



DSSTest

FAA Exam Study for Windows

The screenshot shows a software window titled "Private Pilot FAA Written Exam Prep". The window has a menu bar with "File", "Study", "Test", "History", "Options", and "Help". The main area is divided into a left pane showing a diagram of an altitude indicator and a right pane containing a question and three answer choices. The diagram shows a circular scale with a horizontal bar (B) and a miniature airplane (C) that has shifted from its zero position. A pointer (A) indicates the deflection of the scale. The question asks how to determine the direction of bank from such an indicator. The answer choices are: A - By the direction of deflection of the banking scale (A), B - By the direction of deflection of the horizon bar (B), and C - By the relationship of the miniature airplane (C) to the deflected horizon bar (B). The software interface includes navigation buttons for "Next", "Prev", "Blank", and "Mark", as well as a status bar at the bottom showing "Total Questions: 684", "Total Answered: 1", "Total Time: 00:03:24", and "Avg Time: 00:01:42".

(903) 583-0982

Email: ddeloach@msn.com

Web: <http://www.deloach.com>

Table of Contents

For Technical Support	2
Overview	3
Program Installation	4
Running the Program the First Time	8
Creating Study and Test Sessions	10
Using the Session Screen Controls	13
Reviewing and Printing Your Results	16
DSSCalc Flight Computer	19
Taking the Real Exam	22
Tools for Successful Exams	23
Legal Copyright and Software License	24

For Technical Support

How to reach us:

You can e-mail us on the Internet at **ddeloach@msn.com** for "same or next day" service (we check our mail every day).

For technical support by phone, call Darren evenings from 7:30 pm to 10:30 pm Central at **903-583-0982**.

You can always find the latest program updates on our World Wide Web site at **<http://www.deloach.com>**.

Other Great Software Products from DS&S!

DSSLog Pilot's Logbook for Windows

Darren and Jeanne DeLoach

DeLoach Sales & Software
RR 3 Box 71 C
Bonham, TX 75418-9733

World Wide Web:
<http://www.deloach.com>

Telephone: 903-583-0982

Email:
ddeloach@msn.com

Overview

Welcome to DSSTest, the fast track to passing your next FAA Knowledge Exam! Using DSSTest, you can create individualized Study sessions to reinforce your knowledge, then test yourself with randomly selected Test sessions to verify you are ready for the real thing. Using our software, you'll gain confidence in your ability to pass the written exam and take the next step in your flight training.

With DSSTest you will first use Study Sessions to drill yourself on the subject knowledge in each of the question topic sections. Then you'll do a number of Test Sessions to gain confidence in your knowledge of the subject material. Once you have passing scores on every Test Session you take, you'll know you are really ready for the final exam, and you are assured of passing!

Each time you do a Study or Test Session, your results are saved in a history file that you can view or print at any time. You should see steady improvement as you use the software; the history data will let you monitor your progress. Early in your studies, you will only be working with Study Sessions. As you progress, you should do more and more Test Sessions. When you can pass every Test Session with solid scores you can feel confident in your ability to pass the real test.

One important element of this software is the ability to view the diagrams and charts required to answer the questions on your screen; you won't have to waste time looking up the figures in your study guides. I am sure you'll agree this is a valuable component in using software-based study methods!

Optionally included in this version of DSSTest is our DSSCalc Flight Computer software. In addition to making your exam studies quick and easy, you'll also run it stand-alone for fast and accurate preflight computations!

This manual will give you all the information you need to get started studying for your upcoming FAA Knowledge Exam. After installing the software, you'll find more information in the on-line Help. Be sure to read through the Help file at least once, to get a feel for how everything fits together. You can always bring the Help file back up at any time using the "Help" menu on the main menu line of the program.

Program Installation

Before Running Setup

Before you install DSSTest, make sure your computer meets the following minimum PC requirements:

System Requirements

- An IBM PC-compatible, running Microsoft Windows 95, or Windows 3.1 or Windows for Workgroups 3.11 operating system in 386 Enhanced Mode
- 4 Megabytes of total RAM memory (or more)
- 6 Megabytes of free hard disk drive space (10 Meg for the Instrument Exam Database); 1.5 additional Megs are used during installation for temporary files.
- VGA Card and monitor (or better); 256 Color mode (or better) required to view some of the FAA diagrams (particularly the NOS Sectional Chart excerpts). DSSTest works in any screen resolution 640x480 or higher.

We welcome any comments you have on the installation and use of our software; future enhancements (and future pilots) depend on your feedback.

