

InVision Technologies, Inc.

(INVN-NASDAQ)



BASIC REPORT

February 5, 2002

Threat Detection

Industry ▶

Technology

Industry Segment ▶

Threat Detection

Company Description ▶

InVision Technologies, Inc. develops, manufactures and sells advanced explosives detection systems, and provides related pre-install and post-install services. InVision also leverages its basic technologies into non-threat spaces via the development of products aimed at boosting industrial productivity.

Company Web Site ▶

www.invision-tech.com

Recent Price (bid)	\$43.01
52-Week Range	\$2.00 – 47.09
Shares Outstanding (basic)	13.3 MM
Float (estimated shares)	8.8 MM
Inside Ownership	13.1%
Average Daily Volume	2,917,909
Market Capitalization	\$572 MM
Fiscal Year	December

Fiscal Year	Revenue MM	P/R	EPS (diluted)	P/E
1999A	\$ 58.4	9.4	\$ 0.03	n.m.
2000A	\$ 79.1	6.8	\$(0.14)	n.m.
2001E	\$ 70.3	8.5	\$ 0.09	493.9
2002E	\$ 235.0	2.7	\$ 1.20	35.9
2003E	\$ 445.0	1.5	\$ 2.99	14.4

Balance Sheet (09/30/01): (MM)

Cash & Equivalents	\$ 9.6
Working Capital	\$ 40.2
Long-term Obligations	\$ 0.7
Net Working Capital	\$ 39.4
Shareholders' Equity	\$ 50.4

Compound Annual Gth.: '99-'03E

Revenue	66%
Operating Profit	n.m.
Net Profit	233%

The Opportunity ▶

On the morning of September 11, 2001, the United States and its allies were drawn into yet another war of global scope. But this war, as so horrifically defined by the events of September, was destined to be like none ever seen before. Unlike the two worldwide conflicts of the twentieth century, this new war is not being fought solely on distant military fronts, but also on “fronts” as integral to civilian life as the family mailbox, the company mailroom and the coach section of commercial airliners.

New US federal legislation calls for 100% screening of airline passenger checked baggage using explosives detection system (EDS) units by year-end 2002. Currently, there are fewer than 300 FAA-certified EDS units in operation worldwide, and the US FAA estimates that at least 2,000 EDS units in total—at an average price of about \$1.0 million per unit—will be needed to effectively screen checked bags in the US alone. We estimate that the international market for EDS units is even larger than that in the US.

The Business Model ▶

InVision, in our view, is executing an impressive “dominant first mover” business model. In 1994, InVision became the first of only two companies to develop an EDS certified by the FAA. And InVision accounts for more than 90% of all FAA-certified EDS units installed in airports worldwide. The Company is expanding its production capacity from seven to nine EDS units per month to up to 50 units per month by year-end 2002, and is converting its EDS manufacturing plant from fixed station assembly to a more efficient assembly line process.

Projected Performance ▶

We estimate that InVision generated revenue and EPS of \$70.3 million and \$0.09, respectively, in 2001. We are projecting revenue and EPS of \$235.0 million and \$1.20 in 2002, respectively, and \$445.0 million and \$2.99 in 2003. We expect that this performance will be driven primarily by new EDS installations, EDS replacement sales, and service contracts for installed EDS units.

Analyst ▶ Kevin B. Skislock (skislock@LRPonline.net)

COMPANY PROFILE

InVision Technologies, Inc., the world's largest manufacturer and marketer of explosives detection systems, was incorporated in Delaware in 1990. The Company's headquarters—as well as principal manufacturing facilities—are located in Newark, California.

- The Company completed an *initial public offering* in 1996 that generated net proceeds to the Company of approximately \$9.5 million.
- A May 1997 *secondary offering* by the Company generated net proceeds of about \$21.2 million.

InVision's founding followed the 1988 bombing of Pan Am Flight 103 over Lockerbie, Scotland and the subsequent passage of the Aviation Security Improvement Act of 1990, intended to accelerate the development of explosive and drug detection technologies. In 1994, the Company's CTX 5000 became the first-ever explosives detection system (EDS) certified by the US Federal Aviation Administration (FAA) (www.faa.gov). In 1999, InVision's CTX 9000 DSi became the fastest FAA-certified EDS. The Company's CTX 2500 series is an EDS designed for small, regional airports. InVision is also a key participant in the FAA's "Argus" project which aims to install 400 EDS units in small airports by 2004.

Currently, InVision has three primary revenue, profit and cash flow centers.

- **Explosives Detection Systems** – InVision's Explosives Detection Systems unit develops, manufactures, markets and supports EDS units for civil aviation security based on advanced computed tomography (CT) technology. The Company's products were the first automated explosives detection systems to be certified by the FAA. Since its inception through September 30, 2001, the Company sold 255 EDS systems to the FAA, foreign aviation security agencies and domestic and foreign airports and airlines.
- **Quantum Magnetics** – InVision acquired San Diego-based Quantum Magnetics, Inc. in September 1997 for 770,000 shares of InVision common stock. Quantum, operating as a wholly-owned subsidiary of InVision, develops patented and proprietary technology for inspection, detection and analysis of explosives and other materials. Quantum's products are based on passive magnetic sensing technology and quadrupole resonance (QR) technology, a form of magnetic resonance.

Quantum receives grants from a variety of US government agencies for research and development of landmine detection, carry-on luggage screening, concealed weapon detection, drug detection, and in-process materials inspection. The company recently developed the i-Portal, a technology designed to detect concealed weapons. This is critical to InVision's efforts to penetrate the carry-on luggage security market. Quantum is also involved in the development of technologies meant to detect biological weapons.

- **Wood** – In January 2000, InVision acquired Inovec, Inc. Inovec, operating as a wholly-owned subsidiary of InVision, manufactures, markets and supports products designed to optimize the value and yield of harvested timber using laser scanning and other optimization technologies. Inovec has installed more than 600 laser scanners and other optimization systems in over 300 sawmills worldwide. Inovec is a Delaware corporation, and its headquarters and manufacturing facilities are located in Eugene, Oregon.

In February 2000, InVision announced the formation of its WoodVision division. This new business unit aims to adapt the Company's CT technology to optimizing the value and yield of harvested timber. InVision's CT technology can used 1) to scan harvested "tree stems" at the harvest point to ensure that they are shipped to the appropriate processor and 2) to scan delivered tree stems at the saw mill—using InVision CT equipment *and* Inovec laser scanners—to maximize economic yield.

The primary focus of this report is InVision's EDS technology and market position. The US Federal Aviation Administration has only given certification to the EDS technologies of two companies, one of those companies being InVision. Further, InVision accounts for more than 90% of certified EDS units deployed in airports around the world.

Our analysis indicates that the "untapped" demand for EDS units is huge. While there are now fewer than 300 FAA-certified EDS units installed worldwide, we estimate that the US market can support the installation of at least 2,000 units in total while the international market appears capable of supporting more than 2,500 EDS units. Assuming an estimated price per unit of \$1.0 million, a worldwide explosives detection system market of \$4.5 billion-plus is implied.

THE OPPORTUNITY

On the morning of September 11, 2001, the United States and its allies were drawn into yet another war of global scope. But this war, as so horrifically defined by the events of September, was destined to be like none ever seen before. Unlike the two worldwide conflicts of the twentieth century, this new war is not being fought solely on distant military fronts, but also on "fronts" as integral to civilian life as the family mailbox, the company mailroom and the coach section of commercial airliners.

New US federal legislation calls for 100% screening of airline passenger checked baggage using explosives detection system (EDS) units by year-end 2002. Currently, there are fewer than 300 FAA-certified EDS units in operation worldwide, and the US FAA estimates that at least 2,000 EDS units in total—at an average price of about \$1.0 million per unit—will be needed to effectively screen checked bags in the US alone. We estimate that the international market for EDS units is even larger than that in the US.

Civilian Air Transport, I: An Integral Part of 21st Century Life ►

Civilian air travel is an integral part of 21st century life. Data released by the US Bureau of Transportation Statistics indicates that commercial aircraft are the second most popular mode of transportation in the US today. For roundtrips of 100 miles or more, air travel is led only by transportation via personal-use vehicle, and it far outdistances travel via bus and rail.

- ***Industry data shows that the number of enplaned revenue passengers, or ERPs (the total number of passengers boarding an aircraft) in the US air travel market has grown from less than 36 million in 1954 to an historical peak of 672 million-plus in 2000. (Please see Tables I and II on pages 4 and 5 of this report.)*** These figures imply an estimated compound annual growth rate of 6.5%.
- ***Industry sources estimate that ERPs flying domestic US flights totaled more than 570 million in 2001. This was down an estimated 6.8% from the 612 million-plus figure of 2000.*** The year 2001 started off with a 6.7% year-over-year increase in ERPs in January. During the February through August timeframe, ERP figures were roughly flat versus year-earlier figures, reflecting the impact of a slowdown in the US economy. The September attacks, understandably, had a significant impact on domestic flight travel figures. Estimated ERP declines of 33.9%, 22.3%, 19.5% and 14.7% were registered in September, October, November and December, respectively, of 2001.
- ***Enplaned revenue passenger figures for US international flights reflect the same pattern as seen for domestic flights. For the full year 2001, US international ERPs declined an estimated 5.5% to 56.4 million from 59.7 million in 2000.*** US international ERPs were up 11.2% in January, but showed monthly year-over-

Table I - A
InVision Technologies, Inc.
Enplaned Revenue Passengers
United States - Domestic
1996 through 2001 - Monthly
(thousands)

	1996		1997		1998		1999		2000		2001	
	Total	% Chg.	Total	% Chg.	Total	% Chg.	Total	% Chg.	Total	% Chg.	Total	% Chg.
January	38,409		41,275	7.5%	41,071	-0.5%	42,191	2.7%	42,442	0.6%	45,280	6.7%
February	40,520		40,127	-1.0%	40,548	1.0%	41,953	3.5%	44,183	5.3%	44,315	0.3%
March	48,102		49,601	3.1%	49,350	-0.5%	50,803	2.9%	54,761	7.8%	54,466	-0.5%
April	45,108		45,882	1.7%	53,169	15.9%	49,602	-6.7%	51,073	3.0%	52,024	1.9%
May	45,945		46,988	2.3%	48,593	3.4%	49,217	1.3%	53,278	8.3%	52,347	-1.7%
June	47,471		48,831	2.9%	55,643	14.0%	52,041	-6.5%	56,114	7.8%	54,741	-2.4%
July	48,560		50,874	4.8%	57,142	12.3%	55,266	-3.3%	57,365	3.8%	56,931	-0.8%
August	49,981		51,177	2.4%	53,425	4.4%	53,300	-0.2%	56,169	5.4%	57,752	2.8%
September	41,759		42,784	2.5%	43,698	2.1%	45,729	4.6%	47,382	3.6%	31,327	-33.9%
October	45,858		46,459	1.3%	48,179	3.7%	50,676	5.2%	51,065	0.8%	39,678	E -22.3%
November	41,252		43,609	5.7%	45,835	5.1%	48,689	6.2%	50,775	4.3%	40,874	E -19.5%
December	45,431		45,509	0.2%	46,750	2.7%	47,336	1.3%	48,223	1.9%	41,134	E -14.7%
Total	538,396		553,116	2.7%	583,403	5.5%	586,803	0.6%	612,830	4.4%	570,869	E -6.8%

Table I - B
InVision Technologies, Inc.
Enplaned Revenue Passengers
United States - International
1996 through 2001 - Monthly
(thousands)

	1996		1997		1998		1999		2000		2001	
	Total	% Chg.	Total	% Chg.	Total	% Chg.	Total	% Chg.	Total	% Chg.	Total	% Chg.
January	4,165		4,524	8.6%	4,711	4.1%	4,600	-2.4%	4,357	-5.3%	4,845	11.2%
February	3,983		4,046	1.6%	4,174	3.2%	4,095	-1.9%	4,115	0.5%	4,298	4.4%
March	4,710		4,967	5.5%	4,961	-0.1%	5,120	3.2%	5,079	-0.8%	5,359	5.5%
April	4,231		4,467	5.6%	4,775	6.9%	4,612	-3.4%	4,886	5.9%	5,154	5.5%
May	4,412		4,683	6.1%	4,952	5.7%	4,681	-5.5%	5,128	9.5%	4,990	-2.7%
June	4,911		4,997	1.8%	5,155	3.2%	5,060	-1.8%	5,516	9.0%	5,615	1.8%
July	5,377		5,451	1.4%	5,603	2.8%	5,573	-0.5%	5,914	6.1%	5,848	-1.1%
August	5,552		5,641	1.6%	5,694	0.9%	5,542	-2.7%	5,931	7.0%	5,787	-2.4%
September	4,434		4,703	6.1%	4,333	-7.9%	4,649	7.3%	4,841	4.1%	3,533	-27.0%
October	4,310		4,542	5.4%	4,561	0.4%	4,683	2.7%	4,697	0.3%	3,255	E -30.7%
November	4,076		4,287	5.2%	4,279	-0.2%	4,495	5.0%	4,556	1.4%	3,490	E -23.4%
December	4,331		4,425	2.2%	4,419	-0.1%	4,235	-4.2%	4,670	10.3%	4,208	E -9.9%
Total	54,492		56,733	4.1%	57,617	1.6%	57,345	-0.5%	59,690	4.1%	56,382	E -5.5%

Table I - C
InVision Technologies, Inc.
Enplaned Revenue Passengers
United States - Total
1996 through 2001 - Monthly
(thousands)

	1996		1997		1998		1999		2000		2001	
	Total	% Chg.	Total	% Chg.	Total	% Chg.	Total	% Chg.	Total	% Chg.	Total	% Chg.
January	42,574		45,799	7.6%	45,782	0.0%	46,791	2.2%	46,799	0.0%	50,125	7.1%
February	44,503		44,173	-0.7%	44,722	1.2%	46,048	3.0%	48,298	4.9%	48,613	0.7%
March	52,812		54,568	3.3%	54,311	-0.5%	55,923	3.0%	59,840	7.0%	59,825	0.0%
April	49,339		50,349	2.0%	57,944	15.1%	54,214	-6.4%	55,959	3.2%	57,178	2.2%
May	50,357		51,671	2.6%	53,545	3.6%	53,898	0.7%	58,406	8.4%	57,337	-1.8%
June	52,382		53,828	2.8%	60,798	12.9%	57,101	-6.1%	61,630	7.9%	60,356	-2.1%
July	53,937		56,325	4.4%	62,745	11.4%	60,839	-3.0%	63,279	4.0%	62,779	-0.8%
August	55,533		56,818	2.3%	59,119	4.0%	58,842	-0.5%	62,100	5.5%	63,539	2.3%
September	46,193		47,487	2.8%	48,031	1.1%	50,378	4.9%	52,223	3.7%	34,860	-33.2%
October	50,168		51,001	1.7%	52,740	3.4%	55,359	5.0%	55,762	0.7%	42,933	E -23.0%
November	45,328		47,896	5.7%	50,114	4.6%	53,184	6.1%	55,331	4.0%	44,364	E -19.8%
December	49,762		49,934	0.3%	51,169	2.5%	51,571	0.8%	52,893	2.6%	45,342	E -14.3%
Total	592,888		609,849	2.9%	641,020	5.1%	644,148	0.5%	672,520	4.4%	627,250	E -6.7%

NOTE: The traffic data presented on this page is reported to the Department of Transportation on BTS Form 41 by Large Certificated Air Carriers to include carrier groups: Majors, Nationals, Large Regionals, and Medium Regionals. Traffic statistics for Small Certificated Air Carriers and Commuter Air Carriers are not included.

Source: Bureau of Transportation Statistics; Air Transport Association.
Estimates and calculations: Laguna Research Partners LLC.

Table II - A
 InVision Technologies, Inc.
World Airline Industry Statistics
2000
 (raw data)

<u>Airline Registration</u>	<u>Airline Count</u>	<u>Passengers (thousands)</u>	<u>Revenue Passenger Kilometers (millions)</u>	<u>Freight Ton Kilometers (thousands)</u>	<u>Employee Count</u>	<u>Aircraft Count</u>
Africa	19	28,086	56,502	1,431,040	58,701	361
Asia/Pacific	76	371,947	729,798	45,914,252	396,799	2,496
Canada	7	36,776	75,489	1,819,216	54,481	414
Europe	202	537,945	1,009,331	36,845,438	508,506	5,225
Latin America/Caribbean	49	92,248	135,796	5,146,300	90,227	901
Middle East	20	47,143	86,542	3,953,035	72,765	373
✓ Sub-total: non-US	373	1,114,145	2,093,458	95,109,281	1,181,479	9,770
US Majors	15	585,791	1,056,724	33,885,457	1,102,013	5,188
US Nationals	37	83,555	75,501	7,265,134	71,127	1,391
US Regionals	83	36,478	22,154	182,456	25,407	1,411
US Cargo	15	N/A	N/A	881,830	2,822	152
✓ Sub-total: US	150	705,824	1,154,379	42,214,877	1,201,369	8,142
✓ Total: world	523	1,819,969	3,247,837	137,324,158	2,382,848	17,912

Source: Air Transport World (July 2001)
 Calculations: Laguna Research Partners LLC.

