

JARPPPL is an examination management system which automates every part of the examination process including importing of the generating MCQ (Multiple Choice Questions) exams, automatic exam correction, storing results and producing reports.

## Product Overview

The main functionality of the system can be summarised as follows:

- Generate draft examinations by randomly or manually selecting questions from the central question databank
- Sign-off and prepress.
- Print individualised exam papers and solution sheets
- Maintain complete records of applicants (exam results, dates, etc.)
- Produce school, NAA and JAA pro forma reports.

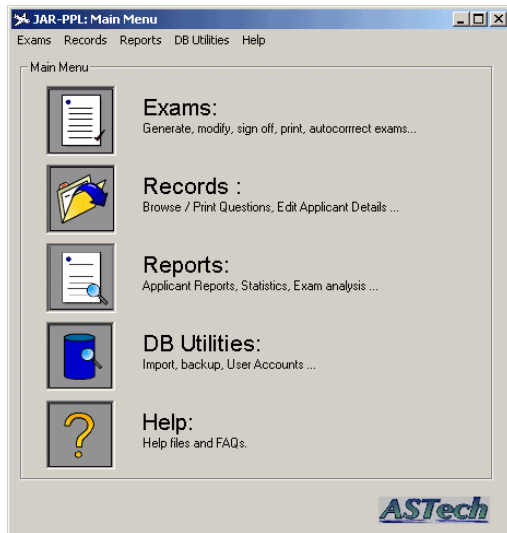


Figure 1: Main Menu

## Operation

ASTech's JARPPPL System provides an intuitive interface and incorporates a main menu allowing access to any of the functionality at any stage. An On-Line help file, accessible from the main menu, ensures that instructions on using the system are always accessible.

The following sections describe typical usage scenarios with the aid of sample screen shots of the user interface.

## Generating Exams

The steps involved in generating exams are as follows:

**1. Schedule a New Exam:** User sets the exam subject, date, time and duration.

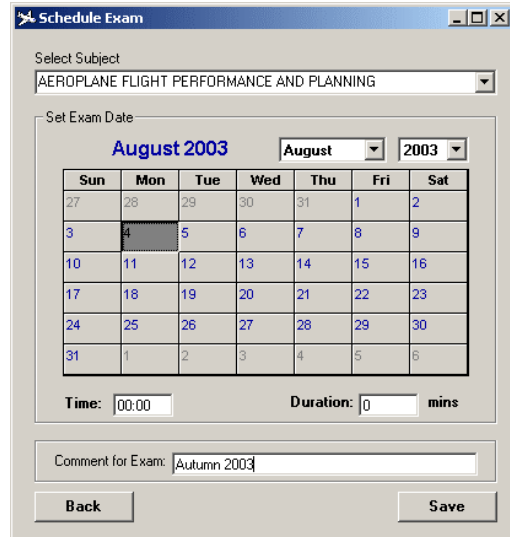


Figure 2: Setting Exam Details

**2. Select Exam Questions:** The system can randomly select suitable questions for a pre-saved examination or questions can be selected manually. Questions asked in the previous three exams are highlighted to avoid duplicating questions asked in recent exams.

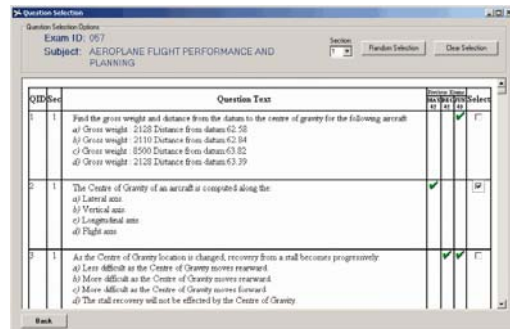


Figure 3: Question Selection

**3. Assigning Applicants:** The list of applicants assigned to sit an examination can be created or edited at any stage. The system provides a list of eligible applicants from which the list of applicants scheduled to sit the exam is assembled.

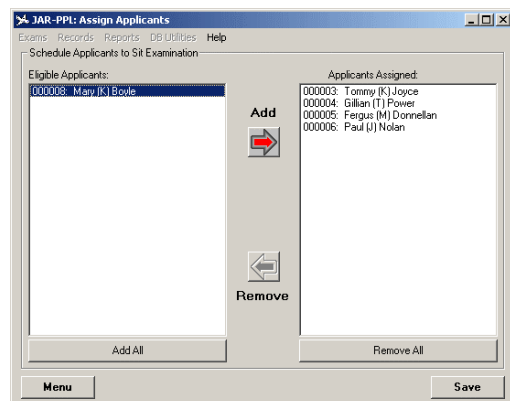


Figure 4: Assigning Applicants

**4. Publish Exam:** When exam questions have been selected and applicants assigned this utility allows the user generate exam question and solution papers for each applicant scheduled to sit the examination

## 5. Auto-Correction of Examinations:

ASTech's JARPPL System can be used with both manual and automatic correction. In the case of automatic correction an OMR (Optical Mark Reader) is used.

## Browsing Records

Utilities for browsing / printing records include:

**1. Question Browser:** The question browser (see Figure 5) allows viewing and editing of any question in the question bank.



Figure 5: Question Browser

**2. Maintaining Applicant Records:** The system includes utilities for viewing, adding, editing and deleting applicant records.

## Reports

Reports can be customised to highlight any aspect of exam or applicant records (e.g. How applicants performed in a particular exam or exam question).

Some sample reports are shown in Figure 6.

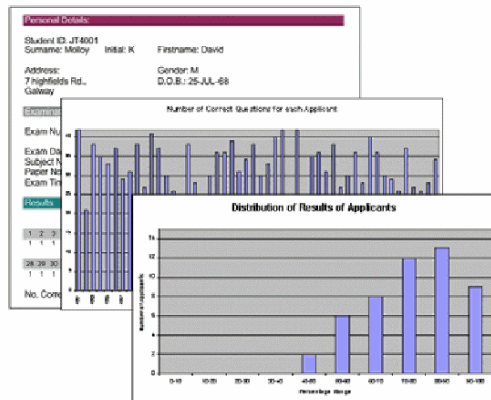


Figure 6: Sample Reports

## Hardware & Software

ASTech have extensive experience in delivering both paper based and on-line examination systems using a variety of hardware and software configurations. ASTech's recommendation for the system is as follows:

### Software

- NT or Windows 2000 Operating System.
- Industry standard SQL database (e.g. Oracle 8i or Microsoft-SQL Server Personal Edition).

- Visual BASIC (VB) front-end.
- IE 5+ for paper review.

### Hardware

- DELL Workstation
- RW CD-ROM (for backup)
- 17 inch monitor
- Lexmark Laser Printer
- Optical Scanner (include own graphics)
- OMR hardware

A schematic of the proposed system's architecture is shown in Figure 7.

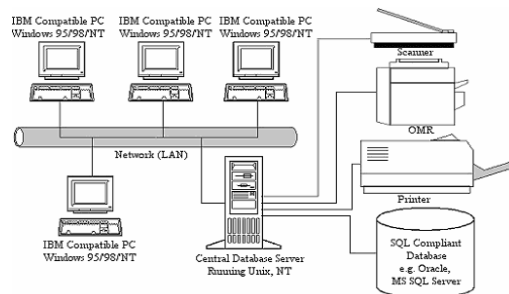


Figure 7: System Architecture

## Contact Us!

ASTech's experience in JAR examinations covers Basic, Type Specific and JAR-FCL type examinations. Our software has been used in successful national and JAA audits. Contact ASTech (Atlantic Simulation & Training Technologies Ltd.) using any of these means:

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