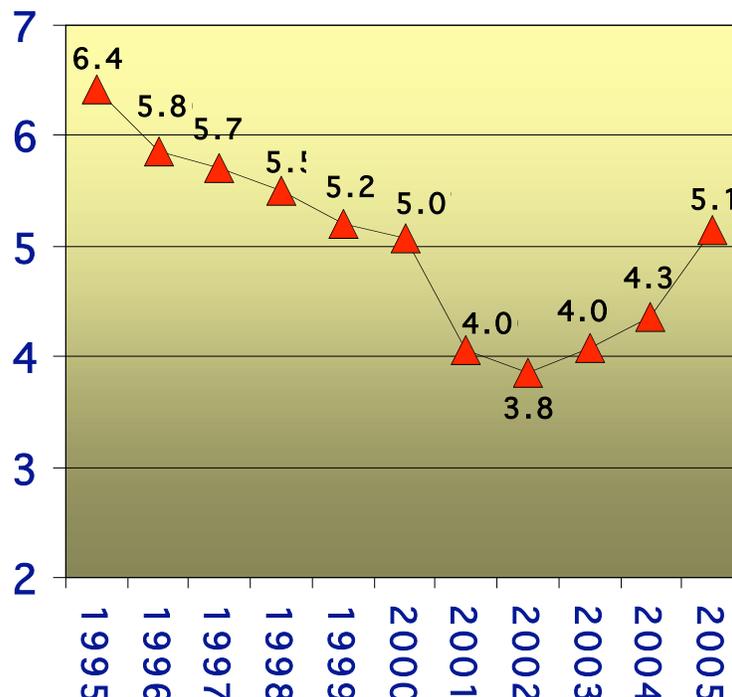


INDEPENDENT EQUIPMENT COMPANY
2005 OUTLOOK FOR USED EQUIPMENT MARKETS
RECOVERY AT LAST

by Carl Chrappa, A.S.A., I.F.A.

Independent Equipment Company annually compiles and rates secondary market outlooks for selected categories of equipment which are commonly financed by leasing and asset-based lending companies. Overall, the outlook for used equipment markets in 2005 can be best described as *very healthy, with some markets sizzling*. This year's average outlook rating showed a 17.9 percent improvement over last year's, and a 33 percent improvement over 2002's 16-year record low. For 2005, the (14) equipment types surveyed scored an average rating of **5.14** – satisfactory. By way of comparison, the average rating in 2003 was 4.3 – not satisfactory, and in 2003 was 4.07 – not satisfactory. See the chart below for previous years' average ratings.

SECONDARY MARKET OUTLOOK



Over the past decade, IEC considers 1995 as a peak year for used equipment markets, with 1996 the start of a slow decline which IEC believes bottomed in 2002. The year 2003 was transitional, and 2004 marked a rapid recovery for most equipment markets. This year is expected to be another year in which used equipment markets will continue to improve. The year is also expected to be one during which the economy will remain vibrant for the second year in a row.

A consensus of (56) leading economists recently published by The Wall Street Journal predicted that GDP for 2005 would expand at average quarterly rates ranging from 3.5 percent for the first quarter to 3.6 percent for the fourth quarter of 2005. These findings were quite similar to another survey of economists conducted by Blue Chip Financial Forecasts of (47) of the nation's leading financial institutions and consulting firms. Specifically, according to the results of that survey, GDP for 2005 is forecast to increase at quarterly rates ranging from 3.4 percent for the first quarter to 3.5 percent for the fourth quarter of 2005.

Most economists also believe that the unemployment rate during 2005, which was 5.4 percent in December 2004, will continue to fall to 5.1 percent by the end of 2005. This would translate into the creation of more than 2.1 million new jobs during the year.

In addition, economists believe that for 2005, business will lend significant support to the economy by investing in more new equipment and hiring more employees, thus picking up some of the load carried by the households, who during the third quarter of 2004 had increased spending at a brisk 5.1 percent annual rate. Instead, consumer spending is expected to decline slightly from last year's 3.7 percent annual rate to about 3.5 percent. Likewise business capital investments are expected to decline from last year's 10.4 percent to a still healthy 8.8 percent annual rate in 2005. This, taken in combination with expectations that after-tax corporate profits will rise approximately 8-10% in 2005 has led most forecasters to believe that 2005 will be a year in which the U.S. economy remains vibrant and healthy. Still, some economist worry about mounting U.S. government debt, low national savings, and the nation's weak international trade position. Although negative economic consequences from some or all of these risks are possible, they are not felt to pose significant risks for economic growth in 2005.

Based on the foregoing and on first-hand knowledge of equipment secondary markets, IEC has compiled the following outlook for selected equipment types that are frequently financed by leasing and asset-based lending companies. For comparative purposes, a rating is given for each equipment type that is reflective of the expected secondary market conditions compared to historical norms. These ratings range from 10 (outstanding) to 7 (very good) to 5 (satisfactory) to 1 (very poor).

2005 USED EQUIPMENT OUTLOOK

Automotive (5) - 2004 was a good year for the automotive industry. The first half of 2004 saw a lowering of incentives, significant cut-backs in zero percent financing, and active buyers aided by an improving economy and low interest rates. However, incentives returned during the second half of the year, becoming quite aggressive by year's end. Final North American (N.A.) sales for 2004 reached 16.24 million units -- almost exactly equal to 2003's total 16.28 million; 2.8% below 2002's total sales of 16.8 million units, which itself was a 2.0% drop from 2001's total of 17.2 million new cars and light trucks -- all of this in comparison to 1999's record total sales of approximately 17.4 million units.

For 2005, experts estimate total North American production will be flat to slightly down. For the year, experts are also forecasting Daimler-Chrysler sales to increase by 6.4%; GM by 2.2%; while Ford is expected to show a sales decline equal to 4.5% of its 2004 level. Over the past six years, Asian automakers have gained U.S. marketshare at the expense of the 'Big Three.' In fact, in 2004, Toyota's U.S. Division sold more than 2.0 million vehicles (a 10% increase) for the first time in its 47 year existence. For 2004, the top five N.A. vehicle sellers were (in order): Ford F Series; Chevrolet Silverado; Toyota Camry; Dodge Ram pickup; and Honda Accord.

Used vehicle sales for the year fell approximately 2.4% to 28.98 million units. Overall, according to ADESA, for 2004, prices for used cars and light trucks increased by 3.8% to \$9,262. According to the same source, the most desirable used cars consisted of: small and mid-range cars, whose price increased 6.4% year-over-year; followed by sporty cars whose prices increased 5.7%. Those not performing well included 'traditional' cars whose prices fell by 3.2%, and 'upscale' cars, whose average prices fell 5.1%. Meanwhile, the price of the average light truck showed a decrease of 2.1% for the year, falling to \$10,381. The most desirable trucks included: full-size vans (+0%); and small pickups (-0.9%). Those types not faring well included: full-size SUV, whose price plunged 13.7% year-over-year; full-sized pickup trucks, whose average price dropped 1.2%; and mini vans, whose average price dropped 2.7% year-over-year. Meanwhile, the number of 'certified' used car sales continued to increase throughout the year, and now totals 1.58 million units, a 7.5% increase year-over-year.

Over the past four years, the drop off in leasing within this sector has been significant, falling from 30.5% in 2000 to just under 20% in 2003. However, for 2004, the lease penetration rate showed an increase to about 21.5%. For 2005, this rate is expected to increase again slightly following the interest rate trend. It is believed as interest rates rise, the "affordability index" will decline, making leasing a more attractive finance product. Due to the decline in lease penetration over the past few years, a shortage of off-lease units has developed which has now provided a stronger market for institutional sellers, such as commercial and rental car fleets. This caused a decrease in the volume of off-lease and repossessed vehicles at auctions during 2004, which was attributable to improvements in the economy, as well as bank and leasing company collection and finance practices.

For 2004, auction volume from dealers increased by 14%, and from manufacturers by almost 9%. However, auction volume from fleets and leasing companies declined by almost 9%, and from repossessions plummeted by about 35%. This illustrates the improvement in the automotive lease finance conditions last year.