Table II - B
 InVision Technologies, Inc.
World Airline Industry Statistics
2000
 (profile - as % of Total World)

<u>Airline Registration</u>	<u>Airlines Count</u>	<u>Passengers</u>	<u>Revenue Passenger Kilometers</u>	<u>Freight Ton Kilometers</u>	<u>Employee Count</u>	<u>Aircraft Count</u>
Africa	3.6%	1.5%	1.7%	1.0%	2.5%	2.0%
Asia/Pacific	14.5%	20.4%	22.5%	33.4%	16.7%	13.9%
Canada	1.3%	2.0%	2.3%	1.3%	2.3%	2.3%
Europe	38.6%	29.6%	31.1%	26.8%	21.3%	29.2%
Latin America/Caribbean	9.4%	5.1%	4.2%	3.7%	3.8%	5.0%
Middle East	3.8%	2.6%	2.7%	2.9%	3.1%	2.1%
✓ Sub-total: non-US	71.2%	61.2%	64.5%	69.1%	49.7%	54.5%
US Majors	2.9%	32.2%	32.5%	24.7%	46.2%	29.0%
US Nationals	7.1%	4.6%	2.3%	5.3%	3.0%	7.8%
US Regionals	15.9%	2.0%	0.7%	0.1%	1.1%	7.9%
US Cargo	N/A	N/A	N/A	0.6%	0.1%	0.8%
✓ Sub-total: US	28.7%	38.8%	35.5%	30.7%	50.4%	45.5%
✓ Total: world	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Air Transport World (July 2001)
 Calculations: Laguna Research Partners LLC.

year growth ranging between -2.7% and +5.5% during the February through August period. During September, October, November and December of last year, US international ERPs declined 27.0%, 30.7%, 23.4% and 9.9%, respectively.

- **Total US ERPs—combining US domestic and US international data—were down an estimated 6.7% in 2001 to 627.3 million from 672.5 million in 2000.** Interestingly, the negative impact of the September attacks on total US air travel appears to be dissipating rapidly. Further, while the industry faces a somewhat “difficult” year-to-year comparison in ERPs in January 2002, comparisons ease significantly during for the remainder of the year.

Civilian Air Transport, II: A History of Vulnerability ►

As the number of passengers using air travel—not just in the US but around the world—has increased, airports, airline offices and aircraft have become an increasingly favored “target of opportunity” for terrorists.

- **The vulnerability of commercial airliners in flight first gained attention in the 1960’s.** The first case of “skyjacking” within the United States occurred on May 1, 1961, when a man forced a commercial airliner en route from Miami to Key West, Florida to detour to Cuba. It was the first of four flights diverted to Cuba that year.
- **Since 1961, the violence associated with air piracy has expanded significantly.** Chart I on page 7 of this report provides a partial list of civil aviation terrorist events for the period 1970 through the present. While some of the events listed in that Chart did not necessarily involve on-board bombings of in-flight craft, we see them as having been critical in rallying public support for increasingly tough anti-terrorism laws including recent legislation calling for 100% checked baggage screening by EDS units by year-end 2002.

As Table III on page 8 indicates, the US is particularly vulnerable to the violence of airborne terrorism given that 15 of the world’s 25 busiest airports are located in the US.

Civilian Air Transport, III: FAA Anti-Terror Programs ►

On its current Web site, www.faa.gov, the US FAA bluntly states, “The use of explosives by terrorists against civil aviation, whether as a hijack weapon or as a bomb to destroy an aircraft, presents the most serious threat to aviation today.” In order to combat this ongoing threat, the FAA has, over the years, initiated a series of programs aimed at eliminating the airborne terrorist bomb threat.

- **The Federal Air Marshall Program (FAM), authorized by the Federal Aviation Act of 1958, the Anti-Hijacking Act of 1974, and the International Security and Development Cooperation Act of 1985, was created to provide a deterrent to hijacking and other forms of terrorist activity aboard in-flight aircraft.** This program provides a covert, armed security force capable of conducting anti-hijacking operations. FAMs are specially trained Special Agents who travel on US air carriers along routes and into areas considered most vulnerable to hijackings. FAM agents are authorized to carry firearms and, if they reasonably believe a person has committed or is committing a felony, are also authorized to make arrests without warrant for any offense against the US.
- **In 1971, the FAA instituted its Aviation Explosives Security Program.** One of the Agency’s first projects under this program was to change FAA regulations and require the airline industry to report all bomb threats.

Chart I
 InVision Technologies, Inc.
Civilian Aviation Terrorist-Related Events - Partial List
1970 through Present

Date	Event / Details
02.21.70	On this date, a Swissair jet was bombed. Suspected members of the Popular Front for the Liberation of Palestine placed a bomb on a Swissair passenger jet en route from Zurich to Tel Aviv, resulting in the death of all 47 passengers.
09.08.74	Libyan terrorist plant a bomb on board a TWA plane flying from Athens to Rome, all 85 passengers are killed.
09.23.83	An Omani Gulf aircraft en route from Karachi to Abu Dhabi was destroyed by a bomb, killing 111 people, including one American.
06.25.85	Air India Bombing, June 23, 1985: A bomb destroyed an Air India Boeing 747 over the Atlantic, killing all 329 people aboard. Both Sikh and Kashmiri terrorists were blamed for the attack. Two cargo handlers were killed at Tokyo airport, Japan, when another Sikh bomb exploded in an Air Canada aircraft enroute to India.
03.30.86	A Palestinian splinter group detonated a bomb as TWA Flight 840 approached Athens Airport in Athens, Greece. Four US citizens were killed.
11.29.87	Korean Air Lines (Republic of Korea) Flight 858 was blown up over the Andaman Sea near Burma by two North Korean agents, killing all 115 persons aboard.
12.21.88	Pan Am Flight 103, outbound from London for New York with 259 people aboard, was destroyed by a bomb planted in checked baggage on December 21, 1988 while over Lockerbie, Scotland. All aboard the aircraft were killed as were eleven persons on the ground at Lockerbie. The flight's passenger list included 35 Syracuse University students and many US military personnel. Two Libyan intelligence officers were tried for this attack under Scottish law in The Hague. One, Abdelbaset Ali Mohamed Al Megrahi, was found guilty, in January 2001.
09.19.89	UTA Flight 772 was bombed, killing all on board. The flight originated in Chad and crashed in Niger.
11.14.91	The United Kingdom issued indictments against two Libyans for the bombing of Pan Am Flight 103 in December 1989.
01.08.92	A Greek court convicted Palestinian terrorist Mohammad Rashid of premeditated murder for planting a bomb on a Pan American aircraft in August 1982. The bomb exploded as the plane was about to land at Honolulu, Hawaii, killing one person and injuring several others. Rashid was arrested in Greece in May 1988 as a result of a tip from the US.
Late 1994, early 1995	Then-fugitive Ramzi Yousef had already slipped out of the US and the Philippines when officials investigated an explosion in a Manila, Philippines apartment occupied by two people linked to him. Investigators discovered plots to assassinate the Pope and President Clinton during visits to the Philippines and to explode a dozen commercial jets over the Pacific.
12.14.99	An alert US Customs agents based in Port Angeles, Washington noticed that Ahmed Ressay was sweating—in winter—while waiting to cross from Canada into the US. Upon inspection, explosives were found in the trunk of his car. Ressay later confessed to a plot to blow up LAX airport.
09.11.01	Three hijacked passenger airliners were crashed into New York City's two tallest buildings—the World Trade Center twin towers—and the Pentagon. A fourth hijacked aircraft crashed into a field in rural Pennsylvania as heroic passengers battled with terrorists. In all, thousands were killed. Investigators indicate that these attacks were carried out by members of the al-Qaida terrorist network.
12.22.01	Richard Reid, 28, allegedly attempted to kill the 197 passengers and crew aboard a Paris-to-Miami American Airlines flight with explosive devices planted in his shoes, but was tackled to the floor by crew and passengers. The jetliner was then diverted to Boston. Reid has since been indicted on federal charges alleging he was trained by the al-Qaida terrorist network and was attempting to use a weapon of mass destruction when he tried to blow up a US-bound jetliner.

Source: Industry sources.

Compiled by: Laguna Research Partners LLC.

Table III

InVision Technologies, Inc.

World's 25 Busiest Airports**Passenger Count**

2000 versus 1999, and H1:01 versus H1:00

Rank (H1:01)	US	Airport	Total Passengers ¹			Total Passengers ¹		
			1999 (estimated) ²	2000 (actual)	% Change	H1:00 (estimated) ²	H1:01 (actual)	% Change
1	✓	Atlanta, Hartsfield (ATL)	77,987,389	80,171,036	2.8%	40,592,742	40,227,407	-0.9%
2	✓	Chicago, O'Hare (ORD)	72,644,398	72,135,887	-0.7%	35,165,742	34,251,433	-2.6%
3	✓	Los Angeles (LAX)	65,154,794	68,477,689	5.1%	32,493,149	32,460,656	-0.1%
4		London, Heathrow (LHR)	62,241,989	64,607,185	3.8%	30,824,340	30,207,853	-2.0%
5	✓	Dallas/Ft. Worth (DFW)	60,026,827	60,687,122	1.1%	30,377,491	29,162,391	-4.0%
6		Tokyo, Haneda (HND)	54,337,385	56,402,206	3.8%	26,262,658	27,838,418	6.0%
7		Paris, Charles de Gaulle (CDG)	43,225,929	48,240,137	11.6%	23,118,158	24,343,420	5.3%
8		Frankfurt-Main (FRA)	45,874,182	49,360,620	7.6%	23,334,602	23,964,636	2.7%
9		Amsterdam, Schiphol (AMS)	36,773,063	39,604,589	7.7%	18,540,140	19,263,205	3.9%
10	✓	Denver (DEN)	38,026,282	38,748,781	1.9%	19,205,459	19,013,404	-1.0%
11	✓	Phoenix, Sky Harbor (PHX)	33,541,993	35,889,933	7.0%	18,202,943	18,858,249	3.6%
12	✓	Las Vegas (LAS)	33,658,617	36,856,186	9.5%	18,016,226	18,574,729	3.1%
13	✓	San Francisco (SFO)	40,327,114	41,173,983	2.1%	19,808,730	18,224,032	-8.0%
14	✓	Minneapolis/St. Paul (MSP)	34,841,557	36,688,159	5.3%	17,878,229	18,217,915	1.9%
15	✓	Houston (IAH)	33,095,001	35,246,176	6.5%	17,314,675	17,972,633	3.8%
16	✓	Detroit (DTW)	33,972,352	35,535,080	4.6%	17,761,095	17,281,545	-2.7%
17	✓	Miami (MIA)	33,908,712	33,569,625	-1.0%	17,296,012	17,174,940	-0.7%
18		Madrid (MAD)	27,720,660	32,765,820	18.2%	15,557,359	16,708,604	7.4%
19	✓	Newark (EWR)	33,623,194	34,194,788	1.7%	16,666,667	16,500,000	-1.0%
20		Hong Kong (HKG)	29,715,732	32,746,737	10.2%	15,830,769	16,464,000	4.0%
21	✓	Orlando (MCO)	29,188,049	30,822,580	5.6%	15,691,958	15,582,114	-0.7%
22		Bangkok (BKK)	27,296,251	29,616,432	8.5%	14,596,320	15,545,081	6.5%
23	✓	New York (JFK)	31,670,945	32,779,428	3.5%	15,532,995	15,300,000	-1.5%
24		London, Gatwick (LGW)	30,559,525	32,056,942	4.9%	14,554,261	14,918,118	2.5%
25		Toronto (YYZ)	27,790,621	28,930,036	4.1%	13,852,922	14,448,598	4.3%

Note 1: Total passengers enplaned AND deplaned; passengers in transit counted once.

Note 2: Data for 1999 and H1:00 was calculated using reported 2000 and H1:01 data, and reported percent change figures for 2000 versus 1999 and H1:01 versus H1:00.

Source: Airports Council International, World Headquarters, Geneva, Switzerland.

Calculations: Laguna Research Partners LLC.

Recognizing that, in spite of security precautions, an explosive device might be successfully smuggled aboard a commercial aircraft, the FAA developed the Least Risk Bomb Location (LRBL) concept in 1972. This concept provides airline crews with a designated LRBL where a discovered explosive device can be placed until an aircraft can be safely landed and evacuated.

The FAA's Aviation Explosives Security Program has since been expanded significantly. It now calls for providing expert advice to the aviation industry regarding aviation explosives security, monitoring the worldwide development of explosives technology, and monitoring worldwide terrorist activities. It also calls for the development of explosives-related test objects to be used in training airport screening personnel, and the training of government and industry personnel worldwide in aviation explosives.

- ***The FAA initiated its K-9 Explosives Detection Team Program in 1972.*** Extortion threats, many involving live explosives, plagued the commercial airline industry throughout the early 1970s. The seriousness of this threat was highlighted in March 1972 when a commercial aircraft en route from New York's John F. Kennedy International Airport to Los Angeles was the subject of an anonymous call claiming that there was a bomb on board the flight. The plane immediately returned to JFK and passengers were evacuated. A bomb-sniffing K-9 brought on board detected an explosive device just 12 minutes prior to its pre-set detonation. In direct response to this incident, the FAA's K-9 Explosives Detection Team Program was created in October 1972.

Civilian Air Transport, IV: The FAA's Own "Radar Screen" ▶

The FAA's own "Criminal Acts Against Civil Aviation – 2000" provided an appraisal of the terrorist threat against US civilian air transport that, in light of the September 2001 attacks, is now haunting. In particular, this document made clear the breadth of the threat to the US in this regard.

"...Although there were no watershed terrorist incidents in 2000, such as the 1988 bombing of Pan Am 103, the terrorist threat remains.

- "The most recent significant aviation-related terrorist action was the December 1999 hijacking of an Indian Airlines plane by members of a Kashmiri separatist group. There continues to be concern that the hijacking may either be copied or spur others to commit acts, because this incident succeeded in gaining the release of prisoners and the hijackers have never been caught.
- "Another threat is attributed to terrorist financier Usama Bin Laden, who has been indicted for the August 1998 bombings of the U.S. embassies in Tanzania and Kenya. Although Bin Laden is not known to have attacked civil aviation, he has both the motivation and the wherewithal to do so. Bin Laden's anti-Western and anti-American attitudes make him and his followers a significant threat to civil aviation, particularly to US civil aviation.
- "Finally, another example that the terrorist threat has not diminished is the plot by convicted World Trade Center bomber Ramzi Yousef of several years ago. In 1994, Yousef masterminded a conspiracy to place explosive devices on as many as 12 US airliners flying out of the Far East. In December 1994, as a test for his more elaborate scheme, Yousef placed and exploded a device on a Philippine Airlines plane killing one person. Although Yousef is currently in prison, at least one other accused participant in the conspiracy remains at large. There are concerns that this individual or others of Yousef's ilk who may possess similar skills pose a continuing threat to civil aviation interests.

“There is every reason to believe that civil aviation will continue to be an attractive target for terrorist groups. The publicity and fear generated by a terrorist hijacking or bombing of an aircraft can be a powerful attraction to a group seeking to make a statement or promote a particular cause...”

US Anti-Terrorist Legislation and Federal EDS Funding ▶

Since InVision’s founding in 1990, the Company’s largest customer for EDS machines has been the US FAA. The Department of Transportation’s budget is set annually by Congress. Within that budget, amounts are dedicated to transportation-related agencies such as the FAA and the newly formed Transportation Security Administration (TSA). (The TSA will assume responsibility for the security of all US transportation modes—including air travel—on February 17.) Within the budgets for these Department of Transportation agencies, budgets supporting the deployment of EDS units are set.

- *The Pan Am 103 bombing over Lockerbie, Scotland in 1988 that resulted in the deaths of 270 people was the catalyst that prompted the US federal government to search for technologies capable of efficiently screening checked airline baggage for explosives.* This attack was carried out via explosives planted in checked luggage.
- *The bombing of Pan Am 103 prompted the development and enactment of the Aviation Security Improvement Act of 1990.* This Act was intended to accelerate the development of explosive and drug detection technologies.
- *The July 1996 crash of TWA Flight 800 off of Long Island—this was initially viewed as a possible terrorist bombing—prompted the formation of the White House Commission on Aviation Safety and Security. This panel became known as the Gore Commission.* In its final report, the Gore Commission found that a lack of effective cooperation between the airline industry and the federal government was hampering efforts towards improved airline safety. Specifically, the Commission recommended that the federal government purchase significant numbers of CT-based explosives detection systems—this is the type of system manufactured and marketed by InVision—and that the funding for these purchases be appropriated by the federal government.
- *In response to the recommendations of the Gore Commission, the FAA instituted plans to purchase and install \$100 million-plus of EDS systems prior to February 1998.* The 1996 Federal Aviation Reauthorization Act and the Gore Commission, however, called for non-certified, commercially available EDS machines to be purchased, if necessary, in order to quickly close the huge gap between the number of systems installed and the number of systems actually needed.
- *The 1997 Appropriations Act provided the FAA with approximately \$144 million in funding to support the deployment of EDS equipment.* At that time, the FAA’s target deadline for 100% screening of checked baggage in US airports was set for 2009. In order to meet this goal, though, the FAA indicated that it would need a 50% increase in its aviation security budget during the 2003 to 2007 timeframe.
- *During the 1997 through early 2000 period, Congress approved \$350 million-plus for the purchase of advanced aviation security technologies.* During this period, Congress also approved \$200 million-plus to support aviation security research and development.
- *In early 2000, the FAA requested that its fiscal 2001 budget include \$98 million for the purchase and installation of EDS machines.* At that time, the FAA also requested \$49 million for continued aviation security research and development.