README.WRI File

IMPORTANT! There is a **README.WRI** file on Disk 1 in Microsoft Write format with special information about this release. This file contains a section on solutions to installation difficulties in addition to other information, so if you have any problems while installing use Windows Write (or WordPad for Windows 95 users) from the Accessories Group to read the file directly from the floppy disk.

Setting Up DSSTest

1. You should already be in Microsoft Windows. **CLOSE DOWN ALL OTHER APPLICATIONS** to avoid conflicts during installation.

2. Place Disk 1 in the appropriate 3.5" floppy disk drive, then:

- **Windows 3.1/3.11:** From Program Manager, select the "File" menu option, then select the "Run" option.
- **Windows 95:** Click the "Start" button then choose "Run"
- **All users:** On the "Command Line" field, type "A:SETUP" (substitute the correct floppy drive letter for "A:" if needed).

3. The Setup program will initially copy several startup files to your hard disk. **Windows 95 users note:** Just after you start the installation, a message box warning of being unable to copy file **DDEML.DL_** because it is already in use may display on your screen. Click on the OK button and continue installing—the message is informational only, and is NOT A PROBLEM for a Windows 95 installation.

4. The drive selection dialog is displayed. You must type in the drive and path to which you want to install the software. The default is "C:\DSSTEST", but you may type in any drive letter and path you desire. Click on the "Continue" button.

5. The program will copy a number of files to your chosen drive and path as well as several files to your Windows System directory (see the list below for the affected files). You will be prompted for each disk in turn, one after the other, in order.

6. After you have fed in all disks, there will be a long pause as the program constructs the exam database. Next, the program will create a new Program Group called "DSSTest" with two icons, one for the DSSTest program and one for the On-Line Help. Two additional icons will also be added for the DSSCalc Flight Computer if included with the package.

7. IMPORTANT! For Windows 3.1 users only [NOT Windows 95 or Windows 3.11 for Workgroups]. One final check is performed on your system before the install program exits. The database engine used in our software requires that you have either the DOS program "SHARE" or the Windows program "VSHARE.386" loaded in order to run. If VSHARE is NOT detected, a dialog will display informing you of this and if possible, will offer to automatically add VSHARE.386 to your

Windows SYSTEM.INI file. If you answer “Yes”, a backup SYSTEM.OLD file is created, and the following entry is written into the [386Enh] section; **you’ll have to reboot your computer for the change to take effect:**

**[386Enh]
device=VSHARE.386**

You may manually add the entry if desired. The VSHARE.386 solution only works if you are running Windows in 386 Enhanced mode (this is true if you have at least a 386 processor and at least 2 Meg of RAM). If you are unable to use VSHARE.386, you may instead use the DOS SHARE command. **This is the least recommended solution**, and should only be used if you absolutely cannot run VSHARE.386. To use SHARE instead, in your AUTOEXEC.BAT file, place a line which reads:

SHARE /L:500

and reboot your PC.

8. Be sure you read the on-line documentation when you’re first trying out the software for specific details about each dialog.

Files Installed By DSSTest

In the installation directory:

- **DSSTEST.EXE, DSSTEST.HLP** — the DSSTest program and on-line Help files
- **DSSCALC.EXE, DSSCALC.HLP** — DSSCalc program and on-line Help files (optional)
- **DSSUSER.MDB** — user options database
- **DSS??.MDB** — FAA Exam databases
- ***.LDB** — Small files created and used by the database engine; you may delete these if necessary, they will be recreated the next time you run the program.

In your Windows directory:

- **DSSAV8N.INI** — INI file used by all DS&S applications.

In your Windows System directory:

- **CMDIALOG.VBX, MSOUTLIN.VBX, THREEED.VBX, KNIFE.VBX, PICBTN1.VBX, MSAES110.DLL, MSAJT110.DLL, VBDB300.DLL, VBRUN300.DLL, IMK.DLL** — shared tools and DLLs; other applications you own may also use some of these files.
- **VSHARE.386** — Windows substitute for the DOS SHARE program; works Windows 386 enhanced mode only.

No modifications are made to any of your boot or Windows configuration files (except for adding VSHARE.386 to SYSTEM.INI in some Windows 3.1 cases).

Network Installation Issues

The license allows for network installation (see the on-line help file). In a “shared” Windows setup, you may have a problem copying setup files to the shared directory unless you have rights to create and write files in the shared Windows directory. The installation program will report the possibility, you can attempt to continue the install or get the help of your System Administrator. Note that files listed above as going to your Windows System directory are instead installed into your local Windows directory, which may conflict with older versions of the VBX or DLL files located in the shared Windows directory.

