



ANNUAL REPORT

2007



Emphasizing Quality in the Fastener Industry

INDUSTRIAL FASTENERS INSTITUTE
2007

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INTRODUCTION

This is the eighth Annual Report to the Membership detailing the operations of the Institute, key issues that confronted the industry in 2007 and our response to same, projections for 2008 and current planning as to how IFI can most benefit the interests of our Members. CY-2007 was a bit of a wild ride if you supply to the automotive or aerospace market segments, and generally not too bad if your customers are in the industrial products sector. Major issues were the economy, a seemingly disappearing domestic auto industry (won't happen), an aerospace boom of unprecedented parallel and more China, China, China!

Operationally, IFI ended the year with an \$8,543 positive balance from operations only, which became a negative \$2,789 after an unrealized loss on investments, versus a budgeted \$41 surplus from operations only. With respect to total operations we ended the year with a \$109,094 surplus lifting reserves to \$1,056,091 or 130% of one year's operating cost, exclusive of annual meetings which are budgeted to break even. In the association world, we are seen to be a very healthy organization!

Our new Director of Technical Engineering, Joe Greenslade, is off to a rocket start with new services including IFI Members' Products Identification website, a Member-focused technical standards and technical project management system which has been bearing immediate fruit, and the new non-dues revenue IFI Technical Connection subscription service which will kick off the first quarter 2008 and is expected to be a major revenue generator. Our Aerospace Division Manager, Pat Meade, continues to lead that Division forward with good success in the government affairs (GA) arena in company with our Washington representatives, the Laurin Baker Group, and with the Division's membership continuing to grow because of our GA successes.

Our great office staff, Jewetta, Barbara, and Michelle, have continued to provide services to the Members at an equal, if not greater, level of competence than at previous significantly larger staffing levels. In 2007 we retained our continuous improvement focus on cutting operating costs, and total operating costs came in \$16,688 below what was budgeted. That focus will continue in 2008.

INDUSTRY OVERVIEW

As noted, depending on who you supply product to, it was a very different year and one of accelerating change. If we start with the economy in general, manufacturing output edged up 1.8% in 2007 and now equaled 12% of the U.S. economy at year end and 1 in 10 jobs. That is the slowest growth in the last four years. The U.S. produced about \$14 trillion (T) in GDP in 2007, of which about \$10T was personal con-

sumption (\$1.1T in durable goods, \$2.9T in nondurable and \$6.0T in services). This was about a 2.1% growth in GDP. Inflation in 2007 rose to 4.0%, the highest in 17 years and a Fed concern. The U.S. Current Account Deficit was \$178.5B or 5.1% of GDP, while the Federal Budget Deficit was \$57.3B at year's end. Economic growth for 2008, pending the severity of a possible economic recession, is projected to be in the 2.4% range or less. The trade deficit for 2007 was about \$711.6B, or 5% of GDP, with \$256B of that with China. This is down from \$758.5B in 2006. The Dow Jones ended the year at 13,265, the S&P 500 at 1,470 and the inverted yield curve seen early in the year reversed itself with 30 year Treasuries ending at 4.35% and 10 year at 3.91. The decline in the value of the dollar vs. the other floated currencies had a very positive effect on exports with the Euro at 1.48/\$1. The manipulated currencies saw the Yuan at 7.305/\$1 and the Yen at 109/\$1. On the good side, U.S. productivity has increased by an average of 2.7% per year over the last 10 years, and in durable goods manufacturing that has been 6.0% per year. Why then the huge trade deficit? Petroleum created about \$293.5B (oil went to almost \$100/bbl), China trade \$256B largely based on the undervalued Yuan, and world automotive products trade another \$121.5B of the trade deficit. The result has been 3.3 million manufacturing jobs lost since 2000. The current reported unemployment rate has risen to 5.0%, and it is possibly greater as many have just given up making it more realistically a 6.8% unemployment rate. In December 2007 alone, manufacturing lost 31,000 jobs, with 20,000 of that lost in the durable goods sector, while construction lost another 49,000. These are not good indicators for future GDP growth. The combination of these effects is a reduction in GDP of about \$250B, and a resulting \$2,000 per U.S. worker in debt service. That means the total U.S. economy is about \$3 trillion smaller than it should be. U.S. GDP growth in 2008 is projected to be 2.4% or less, reflecting these factors and driven by a troika of oil prices, interest rates and the busted housing bubble.

As recession fears have intensified, conventional wisdom is that monetary economic stimulus – the Fed simply lowering the Fed rate – will not by itself head off the problem. It is expected we'll see a minimum of another couple of hundred basis points drop in the rate early in 2008, but with the housing credit problem, loss of jobs, increase in energy (and all raw materials) cost, slipping consumer confidence and an ISM Index (Institute for Supply Management) dropping below 50 to 47.7 in December (denoting a production contraction), it is projected by many experts that Fiscal stimulus will also be needed; meaning a continuation and/or expansion of the tax cuts, plus getting cash into the consumer's hands, and with a Democratic Congress more likely a reallocation of who pays what in taxes, all as a near certainty. If this happens before the November election – and it probably must – business interests should be generally OK. If after November, and there is a Party change in the White House, serious trouble for business interests probably loom. In Europe, industrial output indices though overall still positive, fell slightly in the U.K. and Germany, grew the

fastest in France and contracted in Spain. If this holds in the face of a very, very strong euro and pound, the credit troubles already seen in the U.S. may or may not hit as hard in Europe. For 2008, EU manufacturing output is expected to grow about 1.9% but employment in manufacturing is expected to drop by another 90,000 jobs. In China, manufacturing growth remained on a rampage in 2007, though a little slower at year end, and inflation concerns are growing and becoming a serious government issue. It will be tough for them to exercise the control they would like with the Olympics pending, but watch for China to have some growing pains in 2008, particularly with respect to energy and raw materials availability.

It is somewhat amazing, though not necessarily comforting, how dead-on our IFI economists from the Institute for Trend Research, Alan and Brian Beaulieu, have been on not only what will occur in our economy, but when. There, however, is a "pony in the manure pile they forecast", because they are also telling us that ending 2009 everything turns around and in 2010 the economic recovery will be phenomenal, and they tell us how to prepare for it to maximize your company's advantage.