In response to the terrorist attacks of September 2001, the Aviation and Transportation Security Act was enacted by Congress on November 18, 2001. This Act transferred responsibility for aviation security from the FAA to the new Transportation Security Administration within the Department of Transportation. Also, this Act established two firm deadlines relating to the screening of all checked airline baggage.

- ***Deadline #1: January 18, 2002 - All checked baggage must be screened by some means.*** The law lists four possible ways that checked baggage can be screened. First, airports and airlines can use a “bag match” program that insures that no checked baggage is placed aboard an aircraft unless the passenger who checked the bag is aboard the aircraft. Second, checked baggage can be subjected to a manual search. This specifically calls for opening the bag and searching it by hand. Third, checked baggage can be searched by canine explosives detection units. And, fourth, checked baggage can be screened by other means or technology approved by the Under Secretary for Transportation Security.
- ***Deadline #2: December 31, 2002 - All checked baggage must be screened by an EDS unit.*** This deadline requires the Under Secretary for Transportation Security to take all necessary actions to insure that ***explosives detection systems*** are deployed at all US airports in sufficient numbers by year-end 2002 to screen all checked baggage.

Our research indicates that nearly \$300 million has already been appropriated by Congress to support the TSA’s efforts towards commencing a sharply expanded round of EDS production. Industry sources expect that an additional \$1 billion could be raised annually via the Department of Transportation’s new airline security ticket fee. This new fee—it took effect February 1—is \$2.50 per flight, or \$5.00 for passengers who change planes en route to their destination. Put another way, this fee totals \$5.00 for a round trip non-stop flight, or \$10.00 if a passenger has to change planes each way during a round trip flight. The fee is added to the cost of every airline ticket. Proceeds generated by this fee are to be spent on new technology, passenger screening, law enforcement officers and other security measures. At this point, the TSA has yet to start awarding new EDS contracts.

It should also be noted that the member states of the European Civil Aviation Conference (ECAC) (www.ecac-ceac.org) are attempting to attain 100% screening of hold baggage by year-end 2002. Regarding the progress of member states towards the achievement of this goal, the Conference’s Web site currently states the following.

“...On the question of 100% screening of hold baggage, the vast majority of ECAC Member States report themselves as being on course to achieve this target by the date set by ECAC Directors General, i.e. 31 December 2002...”

Despite the best intentions of the ECAC’s 38 member states, however, we believe that this goal will be difficult to achieve within the timeframe specified. In our view, it is likely that ECAC member states will be continuing to work towards this goal during 2003 and 2004.

EDS Market Potential, I: The “Top-Down” Approach ▶

The US FAA has recently indicated that at least 2,000 explosives detection systems are immediately needed to satisfy the new demands of homeland defense. This installed base target warrants close scrutiny for several reasons.

- First, we can “work backwards” from the 2,000 machine figure to see what it implies regarding checked baggage “coverage” in the ***US market***.

- Second, once we understand how the FAA might have arrived at its 2,000-machine target, we can apply a similar rationale to determining potential sales of EDS machines in the *international market*.
- And, third, from there, we can build up to a *worldwide market* size estimate.

Let's start with analyzing the derivation of the FAA's 2,000-machine target for the US market. Figures supporting our analysis can be found in Table IV on page 14 of this report.

- *We estimate that approximately 947 million checked bags were processed by US airports during 2001.*
- *The targeted 2,000 EDS machines processing roughly 947 million checked bags over the course of the year, implies that each machine, on average, will process 473,389 checked bags annually.*
- *We are also assuming that US airports check most of their checked bag traffic during a 14-hour daily window—this likely ranges from early morning until mid-evening—across a 365-day operating year.* These assumptions imply that EDS machines do most of their checked baggage processing during a total 5,110-hour year.
- *And, finally, if each machine is expected to process 473,389 bags during a 5,110-hour year, an EDS processing speed of approximately 93 checked bags per hour is implied.*

We know that the “work horse” of the InVision product line, the CTX 5500 DS, has an FAA-certified checked bag processing speed—this is referred to as “throughput” in the industry—of 384 bags per hour. Why, then, does the FAA EDS machine count target appear to be based on such a conservative assumed processing speed of 93 bags per hour? We believe that there are several possible answers to this question.

- *First, the daily pattern of checked baggage traffic flow is likely very uneven.* While most checked bag traffic is likely processed during a 14-hour window extending from early morning through mid-evening, most airports probably experience sharp traffic peaks in the early morning, at mid-day and during the evening “rush hour.” In effect, it appears to us that the FAA has to “overbuild” the EDS infrastructure in order to accommodate these daily traffic spikes.
- *Second, EDS unit performance monitoring by the Department of Transportation indicates that EDS units in the field have been operating at rates much lower than the throughput levels certified under normal operating conditions.* In October 11, 2001 testimony before the Committee on Transportation and Infrastructure, Subcommittee on Aviation, US House of Representatives, Kenneth M. Mead, Inspector General for the Department of Transportation, said the following regarding the performance of installed EDS units.

“...There has been a steady increase in the total number of bags screened across the system, as more of these machines are deployed. On the other hand, comparison of quarterly performance statistics compiled on a per machine basis in 2000 and 2001 show the machines are underutilized. In July 2001, the average usage rate per machine was 350 bags *per day*. [These bold italics have been added by Laguna Research Partners.]

“The percentage of machines averaging less than 225 bags per day decreased in 2000. In the first quarter of calendar year 2000 over half of the machines continued to average less than 225 bags per day. In contrast, by the last quarter of 2000 slightly more than a third of the machines averaged less than 225 bags per day. While the utilization has held fairly steady in the first 7 months of 2001, the equipment is still being underutilized with over a third of the deployed machines still screening less

than 225 bags per day, on average, compared to a certified rate of 225 bags per hour. As shown in the chart below, during the month of July the majority of machines continue to be underutilized:

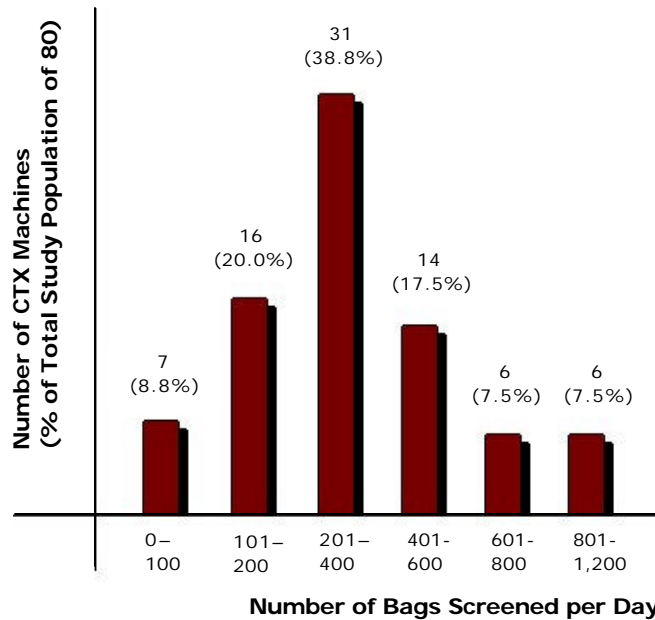
Screening Rates of 80 CTX 5500 Machines Installed in U.S Airports During July 2001

<u>CTX Machines</u>	<u>Number of Bags Screened Per Day</u>
07	0-100
16	101-200
31	201-400
14	401-600
06	601-800
06	801-1200

“This equipment is capable of screening between 140 and 150 bags per hour in an operational environment. FAA needs to take immediate steps to ensure that air carriers use the equipment at this level...”

Given the realities of current EDS performance levels in the field, combined with the need to build an EDS infrastructure that can handle peak traffic loads efficiently, the 93 bag per hour assumption that the FAA’s US EDS unit target appears to imply is, in our view, reasonable. We have taken the data presented in the Congressional testimony above and converted it—with supporting percent profile data—into graph form below.

Graph I
 InVision Technologies, Inc.
 Department of Transportation EDS Performance Survey
 July 2001



Data source: US Department of Transportation.
 Percent calculations and graphic creation: Laguna Research Partners LLC.

Table IV - A
 InVision Technologies, Inc.
EDS Market Potential, I: The "Top-Down" Approach
United States
 (analysis as of January 2002)

Calculation #1 - Implied checked baggage traffic per EDS per year:

Checked bags processed, 2001 (estimate)	946,778,544
US FAA EDS machine count target	2,000

Checked bags processed per EDS per year, implied

473,389

Calculation #2 - Average EDS operating hours per year:

Operating hours per machine per day (assumption)	14
Operating days per year	365

Operating hours per EDS per year (estimate)

5,110

Calculation #3 - Implied EDS processing speed:

Checked bags processed per EDS per year, implied

473,389

Operating hours per EDS per year (estimate)

5,110

✓ **EDS processing speed (bags per hour), US, implied**

93

Table IV - B
 InVision Technologies, Inc.
EDS Market Potential, I: The "Top-Down" Approach
International
 (analysis as of January 2002)

Datapoint - International checked baggage traffic flow:

Checked bags processed, 2001 (estimate)	1,187,234,062
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Calculation #1 - Average EDS operating hours per year:

Operating hours per machine per day (assumption)	14
Operating days per year	365

Operating hours per EDS per year (estimate)

5,110

Calculation #2 - Implied checked baggage traffic per EDS per year:

Operating hours per EDS per year (estimate)	5,110
EDS processing speed (bags per hour), implied	93

Checked bags processed per EDS per year (estimate)

473,389

Calculation #3 - Implied EDS processing capacity:

Checked bags processed, 2001 (estimate)	1,187,234,062
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Checked bags processed per EDS per year (estimate)

473,389

✓ **EDS machine count, international, implied**

2,508

Table IV - C
 InVision Technologies, Inc.
EDS Market Potential, I: The "Top-Down" Approach
Worldwide
 (analysis as of January 2002)

US FAA EDS machine count target	2,000
EDS machine count, international, implied	2,508

✓ **EDS machine count, worldwide, implied**

4,508

Source: Industry sources.
 Assumptions, calculations and estimates: Laguna Research Partners LLC.

We can now estimate the rough size of the international EDS machine market by applying the 93 bag per hour processing speed that appears to be implied by the FAA's 2,000-machine target. The figures summarizing our analysis can be found in Table IV-B on page 14.

- *We estimate that 1,187,234,062 passenger bags were processed internationally in 2001.* We base this estimate on the fact that the US accounts for an estimated 38.8% of the world's enplaned revenue passengers, combined with the assumption that international air travelers probably average 1.2 checked bags, slightly lower than the 1.51 seen in the US.
- *If an EDS machine operates on a 5,110-hour year and processes 93 bags per hour, an estimated 2,508 machines would be needed to process 1,187,234,062 checked bags.*

We see, then, that about 4,508 CTX 5500 DS-equivalent EDS machines might be needed to effectively process current worldwide checked baggage traffic. At an average price of \$1 million per unit, a total worldwide market of \$4.5 billion is implied.

EDS Market Potential, II: The "Bottom-Up" Approach ▶

We can now "cross-reference" the US market size figure that appears to be implied by the FAA's US EDS unit target with a thorough "bottom-up" approach to determining the likely size of the EDS market. (Please see Tables V-A, V-B and V-C on pages 16 and 17 for data summarizing this analysis.)

- *As indicated above, estimated US checked baggage flow was 947 million in 2001.* Further, the FAA indicates that US baggage traffic will reach an estimated 1.525 billion by 2011.
- *As indicated in our analysis above, we are assuming that each EDS in the field processes most of its checked baggage traffic during a 14-hour time span each day.* Assuming a 365-day operating year, total annual operating hours of 5,110 are implied.
- *The FAA has certified InVision's CTX 5500 DS at a processing speed of 384 bags per hour. For the purposes of this analysis, though, we are using a 70% discount to this figure as a conservative estimate regarding real world performance.* (During 1998 and 1999, the Department of Transportation's Office of Inspector General analyzed usage patterns for installed InVision CTX machines and discovered that each machine operator processed 242 bags each day. This equates to about 17 bags per hour assuming a 14-hour processing day. Our 70% discount from the 5500's FAA-certified processing speed of 384 bags per hour implies a 115 bag per hour processing speed and assumes that a steep learning curve will be achieved by EDS operators.)
- *A processing speed of 115 bags per hour over a 5,110-hour operating year implies that approximately 588,000 checked bags can be processed annually.* The 947 million checked bags estimated as actual traffic in the US in 2001, then, would require 1,608 EDS machines for effective processing. Looking out to 2011, an estimated 2,591 EDS units would be needed in the US.

In analyzing the international market, we assume that travelers outside the US check an average of 1.2 bags. In 2001, then, an estimated 989 million enplaned revenue passengers would generate checked baggage traffic of an estimated 1.187 billion bags. Making the same assumptions regarding EDS operator efficiency that we made for the US market, we see that 2,017 EDS machines would be needed to effectively process current non-US checked baggage traffic. By 2011, an estimated 3,248 EDS units would be needed in non-US markets.

Table V - A

InVision Technologies, Inc.

**EDS Market Potential, II: The "Bottom-Up" Approach
United States**

(analysis as of January 2002)

	1999	2000	2001	2002	2003	2004	2005	2011
US Enplaned Revenue Passengers (MM):								
1999 (actual)	644							
2000 (actual)		673						
2001 (preliminary)			627					
2002 (estimate)				658				
2003 (estimate)					690			
2004 (estimate)						724		
2005 (estimate)							759	
2011 (estimate)								1,010
US Checked Bags per Enplaned Revenue Passenger								
1999 (actual)	1.51							
2000 (actual)		1.51						
2001 (preliminary)			1.51					
2002 (estimate)				1.51				
2003 (estimate)					1.51			
2004 (estimate)						1.51		
2005 (estimate)							1.51	
2011 (estimate)								1.51
US Airport Checked Bag Traffic (MM):								
1999 (actual)	972							
2000 (estimate)		1,015						
2001 (estimate)			947					
2002 (estimate)				993				
2003 (estimate)					1,041			
2004 (estimate)						1,092		
2005 (estimate)							1,146	
2011 (estimate)								1,525
US airport operating environment:								
Operating hours, daily (assumed)	14	14	14	14	14	14	14	14
Operating days, annually (estimate)	365	365	365	365	365	365	365	365
Operating hours, annually (estimate)	5,110	5,110	5,110	5,110	5,110	5,110	5,110	5,110
EDS Unit "Similar to" CTX 5500 DS:								
Bags per hour (product specification)	384	384	384	384	384	384	384	384
"Real world" discount (estimate)	70%	70%	70%	70%	70%	70%	70%	70%
"Real world" bags per hour (estimate)	115	115	115	115	115	115	115	115
Operating hours, annually (estimate)	5,110	5,110	5,110	5,110	5,110	5,110	5,110	5,110
"Real world" bags per year (estimate)	588,672	588,672	588,672	588,672	588,672	588,672	588,672	588,672
US Demand Calculation:								
US checked bag traffic (MM) ('99 A, '00-'11 E)	972	1,015	947	993	1,041	1,092	1,146	1,525
"Real world" bags per year (estimate)	588,672	588,672	588,672	588,672	588,672	588,672	588,672	588,672
✓ EDS Units Needed, US (estimate) *	1,651	1,724	1,608	1,687	1,769	1,855	1,946	2,591

* Assumes even airport traffic flow during operating hours. In reality, higher EDS capacity will be needed to handle peak traffic loads.

Source: US FAA; industry sources.

Estimates and calculations: Laguna Research Partners LLC

Table V - B

InVision Technologies, Inc.

**EDS Market Potential, II: The "Bottom-Up" Approach
International**

(analysis as of January 2002)

	1999	2000	2001	2002	2003	2004	2005	2011
Int'l Enplaned Revenue Passengers (MM) (estimate)	1,016	1,061	989	1,038	1,088	1,141	1,197	1,593
Int'l Checked Bags per Enplaned Rev. Pass. (estimate)	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Int'l Airport Checked Bag Traffic (MM) (estimate)	1,219	1,273	1,187	1,245	1,306	1,370	1,437	1,912
<u>International airport operating environment:</u>								
Operating hours, daily (assumed)	14	14	14	14	14	14	14	14
Operating days, annually (estimate)	365	365	365	365	365	365	365	365
Operating hours, annually (estimate)	5,110	5,110	5,110	5,110	5,110	5,110	5,110	5,110
<u>EDS Unit "Similar to" CTX 5500 DS:</u>								
Bags per hour (product specification)	384	384	384	384	384	384	384	384
"Real world" discount (estimate)	70%	70%	70%	70%	70%	70%	70%	70%
"Real world" bags per hour (estimate)	115	115	115	115	115	115	115	115
Operating hours, annually (estimate)	5,110	5,110	5,110	5,110	5,110	5,110	5,110	5,110
"Real world" bags per year (estimate)	588,672	588,672	588,672	588,672	588,672	588,672	588,672	588,672
<u>International Demand Calculation:</u>								
Int'l checked bag traffic (MM) (estimate)	1,219	1,273	1,187	1,245	1,306	1,370	1,437	1,912
"Real world" bags per year (estimate)	588,672	588,672	588,672	588,672	588,672	588,672	588,672	588,672
✓ EDS Units Needed, International (estimate) *	2,071	2,162	2,017	2,115	2,218	2,327	2,440	3,248

* Assumes even airport traffic flow during operating hours. In reality, higher EDS capacity will be needed to handle peak traffic loads.