Other issues the industry continues to deal with include: The Clean Air Act; and vicarious liability, which has led several auto rental and major vendor lease finance companies to exit several markets in the Northeast. However, overall the outlook for 2005 for the automotive industry is upbeat. For comparative purposes, this category rated a 5 in 2004.

Truck/Trailer (6) - 2004 was a remarkable year for the truck/trailer industry, as the market rose more strongly than many had expected. Class 8 truck/tractor production rose by approximately 43% to (203,197) units, compared to 2003's decline to (142,000) units; 2002's (146,000) units; and 2001's (140,000) units. The 2004 sales increase is mainly attributable to buyer's desire to avoid the trucks that will be equipped with the next generation 'low emissions' (EPA) engines starting in 2007. In addition, many purchases in 2004 were to replace older equipment that was retired. Industry experts are expecting a continued upturn in the sale of new, heavy-duty tractors in 2005, with sales increases ranging anywhere from 20% to 25%. Reasons for the increase continue to be related to operators wishing to stay ahead of the more stringent engine emissions standards for 2007, as well as the largest increase in traffic since 1998 due to the improving domestic economy. Some additional demand could also be developed because of the revised HOS (Hours-of-Service) rules which became effective in January of 2004, but were 'stayed' and are presently being revised. In addition, stricter hazardous material license endorsements are likely to cause about 10% of hazmat drivers to decline the fingerprint, threat assessment, and FBI background checks, which will cost \$94 per driver, and are scheduled to take effect by the end of January, 2005.

Because of emerging rules limiting hours of operation, as well as buyers' initial reluctance to purchase truck/tractors equipped with the next generation low emission engines, IEC sees significant opportunities for banks and leasing companies in this industry sector, due to the enormous demand for this equipment. Currently, about 21.5% of all commercial trucks are rented or leased. This trend is expected to increase significantly as operators' desire to shift risk of technology (low emission engines) to lessors. Furthermore, truck rental companies are reporting excellent business conditions with many unable to keep any trucks on their lots. In addition, many operating lessors are finding significant additional revenues in the contract maintenance area.

Due to the rapid economic increases in the truck/trailer sector, spot shortages of drivers have developed over the past year and one-half. This has caused employers to increase driver pay, lessen driver hours, provide guaranteed time at home; and also to provide trucks equipped with "homier" sleeper cabs for long-haul routs. According to a recent fleet manager's bi-annual survey, about 77% of respondents cite 'driver shortage' as their number one problem; 93% of respondents said they would replace 25% of their fleet in 2005, while 72% said they would replace half of their fleet within the next two years or so. Also, 38% of fleet managers indicated they would purchase new truck/tractors *before* the new, tougher low emissions standards take effect. This all sets the stage

for a robust 2005. Market share leaders include: Freightliner, International Truck, Peterbilt, Volvo, Kenworth, and Mack. Truck capacity utilization has increased from 81% in 2001 to over 95% 2004.

Meanwhile, new trailer sales increased by about 27% to (210,000) units in 2004. This compares to 2003's (165,000) units; 2002's (131,000) units; 2001's (143,000) units; 2000's (260,000) units; and 1999's (306,000) units. Forecasters believe 2005 will show similar increases as 2004 in trailer sales of about 25% to 30%, bringing sales into the area of 265,000 units, which is above the long-term average of about 220,000 units. The sales increases in 2004 occurred even though prices for trailers rose sharply during the year, due to acutely higher commodity prices. For example, over the past year and one-half, the cost of a new 53-ft. dry van trailer has risen from \$16,600 to \$22,000 -- a 33% increase. In addition, the average age of a dry van trailer has increased from just 6.4 years in 1993 to approximately 9 years in 2004. Many used trailer dealers have reported that used trailer prices have increased by 15% to 25% over just the past year. For example, one dealer stated, "equipment which used to sell for \$6,500 currently sells for \$8,000."

The supply of Class 8 trucks five-years-old or less has declined since peaking in 2002 at 943,000, then falling to about 750,000 units in 2004. This has put balance back into the secondary market, thus used truck prices increased by about 5% to 10% over those recorded in late 2003. Currently, there is a shortage of used four- and five-year-old, heavy-duty trucks and late-model, medium-duty trucks costing less than \$20,000. Meanwhile, demand for used trailers is expected to be as good as 2004, with prices of 53-ft. dry vans commanding high prices, while those of 48- and 45-ft. alternatives plunge. In addition, flats and tankers will also be in demand. For comparative purposes, the used truck/trailer market was rated a 5 in 2004.

Aircraft (4) - The aircraft equipment sector improved somewhat, but the airline industry continued to be plagued with financial difficulties, making 2004 the second worst year ever. Many U.S. airlines remain in very poor financial condition. For example, Delta posted a stunning \$5.2 billion loss for 2004 (-\$2.2 bil. in the fourth quarter alone), followed by United at -\$1.6 billion for the year; Northwest at -\$848 million; American at -\$761 million; Continental at -\$363 million; while Southwest earned \$313 million. United and U.S. Airways are in bankruptcy. In the fourth quarter of 2004, Continental announced it would need to cut at least \$500 million in labor costs in order to continue to operate, Northwest Airlines is seeking to reduce its annual labor costs by \$950 million, and Delta is in the second phase of its turnaround plan, which seeks to cut \$5 billion in operating costs by 2006. Just as the airlines seemed to narrow their losses, they were hit hard by skyrocketing fuel costs, which added forty percent, or about \$6 billion to their jet fuel bill in 2004. Globally, average jet fuel prices have risen sharply over the past ten years, increasing from 50.74 per gallon in 1994 to 67.94 in 2002, to 81.24 in 2003, to 115.24 per gallon in 2004. Only Southwest Airlines had and still has a large portion of its fuel requirement hedged, thus it suffered less from the sharp increases over the past year. During the year, United encountered restructuring problems due to high fuel prices. The Company is hinging its future on approximately \$1.4 billion in annual concessions from employees and retirees. The airline had a projected loss of about \$800 million for 2004. Meanwhile, Delta was able to put together a financial package, in combination with employee concessions of about \$1.0 billion to help it avoid a bankruptcy filing. U.S. Airways also

put together a package totaling about \$800 million per year in wage and benefit cuts. The Chairman of that airline had indicated that without the concessions, the airline would most likely liquidate under Chapter 7 of the U.S. Bankruptcy Code. Under various creditor scenarios, the airline will be required to find an investor willing to risk \$250 million by June 30. Many analysts believe that the very existence of United and/or U.S. Airways could come to an end in 2005. This would have serious consequences in the secondary commercial aircraft market.

Additionally, ATA Airlines was saved from collapse by selling a large number of its Midway gates for cash to Southwest Airlines and entering an operating partnership with that airline. Sadly, Southeast Airlines collapsed, and Aloha filed for bankruptcy at year's end. The legacy carriers have operating expenses of about 9.54 to 12.04 per available seat mile, compared with Southwest Airlines at about 7.84, and JetBlue Airways at about 64. For 2004, analysts predicted that airlines would lose about \$5 billion; however, losses will be almost twice as high. By comparison, losses between 2001 and 2003 totaled about \$28 billion, with 2002 alone accounting for losses of \$11.3 billion. For 2005, U.S. carriers are expected to lose about \$3.0 billion before turning profitable in 2006-07. Thus, the rate of loss is projected to slow. Also, the number of aircraft parked has fallen below the key 2,000 level -- currently to about 1,900 -- which is roughly 12% of the entire fleet. Many of the late model stored aircraft are being put back into service.

Long-term prospects are improving for aircraft manufacturers. For example, Boeing has projected over the next 20 years the fleet of commercial aircraft will increase by over two times to over 35,000 aircraft, citing strong demand for single-aisle and regional jets. Cargo demand will increase by 6.2%, and passenger demand will increase by 5.2%. In all, 18,600 new planes will be added to the fleet, and 6,400 will be retired. North America will require the most deliveries at about 8,630. For 2004, (605) commercial jet aircraft deliveries were made. This number is expected to increase to (685) in 2005, and increase again in 2006 to (770). This compares to 2003's delivery total of only (584) aircraft. Meanwhile, Airbus continues to lead Boeing in deliveries, outselling its primary competitor 320 to 285 in 2004, and for 2005 it is expected that Airbus will again outsell Boeing 365 to 320. At year's end, Boeing logged its first domestic order for its advanced 7E7 (787) 'Dreamliner' (medium size, long range) jet from Continental (10 planes), this followed Japan Airlines announcement to buy up to (50) of the jets. However, Boeing also announced it will shut down its 717 production line in Southern California in 2006. Meanwhile, Airbus is logging orders for its new \$280 mil. A380 double-deck superjumbo jet (555 to 850 pax). To date, there are (149) orders for the new jet. In addition, Airbus has also launched the A350 to compete with the 7E7.