Closer to home, U.S. Fastener sales were about \$14.0 billion (B), Domestic Production \$10.1B, U.S. Exports \$2.4B and Imports \$3.9B. That puts U.S. consumption at \$11.6B with Imports at 34% of U.S. Consumption.

For the Fastener Industry Worldwide, the following summarizes the story:

- The total global demand for fasteners in 2007 was \$49 Billion
- The end use demand for the \$49B was:
 - \$18.1B (37%) – Motor Vehicles
 - \$8.8B (18%) – Construction
 - \$5.9B (12%) – Electrical Products
 - \$16.2B (33%) – Aerospace, MRO, Industrial Machinery & Other
- The geographical distribution of the demand was:
 - \$14.3B (29%) – North America
 - \$11.6B (24%) – Western Europe
 - \$17.2B (35%) – Asia Pacific
 - \$5.9B (12%) – Latin America, E. Europe, Africa and Middle East
- North America – overall 4% per year growth is projected
 - Mexico – above average growth > 6%

North America's overall market share is projected to be down 2%

- Western Europe – overall 3% per year growth
 - Central Europe – average growth 4-6%
- Asia Pacific – overall 7% per year growth
 - China and S.E. Asia – above average growth – 7-10%
 - Russia – average growth – 4-6%
 - India – above average growth – 7%
 - Asia Pacific overall market share projected to be up 3%
- Latin America, Africa and Middle East – overall 6% per year growth
 - General overall market share projected to be up 1%

For the Fastener Industry in North America in 2007 and projected for 2010, the data looks as follows:

<u>Market Segment</u>	<u>2007</u>	<u>2010 Projected</u>
Total	\$14.0 Billion	\$16.0 Billion
Automotive	\$4.6B (33%)	\$5.1B (32%)
Aerospace	\$1.8B (13%)	\$2.3B (14%)
Electronics	\$1.4B (10%)	\$1.6B (10%)
Medical Devices	\$1.2B (9%)	\$1.6B (10%)
Industrial Machinery	\$1.9B (14%)	\$2.3B (14%)
Distribution/MRO	\$2.9B (21%)	\$3.2B (20%)

- The N. American market's compound annual growth rate during the period 2007-2010 is projected to be 3.6%.
- U.S. Fastener Exports in 2007 were \$2.3B
- U.S. Fastener Imports in 2007 were \$3.8B
- In the period 2006-2010 the projected compound annual growth rate for exports is expected to be about 4.7% up to around \$2.7B, and for imports up 6.6% to around \$4.8B.
- A significant portion of the U.S. exports are aerospace fastener products.

Sources for the imports are as follows; which will again be reported by product type in detail in our *IFI 2007 Import/Export Report*. Of possible interest, the average \$/lb. for U.S. fasteners exported during 2007 was \$2.27/lb.

Country	Value (\$M)	% of Total	% Change vs. 2006	\$/Lb.
1. Taiwan	1,295,016	33.3	- 0.9	\$1.09
2. China	798,993	20.5	+ 8.7	\$0.72
3. Japan	529,826	13.6	- 0.8	\$2.32
4. Canada	327,407	8.4	- 14.4	\$1.51
5. Germany	198,634	5.1	+ 5.1	\$1.48
6. S. Korea	88,057	2.3	+ 9.8	\$1.20
7. UK	88,026	2.3	+ 9.7	\$8.30
8. Italy	86,038	2.2	+ 14.1	\$1.85

Interestingly, at year end China saw wire rod prices jump another 10% consistent with the 35-45% price increase in their fasteners year-to-date from December 2006. An 80% jump in iron ore prices in 2007, another 40% increase for new ore contracts in 2008 and similar increases in energy cost show no slow down in Chinese produced fastener prices in the near future. It has been noted that Taiwanese owned fastener manufacturing concerns are looking for new homes in Southeast Asia! The EU's pending dumping case on Chinese and Taiwanese fasteners, coupled with the already in effect Canadian and South African actions, means a lot of fasteners will be looking for a home. The year end initiative forming the IFI/NFDA Fastener Industry Educational Group's (FIEG) response to some of these imports being of bad quality and/or infringing intellectual property protections seems to have imposed some caution on dumping questionable product on North America. The discipline required to not run afoul of these FIEG guidelines, and U.S. Customs/Homeland Securities close interest and support on the issue, possibly means cost cutting shortcuts in quality will not become the favorite route to circumnavigate good practice and result in fastener problems in North America. For the North American fastener industry, plants operated at 74% of capacity (possibly over 100% in the aerospace segment), inventory turns were 4.4 vs. 4.9 in 2006 and about 25% of the industry showed some capital expenditure expansion while 75% was flat or down.

Raw materials and energy cost again were major concerns. Aside from China's problems in these areas driving up import prices, the surge in iron ore contract rates, the year end rise in scrap prices and the cost of other alloying materials resulted in green carbon wire (not processed) ending the year averaging about \$0.35-0.37/lb., alloy wire (not processed) averaging \$0.46-0.48/lb. and processing costs ranging from \$0.07 to \$0.10/lb. That is carbon wire up 13% and alloy wire up 18% versus 12/31/06. Alloying surcharges have increased on average 20-25% from January 2007 and alloy prices were in the vicinity of \$9.70-\$9.80/lb. for nickel leaving stainless at about \$8.69/lb., and \$3.10/lb. for copper. Aluminum was \$1.13-\$1.14/lb. and tita-

nium \$58.00/lb. Crude steel output worldwide increased 7.5% in 2007 vs. 2006 and hit 1,343 million metric tons, the highest in history. Of this China's growth in steel production was up 15.7% in 2007 vs. an 18.8% increase in 2006. In the EU steels growth was up 1.7% while U.S. production fell 1.4% in 2007.

From an energy perspective, oil touched \$100/bbl and seems likely to stay in the \$80-100/bbl range, unless a warm winter cuts heating oil demand and the slowed economy cuts gasoline and diesel usage. Consumption was 85 MBPD in 2007 and is expected to grow to 116 MBPD by 2030. The short term supply-demand scenario (until new refining capacity comes on stream) is locked into what distillation decisions are made based on market demand. Longer term, Opec's decisions on production rates will govern supply pending new non-Opec discoveries.

