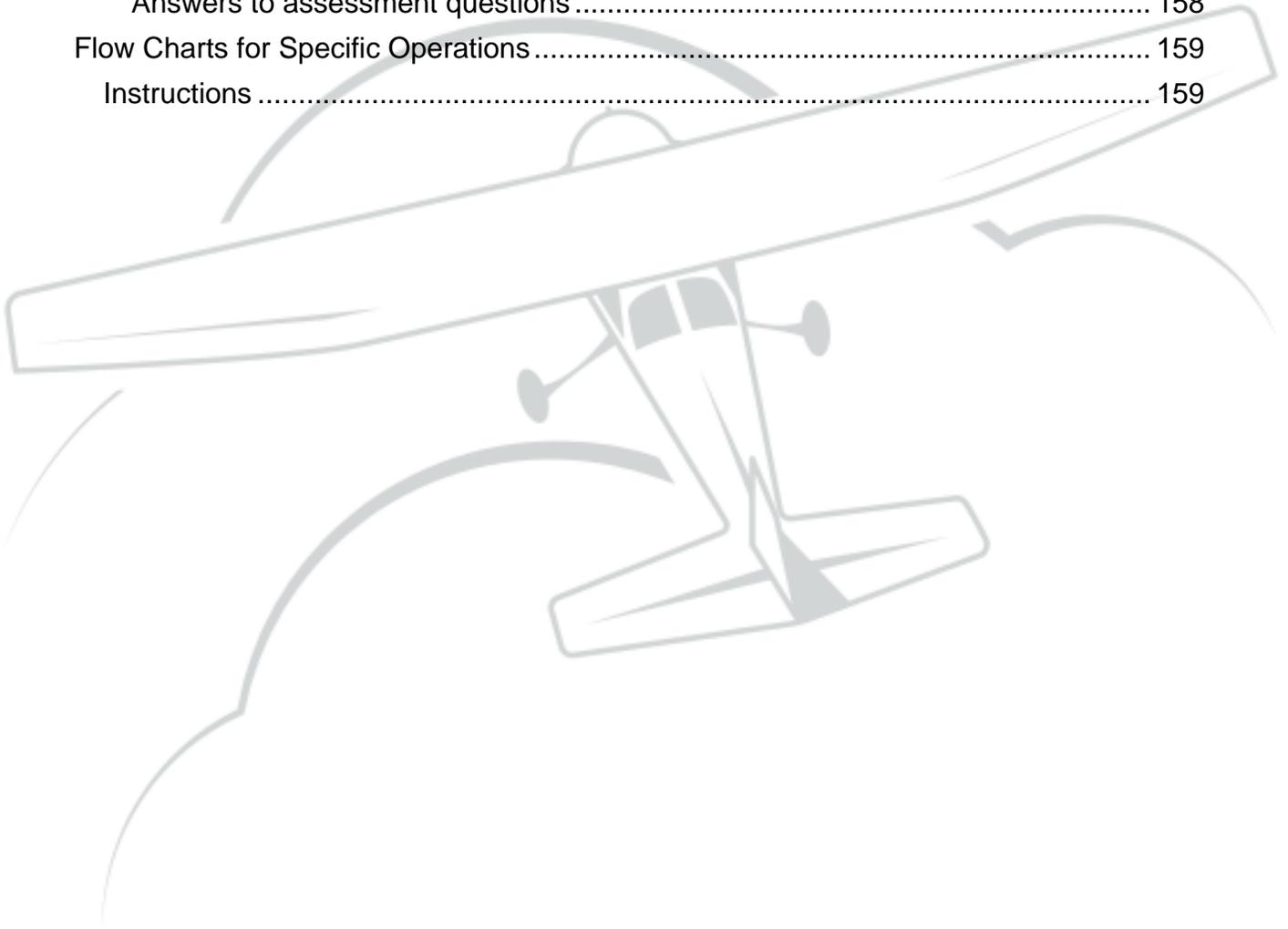
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Instructions

This workbook is intended to help you, the Flight Instructor student, apply and, when possible, correlate the large amount of information necessary to study for the Initial Flight Instructor practical test.

