



INTERNATIONAL CIVIL AVIATION ORGANIZATION



الهيئة العامة للطيران المدني
CIVIL AVIATION AUTHORITY

ICAO Regional Seminar on MRTDs, Biometrics and Border Security

دوندوة الايكاو الإقليمية عن وثائق السفر المقروءة آلياً، والأدوات البيومترية وأمن الحدود
الدوحة، قطر *

31 October - 2 November 2011, Doha, Qatar

٣١ أكتوبر إلى ٢ نوفمبر ٢٠١١



Combating Document Fraud: MRTD Security Features and Forensic Document Examination

Charlie Stevens

Former Head of the UK National Document Fraud
Unit

Problems and Threats for MRTDs



Document Security – Why does an MRTD need to be Secure?

Document Manufacture and Issuing Processes



Why do these need to be secure?

- ☐ **Stolen Blank Documents**
- ☐ **Fraudulently Obtained Documents**
- ☐ **Corruptly Obtained Documents**

Document Security

The Threat posed by Organised Crime and Terrorism



ICAO Regional Seminar on MRTDs, Biometrics and Border Security,
31 October – 2 November, 2011

Document Security

The Role of ICAO

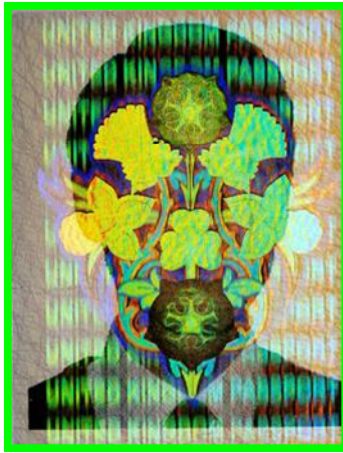


ICAO Regional Seminar on MRTDs, Biometrics and Border Security,
31 October – 2 November, 2011



Seventh Symposium and Exhibition on ICAO MRTDs, Biometrics
and Security Standards, 12 to 15 September 2011, Montréal

Why are many Security Features used in each MRTD?



Seventh Symposium and Exhibition on ICAO MRTDs, Biometrics
and Security Standards, 12 to 15 September 2011, Montréal

Why do we need Security Features in Biometrics MRTDs?



Seventh Symposium and Exhibition on ICAO MRTDs, Biometrics
and Security Standards, 12 to 15 September 2011, Montréal

Why is Front Line Examination so Important?

- ❑ **This is the start of the examination chain. If suspicions are not raised here then back office or forensic checks will not be conducted.**
- ❑ **Often it is behaviour of the document holder that gives rise to suspicions, not simply the document itself.**
- ❑ **At this point impostors as well as other types of document fraud are identified**