Installing and Using Multiple Exam Databases

You can use DSSTest with more than one Exam database. Install all exams into the DSSTest program directory. To change databases:

1. Select the “File” then “Open” menu option.
2. The Open File common dialog is displayed. Locate the desired database. All DSSTest databases are named "DSS" followed by two letters, with an extension of ".MDB".
3. Choose the OK button to open the new file, or the Cancel button to abort the operation and return to the old file.

Note: Whenever you start the program, it will automatically open the most recently used database.

Running the Program the First Time

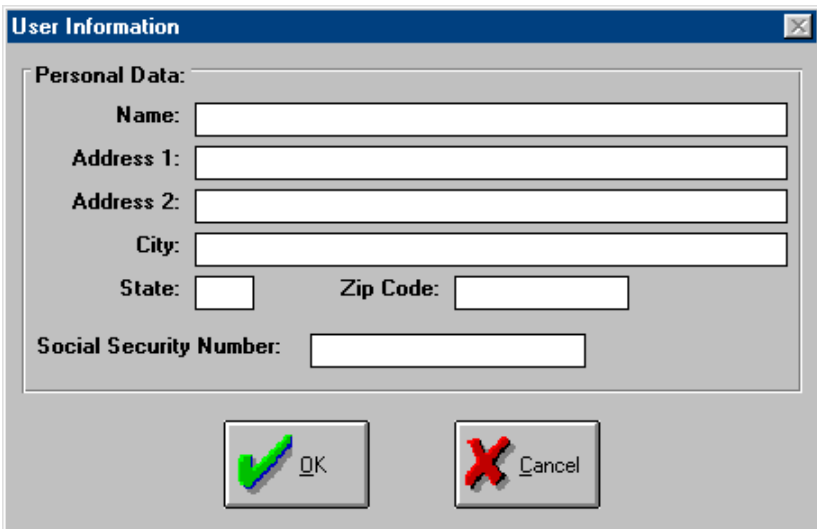
The first time you start up the program, there are a few things you need to do before you begin your studies. These options represent items which will rarely need changing after you have set them up.

Personal Information Dialog

This information is used only to print out Sign-off letters for your instructor to sign to allow you to take the exam.

1. Select the **“Options”** menu option on the top menu line.
2. Select the **“User Info”** option on the Options pop-up menu.
3. The **User Information dialog** is displayed (see figure below).
4. Choose the **“OK”** button to save your data, or the **“Cancel”** button to abort the operation.

Here's a diagram of the User Information dialog:



The image shows a screenshot of a Windows-style dialog box titled "User Information". The dialog box has a blue title bar with a close button (X) in the top right corner. The main content area is titled "Personal Data:" and contains several input fields for user information:

- Name:** A single-line text input field.
- Address 1:** A single-line text input field.
- Address 2:** A single-line text input field.
- City:** A single-line text input field.
- State:** A small, empty text input field.
- Zip Code:** A single-line text input field.
- Social Security Number:** A single-line text input field.

At the bottom of the dialog box, there are two buttons:

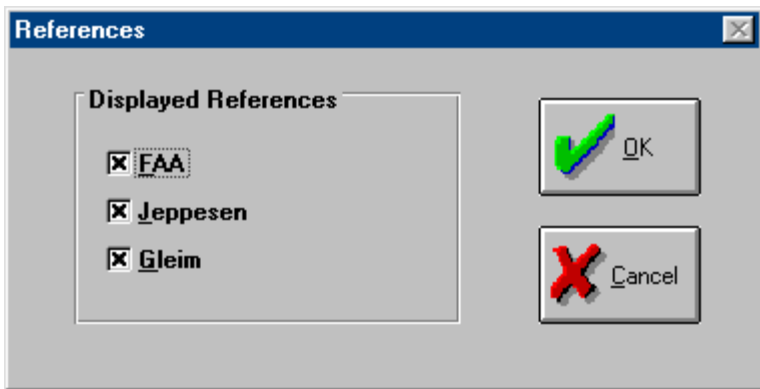
- OK:** A button with a green checkmark icon and the text "OK".
- Cancel:** A button with a red X icon and the text "Cancel".

Question References Dialog

When you answer a question incorrectly, the software will give you references to look up to get more information about the question topic. This dialog allows you to select which references are given (if any). To get to the Question References Dialog:

1. Select the **“Options”** menu option on the top menu line.
2. Select the **“References”** option on the Options pop-up menu.
3. The References dialog is displayed (see figure below).
4. Click on the checkbox for each reference you want displayed.
5. Choose the **“OK”** button to save your choices, or the **“Cancel”** button to abort the operation.