Currently, the aircraft market is glutted with older equipment, but newer, more advanced aircraft are receiving good demand -- and in some instances very good demand -- particularly from Asia. Over the past year, lease rates have stabilized for most aircraft types, and began to slowly increase to finally hover at around the 'one percent of value' benchmark. For the year, it appears that loss in aircraft value can finally be attributed to an aircraft's age, rather than the industry's economic woes. However, leasing and finance companies should carefully weigh the risk associated within the aircraft market, and consider the fact that one or more collapsed U.S. major operators could put over (850) commercial aircraft onto the market at one time. In addition, Delta's recently announced 'across the board' ticket price cuts could put even more pressure on troubled legacy carriers.

Meanwhile, the world cargo market experienced its best year since the late 1990's with deck tonnage increasing 11.7% for the year. Domestically, the market continued to grow at about 4.5%. Due to increased demand, the cargo fleet is finally beginning to step-up conversion programs such as the special 747-400 freighter conversion program, and the ongoing 767-200 and 757-200, and 737 conversion programs. The global freighter fleet, currently at about (1,850) aircraft equivalents, is expected to increase to (1,897) in 2005, (1,945) in 2006, (1,974) in 2007, and finally to (1,996) in 2008. Thus, the cargo sector will be reinventing itself as demand returns.

In other areas, the regional jet market remains a hot spot in the airline industry, as illustrated by solid demand for CRJ's and ERJ's. Even the turbo prop market recovered in 2004, with deliveries increasing by 5.6%, while orders more than doubled. The piston powered aircraft sector increased by 5.5%, and the popular business jet sector increased sharply by 10.4% during 2004. Continued growth is expected in all sectors during 2005.

Finally, the engine market continued to develop strongly during the year, and the outlook for 2005 is even better. Banks and leasing companies are starting to realize that engine values tend to hold up better than aircraft values over long periods of time. Thus, the long-term engine market has seen increased competition over the past two years. The short-term market has also rebounded, due to the reintroduction of many stored aircraft onto the market. Generally speaking engines account for 30% to 35% of new aircraft value on narrow-body aircraft, and about 15% to 20% for new wide-body aircraft. However, over time, this relative value will increase to about 50% of the total aircraft value within ten years time. Therein lies the advantage. The top five engine leasing companies now control over 1,000 engines. According to a recent survey, the most desirable engines include the CFM 56-7B, V2500-A5, CFM 56-3C, CFM 56-5B, and CF6-80. Experts expect the engines spares market – of which about one-quarter of the equipment is currently leased – to rapidly expand to about a 50% lease level in a short period of time. This could present an opportunity to banks and leasing companies with expertise in this area.

Lastly, it is expected that, assuming no liquidations of major airlines occur in 2005, that this year declines in equipment value will closely be linked to normal aircraft aging, rather than economic reasons. For instance, in 2002, narrow-bodies dropped in value from 15% to 45%, then 9% to 18% in 2003, while wide-body aircraft values dropped 15% to 30% in 2002, and 4% to 12% in 2003. This year, values are expected to drop in about the 3% to 7% range. This trend should be welcomed by the lease and finance industries. Thus, 2004 showed a turnaround from 2003, and 2005 is expected to be somewhat better, as conditions for the industry slowly improve along with the global and domestic economy. For comparative purposes, the used aircraft market rated a 3 in 2004.

Telecommunications (3) - 2004 was a year in which much of the financial bleeding in the telecommunications industry and related equipment segment slowed. Part of the industry's ongoing problem lies in the fact that between 1997 and 2001, U.S. and European telecom companies spent more than \$4 trillion in equipment. Then, when the internet bubble burst, the global economy entered into a recession, and accumulated debt began putting companies out of business. Since 2000, over (70) publicly-traded telecommunication companies have filed for Chapter 11. Also,

since 2000, over 675,000 jobs have been lost in the U.S. telecommunications industry. Accordingly, investment in telecommunications infrastructure collapsed from \$118 billion in 2000 to \$52 billion in 2004. The growth rate for 2004 represented a 6% increase over that of 2003. For 2005, the rate is expected to climb by 11%. Sales in North America represent one-half of the world's total, with Asia/Pacific and Western Europe totaling 20% each. Meanwhile, worldwide telecommunication services topped the \$1 trillion mark for the first time ever in 2004. Projections over the next two years are for the services segment to grow at an annual compound annual growth rate of 4.7%.

The telecommunications industry received a major court ruling on June 15, when the U.S. Supreme Court refused to consider an appeal by AT&T and MCI related to Federal regulations that forced regional phone carriers to share their networks with competitors at discount rates. This decision will have a significant impact on both the Regional Bell Operating Companies (RBOCs), and Competitive Local Exchange Carriers (CLECs). The RBOCs will use this as an opportunity to roll out their fiber optics systems and upgrade existing infrastructure, since they won't have to be shared with competitors. On the other hand, CLECs will essentially be left with four choices: (1) purchase equipment (central office switches, etc.) to enable them to compete with the RBOCs; (2) negotiate with RBOCs to lease their existing networks but at prices approaching retail; (3) merge or be acquired; or (4) exit the business. According to the equities market, most investors believe that the outlook for CLECs is not good. Thus, stock prices of such companies have fallen since the Supreme Court's ruling. This could put another 75,000 telecommunications jobs at risk.

Based on the current dismantling of the 1996 Telecommunications Act, the Bell companies now seem committed to a "triple play" business plan, wherein improvements would be made to existing internet protocol (IP) service, advanced voice and video, and broadband data over a single line to customers. Thus, it appears that the regional Bell companies will be increasing their spending, while most others will be decreasing. Some infrastructure equipment growth segments for 2004 included: access +3.5%; signaling +2%; switching -3.5%; optical +17.6%; business systems +4.8%; and mobile platforms +6.1%. For 2005, the rate of investment in these particular segments is expected to slow slightly, due to the fallen investments in the mobile platforms. For example, access is expected to increase by +4.5% to +5.0%; signaling by +3.5% to +4%; switching -2%; optical +20% to +25%; business systems +5%; and mobile platforms 0 to +0.5%. The foregoing illustrates the makeup of some of the key elements within telecommunications equipment infrastructure and changes in year-over-year sales.

In the near term, the industry will focus on its roll-out of Voice over Internet Protocol (VoIP) services. This will create competition between telephone companies and cable television firms. Over the next four years, the number of homes and businesses with VoIP service is expected to increase ten-fold to 22-24 million. This will present leasing and finance companies with significant opportunities to participate. However, it should be understood that large portions of VoIP equipment cost represents "bundled" software which in many instances is non-transferable.

Meanwhile, the used equipment market improved slightly in 2004. It is expected to grow from about \$1.6 billion in 2004 to \$1.7 billion in 2005. Some of this increase is related to resale/

refurbishment programs, wherein equipment is cleaned and refurbished and resold with 90-day warranties, as well as software licenses. In fact, Cisco has entered the refurbishing market, selling much of its used equipment at savings of 25% to 30% over new. However, used equipment dealers are competing directly with Cisco, offering savings of 50% to 75% of savings from new.