Detection at the Front Line

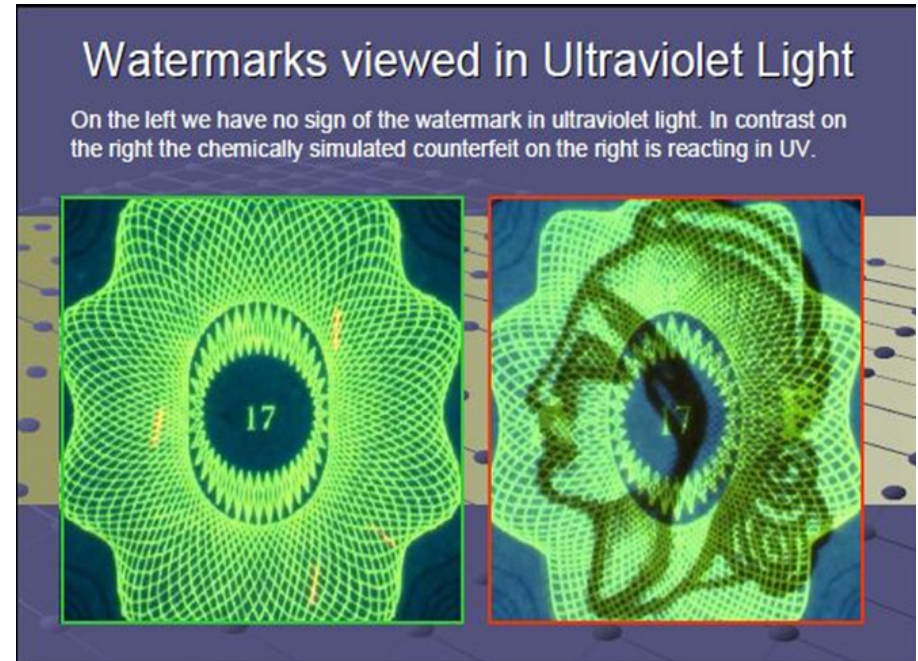
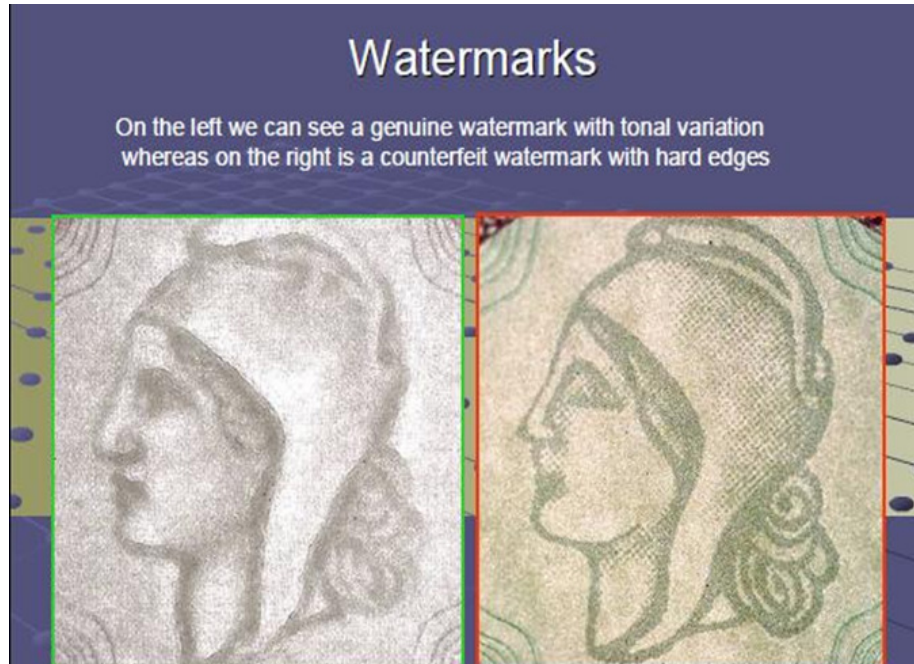
- ❑ **At the front line the passenger's bona fides are tested**
- ❑ **Compliance of the MRZ is validated**
- ❑ **Checks of passengers against watch lists are made**
- ❑ **Checks of document numbers against watch lists are made (such as the Interpol database)**
- ❑ **Is the passenger the rightful holder? Biometrics verification is carried out, if possible**
- ❑ **MRTD security features are checked**