Here's a diagram of the References dialog:



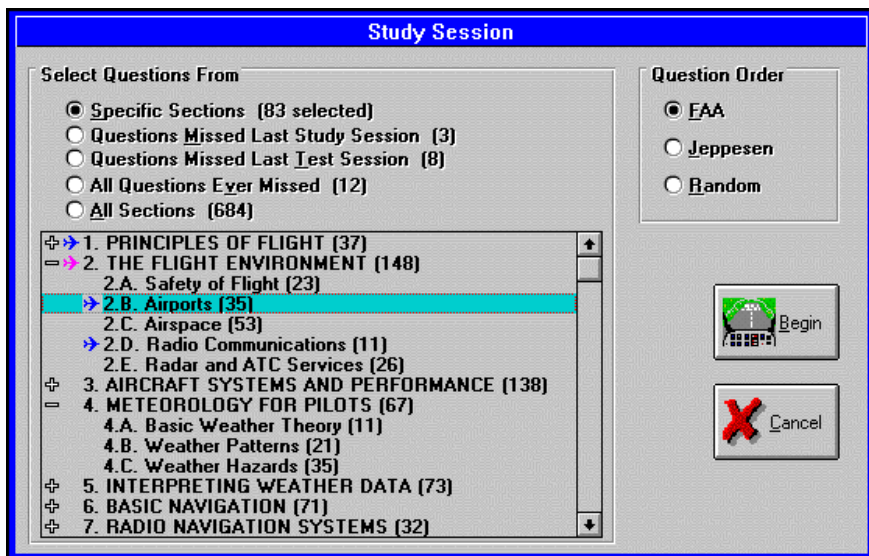
Creating Study and Test Sessions

Creating a Study Session

Before you test your knowledge in Test Sessions, you'll first drill the exam questions in Study Sessions. You can select specific areas of knowledge to study each session, so that you can work on the areas which need the most study. To create a Study Session:

1. Select the “**Study**” menu option on the top menu line.
2. Select the “**New Session**” option on the Study pop-up menu.
3. The Study Session dialog is displayed (see figure below).
4. Choose the “**Begin**” button to begin your study, or the “Cancel” button to abort the operation. Go to Section V, “Using the Session Screen Controls” for information on how to complete your Study Session.

Here's a diagram of the Study Session dialog:



The Question Selection Frame

The five radio buttons in the “Select Questions From” frame allow you to select the questions used in your study session from one of five possibilities. After each available option, a number in parentheses lets you know how many questions are represented by the given selection. The possible choices are:

- a. Specific Sections:** Use the Study Topic Outline Window to select specific chapters or subchapters.
- b. Questions Missed Last Study Session:** Selects only those questions you missed on your first answer attempt during the most recent Study Session.
- c. Questions Missed Last Test Session:** Selects only those questions you missed on your first answer attempt during the most recent Test Session.
- d. All Questions Ever Missed:** Selects all of the questions you have ever missed in ANY study or test session. Remember that this option will be affected by the Purge History menu option since purging also deletes the list of missed questions.
- e. All Sections:** Selects all of the questions in the database.

The Study Topic Outline

Using the Topic Outline, you can target your Study Session for one or more specific areas of study. The Outline mirrors the Jeppesen Study Guide for the particular test you are working on. Using the Outline, you can select whole chapters from the Study Guide or specific subchapters— you can even mix-and-match subchapters from different chapters! There are four basic operations you can do with the Outline:

- a. “Open”** a chapter to view the subchapters beneath it in the outline. With a mouse: click on the “+” symbol on the left side of the chapter heading. With the keyboard: highlight the chapter text using the arrow keys, then press the “plus” (+) key.
- b. “Close”** a chapter to hide the subchapters beneath it in the outline. With a mouse: click on the “-” symbol on the left side of the chapter heading. With the keyboard: highlight the chapter text using the arrow keys, then press the “minus” (-) key.

c. **Select** a whole chapter or a subchapter to study. With a mouse: click on the text of the chapter or subchapter. A small airplane symbol appears, marking selected sections. This is a toggle; click again to “deselect” a section. With the keyboard: highlight the section text using the arrow keys, then press the spacebar. This is a toggle; press spacebar again to “deselect” a section.

At the Chapter level of the outline, a **blue** airplane represents a chapter with ALL of its sections selected, while a **purple** airplane denotes a chapter which has one or more sections unselected (i.e. the chapter is partially rather than completely selected).

