

INSTITUTE FOR INFORMATION TECHNOLOGY APPLICATIONS

United States Air Force Academy, Colorado

OPS TEST: Operational Test and Evaluation Support Tool

**Volume III:
Test-taker's Manual**

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Vol III: OPS TEST Test-Taker's Manual

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Introduction

What's is the Operational Test and Evaluation Support Tool (OPS TEST)?

The Operational Test and Evaluation Support Tool (OPS TEST) is an automated repository of training and evaluation test items and tests that was developed by the United States Air Force Academy's Institute for Information Technology Applications (IITA). It is made freely available to Department of Defense and other US Government agencies. This volume of OPS TEST documentation provides information on using OPS TEST for taking tests on-line. Specific test-taking functions provided are:

- Ability of crew members to take formal training and evaluation tests on-line with automatic grading and feedback to the test-taker.
- Ability of crew members to build on demand and take recurring training tests on-line with automatic grading and feedback to the test-taker.
- Ability of crew members to access the Master Question Files and build and take practice tests from these files with immediate feedback on each question.

Intended Audience

This manual is intended for the following audience:

- **Crew Members Taking Tests:** Member of the operations crews will use OPS TEST to take their formal training and evaluation tests as well as to access the Master Question Files on-line.

System Requirements

OPS TEST is an Access 97 application intended to run within a Microsoft Office 97 environment to include an installed version of Access 97. OPS TEST requires a Windows 95 capable personal computer, preferably a Pentium (or faster) with at least 16MB of main memory (RAM) and 3MB of available disk space. A monitor

running with a resolution of at least 800 X 600 is also assumed. Using a lower resolution will result in some forms not being fully displayed and accessible.

Overview

The OPS TEST consists of two primary areas: Administration and Test-Taking. This manual is specifically designed just for the test-taking component. A separate OPS TEST Administrator's Manual is available for information on the full range of OPS TEST capabilities and its configuration.

The crew member test-taking function is accessed via the Windows' START|PROGRAMS|OPS TEST TEST-TAKING menu. The main test-taking menu is shown as Figure 1.1. The first button provides access to the formal training and evaluation specific tests created for crew members. These tests are uniquely built for individual crew members and are password protected for security. When taking these tests, crew members are presented one test item at a time and are allowed to move back and forth through the entire test answering or not answering test items as they prefer. Specific buttons provide quick access to un-answered test items. When the test-taker has completed the test, they press a button to have it graded. If they have any un-answered test items, they are given the opportunity to go back and answer them prior to grading. Once the test-taker has the test graded, they are told their score and given the opportunity to review any test items they missed. This review shows them both their answer and the correct answer together with the associated reference and feedback information for the test item. Taking formal tests is documented in detail in Chapter 3.

The second option provides access to training tests that are designed to be created upon request. These tests have more flexibility in that they do not need to be built for specific individuals ahead of time and may be set to be re-entered multiple times. These training tests are documented in detail in Chapter 4.

The third test-taking option is for crew members to access the Master Question File (MQF) on-line. In this function, they are provided a query form to use in selecting test items from the MQF. They then answer these questions one at a time and are provided immediate feedback as to whether or not they correctly answered the test item. If they answered incorrectly, they are provided both associated references and the item's feedback information. They are also provided a final summary of their results to include an overall score for that set of test items. Detailed documentation on MQF test-taking is provided in Chapter 5.