Overall, used telecommunications equipment prices stabilized during 2004. Demand increased somewhat while the over-supply decreased, allowing prices to stabilize for nearly all equipment components and backbone, including switches, hubs, routers, multiplexers. Meanwhile, in general, analog systems sales are down, and digital systems and VoIP sales are up. Thus, the market is slowly improving. Most equipment is being purchased for replacement or expansion, and not as a complete operating system. Also, prices remained stable, but relatively low, for common used office systems equipment, such as PBX and key systems. In this office systems market, the tier one manufacturers include: Nortel, Avaya, and Toshiba. Tier two includes: Siemens and Fujitsu. Other manufacturers, such as Iwatsu America, Comdial, NEC USA, NEX Computing Solutions, Panasonic, Samsung, and Mitel are classed as tier three sellers targeting niche markets. In these markets, the accelerating acceptance of Voice over Internet Protocol (VoIP) systems is adversely affecting secondary market prices for older equipment.

For 2005, it is expected that the telecommunications equipment market will improve slightly over the year, but the heavy competitive environment and pricing pressures will continue. The best resale values will be achieved by resellers who specialize in brand name equipment. For comparative purposes, the used telecommunications equipment market was rated a 3 in 2004.

Medical (5) - The aging "baby boomer" generation has allowed the medical equipment marketplace to remain healthy with sales activity holding up reasonably well in both the new and secondary equipment market sectors. Competition has been heavy and growing. While sales levels appear to have held up overall, some suppliers reported that the pace during 2004 was a little slower than in 2003 and is expected to remain fairly level in 2005. Certainly, the effort put forth to obtain sales has had to increase. Sales quotas have been harder to reach. It is no secret that government Medicare and Medicaid reimbursement levels for medical procedures have a direct effect on the demand for medical equipment. Improving reimbursement levels in 2004 had a positive impact on equipment acquisitions. Demand is strongest for newer systems under five years old. Overall, used equipment sales improved slightly during 2004 and are expected to remain healthy in 2005. In all equipment markets, the conversion to digital imaging systems remains strong. As expected, with digital imaging, and smaller more capable systems, the rate of change in equipment innovation has continued to accelerate, equipment life cycles have decreased, and residual values will continue to decrease at a faster rate than in the past. In both the primary and secondary equipment markets, the demand for digital imaging systems remains strong. Digital capability is now available, and in demand, for all of the major imaging modalities. Competition has increased in the medical equipment marketplace and discounting is still necessary to maintain sales volume levels. Today, no one buys medical equipment at list price.

There were no earth-shaking announcements in the medical equipment industry during 2004 and the previously noted trends of higher field strength MRIs, increased use of multi modality equipment

hybrids (such as PET-CT), and faster, multi-slice CTs continued throughout the year. MR systems having a field strength of three Tesla (3T) are expected to become more popular as protocols are developed to support their use, CTs offering 64-slice operation are in demand, while the popularity of pure PET systems is declining as more facilities opt for PET-CT systems. In the ultrasound market, portable units are gaining acceptance for certain applications. The fluoroscopy market is considered to be mature with most new systems being installed as replacement units. Medical facilities are performing more imaging studies by other modalities (such as CT, MR, and US) than was the case in the past. However, new applications for fluoro, such as stomach stapling, esophageal stricture dilation, back pain management, and gastroenterology are taking up some of the slack caused by a loss of traditional fluoro studies that were redirected to other modalities, such as CT, MR and US. The secondary market in the U.S. for conventional, single slice CTs is poor although some units are still being placed in smaller, lower volume, standalone imaging clinics. It has been estimated that the medical equipment leasing market has been growing at a little less than 10% per year. This represents one of the fastest growing leasing markets. Although the exact percentage of leased major medical equipment currently installed has not been determined, it appears to be greater than 50% -- probably between 50% and 60% of installations. In the small ticket medical equipment markets (represented by medical lasers, patient monitoring systems, cardiac monitoring equipment, etc.) it is estimated that currently no more than 30% of installations are leased. For comparative purposes, the used medical equipment market was rated a 5 in 2004.

Computers (5) 2004 saw global PC sales increase by about 14.5% over 2003, with businesses starting the replacement of desktops purchased in 1999. Growth for 2005 is predicted to be approximately 10.1%, as businesses continue to upgrade their IT assets. On the technology front, Intel's adoption of the 'Multi-core' design brought chipmakers into concurrence on this significant change in strategy. PCs of the immediate future will have multiple processing cores for improved performance without excessive power consumption and heat accumulation. This is a significant technology change, since it signals the potential abandonment of the push for ever increasing clock speeds.

Two weeks after Gartner predicted that three of the top ten PC makers would abandon the business in the year to come, and 24 years after IBM initiated the PC industry, IBM sold its PC division to China's Lenovo. This single cash and stock purchase (\$1.75 bil.) elevated Lenovo – China's largest and the world's fastest growing PC manufacturer – from a 2.0% to a 7.9% worldwide marketshare (300% growth). IBM's brand-name is expected to continue to be used by Lenovo for up to five years. However, this sale is being reviewed by the Committee on Foreign Investment which cited "security issues" (Chinese ownership of "advanced U.S. technology and corporate assets") at IBM's North Carolina facility, which could stop the sale.

Adjusted worldwide PC market share for 2004 was: first Dell with 17.9%; HP trailing with 15.8%; Lenovo (plus IBM) 7.9%; Fujitsu & Fujitsu/Siemens with 3.9%; Acer 3.6%, and others 50.9%. By contrast, U.S. marketshare was completely dominated by Dell with 32.8%, with HP a far second at 20.4%; essentially tied for third position were Gateway/eMachines & IBM (5.4% & 5.3%, respectively), Apple Computer with 3.2%, and all others 32.9%. Dell continued to reduce PC prices, citing reductions in component costs. Advertised prices featured \$550 for your choice

of a Dimension 3000 Desktop with P4 processor, 2.8 GHz, 1MB L2 cache or an Inspiron 1000 Notebook with Celeron, 2.2 GHz, 14" display. As a result, Dell sales surpassed HP in the consumer PC sector for the first time ever in the fourth quarter. In apparent response, Wal-Mart, under an exclusive agreement with manufacturer Linspire, offered a similar laptop with operating system and office suite software for \$498. Sales of handheld PCs (PDAs) without telephone capability declined in every quarter of 2004, a trend that is expected to continue.

During 2004, both HP and IBM stated they would recycle any PC for a fee of \$13 to \$34. While California became the first State to enact comprehensive e-waste rules, as of January 1, retailers must charge a 'disposal fee' of \$6 to \$10 to pay for product recycling.

Overall demand for networking gear is also forecast to increase by about 10% in 2005, driven primarily by the explosion of VoIP adoption and the quest for corporate network security. IBM retained its number one spot in the worldwide server market, now a \$42.4 billion market, with 31.7% share (and a 6.3% growth in revenues). HP held a close second at 26.8% market share, with Sun and Dell trailing and tied for third with 10.2% and 10.1%, respectively. Though blade-style servers appear to own the future, thus far they account for only 3% of server sales dollars.

The 2004 trend for used computer equipment differed little from that of 2002 and 2003. As the primary market continues to deliver more value (increased speed, additional components, and higher quality video) for fewer dollars; the secondary market cannot escape the negative impact. Demand for used systems is now at an all time low. The reemergence of the corporate buyer, though positive in the new equipment arena, magnifies the negatives in the secondary market. The additional increase of product (supply) decreases the price of the secondary market equipment even more. Pentium III equipment currently reflects a market price of 10 to 20 cents per MHz depending on memory and hard drive. This compares to the lower end Pentium IV prices of 20 to 25 cents per MHz. Units lower than PIII have little or no value. Some lower end P IV equipment is currently entering the secondary market in small quantities. As long as the quantity is low, the price of this equipment will remain stable. The used monitors, printers, and specialty products markets have similar characteristics to the computer, with higher performance and lower price. LCD monitors continue to reflect a significant price declines. This trend will continue throughout 2005. Notebook or laptop computers have reflected the same general trend as other products in the industry. New product in this arena has a price of 50 to 70 cents per MHz compared to the 25 to 40 cents for a new desktop unit. This price differential continues in the secondary market. Current wholesale prices for a P II laptop average at 25 to 30 cents per MHz. Any laptop unit lower than a P II has negligible value. The crucial area appears to be the cross over products now included in the computer industry. Dell and Gateway now include LCD Televisions in their product offerings. Apple is the leader in MP 3 technology. Motorola, Nokia, LG, Sony, Ericsson, Samsung, and other telephonic companies offer telephones that act as PDAs, provide internet access, and allow email communications. The direction of the suppliers suggests strongly that the PC industry has evolved into a product mix that now covers a much broader marketplace.

