



Member NASD/SIPC

Toll Free: 866-928-0928 ♦ www.DawsonJames.com ♦ 925 South Federal Hwy., 6th Floor ♦ Boca Raton, FL 33432

INSTITUTIONAL RESEARCH

Healthcare & Biotechnology

UPGRADE REPORT

Zoll Medical (ZOLL)

Sell Short Price Target Achieved

NEUTRAL

May 31, 2007

Harish Aiyar, Ph.D.
Senior Analyst
(561) 208-2934
haiyar@dawsonjames.com

Current Price \$21.71 Old Target \$23.00 New Target \$22.00

Investment Highlights:

- Zoll Medical is trading below our SELL SHORT price target of \$23.00. As a result, we are raising our recommendation to NEUTRAL.**
- Physio-Control's Woes Provides Opportunity:** Physio Control, a subsidiary of Medtronic, announced earlier this year in January that it has voluntarily suspended the shipment of products manufactured at its facility in Redmond, Washington. Physio-Control designs and manufactures external defibrillators and other emergency response products for use in hospitals, emergency response organizations, and various public and private enterprises. The shipment stoppage will only affect domestic shipments. In 1991, Physi-Control had a similar shipment stoppage, which lasted over one year. This clearly provides an opportunity for ZOLL (as well as other competitors). On Medtronic's most recent quarterly conference call, management indicated that it is in final discussions with the FDA and expects shipments to resume in the later half of FY08 (the company's fiscal year ends in April).
- 2Q07 Mixed:** The company reported results for 2Q07 of revenue and EPS of \$68.3M and \$0.15, respectively, essentially inline with our estimates. The EPS number reflects a 2:1 split that became effective in mid-February.
- By Segment:**
 - North American Hospital – decreased 18% y/y to \$15M, primarily due to weak Military sales. Excluding military, sales to this segment increased 6% y/y.
 - North American pre-Hospital – sales increased 44% y/y to \$30.4M (these results include Lifecore which was acquired in April of 2006).
 - International – increased 40% y/y to \$17.7M.
 - Autopulse – Revenue of \$3.3M includes first shipments to Japan.

Stock Data

52-Week Range	\$14.44 – \$37.77		
Shares Outstanding (Mill)	20.9		
Market Capitalization (\$Mill)	\$440		
Average Daily Volume	312,287		
Book Value/Share	\$10.79		
Price/Book	2.0		
Cash / Securities (\$Mill)	\$78.8		
Cash/Share	\$3.77		
Insider Ownership	1%		
Institutional Ownership	84%		
Debt (\$Mill)	-		
Dividend/Yield	-		
Short Interest (\$Mill) / %	\$28 / 6.3%		

Estimates (Oct)	2005A	2006A	2007E
Sales (\$Mill)	\$211.3	\$248.9	\$280
EPS	\$0.10	\$0.57	\$0.70
Net Inc. (Loss) (\$Mill)	\$2.0	\$11.1	\$14.7

Management

Pres & CEO	Richard A. Packer
VP, Admin & CFO	A. Ernest Whiton
VP, R&D	Donald R. Boucher



Price target and ratings changes over the past 3 years:
Initiated December 6, 2005 – SELL – Price Target \$10.50.
Downgrade Jan. 19, 2007 – SELL SHORT – Price Target \$23.00.
Upgrade May 31, 2007 – Neutral – Price Target \$22.00.

See last page for important disclosures and analyst certification.

- 5) **Upgrade to NEUTRAL:** Since our downgrade, the stock has declined approximately 39%. At \$22, using the high-end of management's guidance of EPS of \$0.73, the stock trades at 30x FY07 P/E. The S&P SmallCap Health Care Equipment & Services Index trades at 26x FTM P/E. For FY07, we expect revenue of \$280M and EPS of \$0.70. How the remainder of 2007 plays out for Zoll is largely dependent on how soon Physio-Control returns to the market and what lasting impact their absence has on Zoll. We contend that the upside is limited. Given the company's growth prospects and taking into account its strong balance sheet and the change in the competitive landscape, we arrive at a target price of \$22 per share by applying a 30x multiple to FTM EPS.