Although the workbook is primarily written for Initial Flight Instructor Airplane Single Engine students for land planes, much of the workbook can be used for other Flight Instructor ratings or initial certifications.

In particular, the Fundamentals of Instructing are relevant to all Initial Flight Instructor category and classes, regardless of which you are pursuing.

Part of the problem when studying is that there is a lot of reading and study to be done, and the only assessments currently available, until now, are the FAA Knowledge Test questions for Flight Instructor Airplane, and the Fundamentals of Instructing. This workbook allows you to study in a more intelligent way by providing thought-provoking study questions to use before and as you study a topic. After you've answered the study questions and read the material, there are scenario questions to help you apply what you've just learned. Finally, there is an assessment of each topic with multiple choice, fill in the blank, and matching questions to test that you know the material.

The workbook contains study questions, scenarios and assessments for each ground area in the Flight Instructor Airplane Practical Test Standard. The concentration of questions, scenarios and assessments is around the more difficult subjects like the Fundamentals of Instructing, and Regulations and Endorsements.

The Fundamentals of Instructing section of this workbook follows the Aviation Instructors' Handbook Chapter by Chapter. You should read the study questions first and attempt to answer any that you already know. Then, as you read the chapter, complete the questions when that topic is reached. This helps create more than one neural pathway to your brain to help you learn and remember. After you read the chapter and have completed the study questions, use the Scenario questions to help you grasp key concepts by using that information to solve the scenario. Finally, take the assessment test for that chapter and see how you are doing.

For the other technical subject areas in the Practical Test Standard, the study questions don't follow a particular book as there are several from which the information comes. The idea is to study the topic from the relevant FAA Handbooks by using the study questions and scenarios. The assessment will then help you determine whether you have mastered the material.