This means that for both raw materials and energy, the higher prices, plus the higher volatility now governing price, will leave less margin for error in manufacturing decision making, and the reaction by key customers will probably be increasingly to unbundle price levels and their price risk by "mining" the supply base for better prices. The price risk is thus pushed down the supply chain. For fastener and other component suppliers that probably means another fight for raw material cost escalations which will require separating the input material cost from the conversion cost to make a part, and when that conversion cost can't be managed so as to yield a reasonable return, foregoing that business. A silver lining may be that with the down dollar vs. the euro and pound, there could be developing a significant pricing advantage for U.S. producers selling into the European auto market whether to Mercedes, BMW, the Detroit-3's European operations or others. For all the world in general there is no doubt we are entering an era where commodity rationing based on price is a possibility and that our three most basic commodity needs – food, energy and water are at that stage already in some quarters of the world. Globalization along with population growth are driving this, with oil prices up 80% over the last 12 months, global food prices up 50%, and outright drought breaking out in Australia, Africa and some parts of Europe and the U.S. We are already in a war for resources, so there is not a lot of reason to look for much easing in the prices for raw materials and energy.

In the Automotive sector, in 2007 the basic pessimism was well founded, and that is expected to carry forward into 2008. The "market share pie" that is the Detroit-3 is getting smaller as further production cuts are projected, and the Detroit-3's share in 2008 is being forecast to be 3.617M units for GM, 2.576M units for Ford, and 1.953M units for Chrysler, and that with not much certainty. That gives a Detroit-3 total of 8.146M units of a North American total of 14.470M units. Production capacity is thought to be slowly closing in on

equilibrium, at least in North America, but that may not be the case worldwide. The Detroit-3's share of the market was about 51.2% in 2007 and is forecast to drop further in the years to come.

CY-2007 U.S. SALES AND MARKET SHARE OF TOTAL MARKET BY MANUFACTURER

	YTD Sales		% Market Share
	2007	vs 2006 % Chg	YTD 2007
General Motors Corp.	3,789,901	-5.9	23.5
Ford Motor Company	2,386,957	-12.1	14.8
Chrysler LLC	2,076,650	-3.1	12.9
Toyota	2,620,825	3.1	16.2
Honda	1,551,542	2.8	9.6
Nissan	1,068,238	4.8	6.6
Hyundai	467,009	2.5	2.9
Mazda	296,110	10.2	1.8
Mitsubishi	128,993	8.8	0.8
Kia	305,473	3.8	1.9
Subaru	187,206	-6.7	1.2
Suzuki	101,884	0.9	0.6
Mercedes-Benz	253,316	2.2	1.6
Saab	32,711	-10.0	0.2
Volvo	106,363	-8.4	0.7
Volkswagen	452,330	-1.7	2.8
Audi	93,508	3.8	0.6
BMW	293,795	7.1	1.8
Porsche	34,693	1.4	0.2
TOTAL LIGHT VEHICLE SALES	16,148,811	-2.5	100.0

Equally interesting, perhaps, is what sold and what didn't. In brief summary:

- For cars, luxury brand sales were down 6.1% and large cars down 10.5%.
- For light trucks, pickups were down 5.8%, cross-overs up 15.9%, minivans down 15.6%, mid-size SUV's down 12.6%, large SUV's down 9.2% and small SUV's up 19.3%.

With respect to incentives given in 2007, Ford's average incentive was \$3,454 down from \$3,841 in 2006; GM's average was up to \$3,264 from \$2,466 in 2006 and Chrysler did not report.

Another automotive market issue expected to surface in the not too distant future is what will be the effect on the market of the exit strategies the private equity and hedge fund managers adopt – and they will adopt one – and how will the industry recapitalize to deal with that. To wrap up why the pessimism, the threat of

bankruptcy is perceived to still be a valid risk for another 24 months with that risk shifting more and more to the lower tiers, but still with no absolute guarantee of the viability of at least two of the Detroit-3.

Patterns in the automotive components trade are becoming clearer, with \$31B in trade going from the U.S. to Canada, \$21B Canada to the U.S., \$13B U.S. to Mexico, \$26B Mexico to U.S.; and \$815M U.S. to China, but a whopping \$7B China to the U.S. Again, however, as discussed before, there is a hard core element in the automotive industry that over time still sees this industry becoming very regionalized: cars for North America largely being made in North America by whoever owns the company; those in Asia being made in Asia; those in Europe and Russia made there, etc. That argues for further rationalization of the supply base, diversification of one's customer base and integrating up the value chain.

The Aerospace fastener segment was a dramatically different story, with the aerospace industry in one of its very cyclical boom periods with this one expected to stretch out until at least 2012. That is subject somewhat to no more air traffic based terrorist incidents, no jet fuel price explosions that carriers can't cover and passengers won't pay for, and on getting control of the rapidly worsening air traffic capacity constraint issues.

For the fourth year in a row U.S. aerospace sales orders increased to \$198.8 billion generating about a \$56B surplus in trade for the U.S. Boeing had a net income of \$4.1B in 2007, up 84% from 2006, and received orders for 1,423 commercial aircraft (including conversions) or \$53.3B in 2007, and Airbus 1,341. Bombardier, the third largest producer, focuses on regional and business jets and also had strong new orders numbers. Shipments of commercial aircraft were \$29B (443 large planes) and adding general aircraft, helicopters and engines, shipments were \$53.3B. Military aircraft sales were \$54.8B, missiles \$17.7B and space programs \$39.2B. That total is expected to be exceeded by \$12B in 2008, though some sectors are slowing. Boeing's current backlog is 1,796 × 737's, 114 × 747's, 55 × 767's, 344 × 777's and 710 × 787's; (the Dreamliner) for which deliveries are expected to commence by mid-year – maybe? In November alone, Boeing received new orders from Dubai totaling \$10.9B (70 × 737's, 15 × 787's, 10 × 777's and 5 × 747 freighters). Backlog for Boeing and Airbus is now about 6,500 aircraft, or \$750B at list prices. The aerospace fastener industry took a PR hit in 2007 for the current long lead times on aerospace fasteners, but the industry is comfortable knowing that a significant part of that was raw material availability, cumbersome regulations and delayed completion of specifications and ordering by the OEMs and tiers.