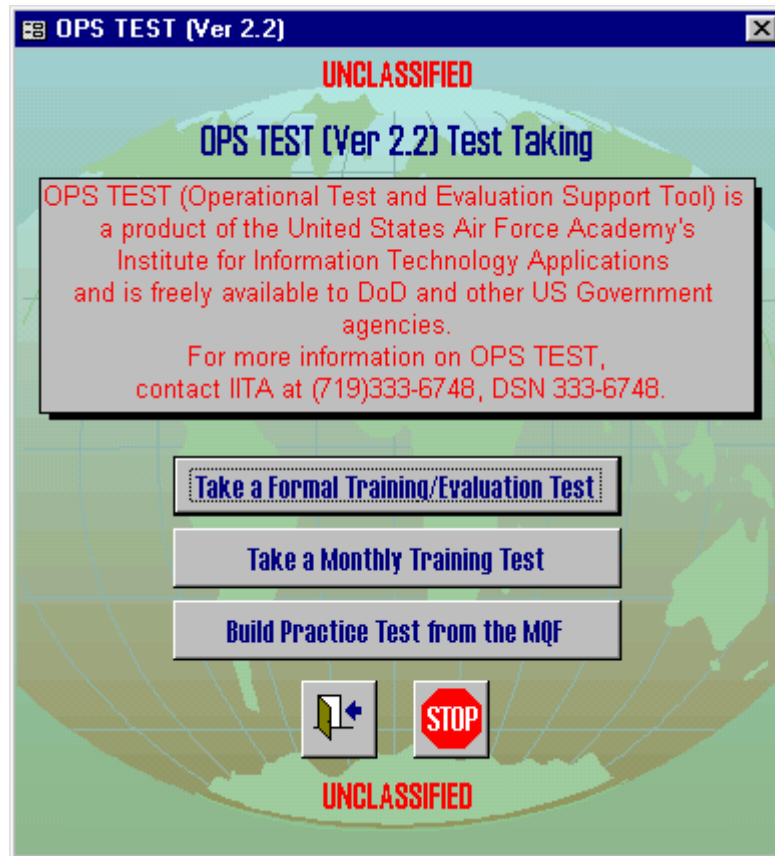


Figure 1.1: Main Test-Taking Menu

Installation Procedures

How do I get the OPS TEST Test-Taking up and running?

OPS TEST Test-Taking is a simple-to-install Access 97 application. The installation consists of a relatively small program loaded on each PC that will be used for test-taking. It automatically links to the OPS TEST database of tests and test items which is maintained by the OPS TEST Administration software documented in a separate manual.

These instructions assume that you have the OPS TEST database installed and configured on your network. If this is not the case, you need a testbank administrator to first perform the initial database installation and configuration procedures described in Chapter 10 of the OPS TEST Administrator's Manual.

OPS TEST Test-Taking Installation

Installation of OPS TEST Test-Taking can be accomplished using the installation compact disk (CD). To accomplish installation of OPS TEST Test-Taking via the CD use the instructions below:

1. Place the OPS TEST Test-Taking installation CD into your CD-ROM drive.
2. Select START|RUN from Windows and enter: "d:\TestTaking\Setup.exe" (replace the "d:" as appropriate if your CD-ROM uses a different device letter).
3. Select all the default options presented to you.
4. When you initially start up the OPS TEST Test-Taking program, you will be prompted for the location of the OPS TEST Backend Database. Your OPS TEST Administrator will provide you with this path/location. You may also be prompted for a password for the OPS TEST Backend Database. This also can be provided by your OPS TEST Administrator.

Formal Test Taking

How do crew members take formal training and evaluation tests on-line?

Formal training and evaluation tests can be taken on-line using the Specific Tests created by Test Administrators. These tests are specific to the crew member taking the test and have a password protection mechanism. Once the test administrator has created the test, they will give the test-taker the password. The test-taker will access the test via the instructions below and work through the test items in the test. When done with the test, the test-taker clicks on the a **Grade Test** button at which point the test is graded and the test-taker is given the opportunity to review and get feedback on any test item that they may have missed. If a test is interrupted once it has been started, the test-taker may not be able to get back into the test without the intervention of the Test Administrator to “reset” the test. This depends on whether the “Can Re-Enter?” box was checked for the test. Regardless, if the test has been graded, the Test-Taker cannot re-enter it without the test administrator’s assistance.

Starting a Formal Test

Once a crew member to be tested has been given the password to their test they can access the main Test-Taking menu shown in Figure 3.1.