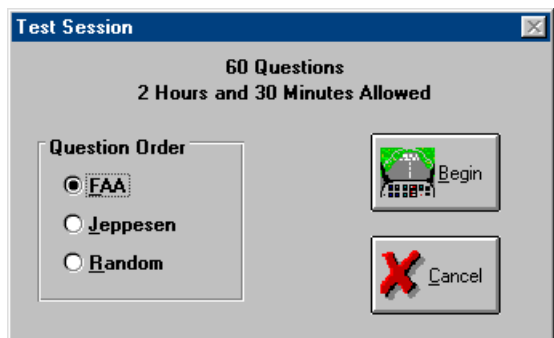
d. **Scroll** the Outline, using the Topic Outline Scrollbar.

Creating a Test Session

After you have mastered the material contained in the study sessions, you are ready to try sample tests to confirm your knowledge. The tests are constructed from the question base; selection is “semi-random”, in that within a subject area questions are chosen randomly, but all subject areas are covered (just like the real FAA exams). To create a Test Session:

1. Select the “**Test**” menu option on the top menu line.
2. Select the “**New Session**” option on the Test pop-up menu.
3. The Test Session dialog is displayed (see figure below).
4. Choose the “**Begin**” button to begin your test, or the “Cancel” button to abort the operation. Go to Section V, “Using the Session Screen Controls” for information on how to complete your Test Session.

Here is a diagram of the Test Session dialog:



Using the Session Screen Controls

Private Pilot FAA Written Exam Prep

File Study Test History Options DSS Calc Help

QUESTION

[5] 3665. (Refer to figures 33 and 34.) Determine if the airplane weight and balance is within limits.

Front seat occupants 340 lb
 Rear seat occupants 295 lb
 Fuel (main wing tanks) 44 gal
 Baggage 56 lb

A - 20 pounds overweight, CG aft of aft limits.
 B - 20 pounds overweight, CG within limits.
 C - 20 pounds overweight, CG forward of forward limits.

Next Prev Blank Mark (1) Marked

Fig. 33 Fig. 34 + -

End Session Total Questions: 31 Total Answered: 1 Total Time: 00:01:01 Avg Time: 00:00:30

This is a sample screen you might see during a Study or Test Session. This diagram shows every possible screen control; on any particular question, not all of these items will be displayed. The screen is divided into two basic sections. On the left side is the Picture Window and its associated controls, and on the right side you see the Question & Answers and Navigation buttons.

The Picture Window

Figures and legends are displayed in the picture window. In addition to using the Picture Window Horizontal and Vertical Scroll bars to “pan” the picture and the Max-Min Button (the button with two arrows pointing up and down) to change the size of the viewing area, you can also:

a. **“Zoom” IN** on a picture without panning: With a mouse: click once with the left mouse button anywhere on the figure, or click the “+” button below the picture. With the keyboard: press

the "+" key, or select the "+" button with the tab key the press the button with your spacebar.

b. “Zoom” OUT on a picture without panning: With a mouse: double-click with the left mouse button anywhere on the figure, or click the "-" button below the picture. With the keyboard: press the "-" key, or select the "-" button with the tab key the press the button with your spacebar.

c. “Zoom” IN on a picture **with panning** to select a specific area: With a mouse: click once with the left mouse button at the top left corner of the area you want to select, then drag your mouse downwards; a selection box will appear to show you the selected area. Release the mouse button to select the area, or drag the mouse upwards above the corner you initially selected to cancel the zoom operation. With the keyboard: no keyboard interface for this!

d. Reset the picture to fill the window horizontally: With a mouse: click once with the **right mouse button** anywhere on the figure. With the keyboard: no keyboard interface for this!

All pictures initially start out zoomed so that the entire figure fits into the window; therefore most pictures will require you to zoom in on the figure to view any details of the picture. The "Max-Min" button enlarges the picture window to fill the screen for easier viewing of larger diagrams (right-click the picture after selecting this button to make the picture fill the window).

Questions which have more than one figure associated with them will also have an "Alternate Figure" button to swap between the various figures in the picture window.

The Question Window

Located in the upper right corner, this window displays the text of the FAA exam question. Most questions are short enough that the entire text of the question will fit in the window. Some longer questions, however, will require you to use the vertical scroll-bar to scroll the window text and view the undisplayed portion of the question. The text embedded in the frame at the top of the question gives you the current session question number in brackets (1 through the number of questions in this session), and the FAA Question Number (for example, the Private Pilot

questions are numbered beginning with 3001, Instrument Pilot with 5001, etc.).