Source: US FAA; industry sources.

Estimates and calculations: Laguna Research Partners LLC

Table V - C

InVision Technologies, Inc.

**EDS Market Potential, II: The "Bottom-Up" Approach
Worldwide Market**

(analysis as of January 2002)

	1999	2000	2001	2002	2003	2004	2005	2011
<u>United States:</u>								
EDS Units Needed, US (estimate) *	1,651	1,724	1,608	1,687	1,769	1,855	1,946	2,591
<u>International:</u>								
EDS Units Needed, International (estimate) *	2,071	2,162	2,017	2,115	2,218	2,327	2,440	3,248
<u>Worldwide:</u>								
✓ EDS Units Needed, Worldwide (estimate) *	3,722	3,886	3,625	3,802	3,988	4,182	4,386	5,838

* Assumes even airport traffic flow during operating hours. In reality, higher EDS capacity will be needed to handle peak traffic loads.

Source: US FAA; industry sources.

Estimates and calculations: Laguna Research Partners LLC

EDS Market Potential, Epilogue ▶

The gap between the FAA's 2,000-plus EDS machine target for the US market and the 1,608 (2001) to 1,687 (2002) unit US market size calculated from a bottom-up perspective is probably a function, we feel, of at least two factors. (These are the same factors that we cited as possible explanations for the low 93 bag per hour assumption that appears to be implied by the FAA 2,000-machine target for the US market.)

- First, the 2,000-plus machine target probably reflects the need to create a threat detection infrastructure that is adequate to meet peaks in airport activity.
- Second, the FAA figure is probably more reflective of real world operating conditions—particularly operator learning curves—than is our bottom-up model.

In sum, we see end-market demand for EDS machines to be a “long-term” phenomenon, lasting well past 2010.

- *Nearer-term, we expect that EDS industry growth will be driven by aggressive programs on the part of governments worldwide to “close the gap” between the number of EDS machines that are now installed and the number believed to be needed to meet homeland defense requirements.*
- *Longer-term, EDS industry growth is likely, we feel, to be driven by the sale of “first-time” units, the sale of “replacement” units and the procurement of service contracts.* However, we expect that EDS replacement sales will be driven not just by the normal “wear-and-tear” of the installed EDS base, but also by continued improvements in EDS technologies that will be essential to meeting the challenges likely to be posed by the evolving weapons capabilities and tactics of terrorists.

THE BUSINESS MODEL: InVision Technologies, Inc.

InVision, in our view, is executing an impressive “dominant first mover” business model.

- In 1994, InVision became the first company to develop an EDS certified by the FAA.
- InVision now has the largest installed base of FAA-certified EDS units in operation in airport security service.
- Finally, the Company is aggressively expanding its production capacity from seven to nine EDS units per month to up to 50 units per month by the end of 2002, and converting its production process from fixed station assembly to a more efficient assembly line process.

Products and Services ▶

InVision's current EDS products include the CTX 2500, the CTX 5500 DS and the CTX 9000 DSi. These products are designed, through variation in price, size and processing speed, to provide customers with EDS threat detection solutions appropriate to different traffic levels, security budgets and location constraints.

All three of the InVision EDS models listed below are certified by the FAA as automated explosives detection systems for use in airport environments. Product specifications for InVision's core EDS product line can be found in Chart II on the following page. Our discussion of those core products follows on page 20.

Chart II

InVision Technologies, Inc.

InVision Explosives Detection Systems**Product Specifications**

(as of January 2002)

	<u>CTX 2500</u>	<u>CTX 5500 DS</u>	<u>CTX 9000 Dsi</u>
Price (estimates)	\$700,000	\$1.0 million	\$1.4 million
US FAA Certified	Yes	Yes	Yes
Year of US FAA Certification	1999	1998	1999
LUGGAGE (maximums)			
Length	39 in.	47 in.	55 in.
Width	25 in.	25 in.	39 in.
Height	19 in.	19 in.	24 in.
Weight	110 lbs.	110 lbs.	110 lbs.
SCANNER			
Length	97.1 in.	173.5 in.	188 in.
Width	75 in.	75 in.	94 in.
Height	77.5 - 82.4 in.	77.4 - 82.4 in.	87.5 in.
Weight	7,350 lbs.	9,350 lbs.	16,900 lbs.
Footprint	43 sq. ft.	56 sq. ft.	N/A
Conveyor Height	(±.75") 27 - 32 in.	(±.75") 27 - 32 in.	34 in.
Loading Velocity	1.5 ft./sec.	1.5 ft./sec.	N/A
Unloading Velocity	adjustable	<9.8 ft./sec.	N/A
✓ Throughput*	128 bags per hour	384 bags per hour	542 bags per hour
WORKSTATION			
Monitors	2 x 17 in.	2 x 17 in.	2 x 17 in.
Image Depth	128 level gray + colors	128 level gray + colors	N/A
SP Screen Image Resolution	480 X 476 pixels	480 x 576 pixels	1,024 x 768 pixels
CT Screen Image Resolution	512 X 512 pixels	512 x 512 pixels	1,024 x 768 pixels
Threat Coloring	red	red	red
Detonator Coloring	green	green	green
Metal Coloring	blue	blue	blue
Shield Coloring	yellow	yellow	yellow
Controls (images, system)	hard & soft keys, trackball, hand control unit	hard & soft keys, trackball, hand control unit	soft keys, mouse, hard-wired E-Stop/key switch
Printer	Color	Color	Color
SCANNER INTERFACE			
Modem	9,600 bps - 56 kbps	9,600 bps - 56 kbps	9,600 bps - 56 kbps
X-RAY SYSTEM			
SP Operating Range	N/A	140 kV, 0.9 mA	160 kV, 3 mA
SP Sensitivity	N/A	12 bit	12 bit
SP Detectors	N/A	770	1,024
CT Operating Range	180 kV, -3 mA	180 kV, 1 - 3 mA	180 kV, 15 mA
CT Sensitivity	16 bit	16 bit	16 bit
CT Detectors	480	482	576
Cooling System	continuous, oil filled	continuous, oil filled	continuous EGW
ENVIRONMENT (operating)			
Voltage-Nominal	350-510 V, 3 phase, 3 W+PE	350-510 V, 3 phase, 3 W+PE	380 to 480 V, 3 phase, 3 W +PE
Frequency	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Rating	12 kVA nominal maximum	12 kVA nominal maximum	25 kVA
Voltage Tolerance	± 5%	± 5%	± 10%
Circuit Breaker Rating	25 A	25 A	25 A
Temperature	10 - 26.7° C (50 - 80° F)	10 - 26.7° C (50 - 80° F)	-7° to 49° C (20° to 120° F)
Humidity	<60 % non-condensing	<60 % non-condensing	<99 %

* US FAA certification test conditions. Operational throughputs may vary.

Source: Company publications.

Estimates and data compilation: Laguna Research Partners LLC

- The **CTX 5500**—this is an enhanced version of the Company's first EDS product, the CTX 5000 model, which was introduced in 1994—was introduced in 1998. The CTX 5500 system can be integrated into a user site's existing baggage handling system or can operate as a non-integrated standalone machine.
- The **CTX 9000** was introduced in 1999. It was designed to achieve a higher checked baggage processing speed and to be easier to integrate into a user site's baggage handling systems than existing CT-based EDS machines. The CTX 9000 system functions on software designed specifically for airport environments. It has a larger belt-size and aperture, and a compact x-ray shielding method, compared to other CT-based explosives detection systems.
- The **CTX 2500** was also introduced in 1999. It represents a less expensive EDS solution for user site's characterized by lower checked baggage traffic rates and space constraints.
- InVision is also a key participant in the FAA's "**Argus**" project, which aims to install 400 EDS units in small airports by 2004.

InVision generally provides a one year parts and service warranty with the sale of each system. The Company also offers fee-based primary and back-up service contracts to its customers to provide system maintenance, ongoing technical support, documentation and training. Where no new hardware is required, periodic software releases are also be included.

Operator qualification and training is critical to the effective functioning of EDS systems. InVision provides operator training and testing as a critical component of each sale and installation. It licenses its training materials to FAA approved customers for a nominal fee. The Company also offers a standalone training console that simulates a CTX system for sale to customers to train operators to use a CTX system without disrupting the operation of a deployed CTX system.

Acquisitions ▶

Since its inception in 1990, InVision has made two important acquisitions that have diversified the Company's product offerings and, in our view, reduced the risk attached to the flow of future sales, profits and cash flow.

- ***InVision acquired Quantum Magnetics, Inc. as a wholly owned subsidiary in 1997.*** Quantum is a California corporation located in San Diego, California. Quantum develops proprietary technologies supporting the inspection, detection and analysis of explosives and other materials. Its products are based on passive magnetic sensing technology and quadrupole resonance (QR) technology, a form of magnetic resonance.

As mentioned earlier in this report, Quantum receives grants from a variety of US government agencies for research and development of landmine detection, carry-on luggage screening, concealed weapon detection, drug detection, and in-process materials inspection. The company has recently developed the i-portal, a technology to detect concealed weapons. This is critical to InVision's efforts to penetrate the carry on luggage security market. Quantum is also involved in the development of technologies meant to detect biological weapons.

- ***On January 1, 2000, InVision acquired Inovec, Inc.*** Inovec manufactures advanced optimization equipment for increasing yields in the forest products industry. Inovec was purchased for \$5.2 million in cash and stock. This business unit develops, manufactures, markets and supports technology to optimize the value and yield of harvested timber based on different types of scanning technologies. Inovec has installed more than 600 laser

scanners and other optimization systems in over 300 sawmills worldwide. Inovec is a Delaware corporation, and its headquarters and manufacturing facilities are located in Eugene, Oregon.

In February 2000, InVision announced the formation of its WoodVision division. The mission of this new business unit is to adapt the Company's CT technology to optimizing the value and yield of harvested timber. InVision's CT technology can "see" inside the trunks of harvested tree stems.

Research and Development ►

In order to maintain healthy growth in its revenue, profit and cash flow, it is imperative, in our view, that InVision maintain steep basic research and product development curves. This, we believe, will accomplish two important objectives for the Company.

- *First, the market opportunity now present in explosives detection is likely, we feel, to attract an ever-expanding list of competitors.* A strong research and development will be essential to InVision if it is to maintain its "dominant first mover" industry position.
- *Second, InVision needs to stay at least "one or two steps" ahead of terrorists and the certain evolution of their weaponry and tactics.*

Our research indicates that InVision dedicates substantial resources to research and development.

- *As of September 30, 2001, the Company had 140 full-time employees engaged in research and development, and product development activities.* This figure is comprised of 47 working for EDS, 62 for Quantum and 31 for Wood.
- *As of the same date, the Company was also using the services of 14 specialized research and development contract employees and consultants.*
- *During the nine months ended October 1, 2000 and September 30, 2001, the Company spent \$8.5 million and \$10.1 million, respectively, on*

CT Baggage Scanning: How Does It Work?

The core of the InVision Technologies Explosives Detection Systems (EDS) product line is based on advanced Computed Tomography (CT) for the detection of explosives in checked baggage.

Image I
InVision Technologies, Inc.
Model: CTX 5500 DS



Source: InVision Technologies, Inc.

The CT baggage screening process works as follows:

- First, the CTX collects a conventional x-ray image that is used to locate areas inside the luggage that contain sufficient mass to be a threat.
- Second, the CTX produces cross-sectional CT images of the portions of the luggage containing those threats. Each suspicious object is then analyzed and compared against a software library of explosives data.

Image II
InVision Technologies, Inc.
CTX 5500 DS CT Screen Capture



Source: InVision Technologies, Inc.

If a suspicious object is detected, an alarm automatically sounds and the image is displayed. Potential explosives are highlighted in red, detonators in green and metallic objects, such as circuit boards, are highlighted in blue.

research and development activities. Approximately \$435,000 and \$3.4 million, respectively, were funded by the FAA and other agencies under development contracts and grants. After deducting what was funded by the FAA, InVision spent an estimated 14.0% and 13.0% of sales on R&D activities during the first nine months of 2000 and 2001, respectively.

- **At September 30, 2001, the Company had in backlog grants of \$506,000 for EDS research and development.** These grants were primarily related to the development of ARGUS, an FAA-sponsored program designed to develop allow-cost, automated explosives detection system to scan checked baggage in small airports and low-traffic stations within larger airports.
- **Additionally, the Company's Quantum subsidiary has performed non-funded development and commercialization of the i-Portal 100 walk-through portal.** As described earlier, the i-Portal 100 system uses passive magnetic sensing to detect concealed objects. The system's computer workstation displays a digital image of the person walking through the portal and superimposes large dots on the image at the locations of objects that could be weapons.

In general, InVision's research and development expenses consist primarily of compensation paid to personnel directly engaged in research and development activities, fees paid for outside services, and the cost of materials utilized in the development of hardware products, particularly prototype units. Importantly, the Company's research and development expenditures are partially offset by amounts reimbursed by the FAA and other government agencies and private entities under research and development contracts and grants.

Intellectual Property ►

As evidenced by its deep base of intellectual property, InVision's research and development has achieved impressive success since the Company's formation in 1990. The Company, in our opinion, has adequate intellectual property protection—this is by way of patents, patent applications, patent licenses and exclusive rights to proprietary know-how—in the US. Overseas, the Company appears to have something of an “Achilles heel” in that the time period for filing foreign counterparts to its US patents has expired, and the Company did not seek or obtain patent protection in those markets.

- **EDS US Patents** – InVision holds two US patents for automatic concealed object detection systems using a pre-scan stage as used in InVision's CTX units. The Company points out in US SEC filings that these patents have not prevented competition from CT-based competitors, since the competitive system does not use a pre-scan stage. InVision's two patents in this area expire in the years 2010 and 2011. The Company also has a patent application pending covering a number of new features incorporated into the CTX 9000 model.

According to the terms of the Company's development contracts with the FAA, the US Government has the right to use certain elements of the Company's proprietary technology developed after the award of the contracts and funded by the contracts. Further, the US Government may use such rights to produce or have produced for the US Government competing products using such technology.

- **EDS Foreign Patents** - The time period for InVision to file foreign counterparts to its US patents has expired, and the Company did not seek or obtain patent protection.

InVision does hold licenses under foreign patents owned by Imatron Inc. It also has relied on software copyrights and trade secrets for the protection of its proprietary technology. It is important to note, in our opinion, that the absence of foreign counterparts to InVision's US patents could adversely affect the Company's ability to prevent a competitor from using technology similar to the technology used in its CTX product line.

- **Imatron License** – At the time of its original formation, InVision obtained an exclusive, worldwide, and fully-paid license, from Imatron, Inc. related to Imatron’s patents and know-how regarding 1) scanners designed to inspect mail, freight, parcels, baggage and wood products, and 2) compact medical scanners for military field applications. This license allows InVision to develop, manufacture and sell systems based on a different type of CT technology than is currently incorporated in InVision’s CTX units. InVision, in exchange, granted Imatron an exclusive, worldwide, perpetual and fully-paid license permitting Imatron to utilize such technology in medical scanners other than compact medical scanners for military field applications. This license expires in 2009.
- **Quantum Patents** - In connection with its QR technology, the Company utilizes three key QR patents from the Naval Research Laboratory and has been granted an exclusive license to commercialize the technology, including landmine detection. This license expires in 2009.

Additionally, InVision has been granted ten patents related to Quantum technology, with additional patents pending. The Company has also developed a significant amount of know-how in the areas of magnetic sensing and detection. These patents and know-how, the Company believes, enable field deployable security systems to be designed and cost-effectively manufactured.

- **Quantum Licenses** – International Business Machines Corporation (www.ibm.com) has granted to InVision a non-exclusive license regarding certain patented and non-patented proprietary software and know-how related to electro-magnetic sensing and detection. This license grant expires in 2009.
- **Wood** - The Company has a patent application pending covering a number of new features related to the design and use of its CT-based log scanner. Also, the Company has a patent, issued in the US and Canada, for certain technology used in Inovec logcutting optimization systems.

InVision management indicates that the Company generally enters into confidentiality agreements with each of its employees and, on a case-by-case basis, enters into similar agreements with distributors, customers, and potential customers. In addition, the Company limits distribution of its software, documentation and other proprietary information.

Competition ►

As mentioned earlier in this report, InVision is one of only two companies that market EDS machines that have been certified by the US FAA. The other is L-3 Communications Holdings, Inc. (www.L-3Com.com), a merchant supplier of advanced secure communication systems and specialized communication products. Despite the presence of this well-funded competitor, InVision EDS machines represent 90% of the worldwide installed base of FAA-certified units.