Aerospace fastener sales for 2007 (all uses) were about \$1.8B, which is expected to continue growing at a healthy rate to about \$2.3B in 2010. Domestically produced aerospace fasteners were about \$1.7B of the total. Of that, externally threaded fasteners were about 50% of the total, internally threaded 30% and non-threaded 20%. Exports and imports balanced the numbers, and for aerospace fasteners, exports exceeded imports. Interestingly, Airbus has become very vocal that it believes new aircraft orders may fall a whopping 50% in 2008 vs. 2007, that the cycle peak has been passed. Boeing is not singing that song yet. As U.S. airlines orders represent only 11% of Boeing's order book, the U.S. economy is not a particularly troublesome concern at this point in time. The current huge backlog will keep them busy cranking out airplanes into the 2012 time frame.

The Industrial Products sector in 2007 varied from OK to quite good, depending on which industrial segments were being served. The home building market bubble burst late in the year and did put a brake on a number of segments, but not all. The \$1.21 trillion construction market in general fell about 3.7% in 2007, but surprisingly is expected to grow 5.8% in 2008. Deteriorating infrastructure – bridges, buildings, roads, etc. – is expected to drive the growth and a year end \$3B boost in additional infrastructure rebuilding by the Federal government is reinforcing that expectation. New “green” construction, which contributed \$13.4B in 2006, continued in 2007 at an accelerated rate. Construction in general employs about 11.8 million workers, of which 25% are Hispanic, so along with agriculture talk of how to deal with immigration issues is a serious topic here.

For some of the “big dogs” in the industrial products area, 2007 was not bad at all. “Caterpillar” grew about 5% with growth in the international arena offsetting slowing U.S. sales. “Cat” is a \$3.968B market. “John Deere” generated about \$1.822B in sales in 2007 and is projected to grow by a whopping 12% in 2008. Major appliance fell 3% in 2007 and is expected to grow only 0.5% in 2008. Electric house wares were up very slightly in 2007 and are expected to grow 1.4% in 2008, commercial appliance was down about 1% in 2007 and is projected to be up 1.25% in 2008, and comfort conditioning was down 5% with little growth expected in 2008. This was all driven by the cratering housing market which is currently not expected to show any significant recovery until the fourth quarter 2008 at the earliest. The National Association of Home Builders is forecasting a further 5.6% decline in housing starts in 2008 while the inventory overhang stabilizes. Heavy truck was mixed with the need to replace existing rolling stock balancing off against year end cargo shipment slow downs.

China continued to be a front and center Government Affairs issue, not only with the tidal wave of fasteners it and Taiwan are pushing into North America, but also because of the manipulated currency issue. The U.S. Government did absolutely nothing about this very serious problem except talk, talk, talk. The magnitude of the undervaluing of the Yuan continues to be in the now 40-50% range, even with the 5.8% appreciation seen in 2007. This is because of China's continued very heavy intervention in the currency markets, which has risen to \$450B in 2007, or an amount equal to 45% of their export earnings. For the U.S., our export growth due to the weak U.S. dollar versus the pound, euro and looney, has somewhat tempered domestic reaction to China, though many in Congress want to see the Administration crack down hard on Chinese mercantilism, a move they feel is prudent trade policy not protectionism.

Other major GA issues continued to be health care cost, the wars in Iraq and Afghanistan, access to world priced raw materials, the make up of Congress and pending elections, the continuation of no value added regulatory costs, U.S. trade policy and several potential tax issues – particularly the threat to LIFO inventory accounting. Equally troublesome were the actions of a number of the industries key customers, the “off shoring” of manufacturing and the competitiveness issues brought on by low labor cost countries. At year's end with the housing lending bubble burst, the resulting very significant lowering of consumer confidence drove down consumer spending negatively affecting almost every market segment which became the dominant issue of the day. The r-word was suddenly given serious attention. This is the environment we play into entering 2008.

In Europe in 2008, the credit squeeze is expected to be less felt than in the U.S. everywhere except in the UK. France expects to see GDP growth in the 2.0-2.5% range, Italy expects 1% GDP growth, Spain expects a very healthy 3.1% GDP growth (they had 3.7 in 2007!) and Germany is pessimistic expecting no growth beyond the 2.0-2.5% seen in 2007 or possibly even a slight decline. Overall the Eurozone averaged 2.0% GDP growth. All of Asia continued to be very strong averaging 8.5%. It is expected to slow a little to about 8.0% in 2008 largely due to the volatility in the world's financial markets and high commodity prices. China, however, grew 11.2% in 2007 and is expected to grow 10.8 in 2008.

In fasteners, as noted, Chinese exports continued to grow and interestingly, the prices of fasteners from China increased from 33-51% in 2007, depending on the type of product. This price escalation is expected to continue in 2008 as their steel and energy prices increase, and as the realities of private market workers' expectations continue to influence their cost of doing business.

INSTITUTE OPERATIONS

Operationally, the Institute again did well in 2007 showing the previously noted positive balance from Operations and a significant increase in funds when Other Income is added in. Reserves continue to build to a level of \$1,056,091 or 130% of one year's operating cost, less annual meetings, and not including the various Divisions very successfully separately funded special projects geared to their specific needs.

The *Inch Fastener Standards, 7th Edition*, continued to sell as projected earning \$76,497 and we sold a significant number of copies of the *Metric Fastener Standards, 3rd Edition* printed via desk top publishing at \$50 per copy. Work commenced on the new *IFI Technology Connection* subscription service which will be reviewed in detail in the Technical Engineering section of this report. The Institute's Annual Meeting at the Ritz-Carlton in Sarasota, FL and Fall Meeting at the Ritz-Carlton at Bachelor's Gulch, CO were successful events, rich in take home value, and offering great networking opportunities. We had a blend of technical, business, government affairs and economic forecasts programming and hosted guests from Brazil and the NFDA. We reviewed our first ever IFI Study Mission to China. The study mission is expected to possibly be repeated in 2008. Similar missions to India and Eastern Europe are being contemplated, if there is Member interest in same.