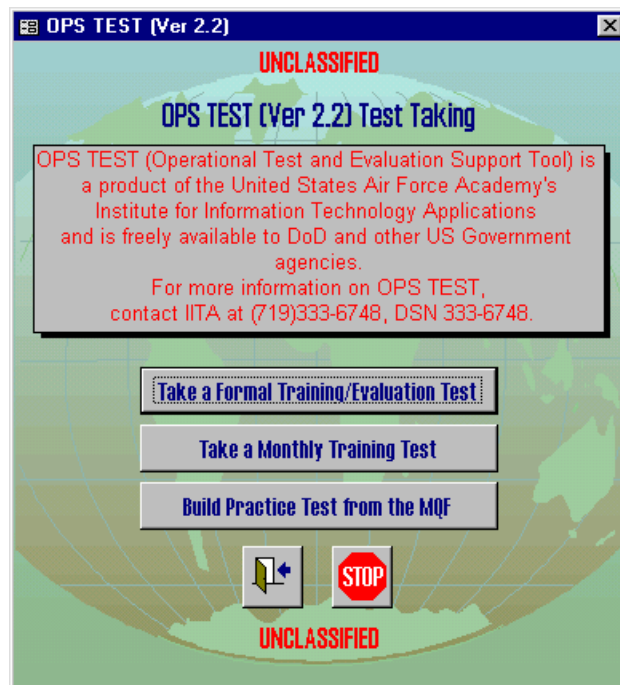


Figure 3.1: Open a Specific Formal Test

This can be accessed by the START|PROGRAMS|OPS TEST TEST-TAKING menu from Windows.

The test-taker then clicks on the **Take a Formal Training/Evaluation Test** button. This will cause a Begin Test form to come up as shown in Figure 3.2. You can then locate the "Test" in the pull-down menu, enter the provided password, and click the **Begin Test** button.

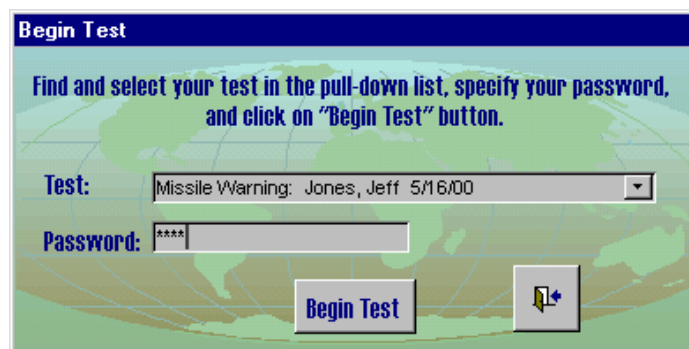


Figure 3.2: Selecting a Specific Formal Test to Open

Once the test has been successfully entered you will get the individual test items displayed one at a time via the Crew Member Test-Taking form shown in Figure 3.3.

Answering Formal Test Items

To answer a test item in a formal test, click on the appropriate radio button in the Answer Here selection box in the lower left corner of the form. You can move to the next test item using either of the right arrow buttons provided on the form. The first right arrow button (with the shadowed effect) takes you to the next unanswered test item. The plain right arrow takes you to the next test item regardless of whether or not it has been already answered. The left pointing arrow move you to previous test items and the one with the shadowed effect moves you to the next previous test item that has not yet been answered. If the test item has an associated multimedia clip, the **Play Multimedia** button will be available. Click on this button to have the multimedia clip played for your viewing. You may play the clip as many times as you like.

The screenshot shows a software window titled "MQF Test-Taking". At the top, it displays "# 6 of 14" and "UNCLASSIFIED" in red. The main area contains a test item: "(U/RC) The multimedia clip shows a liftoff of what NASA Manned Space Flight Program vehicle? (Click the PLAY MULTIMEDIA button below)". Below the question are four radio button options: A. Mercury, B. Gemini, C. Apollo, and D. Space Transportation System. To the right of the options is a video player window titled "EFFECTS" showing a rocket launch. At the bottom left, there is a "Your Answer" label and a row of four radio buttons labeled A, B, C, and D. At the bottom right, there is a "Play Multimedia" button and a small icon of a document with a plus sign.