- ***L-3 EDS equipment, as of November 2001, was installed in several US airports—these include Dallas/Fort Worth International Airport and Baltimore/Washington International Airport—and in Italy.***
- ***The FAA has awarded L-3 a development contract for advanced airport security equipment for the detection of explosives.*** In partnership with Analogic Corporation (www.analogic.com) and General Electric Company (www.ge.com), L-3 has designed and manufacturers the eXaminer 3DX 6000 CT-based EDS unit. The 6000 was certified by the FAA for a 500 bag per hour processing speed in November 1998. The company’s eXaminer 3DX 3000 EDS unit, designed for smaller airports, is also CT-based.

- ***In January 2002, L-3 agreed to acquire the Detection Systems business of PerkinElmer, Inc. (www.perkinelmer.com) for approximately \$100 million in cash.*** PerkinElmer's Detection Systems business offers X-ray screening for three major security applications: 1) aviation systems for checked and oversized baggage, break bulk cargo and air freight, 2) port and border applications including pallets, break bulk and air freight and 3) facility protection, such as parcels, mail and cargo. Detection Systems has an installed base of over 16,000 units. While these units are not FAA certified, industry observers believe that they can be effectively used to boost the productivity of certified machines sold by InVision and L-3. Customers include major airlines and airports, US domestic agencies—these include the US Customs Service, US Marshals Service, US Department of Agriculture and US Department of State—and international authorities in Europe, Asia and South America.

October 11, 2001 testimony by Kenneth M. Mead, Inspector General for the US Department of Transportation before the Committee on Transportation and Infrastructure, Subcommittee on Aviation, US House of Representatives, made reference to some of the issues surrounding the performance of L-3's units. Here is an excerpt from that testimony.

“...Prior to September 11th, FAA had 22 bulk explosives detection systems stored in a warehouse. Twenty of the systems, including 11 CTXs, manufactured by InVision Technologies, and 9 eXaminer 6000s, manufactured by L-3 Communications, had been allocated to a specific air carrier and airport. It had not been decided where the remaining two InVision CTX-5500s would be installed, but FAA had at the time over 60 requests from air carriers for deployment of additional units. According to FAA, the 11 CTXs had not been installed primarily because funds were not available to pay for the installation of the equipment.

“The nine L-3 machines remain in the warehouse because there have been operational problems with these machines. For example, the L-3 machine at the Dallas Ft. Worth airport (DFW) had operational problems from the day it was installed in the spring 2000. Between July 2000 and July 2001, the L-3 machine at DFW experienced a mean time between failures requiring a service call of 84 hours, and a mean time to repair of almost 6 hours. This means that if the machine broke at the start of the day, it would be out of service for most of that day's screening operation...”

At the same time, InVision appears to face issues regarding the quick and efficient deployment of its own EDS machines. Here is another excerpt from the October 11, 2001 testimony of Mr. Mead.

“...The complexity of the installations and the number of entities involved have slowed the deployment of InVision's machines. At some airports, the machines are installed in locations not conducive to efficient and effective security operations. For example, we observed machines not secured from the public and machine operators not sufficiently insulated from noise and disruption. Other contributing factors have been the initial inexperience of the integration contractors; airline indecision on where to put the machines; and delays due to airport permits, approvals and construction. At one major airport, the airport operator would not approve a lobby installation because the machine did not fit the lobby's color scheme...”

Importantly, the FAA is permitted by law to purchase non-certified equipment if supplies of certified machines are inadequate to meet current needs. Alternative systems include projection X-ray systems and trace detectors produced by companies such as Barringer Technologies, Inc. (www.barringer.com), headquartered in Warren, New Jersey, and OSI Systems, Inc. (www.osi-systems.com), based in Hawthorne, California. In January 2002, OSI announced that it had signed a Letter of Intent with L-3 to acquire from L-3, PerkinElmer's businesses pertaining to carry-on passenger baggage screening including service, as well as all technologies and rights associated with PerkinElmer's ARGUS explosives detection X-ray system.

Additionally, spokespersons for the Department of Transportation's newly formed TSA have indicated that the agency might attempt to accelerate the placement of FAA-certified EDS units by encouraging the licensing of technology already developed by InVision and L-3 to other manufacturers. Given the urgent nature of the current threat, industry sources also speculate that the FAA might expand the list of equipment approved for explosive device screening. Ancore Corporation (www.ancore.com) of Santa Clara, California—Ancore has developed Thermal Neutron Analysis technology that detects known commercial and military explosives and drugs—is, in our opinion, one possible beneficiary of alternative deployment strategies that could emerge from the FAA. Heimann Systems Group (www.heimannsystems.com), based in Pine Brook, New Jersey—Heimann is an X-ray equipment maker that has developed explosives detection devices—is, in our view, another.

PERFORMANCE

We estimate that InVision generated revenue and EPS of \$70.3 million and \$0.09, respectively, in 2001. We are projecting revenue and EPS of \$235.0 million and \$1.20 in 2002, respectively, and \$445.0 million and \$2.99 in 2003. During 2002 and 2003, we expect that this performance will be driven by accelerating sales to a severely under-served market. Longer-term, we look for InVision to benefit from first-time sales of EDS machines, replacement EDS sales and service contracts related to installed EDS equipment.

Recent Developments ►

InVision has seen a significant increase in EDS orders as a result of a heightened interest in aircraft security following the September 2001 terrorist attacks. This increased order activity, though, came too late to have any notable impact on the Company's Q3:01 operating performance. (Please see Chart III on pages 26 and 27 of this report for a list of order-related announcements made by InVision since September 11.)

- Since September 11, InVision has received new EDS orders from the FAA as well as from airports in France, Israel, Italy, the Philippines and Sweden.
- InVision indicates that, as of January 17, it accounts for more than 90% of the installed global base of EDS. Since its inception, the Company has shipped more than 260 FAA-certified CTX systems worldwide.
- The FAA has purchased several i-Portal 100 imaging detection systems for concealed weapons from Quantum Magnetics.
- The U.S. Navy has purchased two QScan QR160 explosives detection devices from Quantum. The explosives detection devices will be used for homeland defense.
- Quantum has received a US Army contract for \$729,000 to develop a magnetic gradiometer to be used to detect landmines and unexploded ordnance.
- Quantum has been awarded \$499,978 from the US National Science Foundation (NSF) to continue the development of a non-invasive gauge to measure residual strains in composite materials used in such entities as bridges, buildings, boats and aircraft.

Chart III
 InVision Technologies, Inc.
Order Summary
09.11.01 through Present

Date	Customer	Value	Comments
01.17.02	Aeroports de Paris ("ADP"), owner and operator of the Charles de Gaulle and the Orly international airports	\$9.0 MM of \$27.0 MM	InVision announced that it received a follow-on purchase order for multiple explosives detection systems for approximately \$9 MM from Aeroports de Paris under a master contract signed in November, 2001. InVision expects to record revenues from this order during Q1:02, Q2:02 and Q3:02. ADP operates the Charles de Gaulle and the Orly international airports in the French capital and installations are planned at both locations. Also, InVision has executed service contracts with ADP which, with renewals, could cover their EDS equipment for up to three years.
12.14.01	US Navy	not announced	InVision announced that the U.S. Navy has purchased two QScan QR160 explosives detection devices from the Company's wholly owned subsidiary Quantum Magnetics, Inc. The explosives detection devices will be used for homeland defense.
12.12.01	FAA (US Federal Aviation Administration)	\$16.3 MM	InVision Technologies, Inc. announced that it received an order for multiple explosive detection systems - CTX 5500 and CTX 2500 systems - with a total value of approximately \$16.3 MM from the United States Federal Aviation Administration (FAA). This order, says the Company, was based on funding secured prior to the final passage of the Aviation and Transportation Security Act.
11.30.01	FAA (US Federal Aviation Administration)	\$445,300	InVision announced that the FAA purchased several i-Portal 100 imaging detection systems for concealed weapons from the Company's wholly owned subsidiary Quantum Magnetics, Inc. The FAA plans to install these systems at undisclosed locations throughout the US. This purchase, together with other recent orders of portal hardware from Milestone Technology, Inc., an Idaho-based technology development company, total \$445,300 in sales for newly commercialized weapons detection systems.
11.29.01	Aeroports de Paris ("ADP"), owner and operator of the Charles de Gaulle and the Orly international airports	\$13.0 MM of \$27.0 MM	InVision announced that it has signed a master supply agreement valued at approximately \$27 million for its CTX 9000DSi and CTX 2500 Explosives Detection Systems with France's Aeroports de Paris. Pursuant to this agreement InVision also received an initial purchase order for multiple systems valued at approximately \$13 million.
11.27.01	Luftfartsverket, the Swedish government civil aviation authority that operates all of the country's major airports	\$5.1 MM	InVision announced that it has received an order valued at approximately \$5.1 million for its CTX 9000 DSi Explosives Detection Systems from Sweden's Luftfartsverket. This order represents the third EDS order from Sweden this year, which have a combined value of approximately \$11.0 million. The systems referenced in this announcement will be integrated with the baggage handling system in the Stockholm-Arlanda Airport and are expected to ship and over a two year period.
11.15.01	Service Technique des Bases Aériennes (STBA - France) Società Aeroporto di Venezia Marco Polo S.p.A. (SAVE - Italy) Jacksonville Airport Authority (Florida - United States)	\$6.1 MM	InVision announced that it has received several orders totaling \$6.1 million for its CTX Explosives Detection Systems (EDS) from France, Italy and the United States. 1) The order from France is for InVision's CTX 2500 and CTX 9000 DSi systems. This order was placed under two previously announced three-year contracts with the French Service Technique des Bases Aériennes (STBA). Revenues from these orders will be recorded during Q4:01. 2) The order from Venice, Italy is for a CTX 5500 DS EDS. This is a new contract with the Società Aeroporto di Venezia Marco Polo S.p.A. (SAVE), the agency licensed to modernize the Venice Airport. Revenues from this order will be recorded during Q4:01. 3) The Jacksonville Airport Authority has placed an order for two CTX 9000 DSi systems to be installed in the Jacksonville International Airport, Florida. This contract is independent of FAA orders with InVision. Revenues for this order will be recorded in Q3:02.

(continued on next page...)

Source: Company publications.
 Compiled by: Laguna Research Partners LLC

Chart III (...continued from previous page)
InVision Technologies, Inc.

Order Summary

09.11.01 through Present

Date	Customer	Value	Comments
11.05.01	Lufftartsverket, the Swedish government civil aviation authority that operates all of the country's major airports	\$2.9 MM	InVision announced that it has received an order valued at approximately \$2.9 million for its CTX 9000DSi Explosives Detection Systems (EDS) from Sweden's Lufftartsverket, the government civil aviation authority that operates all of the country's major airports, and will be installed at the Malmo-Sturup Airport. Revenues from the order are expected to be recorded in late 2002. This order follows the Company's initial order for the CTX 9000 from Sweden in May 2001.
10.19.01	US Army	\$729,000	InVision announced that its wholly owned subsidiary Quantum Magnetics, Inc. has received a US Army contract for \$729,000 to develop an innovative magnetic gradiometer to be used to detect landmines and unexploded ordnance. This funding follows an initial US Army research and development project to develop a system that would detect mines and unexploded ordnance with significantly reduced false alarms rates than is possible today. This system would complement the quadrupole resonance-based system that Quantum is developing to detect landmines under previously announced contracts with the US Army and Office of Naval Research.
10.18.01	US National Science Foundation (NSF)	\$499,978	InVision announced that its wholly owned subsidiary, Quantum Magnetics, Inc., has been awarded \$499,978 from the US National Science Foundation (NSF) to continue the development of a non-invasive gauge to measure residual strains in composite materials used in such entities as bridges, buildings, boats and aircraft.
10.11.01	Crisplant a/s (Danish company for airport in The Philippines French Service Technique des Bases Aériennes (STBA)	\$3.4 MM	InVision announced that it has received orders valued at approximately \$3.4 million for its CTX Explosive Detection Systems (EDS) systems from The Philippines and France. 1) The Philippines order is for the company's CTX 9000DSi explosive detection system that will be integrated into the baggage system of Ninoy Aquino International Airport in Manila. The purchase is being made by Crisplant a/s, a Danish company that is a leader in baggage and materials handling. InVision expects to record revenues from this transaction in Q1:02. 2) The orders from France for InVision's CTX 2500 systems were placed under a previously announced three-year contract with the French Service Technique des Bases Aériennes (STBA). Revenues from these orders will be recorded during Q3:01.
10.04.01	Società Esercizi Aeroportuali SpA (corporation responsible for managing Milan's two airports)	\$9.3 MM	InVision announced that it has received an order valued at approximately \$9.3 million for its CTX 9000DSi Explosive Detection Systems (EDS) for installation at Malpensa Airport in Milan, Italy. This new contract represented the Company's first order from Italy. Revenues from the order are expected to be recorded over several quarters beginning in Q4:01.
09.28.01	EI Al Israel Airlines, Ltd.	\$2.0 MM	InVision announced that it has received an order valued at approximately \$2 million for two CTX 5500DS Explosive Detection Systems (EDS) and related services from EI Al Israel Airlines, Ltd. The company indicated that it expects to record the revenue from this order in Q3:01. This new order followed a \$1.3 million order from EI Al for CTX 2500 EDS systems announced November, 2000.
09.21.01	Service Technique des Bases Aeriennes (STBA - France)	\$16.0 MM	InVision announced that it has received a new, three-year contract for its CTX 2500 Explosive Detection Systems (EDS) from the French Government's Service Technique des Bases Aeriennes (STBA). This new contract, which has a potential value of more than \$16 million, is the second agreement InVision has signed in the past year with STBA. Last year, InVision received a contract with a potential value of more than \$27 million for its CTX 9000DSi EDS Systems.

Source: Company publications.

Compiled by: Laguna Research Partners LLC.

Recent Operating Results ▶

Operating results registered by InVision in Q3:01 ended September 30, 2001, reflect the lack of urgency that pervaded the EDS market prior to the attacks of September 11. Overall, Q3 sales were down 25.9%, operating profit was \$148,000 versus the year-ago \$(44,000) and EPS were \$0.03 versus \$0.02. Quarterly operating results can be found in Tables VI-A, VI-B and VI-C on pages 29, 30 and 31.) Here are the details regarding Q3:01.

- InVision's **EDS product** revenues were \$6.9 million in Q3:01, a decrease of 48.7% versus \$13.5 million in Q3:00. Management says that this decrease reflected a year-to-year decline in CTX system sales. This drop was partially offset by increased sales of accessories and spare parts. Gross profit for EDS products was \$2.5 million in Q3:01, a drop of 43.7% from \$4.4 million in Q3:00. However, the Company's gross profit margin for EDS products increased to 35.7% in Q3:01 versus 32.5% in the year-ago quarter. Management attributes this increase to improvements in manufacturing costs related to the CTX 9000 system, first introduced in late 1999, and an improved product mix. Accessories and upgrade sales typically carry higher profit margins.

The Company's **EDS service** revenues were \$2.6 million in Q3:01, an increase of 25.2% from the \$2.1 million in Q3:00. Gross profit for EDS services was \$1.2 million in Q3:01, an increase of 41.1% versus \$833,000 in Q3:00. Gross profit margins for EDS services jumped to 44.7% in Q3:01 versus 39.7% in Q3:00. This surge in profitability reflected an improved service mix. Specifically, billed time and materials services were strong in the quarter. Also, revenues were recorded in Q3:01 for services provided in prior periods, which had been deferred due to collection uncertainties.

As of September 30, 2001, InVision had a **backlog of EDS equipment orders and service agreements** totaling \$24.1 million.

- **Quantum's** government contract revenues were \$4.6 million in Q3:01, an increase of 59.0% from the \$2.9 million registered in Q3:00. Management indicates that this increase primarily reflected increased develop activities in the areas of landmine and concealed weapons detection technologies. This was partially offset by decreases in other types of development efforts as work under certain government contracts and grants reached completion. Gross profit for government contracts was \$851,000 in Q3:01, a 27.0% increase from \$670,000 in Q3:00. The gross profit margin declined to 18.7% versus the year-earlier 23.4%, reflecting the lower profitability of outside engineering services related to InVision's landmines contract.

As of September 30, 2001, the Company's **Quantum government contract backlog** was approximately \$16.3 million, and that backlog was primarily related to the development of landmine detection technologies.

- **Wood** product and service revenues were \$2.2 million in Q3:01, a drop of 39.7% from \$3.7 million in Q3:00. This decrease reflected lower system sales and lower machinery equipment sales. Both of these declines, says management, reflected softness in the wood products industry in Q3:01. Gross profit for Wood products and services was \$849,000 in Q3:01 versus Q3:00, a decrease of 30.0% from the \$1.2 million of Q3:00. The gross profit margin rose to 37.9% versus 32.6%. This increase in gross margins, says management, was primarily due to a larger portion of revenues attributable to system revenues, which typically carry a lower profit margin than machinery equipment sales.

As of September 30, 2001, the Company had an **Inovec equipment orders and service agreements backlog** of \$1.9 million. Management indicates that the Company is still developing the CT-based log scanner, but had no related revenues or backlog as of September 30, 2001.