In summary, the direction of the Personal Computer industry continues to be increased features for a lower cost. This creates increasing product availability on the secondary market, which lowers

values and thus margins. Additionally, the industry is expanding its product offerings to include areas that provide additional features previously not offered to the consumer. This is further indication that the industry has matured, and in order to expand growth and revenue must expand product offerings. Realizing this, the reseller and/or secondary market provider must also expand their market offerings to remain successful. Overall, it's business as usual. For information purposes, the computer segment rated a 5 in 2004.

Semiconductor (4) - Worldwide sales of semiconductors increased sharply again for the second straight year. For 2004, sales increased approximately 26% to a record \$213 billion, adding to the sizeable 18.9% increase in 2003, and the industry's small 1.3% increase in 2002. This compares to a sharp plunge in 2002, when the industry entered its worst depression in history and sales fell by 32%, after reaching record levels in 2000. According to experts, it is expected that semiconductor sales for 2005 will range from approximately -5% to +10% of 2004's level, with the average being about +3%. Meanwhile, worldwide sales of chipmaking equipment increased by almost 60% in 2004, to \$35.3 billion. This compares to 2003's increase of 8%, prior to which there were sharp declines in 2001 and 2002. The outlook for 2005 is somewhat muted, as sales of chipmaking equipment are expected to range from -13% to +4% of 2004's level, with the average being about -5%. It should be noted that 2005's expected slowdown will be very mild in contrast to the 2001 depression. Hints of the slowdown have been coming, as reported utilization rates of fabs around the world started to drop during the third quarter. For 2004, utilization rates ranged from about 96% at mid-year to 79% in December, as fabs temporarily cut back on manufacturing to absorb excess inventories. This compares to an industry low utilization rate of 64%, which occurred during the industry "depression" of three years ago. Major semiconductor equipment manufacturers for the year include: Applied Materials; Tokyo Electron; ASML; Nikon; KLA-Tencor; Canon; Advantest; DaiNippon Screen; Novellus; Hitachi High Technology; Lam Research; and Teradyne. Leading chip manufacturers for 2004 include: Intel, Samsung, Texas Instruments, Renesas, Infineon, Toshiba, STMicroelectronics, TSMC, NEC, Free Scale, and Philips. Semiconductor devices which had the highest growth rates in 2004 include: DRAM, Opto, MOS Logic, and Flash. For 2005, growth leaders are expected to be: Opto, followed by DSP, Microprocessors, MOS Logic, and Micro Controllers. Top revenues are expected to be garnered in 2005 in MOS Logic, Analog, and Microprocessors. This will be a repeat of 2004's leading devices.

Meanwhile, global revenue for EMS market increased by about 15% in 2004. The equipment market followed in step with PCB sales. However, new packaging and assembly equipment sales are expected to drop by about 14% in 2005, to approximately \$2.1 billion. Currently, used printed circuit board equipment has recovered from its 2002 crash, where such equipment was selling for mere pennies on the dollar, and now lies within 5% to 15% of its historic value norm. Values are expected to decline minimally in 2005 as conditions soften a bit in the industry and more consolidations occur.

The secondary market for semiconductor equipment has been improving since about mid-year 2003. For most of 2002 and early 2003, many used semiconductor tools were selling for 40% to 65% of historic "norms." Beginning around mid-year 2003 -- largely based on demand from Asia [China, Japan, and Korea], the market started to turn around. It has improved steadily since that time.

There is solid demand for equipment in the 0.25 μ m and below technology node. Current estimates for the size of the used semiconductor equipment market range from \$1.25 to \$1.50 billion. China has been responsible for a major share (about 50%) of used semiconductor tool sales. This country has ramped-up quickly from its humble beginnings in 2002, when it operated one 6-inch and one 8-inch fab, to last year when it operated six 6-inch fabs, and six 8-inch fabs. Currently, there are plans to build four 300mm fabs in China by 2007. This illustrates the dramatic and continued growth within this region.

As for technologies, the ITRS Roadmap was revised in 2004 to show the advent of the 65nm mode in the 2007-2009 timeframe. The industry is currently in the 90nm technology node. Furthermore, the Roadmap proposed the initiation of 450mm substrate during the 2011-12 timeframe. Many analysts believe this timeframe will be pushed back significantly, as current manufacturers have been slow to adopt the 300mm (12") substrate size.

Semiconductor equipment financing opportunities for individual tools are expected to increase in 2005, after a quiet last year. Typical financings range from \$250,000 to \$20.0 million per item, and about \$300 million to approximately \$1.50 billion for an entire fab. Lease terms for most equipment currently range from about three years to six years, depending on the type of semiconductor tool leased. Additionally, there will be opportunities this year for banks to finance, and leasing companies to renew or re-lease equipment from leases which have come to the end of their initial term. These opportunities can be particularly attractive if the right equipment is included in the mix, and at the right price. For comparative purposes, this market was rated a 4 in 2004.

Machine Tool (5) - For the first time in six years, U.S. machine tool consumption increased sharply in 2004 by 44%, after nearly five consecutive years of double-digit declines. However, that being said, machine tool demand is currently a mere 48% of its 1997 peak. In comparison to 2004's revival, sales fell from \$4 billion in 2000, to \$2.67 billion in 2001, to \$2.16 billion in 2002, to \$2.09 billion in 2003, before rebounding sharply to \$3.00 billion in 2004. As usual, the Midwest region was the top U.S. area of total consumption of new machine tools, followed by the South. However, the rate of consumption increased the most in the Midwest, followed by the Central Region, with the Northeast and Southern Regions in a tie for the third spot. During the year, the manufacturing sector's confidence in the direction of the domestic economy grew. This led to strong capital investments by U.S. manufacturers. Current indicators point to continued investments during 2005.

During the year, Bourn & Koch purchased portions of its former competitor DeVlieg Bullard II, Inc. Walter A.G. sold its grinding and measuring machine to Körber Schleifring Group; Milacron Inc. sold its Cimform - Grinding Wheel Division (the last of its metalworking operations) to Tyrolit Group, and finally, Hardinge acquired the intellectual property rights and certain assets of Bridgeport Int'l., LLC. It also acquired Bridgeport's finished goods inventory (CNC machining centers only) that was added to the Bridgeport - knee-mill business, in which Hardinge already has a licensing agreement.

Thus, for 2004, even though a sharp turnaround occurred within the U.S. industry, compared to global producers the total U.S. production last year equalled a little over 30% of Germany's. Heavy

investment by the automotive industry greatly aided the machine tool industry last year, and is expected to help it again in 2005. For example, many new models are being planned – the Chrysler group is planning 25 new models over the next three years, and Ford plans about twenty. The implications on the machine tool sector are obvious.

In the secondary market, there is good demand for late model CNC turning centers, and vertical and horizontal machining centers. In addition, there is demand for metal fabricating centers, mechanical/stamping presses, hydraulic stamping presses, laser cutting machines, press brakes, shears, and forging and heading machines. Used equipment sales by top-tier machine tool manufacturers have been described as "very, very good." Several companies stated that the huge supply overhang of the past three years quickly evaporated in 2004 and changed into a machine tool shortage. Some of this was caused by the fact that little equipment was financed or leased from 2000 through 2003, causing a shortage of equipment normally returned off-lease or through default. During 2004, many dealers even started taking trade-ins again. Overall, demand has been described as very strong in the primary and secondary market. In fact, demand is so strong in the primary market that many manufacturers currently have three- to six-month backlogs of orders. Based on this, it can be concluded that 2005 will be another robust year for this sector.

After falling by as much as 50% from trend line over the past two- to three years, used machine tool prices finally returned to near "normal" last year, and are expected to remain at near "normal" levels during 2005. Overall, it is expected that the machine tool sector recovery will continue into 2005, unless there is a glitch in the domestic economy. For comparative purposes, the used machine tool market was rated a 3 in 2004.