INVESTMENT CONCLUSION & VALUATION

We are upgrading our recommendation on Zoll Medical to Neutral from Sell Short.

Since our downgrade of the stock to Sell Short on Jan. 19, 2007, the stock price has declined 39%.

We believe the stock is fairly valued at the current price. At \$22, using the high-end of management's guidance of EPS of \$0.73, the stock trades at 30x FY07 P/E. The S&P SmallCap Health Care Equipment & Services Index trades at 26x FTM P/E.

For FY07, we expect revenue of \$280M and EPS of \$0.70. This is slightly below our previous estimate due to more modest expectations from the R-series defibrillator, military revenue and the anticipated return of Physio-Control by the end of 2007 or early 2008.

How the remainder of 2007 plays out for Zoll is largely dependent on how soon Physio-Control returns to the market and what lasting impact their absence has on Zoll. We contend that the upside is limited. Given the company's growth prospects and taking into account its strong balance sheet and the change in the competitive landscape, we arrive at a target price of \$22 per share by applying a 30x multiple to FTM EPS.

Physio-Control

On Medtronic's 4Q07 quarterly conference call, management indicated that it is in final discussions with the FDA and expects shipments to resume in the latter half of FY08 (the company's fiscal year ends in April). If this schedule holds, it would imply a faster return to market for the company than what occurred in the early 1990s.

For some background, Physio-Control designs and manufactures external defibrillators and other emergency response products for use in hospitals, emergency response organizations, and various public and private enterprises. The shipment stoppage will only affect domestic shipments. Physio-Control had annual sales of approximately \$450M, of which 35% were to international markets. The company was acquired by Medtronic in 1998.

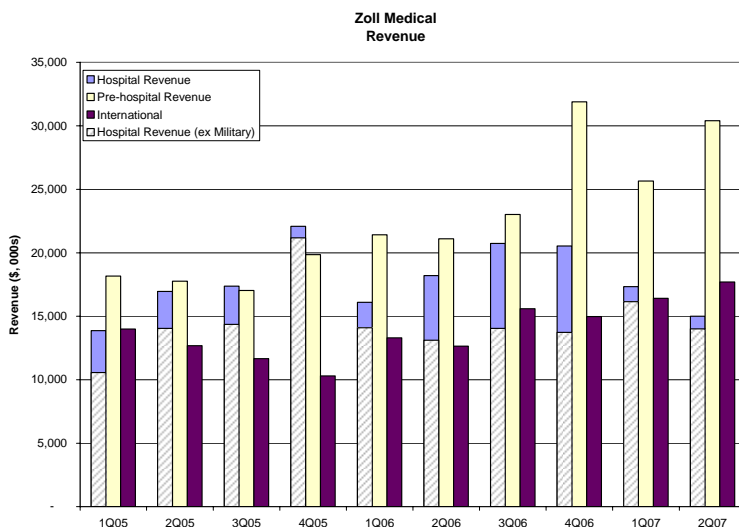
In 1991, Physio-Control had a similar shipment stoppage, which lasted nearly 18 months. During this period, Zoll experienced strong top-line growth as well as the highest levels of profitability in the company's recent history.

Physio-Control did eventually benefit from its strong customer relationships and installed base as its sales returned to a pre-stoppage rate rapidly once the shipment stoppage was lifted. This was also apparent in Zoll's results.

While recent events clearly provide an opportunity for Zoll and other competitors (including Philips and Cardiac Science (Rating: BUY)), only time will tell whether the recent trouble at Physio-Control will translate into performance at Zoll similar to what the company experienced in the early 1990s. We certainly don't expect quarterly revenue for Zoll to double over the course of a year, which is what happened between 1Q92 and 2Q93. We expect Zoll to gain some share, but also expect the effect on the top-line and margins to be more muted this time around.