Table VI - A
 InVision Technologies, Inc.
Consolidated Statements of Income - Quarterly
Q1:00 through Q3:01 (actual)
 (thousands - except per share data)

	2000				2001		
	Q1:00	Q2:00	Q3:00	Q4:00	Q1:01	Q2:01	Q3:01
Revenue - by division:							
EDS							
Product	\$ 11,767	\$ 7,813	\$ 13,453	\$ 13,466	\$ 9,394	\$ 7,346	\$ 6,901
Service	2,055	2,139	2,099	1,985	2,150	2,466	2,628
Government contract	-	-	-	-	-	-	-
EDS: total revenue	\$ 13,822	\$ 9,952	\$ 15,552	\$ 15,451	\$ 11,544	\$ 9,812	\$ 9,529
Quantum							
Product	\$ -	\$ -	\$ -	\$ 307	\$ -	\$ 54	\$ -
Service	-	-	-	-	-	26	71
Government contract	2,165	2,712	2,869	2,886	3,719	3,966	4,561
Quantum: total revenue	\$ 2,165	\$ 2,712	\$ 2,869	\$ 3,193	\$ 3,719	\$ 4,046	\$ 4,632
Wood							
Product	\$ 2,347	\$ 3,861	\$ 3,322	\$ 2,377	\$ 1,827	\$ 3,187	\$ 1,905
Service	345	457	398	323	407	355	338
Government contract	-	-	-	-	-	-	-
Quantum: total revenue	\$ 2,692	\$ 4,318	\$ 3,720	\$ 2,700	\$ 2,234	\$ 3,542	\$ 2,243
Total revenue	\$ 18,679	\$ 16,982	\$ 22,141	\$ 21,344	\$ 17,497	\$ 17,400	\$ 16,404
Revenue - by type:							
Product revenue	14,114	11,674	16,775	16,150	11,221	10,587	8,806
Product cost of sales	9,672	8,044	11,391	10,226	6,415	6,941	5,647
Product gross profit	4,442	3,630	5,384	5,924	4,806	3,646	3,159
Service revenue	2,400	2,596	2,497	2,308	2,557	2,847	3,037
Service cost of sales	1,677	1,808	1,460	1,567	1,833	1,866	1,694
Service gross profit	723	788	1,037	741	724	981	1,343
Government contract revenue	2,165	2,712	2,869	2,886	3,719	3,966	4,561
Government contract cost of sales	1,571	1,908	2,199	2,171	2,821	3,256	3,710
Government contract gross profit	594	804	670	715	898	710	851
Total revenue	18,679	16,982	22,141	21,344	17,497	17,400	16,404
Total cost of sales	12,920	11,760	15,050	13,964	11,069	12,063	11,051
Total gross profit	5,759	5,222	7,091	7,380	6,428	5,337	5,353
Operating expenses:							
Research and development	2,382	2,563	3,129	2,965	2,850	1,907	1,927
Selling, general and administrative	4,372	4,386	4,006	3,787	3,470	3,141	3,278
Total operating expenses	6,754	6,949	7,135	6,752	6,320	5,048	5,205
Income (loss) from operations	-995	-1,727	-44	628	108	289	148
Interest expense	49	39	46	61	65	83	76
Interest and other income, net	384	101	287	-245	105	0	388
Pretax profit	-660	-1,665	197	322	148	206	460
Taxes	0	0	0	0	59	62	13
Net profit	-660	-1,665	197	322	89	144	447
EPS, basic	-0.05	-0.14	0.02	0.03	0.01	0.01	0.03
EPS, diluted	-0.05	-0.14	0.02	0.03	0.01	0.01	0.03
Weighted average shares outstanding, basic	12,208	12,290	12,322		12,635	12,932	13,046
Weighted average shares outstanding, diluted	12,208	12,290	12,833	12,709	13,742	13,835	13,992

Source: Company publications.
 Calculations: Laguna Research Partners LLC.

Table VI - B
 InVision Technologies, Inc.
Consolidated Statements of Income - Quarterly
Q1:00 through Q3:01 (actual)
 (percent profile)

	2000				2001		
	Q1:00	Q2:00	Q3:00	Q4:00	Q1:01	Q2:01	Q3:01
As % of sector/type revenue:							
EDS							
Product	85.1%	78.5%	86.5%	87.2%	81.4%	74.9%	72.4%
Service	14.9%	21.5%	13.5%	12.8%	18.6%	25.1%	27.6%
Government contract	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
EDS: total revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Quantum							
Product	0.0%	0.0%	0.0%	9.6%	0.0%	1.3%	0.0%
Service	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	1.5%
Government contract	100.0%	100.0%	100.0%	90.4%	100.0%	98.0%	98.5%
Quantum: total revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Wood							
Product	87.2%	89.4%	89.3%	88.0%	81.8%	90.0%	84.9%
Service	12.8%	10.6%	10.7%	12.0%	18.2%	10.0%	15.1%
Government contract	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Quantum: total revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total revenue							
Revenue - by type:							
Product revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Product cost of sales	68.5%	68.9%	67.9%	63.3%	57.2%	65.6%	64.1%
Product gross profit	31.5%	31.1%	32.1%	36.7%	42.8%	34.4%	35.9%
Service revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Service cost of sales	69.9%	69.6%	58.5%	67.9%	71.7%	65.5%	55.8%
Service gross profit	30.1%	30.4%	41.5%	32.1%	28.3%	34.5%	44.2%
Government contract revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Government contract cost of sales	72.6%	70.4%	76.6%	75.2%	75.9%	82.1%	81.3%
Government contract gross profit	27.4%	29.6%	23.4%	24.8%	24.1%	17.9%	18.7%
Total revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total cost of sales	69.2%	69.2%	68.0%	65.4%	63.3%	69.3%	67.4%
Total gross profit	30.8%	30.8%	32.0%	34.6%	36.7%	30.7%	32.6%
As % of total revenue:							
Operating expenses:							
Research and development	12.8%	15.1%	14.1%	13.9%	16.3%	11.0%	11.7%
Selling, general and administrative	23.4%	25.8%	18.1%	17.7%	19.8%	18.1%	20.0%
Total operating expenses	36.2%	40.9%	32.2%	31.6%	36.1%	29.0%	31.7%
Income (loss) from operations	-5.3%	-10.2%	-0.2%	2.9%	0.6%	1.7%	0.9%
Interest expense	0.3%	0.2%	0.2%	0.3%	0.4%	0.5%	0.5%
Interest and other income, net	2.1%	0.6%	1.3%	-1.1%	0.6%	0.0%	2.4%
Pretax profit	-3.5%	-9.8%	0.9%	1.5%	0.8%	1.2%	2.8%
Tax rate	0.0%	0.0%	0.0%	0.0%	39.9%	30.1%	2.8%
Net profit	-3.5%	-9.8%	0.9%	1.5%	0.5%	0.8%	2.7%

Source: Company publications.
 Calculations: Laguna Research Partners LLC.

Table VI - C
 InVision Technologies, Inc.
Consolidated Statements of Income - Quarterly
Q1:00 through Q3:01 (actual)
 (percent change, year-over-year)

	2000				2001		
	Q1:00	Q2:00	Q3:00	Q4:00	Q1:01	Q2:01	Q3:01
Revenue - by division:							
EDS							
Product					-20.2%	-6.0%	-48.7%
Service					4.6%	15.3%	25.2%
Government contract					n.m.	n.m.	n.m.
EDS: total revenue					-16.5%	-1.4%	-38.7%
Quantum							
Product					n.m.	n.m.	n.m.
Service					n.m.	n.m.	n.m.
Government contract					71.8%	46.2%	59.0%
Quantum: total revenue					71.8%	49.2%	61.4%
Wood							
Product					-22.2%	-17.5%	-42.7%
Service					18.0%	-22.3%	-15.1%
Government contract					n.m.	n.m.	n.m.
Quantum: total revenue					-17.0%	-18.0%	-39.7%
Total revenue					-6.3%	2.5%	-25.9%
Revenue - by type:							
Product revenue					-20.5%	-9.3%	-47.5%
Product cost of sales					-33.7%	-13.7%	-50.4%
Product gross profit					8.2%	0.4%	-41.3%
Service revenue					6.5%	9.7%	21.6%
Service cost of sales					9.3%	3.2%	16.0%
Service gross profit					0.1%	24.5%	29.5%
Government contract revenue					71.8%	46.2%	59.0%
Government contract cost of sales					79.6%	70.6%	68.7%
Government contract gross profit					51.2%	-11.7%	27.0%
Total revenue					-6.3%	2.5%	-25.9%
Total cost of sales					-14.3%	2.6%	-26.6%
Total gross profit					11.6%	2.2%	-24.5%
Operating expenses:							
Research and development					19.6%	-25.6%	-38.4%
Selling, general and administrative					-20.6%	-28.4%	-18.2%
Total operating expenses					-6.4%	-27.4%	-27.0%
Income (loss) from operations					n.m.	n.m.	n.m.
Interest expense					32.7%	112.8%	65.2%
Interest and other income, net					-72.7%	-100.0%	35.2%
Pretax profit					n.m.	n.m.	133.5%
Taxes					n.m.	n.m.	n.m.
Net profit					n.m.	n.m.	126.9%
EPS, basic					n.m.	n.m.	50.0%
EPS, diluted					n.m.	n.m.	50.0%
Weighted average shares outstanding, basic					3.5%	5.2%	5.9%
Weighted average shares outstanding, diluted					12.6%	12.6%	9.0%

Source: Company publications.
 Calculations: Laguna Research Partners LLC.

- **Research and development (R&D) expenses** were \$3.2 million in Q3:01, down slightly from \$3.4 million in Q3:00. In Q3:01 and Q3:00, \$1.3 million and \$255,000, respectively, were funded by R&D contracts and grants from government agencies such as the FAA as well as from private entities. Net R&D expenses were \$1.9 million in Q3:01, a decrease of 38.4% compared to the \$3.1 million in Q3:00. As a percent of sales, net R&D expenses were 11.7% and 14.1% in Q3:01 and Q3:00, respectively.

As of September 30, 2001, InVision had a **backlog of R&D contracts and grants** of \$60,000.

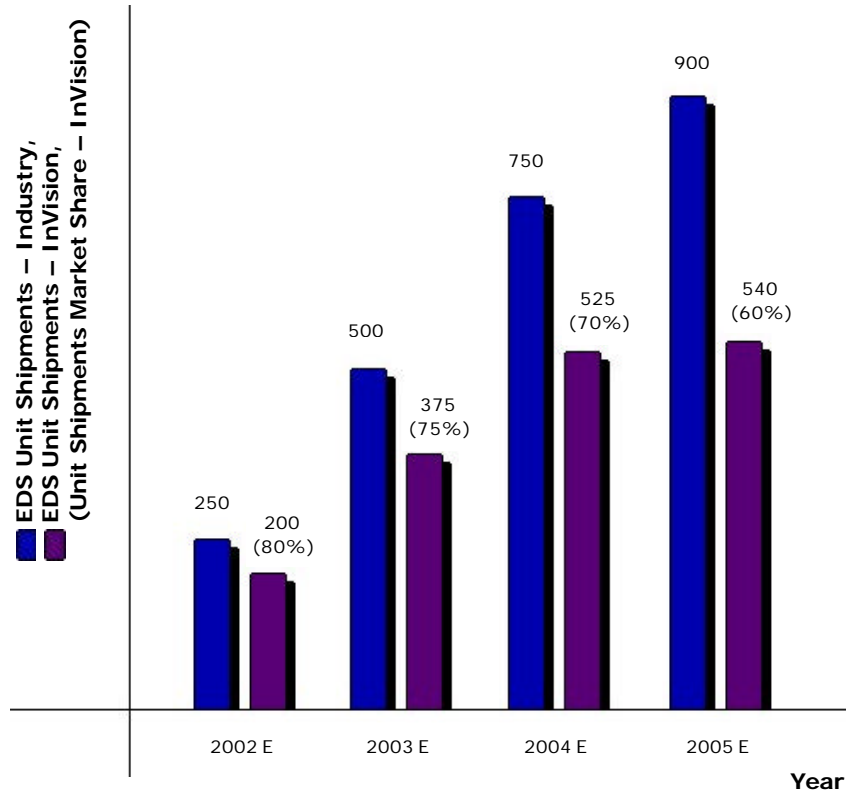
- **Selling, general and administrative (SG&A) expenses** were \$3.3 million in Q3:01, a decline of 18.2% from the \$4.0 million in Q3:00. This decrease reflected, in part, a year-to-year decline in business development costs related to the formation of the WoodVision division. This decrease was partially offset by restructuring provisions recorded in Q3:01. As a percent of sales, SG&A expenses were 20.0% in Q3:01 compared with 18.1% in Q3:00.
- **Operating profit** was \$148,000 in Q3:01 compared to \$(44,000) in Q3:00, a positive year-over-year swing of \$192,000.
- **Interest expense** increased to \$76,000 in Q3:01 from \$46,000 in Q3:00, reflecting an increase in the Company's average debt balances.
- **Interest and other income, net**, was \$388,000 in Q3:01 versus \$287,000 in Q3:00, a drop of 35.2%, reflecting lower average cash balances in Q3:01 compared with Q3:00.
- **Pretax profit** improved to \$460,000 in Q3:01 versus \$197,000 in Q3:00, a jump of 133.5%.
- The Company recorded a provision for **income taxes** of \$13,000 in Q3:01.
- **Net profit** in Q3:01 was \$447,000 versus \$197,000 in Q3:00, an increase of 126.9%.

As of December 31, 2000, the Company had federal **net operating loss carryforwards** of approximately \$2.7 million available to reduce future federal taxable income. The Company's net operating loss carryforwards, primarily from the Quantum Magnetics subsidiary, expire from 2010 to 2012 and tax credit carryforwards expire from 2005 to 2018.

Operating Outlook ►

As mentioned earlier in this report, we estimate that InVision generated revenue and EPS of \$70.3 million and \$0.09, respectively, in 2001. We are projecting revenue and EPS of \$235.0 million and \$1.20 in 2002, respectively, and \$445.0 million and \$2.99 in 2003. Importantly, we want our research users to understand that we view our operating projections for InVision as “educated guesses” from several important perspectives. Demand for the Company's products will be very much a function of the US public's determination to aggressively counter the terrorist threat to civil aviation. It is this determination that will drive the political mandate that Congress and the President have to appropriate funds to support the installation of EDS units in airports across the US. No amount of superior R&D, brilliant marketing or effective financial management will make up for a decline in the public's determination, as we see it, if such a decline occurs. While, in our view, the American public is determined to see the “War on Terrorism” through to a decisive conclusion, our research users should be aware that many key factors regarding the Company's future operating performance are out of the control of InVision management.

Graph II
 InVision Technologies, Inc.
 EDS Unit Shipments – Industry, EDS Unit Shipments – InVision, Unit Shipments Market Share - InVision
 2002 E through 2005 E



Estimates and graphic creation: Laguna Research Partners LLC.

With this perspective in mind, we have taken what we consider to be a conservative approach to projecting InVision’s operating performance.

- *In formulating our revenue forecast for InVision, we have made several key assumptions.* First, we are using as our industry demand “baseline” the more conservative figures derived via our bottom-up industry analysis. While this analysis yields current—2001 to 2002—demand figures that are lower than the FAA target for 2002 installations, we feel that this is most prudent given political uncertainties. Further, we are assuming that InVision will realize a steady decline in market share versus the lofty 90%-plus share of market that the Company now enjoys.

As shown in Graph II above, despite these conservative assumptions, we expect that InVision will be able to achieve robust growth in unit shipments through 2004. (Detailed supporting data for this Graph can be found in Table VII on the following page.)

We are estimating that, in 2002, InVision will ship 200 of an estimated 250 industry units shipped—this represents an 80% “share of shipments”—and that the Company’s monthly production rate will average 16.7 units during the year. As mentioned earlier in this report, the Company is currently expanding

Table VII
 InVision Technologies, Inc.
InVision and EDS Growth Scenario: US, International and Worldwide
2001, 2002, 2003 and 2011
 (analysis as of January 2002)

	<u>2001 E</u>	<u>2002 E</u>	<u>2003 E</u>	<u>2004 E</u>	<u>2005 E</u>	<u>2011 E</u>
<u>Market for Explosives Detection Systems*:</u>						
United States	1,608	1,687	1,769	1,855	1,946	2,591
International	<u>2,017</u>	<u>2,115</u>	<u>2,218</u>	<u>2,327</u>	<u>2,440</u>	<u>3,248</u>
Worldwide	3,625	3,802	3,988	4,182	4,386	5,838
<u>EDS Machines Installed (Year-End):</u>						
Worldwide	290	540	1,040	1,790	2,690	5,838
✓ EDS Machine Market Penetration	8.0%	14.2%	26.1%	42.8%	61.3%	100.0%
	I	I	I	I	I	
	I	I	I	I	I	2006 E
	I	I	I	I	I	through
	V	V	V	V	V	<u>2011 E</u>
<u>EDS Machines Shipped:</u>						
EDS Unit Shipments, Industry	43	250	500	750	900	3,148
✓ EDS Unit Shipments, InVision	40	200	375	525	540	1,574
<u>Key Metrics, InVision:</u>						
✓ Monthly Production Rate, InVision	3.3	16.7	31.3	43.8	45.0	N/A
✓ Unit Shipments Market Share, InVision	93.0%	80.0%	75.0%	70.0%	60.0%	50.0%

* The derivation of these figures can be found in Tables V-A, V-B and V-C on pages 16 and 17 of this report.

Source: Industry sources.