Security Features in MRTDs



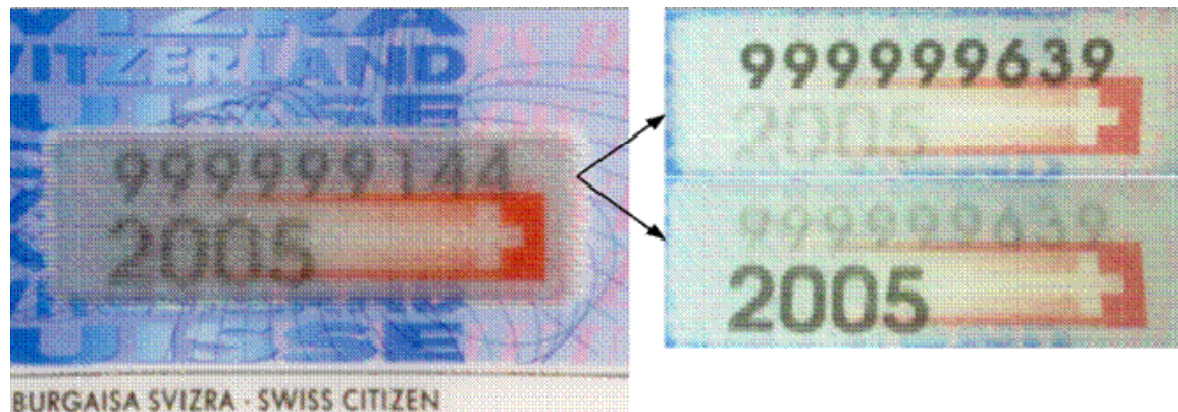
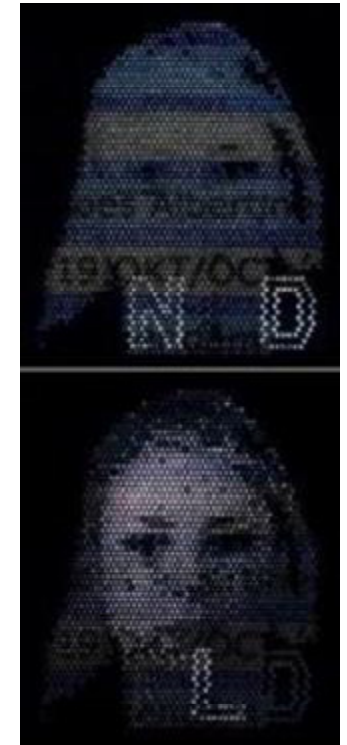
Seventh Symposium and Exhibition on ICAO MRTDs, Biometrics
and Security Standards, 12 to 15 September 2011, Montréal

