

Homeland Defense Industry

A "THREE DOORS" UPDATE REPORT
August 19, 2003



Homeland Defense Equity Research from Laguna Research Partners focuses on companies that, in our view, are positioned to make important contributions to the War on Terror, both in the US and abroad. Our Homeland Defense Industry "Three Doors" Update Reports provide our analysis of key events in the Aviation Security, Maritime Security and Border/Checkpoint Security sectors of the Homeland Defense Industry.

"War is the realm of the unexpected."

Defense of the West: Some Riddles of War and Peace
Basil H. Liddell Hart
(London, Cassell, 1950)

The threat of Man Portable Air Defense Systems (MANPADS) to US aviation security has once again gained widespread attention following the attempted black market sale of an advanced Russian-made SA18 Igla surface-to-air missile to a US Federal Bureau of Investigation (FBI) (fbi.gov) operative. Commercial passenger and cargo airline pilots generally regard MANPADS as the greatest threat to commercial airliners currently. The low cost, ease of procurement, and destructive capabilities of these systems emphasize the severity of this threat.

...evidence of the MANPADS threat has been mounting steadily ...on November 28, 2002, suspected al Qaeda operatives armed with Russian-made SA7 Strela MANPADS attempted to down a chartered Boeing 757-300 Arkia Israeli Airlines passenger jet on takeoff from an airport in the seaside city of Mombasa, Kenya ...that attempt was unsuccessful ...on August 17, 2003, Russian police found a hidden stash of 110 surface-to-air missile parts including warheads at an unspecified location outside of Moscow ...the final collapse of the USSR on December 25, 1991 and the subsequent disintegration of its military has made Russia, in the view of many experts, the unwitting "fountainhead" of illicit international trade in MANPADS

...US-made Stinger surface-to-air missiles are also considered by leading experts to be a significant threat to US aviation security ...an estimated 900 Stingers were supplied by the US to Taliban and anti-Soviet *mujahideen* freedom fighters in Afghanistan prior to the 1988 retreat of Soviet troops from that country ...al Qaeda's Osama bin Laden, a key anti-Soviet *mujahideen* ally, is reported to have been supplied with Stingers by the US during the 1979 through 1988 Soviet-Afghan conflict ...our sources indicate that, following the fall of the Soviet-backed Najibullah government in Kabul in April 1992, the US Central Intelligence Agency (CIA) (cia.gov) effort aimed at securing unused Stingers from Taliban and *mujahideen* fighters generated mixed results at best ...those very US missiles might now already be in the hands of anti-US terrorists ...in military and intelligence circles, this phenomenon is known as "blowback"

...law enforcement agencies across the globe are now scrambling to secure international MANPADS supplies ...on August 14, 2003, US General Richard Myers, Chairman of the Joint Chiefs of Staff, announced that the government of Nicaragua is committed to destroying 2,000 SA7 MANPADS in its possession ...Myers indicated that US military personnel have provided direct assistance in securing those missiles at a dedicated facility ...in November 2002, three operatives with alleged al Qaeda ties attempted to purchase Stinger MANPADS from US FBI agents in Hong Kong ...most recently, as mentioned above, a US FBI sting operation including law enforcement officials from the UK and Russia arrested three arms dealers who believed that they were selling Russian-made MANPADS to US-based al Qaeda operatives

Key US Government spending initiatives relating to the MANPADS commercial aviation threat will be considered when the US Congress returns from its August recess.

...US Senator Barbara Boxer (Democrat-California) (boxer.senate.gov) and Representative Steve Israel (Democrat-New York) (www.house.gov/israel/) filed S. 311, The Commercial Airline Missile Defense Act, in February 2003 ...that bill would require the US Department of Transportation (DOT) (dot.gov) to purchase protective devices for more than 6,800 US commercial airliners at an estimated cost of \$1 million-plus per aircraft ...some industry experts project a \$2 million cost per aircraft ...these figures imply a market for commercial jetliner anti-missile defense technologies of \$6.8 billion to \$13.6 billion in the US alone ...S. 311 would also require that all new airliners manufactured for operation in the US be equipped with factory-installed anti-missile systems

...further, the Senate's FY 2004 appropriations bill for the US Department of Homeland Security (DHS) (dhs.gov)—HR 2555 EAS was passed by the Senate on July 24—recommends \$60.0 million for systems development, aircraft integration analysis, and modeling and simulation performance assessment of an antimissile device for commercial aircraft ...in notes attached to that legislation, the Senate Appropriations Committee points out that this is the amount recommended by DHS's Under Secretary for Science and Technology in his "Program Plan for the Development of an Antimissile Device for Commercial Aircraft" presented to the Committee on May 22, 2003

...some military aircraft use burning phosphorous flares to thwart MANPADS attacks ...many experts regard this solution as impractical for commercial craft given that countermeasure flares often start ground fires ...more sophisticated systems are either lamp-based or laser-based ...lamp-based systems generally have a cost advantage over laser-based systems ...laser-based systems, however, typically weigh less, take up less space and are capable of thwarting the most sophisticated MANPADS