The IFI decision to exit the trade show business for the period 2006-09 gave us the opportunity to collect a \$56,430 settlement from our show partner and allowed them to proceed with shows as they wish. Our outreach to other associations continued with our office co-location with the Precision Metalforming Association (PMA); joint venture with four other metalworking associations (PMA, FIA, SMI and NFFA) to form the Metalworking Health Insurance Trust; regular information exchange with the Original Equipment Suppliers Association (OESA); co-location of our Aerospace Division meetings with the Aerospace Locknut Manufacturers Association (ALMA), and regular participation with the National Association of Manufacturers (NAM) on a variety of industry and government affairs initiatives. Within our industry, our coordination with the NFDA, MWFA, LAFA/WAFDA and the Fastener Industry Coalition (FIC) continued and expanded when common cause was identified. With the rash of "bad product" imports from China – toys, food, dog food, etc. – we joined with the NFDA and formed the "Fastener Industry Education Group" which authored a guide on how to properly specify, buy and inspect imported product to ensure "bad product" is kept out of the U.S. stream of commerce. A successful workshop was put on by the FIEG at the Las Vegas fastener show and most world press fastener trade journals carried the material in their press coverage. Additional presentations are expected in 2008 at regional fastener association meetings and possibly other trade shows. The effort was noted and applauded by U.S. Customs/Department of Homeland Security, who of-

ferred it as a model to other industries. This effort focuses on keeping out "bad product" and product that infringes on the intellectual property rights of domestic producers.

The good financial condition of the Institute can be seen in the following Treasurer's Report for 12/31/07, including the year end Financial Statements and 2008 Budget. We are again projecting break even or better from Operations and a further addition to Reserves from Other Income.

MEMBERSHIP SERVICES

Members and non-members contemplating membership frequently ask, can I afford to be a member of a trade association? Is the money I pay worth the investment? By joining the association will I be provided with opportunities and information to better run my business? These are the issues as to why companies have an association membership, and our challenge is to provide a value proposition in which the reward consistently exceeds the cost.

Trade associations have been around a long time. They were formed because it was recognized early on that individual companies could not sufficiently influence their industries customers or the government as successfully as a group of companies working together could. Trade associations were formed to meet that need. Today trade associations are almost a necessity in a globally competitive business world and almost all governments recognize them as institutions that advance the nation's industries in ways no other organization could.

What does IFI do and what does membership provide?

- 1) Networking opportunities with peers and key suppliers to the industry is almost everyone's first consideration.
- 2) A voice and source of advocacy for the industry which is recognized by the public, the industry's customers, and the government is usually number two.
- 3) A forum to collectively develop and share the cost of information gathering, training, carrying out industry specific technical and business oriented projects, and a vehicle to coordinate projects of joint interest to the industry and with the key customers of and the suppliers to the industry.
- 4) A mechanism by which to represent the industry on technical and standards-based issues nationally and internationally in the interest of the member companies and their supply base.
- 5) The vehicle to coordinate with other associations in N. American manufacturing's best interest.

These are the functions performed by IFI's Divisions, Committees, Working Groups and by the Staff of the Institute under the Board of Directors' direction. For 2007, the scope of these activities is summarized below. The IFI supplies qualified staff to attend industry meetings which take up more than 60 meeting days per year, plus travel time, where shared representation is a cost saving for Members who do not all have to attend these meetings themselves. Such representation also allows for a coordination amongst and between the various bodies and activities rationalizing the decisions reached. Typically, over the course of a year these include attendance at:

- ASTM – F-16
- ASME – B-18 and B-1
- SAE – Fastener Committee and E-25
- International Standards Organization (ISO) – TC2
- Aerospace Industries Association NASC
- The Aerospace Government/Industries Working Group (GIFWG)
- At the National Association of Manufactures (NAM)
 - International Economic Policy Committee and the Subcommittee on China
 - Coalition for a Sound Dollar
 - Coalition for the Future of Manufacturing
 - Associations Council
 - OSHA Policy Group
- The FAA/STC-TF on Aerospace Fasteners
- The Research Council on Bolted Joints
- The Metalworking Industries Associations Executive Committee
- The Automotive Industries Action Group (AIAG) – Packaging & Logistics and Quality Committees
- The Metalworking Manufacturing Coalition and the MMC Health Insurance Trust
- The Steel Task Force
- The Berry Amendment Reform Coalition

In addition, the Institute provides the vehicle for Member companies to gain the advantage of coordination with other like-minded organizations on issues of direct concern to the Members. These relationships leverage the political reach of the Membership on government affairs and issues of business concerns where common interests exist. This spreads the cost of such activities over a broader base and makes accessible to IFI's Members the best thinking of the combined groups without the cost burden of having to belong to multiple organizations, or of having to house all such expertise at the IFI, or in the individual companies.

Key groups IFI regularly interacts with includes:

Fastener Organizations:

- European Industrial Fastener Institute (EIFI)
- Fastener Institute of Japan (FIJ)
- Brazilian Fastener Institute (SINPA)
- Taiwan Industrial Fasteners Institute (TIFI)
- Chinese Fastener Association
- National Fastener Distributors Association (NFDA)
- Other Distributor organizations: CBNSA/WAFDA/LAFA, etc.

Other Metalworking Organizations:

- Precision Metalforming Association (PMA) – stamping & pressing
- Precision Machined Parts Association (PMPA) – screw machine
- Spring Manufacturers Institute (SMI) – spring making
- Forging Industry Association (FIA) – forging
- Tooling & Manufacturing Association (TMA)
- American Bearing Manufacturing Association (ABMA)
- American Gear Manufacturing Association (AGMA)
- American Iron & Steel Institute (AISI)
- Metal Treating Institute (MTI)
- National Association of Manufacturers (NAM)

Other Institute activities include developing and/or acquiring and disseminating industry information. These surveys and studies are able to be done on a shared cost basis and would possibly not be done at all if left to individual companies. Included are:

- IFI "Import/Export Report"

- Reports on the global steel and other raw materials markets
- Benchmarking Surveys
- Washington newsletters from a variety of Association sources (NAM, AIA, Credit-Suisse, etc.)
- Periodic e-mails, broadcast faxes and website updates on critical issues impacting the industry.

