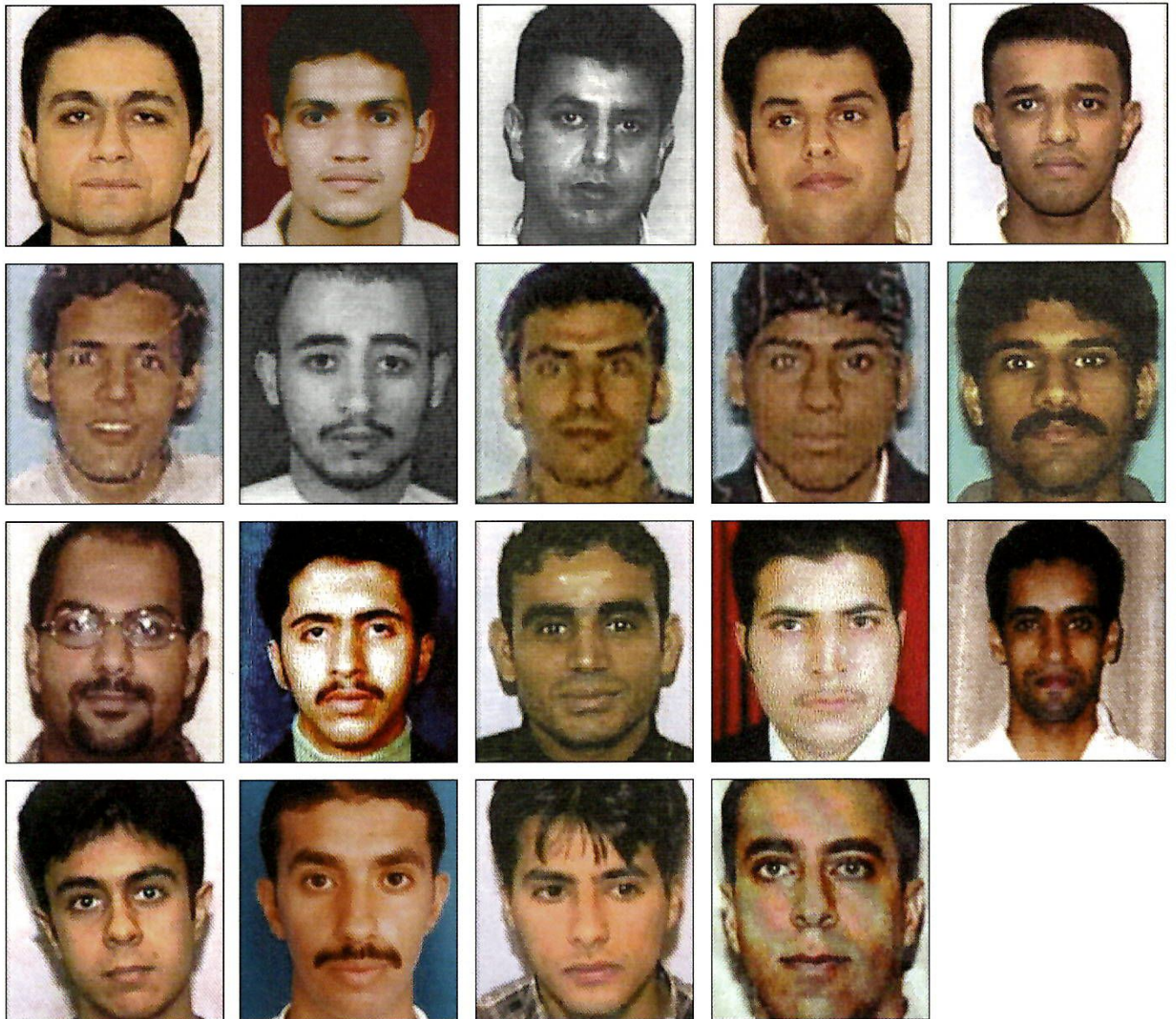


# BEHAVIOUR PATTERN RECOGNITION



the new age of profiling

**When Rafi Ron tendered his notice to the Israel Airports Authorities, little did he know how significantly the aviation security industry would change or how timely his decision was to establish New Age. Philip Baum caught up with him in Boston where New Age are acting as consultants to the airport that has been one of the most proactive in security development despite, or perhaps because of, it being the departure point for two of the hijacked airliners a year ago. Ron talks about how Boston's Logan Airport has adapted to the new era and explains his faith in a new style of profiling – behavioural pattern recognition.**