...**BAE Systems Plc** (baesystems.com) manufactures the AN/ALQ-204 Matador Infrared Countermeasure (IRCM), estimated to cost about \$3.5 million including installation and crew training, for installation on business jets ...the Matador system weighs approximately 350 pounds and is claimed to incur no aerodynamic penalty ...its "lamp based" system uses a matrix of heat transmitters to confuse a MANPADS's heat-seeking sensor ...two Israeli companies are supplying civilian versions of their military systems ...**Rafael Israel Armament Development Authority Ltd.** (www.rafael.co.il) is now marketing its BRITENING Missile Warning and Countermeasures System for commercial aircraft ... **Elta Electronics Industries**, a wholly owned subsidiary of **Israel Aircraft Industries Ltd.** (IAI) (www.iai.co.il), is also believed to be working towards an anti-MANPADS platform based on its existing military solutions

On July 29, the US DHS announced that the People's Republic of China has formally joined the US Container Security Initiative (CSI).

We view this cooperation as vital to the US War on Terror given that trade and economic cooperation between China and the US has grown sharply in recent years. The US is now the largest source of overseas investment in China and, following Japan, is China's second largest trading partner. Viewed from the other direction, China was the 24th largest US trading partner in 1980, rose to the 10th position in 1990, and ranked 4th in 2001 with over \$121 billion in merchandise trade. China, in our view, is poised to overtake Japan as the US's leading trade partner, particularly in view of the economic malaise that continues to stubbornly grip Japan.

...under CSI, US Customs and Border Protection (CBP) officers are deployed to work with host nation counterparts to target high-risk cargo containers ...with this agreement, the US and China have formally initiated joint efforts to target and pre-screen cargo containers shipped from the ports of Shanghai and Shenzhen, China and destined for US ports

...the CSI program is comprised of four core elements ...using intelligence and automated information to identify and target high-risk containers ...pre-screening those containers identified as high-risk, at the port of departure, before they arrive at US ports ...using ***detection technology*** to quickly pre-screen high-risk containers ...using ***smarter, tamper evident containers***

...roughly 200 million sea cargo containers move annually among the world's top seaports ...nearly 50% of the value of all US imports arrive via sea containers ...an estimated two-thirds of all containers that arrive in the US by sea originate from or pass through the world's 20 largest ports ...to date, 19 of the top 20 ports have agreed to join CSI and are at various stages of implementation ...CSI is currently operational in 16 ports including Singapore, Yokohama, Hong Kong, Busan, Rotterdam, LeHavre, Bremerhaven, Hamburg, Antwerp, Göteborg, Felixstowe, Genoa, La Spezia, Vancouver, Montreal, and Halifax

Malaysia has announced intensified efforts to improve seaport security following a Muslim extremist terror attack on neighboring Indonesia's Jakarta J.W. Marriott Hotel that killed at least 14 and injured nearly 150. This attack is believed to be linked to the October 2002 terror attack in Bali, Indonesia that killed 202 and injured more than 300 in the most deadly terrorist bombing since the September 2001 high impact terror attacks in the US.

...Malaysian officials are boosting security across the country's seaports following the recent Jakarta attack ...tighter security measures include patrols of isolated waterways and ***enhanced scrutiny of all cargo ships and their crews*** ...prior to the Jakarta attack, Malaysian marine police had only concentrated on open water patrols ...those law enforcement units will now also focus on the country's ports ...ships will be searched for hazardous materials, particularly explosives

...seaport protection is crucial to the health of the Malaysian economy which is driven primarily by the export of electronics ...further, Malaysia's large Muslim population and close proximity to Indonesia make it vulnerable to the violent extremism that is now impacting the key tourism sector of the Indonesian economy

On June 24, the US House of Representatives (house.gov) passed a \$29.4 billion FY 2004 appropriations bill for the US Department of Homeland Security. On July 24, the US Senate (senate.gov) passed its own \$29.3 billion version of the bill. Conferees will attempt to reconcile differences in the bills when the first session of the 108th Congress reconvenes following August recess.

Please see Table I below for a capsule profile of these FY 2004 bills versus total FY 2003 appropriations to date. Tables II-A and II-B on pages five and six of this report provide detailed reviews of both bills. A comparative analysis of key aviation security, maritime security and border / checkpoint security line items can be found in Tables III and IV on pages seven and eight. And, finally, selected text from both bills is presented in Appendices I and II at the end of this report.)