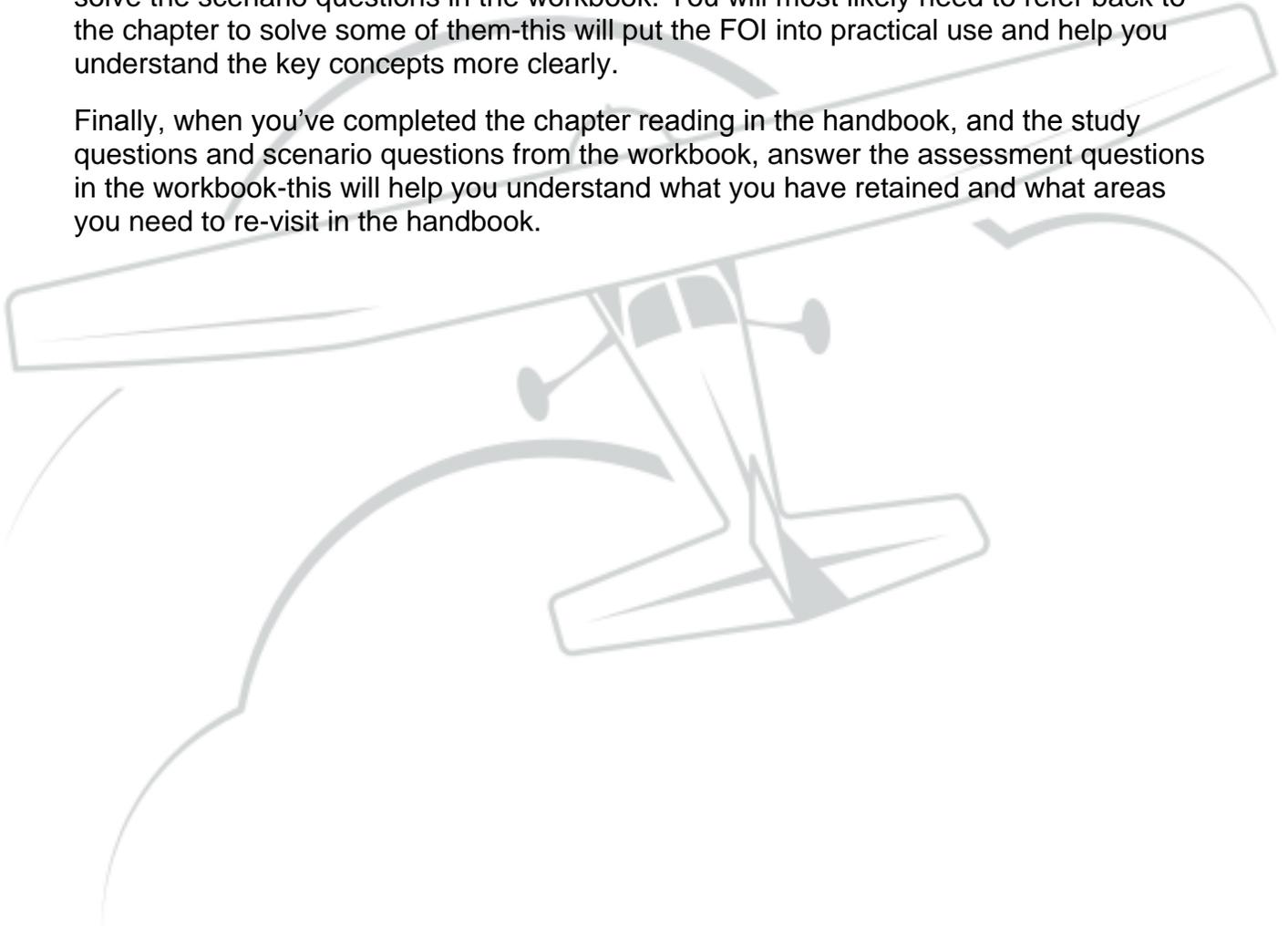
Fundamentals of Instructing

The workbook is aligned with the Aviation Instructors Handbook (FAA-H-8083-9).

Every chapter in the handbook is represented in the workbook. You should read the study questions before reading the chapter, then as you read the chapter complete these questions- this helps you remember what you've read.

After reading the chapter in the handbook and completing the study questions, try to solve the scenario questions in the workbook. You will most likely need to refer back to the chapter to solve some of them-this will put the FOI into practical use and help you understand the key concepts more clearly.

Finally, when you've completed the chapter reading in the handbook, and the study questions and scenario questions from the workbook, answer the assessment questions in the workbook-this will help you understand what you have retained and what areas you need to re-visit in the handbook.