Estimates and calculations: Laguna Research Partners LLC.

its monthly production capacity from seven to nine units to up to 50 units by year-end 2002. In our view, our 16.7 unit average monthly production estimate for InVision in 2002 is clearly conservative relative to this capacity expansion target. We estimate that the worldwide market for EDS units will reach 3,802 in 2002, but that the industry penetration rate will reach only 14.2% with an estimated total of 540 machines installed by year-end.

We are projecting that InVision will account for an estimated 375 of 500 industry units shipped in 2003. This implies that InVision will have a 75% share of industry shipments and an average monthly production rate of 31.3 EDS units during 2003. We are projecting that the worldwide market for EDS machines will reach the 3,988 level in 2003, and that the industry will reach a penetration level of 26.1% with 1,040 units installed.

Importantly, while we have projected unit shipments for the EDS industry and for InVision through 2011, our income statement projections only extend as far as 2003. This reflects our view that 1) 100% penetration of the EDS market will never, in the real world, be achieved and 2) as market saturation *approaches* 100%, industry demand is likely to be increasingly satisfied with “Argus”-type units priced under \$700,000 per system. It should be noted that, in our opinion, these smaller, less expensive EDS units might also prove to have a wide range of non-airport applications in high-traffic, public facilities such as office buildings.

- *In projecting InVision’s income statement, we have made several key assumptions regarding profitability.* (Our annual operating estimates for InVision can be found in Tables VIII-A, VIII-B and VIII-C on pages 36, 37 and 38.) In general, we are looking for the Company’s backlog to rise substantially during the next 12 months. As the Company works through that backlog and accelerates production and shipments, overhead coverage should improve dramatically. The Company’s move away from fixed station assembly to a traditional assembly line manufacturing configuration should also contribute to improved profitability.

Summarizing our revenue analysis above, we estimate that InVision’s 2001 *revenue* was roughly \$70.3 million, -11.2% versus 2000 revenue of \$79.1 million. Based on our InVision EDS shipment estimates, and reflecting our growth projections for InVision’s service revenue and government contract revenue, we are estimating 2002 revenue of \$235 million, +234.5%, and 2003 revenue of \$445 million, +89.4%.

Gross profit, we estimate, reached \$24.1 million in 2001, -5.4% compared with \$25.5 million in 2000. We are projecting gross profit of \$89.1 million and \$181.8 million in 2002 and 2003, respectively. We estimate that InVision achieved a *gross profit margin* of 34.3% in 2001, and we are projecting that improved overhead coverage will lead to gross profit margins of 37.9% in 2002 and 40.8% in 2003.

Our 2001 *operating profit* estimate for 2001 is \$1.5 million, up from (\$2.1) million in 2000. Our operating profit forecast is \$27.9 million for 2002 and \$76.0 million, +172.9%, for 2003. We project an improvement in the *operating profit margin* from an estimated 2.1% in 2001 to a projected 11.9% and 17.1% in 2002 and 2003, respectively.

EPS, we estimate, reached \$0.09 in 2001. We are projecting EPS of \$1.20 in 2002 and \$2.99 in 2003. In projecting InVision’s EPS for 2002 and 2003, we are assuming a *tax rate* of 40.0% in each year.

Table VIII - A

InVision Technologies, Inc.

Consolidated Statements of Income - Annual**1996 through 2003 (E)**

(thousands - except per share data)

	1996	1997	1998	1999	2000	2001 (E)	2002 (E)	2003 (E)
Product revenue	\$ 15,684	\$ 55,216	\$ 60,854	\$ 43,160	\$ 58,713	\$ 42,614	\$ 200,000	\$ 375,000
Product cost of sales	9,731	27,576	32,701	24,886	39,333	26,203	121,000	217,500
Product gross profit	5,953	27,640	28,153	18,274	19,380	16,411	79,000	157,500
Service revenue	157	1,211	2,430	4,582	9,801	11,241	15,000	45,000
Service cost of sales	5	451	2,245	3,678	6,512	7,073	9,300	27,000
Service gross profit	152	760	185	904	3,289	4,168	5,700	18,000
Government contract revenue	3,444	5,533	7,210	10,694	10,632	16,396	20,000	25,000
Government contract cost of sales	2,836	4,273	5,223	7,739	7,849	12,900	15,600	18,750
Government contract gross profit	608	1,260	1,987	2,955	2,783	3,497	4,400	6,250
Total revenue	19,285	61,960	70,494	58,436	79,146	70,251	235,000	445,000
Total cost of sales	12,572	32,300	40,169	36,303	53,694	46,176	145,900	263,250
Total gross profit	6,713	29,660	30,325	22,133	25,452	24,076	89,100	181,750
Operating expenses:								
Research and development	3,409	8,635	8,498	10,443	11,039	9,184	18,500	34,000
Selling, general and administrative	7,568	12,323	12,997	11,767	16,551	13,389	42,750	71,750
Acquisition costs	-	685	-	-	-	-	-	-
Total operating expenses	10,977	21,643	21,495	22,210	27,590	22,573	61,250	105,750
Income (loss) from operations	(4,264)	8,017	8,830	(77)	(2,138)	1,503	27,850	76,000
Interest expense	1,599	428	390	227	195	299	300	300
Interest and other income, net	187	242	697	754	527	618	1,800	3,000
Pretax profit	(5,676)	7,831	9,137	450	(1,806)	1,822	29,350	78,700
Taxes	-	1,192	1,096	67	-	611	11,740	31,480
Net profit	(5,676)	6,639	8,041	383	(1,806)	1,211	17,610	47,220
EPS, basic	\$ (0.90)	\$ 0.60	\$ 0.67	\$ 0.03	\$ (0.14)	\$ 0.09	\$ 1.20	\$ 2.99
EPS, diluted	\$ (0.90)	\$ 0.55	\$ 0.63	\$ 0.03	\$ (0.14)	\$ 0.09	\$ 1.20	\$ 2.99
Weighted average shares outstanding, basic	6,338	11,141	12,046	12,133	12,510	13,900	14,700	15,800
Weighted average shares outstanding, diluted	6,338	12,166	12,827	12,751	12,510	13,900	14,700	15,800

Source: Company publications.

Calculations: Laguna Research Partners LLC.

Table VIII - B
 InVision Technologies, Inc.
Consolidated Statements of Income - Annual
1996 through 2003 (E)
 (percent profile)

	1996	1997	1998	1999	2000	2001 (E)	2002 (E)	2003 (E)
As % of sector revenue:								
Product revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Product cost of sales	62.0%	49.9%	53.7%	57.7%	67.0%	61.5%	60.5%	58.0%
Product gross profit	38.0%	50.1%	46.3%	42.3%	33.0%	38.5%	39.5%	42.0%
Service revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Service cost of sales	3.2%	37.2%	92.4%	80.3%	66.4%	62.9%	62.0%	60.0%
Service gross profit	96.8%	62.8%	7.6%	19.7%	33.6%	37.1%	38.0%	40.0%
Government contract revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Government contract cost of sales	82.3%	77.2%	72.4%	72.4%	73.8%	78.7%	78.0%	75.0%
Government contract gross profit	17.7%	22.8%	27.6%	27.6%	26.2%	21.3%	22.0%	25.0%
Total revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total cost of sales	65.2%	52.1%	57.0%	62.1%	67.8%	65.7%	62.1%	59.2%
Total gross profit	34.8%	47.9%	43.0%	37.9%	32.2%	34.3%	37.9%	40.8%
As % of total revenue:								
Operating expenses:								
Research and development	17.7%	13.9%	12.1%	17.9%	13.9%	13.1%	7.9%	7.6%
Selling, general and administrative	39.2%	19.9%	18.4%	20.1%	20.9%	19.1%	18.2%	16.1%
Acquisition costs	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total operating expenses	56.9%	34.9%	30.5%	38.0%	34.9%	32.1%	26.1%	23.8%
Income (loss) from operations	-22.1%	12.9%	12.5%	-0.1%	-2.7%	2.1%	11.9%	17.1%
Interest expense	8.3%	0.7%	0.6%	0.4%	0.2%	0.4%	0.1%	0.1%
Interest and other income, net	1.0%	0.4%	1.0%	1.3%	0.7%	0.9%	0.8%	0.7%
Pretax profit	-29.4%	12.6%	13.0%	0.8%	-2.3%	2.6%	12.5%	17.7%
Tax rate	0.0%	15.2%	12.0%	14.9%	0.0%	33.5%	40.0%	40.0%
Net profit	-29.4%	10.7%	11.4%	0.7%	-2.3%	1.7%	7.5%	10.6%

Source: Company publications.
 Calculations: Laguna Research Partners LLC.

Table VIII - C

InVision Technologies, Inc.

**Consolidated Statements of Income - Annual
1996 through 2003 (E)**

(percent change, year-over-year)

	1996	1997	1998	1999	2000	2001 (E)	2002 (E)	2003 (E)
Product revenue		252.1%	10.2%	-29.1%	36.0%	-27.4%	369.3%	87.5%
Product cost of sales		183.4%	18.6%	-23.9%	58.1%	-33.4%	361.8%	79.8%
Product gross profit		364.3%	1.9%	-35.1%	6.1%	-15.3%	381.4%	99.4%
Service revenue		671.3%	100.7%	88.6%	113.9%	14.7%	33.4%	200.0%
Service cost of sales		8920.0%	397.8%	63.8%	77.1%	8.6%	31.5%	190.3%
Service gross profit		400.0%	-75.7%	388.6%	263.8%	26.7%	36.8%	215.8%
Government contract revenue		60.7%	30.3%	48.3%	-0.6%	54.2%	22.0%	25.0%
Government contract cost of sales		50.7%	22.2%	48.2%	1.4%	64.3%	20.9%	20.2%
Government contract gross profit		107.2%	57.7%	48.7%	-5.8%	25.6%	25.8%	42.0%
Total revenue		221.3%	13.8%	-17.1%	35.4%	-11.2%	234.5%	89.4%
Total cost of sales		156.9%	24.4%	-9.6%	47.9%	-14.0%	216.0%	80.4%
Total gross profit		341.8%	2.2%	-27.0%	15.0%	-5.4%	270.1%	104.0%
Operating expenses:								
Research and development		153.3%	-1.6%	22.9%	5.7%	-16.8%	101.4%	83.8%
Selling, general and administrative		62.8%	5.5%	-9.5%	40.7%	-19.1%	219.3%	67.8%
Acquisition costs		nm.	-100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total operating expenses		97.2%	-0.7%	3.3%	24.2%	-18.2%	171.3%	72.7%
Income (loss) from operations		nm.	10.1%	nm.	nm.	nm.	1753.6%	172.9%
Interest expense		-73.2%	-8.9%	-41.8%	-14.1%	53.3%	0.3%	0.0%
Interest and other income, net		29.4%	188.0%	8.2%	-30.1%	17.3%	191.3%	66.7%
Pretax profit		nm.	16.7%	-95.1%	nm.	nm.	1511.3%	168.1%
Taxes		nm.	-8.1%	-93.9%	-100.0%	nm.	1821.4%	168.1%
Net profit		nm.	21.1%	-95.2%	nm.	nm.	1354.8%	168.1%
EPS, basic		nm.	11.7%	-95.5%	nm.	nm.	1275.6%	149.5%
EPS, diluted		nm.	14.5%	-95.2%	nm.	nm.	1275.6%	149.5%
Weighted average shares outstanding, basic		75.8%	8.1%	0.7%	3.1%	11.1%	5.8%	7.5%
Weighted average shares outstanding, diluted		92.0%	5.4%	-0.6%	-1.9%	11.1%	5.8%	7.5%

Source: Company publications.

Calculations: Laguna Research Partners LLC.

Table IX
 InVision Technologies, Inc.
Backlog Analysis - Quarterly
Q4:99 through Q3:01
 (millions)

Period	Division	Backlog		Comments (from US SEC filings)
		\$	% of total	
Q3:01	EDS	24.1	56.3%	equipment orders and service agreements
	EDS R&D	0.5	1.2%	research and development contracts and grants
	Quantum	16.3	38.1%	primarily for development of landmine detection technologies
	Inovec	1.9	4.4%	equipment orders and service agreements
		42.8	100.0%	total
Q2:01	EDS	10.6	31.8%	primarily consisting of service agreements
	EDS R&D	1.9		grants primarily for the development of ARGUS, an FAA-sponsored program designed to develop a low-cost, automated explosive detection system to scan checked baggage in small airports and low-traffic stations within larger airports
	Quantum	18.8	56.5%	primarily for development of landmine detection technologies
	Inovec	2.0	6.0%	equipment orders and service agreements
		33.3	100.0%	total
Q1:01	EDS	9.6	24.3%	primarily consisting of service agreements
	EDS R&D	5.5		grants primarily for the development of ARGUS, an FAA-sponsored program designed to develop a low-cost, automated explosive detection system to scan checked baggage in small airports and low-traffic stations within larger airports
	Quantum	21.7	54.9%	primarily for development of landmine detection technologies
	Inovec	2.7	6.8%	equipment orders and service agreements
		39.5	100.0%	total
Q4:00	EDS	8.1	20.1%	primarily consisting of service agreements
	EDS R&D	6.7	16.7%	grants or EDS research and development
	Quantum	23.6	58.7%	government contract primarily for development of landmine detection technologies
	Inovec	1.8	4.5%	equipment orders and service agreements
		40.2	100.0%	total
Q3:00	EDS	15.6	36.4%	equipment orders and service agreements
	EDS R&D	7.9	18.4%	research and development contracts and grants
	Quantum	19.4	45.2%	backlog government revenue
	Inovec	-	0.0%	
		42.9	100.0%	total
Q2:00	EDS	22.9	46.1%	backlog CTX equipment orders and service agreements
	EDS R&D	7.9	15.9%	research and development contracts and grants
	Quantum	18.9	38.0%	government contracts
	Inovec	-	0.0%	
		49.7	100.0%	total
Q1:00	EDS	21.6	76.6%	backlog CTX equipment orders and service agreements
	EDS R&D	0.5	1.8%	research and development contracts
	Quantum	6.1	21.6%	government contracts
	Inovec	-	0.0%	
		28.2	100.0%	total
Q4:99	EDS	19.8	83.2%	product and service revenues
	EDS R&D	0.8	3.4%	research and development contracts and grants
	Quantum	3.2	13.4%	government contracts
		23.8	100.0%	total

Source: Company publications.
 Calculations: Laguna Research Partners LLC.

Table X
InVision Technologies, Inc.
Backlog Summary - Quarterly
Q4:99 through Q3:01
(millions)

Division	Q4:99	Q1:00	Q2:00	Q3:00	Q4:00	Q1:01	Q2:01	Q3:01
EDS	\$ 19.8	\$ 21.6	\$ 22.9	\$ 15.6	\$ 8.1	\$ 9.6	\$ 10.6	\$ 24.1
EDS R&D	0.8	0.5	7.9	7.9	6.7	5.5	1.9	0.5
Quantum	3.2	6.1	18.9	19.4	23.6	21.7	18.8	16.3
Inovec	n.a.	-	-	-	1.8	2.7	2.0	1.9
Total	\$ 23.8	\$ 28.2	\$ 49.7	\$ 42.9	\$ 40.2	\$ 39.5	\$ 33.3	\$ 42.8

Source: Company publications.
Calculations: Laguna Research Partners LLC.

Table XI - A
InVision Technologies, Inc.
Revenue Profile - Geographic
Annual: 1998, 1999 and 2000
(raw data)

	1998	1999	2000
United States	\$ 49,171	\$ 49,830	\$ 58,441
Europe	12,907	3,084	11,939
Middle East	5,624	450	1,773
Pacific Rim	2,792	2,979	5,239
Other	-	2,093	1,754
Total: Worldwide	\$ 70,494	\$ 58,436	\$ 79,146

Table XI - B
InVision Technologies, Inc.
Revenue Profile - Geographic
9M:01 versus 9M:00
(% profile)

	1998	1999	2000
United States	69.8%	85.3%	73.8%
Europe	18.3%	5.3%	15.1%
Middle East	8.0%	0.8%	2.2%
Pacific Rim	4.0%	5.1%	6.6%
Other	0.0%	3.6%	2.2%
Total: Worldwide	100.0%	100.0%	100.0%

Table XI - C
InVision Technologies, Inc.
Revenue Profile - Geographic
9M:01 versus 9M:00
(% change, year-over-year)

	1999	2000
United States	1.3%	17.3%
Europe	-76.1%	287.1%
Middle East	-92.0%	294.0%
Pacific Rim	6.7%	75.9%
Other	n.m.	-16.2%
Total: Worldwide	-17.1%	35.4%

Source: Company publications.
Calculations: Laguna Research Partners LLC.