Finally, at our Annual Spring, Fall, and periodic Divisional meetings, critical issues speakers and presentations are hosted on a shared cost basis. In 2007 these included:

- Alan Beaulieu's Annual U.S. Fastener Economic Forecast
- Sanford Kahn on the Global Economy
- David Tawil on the Automotive Bankruptcy Situation Automobile Productions Forecast
- Laurin and Jennifer Baker IFI Government Affairs Briefings
- Laurin and Jennifer Bakers' "Berry Amendment" and "ITAR" Briefings
- Dr. Rena Pomaville on Penetrating the Japanese Supply Chains
- A MITTAL STEEL Panel on Boron Steel in Fasteners
- Peter Koenig on U.S. Trade Law
- A variety of attorneys on How Suppliers Can Deal with Bankrupt Customers

Developing common opportunities and dealing with common problems, along with networking, are what drives trade associations. Your participation in the IFI is much appreciated and is what gives you a seat at the table in deciding what those issues will be and how they will be dealt with. At worst, it is your insurance policy. At best it is your entree to proactively shaping the future your business will exist in.

GOVERNMENT AFFAIRS (GA)

The 2007 GA agenda focused on health care cost, trade issues – globalization and outsourcings impact on domestic industries, currency manipulation, access to world priced raw materials and energy and potential tax issues which would negatively impact the industry. The Aerospace Division had a particularly successful year impacting legislation and implementing regulations governing the raw materials they use in product delivered to the Department of Defense, and regulations governing which of their products can be exported.

Our Washington representatives, The Laurin Baker Group, kept us on point when issues arose of potential interest to Members and kept us in front of specific Congressmen and Senators who form our informal "Fastener Caucus." This is a very powerful tool to have in place, knowledgeable about the industry, if and when it is needed.

Our regular participation with the National Association of Manufacturers (NAM) continued, both on the Associations Counsel and on the NAM International Economics Policy Committee, which determines NAM's positions on trade. We commenced the daily circulation of the NAM "Manufacturing Economy Daily" and the bi-weekly circulation of the "Steel Benchmark" to all Members. We also continued the circulation of the Credit-Suisse updates on the automotive bankruptcy, M&A and production situation in Detroit.

The planned second study mission to China was delayed for at least another year but we continued our close monitoring of the China situation as it impacts our industry. The Canadians and South Africans continued their duties on "dumped" Chinese and Taiwanese fasteners entering their countries. The EU initiated, then stopped and then at year end reinitiated a similar dumping action against China and Taiwan, and we had U.S. Trade Law and trade remedies explained by a Washington trade law firm at our Fall Meeting. We remain in a wait and see mode with respect to Chinese dumping.

IFI/PMA CO-LOCATION

The relocation to the PMA building continues to prove to have been the correct decision. We have cut at least \$28,000 out of annual operating cost, have access to excellent training and meeting facilities, have onsite website hardware and software support services and are able to share and coordinate GA and other Member support services with a fellow metalworking association. We hosted the *Fastener Technology International* Coldheading 101 and Metal Treatment 3-day training workshops in March at IFI with more than 60 attendees, and will do so again in 2008.

ENGINEERING TECHNOLOGY ACTIVITIES IN 2007

New Director of Engineering Technology

Joe Greenslade joined the IFI staff as Director of Engineering Technology on January 2, 2007. Joe comes to the IFI with 37 years of experience in the fastener industry. He first entered the fastener industry in 1970 working in sales for CAMCAR-TEXTRON. While with CAMCAR he held positions in applications engineering, product specialist for the TORX Drive System, corporate engineering management, and plant management. He went on to be the National Sales Manager of ROCKFORD HEADED PRODUCTS and was later the company's General Manager.

In 1978 Joe started GREENSLADE & COMPANY, INC. to supply manufacturing tooling and quality assurance equipment to fastener manufacturers and distributors. By the time he sold his company in 2006 he was doing business worldwide. In his GREENSLADE & COMPANY days he served on the ASME B1 and B18 and

ASTM F16 fastener committees. He was selected as the NFDA technical representative on the FQA Task Force. Over this time, he published more than 300 technical articles related to fasteners and was awarded 12 U.S. patents.

Joe brought the IFI a fresh view of things the IFI can do to serve our members and the fastener industry. Additionally, he has introduced many ideas on new ways of doing things like using web conferencing for most meetings instead of face-to-face meetings requiring travel and all of the related expenses.

Worldwide Fastener Standards Activities

The IFI plays a major role in the creation and maintenance of fastener standards both within the USA as well as internationally. The IFI participates in the following organizations:

1. American Society of Mechanical Engineers (ASME)
2. American Society for Testing and Materials (ASTM)
3. Society of Automotive Engineers (SAE)
4. International Organization for Standardization (ISO)
5. Research Council on Structural Connections (RCSC)

The IFI also supports IFI member companies in working with major OEM fastener standards and through the creation of IFI standards to fill in the gaps where the other organizations do not provide needed guidance.

The IFI invests between 300 – 400 man hours per year working on fastener standards activities.

ASME, ASTM, and SAE Activities

Most of the work within these organizations during 2007 was the maintenance and minor revision of existing standards. In July 2007 two IFI members contacted the IFI staff for interpretation of different portions of *ASME B18.5, Round Head Bolts (Inch Series)*. It was discovered that the standard imposed some unnecessary limitations on how square neck and ribbed neck bolts could be produced. The IFI staff initiated a revision to the standard immediately through ASME. The revision containing the requested changes was approved on December 27, 2007. The revised standard will be published in the second half of 2008.

ISO Standards Activities

The ISO fastener standards meeting was held in Stockholm, Sweden in October for 5 days. These standards are the predominate metric standards used worldwide and by most of the multi-national companies based in the USA such as FORD MOTOR, GENERAL MOTORS, CHRYSLER, JOHN DEERE, CATERPILLAR, etc.