2Q07 Mixed

The company reported results for 2Q07 of revenue and EPS of \$68.3M and \$0.15, respectively, below our estimates of \$68.8M and \$0.17. The EPS number reflects a 2:1 stock split that became effective in mid-February. Management commented that the impact from Physio Control was modest, with the largest impact in the North American public access AED market. With regards to the professional defibrillator business, the impact was not as significant, with most of Physio’s customers taking a “wait and see” attitude. Clearly, the longer the shutdown, the larger the impact to Zoll. In the meantime, the company has ramped up telemarketing initiatives, intends to build on its North American sales force and has increased inventory in preparation for increased production levels.



North American Hospital Market Remains Weak

Sales to the North American hospital market continue to underperform for Zoll. For 2Q07, North American hospital revenue decreased 18% y/y to \$15M, primarily due to weak military sales. Excluding military, sales to this segment increased 6% y/y, albeit off a weak 2Q06. Year-to-date, sales in the military segment of \$2.2M are tracking below management’s expectations.

The introduction of the new R-series defibrillator in 1Q07 has not had the impact management had hoped for. In an effort to improve this business, management is in the midst of a leadership change in the sales team.

That said, ultimately, this is a mature market. Moreover, it is not a trivial matter to switch vendors if the product in question is performing well. Thus, even though Physio-Control maybe out of the market for sometime, hospital purchase decisions may be delayed temporarily if that institution is pleased with their experience with the Physio product.

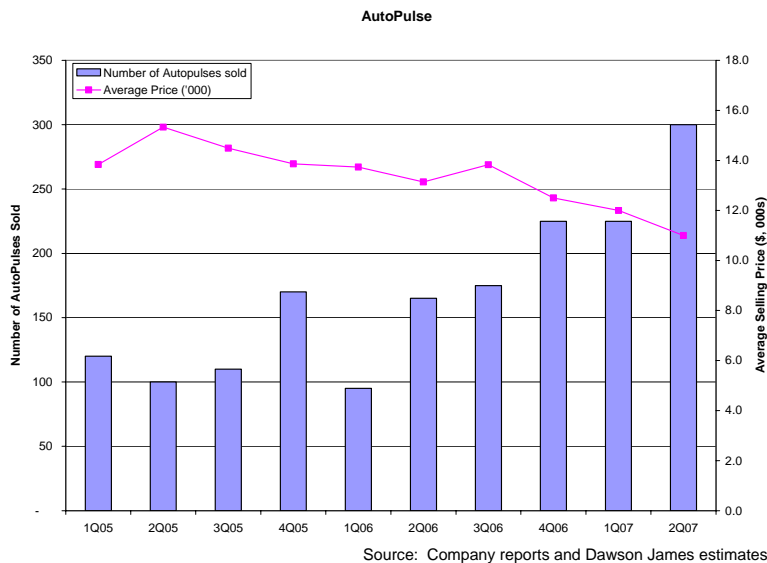
Pre-Hospital Market Continues to Perform Well

Sales to the North American pre-hospital market increased 44% y/y to \$30.4M (these results include Lifecore which was acquired in April of 2006), with growth from the E Series and AED sales. We expect continued strength in the public access AED market.

Autopulse

Autopulse revenue for 2Q07 was \$3.3M, and included the first shipments to Japan (through Nihon Kohden).

We estimate 300 Autopulse units were sold in 2Q07, versus 165 in 2Q06. To date, we estimate the installed base to be just over 1,900 units. Sales continue to be choppy. We continue to believe that continued decline in average selling price and additional clinical data that provides some clarity with regards to the ASPIRE trial will be necessary before the product gains meaningful traction.



During the quarter, the company unveiled the next version of the AutoPulse. Although this new product looks very similar to its predecessor, it incorporates data collection technology and an improved user interface as well as being lighter weight.