Construction (5) - 2004 was a very good year for the construction industry with growth of about 8.9% in terms of total contracts awarded, according to the McGraw-Hill Construction. However, for 2005, McGraw-Hill expects contract awards to increase by only 1.5%. In terms of construction put-in-place, the Commerce Department expects the final total to be over \$1 trillion for 2004. For 2005, Commerce forecasts that construction put-in-place will increase 5.8% and reach \$1.058 trillion.

For 2005, a mild 1.8% decline in the value of contract awards for residential construction is expected as the demand cools slightly for single-family housing. Multifamily housing is expected to remain a bright spot increasing by 7.4%. In terms of construction contract awards for non-residential construction, office buildings (12.2%), hotels and motels (15.1%), manufacturing (13.5%) and other commercial building (14.7%) are expected to post double digit increases. Single digit gains are expected in stores and shopping centers (1.9%), educational buildings (8.0%), healthcare facilities (6.4%), other institutional buildings (5.6%), nonbuilding construction (1.1%) and highways and bridges (4.8%). Declines are forecast for construction of electric utilities (– 8.3%), sewers and water supply (–0.5%), and other public works (–1.4%). Congress extended the nation's multi-year transportation bill, TEA-21, five times during the 108th Congress, but failed to pass a multi-year transportation bill to replace it (the most recent extension runs out May 31, 2005). The White House proposed limiting spending levels to \$256 billion over six years and threatened to veto any bill which exceeded that limit. The Senate proposed spending \$318 billion, while the

House proposed spending of \$275 billion. Both the House and Senate bills passed and were sent to conference. Reportedly, at that time, all sides had compromised on a spending level of \$299 billion, but the bill died in conference. It will now be up to the 109th Congress to *hopefully*, finally pass this bill.

New construction equipment prices, as reported by the Bureau of Labor Statistics, in 2004 rose an average of 6.0% with manufacturers blaming high steel costs for the price increases. Meanwhile, Engineering News Record's (ENR) Materials Cost Index increased 20.3% in 2004 due to steep price increases for steel, lumber and cement, while ENR's Common Labor Index increased at an annual rate of 4.9%. Consequently, the ENR Construction Cost Index escalated by 7.8% in 2004. For 2005, ENR forecasts more moderate price increases; a 2.7% increase in its Materials Cost Index, a 4.4% increase in its Common Labor Index and a 3.5% increase in its Construction Cost Index.

According to the Association of Equipment Manufacturers (AEM), total U.S. construction equipment sales increased 16.1% in 2004. This year, AEM forecasts equipment sales will increase by 8.4%. For 2005, US sales of construction equipment are expected to cool somewhat when compared to 2004's strong growth, but will continue to show positive gains across all sectors including: earthmoving machinery such as excavators, loaders, trenchers, off-highway haulers, tractors, scrapers, graders and log skidders (+7.8% in 2005, compared to +27.4% in 2004); lifting equipment such as lattice boom and hydraulic cranes, tower cranes, aerial lifts, boom trucks, rough-terrain forklifts and telescopic material handlers (+8.7% in 2005, compared to +14.7% in 2004); bituminous machinery such as cold planers, asphalt pavers, rollers, soil stabilizers and asphalt plants (+10.4% in 2005, compared to +15.7% in 2004); concrete/ aggregate machinery such as crushers, screens, feeders, conveyors, rock drills, batch plants, pavers, etc. (+9.5% in 2005, compared to +12.3% in 2004); light equipment including breakers, saws, trowels, light towers, generators, pumps, vibrators, compactors, etc. (+6.8% in 2005, compared to +8.6% in 2004); attachments and components (+6.8% in 2005, compared to +11.0% in 2004); and miscellaneous (+10.2% in 2005, compared to +9.7% in 2004).

Average used equipment prices at auction increased approximately 7.2%, while the total number of units tracked and sold at auction declined by about 4.6%. This increase in pricing power when combined with the reduction in units available for sale indicates that the market for used construction equipment market was quite strong in 2004. Price increases and order backlogs among manufacturers of new equipment may have also spurred demand for used equipment. Demand is good for late model hydraulic excavators, crawler dozers, rubber tired loaders, and loader backhoes. For comparative purposes, the used construction equipment market was rated a 5 in 2004.

Mining (6) - Domestic and global mining activity experienced a boom in 2004, adding to the gains of the previous year. Analysts continue to view the industry's health by that of the global economy, and continued strong demand from India and China. Over the past year, the FTSE Mining Index, which includes some of the world's largest miners, jumped almost 15%, after increasing sharply by more than 40% in 2003. During 2004, many mining products experienced multi-decade highs from a pricing standpoint. Over the year, prices of precious metals, such as gold, were up by

approximately 50%, palladium by over 90%, and silver by over 90%. Meanwhile, prices for industrial metals, such as copper, increased by approximately 100%. In addition, thanks to soaring demand from industry around the world, the price of coal also soared by almost 100%. It is expected that prices in most metals will fall somewhat during 2005.

The industry's solid gains have been driven by China's insatiable demand for coal, iron ore, copper, and other commodities. According to the U.S. National Mining Association, mining is expected to enjoy a very solid year in 2005, adding to 2004's record volumes. This increase in demand will continue to create strong markets for mining equipment suppliers, especially off-road trucks, hydraulic and mechanical shovels, excavators, tractor dozers, and similar items. Due to increased commodity prices, numerous smaller mining concerns have sprung up around the country, many concentrated near the Powder River basin. Minerals in demand include: aluminum (which is used in the manufacture of automobiles, food and beverage cans, aircraft, and the like); copper, which is used for electrical wire, piping, automobiles, and telecommunications equipment; and nickel, which is used in the stainless steel market for applications such as the manufacture of kitchen sinks and sanitary fixtures, etc.

The outlook for all of the metals for 2005 looks very positive, and is based on an expanding global GDP, and significant demand from China, India, and other developing countries. Likewise, the demand for coal looks bright, based on demand from the global power and steel-making industries. The amount of coal mined in the U.S. is expected to increase on the high side of the projected range of 1% to 2% per annum.

Major mining projects spurring demand for equipment around the world include: three new copper mines in Chile; a major nickel mine in New Caledonia, an iron ore mine in Australia, and the Inco Voisey's Bay Canadian Nickel mining project, as well as numerous smaller iron, copper, and gold projects around the world.

Demand for new equipment has been so strong that it has caused backlogs of over six months in some cases for equipment. Caterpillar's introduction of its new 2,400-h.p., 300-ton, off-highway truck is in very high demand, with numerous orders received, and production is not expected to start until some time in 2005. Equipment manufacturers are predicting that they are in the early stages of a prolonged global expansion of mining capacity. They continue to cite demand from China and India as primary contributors to this demand. Such demand has sparked solid growth in underground sector for haul trucks, load-haul dump tractors, loose material scalers, face drills/roof drills, continuous miners, and long-wall miners. This has caused used equipment prices for underground mining equipment to increase throughout the year. Likewise, surface mining equipment has encountered strong demand for such equipment as hydraulic and mechanical shovels, hydraulic excavators, drag lines, off-highway trucks, and the like. The most desirable equipment remains equipment less than seven years old, which currently achieves prices typically three times those achieved in 2000. Although the used mining equipment market has never been described as ideal, it is believed to be approaching that standard.

In the area of technology, BHP Billiton has invested almost \$1 billion in a highly technical process

to extract high-grade ore via bacteria. In addition, the industry seems enamored with large equipment (doing more than less), such as P&H's - 4100 XPB mechanical shovel, valued at over \$12 million, having a capacity of 82 cubic yards, or 100-tons; the Terex Mining - Model RH400 Hydraulic Shovel, having a 57 cubic yard, or 93-ton capacity, and costing over \$11 million; and finally, the Caterpillar - 797B off-highway truck, which is the world's largest and heaviest mechanical-drive truck, having a payload of 380-tons, and carrying a price of \$5.7 million. Obviously, mid-tier to smaller mines purchase medium- to small-capacity equipment. However, for the approximate 20 mining companies now owning more than 80% of the global mining capacity, bigger seems to be better. For comparison purposes, the used mining equipment market rated a 5 in 2004.