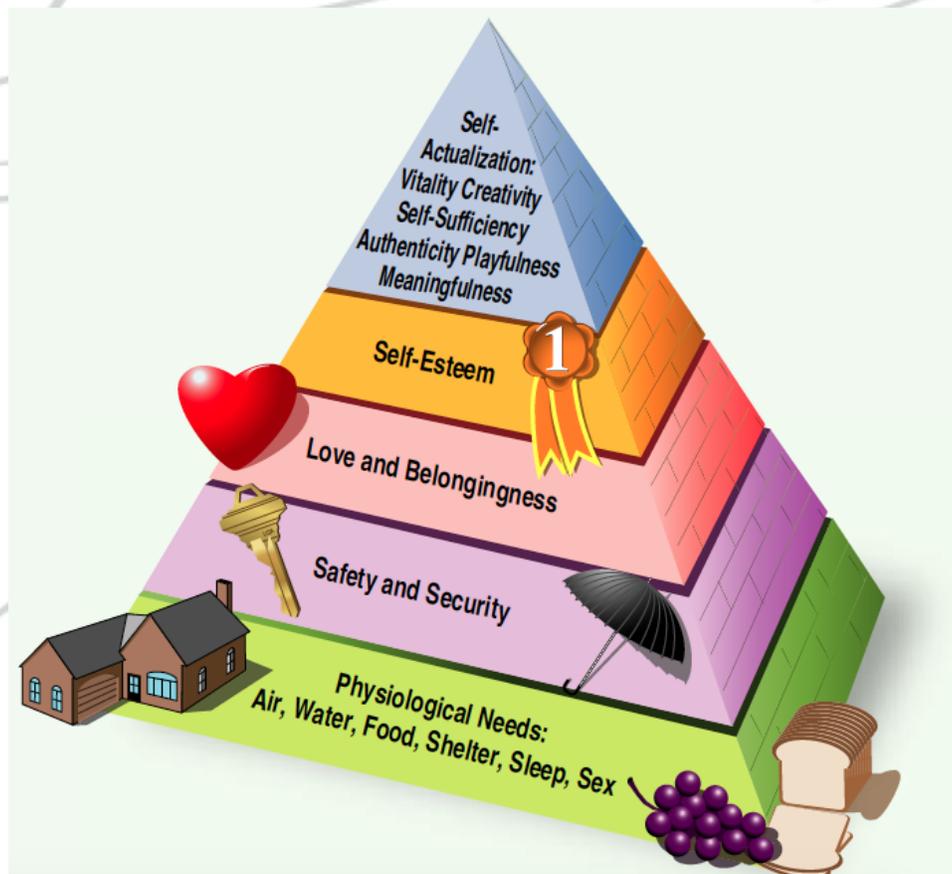


Chapter 1 – Human Behavior

Instructions

In this chapter there are study questions, scenarios and assessment questions. As you read the chapter and take notes, answer the study questions to help drive some of the key points home. After that, try to answer the scenarios so that you can apply this new knowledge. Finally, do the assessment questions to see how you've understood the material in this chapter.

At the end of the study questions there is a "Think about the following...." section. Here you will find some thought-provoking questions or proposed situations that will cause you to think more deeply about the contents of the chapter.



Human behavior: Study questions

1. Complete the pyramid of Maslow's hierarchy of needs from the bottom to the top.
2. Helen is a new student pilot. She is anxious when she flies with Larry about practicing stalls. Larry recognizes that this is a (circle one) normal/abnormal reaction to stress.
3. Consider the differences in motivation between Theory X and Theory Y.
4. Which of these theories tends to infer that humans are generally self-motivated and not lazy?
5. Think about when defense mechanisms are automatically activated in the mind. It is when the brain can't solve the problem or can't _____.

Think about the following:

- Put yourself in an instructional moment with a student in the air. Imagine that they are not doing well at the maneuver you have just taught them. Try to verbalize each defense mechanism the student may try to use. When thinking about how they will react, keep in mind that they are actually displaying a defense mechanism to you.
- Think about a job you have or had and which theory (X, or Y) your manager used in motivating you to do something. Was it necessary at the time, or would the other theory have worked on you given your situation and motivation at that moment?



Connect The Matching Pairs By Drawing A Line Between Them:

Name: _____

Date: _____

Human Behavior

- | | |
|--|---|
| 1. Element of Maslow's Hierarchy of needs - | - Self-actulization |
| 2. A defense mechanism - | - Over-cooperation |
| 3. Placing unacceptable impulses onto someone else - | - People are lazy |
| 4. When a student is trying to hard to please or perform - | - Love and Belongingness |
| 5. Unconscious shift from original object to a more acceptable one - | - Have the student fly with another instructor for evaluation |
| 6. Refusal to accept external reality - | - Anxiety |
| 7. Theory X - | - Displacement |
| 8. Theory Y - | - Repression |
| 9. Highest Hierarchy of need - | - Rationalization |
| 10. Justifying actions that would otherwise be unacceptable - | - People learn to accept responsibility |
| 11. Common student emotional reaction - | - Projection |
| 12. Adult learners are mostly - | - Denial |
| 13. An action to be taken if abnormal behavior is suspected is - | - Compensation |
| 14. Counterbalancing weakness in one area for strengths in another - | - Abnormal reaction to stress |
| 15. Marked changes in mood from lesson to lesson is indicative of - | - Goal oriented |