The Answer Buttons

Located just below the Question Window are three answer buttons, “A” through “C”. Click one of these three buttons to select your answer (or press the “A”, “B” or “C” key on your keyboard). If your answer is correct, the next question will be displayed; otherwise, the “Wrong Answer” window will pop up. Once you have answered a question, the answer button you have chosen will be colored cyan anytime that question is subsequently displayed during the session.

The Navigation Buttons

Just below the three Answer buttons are the Question Navigation buttons, “Next” (next question), “Prev” (previous question), “>>Blank” (next unanswered question), “Mark” (place a “bookmark” on this question), “>>Marked” (jump to next bookmarked question), and “End Session” (end this session).

Note that you can simply press the underlined letter (the Alt key is NOT required) to select the corresponding button as well; for example, just press “N” for Next, “P” for Prev, etc. Of course, as with all Windows programs you can always tab to a button then press the spacebar to “click” it.

During your Session, first read the question, then click on one of the Answer buttons (A, B or C). You are not required to answer a question; you can skip it and come back later. The “Next” and “Previous” buttons let you navigate through the list of questions selected for the Study or Test Session. The “>>Blank” button will jump to the next unanswered question. Use the “Mark” and “>>Marked” buttons to place a “bookmark” on a question, and jump around among the bookmarked questions; this is especially useful when you want to skip a question for now and come back to it later. When you have answered all the questions (or as many as you plan on answering) you simply press the “End Session” button to stop the session and grade it.

Reviewing and Printing Your Results

Viewing the results of your most recent Study Session

You can view a detailed description of your most recent Study session as follows:

1. Select the “Study” menu option on the top menu line.
2. Select the “Previous Grade” option on the Study pop-up menu.
3. The Previous Study Session dialog is displayed.
4. Choose the OK button to close the dialog.

Viewing the results of your most recent Test Session

You can view a detailed description of your most recent Test session as follows:

1. Select the “Test” menu option on the top menu line.
2. Select the “Previous Grade” option on the Test pop-up menu.
3. The Previous Test Session dialog is displayed.
4. Choose the OK button to close the dialog.

Viewing a history list of all Sessions

You can view a list of all of your study and test sessions with their results as follows:

1. Select the “History” menu option on the top menu line.
2. Select the “Display” option on the History pop-up menu.
3. The Session History dialog is displayed.
4. If a vertical scrollbar is visible, you may use it to scroll the list to review all of the sessions. You can drag the scroll thumb, click anywhere within the scrollbar, or click on the arrows at either end of the scrollbar to scroll the list.
5. Choose the "Print" button to print a copy of your history, if

desired.

6. Choose the OK button to close the dialog.

Printing a history list of all Sessions

You can initiate printing of your session history either by:

1. Choose the “Print” button on the Session History dialog.

- OR -

2. Select the “File” menu option on the top menu line.

3. Select the “Print History” option on the File pop-up menu.

- THEN -

4. The Printer Setup common dialog is displayed. Select the desired printer and settings.

5. Press the OK button to print the history, or press the Cancel button to abort the process.

Purging (Deleting) the history list of all Sessions

You can delete your entire session history list as follows.

WARNING: Once your history is purged, it can never be recovered (though new sessions will build a new history)!

1. Select the “History” menu option on the top menu line.

2. Select the “Purge” option on the History pop-up menu.

3. You will be prompted to verify you really want to purge your history. Choose the “Yes” button to purge, or the “No” button to abort the purge.

Printing a Sign-Off Form

Many FAA Exams require approval of your CFI or CGI in order to be allowed to take the exam, for example the Private Pilot and Instrument Pilot exams. When you are ready to take the exam, you must print a sign-off form, have your instructor sign it, and take it with you to your chosen examination site. The Sign-off Form uses information you have entered in the User Information dialog (such as name, address, SSN, etc.).

To print a sign-off form:

- 1.** Be sure you have entered your personal data on the User Information dialog:
 - a.** Select the “Options” menu option on the top menu line.
 - b.** Select the “User Info” option to get the User Information dialog.
 - c.** Enter your personal data on the dialog, and press the OK button to save it.
- 2.** Select the “File” menu option on the top menu line.
- 3.** Select the “Print Sign-Off” option on the File pop-up menu.
- 4.** If no sign-off is required for your chosen database, a message box will inform you of this. No further action is required.
- 5.** The Printer Setup common dialog is displayed. Select the desired printer and settings.
- 6.** Press the OK button to print the form, or press the Cancel button to abort the process.
- 7.** Once you have printed your form, be sure your instructor signs it before you go to your chosen examination site!