Management expects the clinical trial to address the negative results of the ASPIRE trial to commence in FY07, with results not expected until 2008. Dr. L. Wik (Norway) and Dr. Tom Aufderheide (Wisconsin, US) have been identified as the lead investigators. The final trial design is nearing completion with an anticipated six sites (three in the US and three abroad) enrolling 1,500 patients. Two sites have begun the training process. Patient enrollment is expected to commence in the fall, slightly later than original expectations.

FY07 Guidance & Valuation

Management reiterated guidance for FY07 of revenue growth in the mid-teens and EPS between \$0.68 to \$0.73. Following the shipment stoppage at Physio-Control, management guided towards the higher end of the EPS range.

We believe the stock is fairly valued at the current price. At \$22, using the high-end of management’s guidance of EPS of \$0.73, the stock trades at 30x FY07 P/E. The S&P SmallCap Health Care Equipment & Services Index trades at 26x FTM P/E.

For FY07, we expect revenue of \$280M and EPS of \$0.70. This is slightly below our previous estimate due to more modest expectations from the R-series defibrillator, military revenue and the anticipated return of Physio-Control by the end of 2007 or early 2008.

How the remainder of 2007 plays out for Zoll is largely dependent on how soon Physio-Control returns to the market and what lasting impact their absence has on Zoll. We contend that the upside is limited. Given the company’s growth prospects and taking into account its strong balance sheet and the change in the competitive landscape, we arrive at a target price of \$22 per share by applying a 30x multiple to FTM EPS.

Key Modeling Assumptions

Increase penetration of Defibrillator and AED market – The AED market is still relatively underpenetrated. Our forecast assumes continued adoption of AEDs in the U.S. and overseas. We view the traditional defibrillator market as mostly a replacement market vs. new purchase.

International Markets – The company derives nearly 20% of its revenue from international markets. We expect this to continue.

AutoPulse Unit Sales and Pricing – We expect the company to continue to ramp sales of the AutoPulse, but we expect the average selling price to decline from current levels.

Share Gain from Physio-Control – We expect the company to gain some share in their core defibrillator market due to recent events surrounding one of its main competitors.

New Product Introduction and Clinical Trials – The company has recently introduced the new E-Series and R-Series defibrillators. We don't expect any major product introductions, but do expect to see additional clinical data regarding the AutoPulse.

RISKS

We believe a Neutral position with Zoll Medical involves the following risks:

- **Large Orders** – The company may receive a large customer order (eg US Military).
- **Clinical Data** – We expect additional data regarding the AutoPulse to be presented in the coming months.
- **M&A Activity** – Zoll may acquire or may be acquired by another company.
- **Extended Issues at Physio-Control** – One of the company's major competitors is in the midst of a shipping stoppage. If these issues persist, Zoll may benefit to a greater extent.
- **Sector Rotation** – Zoll is a medical device company and is often held in a portfolio with other device companies. A material event affecting one company many times affects the entire group.

ZOLL MEDICAL CORP (ZOLL)