...both HR 2555 EH (Engrossed as Passed by House) and HR 2555 EAS (Engrossed Amendment as Agreed to by Senate) call for FY 2004 DHS spending levels just slightly ahead of total FY 2003 appropriations to date ...original FY 2003 appropriations were \$22,980,261,000 ...PL (Public Law) 108-11, signed into law on April 16, 2003, added appropriations of \$6,306,500,000, bringing the FY 2003 total (to date) to **\$29,286,761,000** ...HR 2555 EH calls for FY 2004 DHS spending of **\$29,410,982,000**, an increase of just 0.4% versus total FY 2003 appropriations ...HR 2555 EAS calls for an even smaller FY 2004 DHS budget of **\$29,326,000,000**, a slim 0.1% larger than total FY 2003 appropriations to date

Table I
Homeland Defense Industry
FY 2004 Budget: US Department of Homeland Security
Summary: HR 2555 EH and HR 2555 EAS versus Actual FY 2003 Appropriations

FY 2003:	
Original appropriations	\$ 22,980,261,000
Supplemental appropriations provided by Public Law 108-11	6,306,500,000
Total: FY 2003 appropriations acts to date	\$ 29,286,761,000
FY 2004:	
HR 2555 EH: Amount of bill as passed by House	\$ 29,410,982,000
\$ increase versus total appropriations provided in FY 2003	124,221,000
% increase versus total appropriations provided in FY 2003	0.4%
HR 2555 EAS: Amount of bill as agree to by Senate	\$ 29,326,000,000
\$ increase versus total appropriations provided in FY 2003	39,239,000
% increase versus total appropriations provided in FY 2003	0.1%

Source: US General Accounting Office (GPO) (gpo.gov).
Compiled by: Laguna Research Partners LLC (LRP) (lrponline.net).

While the overall increase in proposed FY 2004 DHS spending is unimpressive, the House and Senate bills both emphasize key security-related line items. They also both include important language regarding aviation security, maritime security and border / checkpoint security.

...the House's HR 2555 EH allocates \$5,172,000,000 to the *US Transportation Security Administration* (TSA) (tsa.gov) ...this represents 17.6% of the bill's total FY 2004 DHS spending proposal, but a decline of 11.0%, or \$639,330,000, versus the FY 2003 appropriations level of \$5,811,330,000 ...notably, the House's budgeted TSA funding level is \$359,700,000 above the Bush Administration's request

Table II-A
 Homeland Defense Industry
 FY 2004 Budget: US Department of Homeland Security
 HR 2555 EH (Engrossed as Passed by House - June 24, 2003)

Spending Category	\$ Amount	% of Total
Title I — Departmental Management and Operations		
Departmental Administration	\$ 221,493,000	0.8%
Counterterrorism Fund	20,000,000	0.1%
Department-Wide Technology Investments	206,000,000	0.7%
Office of The Inspector General	58,118,000	0.2%
Sub-total: Title I	\$ 505,611,000	1.7%
Title II — Border and Transportation Security		
Bureau of Customs and Border Protection (CBP)		
Salaries and Expenses (Including Transfer of Funds)	4,587,600,000	15.6%
Automation Modernization	493,727,000	1.7%
Sub-total: CBP	\$ 5,081,327,000	17.3%
Immigration and Customs Enforcement (ICE)		
Bureau of Immigration and Customs Enforcement: Salaries and Expenses	2,030,000,000	6.9%
Federal Protective Service (Including Transfer of Funds)	424,211,000	1.4%
Automation and Infrastructure Modernization (includes \$350 million for US-Visit)	367,605,000	1.2%
Air and Marine Interdiction	175,000,000	0.6%
Sub-total: ICE	2,996,816,000	10.2%
Transportation Security Administration (TSA)		
Aviation Security	3,679,200,000	12.5%
Federal Air Marshals	634,600,000	2.2%
Maritime and Land Security	231,700,000	0.8%
Intelligence	13,700,000	0.0%
Research and Development	125,700,000	0.4%
Administration	487,100,000	1.7%
Sub-total: TSA (before other items)	5,172,000,000	17.6%
Unspecified Reduction	(20,000,000)	-0.1%
Offsetting Collections	(2,070,000,000)	-7.0%
Sub-total: TSA	3,082,000,000	10.5%
Federal Law Enforcement Training Center	168,952,000	0.6%
Office for Domestic Preparedness	3,513,000,000	11.9%
Sub-total: Title II	14,842,095,000	50.5%
Title III — Emergency Preparedness and Response		
Administrative and Regional Operations	168,589,000	0.6%
Preparedness, Mitigation, Response, and Recovery	363,339,000	1.2%
Public Health Programs	484,000,000	1.6%
Biodefense Countermeasures	890,000,000	3.0%
Grant Programs	180,000,000	0.6%
Emergency Food and Shelter	153,000,000	0.5%
Firefighter Assistance Grants (Including Transfer of Funds)	760,000,000	2.6%
Disaster Relief (Including Transfer of Funds)	1,800,000,000	6.1%
Flood Map Modernization Fund	200,000,000	0.7%
National Flood Insurance Fund (Including Transfer of Funds)	110,570,000	0.4%
Disaster Assistance Direct Loan Program Account	558,000	0.0%
Sub-total: Title III	5,110,056,000	17.4%
Title IV — Other Departmental Activities		
Operating Expenses	248,500,000	0.8%
United States Coast Guard (USCG)		
Operating Expenses	4,703,530,000	16.0%
Environmental Compliance and Restoration	17,000,000	0.1%
Reserve Training	94,051,000	0.3%
Acquisitions, Construction, and Improvements	805,000,000	2.7%
Alteration of Bridges	19,500,000	0.1%
Research, Development, Test, and Valuation	22,000,000	0.1%
Retired Pay (\$1,020,000,000 Mandatory)	-	0.0%
Sub-total: USCG	5,661,081,000	19.2%
Information Analysis and Infrastructure Protection	776,000,000	2.6%
Science and Technology	900,360,000	3.1%
United States Secret Service (USSS)		
Salaries and Expenses	1,148,700,000	3.9%
Acquisition, Construction, Improvements, and Related Expenses	3,579,000	0.0%
Sub-total: USSS	1,152,279,000	3.9%
Sub-total: Title IV	8,738,220,000	29.7%
Airline Bailout Scorekeeping Adjustment	215,000,000	0.7%
Total: HR 255 EH	\$ 29,410,982,000	100.0%