DSSCalc Flight Computer

Welcome to DSSCalc, the fast and easy way to do everyday aviation computations! Using DSSCalc, you can quickly perform all of the usual preflight calculations on your own computer. If you are using DSSTest, our FAA Written Exam software for Windows, you'll like how easily you can work on study sessions with a real flight computer only a mouse click away!

DSSCalc works like a standard electronic flight computer. If you already own a Jeppesen Techstar electronic flight computer, you'll feel right at home with DSSCalc!

DSSCalc is actually two calculators in one: a standard "four-banger" calculator with +, -, *, / and % operators, and a menu-driven aviation computer with numerous aviation computations and conversions built-in.

You'll find more information about DSSCalc in the on-line Help. Be sure to read through the Help file at least once, to get a feel for how eveevverything fits together. You can always bring the Help file back up at any time using the "Help" menu on the main menu line of the program.

Starting DSSCalc

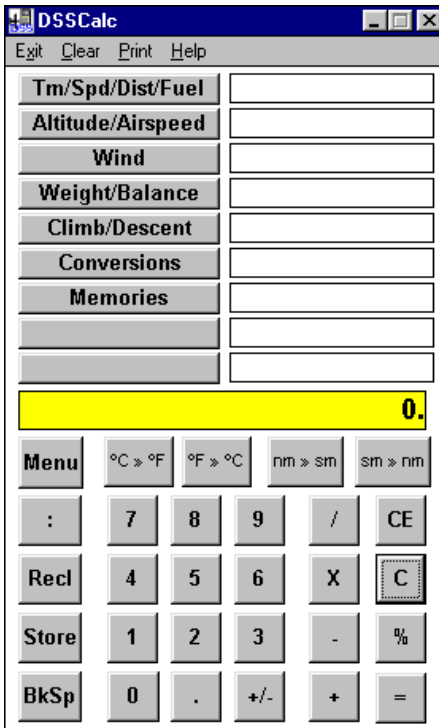
You can bring up DSSCalc in two different ways:

1. Click on the "DSSCalc" menu option on the top menu line of the DSSTest program.
2. You can also run it standalone. The installation program created an icon for DSSCalc in your DSSTest group when you ran the Setup program. Use DSSCalc for fast and accurate preflight computations!

The DSSCalc Program Window

The main program window consists of three areas: the menu at the top of the window, the aviation menu/computation menu buttons in the middle, and the calculator keys at the bottom:

There are only four **Menu** options required in DSSCalc:



- **Exit** — Quits out of the program.
- **Clear** — Clears all input and computed data from the aviation computation section (same as double-clicking the “C” Clear button).
- **Print** — Prints the current aviation computation to your default Windows printer.
- **Help** — Displays the On-line Help program documentation.

The **Aviation Computation menu** has nine buttons arranged vertically on the left side, and each button has an associated input/computed value window on the right side. These buttons represent a “menu” to guide you

through your computations; clicking a button will either select the described sub-menu, or copy the value in the calculator display (the yellow box) into the described problem input.

The **Calculator keys** are at the bottom, and work just like a regular hand-held calculator. Note that four conversion buttons along the top give you instant access to mileage and temperature conversions without going through the aviation menus. The “**Store**” and “**Recall**” buttons work on the ten independent memories numbered “0” through “9”; you can save numbers or time values. The “**Menu**” button is special: it will reset the Aviation Computation menu to the startup “main” menu where you can select the type of aviation problem you want to solve. Finally, the “:” button lets you enter time values in standard

“hh:mm:ss” format.

In actual practice, to perform aviation calculations you will:

- Click the Aviation Menu buttons to get to the correct problem entry screen.
- Enter numbers and times in the yellow calculator display, then click the menu button corresponding to the number you typed to enter the value into the aviation problem.
- Read the answers from the aviation menu. Computed values are displayed in blue, while your inputs are in black.

Keyboard Interface

You should also note that in addition to the obvious buttons which you can click with your mouse, there is also a keyboard interface for the calculator as well. Every button in the lower part of the screen has a key associated with it, and though there is no direct keystroke for the Menu buttons, you can still select them with the Tab key and "press" them using the spacebar. Of course, as with all Windows programs you can always tab to any button then press the spacebar to "click" it.

The number buttons use the associated number key as you would expect. The operator keys are "+", "-", "*" or "X" for multiplication, "/" for division, "%" and "=". "M" gets you the Main Menu, "S" and "R" do the Store and Recall Memory actions, "C" is the Clear key and "E" is the Clear Entry key, ":" or ";" is for time entry, the backspace key backspaces as you type, and the "Q" key quits the program.

