



Passport Control

Using Iris Recognition

*Heathrow Passenger Operations
Experience - Results and Lessons
Learned*

Evan Smith

EyeTicket Corporation
esmith@eyeticket.com



Heathrow SPT Trial

- Introduction
- Passenger Experience
- Operating Statistics
- Lessons Learned
- Achievements
- Questions and Discussion

Simplifying Passenger Travel (SPT): Aviation/Government/Industry initiative to expedite travelers using biometrics

Reservations/Ticketing, Check-in,
Baggage Check, Security Control,
Boarding, Immigration/Passport
Control, Hotel Check-in, Car Rental

(www.simplifying-travel.org)

Trial Overview:

- London Heathrow Airport
- Six months: Jan.-July 2002
- JetStream™ Travel Processing incorporating iris recognition
- UK Immigration, BAA, British Airways, Virgin Atlantic, and EyeTicket Corporation
- Enrolled travelers bypass immigration queue

How it works:

- On-line application
(www.eyeticket.com/jetstream)
- UK Immigration completes background check, approves application by e-mail.
- Traveler appears for one-time biometric registration and ID check.
- Traveler then permitted to bypass immigration queue and enter through JetStream™ gate, by merely looking into a video camera for two seconds.

On-Line Application



The screenshot shows the 'Eye Ticket' website header with a navigation menu including 'About EyeTicket', 'Passenger Processing', 'Access Control', 'Sports & Events', 'Technology', 'Press Room', and 'Gallery'. The main content area features the 'JetStream' logo and the text 'SIMPLIFYING PASSENGER TRAVEL' and 'ENROLLMENT FORM'. Below this, there is a link to 'Click HERE for answers to Frequently Asked Questions about the program.' and a paragraph of text explaining the trial of a biometric-based expedited immigration clearance system at London Heathrow Airport. The text states that the trial is limited to invited customers and is only for business or official purposes of six months or less. It also notes that the trial is only open to persons who are not European Economic Area citizens and who do not require a visa for the United Kingdom. At the bottom, there is a note that the following information is required by the United Kingdom Immigration Service to assess eligibility for expedited clearance into the United Kingdom during the period of this trial, and that all fields must be completed. The text also states that the details given are exactly as they appear in the passport and that any errors mean the user will not be able to enroll without resubmitting the form.

IMPORTANT: Enter Surname & ALL Given Name(s) exactly as shown on your

- Passenger submits data
- Immigration Service performs check
- Approval and registration instructions by e-mail



One-Time JetStream™ Registration



- Match Passport Data
- Collect Iris Data
- Verify Identity



Passenger Experience

Automated Entry

- Look into camera
- Take Leave-to-Enter card
- Proceed through gate



Film: The Heathrow Experience - high-volume public processing using iris recognition

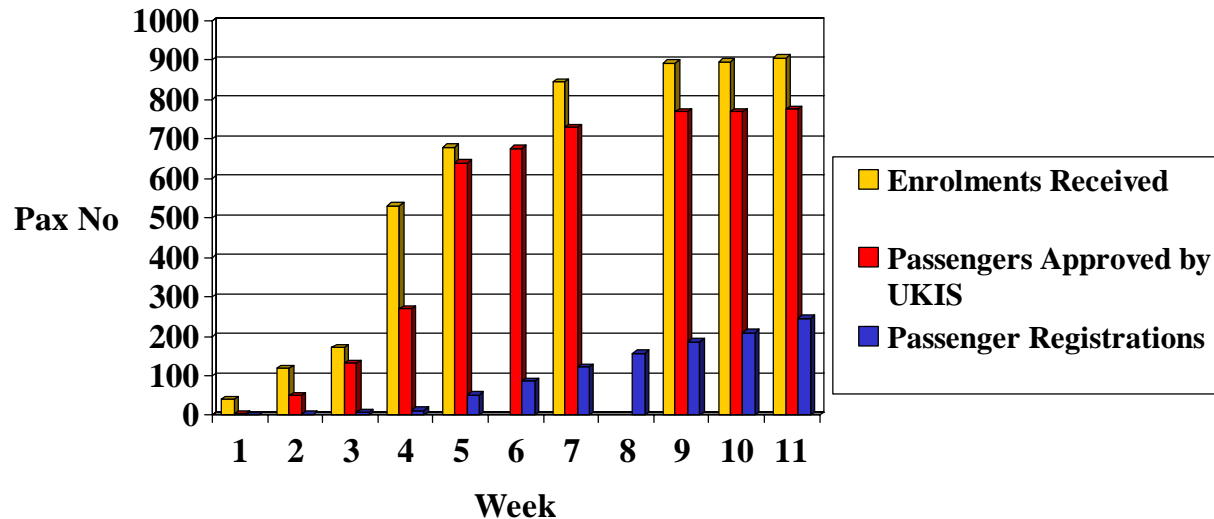
EyeTicket gratefully acknowledges the cooperation of:

- BAA/London Heathrow Airport
- U.K. Immigration Service
- SPT Interest Group
- Virgin Atlantic Airlines
- British Airways

Results Overview

- 800+ applications
- 200+ registrations
(excludes staff)
- Regular repeat usage
- Traveler acceptance
- Six month operation
with zero errors

Passenger Enrollment Statistics



Passenger Usage Statistics

- Average user entered twice
- Ten passengers entered 7+ times during trial
- Average entry time of 12 seconds includes 5 seconds of card printing time
- No known false accepts
- No known false rejects

Passenger Survey Results: Non-Participants

Main reasons for not applying were:

- Lack of travel to the UK
- Not eligible due to nationality

Passenger Survey Results: Non-Participants

Concerns with technology **not** reported as a deterrent to participation

- 90% stated that this type of technology is appropriate for immigration purposes
- 87% say they are 'quite' or 'very' likely to use this type of technology in the future for other applications
- 25% have seen biometric technology in other applications

Passenger Survey Results: Non-Participants

Of those who applied but did not register:

- One third reported difficulties with availability and ease of finding the one-time registration location
- One third did not travel to the UK during the registration period.



Lessons Learned

- Address data sharing issues
- Allow realistic time for trial
- Improve signage
- Plan human resources for
operation, education
- Anticipate need for approvals
- Use same equipment for
registration and expedited
processing



Achievements

“Initial findings from the six-month expedited arrivals trial at Heathrow using the JetStream™ iris recognition system offer an encouraging outlook for the future use of such technology at airports.”

--U.K. SPT Trial Group



Achievements

- Simplifying and expediting the arrivals process at immigration for participating passengers
- Demonstrating that iris recognition is a safe, effective and robust technology in a live airport environment
- Showing that JetStream™ identifies individuals without the need for supporting documents



Achievements

- Achieving positive feedback from passengers - comments from participants were highly favorable
- Attaining cooperation among a number of airport-related organizations with diverse functions to introduce passengers to an innovative technology



Achievements

- Proving that passengers can register on one continent and be identified on another after their flight (via registrations in New York JFK and Washington Dulles airports)
- Maintaining border integrity through strict selection criteria for trial participants



Achievements

“The trial has been successful in meeting its specific goals and achieving an important benchmark against which to examine the potential uses of biometrics for passengers. The participating organisations are now considering that potential and the trial results in detail.”

--United Kingdom SPT Trial Group



**Questions
and
Discussion**