Teacher's Answer Sheet

TEACHER ANSWER SHEET

Human Behavior

1.	Element of Maslow's Hierarchy of needs	Love and Belongingness
2.	A defense mechanism	Repression
3.	Placing unacceptable Impulses onto someone else	Projection
4.	When a student is trying to hard to please or perform	Over-cooperation
5.	Unconscious shift from original object to a more acceptable one	Displacement
6.	Refusal to accept external reality	Denial
7.	Theory X	People are lazy
8.	Theory Y	People learn to accept responsibility
9.	Highest Hierarchy of need	Self-actulization
10.	Justifying actions that would otherwise be unacceptable	Rationalization
11.	Common student emotional reaction	Anxiety
12.	Adult learners are mostly	Goal oriented
13.	An action to be taken if abnormal behavior is suspected is	Have the student fly with another instructor for evaluation
14.	Counterbalancing weakness in one area for strengths in another	Compensation
15.	Marked changes in mood from lesson to lesson is indicative of	Abnormal reaction to stress



Human behavior: Scenario questions

1. Matt has a friend, Fred, who also wants to learn to fly. Matt brings Fred to introduce him to Larry, Matt's instructor. Matt and Larry are making a flight so that Matt can practice stalls. Fred goes along on the flight with Matt and Larry. During the flight Fred is fine until Matt performs a power-on stall. The wing dropped and Fred got nervous and made an unsettling sound from the back seat. The flight is terminated early so that Fred will feel more comfortable. This flight was to both let Matt practice stalls and to introduce Fred to flying. It seems to have failed at both due to the instructor not thinking about Maslow's hierarchy of needs. Where did it go wrong with Fred?
2. In order for Fred to progress he needs help to lose his fear of performing stalls. Everything is fine until he actually tries to stall the airplane. He freezes up and can't go on. It's as if he forgets how to do the procedure at that moment. What theory of forgetting is he most likely experiencing?
3. Matt is being evaluated today on how he meets the Private Pilot Practical Test Standards on steep turns. It's a little turbulent, considered by most pilots to be light. Nigel, the instructor performing the evaluation, tells Matt to perform a 360° turn to the left, roll out, and then perform a 360° turn to the right. Matt enters the turn and loses 250 feet during the first turn, and then loses 300 feet on the turn to the right, but rolls out on heading correctly. Nigel informs Matt that the altitude tolerances were exceeded in both turns. Matt says "I could have held altitude perfectly if it hadn't been for the turbulence". Nigel determines the turbulence is not causing Matt to lose altitude, but rather Matt's lack of elevator backpressure. What defense mechanism is Matt displaying?
4. Fred is up for his evaluation on steep turns with Nigel, the evaluation instructor. During the steep turns Fred loses 300 feet in both directions, and misses the roll-out, heading in both directions by 20°. After the maneuver is over Fred quickly offers this statement about his performance: "My steep turns aren't the best, but I'm dead-on with slow flight. I'm kind of happy about that because I'll be using slow flight when I land the plane, but won't need to worry much about steep turns". What defense mechanism is Fred displaying to Nigel?
5. After more instruction, Fred is again being evaluated on steep turns with Nigel. This time Fred performs better, but still is almost 200 feet off the altitude in the steep turn to the left. This time Fred says to Nigel: "I wish I had an instructor who could really teach me steep turns. My CFI is the lowest level CFI the school has. No wonder I can't do a steep turn to the right". What defense mechanism is Fred displaying to Nigel?
6. Back at the flight school Fred is daydreaming about how awesome his steep turns are going to be this time around. He knows that he needs to get past this evaluation to be recommended for the Private Pilot Practical Test. He knows he is supposed to read up on the aerodynamics of turning flight that his instructor assigned yesterday for the lesson later on today; but Fred is picturing how he