Many standards were reviewed and amended in the five days, but the most significant work was done on ISO 898-1 which defines the steel fastener property classes and their associated material and testing requirements. This document has been in revision for 10 years. It has been completely re-structured. Some of the significant changes are the result of the standard being written in such a way as to acknowledge the use of in-process controls as an alternative to the use of final inspection as the only means of assuring fastener quality. There is a special meeting in France the end of February 2008 just to finalize this standard so it can be published during 2008.

The IFI staff considers our involvement in the ISO fastener standards activities very important to IFI member companies because of the constantly growing use of ISO metric fastener standards by most major fastener consumers around the world. It is felt that because of the dominance and growing use of ISO metric fastener standards there should be a systematic move away from the support of ASME, SAE, and ASTM metric fastener standards and the adoption of ISO standards to replace them. Today there are multiple standards for the same fasteners. This causes confusion for both the fastener suppliers and their end users.

IFI Standards Activities

The IFI has historically created standards that members felt were needed for fasteners that other standards organizations did not adequately address. During the past, many IFI standards have eventually been adopted by ASME, ASTM, or SAE, such as the cold heading raw material standard IFI-140 that was adopted and published by ASTM as ASTM F2282.

During 2007 the following IFI standards were published for the first time:

1. NEW: IFI-160 – *Test Procedure for the Performance of Nuts With Pre-applied Adhesive Coated Threads – Inch Series*
2. NEW: IFI-560 – *Test Procedure for the Performance of Nuts With Pre-applied Adhesive Coated Threads – Metric Series*
3. NEW: IFI-165 – *Test Procedure for the Performance of Chemical Coated Prevailing-Torque Small Screws – Inch Series*
4. NEW: IFI-565 – *Test Procedure for the Performance of Chemical Coated Prevailing-Torque Small Screws – Metric Series*
5. NEW: IFI-562 – *Acceptance Gaging for Fastener Drive Systems with Six Lobes*

During 2007 the following IFI standards were updated to incorporate new information, additional size ranges, and/or new product varieties.

1. REVISION: IFI-112 – *High Performance Thread Rolling Screws – Inch Series*

2. REVISION: IFI-113 – *Steel Self-Drilling Tapping Screws – Inch Series*
3. REVISION: IFI-125 – *Test Procedure for the Performance of Adhesive Coated Prevailing-Torque Screws – Inch Series*
4. REVISION IFI-166 – *Inspection Procedure for Thread Nicks – Inch Series*
5. REVISION: IFI-503 – *High Performance Thread Rolling Screws – Metric Series*
6. REVISION: IFI-504 – *Steel Self-Drilling Tapping Screws – Metric Series*
7. REVISION: IFI-525 – *Test Procedure for the Performance of Adhesive Coated Prevailing-Torque Screws – Metric Series*
8. REVISION IFI-566 – *Inspection Procedure for Thread Nicks – Metric Series*

2007 IFI Standards Highlights

IFI-166 and IFI-566 covering nicked thread acceptance

On July 31, 2007 revised standards that provide guidance to industry on how to determine the acceptability of nicked threads were released. It is almost impossible to manufacture screws and bolts over 3/8 inch or 10 millimeters in diameter without some nicks in the threads. This frequently causes disputes between sellers and buyers regarding which parts are acceptable. These two IFI standards provide a specific test method and specific maximum torque values that can be used to drive externally threaded parts into a GO ring gage to objectively determine acceptability.

IFI-113 and 504 covering inch and metric self-drilling screws

In early August the IFI released updated standards for two standards that were last revised in 1997. The new revisions provide more complete descriptions of the test procedures, eliminate some out-of-date content, and add test procedures for the evaluation of screws for construction applications that must drill through thicker materials than those used in automotive and light sheet metal applications.

IFI-112 and 503 covering inch and metric high performance thread rolling screws

The inch standard was last issued in 1970 and the metric standard was last revised in 1997. These standards now recognize a wider range of screw designs than the previous revisions. The explanation of test procedures is now clearer. Some obsolete test procedures are eliminated. Both the inch and the metric standards both cover case hardened screws and through hardened screws with zone hardened points.

New Project Management System improves responsiveness to member technical needs

To address technical issues in a more responsive way the IFI Technical Project Management System was created and adopted. When IFI member companies bring issues to the attention of the IFI technical staff, the staff determines if there are other member companies interested in that same issue. If so, a working group is formed to specifically address the issue. All IFI Company and Associate Members are invited to

participate. A working group chair is elected to head the group's activity. A specific mission statement is created and a determination is made of what specific product will result from the completion of the project. All meetings are conducted through one-hour long web conferences held approximately every other week until the project is concluded.

Two projects were completed in 2007 using the new system

IFI Recess-fill Working Group

This working group produced an *IFI TechGuide* that emphasizes the importance of fastener end users' need to collaborate with their fastener suppliers when they want to use one of the modern, high-performance finishes applied by the dip-spin method during the customer's product design phase. The purpose is to discuss how parts can be designed for the optimum use of these finishes and what the criteria for acceptance will be when the parts are delivered. This document is available for FREE from the IFI web site. It and other technical documents can be found and downloaded by clicking on the FREE Technical Information link. The working group had 22 participants and was led by Gene Simpson of SEMBLEX CORPORATION.

IFI Working Group for the Review of the GMW25 Standard

GENERAL MOTORS is revising their metric fastener material standard GMW25. They asked the fastener suppliers to comment on the changes they feel need to be made. The IFI working group completed the review and identified two new requirements that will cause significant increases in the manufacturing of some categories of parts if the standard is published as originally proposed by GM.

The first new GM requirement is for the measurement and reporting of the internal cleanliness (inclusion rating) of the steel used in making fasteners. This has not been routinely measured in steel making in the past. This is something that is controlled by the steel mills through strict process controls during the melting process. The working group cooperated with steel suppliers to develop an approach that will give GM the assurance of the quality of the steel and its cleanliness they desire without unnecessarily driving up costs.