Source: United States Government Printing Office (US GPO) (gpo.gov).
 Compiled by: Laguna Research Partners LLC (LRP) (lrponline.net) based on US GPO text.

Table II-B
 Homeland Defense Industry
 FY 2004 Budget: US Department of Homeland Security
 HR 2555 EAS (Engrossed Amendment as Agreed to by Senate - July 24, 2003)

Spending Category	\$ Amount	% of Total
Title I - Departmental Operations, Management, and Oversight		
Office of The Secretary and Executive Management	\$ 83,653,000	0.3%
Office of The Under Secretary for Management	167,521,000	0.6%
Department-Wide Technology Investments	185,000,000	0.6%
Office of The Inspector General	80,118,000	0.3%
Sub-total: Title I	\$ 516,292,000	1.8%
Title II —Services		
Citizenship and Immigration Services	229,377,000	0.8%
Sub-total: Title II	229,377,000	0.8%
Title III —Security, Enforcement, and Investigations		
Office of The Under Secretary for Border and Transportation Security (BTS)		
Salaries and Expenses	8,842,000	0.0%
United States Visitor and Immigrant Status Indicator Technology	380,000,000	1.3%
Sub-total: BTS	\$ 388,842,000	1.3%
Customs and Border Protection (CPB)		
Salaries and Expenses (Including Transfer of Funds)	4,366,000,000	14.9%
Harbor Maintenance Fee Collection	3,000,000	0.0%
Automation Modernization	441,122,000	1.5%
Construction	90,363,000	0.3%
Sub-total: CPB	4,900,485,000	16.7%
Immigration and Customs Enforcement (ICE)		
Salaries and Expenses (Including Transfer of Funds)	2,180,000,000	7.4%
Federal Protective Services	424,211,000	1.4%
Air and Marine Interdiction, Operations, Maintenance and Procurement	257,291,000	0.9%
Construction	26,775,000	0.1%
Sub-total: ICE	2,888,277,000	9.8%
Transportation Security Administration (TSA)		
Aviation Security	4,523,900,000	15.4%
Maritime and Land Security	295,000,000	1.0%
Intelligence	13,600,000	0.0%
Research and Development	130,200,000	0.4%
Administration	433,200,000	1.5%
Sub-total: TSA (before offsetting collections)	5,395,900,000	18.4%
Offsetting Collections	(2,070,000,000)	-7.1%
Sub-total: TSA	3,325,900,000	11.3%
United States Coast Guard (USCG)		
Operating Expenses, Net	4,648,000,000	15.8%
Environmental Compliance and Restoration	17,000,000	0.1%
Reserve Training	95,000,000	0.3%
Acquisition, Construction, and Improvements	1,035,000,000	3.5%
Retired Pay (\$1,020,000,000 mandatory)	1,020,000,000	3.5%
Sub-total: USCG	6,815,000,000	23.2%
United States Secret Service (USSS)		
Salaries and Expenses	1,114,737,000	3.8%
Acquisition, Construction, Improvements, and Related Expenses	3,579,000	0.0%
Sub-total: USSS	1,118,316,000	3.8%
Sub-total: Title III	19,436,820,000	66.3%
Title IV —Assessments, Preparedness, and Recovery		
Counterterrorism Fund	20,000,000	0.1%
Federal Law Enforcement Training Center	201,444,000	0.7%
Office for Domestic Preparedness	3,638,000,000	12.4%
Under Secretary for Emergency Preparedness and Response	3,615,000	0.0%
Emergency Preparedness and Response	3,574,892,000	12.2%
Office of The Under Secretary for Information Analysis and Infrastructure Protection	10,460,000	0.0%
Information Analysis and Infrastructure Protection, Operating Expenses	823,700,000	2.8%
Sub-total: Title IV	8,272,111,000	28.2%
Title V —Research and Development		
Office of The Under Secretary for Science and Technology	5,400,000	0.0%
Science and Technology, Research, Development, Acquisition and Operations	866,000,000	3.0%
Sub-total: Title V	871,400,000	3.0%
Total: HR 2555 EAS	\$29,326,000,000	100.0%

Source: United States Government Printing Office (US GPO) (gpo.gov).
 Compiled by: Laguna Research Partners LLC (LRP) (lrponline.net) based on US GPO text.