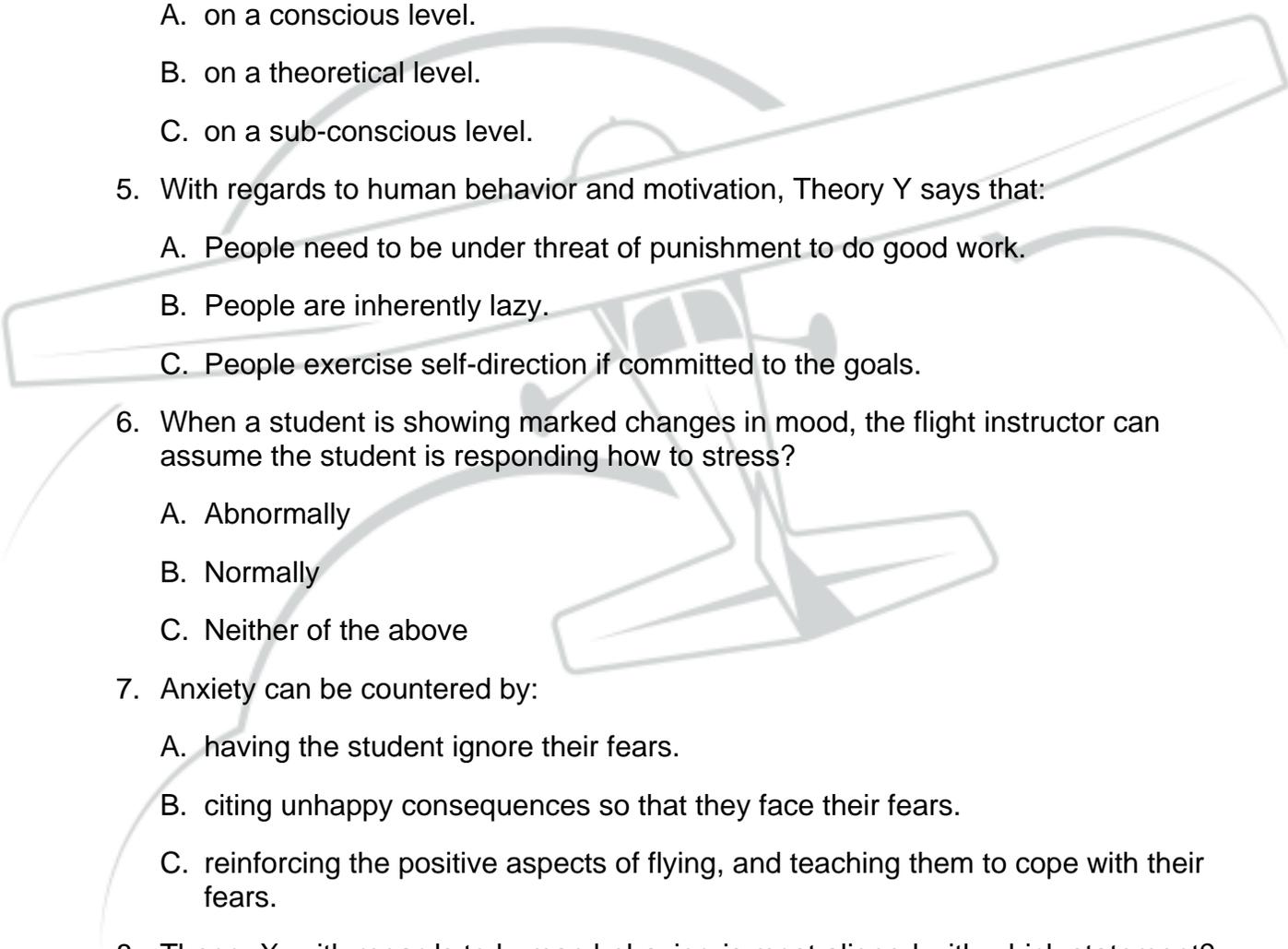
passes the Private Pilot Test, and takes up his student pilot friend David for a flight. What defense mechanism is Fred displaying?