	1Q06	2Q06	3Q06	4Q06	1Q07	2007	Forecast				2003	2004	2005	2006	2007e	2008e		
	Jan-06	Apr-06	Jul-06	Oct-06	Dec-06	Apr-07	3Q07e	4Q07e	1Q08e	2Q08e	3Q08e	4Q08e	Oct-03	Oct-04	Oct-05	Oct-06	Oct-07	Oct-08
Income Statement																		
Revenue																		
North America																		
Hospital	16,097	18,207	20,742	20,533	17,337	15,000	18,668	21,149	17,857	15,900	20,161	22,841	63,558	87,866	70,266	75,579	72,154	76,759
Pre-Hospital (inc public safety, EMS)	21,414	21,094	23,011	31,886	25,645	30,400	26,404	33,350	26,424	31,813	31,060	36,202	55,357	62,724	72,831	97,405	117,799	125,500
Other	4,840	4,984	4,925	4,887	5,245	5,210	5,467	5,571	5,245	5,210	5,467	5,571	19,602	19,900	19,628	19,336	21,493	21,493
International	13,309	12,648	15,589	14,983	16,414	17,700	17,148	17,081	17,727	19,116	18,348	18,105	46,086	41,295	48,615	56,529	68,343	73,297
Total Revenue	55,460	56,833	64,267	72,289	64,641	68,310	69,687	77,151	67,254	72,039	75,037	82,720	184,603	211,785	211,340	248,849	279,788	297,049
Cost of Goods																		
Gross Profit	30,979	31,643	36,289	41,373	36,270	38,223	39,164	43,822	37,797	40,486	42,396	47,150	103,126	119,240	119,015	140,284	157,478	167,828
S&M																		
G&A	19,349	18,502	20,523	21,042	21,061	21,059	21,691	22,016	22,226	22,569	22,907	23,594	59,461	74,946	75,838	79,416	85,827	91,197
R&D	4,948	4,921	6,383	6,165	6,176	6,515	6,548	6,613	6,626	6,659	6,726	6,760	12,404	14,504	18,667	22,417	25,852	26,771
Total Operating Expense	29,597	28,868	32,956	33,806	33,620	34,207	34,905	35,395	35,654	35,992	36,329	37,016	85,980	107,826	117,401	125,227	138,127	144,991
Operating Income	1,382	2,775	3,333	7,567	2,650	4,016	4,259	8,426	2,143	4,494	6,067	10,134	17,146	11,414	1,614	15,057	19,352	22,837
Interest/Other																		
Net Income Before Taxes	1,665	3,205	3,967	8,302	3,311	4,918	5,009	9,176	2,793	5,144	6,717	10,784	19,179	12,737	2,186	17,139	22,415	25,437
Provision for Income Taxes																		
Net Income After Taxes	533	1,123	1,437	2,906	959	1,746	1,753	3,212	977	1,801	2,351	3,774	6,329	3,781	223	5,999	7,670	8,903
Basic EPS																		
Diluted EPS	\$ 0.06	\$ 0.11	\$ 0.13	\$ 0.28	\$ 0.12	\$ 0.16	\$ 0.16	\$ 0.29	\$ 0.09	\$ 0.16	\$ 0.21	\$ 0.34	\$ 1.42	\$ 0.86	\$ 0.10	\$ 0.58	\$ 0.73	\$ 0.80
	\$ 0.06	\$ 0.11	\$ 0.13	\$ 0.27	\$ 0.12	\$ 0.15	\$ 0.16	\$ 0.28	\$ 0.08	\$ 0.15	\$ 0.20	\$ 0.32	25%	-39%	-8%	46%	23%	7%
Basic Weighted Average Shares																		