**What was your initial thought when you saw those now infamous images on your television a year ago?**

They represented the worst nightmare for anyone involved in counter-terrorism. It was obvious that this was a terrorist attack from the first crash. Aircraft have been flying since the beginning of the last century and it's only lately that they've started to crash into buildings. And, there is always somebody at the controls

**How much of a surprise was it for you that this type of attack happened in the United States, particularly on domestic flights?**

It was a surprise, but not because a domestic flight was hijacked, rather because of the scale of the attack. Knowing American domestic aviation security standards, it was always a very exposed target. The fact that there was active terrorism against the US domestically was nothing new.

**And you were already set to complete your term of service as Head of Security at Tel Aviv's Ben Gurion airport on September 30th?**

Yes that is correct. I gave notice about 3 months before reaching the end of my contract. I decided to go into the private sector because I realised there would be a shift in responsibility from airlines to air-

ports. Having done my job at Ben Gurion Airport for 5 years certainly gave me an advantage, so even without, and indeed before, 9/11, I was on the way to establish my own company. Of course 9/11 has made it all extremely more relevant and much more hectic than it would have been under normal circumstances.

**And you are now in Boston. Was Boston your first contract?**

Boston is my first contract. I left Ben Gurion on October 1st and a couple of weeks later I was approached by Massport to come in and provide them with a proposal for consultancy. Since then I have been working here. New Age currently consists of 10 men, but we are recruiting people on an ad hoc basis according to specific contracts that we have and we already have a few more.

**Where else do you have contracts?**

A few months ago we finished a contract at Schipol Airport in Amsterdam where we did a study for the Dutch government on the security checkpoint procedures. Our recommendations were discussed with the Dutch government and most of them were adopted. We are now engaged in further contracts here in the US in training security personnel. We are involved with the Massachusetts State Police. We are also engaged with other airports. Right now we have teamed up with an American company to plan the security at San Juan, Puerto Rico and we have been short-listed by a major port authority here in the US – we are waiting shortly to hear whether we

actually won the contract.

**When you first came to Boston, what shocked you most about the security here?**

It was the overall atmosphere that, on the one hand, everybody realised that the way things were handled in most American airports, including Logan, before 9/11 were completely wrong and did not meet the threat, whilst, on the other hand, there was very little knowledge as to how to go about changing the situation. Logan had been heavily criticised by the media, and by the public, for the fact that two groups of terrorists were allowed to board the aircraft here. I think that, among professionals, it would be fair to say this could have happened in other American airport. Logan was probably chosen for other reasons rather than the bad security performance.

**Departure points providing the longest distance domestic flights, laden with the maximum amount of fuel?**

That's right. And they probably wanted to simplify the navigation and wanted a high profile target. So, as New York was chosen as a target, Boston was an obvious airport to take off from.

**Other than securing the services of consultants, in practical terms what did Massport do to increase security at Logan?**

Massport adopted, from a very early stage, a policy of moving ahead with security and not waiting for the federal government, or anybody else, to create policies. This was

*Facing page: Arguably the best way of identifying the likes of the nineteen September 11 hijackers is through behaviour pattern recognition*



Massachusetts troopers at Boston's Logan Airport (Photo: Chaz Boston Baden)

## What has actually been achieved in terms of improving the level of security afforded passengers and aircraft departing Logan?

I have some difficulty in answering this question. 9/11 occurred a year ago, but it took a few months to get everybody oriented in the right direction. Since then things have started to move but I would say the greatest difference lies in the overall attitude to security. That dictates a lot of the behaviour of people at the airport. People do not ignore anything that may have a security implication. So if somebody moves around and there is something suspicious about him, you can bet that somebody will react immediately. That was not the situation before 9/11. Anybody who enters the restricted areas without proper identification will be spotted immediately and people will react to that on the spot and he will be dealt with very forcefully.