7. Fred is angry about not passing the evaluation because of his performance on steep turns. Nigel says that Fred only needs to bring that task to standards and he will be recommended for the Private Pilot Practical Test, but for now he has not passed the steep turns section of the evaluation. Fred wants to voice his displeasure about this to Nigel, but fears Nigel may make him do even more tasks next time if he says anything. So Fred goes back to his room and yells at his roommate. What defense mechanism is Fred showing now?
8. Helen is learning about power-on stalls today. In the air Larry demonstrates a few to her, and notices that she appears very anxious. When Larry tells Helen to perform a power-on stall herself, she begins by verbalizing the procedure in an effort to maintain her self-control. As the stall occurs she starts laughing a little while saying "it's stalling now, it's stalling now". Helen is having a(n) (circle one) normal / abnormal reaction to stress.
9. Charles is being evaluated by Nigel for an Instrument Rating. Larry tells Nigel that he thinks Charles is too dependent upon the GPS and the VOR approach; he should turn it off and have Charles fly the approach using two VORs. During the flight, Nigel has Charles set up for the VOR approach. As Charles starts the turn to the final approach segment, Nigel switches off the GPS. Charles rolls the wings level and begins yelling at Nigel saying, "OK, I see how it is. Larry is setting me up to fail with you. He continues to voice his anger at Nigel and Larry until they get back to the flight school. Charles is demonstrating a (n) (circle one) normal / abnormal reaction to stress.
10. One difference between an adult learner and a younger learner is that the adult learner wants learning to be (circle one) non-personalized / problem-oriented and the younger learner may need (circle one) (structured training / non-structured training).

Human behavior: Assessment questions

1. Fred continues to struggle with steep turns. He confides in Nigel that he really doesn't care how people think of his performance doing them. What defense mechanism is Fred displaying?
2. Which statement is true regarding a student's normal reaction to stress?
 - A. Students tend to over-cooperate.
 - B. Students tend to be angry at their instructor.
 - C. Students begin to respond rapidly and exactly within the limits of their experience and training.



- 
3. When a student feels afraid of performing stalls, what part of Maslow's Hierarchy of needs is not being met?
 - A. Physiological needs
 - B. Safety and security
 - C. Self-actualization
 4. Defense mechanisms are hard to self-realize because they tend to operate:
 - A. on a conscious level.
 - B. on a theoretical level.
 - C. on a sub-conscious level.
 5. With regards to human behavior and motivation, Theory Y says that:
 - A. People need to be under threat of punishment to do good work.
 - B. People are inherently lazy.
 - C. People exercise self-direction if committed to the goals.
 6. When a student is showing marked changes in mood, the flight instructor can assume the student is responding how to stress?
 - A. Abnormally
 - B. Normally
 - C. Neither of the above
 7. Anxiety can be countered by:
 - A. having the student ignore their fears.
 - B. citing unhappy consequences so that they face their fears.
 - C. reinforcing the positive aspects of flying, and teaching them to cope with their fears.
 8. Theory X, with regards to human behavior, is most aligned with which statement?
 - A. Work is as natural as play and rest.
 - B. People have a dislike for work and will avoid it whenever possible.
 - C. People love to work but not to have fun.

