

Improving Aviation Security through scenario-based gaming

ADSA 2016
Graeme Goldsworthy (GBR)
Diederik Stolk (NLD)

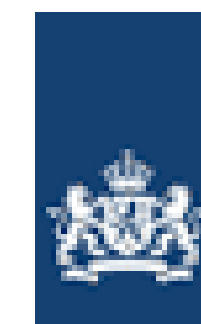


NATO Wargame during Exercise. Noble Ledger 2014

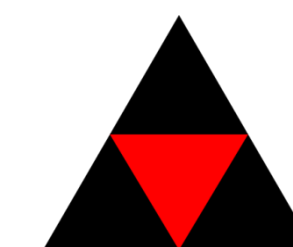
SAMPLE GAME:
BLACK BOX.

Goldsworthy, Stolk & Associates (GS&A): world leading experts in scenario-based gaming, exercise design and decision-making simulations in the security sector.

Our Clients include:



Ministerie van Defensie



Contents

- So what, Who cares?
- The Problem, the Solution and Who we are.
- But wait! Is there an elephant in the room?
- Benefits of Scenario based gaming
- Revisiting the ADSA 16 Game – What is it?, why do we use it?
- The Game
- Set up, Components and How to play
- After the game



So what? Who cares?

- We've studied Aviation Security for some time now and concluded that our adversaries have the initiative. We are on the defensive. To be permanently on the defensive is debilitating, bad for morale and expensive.
- The current system suffers from organisational stovepiping, with technology always as the 'go to' solution. So what about the human factor?
- In our opinion, an offense is the better defence. Taking the initiative installs a more proactive approach in 'defenders'.
- Adopting a more imaginative, multi-agency, human agency and technology fusion in a Comprehensive Approach puts us back in the lead.
- We have a proven low cost solution (and it can be quite fun).