If you look at the way the security checkpoints are being run in most American airports, all right, you may still

be able to take a box cutter through which is not good news but, at the same time, it's also not as dramatic as it is described by the media. If everybody expects the security system to rely on the ability of the checkpoint to identify box cutters, then we are going to fail and we are going to face more 9/11s. There is something else that is needed – something the aviation security industry has not yet accepted – and that is the need for profiling. Or, in other terms, the human factor. That is something that I've been advocating here in the US very vocally, because I don't think that there's a way to stop all box cutters from getting on board. We really need to make sure that the Richard Reids of this world, who have been identified as a possible threat, are properly searched, to the point that they will not be able to bring even a box cutter on board.

Logan is already doing something in that respect. We have developed a programme called BPR – behaviour pattern recognition. We've moved away from the term profiling because the interpretation of the term is not what we mean. We don't

proven to be the right policy because we started, for example, to design the integrated screening systems here long before the government had decided on what they should look like. If you go around the airport now you will see a lot of construction work already being done to build the system and Logan will probably be one of the only airports in America that, by the end of year, will have this already done.

## AVIATION SECURITY INSPECTORS

### TRANSPORT SECURITY DIVISION - TRANSEC

London

Department for  
**Transport**

Starting salary £24,800 - £27,280

The role of TRANSEC is to formulate appropriate protective security regimes for the various modes of transport, to monitor and, when necessary, enforce them. TRANSEC's purpose is to ensure that the travelling public, those employed in transport industries and, where appropriate, transport facilities, are protected from acts of unlawful interference. We are looking for another three Inspectors. The successful candidates will receive comprehensive in-depth training, and be expected to conduct inspection activities on their own within 6 months.

#### THE ROLE

- Through on-site visits, assessing levels of security in the UK aviation industry (over 40 airports, around 350 airlines)
- Seeking compliance through personal inspections
- Taking part in team based security surveys
- Regular meetings with industry representatives at all levels, including speaking on industry training courses
- Using various methods to deal with non-compliant organisations to achieve rectification
- Lead Inspector for one or two airports and/or specific subject areas
- Entering reports of compliance activity on the database.

#### THE PERSON

- Minimum of three years' experience in the aviation industry, being directly involved in aviation security
- Excellent interpersonal skills
- Excellent written and oral communication skills
- Confident to deal with people at all levels in both the public and private sector
- Good judgement and a high level of personal effectiveness
- Effective team player, yet able to work alone with minimal direction
- Ability to manage small teams
- Analysis and problem solving skills.

TRANSEC expects to be one of the first divisions within the Department for Transport to introduce flexible working patterns but the posts can involve long hours on a fairly regular basis (overtime or time off in lieu available). Regular travel and overnight stays will also be required, and applicants must be prepared to fly, and drive regularly within the UK (hire cars are available where required).

**For further written information and an application pack about these interesting and challenging roles, please contact Dina Markey (our representative at CPG, our recruitment consultancy) on 020 7562 1653, fax on 020 7588 8013, email [dft@centrepoinpointgroup.co.uk](mailto:dft@centrepoinpointgroup.co.uk) or write to CPG, 16 St Helens Place, London EC3A 6DP, quoting reference ASI. Alternatively you can apply online at [www.centrepoinpointgroup.co.uk](http://www.centrepoinpointgroup.co.uk)**  
The closing date for receipt of applications is 31st October 2002.

The Department is an equal opportunities employer. Applications are welcomed from all suitably qualified people regardless of race, gender, marital status, disability, age or sexual orientation. Under the Data Protection Act, the data provided or completed on application forms will be used for the specific purpose of Human Resources Management and will not be further processed in any manner incompatible with that purpose.



mean selecting people because of the colour of their skin – that is nonsense. We do believe though that it is related to his national background and many other things that relate to his behaviour. When I say his behaviour, I don't necessarily mean just the way he moves or his body language, but what I mean is also the way he runs his life. Is this a guy who has had a permanent job for the last 20 years and has a family with 2 little kids and back home he has been paying all his debts and living at the same place, etc., etc., etc., etc.? If we have access to this information and we can say that the person we are facing is somebody who represents a legitimate person through his lifestyle, then we can view him in a different way.