Table III
Homeland Defense Industry
FY 2004 Budget: US Department of Homeland Security
Summary Comparison: HR 2555 EH (Passed by House) versus HR 2555 EAS (Agreed to by Senate)

Spending Category	FY 2003 Total Appropriations to Date	FY 2004							
		HR 2555 EH (House)				HR 2555 EAS (Senate)			
		\$ Amount	% of Total Bill	Change versus FY 2003		\$ Amount	% of Total Bill	Change versus FY 2003	
			%	\$			%	\$	
Transportation Security Administration (TSA)	\$ 5,811,330,000	\$ 5,172,000,000	17.6%	-11.0%	\$ (639,330,000)	\$ 5,395,900,000	18.4%	-7.1%	\$ (415,430,000)
Customs and Border Protection (CBP)	5,236,589,000	5,081,327,000	17.3%	-3.0%	(155,262,000)	4,900,485,000	16.7%	-6.4%	(336,104,000)
Office for Domestic Preparedness (ODP)	3,235,884,000	3,513,000,000	11.9%	8.6%	277,116,000	3,638,000,000	12.4%	12.4%	402,116,000
Immigration and Customs Enforcement (ICE)	2,444,109,000	2,996,816,000	10.2%	22.6%	552,707,000	2,888,277,000	9.8%	18.2%	444,168,000
	-	350,000,000	1.2%	100.0%	350,000,000	380,000,000	1.3%	100.0%	380,000,000

Source: US General Printing Office (US GPO) (gpo.gov).
Calculations: Laguna research Partners LLC (LRP) (lrponline.net).

Table IV
Homeland Defense Industry
FY 2004 Budget: US Department of Homeland Security
Analysis: Proposed House and Senate Budgets for Transportation Security Administration (TSA) (tsa.gov)

Spending Category	FY 2003		HR 2555 EH (House)					HR 2555 EAS (Senate)					
	Total Appropriations to Date		\$ Amount	% of Total TSA Budget	% of TSA Budget	% of Total Bill	Change versus FY 2003		\$ Amount	% of Total TSA Budget	% of Total Bill	Change versus FY 2003	
	\$ Amount	% of Total TSA Budget					%	\$				%	\$
Transportation Security Administration (TSA)	\$ 5,811,330,000	100.0%	5,172,000,000	100.0%	17.6%	-11.0%	\$ (639,330,000)	5,395,900,000	100.0%	18.4%	-7.1%	\$ (415,430,000)	
Aviation Security	5,131,944,000	88.3%	3,679,200,000	71.1%	12.5%	-28.3%	(1,452,744,000)	4,523,900,000	83.8%	15.4%	-11.8%	(608,044,000)	
Maritime and Land Security	263,209,000	4.5%	231,700,000	4.5%	0.8%	-12.0%	(31,509,000)	295,000,000	5.5%	1.0%	12.1%	31,791,000	
Intelligence	-	0.0%	13,700,000	0.3%	0.0%	n.m.	13,700,000	13,600,000	0.3%	0.0%	n.m.	13,600,000	
Research and Development	109,484,000	1.9%	125,700,000	2.4%	0.4%	14.8%	16,216,000	130,200,000	2.4%	0.4%	18.9%	20,716,000	
Administration	306,693,000	5.3%	487,100,000	9.4%	1.7%	58.8%	180,407,000	433,200,000	8.0%	1.5%	41.2%	126,507,000	
Total: TSA	\$ 5,811,330,000	100.0%	\$ 5,172,000,000	100.0%	17.6%	-11.0%	\$ (639,330,000)	\$ 5,395,900,000	100.0%	18.4%	-7.1%	\$ (415,430,000)	
Total: HR 2555 EH and HR 2555 EAS			\$ 29,410,982,000		100.0%			\$ 29,326,000,000		100.0%			

Source: US General Printing Office (US GPO) (gpo.gov).
Calculations: Laguna research Partners LLC (LRP) (lronline.net).