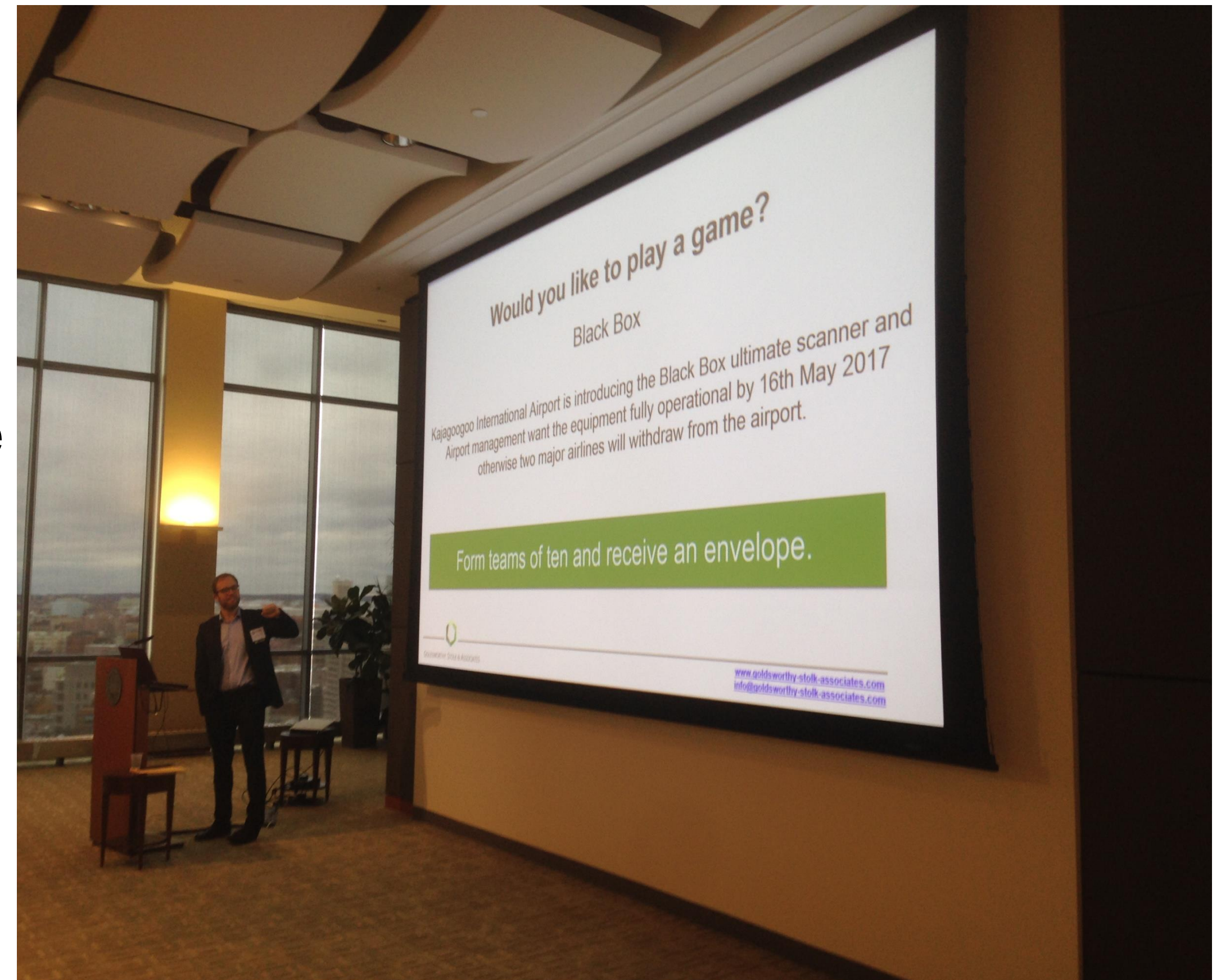


The Problem, the Solution and Who we are

Problem: The field of Aviation Security is a Complex Adaptive System defined by competing goals, technologies, stakeholders and adversaries.

Solution: to use scenario-based serious gaming to solve problems

About us: We solve complex inter-agency problems for serious people using serious games



But wait! Is there an Elephant in the room?

- This is crazy right? Playing games?
- Games to enhance airline security?
- Such a critical national security issue? This will never work! This is too serious! Isn't it?
- Where did these guys come from? Where does Carl Crawford find such people, has he lost his marbles?
- No! Because we have successfully solved complex problems for approx 250,000 people (check out our client list....)
- This stuff really does work!



The benefits of scenario-based gaming

- Model Reality (complex adaptive systems)
- Create safe environments for trial and error
- Discovers the unforeseen
- Are cost effective
- Factor in human agency
- Improve decision-making
- Expedite the implementation of comprehensive solutions

“No one ever made a list of the things they never thought of...”



Revisiting the ADSA 16 Game – What is it? Why do we use it?

- **Black Box** is an **Information (or Intelligence) collation game**.
- It is used to allow different agencies or organisations to pool information, work through differences and agendas to arrive at answers and comprehensive solutions.
- We chose it for ADSA as it is a ‘quick play’ format with the simplest of rules. It can also last for as long as is needed. In our case, about 25 minutes.
- It is challenging, people interactive, user friendly in any space and it is fun. At least we hope you had fun!?
- The Correct answers (you select a team member to brief each answer), How each player interacts. (for example: No shouting down, bullying or dismissive behaviour) Organisation. Taking on tasks. Useful contributions. Intelligent insights
- It is just **a sample** of the many designs and formats we use.



The Game: Black Box

You were the multi-Agency team tasked to Implement the new Black Box system

- Kajagoogoo International Airport is introducing the Black box ultimate scanner.
- Airport management want the equipment fully operational by May 2017.
- Airport managment needs a briefing that answers the following key questions:
 - On what date will Black Box be fully operational?
 - How many passengers can be screened per hour in each security channel that uses black box?
 - What is the minimum of TSA agents that are required to man each channel per hour?
 - What is the cost of implementing Black box?



Set up, Components and How to Play

- Teams of 10 participants.
- Each of you issued four cards.
- Each card contains one piece of information.
- You deliver to piece of information the group.
- Sources of information can range from very reliable to less reliable.
- You have two standard year planners, adapted to show public holidays and weekends (shaded).
- There are the four key questions on a sheet of A4 paper. There is space to write your answers.
- There are 40 index card sized information cards. Blank on one side.
- Notebooks and pens.
- Whiteboard and markers.
- Simple. Work as a team to share information that each of you hold and build the picture to answer the set questions.
- **Do not show your cards to other players.**
- **Assume all working days are working days unless information suggests otherwise.**
- **Do not dismiss information out of hand.**
- **Consider of some information is culmuative or concurrent.**



After the Game

What did we see?

Key words in the feedback session:

Chaos!
also **Co-operation**
Complexity
But also **Problem solving,**
finding solutions
Interaction
Enjoyable
Different