**How do you prevent somebody getting onto a plane and hijacking it, bearing in mind that they might actually go through the security checkpoint with nothing whatsoever that poses a threat? They could use a glass bottle that they get air-side, they could use their bare hands, they could even put together an explosive device with the components that they can buy in most airport duty-free shops.**

Well, about constructing or making explosives at the airport, if the airport is secure enough this becomes very very difficult and I don't think that we are exposed to this threat. But, as far as the unarmed passenger or the unarmed group of passengers who go on board aircraft, which is more or less what happened on 9/11, that's another story. It was not the box cutters that made the difference, but rather the number of dedicated terrorists on board. Airports are not the only players in the security set-up. There's the airport, there's the government, and there's the airline. Everyone has to play their part and when we speak

about the aircraft, they need to be equipped with bulletproof cockpit doors and with sky marshals.

**On every aircraft?**

I would answer yes. Just as airlines have been very careful in hiring and counting the number of flight attendants on board in order to serve you your cup of tea. I don't know what is more important – serving you the cup of tea in time by having three flight attendants on board or maybe, if the issue is a financial matter, they drop one of the flight attendants and put a sky marshal on board instead. But sky marshalling isn't the role of the airline. It is the role of the government.

I think that the war the US is engaged in right now is a homeland war, and not out there in Afghanistan. The war is right now, right here and there are billions of dollars being spent on defence systems and manpower to defend the country against a threat that doesn't necessarily exist any more since the end of the Cold War; if only a part of it was diverted to running a comprehensive sky marshal programme, that would make sure that every aircraft was properly protected and could not be turned into a guided missile that could be directed to strategic targets in the US.

**But the main argument against that is the fact that you would have to recruit so many sky marshals and arm so many people that it would be very difficult to ensure that there will be no bad eggs getting into the sky marshal programme?**

What I see right now is that they decided to arm the pilots. I can't think of anything worse than that. Pilots should fly airplanes and sky marshals should look after security. When an attack occurs, that's exactly when you need the pilot holding

# Problems with inadmissible passengers?



*The latest and most cost effective forgery detection products...*

**Desktop Systems  
Portable Kits  
Laboratory Equipment**



**Your one stop shop!**

**ACO Electronics Limited**

Unit 3, Manor Farm Business Park, Wendy, Royston,  
Hertfordshire SG8 0HW United Kingdom  
Tel: +44 (0) 1223 208 222 Fax: +44 (0) 1223 208 150



*Rafi Ron, former Chief Security Officer at Ben Gurion Airport and now Managing Director of New Age Aviation Security*

the helm. Secondly, it's just a matter of time until these guns will be used at the wrong time against the wrong target and I don't want to be on that aircraft when that happens. As far as the number of the sky marshals – look, I don't know how many marines are being paid for by the US, how many rangers there are out there in the US army, how many pilots are flying F16s and how many sailors are sailing the American Navy ships, but I know one thing, the number of sky marshals probably could be a drop in the ocean compared to these numbers. So I don't think that is the issue. The issue is how to prioritise and to realise where the war is – where the front is and where the war is right now and to deal with it specifically.

**What is your overall view on the way in which the United States has responded to 9/11 in respect of aviation security?**

I think that, on the one hand, there is a very strong drive in Washington, in local government and at the airports and airlines, but the airlines are crumbling under the financial pressures. The airports are following them, not far behind. Now the government has created the TSA that is focussing on aviation security before it moves into other fields – that's

good news for aviation. I am not sure it's such good news for the other modes of transportation because there is no guarantee that the next attack will be against aviation. But, if we look at it from the aviation point of view, the government has allocated a substantial amount of financial resources and has set standards for screening procedures. It has taken over these operations from the airlines, which I believe is good news, but in the future I believe this should be given back to the private sector because there is no reason why the government, after the standards have been set, should keep on doing it.

So they're now taking it very seriously and they're trying to elevate the standards of the people that they recruit, but they have to recruit so many different people in such a short period time they'll have to jeopardise their standards or the goals they set for themselves. What they're doing on the screening side should be highly appreciated, but they're focussing only on screening and don't see the rest of the picture. And the rest of the picture is just as important because the security system's strength is judged by the weakest point, not by the strongest point. You can invest \$4 billion, which is more or less what will be invested by the end of this year, in

screening, but if you don't have perimeter security around the airport, and anyone can walk up to an aircraft, you haven't done much because the passengers' bags are not the only way to put a bomb on board an aircraft.