Figure 3.3: Formal Test Taking Form

Once you have completed the test, click on the **Grade Test** button. If you have left any test items unanswered it will warn you and provide you a chance to go back and answer them prior to grading. Otherwise your test will be scored and your score presented to you. If you missed any test items, you will be given the opportunity to go back and review them.

When reviewing missed test items, you will not be able to change your answers but you can use the arrows to move through the missed items. With each missed test item

you will be provided the governing reference for that item and perhaps some additional feedback information about the test item.

Completing Formal Tests

After the test has been graded, per the instructions above, and any missed items optionally reviewed, simply close out of the remaining forms to exit OPS TEST Test-Taking.

Monthly Training Tests

How do you take the Monthly training Tests?

Crew members can use OPS TEST Test-Taking to take monthly training tests that are built for them by their training personnel. These tests are built upon request and some can be closed without being graded and then later re-entered with all the previous responses kept intact. The status and results of these tests are typically monitored by and reported to the training personnel.

Taking a Monthly Training Test

When a crew member wants to take a monthly training test, they can do so by clicking on the Take Monthly training Test button of the main Test-Taking form (seen as Figure 1.1). This can be accessed via the START|PROGRAMS|OPS TEST-TEST TAKING menu from Windows.

Clicking on the **Take Monthly Training Test** button on this main Test-Taking form brings up a form that allows the crew member to specify the test they wish to take, their name, and the password for the test (if one has been placed on the test). This same form is used to re-enter tests that were started but not completed. This form is shown in Figure 4.1 below. Once this information has been specified, click on the associated **Take Test** or **Re-Enter Test** button to access the test.

Generate or Re-Enter a Training Test

Start a new training test

Select test:

Your name:

Password:

Take Test

Re-enter an existing training test

Select Test:

Password:

Re-Enter Test

Figure 4.1: Selecting MQF Test Items

Answering Monthly Training Test Questions

Once you have gained access to the training test, the test items are displayed one at a time using the form shown in Figure 4.2 below. If there is a multimedia clip associated with the test item, the **Play Multimedia** button will be shown and you can click on it to play the clip as many times as you like. Answer the test items by selecting the appropriate response in the **Answer Here** selection box in the lower left corner of the form.

As with formal testing, you can move freely between test items using the arrow buttons. The ones with the shadows move to the previous/next un-answered item while the plain arrows move you to the immediate prior/next item.

Once you have answered all the questions, you can click on the **Grade Test** button to have your test scored. If you answered any questions incorrectly, you will be provided the opportunity to review them with the correct answer and some feedback text shown for you. Some test items also include hyperlinks to associated reference material.

If you wish to exit the test prior to completing it, you can click on the **Close Form** button. Depending on how the test was created, you may or may not be able to re-enter it later. If this option is not available on your test, you'll need to have your training test administrator reset the test for you.