Table XII
 InVision Technologies, Inc.
Consolidated Statements of Cash Flows
9M:01 versus 9M:00
 (thousands - except per share data)

	<u>9M:00</u>	<u>9M:01</u>
Cash flow from operating activities:		
Net income (loss)	\$ (2,128)	\$ 680
Adjustments to reconcile net income (loss) to net cash used in operating activities:		
Depreciation and amortization	2,207	2,162
Amortization of capitalized software development costs	131	90
Amortization of intangible assets	512	571
Loss (gain) on disposal of fixed assets	5	(7)
Bad debt expense	146	70
Stock compensation expense	47	-
Changes in operating assets and liabilities:		
Accounts receivable	(9,077)	469
Inventories	(3,783)	(4,599)
Other current assets	873	229
Other non-current assets	9	(21)
Accounts payable	539	(461)
Accrued liabilities	3,006	(1,046)
Deferred revenue	(1,807)	(872)
Other long-term obligations	75	40
Net cash used in operating activities:	\$ (9,245)	\$ (2,695)
Cash flow from investing activities:		
Purchases of property and equipment	(2,014)	(1,343)
Proceeds from (purchases of) short-term investments, net	5,887	(750)
Purchase of subsidiary, net of cash acquired	(1,519)	(267)
Net cash provided by (used in) investing activities	\$ (1,519)	\$ (2,360)
Cash flow from financing activities:		
Proceeds from short-term debt, net	-	2,391
Repayments of long-term debt	(326)	(292)
Proceeds from issuance of common stock	594	617
Net cash provided by financing activities	\$ 268	\$ 2,716
Net change in cash and cash equivalents for the period	\$ (6,623)	\$ (2,339)
Cash and cash equivalents at beginning of period	18,282	11,908
Cash and cash equivalents at end of period	11,659	9,569

Source: Company publications.

Capital Resources ▶

InVision's financial position as of September 30, 2001, is reflective of the slower business activity that the Company was experiencing prior to the September attacks. We are currently anticipating a jump in the Company's backlog, sales and cash flow during the coming year. (Our balance sheet analysis can be found in Table XIII on the following page.)

- At September 30, 2001, the Company had \$9.6 million in *cash and cash equivalents*, compared to \$11.9 million at December 31, 2000. The *current ratio* was 3.05 at September 30, 2001 versus 2.89 as of December 31, 2000.
- During the December 31, 2000 through September 30, 2001 timeframe, a \$2.4 million increase in *short-term debt* was more than offset by declines in *accounts payable, accrued liabilities and deferred revenue* totaling \$2.6 million.
- *Working capital* was \$40.2 million at September 30, 2001 compared to \$37.7 million at December 31, 2000, +6.7%.
- *Long-term obligations* totaled \$745,000 as of September 30, 2001, a decline of 60.0% from \$1.9 million as of December 31, 2000. *Net working capital* amounted to \$39.4 million as of September 30, 2001 versus \$35.8 million as of December 31, 2000, +10.1%.
- *Net cash used in operating activities* was \$2.7 million in the first nine months of 2001, compared to \$9.2 million in the first nine months of 2000. This 2001 figure reflected an increase in inventories, a decrease in accounts payable and accrued liabilities, and a decrease in deferred revenues, partially offset by net profit of \$680,000, the \$2.8 million non-cash effect of depreciation and amortization and a drop in accounts receivable.
- *Net cash used in investing activities* was \$2.4 million in the first nine months of 2001, compared to \$1.5 million provided by investing activities in the first nine months of 2000. Net cash used in investing activities in the first nine months of 2001 resulted from \$1.3 million in capital equipment procurements, short-term investment purchases of \$750,000, and \$267,000 for the payment of an earn-out to the former shareholders of Inovec in accordance with terms in that purchase agreement.
- *Net cash provided by financing activities* was \$2.7 million in the first nine months of 2001, compared to \$268,000 in the first nine months of 2000. This 9M:01 figure was primarily driven by \$2.4 million in proceeds from borrowings of short-term debt, net of payments, and \$617,000 in proceeds from sales under the employee stock purchase plan and exercises of incentive stock options, partially offset by \$292,000 in repayments of long-term debt.

RISKS

In our view, the key risks for InVision include 1) the timing and size of orders from major customers, 2) the Company's ability to manage a sharp ramp-up in growth, 3) the introduction and acceptance of new products by the Company or its competitors and 4) changes in pricing policies by the Company, its competitors or suppliers, including possible decreases in average selling prices of the Company's products in response to competitive pressures.

Table XIII
 InVision Technologies, Inc.
Consolidated Balance Sheets
September 30, 2001 versus December 31, 2000
 (thousands - except per share data)

	December 31, 2000	September 30, 2001	Change:	
			%	\$
ASSETS				
Cash and cash equivalents	\$ 11,908	\$ 9,569	-19.6%	\$ (2,339)
Short-term investments	-	750	n.a.	750
Accounts receivable, net	22,547	22,008	-2.4%	(539)
Inventories	20,207	24,806	22.8%	4,599
Other current assets	2,977	2,698	-9.4%	(279)
Total: current assets	57,639	59,831	3.8%	2,192
Property and equipment, net	6,741	5,953	-11.7%	(788)
Intangible assets, net	4,412	3,842	-12.9%	(570)
Other assets	540	1,146	112.2%	606
Total: assets	\$ 69,332	\$ 70,772	2.1%	\$ 1,440
LIABILITIES and SHAREHOLDERS' EQUITY				
Accounts payable	\$ 5,353	\$ 4,892	-8.6%	\$ (461)
Accrued liabilities	11,213	9,983	-11.0%	(1,230)
Deferred revenue	2,107	1,233	-41.5%	(874)
Short-term debt	890	3,281	268.7%	2,391
Current maturities of long-term obligations	404	254	-37.1%	(150)
Total: current liabilities	19,967	19,643	-1.6%	(324)
Long-term obligations	1,861	745	-60.0%	(1,116)
Commitments and contingencies	-	-	0.0%	-
Shareholders' equity				
Preferred stock	-	-	0.0%	-
Common stock	13	13	0.0%	-
Additional paid-in capital	59,671	61,871	3.7%	2,200
Accumulated deficit	(10,981)	(10,301)	n.m.	680
Treasury stock, at cost	(1,199)	(1,199)	n.m.	-
Total: stockholders' equity	47,504	50,384	6.1%	2,880
Total: liabilities and stockholders' equity	\$ 69,332	\$ 70,772	2.1%	\$ 1,440
CALCULATIONS:				
Current ratio (x)	2.89	3.05	n.a.	0.16 points
Working capital	\$ 37,672	\$ 40,188	6.7%	\$ 2,516
Long-term obligations	\$ 1,861	\$ 745	-60.0%	\$ (1,116)
Long-term obligations-to-total capitalization	3.8%	1.5%	n.a.	(231) basis points
Net working capital	\$ 35,811	\$ 39,443	10.1%	\$ 3,632
Book value (shareholders' equity per share)	\$ 3.76	\$ 3.80	1.1%	\$ 0.04
Shares outstanding	12,650	13,270	4.9%	620 shares

Source: Company publications.
 Calculations: Laguna Research Partners LLC.

Table XIV - A
 InVision Technologies, Inc.
Consolidated Balance Sheets
December 31, 1995, 1996, 1997, 1998, 1999, 2000 and September 30, 2001
 (thousands - except per share data)

	December 31, 1995	December 31, 1996	December 31, 1997	December 31, 1998	December 31, 1999	December 31, 2000	September 30, 2001
ASSETS							
Cash and cash equivalents	\$ 1,927	\$ 2,363	\$ 14,111	\$ 10,462	\$ 18,282	\$ 11,908	\$ 9,569
Short-term investments	-	-	5,079	1,995	5,887	-	750
Restricted cash	-	-	1,556	1,056	-	-	-
Accounts receivable, net	735	5,987	16,847	26,933	10,633	22,547	22,008
Inventories	3,413	4,810	10,781	11,825	17,460	20,207	24,806
Other current assets	252	292	531	1,731	2,972	2,977	2,698
Total: current assets	6,327	13,452	48,905	54,002	55,234	57,639	59,831
Long-term restricted cash	-	-	800	200	-	-	-
Property and equipment, net	914	1,804	7,180	8,035	6,796	6,741	5,953
Other assets	75	-	366	1,249	957	4,952	4,988
Total: assets	\$ 7,316	\$ 15,256	\$ 57,251	\$ 63,486	\$ 62,987	\$ 69,332	\$ 70,772
LIABILITIES and SHAREHOLDERS' EQUITY							
Accounts payable	\$ 3,035	\$ 2,541	\$ 5,097	\$ 3,402	\$ 5,128	\$ 5,353	\$ 4,892
Accrued liabilities	1,217	1,020	4,032	6,331	5,566	11,213	9,983
Deferred revenue	3,082	2,443	3,376	1,496	3,194	2,107	1,233
Short-term debt	2,260	-	4,168	2,967	-	890	3,281
Current maturities of long-term obligations	10	68	426	895	433	404	254
Advances from stockholders	200	-	-	-	-	-	-
Total: current liabilities	9,804	6,072	17,099	15,091	14,321	19,967	19,643
Long-term obligations	34	110	1,336	1,565	1,181	1,861	745
Commitments and contingencies	-	-	-	-	-	-	-
Shareholders' equity							
Convertible preferred stock	12,212	-	-	-	-	-	-
Preferred stock	-	-	-	-	-	-	-
Common stock	-	9	12	12	12	13	13
Additional paid-in capital	1,885	28,919	56,602	57,372	57,910	59,671	61,871
Accumulated deficit	(15,927)	(19,499)	(17,599)	(9,558)	(9,175)	(10,981)	(10,301)
Deferred stock compensation expense	(692)	(355)	(199)	(131)	(63)	-	-
Treasury stock, at cost	-	-	-	(865)	(1,199)	(1,199)	(1,199)
Total: stockholders' equity	(2,522)	9,074	38,816	46,830	47,485	47,504	50,384
Total: liabilities and stockholders' equity	\$ 7,316	\$ 15,256	\$ 57,251	\$ 63,486	\$ 62,987	\$ 69,332	\$ 70,772
CALCULATIONS:							
Current ratio (x)	0.65	2.22	2.86	3.58	3.86	2.89	3.05
Working capital	\$ (3,477)	\$ 7,380	\$ 31,806	\$ 38,911	\$ 40,913	\$ 37,672	\$ 40,188
Long-term obligations	\$ 34	\$ 110	\$ 1,336	\$ 1,565	\$ 1,181	\$ 1,861	\$ 745
Long-term obligations-to-total capitalization	n.m.	1.2%	3.3%	3.2%	2.4%	3.8%	1.5%
Net working capital	\$ (3,511)	\$ 7,270	\$ 30,470	\$ 37,346	\$ 39,732	\$ 35,811	\$ 39,443
Book value (shareholders' equity per share)	\$ 0.99	\$ 0.99	\$ 3.23	\$ 3.88	\$ 3.89	\$ 3.76	\$ 3.80
Shares outstanding		9,206	12,027	12,068	12,215	12,650	13,270

Source: Company publications.
 Calculations: Laguna Research Partners LLC.

Table XIV - B

InVision Technologies, Inc.

Consolidated Balance Sheets**December 31, 1995, 1996, 1997, 1998, 1999, 2000 and September 30, 2001**

(percent profile)

	December 31, 1995	December 31, 1996	December 31, 1997	December 31, 1998	December 31, 1999	December 31, 2000	September 30, 2001
ASSETS							
As a % of current assets:							
Cash and cash equivalents	30.5%	17.6%	28.9%	19.4%	33.1%	20.7%	16.0%
Short-term investments	0.0%	0.0%	10.4%	3.7%	10.7%	0.0%	1.3%
Restricted cash	0.0%	0.0%	3.2%	2.0%	0.0%	0.0%	0.0%
Accounts receivable, net	11.6%	44.5%	34.4%	49.9%	19.3%	39.1%	36.8%
Inventories	53.9%	35.8%	22.0%	21.9%	31.6%	35.1%	41.5%
Other current assets	4.0%	2.2%	1.1%	3.2%	5.4%	5.2%	4.5%
Total: current assets	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
As a % of total assets:							
Total: current assets	86.5%	88.2%	85.4%	85.1%	87.7%	83.1%	84.5%
Long-term restricted cash	0.0%	0.0%	1.4%	0.3%	0.0%	0.0%	0.0%
Property and equipment, net	12.5%	11.8%	12.5%	12.7%	10.8%	9.7%	8.4%
Other assets	1.0%	0.0%	0.6%	2.0%	1.5%	7.1%	7.0%
Total: assets	100%	100%	100%	100%	100%	100%	100%
LIABILITIES and SHAREHOLDERS' EQUITY							
As a % of current liabilities:							
Accounts payable	31.0%	41.8%	29.8%	22.5%	35.8%	26.8%	24.9%
Accrued liabilities	12.4%	16.8%	23.6%	42.0%	38.9%	56.2%	50.8%
Deferred revenue	31.4%	40.2%	19.7%	9.9%	22.3%	10.6%	6.3%
Short-term debt	23.1%	0.0%	24.4%	19.7%	0.0%	4.5%	16.7%
Current maturities of long-term obligations	0.1%	1.1%	2.5%	5.9%	3.0%	2.0%	1.3%
Advances from stockholders	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total: current liabilities	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
As a % of total liabilities and shareholders' equity:							
Total: current liabilities	134.0%	39.8%	29.9%	23.8%	22.7%	28.8%	27.8%
Long-term obligations	0.5%	0.7%	2.3%	2.5%	1.9%	2.7%	1.1%
Commitments and contingencies	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Shareholders' equity							
Convertible preferred stock	166.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Preferred stock	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Common stock	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Additional paid-in capital	25.8%	189.6%	98.9%	90.4%	91.9%	86.1%	87.4%
Accumulated deficit	-217.7%	-127.8%	-30.7%	-15.1%	-14.6%	-15.8%	-14.6%
Deferred stock compensation expense	-9.5%	-2.3%	-0.3%	-0.2%	-0.1%	0.0%	0.0%
Treasury stock, at cost	0.0%	0.0%	0.0%	-1.4%	-1.9%	-1.7%	-1.7%
Total: stockholders' equity	-34.5%	59.5%	67.8%	73.8%	75.4%	68.5%	71.2%
Total: liabilities and stockholders' equity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Company publications.

Calculations: Laguna Research Partners LLC.

Table XV - A
 InVision Technologies, Inc.
Inventory Analysis
Quarterly, March 31, 2000 through September 30, 2001
 (thousands)

	March 31, 2000	July 2, 2000	October 1, 2000	December 31, 2000	April 1, 2001	July 1, 2001	September 30, 2001
Raw material and purchased components	\$ 12,190	\$ 8,757	\$ 8,262	\$ 9,270	\$ 7,144	\$ 8,190	\$ 8,115
Field service spare parts	n.a.	5,650	7,005	6,240	7,890	8,577	9,058
Work-in-process	7,249	8,610	5,792	4,162	5,667	6,413	6,649
Finished goods	577	837	738	535	932	964	984
Total	\$ 20,016	\$ 23,854	\$ 21,797	\$ 20,207	\$ 21,633	\$ 24,144	\$ 24,806

Table XV - B
 InVision Technologies, Inc.
Inventory Analysis
Quarterly, March 31, 2000 through September 30, 2001
 (as a % of total)

	March 31, 2000	July 2, 2000	October 1, 2000	December 31, 2000	April 1, 2001	July 1, 2001	September 30, 2001
Raw material and purchased components	60.9%	36.7%	37.9%	45.9%	33.0%	33.9%	32.7%
Field service spare parts	n.a.	23.7%	32.1%	30.9%	36.5%	35.5%	36.5%
Work-in-process	36.2%	36.1%	26.6%	20.6%	26.2%	26.6%	26.8%
Finished goods	2.9%	3.5%	3.4%	2.6%	4.3%	4.0%	4.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Company publications.
 Calculations: Laguna Research Partners LLC.

Analyst Bio ▶ Kevin B. Skislock (skislock@LRPonline.net)

Kevin Skislock is Founding Partner and CEO of Laguna Research Partners LLC. He also serves as the Firm's senior technology analyst.

Kevin has more than 25 years of experience as a Wall Street stock analyst. Nearly half of his career has been spent analyzing stocks for leading buy-side money managers including Citibank, N.A., a division of CitiGroup, and Wellington Management Company. On the sell-side of Wall Street, he has analyzed stocks for the institutional and retail investment clients of firms including a "research boutique" subsidiary of Paine Webber, Inc. and Dain Raucher Wessels, Inc.

Having served as a Director of Investment Research and Investment Strategy Committee member on the buy-side of Wall Street and a Director of Investment Research and Commitment Committee member on the sell-side, Kevin is respected for his insights regarding the effective development and execution of business models across all sectors of the economy. He takes an active role in the creation and development of new business enterprises, often serving as a Director or Advisory Board member.

Kevin has been recognized by *Institutional Investor* magazine in their "Best of the Buy-side" rating of Wall Street's buy-side analysts. He has appeared on *NBC Nightly News with Tom Brokaw*, *CNBC's Market Wrap*, *CNBC's Business Center* and *The Wall Street Journal Report*, and is quoted widely in the general and financial press. He holds a BS degree in Economics from Villanova University in Villanova, Pennsylvania. He earned his MBA at The University of Chicago.

Companies mentioned in this report ▶

Ancore Corporation (privately held)
Analogic Corporation (ALOG-NASDAQ)
Barringer Technologies, Inc. (division of Smiths Group PLC)
General Electric Company (GE-NYSE)
Heimann Systems Group (a division of Rheinmetall Group)
International Business Machines Corporation (IBM-NYSE)
L-3 Communications Holdings, Inc. (LLL-NYSE)
OSI Systems, Inc. (OSIS-NASDAQ)
PerkinElmer, Inc. (PKI-NYSE)

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



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