Diluted Weighted Average Shares	19,244	19,250	19,264	19,362	19,776	20,310	20,227	20,330	20,567	20,919	20,632	20,737	18,059	18,382	19,116	19,280	20,161	20,714
	19,388	19,404	19,438	19,658	20,238	20,919	21,000	21,200	22,000	22,000	22,000	22,000	18,431	18,647	19,227	19,472	20,839	22,000
% of Revenue																		
Gross Margins																		
S&M	55.9%	55.7%	56.5%	57.2%	56.1%	56.0%	56.2%	56.8%	56.2%	56.2%	56.5%	57.0%	55.9%	56.3%	56.3%	56.4%	56.3%	56.5%
G&A	34.9%	32.6%	31.9%	29.1%	32.6%	30.8%	31.1%	28.5%	32.9%	31.3%	30.5%	28.5%	32.2%	35.4%	35.9%	31.9%	30.7%	30.7%
R&D	8.9%	8.7%	9.9%	8.5%	9.6%	9.5%	9.4%	8.6%	9.9%	9.2%	9.0%	8.2%	6.7%	6.8%	8.8%	9.0%	9.2%	9.0%
Total Operating Expense	9.6%	9.6%	9.4%	9.1%	9.9%	9.7%	9.6%	8.8%	10.3%	9.4%	8.9%	8.1%	7.6%	7.7%	10.8%	9.4%	9.5%	9.1%
Operating Margin	53.4%	50.8%	51.3%	46.8%	52.0%	50.1%	50%	46%	53%	50%	48%	45%	47%	51%	56%	50%	49%	49%
Net Income Before Taxes	2%	5%	5%	10%	4%	6%	6%	11%	4%	7%	9%	13%	3%	5%	1%	6%	7%	7%
Net Income After Taxes	3.0%	5.6%	6.2%	11.5%	5.1%	7.2%	7%	12%	4%	7%	9%	13%	10%	6%	1%	7%	8%	9%
Tax rate	32.0%	35.0%	36.2%	35.0%	29.0%	35.5%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	33.0%	29.7%	10.2%	35.0%	34.2%	35.0%
Net Income After Taxes	2.0%	3.7%	3.9%	7.5%	3.6%	4.4%	5%	8%	3%	5%	6%	8%	7%	4%	1%	4%	5%	6%
q/q % Change																		
Revenue	(2.9%)	2.5%	13.1%	12.5%	(10.6%)	5.7%	2.0%	10.7%	(12.8%)	7.1%	4.2%	10.2%						
COGS	(4.5%)	2.9%	11.1%	10.5%	(8.2%)	6.0%	1.4%	9.2%	(11.6%)	7.1%	3.4%	9.0%						
Gross Profit	(1.6%)	2.1%	14.7%	14.0%	(12.3%)	5.4%	2.5%	11.9%	(13.7%)	7.1%	4.7%	11.2%						
S&M	5.4%	(4.4%)	10.9%	2.5%	(0.0%)	3.0%	1.5%	0.5%	2.0%	1.5%	3.0%							
G&A	(4.1%)	(0.5%)	29.7%	(3.4%)	0.2%	5.5%	0.5%	1.0%	0.2%	0.5%	1.0%	0.5%						
R&D	(2.3%)	2.7%	11.1%	9.1%	(3.3%)	3.9%	0.5%	1.5%	2.0%	(2.0%)	(1.0%)	(0.5%)						
Operating Expense	2.2%	(2.5%)	14.2%	2.6%	(0.6%)	1.7%	2.0%	1.4%	0.7%	0.9%	0.9%	1.9%						
Operating Income	(45.5%)	100.8%	20.1%	127.0%	(65.0%)	51.5%	6.1%	97.8%	(74.6%)	109.8%	35.0%	67.0%						
Net Income	(49.4%)	83.9%	21.5%	113.3%	(56.4%)	34.9%	2.7%	83.2%	(69.6%)	84.2%	30.6%	60.6%						
ylf % Change																		
Revenue	9.5%	8.3%	25.8%	26.5%	16.6%	20.2%	8%	7%	4%	5%	8%	7%						
Cost of Goods	10.3%	10.4%	29.2%	20.6%	15.9%	19.4%	9%	8%	4%	5%	7%	7%	25%	14%	0%	18%	13%	6%
Gross Profit	9.0%	6.6%	23.3%	31.4%	17.1%	20.8%	6%	6%	4%	6%	8%	8%						
S&M	(1.6%)	(2.5%)	9.0%	14.6%	8.8%	13.8%	6%	5%	5%	6%	7%	7%	22%	26%	1%	5%	8%	6%
G&A	15.8%	6.4%	38.4%	19.5%	24.8%	32.4%	3%	7%	7%	2%	3%	2%	11%	17%	29%	20%	15%	4%