Watermarks



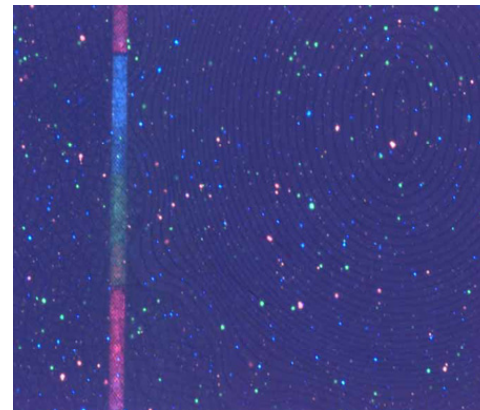
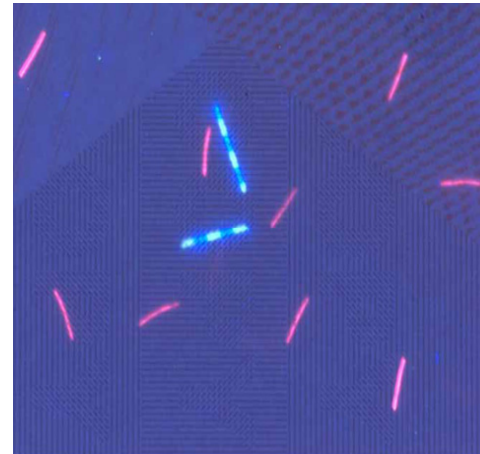
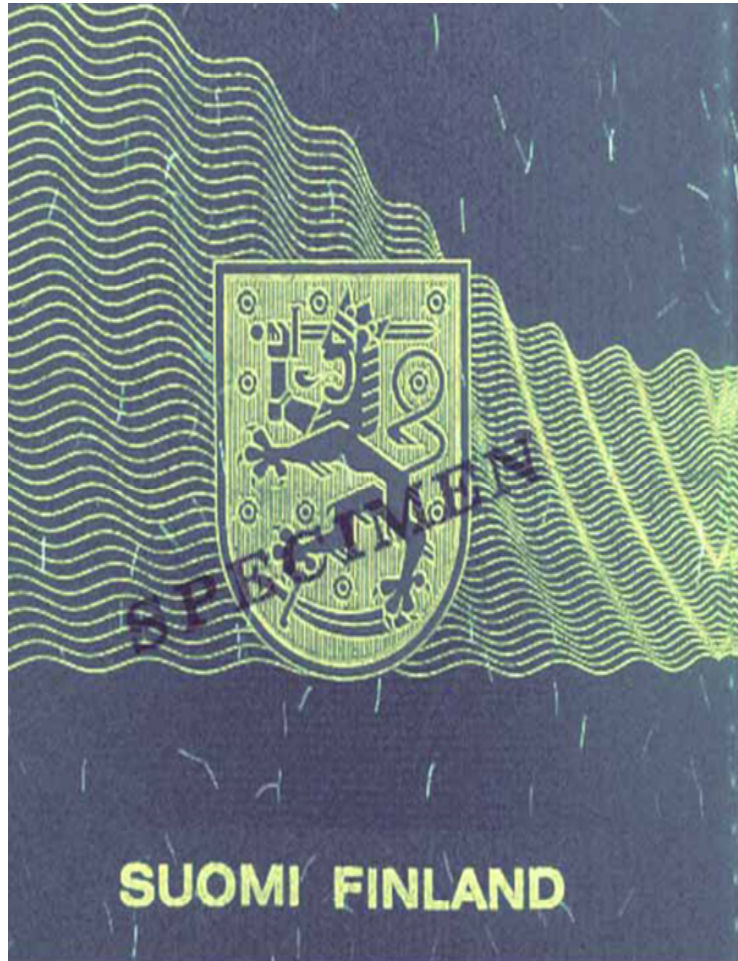
Seventh Symposium and Exhibition on ICAO MRTDs, Biometrics
and Security Standards, 12 to 15 September 2011, Montréal