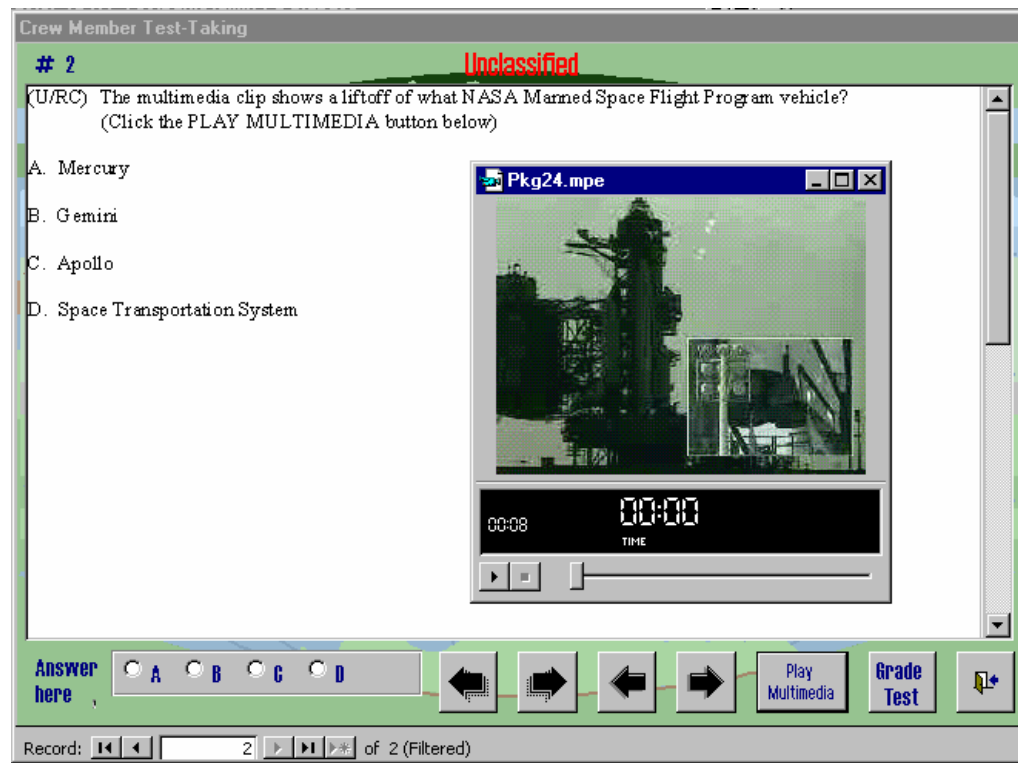


Figure 4.2: Answering Test Items

On-Line Access to Master Question File

How do you access the Master Question File to take practice tests on-line?

Crew members can use OPS TEST to call up practice test items from the Master Question File (MQF). Practice test items are retrieved via a query form. The crew member may answer as many or as few of the retrieved test questions as they wish. None of their responses will be recorded or can be traced back to them. As each retrieved MQF test item is answered, the test-taker is given immediate feedback as to whether they answered correctly or not. If they did not correctly answer, the test item is displaced with some additional reference information (including the correct answer) so they can learn the objective of the question. Upon completing a set of retrieved questions, an overall score for that set of test items is provided. At this point the crew member can either retrieve some more MQF test items or exit.

Selecting MQF Questions

When a crew member wishes to answer some practice test items from the MQF, they can access the main Test-Taking form (seen as Figure 1.1). This form can be accessed via the START|PROGRAMS|OPS TEST TEST-TAKING menu from Windows.

Clicking on the **Practice Test from the MQF** button on this main Test-Taking form brings up a query form that can be used to select questions from the MQF (see Figure 5.1 below). Several of the selection fields allow the use of wildcards (“?” and “*”) to substitute for one or many of any characters. You can also find current values for these fields using the pull-down lists provided. All specified criteria must be met by the test items returned. Clicking on the **Take Practice Test** button will retrieve the selected test items and display them one at a time to be answered.

Figure 5.1: Selecting MQF Test Items

Answering MQF Questions

Once test items have been retrieved from the MQF via the query form described above, they are displayed one at a time using the MQF Test Taking form shown in Figure 5.2 below. If a multimedia clip is associated with the test item, the **Play Multimedia** button will be shown and you can click on it as many times as you want to play the clip. Answer the test items by selecting the appropriate response in the Answer Here selection box in the lower left corner of the form. Your response will be immediately checked against the correct answer and you will be told if you got it right. If you missed it, you will be provided some feedback information on the question and what the correct answer is. You will also be provided with a hyperlink to an associated reference for some test items. Clicking on the link will open that reference up for you.

Once you have answered all the questions, you will be given a summary score for that set. You can then select more questions or simply exit out of the form(s) via the open door buttons in the lower right corner. None of your responses to MQF questions will be recorded or are trace-able back to you.

Figure 5.2: Answering MQF Test Items