**How realistic were the deadlines that were set?**

Extremely unrealistic. Logan is going to be one of the only airports that will reach this deadline in a reasonable way. The rest of the American airports will probably meet this standard because it's the law, but they will do it at the expense of customer service. There will be explosive detectors in front of the check-in counters and passengers will have to open their bags in a public place – most American airports will look the way Ben Gurion Airport looked in the 80s. That is not good news for the industry.

**Why do you think that governments – not only in the United States – but practically everywhere in the world, are so reluctant to train their staff in behavioural analysis, especially given that immigration officers and, more particularly, customs officers, do use that approach?**

Their attitude to the question of the security. In most countries – especially most western countries – security is not a major issue. It is not high on the priority list. Look, even before 9/11 those checkpoints that we are looking at right now – they existed! People were working them, only they didn't know what they were doing. Nobody paid attention to what they were doing. It was a case of let's get the lowest paid person sitting in front of the screen and not waste our money and time in even trying to train him. I'm afraid that even western Europe, that did move ahead before 9/11 on aviation security, still compromised a lot in its effectiveness. The use of technology is very sexy from the political point of view – you project a hi-tech image to the industry and it's very easy to discuss technological systems and to spend money on technological systems. It's much more difficult to speak about

behavioural aspects and to adopt a tool or a methodology that will help you deal with this. By doing that, you expose yourself to decision-making and, God forbid, people will have to take decisions. As long as machines take decisions, that's fine. It's comfortable for everybody. Worst comes to worst, you can always blame the technology and stay in the clear. But if you have to train people to take decisions and they take decisions and they fail, because there is always a percentage of failure in anything that we do, well...

**People are still more likely to select people that are members of the Islamic faith for additional screening if we do profile. They are not likely to focus on the average WASP.**

Look, the answer to that is very simple. It's not a crime to use your intelligence. The fact is that, right now, most of the terrorists that are acting against the US are coming out of extreme Muslim groups. This is a fact that cannot be denied. I

know people can say there are always the likes of Timothy McVeigh so why pick on the Muslims. And I say, don't pick up on the Muslims but, at the same time, don't ignore the fact that most of the terrorists right now are coming from extreme Muslim groups. Now that doesn't mean that you should automatically make every Muslim a selectee in your security process, but, at the same time, don't ignore it. I was invited to testify before a House committee in Washington on profiling. I received tremendous support from the committee members. There were about 30 of them, and I think that about 28 of them were extremely supportive of the use of BPR because it excluded the racial element. One of the committee members asked me specifically whether nationality should be an element in security profiling. And my answer was 'if somebody's home address is a cave in Afghanistan, it would be ridiculous to ignore it'. There's nothing unconstitutional to use nationality as part of your security profiling when it comes to protecting

the US against its enemies. The people who wrote the constitution never intended to blur the view of the government in this country in identifying who is their enemy and who is not. So it may be politically correct to go and pick on a 72-year old Norwegian, but it's not very practical.

**What about the future threat? How do you view the possibility of a chemical or biological attack using aviation?**

We're not prepared from the point of view of technological solutions, but the only effective answer to all type of threats, old, new, and even those that we've not talked about yet, is the BPR concept. That's the only system because it does not identify the weapon, it identifies the person and if somebody intends to carry out an attack on board an aircraft by the use of chemical weapons, you will be able to identify him. First of all by his behaviour, especially considering that identifying a chemical or biological agent will be extremely difficult, if not impossible. ☉



Worldwide Headquarters  
205 Lowell Street  
Wilmington, MA 01887 USA  
Web Site: www.iontrack.com

Email: sales@iontrack.com  
USA: +1.978.658.3767  
Europe: +44 (0)1223 728888  
Hong Kong: +852 2368 2332

**ITEMISER<sup>3</sup>**  
Desktop Explosives  
and Narcotics  
Trace Detector

- Simultaneous detection of explosives & narcotics
- Approved for explosives detection by the FAA
- Extended range of contraband detection
- Unparalleled transportability, 26 lbs. (12 kg) with softshell case
  - Fold-down touchscreen display
  - Maintenance-free regenerative dryers
  - Internal backup battery
  - Reusable, extended shelf life traps

**Detect & Identify Traces  
of Explosives  
in Seconds**

Boston • Cambridge UK • Hong Kong • Miami • Washington DC