Polymer Substrates



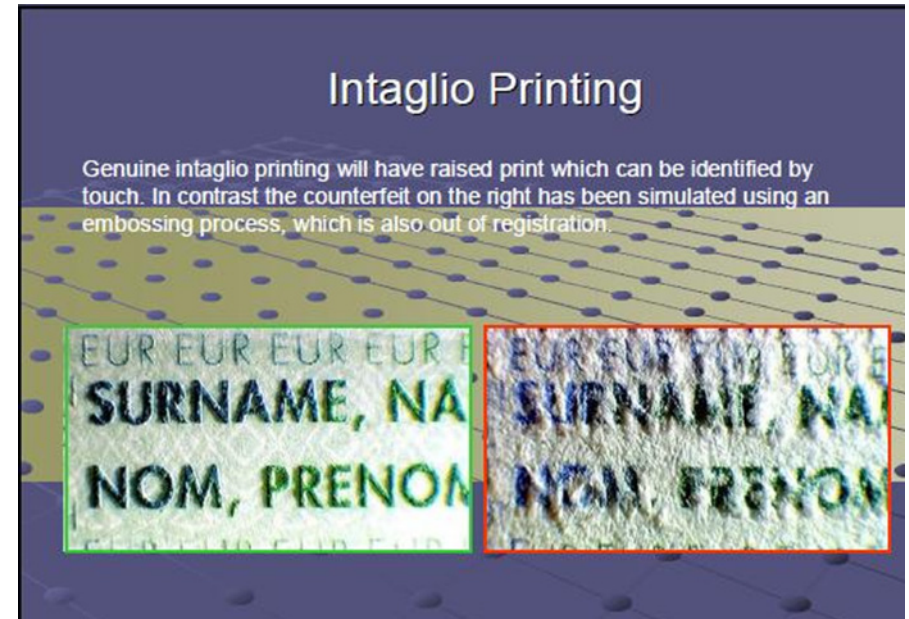
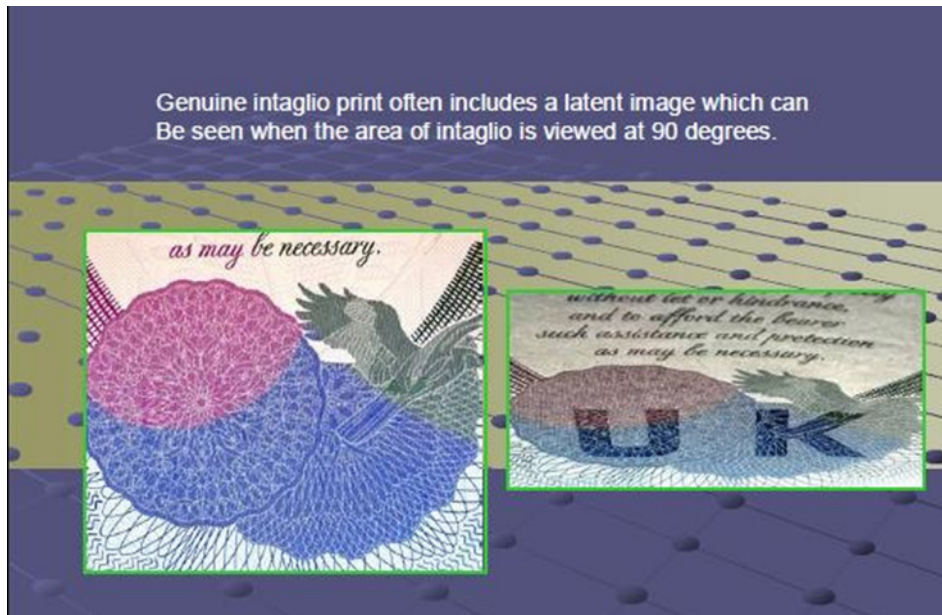
Seventh Symposium and Exhibition on ICAO MRTDs, Biometrics
and Security Standards, 12 to 15 September 2011, Montréal

Ultra-Violet reactive ink



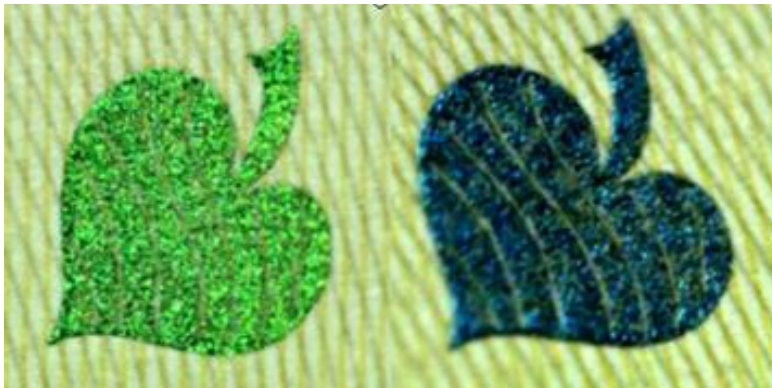
Seventh Symposium and Exhibition on ICAO MRTDs, Biometrics
and Security Standards, 12 to 15 September 2011, Montréal

Intaglio Printing



Seventh Symposium and Exhibition on ICAO MRTDs, Biometrics
and Security Standards, 12 to 15 September 2011, Montréal

Optically Variable Ink



Seventh Symposium and Exhibition on ICAO MRTDs, Biometrics
and Security Standards, 12 to 15 September 2011, Montréal



Questions?



Seventh Symposium and Exhibition on ICAO MRTDs, Biometrics
and Security Standards, 12 to 15 September 2011, Montréal