Rail (6) - Strong retail sales, record housing starts, solid automotive sales, a record grain harvest, and strong demand for scrap steel and lumber signaled the long-awaited recovery in the rail equipment market. These demand factors, as well as others, pushed 2004 U.S. carloadings up by 2.8% for the year, while intermodal units originated increased by 12.3% compared to 6.8% in 2003 and 4.6% in 2002. Meanwhile, railroads' estimated ton miles increased by approximately 5.0%. These are all very favorable statistics signaling a market turnaround and the advent of a 'sellers market' in the industry. From an equipment standpoint, 2004 was better than 2003. For the year, new car deliveries increased for the second time since 1999 when total deliveries amounted to 74,000, falling to 56,000 in 2000; to 34,000 in 2001; to 17,700 in 2002; before finally increasing to 33,000 in 2003; followed by 2004's increase to approximately 42,500 cars. Predictions for 2005 are even better. The current backlog is over 78,000 cars, which is a sharp increase over the 32,000 car backlog recorded in 2003, which itself was approximately twice 2002's level. This bodes extremely well for railcar builders during 2005, when total deliveries are expected to increase again to approximately 52,500 cars.

On the technology front, the industry remains focused on HAL (heavy axle-load) railcars, which have gross weight capacities of 315,000-lbs. compared to current state-of-the-art 286,000-lbs. Adoption of heavier cars would likely spur increased spending in rail construction MOW projects over the next three to four years.

Rail equipment in the 70-ton capacity has little or no demand, and very little value. Due to the sharp increase in the global demand for steel, cars designated for scrap, which were garnering \$1,500 to \$2,000 each, now command prices of \$4,500 to \$5,500.

Since the rail industry's recovery which began in mid-year 2003, spot shortages have been developing in locomotives. Increased activity on railroads has caused locomotive prices to rebound sharply. For example, new locomotives are currently only lightly discounted, compared to healthy discounting in previous years; and used power, such as EMD SD-40-2's have seen prices increase by over 30% in just the past year. This, in spite of Tier Zero (clean engine) regulations. In addition, GE will be offering a totally redesigned locomotive next year to meet the even more stringent Tier 2 requirements for diesel power. The new 4,400-h.p. units will be designated "EVO", which signifies the "Evolution Series." On the other hand, EMD will be "tweaking" its existing power and will introduce the 4,300-h.p. SD-70-ACe as its response to the rigid EPA requirements.

In the intermodal sector, trailer shipments increased sharply by over 12%, compared to 12% in 2003; likewise, container shipments increased sharply by 11.6% compared to 8.5% in 2003. Future intermodal demand will mainly be focused on 53-ft. well cars. Meanwhile, operators who are seeking increased train capacity have entered modification programs wherein 48-ft. double-stack well cars are being shortened, and 48-ft. spine cars are being lengthened.

Used railroad cars are now in high demand. Most of the major railcar operating lessors have reported utilization rates of over 95%. There is good demand for intermodal cars, coal cars – both high-side gondolas and open-top hoppers, tank cars, grain cars, steel coil gondolas, and mill gondolas. In addition, railcar builders are reporting increased demand for refrigerated boxcars and 6,351-c.f. hopper cars. Some types of jumbo plastic pellet cars have seen soft market demand. Also, due to a recent derailment of a pressurized tank car and catastrophic release of chlorine gas, pre-1989-90-built pressurized tank cars are being investigated for potential safety hazards ("brittle" steel shells). In addition, government safety officials stated that more than half of the nation's 60,000 pressurized tank cars did not meet industry standards, and also raised safety questions for the rest of the tank car fleet. This could cause prices for used pressurized tank cars, especially pre-1989-90-built, to fall. In general, the market's demand for used railcars has caused spot shortages of certain car types. This is one of the reasons why new car buildings increased sharply in 2004. Along with the increased new car buildings have come sharply higher prices. For example, prices for new covered hopper cars have increased by 30% to 45% in just the past four years. This sharp increase, caused by a spike in material costs, has "pulled" used car prices upward. Banks and leasing companies are advised to carefully assess "fair values" of each railcar transaction before assigning "standard" residual value percentages against inflated new car costs. Thus, it is clear that the railcar and locomotive equipment sectors rebounded strongly in 2004, and are expected to remain strong through 2005. It is believed that an improved U.S. and global economy will continue to support a healthy railroad equipment sector. For comparative purposes, the used rail equipment market segment was rated 4 in 2004.

Containers (6) - The market for new ISO (marine) and domestic containers experienced yet another very prosperous year in 2004, as a record 2.6 million TEU dry freight containers were delivered. This compares to the previous record of about 2.0 million TEU set in 2003, 1.6 million TEU in 2002, and 1.2 million TEU in 2001. In 2000, the cost of new boxes topped \$1,500 per 20-ft. standard unit. Current U.S. quotes range from \$1,800 to \$2,300 for a new 20-ft. container, and approximately \$2,600 to \$2,800 for a new 40-ft. high cube. A prime driver in the continued success story has been an improving global GDP, and sharply increased box trade from Asia – China, in particular. In addition, materials prices have risen sharply in the past year, with steel alone increasing by 50% during this period. The leasing sector bought very heavily during the first nine months of 2004, when it collectively took delivery of over one million TEU. Leading lessors for the year include: Triton Container International; Textainer Group; Transamerica Leasing; GE SeaCo; Interpool; Florens Group, and CAI. Meanwhile, the U.S., the domestic container market is solely focused on the 53-ft. box, which is presently being sold new for about \$13,500 – approximately a 29% increase over last year's price. Current plans call for domestic container production in the U.S. to be approximately 20,000 units, which represents 80%

replacement and about 20% growth. During 2004, the industry clearly moved away from the 48-ft. domestic container, making its current value at or around Scrap.

As for technology, experimental domestic containers which are 53-ft. long and 100d-in. wide (12 inches wider than the standard intermodal container) will be tested this year. Such containers have the potential for ten- to fifteen percent more palletized cargo. Acceptance of such containers is some time away.

Finally, the chassis market continues to remain strong, and day rates have increased about 7%, to range from about \$2.60 to \$2.75 per day. The spot market is significantly higher at \$8 to \$10 per day. Currently, 48-ft. goose-necks sell new for \$7,800 – an 11% increase over last year's price, and can be purchased on the secondary market from about \$3,000 to \$4,000, depending on condition. This is a clear indicator that the chassis market is extremely strong. Meanwhile, domestic 53-ft. chassis are now selling for \$9,000 to \$9,500 new (some reportedly as high as \$12,000), which is a 9% increase over last year's prices. Current domestic chassis day rates are about \$3.25, which is a significant improvement over last year's rate. In addition, approximately 25,000 to 30,000 chassis are predicted to be built during 2005.

In the secondary market, prices for used 20-ft. dry van containers increased sharply in 2004, due to continued military requisitions and increased intermodal moves, brought about by demand from China and other developing countries. Likewise, prices for used 40-ft. containers also increased sharply in 2004 (by 50%+) and are expected to remain strong in 2005. Finally, used 48-ft. domestic containers are currently valued at approximately \$500 to \$750, and older, 53-ft. containers with low heights (107-in.) are valued at about \$50 more than a high-end 48-ft. box.

Top shipping lines into the U.S. include Maersk SeaLand, APL, Hanjin, Evergreen, Cosco, NYK Line, OOCL, and P&O Nedlloyd. For 2005, analysts predict that container trade will surpass 100 million TEU's for the first time ever, which is a 12.5% increase over 2004's record rate. Especially strong will be East-West trade. Geographically, there is good demand for ISO containers in L.A., Seattle, Houston, New England; soft conditions in Chicago, New York/New Jersey; and flat demand in Montreal. For 2005, prices in the used container market are expected to remain at very high levels, primarily due to continued demand from Asia -- China in particular, and a continued expansion in global GDP, promoting intermodal trade. Thus, this market has fully recovered from its cyclical lows, and will now operate at perhaps a cyclical high during 2005. For comparison purposes, the used container/chassis market rated a 5 in 2004.

Marine (7) - Opportunities in the marine sector during 2004 could best be described as "sizzling hot." Prices for used marine vessels rose very sharply during the year due to increases in tonnage – headed primarily to China and India. Orders for new tonnage over the next three years increased sharply for all types of vessels. For instance, over the next three years, the bulk carrier fleet is expected to increase by over 13%, crude tankers by 20%; product tankers by 30%; and chemical/oil tankers by 18%. In addition, the order book for container ships over the next four years is approaching 30% of the entire fleet.

