

The seal of the Naval Operational Medicine Institute is a circular emblem. It features a blue outer ring with the text "NAVAL OPERATIONAL MEDICINE INSTITUTE" at the top and "PENSACOLA, FLORIDA" at the bottom. Inside the ring, there is a central illustration depicting a silhouette of a person standing on a ship's deck, looking out at a large aircraft carrier. A submarine is visible in the water below the ship. The entire seal is rendered in a light, semi-transparent blue color.

Web-Based Aptitude Test Administration for Naval Aviators

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Background

- Aviation Selection Test Battery (ASTB)
 - Aptitude/Knowledge battery used to select aviators since 1942
 - 5 subtests, 2.5 hours, 3 forms, mult choice
- Automated Pilot Exam (APEX)
 - Web-based version of same 3 forms
 - Proof of concept in 1998
 - APEX in use since 2003, current forms in use since July 2004

Details

- Installation
 - Installation cannot be initiated without a username, password, and auth code given by an administrator by phone
 - Small client app downloaded to hard-drive
- Access
 - License is tied to both the PC and the examiner
- Test Security
 - No test materials or test data stored on hard drive
 - Application monopolizes computer environment

Details

- Administration
 - Before a test begins, examiner searches our database for previous exam history
 - Item responses uploaded and item jpegs downloaded one at a time and erased following each answer
- Test Timing
 - Connection speed consistency is not guaranteed
 - Subtest timers stop while the next item is downloading
- Score Reporting
 - Scores reported instantly upon test completion, and an official scores document can be printed

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- Over 3,000 APEX exams have been given

Old Issues

- NMCI compatibility – worldwide intranet
- Scope creep
 - Requirements unrecognized until development underway
 - Administrative controls, search, & reporting procedures
- Culture shock
 - Examiners liked paper tests
 - Examiners do not like beta testing
- IRT-scaling in 2004
- Modality comparison

The Future

- Sharing with other services
- Capacity limit not yet reached
- Test content will soon include multimedia tests
 - Client PCs will need peripheral joysticks and headphones (supplied by us)
 - The Fable of Windows & measurement of units of time <1 sec