R&D	(9.1%)	(6.4%)	3.9%	21.7%	20.4%	21.8%	10%	3%	8%	2%	0%	-2%	22%	30%	25%	2%	13%	2%
Operating Expense	(0.0%)	(1.5%)	12.6%	16.8%	13.0%	18.5%	6%	5%	4%	5%	5%	5%	20%	25%	9%	7%	10%	5%
Operating Income	(203.2%)	1023.5%	1849.1%	188.5%	91.8%	44.7%	28%	11%	-19%	12%	42%	20%						
Net Income	(300.0%)	1209.4%	1816.7%	141.1%	107.8%	52.4%	29%	11%	-23%	5%	34%	18%						
Basic Weighted Average Shares	1.1%	0.5%	0.6%	1.3%	2.8%	5.5%	5%	4%	4%	5%	2%	2%	1%	2%	4%	1%	5%	3%
Diluted Weighted Average Shares	1.8%	0.5%	0.9%	1.9%	4.4%	7.8%	8.0%	7.8%	8.7%	5.2%	4.8%	3.8%	1%	1%	3%	1%	7%	6%
Balance Sheet																		
Assets																		
Cash/Equivalents	42,217	35,432	39,129	42,831	45,053	59,476	40,999	46,439	60,682	82,244	47,885	57,953	40,780	40,685	36,270	42,831		
Mktbl. Securities	13,092	23,455	18,222	20,548	21,726	19,345	19,345	19,345	19,345	19,345	19,345	19,345	19,992	18,325	14,553	20,548		
Accounts Receivable	44,934	45,576	50,043	59,078	60,566	58,125	57,434	63,586	55,429	59,373	61,843	66,000	52,595	55,893	47,733	59,078		
Doubtful Accounts	-	-	-	-	-	-	-	-	-	-	-	-	(4,689)	(4,855)	-	-		
Inventories	37,354	36,280	37,078	37,119	41,722	44,569	36,896	40,288	35,607	38,141	39,456	41,624	34,388	31,702	38,637	37,119		
Prepaid & Other	8,280	8,227	7,895	9,010	9,485	9,501	9,976	10,475	10,999	11,549	12,126	12,732	5,042	7,273	8,055	9,010		
Total Current Assets	145,877	148,970	152,367	168,586	178,552	191,016	164,650	180,132	182,062	210,651	180,655	197,654	148,108	149,023	145,248	168,586		
Property & Equipment, net																		
Property & Equipment	25,050	25,053	27,020	26,655	27,204	28,876	33,193	34,584	39,302	42,736	47,700	49,300	52,826	-	-	26,655		
Depreciation	-	-	-	-	-	(6,067)	(8,217)	(10,469)	(12,832)	(15,194)	(17,667)	-	(29,780)	(36,066)	-	-		
Investments	-	-	-	-	-	-	-	-	-	-	-	-	12,804	9,858	-	-		
Intangible Assets	-	-	-	-	-	-	-	-	-	-	-	-	2,113	16,961	-	-		
Other Assets	51,353	51,698	54,300	56,245	55,839	55,897	57,574	59,301	61,080	62,913	64,800	66,744	6,025	7,130	50,796	56,245		
Total Assets	222,280	225,721	233,687	251,486	261,595	275,789	249,350	265,800	271,975	303,467	277,961	296,031	192,096	207,193	219,536	251,486		
Liabilities																		
Line of Credit																		
Accounts Payable	10,337	10,119	12,550	13,745	15,554	15,745	13,292	14,391	16,495	16,566	13,835	15,050	12,204	12,321	9,020	13,745		
Accrued Expenses & Other Liabilities	19,843	20,688	22,278	28,671	23,849	40,799	23,595	30,019	25,292	42,928	24,558	31,394	22,399	21,917	19,7			