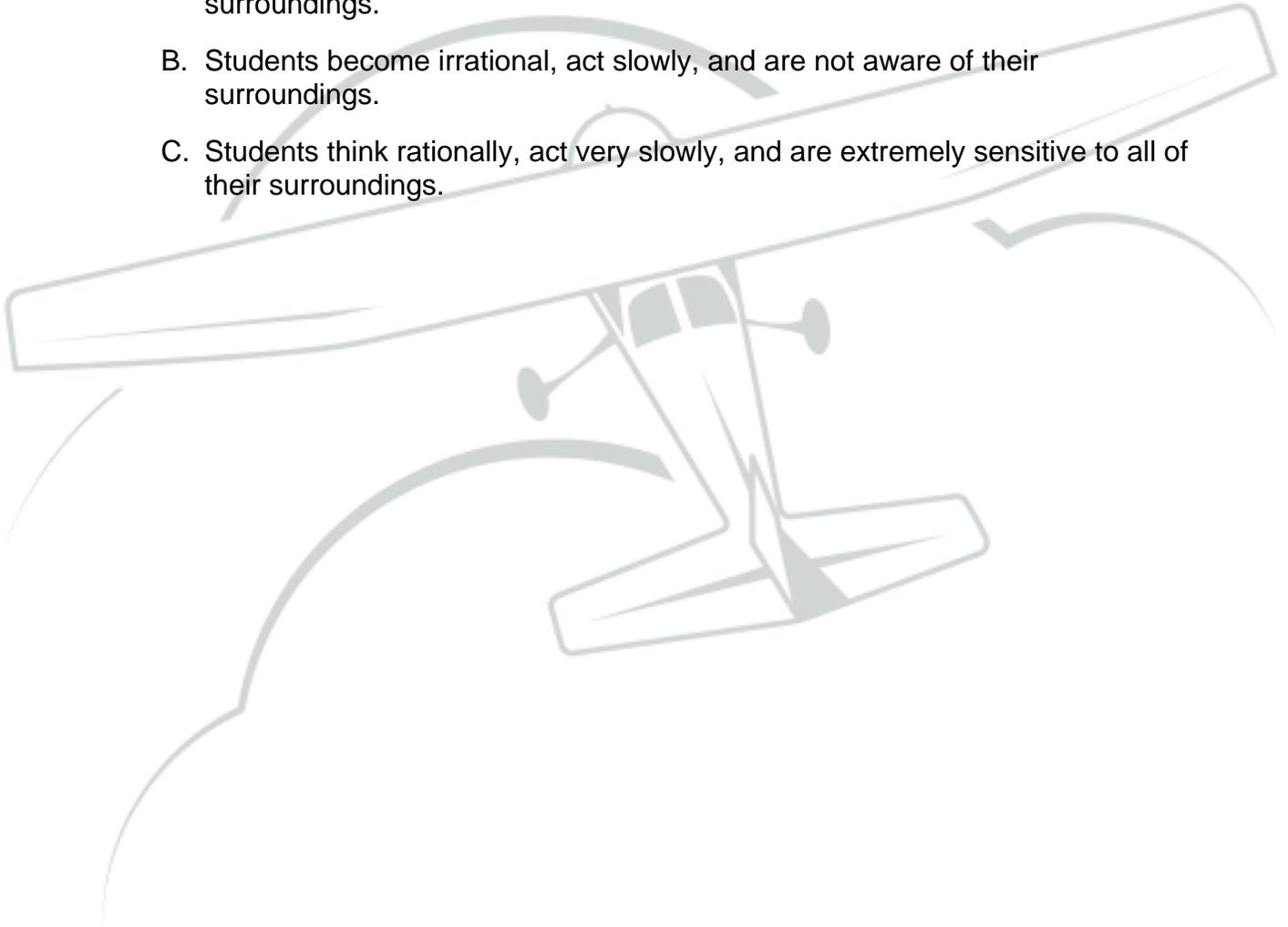


9. Which statement is true regarding adult learners?

- A. They are not goal-oriented.
- B. They are goal-oriented.
- C. They do not need to control the stop/start time or pace of a lesson.

10. Which of these statements is true regarding normal reactions to stress?

- A. Students think rationally, act rapidly and are extremely sensitive to all of their surroundings.
- B. Students become irrational, act slowly, and are not aware of their surroundings.
- C. Students think rationally, act very slowly, and are extremely sensitive to all of their surroundings.



Chapter 1 – Human behavior - Answer key

Answers to study questions

Physiological, Safety, Love and belonging, Self-esteem, Self-actualization	(REF: 1-1)
Normal	
Theory Y	(REF: 1-6)
Escape	(REF: 1-6)

Answers to scenario questions

1. Fred did not feel adequate safety or security (REF: 1-3)
2. Repression (REF: 1-7)
3. Rationalization (REF: 1-7)
4. Compensation (REF: 1-7)
5. Projection (REF: 1-7)
6. Fantasy (REF: 1-7)
7. Displacement (REF: 1-7)
8. Abnormal (REF: 1-9)
9. Abnormal (REF: 1-9)
10. problem-oriented / structured training (REF: 1-10)



Answers to assessment questions

1. Reaction formation (REF: 1-7)
2. C (REF:1-9)
3. B (REF: 1-4)
4. C (REF: 1-8)
5. C (REF 1-6)
6. A (REF:1-9)
7. C (REF: 1-8)
8. B (REF:1-5)
9. B (REF: 1-10)
10. A (REF: 1-9)