The demand for equipment is so acute that near the end of 2004, prices for used dry tonnage hit record levels. Some examples include a typical ten-year-old Capesize dry bulker, prices currently standing at \$46 million compared to \$22 million in 2003. Likewise, five-year-old Capesize prices are now approaching \$63 million – an increase of over two times the price paid in 2003. Meanwhile, benchmark Panamax prices for ten-year-old equipment have increased to \$31 million, with five-year-old prices approaching \$40 million. This exceeds the replacement value of such a vessel.

Tanker prices also continue to forge ahead, with typical five-year-old prices at least equal to 100% of replacement cost. In addition, Suezmax tankers have become the most expensive in the used equipment market, with average prices for five-year-old equalling about 110% of replacement cost. Demand is so strong, that even single-hull VLCCs are selling at high price. So far, the super-heated freight market has held together and is supporting deals at very high levels. Recently however, several top analysts – including one finance company in Hong Kong – have stated, "The spectacular rises in cost and values means that there is now much more downside risk than there is upside potential." Furthermore, a stock analyst stated that the current level of VLCC charter day rates is not supported by fundamentals. He warned that strong supply growth and weaker demand will render the tanker market fundamentals unfavorable for the next 12 to 18 months. This was followed by several economic forecasting firms issuing statements that they expect a slowdown in global GDP from 2004's 4.2% to about 3.2% in 2005. Thus, they forecast marine shipping to increase about 3.8% in 2005, after increasing by almost 5% in 2004. They note, containerized cargo is expected to continue to grow at well above the underlying trend rate.

Technology continues to push the average size of container ships. Currently, carriers have ordered more than 140 vessels of 8,000 to 9,500 TEU capacity to be delivered through 2007. Technically, there is no limit to how large a container ship can be, although ships of more than 12,000 TEUs will require a second engine, making them very costly to build and operate. Thus, the real limit on container ships is expected to be economic. The container ship fleet will grow by approximately 30% over the next four years. With most of the growth occurring in ship sizes of 4,000 TEUs and up, with the highest amount of orders occurring in the 8,000 TEU category and up (36% of all orders for 2005). To illustrate how hot this market is, the Journal of Commerce recently reported that Seaspan (of China) just took delivery of four 8,200-TEU ships which it ordered in 2002 at a cost of \$80.0 million each. It was reported that "those ships would cost \$110 to \$120 million each if they were ordered today for delivery in 2007-08. If you had such a ship in today's market without a charter, you'd get \$160 million+ for it."

Meanwhile, the intercoastal waterway market also had a very robust year in 2004, with solid demand for open- and covered hopper barges, causing day rates to increase by over 40%, and utilization rates to skyrocket, leading to spot shortages. In addition, due to sharp commodity price increases, barges which traditionally had scrapped for \$15,000 to \$20,000 currently bring prices approaching \$50,000. Most of the price increases in used barges are related to increased tonnage on the intercoastal waterways, which rose sharply by 6.3% over the past year. There is likewise strong demand for tank barges, and supply and tug supply boats, whose prices have risen by about 30% over the past year, and even for utility boats. Thus, it is very apparent that 2004 was an excellent

year for the used marine equipment market, and 2005 is expected to be excellent as well. However, as previously stated, there are some thoughts now being expressed that perhaps this market has reached its pinnacle, and there is now limited upside in the vessel market, with a sizeable downside risk. The final outlook for this market will be determined by how the global GDP changes over the year, and whether or not the sizeable demand for shipping products and commodities to and from China, India and the like remain strong. Finally, a word of caution for asset-based lenders and lessors setting residual values or relying on future values to remain steady: it is clear that the market is currently in a very heightened state, and that over the next five to ten years there is a very high probability that prices will fall to more normal levels. For comparative purposes, the used marine vessel market rated a 5 in 2004.

Printing (5) - Overall, business is good for suppliers of new and used printing equipment at the present time. Currently there are about 44,500 printing establishments in the U.S. employing over 1.1 million people and producing products valued at about \$160 billion. Three-fourths of these businesses do commercial printing, and the remainder are classified as form, label, and tag printing, greeting card printing, packaging printing, specialty printing, and providing prepress and postpress services. Book printers have been especially bothered by competitive pricing pressures, while newspaper advertising increased 4% to 7% last year, depending on the paper. Overall, printing industry sales increased by just over 4% for 2004, and are expected to increase slightly less this year. As the overall economy has strengthened, so has the printing equipment industry marketplace.

The new printing equipment market improved in 2004 and manufacturers are currently enjoying an increase in demand from printers now willing to invest in new capital equipment as the economy improves. Also, the used equipment market is continuing to improve and is expected to remain relatively strong during 2005, especially for newer, more automated and capable equipment. Several used equipment dealers contacted reported "having a great year." Along with improving demand, pricing pressures have eased somewhat and used equipment prices seem to have stabilized. Digital and sheet-fed presses continue to sell better than web equipment, and more "color capable" equipment (6-color, and up) has significantly greater demand and offers better margins to resellers than less capable systems. Much more often than not, presses are now being delivered with coaters and UV dryers. Where color is concerned, it seems "the more, the better." With this said, it can be noted that the secondary market for presses with two-color capability is nearly non-existent and the demand for four-color machines has significantly lessened. Standalone digital printing demand continues to increase. This equipment offers an increasingly popular solution as printers attempt to offer more flexibility to clients and, at the same time, decrease their operating costs by reducing makeready time and setup waste. Direct-to-Plate (DTP) systems have also become very popular as prices have dropped. Demand in the prepress and postpress sectors continues to hold steady. Overall, the printing equipment market, while healthy, remains quite competitive and discounting is common. However, since most major printing systems are imported from offshore, it appears the levels of discounting are less than in previous years as pricing adjustments are being made to equalize the effect of the weakened dollar. Already in 2005, there has been resolution of the controversial FCC rules related to cross-ownership of broadcasting companies and newspapers in the same market. The Supreme Court granted a second extension to the FCC for it to decide whether or not to try to overturn a Philadelphia Appeals Court ruling that blocked the measure. If the FCC decided to

attempt to reverse the Appellate Court's decision and was successful, it could have spurred a rash of consolidations and takeovers in the industry. However, the FCC has declined to challenge the Appellate Court's decision. For comparative purposes, this equipment market was rated a 4 in 2004.

CONCLUSION

As can be seen from the foregoing, the outlook for used equipment markets is forecast to be robust in 2005, as the economy continues to improve at a healthy rate. Conditions for some equipment markets have improved so much, it is believed they represent 'tops.' Therefore, lessors and asset-based lenders should carefully weigh risks associated with entering or participating in such markets. Meanwhile, equipment sellers should experience a very profitable and rewarding year. Good luck to all, and have a very happy and prosperous 2005!

BIOGRAPHY

CARL C. CHRAPPA, A.S.A., I.F.A.

Carl C. Chrappa is President and CEO of Independent Equipment Company, the nation's oldest equipment management outsourcing firm, headquartered in Clearwater, Florida. He is a registered auctioneer and tested and accredited senior appraiser with over 30 years of equipment experience.

Mr. Chrappa is uniquely qualified, since he regularly trades in used equipment markets, and provides valuation and technical consulting services to companies throughout the world. He is also a member of the *National Association of Business Economics*, where he serves on the Association's Manufacturing and International Roundtables.

He is a founding and current member of *The Equipment Leasing Association's Equipment Management Committee*, he also serves on the Board of Directors of the *Commercial Finance Association*, *ELA Business Services, Inc.*, and is a past technical director of the *American Association of Cost Engineers*. He has co-authored a book entitled *A Leasing Company's Guide to Equipment Management* and is the author of several columns devoted to equipment management. He has been interviewed and quoted by such news media as the L.A. Business Times, TheStreet.com, and CNBC MoneyLine. In addition, he is a major content provider to the ELA's web-based Asset Management Central. Mr. Chrappa is a graduate of the University of Massachusetts at Amherst.