...the Senate's HR 2555 EAS specifies a FY 2004 budget of \$5,395,900,000 for **TSA** ...this amounts to 18.4% of the total DHS spending package envisioned by HR 2555 EAS ...it represents a drop of 7.1%, or \$415,430,000, versus FY 2003 appropriations to date ...the Senate's TSA budget is \$583,600,000 above the Administration's proposed budget

...within the House's TSA budget proposal, **airport security** receives \$3,679,200,000, 71.1% of the bill's TSA funding ...this is 28.3%, or \$1,452,744,000, less than the FY 2003 appropriations level and \$537,600,000 less than the amount requested by the Bush Administration ...after accounting for a proposed transfer of Federal Air Marshal activities to a separate appropriation, the reduction from the budget estimate is largely due to approval of a lower staffing level for screening activities ...also, the House bill anticipates that its airport security funding total will be largely offset by an estimated \$2,070,000,000 of off-setting collections from security user fees

...the Senate's version of the TSA budget indicates funding of \$4,523,900,000 for **airport security**, 83.8% of the Senate's total FY 2004 TSA funding ...this represents a decline of 11.8%, or \$608,044,000, from the FY 2003 funding level, and is \$307,100,000 in excess of the budget request made by the Administration ...like the House, the Senate assumes \$2,070,000,000 in estimated off-setting collections from security user fees

...the House recommends \$1,284,800,000 for **airport baggage screening** ...this is \$341,000,000 more than the Administration request ...the House says that this recommendation primarily reflects its decision to accelerate the installation of explosive detection machines in line with the baggage handling systems at large and medium-sized airports

...\$100,000,000 is allocated by the House for the procurement of additional **explosive detection systems (EDS)** for the nation's airports ...the House points out that 36 large and medium US airports require more than 719 high-speed in line EDS machines by 2005 ...further, the House anticipates that the vast majority of these EDS will be the most expensive and largest machines ...additionally, the House budgets \$235,000,000 for the **in line installation of the additional EDS** provided for in its version of HR 2555 ...notably, the Bush Administration did not request any funding for these procurement or installation expenses ...further, in commentary attached to HR 2555 EH, the House Appropriations Committee expresses disappointment with how long it has taken TSA to deploy EDS systems in line ...reflecting this disappointment, the Committee has directed TSA to report to the Committee quarterly on their plan for installing EDS machines in line ...these reports are to begin on September 1, 2003 and must include TSA's deployment time-table and deployment cost estimates for each airport

...in notes attached to HR 2555 EH, the House Appropriations Committee cites estimates indicating that the **installation of EDS units in line with airport baggage systems** will range from \$3 to \$5 billion ...to date, \$1.2 billion has been appropriated for this effort ...even with HR 2555 EH's additional funding, says the Committee, airports, at best, will be funded for about half of their installation needs ...this implies that many US airports will still have large, bulky EDS machines in airport lobbies for the foreseeable future

...the Senate specifies a FY 2004 budget of \$1,378,300,000 for **airport baggage screening** activities ...within this budget, \$150,500,000 is allocated for the **procurement of EDS and ETD units**, \$309,000,000 is allocated for the **installation of explosives detection equipment**, and \$75,000,000 is specified for **EDS and ETD maintenance** ...the Senate Appropriations Committee indicated that it believes that a strong commitment to the **installation of explosive detection systems in an in-line**

system is key to improving passenger security, reducing passenger wait time, and increasing efficiencies of passenger and baggage screeners

...in our view, *American Science and Engineering, Inc., InVision Technologies, Inc., L-3 Communications Holdings, Inc.* and *OSI Systems Inc.* are all potential beneficiaries of continued US Government deployment of EDS and ETD technologies

...the House bill includes \$20,000,000 in funding to support the development of an **air cargo security** program for domestic and foreign “cargo-only” carriers ...the bill also directs TSA to develop and implement a risk-weighted **freight screening system** designed to identify pieces of cargo that require closer scrutiny ...such a system, says the House, is expected to include the automated known shipper verification system, the automated indirect air carrier re-certification program and automated cargo profiling systems

... the Senate, without elaboration, allocates \$30,000,000 to activities aimed at further enhancing **air cargo screening** ...this is 33.3%, or \$10,000,000, more than the figure specified by the House

...beyond airport security, HR 2555 EH also provides TSA with funding of only \$231,700,000 for **maritime and land security** ...this represents just 4.5% of the bill’s total TSA funding and a miniscule 0.8% of the bill’s total DHS budget ...additionally, it is 12.0%, or \$31,509,000, below total appropriations to date of \$263,209,000 for FY 2003 ...importantly, though, it should be noted that the HR 2555 EH figure is 171.0%, or \$146,200,000, higher than the \$85,500,000 in funding requested by the Administration ...the \$231,700,000 HR 2555 EH figure for maritime and land security includes \$100,000,000 for **port security grants** ...the US Coast guard (USCG) (uscg.mil) estimates that port security expenditures will total \$4,400,000,000 over 10 years ...the House Appropriations Committee estimates that \$388,000,000 of this figure has already been appropriated ...HR 2555 EH’s maritime and land security budget also includes \$55,000,000 for and the **Transportation Worker Identification Card (TWIC) Program** ...as described in our *Homeland Defense Industry Biometrics Sector Update Report* dated August 4, 2003, the current bi-coastal test of TWIC is expected to have an important biometrics component during its second phase starting in late 2003 ...HR 2555 EH also includes in its maritime and land security appropriations \$22,000,000 for **trucking and highway security** measures beyond TWIC, \$10,000,000 for **inter-city bus security**, \$10,000,000 for **transit security and training**, and \$4,000,000 for **nuclear detection and monitoring**

