STATEMENT BY RAFI RON TO THE SENATE COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS September 21, 2005

Mr. Chairman and members of the Senate Committee on Homeland Security and Governmental Affairs.

For the record, I am Rafi Ron, President of New Age Security Solutions, a Transportation Security Consultancy firm based in McLean, VA. This company was established in October 2001 following a request by the Massachusetts Port Authority (Massport) to provide it with professional support in developing and implementing a new security policy and program so as to elevate Logan airport to a leading position in airport security. Logan's achievements are widely recognized today by the Federal Government as well as by the aviation industry.

Before my involvement with Massport and Logan Airport I served as Director of Security at Tel-Aviv Ben-Gurion International Airport for a period of five years. In this position I was responsible for all aspects of the security operation, including planning, implementation and management. My previous security experience stems from over 30 years of work in security, intelligence and counterterrorism for the government of Israel.

For the last four years, my company has been involved in numerous transportation security projects in the US and abroad involving airports, seaports and ground transportation.

I would like to thank the Committee for inviting me to testify about Transportation Security.

Over the past fifty years or so it has become clear that transportation is a high-priority target for terrorists and terrorist organizations. Since transportation systems constitute a critical infrastructure without which our modern industrial societies cannot function, these systems are very likely to remain at the high-risk end in the foreseeable future. Key links in our transportation systems are vulnerable to attack, and the potential damage may cause a large number of casualties as well as long shutdowns which can lead to major system collapse with multiple economic and political repercussions. No other system combines such a high level of vulnerability with so many attractive goals for terrorists acting against the United States.

As a result of the 9/11 attack, aviation security has been given a great deal of attention and the achievements are impressive. In less than four years, the United States of America has set itself as the global leader in aviation security and has become the driving force in making the domestic and global aviation system safer. Unquestionably, American aviation has become a harder target for terrorists to hit. For terrorists this means that in order to ensure the success of an attack on aviation they would have to meet much higher requirements than ever before in terms of effort and sophistication. Concurrently, the disruption of the global terrorist organizational structure by U.S. global war on terror is resulting in the shift of responsibility for initiating and executing attacks to local terrorist cells, as we have seen both in the Madrid and the London attacks. The resources needed to mount successful attacks on hard targets are less readily available to terrorists operating on the local level.

The important lesson to be drawn from this recent history of terrorist activity is that once high priority targets are made harder, terrorist effort tends to be diverted towards minor targets that are still perceived as being soft. Mass transit remains a vulnerable target, more difficult to protect because of its vast extension and accessible nature, because attacking it does not require extraordinary resources, and because technological solutions have only a limited relevance to its protection. The turning of terrorist attention to urban mass transit systems is thus an expected consequence of our success in other domains.

Implementing the aviation security model in the mass transit environment is not an option. 100% screening cannot be performed with the technology available today without creating a bottleneck at check points. However, bottleneck check-points are not a proper solution because we need to allow high throughput without which mass transit cannot fulfill its role.

The challenge facing us is to develop a system-approach solution that combines technology, human resources and procedures. This system-approach solution must be designed to address the three stages of the security process:

- Preparedness and routine management
- Incident management and first response
- Recovery

The system must have an "open architecture" that will allow the shift of weight from one element to the other as more advanced and relevant technology becomes available and operational.

At present, the most relevant available technology is in the video field. Traditionally, video systems are installed in the location of the expected crime scene. While this is an effective way to identify criminals and secure the necessary evidence to convict them in court, it is totally inadequate to deal with a terrorist attack, because in the latter case, as soon as the attack takes place terrorist success has been achieved and the damage has been done.

What we need is a new approach to video application as well as to overall security planning. Prevention and deterrence must be the goal rather than detention and conviction. This distinct goal dictates pushing the security measures to the perimeter of the mass transit system. Our focus must be on detection and response **before** the terrorist gains access to the target. In other words, we need to shift our efforts from the train and ramp to the station entrances.

While video technology is undoubtedly important, it does not provide us with the most critical information we need – explosive detection. At present, explosive detection systems (EDS) are designed to meet the requirements of the aviation industry, and are not applicable in the mass transit environment. With research and development that recognizes this need and is focused on operational application, such EDS solutions can be available in the next couple of years. Current ideas in this area vary from air sampling techniques to trace detection on tickets or body parts that come into contact with the system in the entry process.

Appropriate technology is a critical factor in the protection of mass transit systems, but no technology can provide a solution without human individuals who can not only operate it effectively but also provide appropriate immediate response. It is useless to detect an explosive device if you cannot act to stop the person who carries it from entering the system.

Human resources will thus remain a critical element even when we have these future technologies at hand. At the present time, while these technologies are still in the works, the importance of the human factor is even more critical. In Israel, as well as in other parts of the world, the presence of trained security personnel at entrances of public facilities has proven to be a very effective preventive measure against terrorist attacks, including suicide attacks. Despite numerous attempts by suicide bombers to enter shopping malls in Israel, none has been successful. The terrorists were forced to carry out their attack outside the mall, the targets affected have been relatively minor and the damage sustained was smaller in terms of human life as well as property.

In reference to the human factor I would like to point out that the Achilles heel of the suicide terrorist is his behavior. A person intending to commit an extreme act of violence, in most cases for the first time in his/her life, as well as to terminate his own life is most likely not to behave like the ordinary people around him going about their daily routines. A signal example is Richard Reid (the "shoe bomber"), who was clearly detected by both security and non-security personnel as a suspicious person before and during boarding AA flight from Paris (Dec. 2001).

Behavior Pattern Recognition techniques implemented by trained security and nonsecurity personnel have proven to be a valuable measure in the detection and prevention of terrorist attacks in public facilities. The training provides the skills and confidence not only to law enforcement officers positioned at entry points, but also to employees who are present at every point in the system. No one is in a better position to recognize irregularities on the ground than the people who regularly work there.

Let me sum up by reiterating three major points:

1. Legacy security programs in mass transit systems must be reassessed in light of the shift from the threat of conventional crime to the threat of terrorism, including suicide terrorism. This means putting a higher focus on early detection and prevention.

2. There is a pressing need to invest in technological R&D that will result in effective early detection of explosives and chemo/bio materials without disruption of throughput.

3. Security and non-security personnel in mass transit should undergo counter-terrorist training that includes suspicious behavior recognition techniques.

I thank you for your attention and I will be happy to answer any questions.