Sample Problems

The On-line Help has a complete Sample Problems topic which walks you through each kind of aviation problem. Each problem gives you keystroke-by-keystroke instructions to perform each problem type. Be sure to work through each type of problem at least once, so that you get a good feel for how it all fits together!

Taking the Real Exam

First, for many FAA tests (such as the Private Pilot and Instrument Pilot) you must have authorization from your instructor to take the exam; this software can print a standard Sign-off Form to have your instructor sign.

If you have successfully completed a number of sample Test Sessions, you can be confident you will pass your exam: you have been working with the real questions from the FAA Written Test groups, your actual exam will be no different than what you have already studied.

There are several tools which are required for many exams, all of which you can purchase directly from your local dealer or directly from us at DeLoach Sales & Software; see the next page for more information.

What you should take to your exam:

1. A flight computer, either manual (CSG/E6B) or electronic (such as the Jeppesen Techstar).
2. A pocket calculator (not necessary if you have an electronic flight computer, as these also do standard computations as well).
3. Extra batteries for calculators (Murphy's Law applies here!).
4. A navigation plotter (Jeppesen PN-1 or equivalent).
5. Your sign-off form.
6. Picture identification of yourself with a signature and your actual residential address (drivers license, etc.).

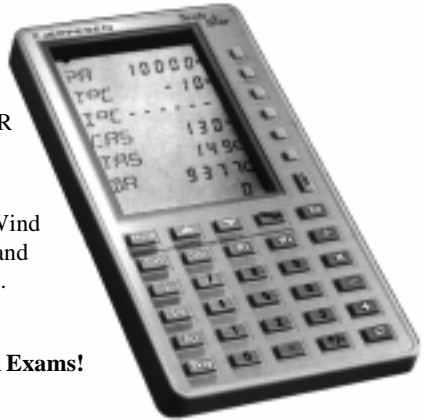
Pencils and scrap paper are supplied at the examination site.

Tools for Successful Exams

JEPPESEN TECHSTAR

No other handheld flight computer gives you this much capability! The Techstar features a menu-driven data entry screen, with easy-to-follow prompts for all required inputs. It comes in a small box with the unit, 4 AAA batteries, instructions and a small plastic cover. **Features:**

- Over 25 Aviation Calculations
- 55 Conversions (such as °F to °C, Statute Miles to Nautical Miles, etc.)
- 6 Independent Memories to save interim results
- Enter Values In Any Order— Change Them At Any Time!
- Easy-To-Use Menus Guide Your Inputs To Each Problem
- Weight And Balance ANY NUMBER of Items, Including Weight Shifts
- 5 Operating Modes: Time-Speed-Distance-Fuel, Altitude-Airspeed, Wind (heading, crosswinds, etc.), Weight and Balance, Timer (counts up or down).
- Three Year Warranty
- **Approved For Use on FAA Written Exams!**



You can purchase these items and more at your local pilot shop or directly from DeLoach Sales & Software.

Jeppesen Flight Computers: Both **Student** and **Metal Manual CSG Flight Computers** - Jeppesen's version of the venerable E6B, features a circular computer on one side and a sliding wind computer on the other.

Jeppesen Plotters: **PN-1** - Classic navigation plotter, WAC and Sectional scales in statute and nautical miles. **PJ-1** - Rotating azimuth plotter. True and magnetic courses are measured by simply rotating the azimuth dial instead of moving the whole plotter. **Folding** - Folds down to pocket size! All the features of a standard plotter (unfolds to 15 inches). Scales for WACs, Sectionals and TCA charts; measures in statute and nautical miles and kilometers.

Legal Copyright and Software License

This software and program documentation are Copyright © 1996 DeLoach Sales and Software. This software is a commercial product, and is NOT shareware, freeware, or public domain software.

No-Nonsense License

This software is covered by United States and international copyright laws. You must treat this software like a book, except that the software is licensed only to a single individual. You MAY install the software on more than one computer, so long as ONLY the individual user to whom the software is licensed uses the software.

Just as a single book cannot be read by two different persons in two locations at the same time, neither can this software be used by two different people simultaneously (either on a network of computers or by making more than one copy of the software), or in fact by anyone other than the individual user to whom the software is licensed, or you will be in violation of this license and copyright laws. You MAY make backup copies of the software for archival purposes only, but not to give away or sell to other users.

We aren't trying to place any undue restrictions on your usage of our software, but we expect you to be honest and not cheat our company (and my family) by making illegal copies of the software for your friends. We are an honest business, we charge a fair price for good software, we have in every way possible tried to be up-front with our customers, and we expect the same treatment in return.

If any of these License terms are objectionable to you, you may return the software for a full refund.