...the Senate’s HR 2555 EAS allocates \$295,000,000 to the TSA for **maritime and land security** ...this is only 5.5% of the Senate’s entire TSA budget and a mere 1.0% of the Senate’s total DHS budget for FY 2004 ...however, it is 12.1%, or \$31,791,000, higher than FY 2003 appropriations to date ...this contrasts sharply with the 12.0% decline specified by the House bill’s allocation ...this increase probably reflects the aggressive efforts of US Senator Fritz Hollings (Democrat-South Carolina) who cast the Senate’s lone “No” vote against the passage of HR 2555 EAS on July 24 ...despite the year-over-year increase in maritime and land security expenditures called for in HR 2555 EAS, Hollings remains dissatisfied with US port security measures ...he maintains that the absence of a full-scale vessel tracking system represents a huge vulnerability vis-à-vis the threat of a high impact terrorist attack ...Hollings sponsored the Maritime Transportation Security Act of 2002 (MTSA) (PL 107-295; signed into law on November 25, 2002) which will soon require vessels to emit location signals ...however, due to a lack of funding, the US Coast Guard has not yet built transponder towers to receive those signals

...within the TSA maritime and land security budget outlined in HR 2555 EAS, the Senate designates \$150,000,000 for *port security grants*, \$30,000,000 for *Operation Safe Commerce* aimed at improving security for the movement of cargo through the supply chain and to expand this initiative and its learned efficiencies to other ports, \$25,000,000 to expand the *Highway Watch Grant Program*, \$13,000,000 for the *Hazardous Materials Permit Program* and nationwide *truck tracking system*, and \$10,000,000 for *inter-city bus security grants*

...the House's TSA budget includes \$13,700,000 for *TSA intelligence* ...this amount is expected to support TSA's role as primary liaison for transportation security to the intelligence and law enforcement communities ...this amount compares with no appropriations for FY 2003 and is \$100,000 above the Administration's request

...the TSA budget outlined in the Senate's HR 2555 EAS specifies \$13,600,000 in support of *TSA intelligence* activities ...this is in line with the Administration's budget request ...in addition to the "primary liaison role" described by the House, the Senate directs TSA intelligence officers to provide current and strategic warnings regarding threats to US transportation modes, and to identify trends and changes in assessments of any threats to the safety of US transportation

...another \$125,700,000 is included in the House's HR 2555 EH for *TSA research and development* activities ...this is up 14.8%, or \$16,216,000, versus the FY 2003 appropriations level of \$109,484,000, and a significant \$50,500,000 above the Administration's \$75,200,000 request ...of the FY 2004 amount, \$40,000,000 is provided for research into *next generation EDS and explosive trace detection (ETD) machines*, \$30,000,000 more than requested ...\$30,000,000 is provided for research and development activities for *state-of-the-art cargo screening technologies* for cargo both carried onboard a passenger aircraft and transported in cargo aircraft ...this is \$20,000,000 above the budget request

...the Senate allocates \$130,200,000 to *TSA research and development* efforts ...this exceeds the FY 2003 appropriations level by 18.9%, or \$20,176,000 ...also, it is \$55,000,000 greater than the Administration's request ...the Senate's funding level includes \$45,000,000 for the development of *next generation EDS* and \$30,000,000 to support development of *new cargo security technologies* ...the Administration had requested only \$10,000,000 for each of these activities

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APPENDIX I

HR 2555 EH

Engrossed as Passed by House on June 24, 2003
108th Congress / 1st Session

(selected text)

AN ACT: Making appropriations for the Department of Homeland Security for the fiscal year ending September 30, 2004, and for other purposes.

TRANSPORTATION SECURITY ADMINISTRATION

Aviation Security

For necessary expenses of the Transportation Security Administration related to providing civil aviation security services pursuant to Public Law 107-71, \$3,679,200,000 (reduced by \$20,000,000), to remain available until expended, of which not to exceed \$3,000 shall be for official reception and representation expenses: *Provided*, That of such total amount, not to exceed \$1,672,700,000 shall be for passenger screening activities; not to exceed \$1,284,800,000 shall be for baggage screening activities; and not to exceed \$721,700,000 shall be for airport support and enforcement presence: *Provided further*, That security service fees authorized under section 44940 of title 49, United States Code, shall be credited to this appropriation as offsetting collections and used for providing civil aviation security services authorized by that section: *Provided further*, That the sum herein appropriated from the General Fund shall be reduced on a dollar-for-dollar basis as such offsetting collections are received during fiscal year 2004, so as to result in a final fiscal year appropriation from the General Fund estimated at not more than \$1,609,200,000: *Provided further*, That any security service fees collected in excess of the amount appropriated under this heading shall be treated as offsetting collections in fiscal year 2005: *Provided further*, That none of the funds in this Act shall be used to recruit or hire personnel into the Transportation Security Administration which would cause the agency to exceed a staffing level of 45,000 full-time equivalent screeners: *Provided further*, That of the total amount provided herein, \$235,000,000 shall be available only for physical modification of commercial service airports for the purpose of installing checked baggage explosive detection systems and \$100,000,000 shall be available only for procurement of checked baggage explosive detection systems.