DISCLOSURES


Initiated December 6, 2005 – SELL – Price Target \$10.50
 Downgrade January 19, 2006 – SELL SHORT – Price Target \$23.00
 Upgrade May 31, 2007 – Neutral– Price Target \$22.00.

Analyst Certification: The analyst(s) whose name appears on this research report certifies that 1) all of the views expressed in this report accurately reflect his personal views about any and all of the subject securities or issuers discussed; and 2) no part of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst in this research report; and 3) All Dawson James employees, including the analyst(s) responsible for preparing this research report, may be eligible to receive non-product or service specific monetary bonus compensation that is based upon various factors, including total revenues of Dawson James and its affiliates as well as a portion of the proceeds from a broad pool of investment vehicles consisting of components of the compensation generated by investment banking activities, including but not limited to shares of stock and/or warrants, which may or may not include the securities referenced in this report.

Dawson James has not acted as an investment banker for the company(s) mentioned in this report in the past, although Dawson James may have sought in the past, or may actively seek in the future, compensation for investment banking services. Dawson James does not make a market in this security(s). Neither the research analyst whose name appears on this report nor any member of his household is an officer, director or advisory board member of the company(s). Dawson James did not receive any other compensation from the company (s) in the previous 12 months nor did the Firm own any additional securities of the company(s) prior to the publication of this report. The Firm and/or its directors and employees may own securities of the company(s) in this report and may increase or decrease holdings in the future.

Ratings definitions: **1) Speculative Buy:** the stock is expected to appreciate and produce a total return of at least 30% over the next 12-18 months but **the volatility and investment risk is substantially higher** than our "Strong Buy" recommendation; **2) Strong Buy:** the stock is expected to appreciate and produce a total return of at least 30% over the next 12-18 months; **3) Buy:** the stock is expected to appreciate and produce a total return of at least 20% over the next 12-18 months; **4) Neutral:** the stock is fairly valued for the next 12-18 months; **5) Sell:** the stock is expected to decline at least 20% over the next 12-18 months and should be sold; **6) Sell Short:** the stock is expected to decline at least 30% over next 12-18 months and should be sold short, however **the volatility and investment risk is substantially higher** than our "Sell" recommendation; **7) Under Review:** the previous rating and/or price target is suspended due to a significant event which now requires additional analysis and the previous rating and/or price target cannot be relied upon; and **8) Restricted:** coverage cannot be initiated or has been temporarily suspended to comply with applicable regulations and/or firm policies in certain circumstances such as investment banking or an advisory capacity involving the company.

Ratings Distribution	Company Coverage		Investment Banking	
	# of Companies	% of Total	# of Companies	% of Totals
Speculative Buy	5	17%	2	40%
Strong Buy	3	10%	1	33%
Buy	17	59%	1	6%
Neutral	3	10%	0	0%
Sell	0	0%	0	0%
Sell Short	0	0%	0	0%
Under Review	1	3%	1	100%
Restricted	0	0%	0	0%
Total	29	100%	5	17%

Information about valuation methods and risks can be found in the “STOCK VALUATION” and “RISKS” sections of this report.

DAWSON JAMES SECURITIES, INC., Member SIPC, NASD, (the "Firm") does not make a market in these securities. The Firm may perform or seek to perform investment banking services for these companies in the future. Analysts receive no direct compensation in connection with the firm's investment banking business. All Dawson James employees, including the analyst(s) responsible for preparing this research report, may be eligible to receive non-product or service specific monetary bonus compensation that is based upon various factors, including total revenues of Dawson James and its affiliates as well as a portion of the proceeds from a broad pool of investment vehicles consisting of components of the compensation generated by investment banking activities, including but not limited to shares of stock and/or warrants, which may or may not include the securities referenced in this report. The Firm, its officers, directors, analysts or employees may effect transactions in and have long or short positions in the securities (or options or warrants with respect thereto) mentioned herein. Although the statements of fact in this report have been obtained from and are based upon recognized statistical services, issuer reports or communications, or other sources that the Firm believes to be reliable, we cannot guarantee their accuracy. All opinions and estimates included in this report constitute the analyst's judgment as of the date of this report and are subject to change without notice. The Firm may effect transactions as principal or agent in the securities mentioned herein. The securities discussed or recommended in this report may be unsuitable for investors depending on their specific investment objectives and financial position. This report is offered for informational purposes only, and does not constitute an offer or solicitation to buy or sell any securities discussed herein in any jurisdiction where such would be prohibited. Additional information is available upon request.