Federal Air Marshals

For necessary expenses of the Federal air marshals, \$634,600,000, to remain available until expended.

Maritime and Land Security

For necessary expenses of the Transportation Security Administration related to maritime and land transportation security grants and services pursuant to Public Law 107-71, \$231,700,000, to remain available until expended: *Provided*, That of such amount, \$100,000,000 shall be available only to make port security grants, which shall be distributed under the same terms and conditions as provided for under Public Law 107-117.

Intelligence

For necessary expenses of the Transportation Security Administration related to transportation security intelligence activities, \$13,700,000, to remain available until expended.

Research and Development

For necessary expenses of the Transportation Security Administration for research and development related to transportation security, \$125,700,000, to remain available until expended.

Administration

For necessary expenses of the Transportation Security Administration for administrative activities, including headquarters and field support, training, and information technology, \$487,100,000, to remain available until September 30, 2005.

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APPENDIX II

HR 2555 EAS

**Engrossed Amendment as Agreed to by Senate on July 24, 2003
108th Congress / 1st Session**

(selected text)

AN ACT: Making appropriations for the Department of Homeland Security for the fiscal year ending September 30, 2004, and for other purposes.

TRANSPORTATION SECURITY ADMINISTRATION

Aviation Security

For necessary expenses of the Transportation Security Administration related to providing civil aviation security services pursuant to the Aviation and Transportation Security Act (49 U.S.C. 40101 note), \$4,523,900,000, to remain available until September 30, 2005, of which \$3,185,000,000 shall be available for screening activities and of which \$1,338,900,000 shall be available for airport support and enforcement presence: Provided, That security service fees authorized under section 44940 of title 49, United States Code, shall be credited to this appropriation as offsetting collections and used for providing civil aviation security services authorized by that section: Provided further, That the sum under this heading appropriated from the general fund shall be reduced on a dollar-for-dollar basis as such offsetting collections are received during fiscal year 2004 in order to result in a final fiscal year appropriation from the general fund estimated at not more than \$2,453,900,000: Provided further, That any security service fees collected in excess of the amount appropriated under this heading shall be treated as offsetting collections in fiscal year 2005: Provided further, That of the total amount provided under this heading, \$309,000,000 shall be available for physical modification of commercial service airports for the purpose of installing checked baggage explosive detection systems, as authorized by section 367 of title III of Division I of the Consolidated Appropriations Resolution, 2003 (49 U.S.C. 47110 note); and \$150,500,000 shall be available for procurement of checked baggage explosive detection systems, including explosive trace detection systems, as authorized by section 4490 of title 49, United States Code.

Maritime And Land Security

For necessary expenses of the Transportation Security Administration related to maritime and land transportation security grants and services pursuant to the Aviation and Transportation Security Act (49 U.S.C. 40101 note), \$295,000,000, to remain available until September 30, 2005: Provided, That of the total amount provided under this heading, \$150,000,000 shall be available for port security grants, which shall be distributed under the same terms and conditions as provided for under Public Law 107-117; and \$30,000,000 shall be available to execute grants, contracts, and interagency agreements for the purpose of deploying Operation Safe Commerce.

Intelligence

For necessary expenses for intelligence activities pursuant to the Aviation and Transportation Security Act (49 U.S.C. 40101 note), \$13,600,000, to remain available until September 30, 2004.

Research And Development

For necessary expenses for research and development related to transportation security, \$130,200,000, to remain available until expended: Provided, That of the total amount provided under this heading, \$45,000,000 shall be available for the research and development of explosive detection devices.

Administration

For necessary administrative expenses of the Transportation Security Administration to carry out the Aviation and Transportation Security Act (49 U.S.C. 40101 note), \$433,200,000, to remain available until September 30, 2004.

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Companies mentioned in this report ▶

American Science and Engineering, Inc. (ASE-AMEX)
BAE Systems Plc (BAESY.PK-Other OTC)
Boeing Company, The (BA-NYSE)
InVision Technologies, Inc. (INVN-NASDAQ)
Israel Aircraft Industries Ltd. (government owned)
L-3 Communications Holdings, Inc. (LLL-NYSE)
OSI Systems Inc. (OSIS-NASDAQ)
Rafael Israel Armament Development Authority Ltd. (privately held)

“Homeland Defense” Equity Research from Laguna Research Partners focuses on companies that, in our opinion, are positioned to make important contributions to the “War on Terror,” both in the US and abroad.



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