The second troublesome requirement GM is adding is a prohibition of the presence of phosphorous on the surface of post heat treated fasteners of property class 10.9 and 12.9. The difficulty here is that there is no recognized method of detecting and measuring the phosphorous on finished parts. The working group explored how to meet the intent of this GM requirement in a way that all parties can agree on in a practical, economical way. GM was receptive to the working groups' proposals in these two areas, but no final document was issued by the end of 2007. This working group was led by Chris Wackrow of MNP CORPORATION.

Thread Gage Calibration Work Group

The IFI Technical Committee was asked to undertake a project to develop a standard covering the proper procedures for the calibration of thread gages during December 2007. The resulting document will be IFI-301. It will cover internal and external thread gage of both the fixed limit and variable types. The participants in this project include several technical experts from IFI member companies, gage manufacturing companies, ASME B1, and the FAA. This standard is targeted for completion in the second quarter of 2008. This working group is headed by Mike Lawler, PCC – SPS FASTENER DIVISION.

IFI – NFDA makes a joint effort to emphasize quality in the fastener industry

During the summer of 2007 the IFI partnered with the National Fastener Distributors Association (NFDA) in the creation of the *Fastener Industry Education Group* (FIEG). The purpose of this group is to create and disseminate information that is helpful and informative to the fastener industry on timely subjects. Several product recalls were reported in 2007 in several different industries. The IFI and NFDA feel the leaders in the fastener industry should be proactive in raising the issue of the importance of quality and how to achieve it in hopes of avoiding the kind of negative attention that several other industries are experiencing.

The FIEG's first project was the creation and publication of a white paper entitled, *The Proper Designation and Use of Standards by End-users and Suppliers Is Critical to Fastener Quality*. This paper is available for FREE download from www.indfast.org and www.nfda-fastener.org. A free presentation based on the content of the white paper was given in Las Vegas as part of the Western National Industrial Fastener Show on November 14, 2007. The feedback from the more than 100 attendees was very positive. The FIEG is working with the LAFA and other regional fastener associations to make similar presentations available in several locations around the United States during 2008. The U.S. Customs and Border Protection Service references and recommends the guide in their advice to fastener importers.

43,000 leads were generated for IFI members in 2007

The technical staff oversaw the development of a database search feature on the IFI home page called: **"Find a Fastener Supplier"**. Those looking for domestically made fasteners can now easily find them through the IFI home page. By clicking on **"Find a Fastener Supplier"** the user can find all of the IFI member companies that make the fasteners they are looking for. They can find the companies by searching by fastener category and type or by trade name. Finding a domestically produced fastener by respected producers has never been easier.

The IFI is developing new approaches to making fastener technology available to both end-users and suppliers.

In March 2007, the Board of Directors of the IFI approved the development of the *IFI Technology Connection* (IFITC). The mission of this project is to provide the world's most comprehensive fastener technology web site to serve both end users and fastener suppliers of all types. Access to this web site will be sold on an annual subscription basis. The launch target is April 2008. As of the first of August the project was over 50% complete. At year's end, metric data was being loaded. The IFITC is organized into various modules.

The following modules will be available at launch:

1. Torque calculator
2. Inch-metric converter
3. Hardness-tensile strength converter
4. International raw material equivalence database
5. Thread database
6. IFI Technical Bulletin Library
7. IFI Technical Question and Answer Bulletin Board searchable by key words
8. Technical data (inch and metric) modules
 - a. Bolts and cap screws
 - b. Socket products
 - c. Nuts
 - d. Washers
 - e. Screws

In the "Technical data" module users will select the part description from a series of pull down menus and when they click on "Select" all of the dimensional, material and performance data will pop up instantly on one screen. After clicking "Select" in the "Hex cap screw" database the users will see the following:

1. The thread size data from ASME B1.1
2. The dimensional data, including a print, from ASME B18.2.1
3. The mechanical and material data from ASTM or SAE as selected
4. Plating from the selected standard
5. Recommended tightening torque
6. Single shear through both the body and through the thread

By clicking on the "Print" button all of this data will be sent to a PDF file that can be saved or printed out.

During 2008 the technical data will be expanded to cover rivets and pins and the screw database will be expanded to include hole size recommendations for all types tapping screws in a variety of commonly used materials. The IFITC will be a project that will continually expand and change based on changes in standards, technology, and user feedback.

The IFI is also exploring the possibility of combining Inch and Metric Standards Books and changing them to an annual publication issued in January of every year. If it is determined this is feasible, it is hoped that the first edition of this book will be available in January of 2010. There will be more information on this during 2008.

Hydrogen Embrittlement Study Supported

In 2005 The IFI committed to support a doctoral study at McGill University on hydrogen embrittlement for three years giving \$10,000 each year. The project officially started in 2006 and will run through 2008.

Salim Brahim, the project leader, has selected more than a dozen typical fastener materials to study. Each material will be cleaned by various processes and will be coated with a variety of commonly used fastener finishes. Multiple samples of each combination of cleaning and finishes will be tested for the presence of hydrogen embrittlement using the rising step-load test method.

There are two project review meetings each year. It is too early to know what any of the programs findings and conclusions will be, but many of the preliminary results appear to be providing some very interesting insights into this illusive phenomenon. Hydrogen embrittlement failures in fasteners are like heart attacks in humans. Fortunately they do not occur very often, but when they do the results can be devastating.

Technical Support

Throughout 2007 the IFI technical staff provided a wide range of technical services to the members on a timely basis. Some of the support activities included standard and specification interpretations, sourcing suggestions for various services, and quality assurance consultation. Most requests for technical assistance are responded to within 24 hours.

DIVISION I: INDUSTRIAL PRODUCTS

Division I continued to provide outstanding speakers at our Annual and Fall Meetings, particularly Alan Beaulieu's annual economic projection for the North American Fastener Industry. The Division also continued its strong support for the small products engineering activities, the Research Council on Structural Connections, the Bolting Technology Council and the Hydrogen Embrittlement Study being conducted at McGill University.

The Division was chaired by Jonathan Turner of TURNASURE LLC with Vice Chairman, John Grabner of CARDINAL FASTENER & SPECIALTY CO., INC.

DIVISION II: AEROSPACE PRODUCTS

Division II maintained its very high level of activity in both the technical, and by its separately funded Aerospace Fastener Government Affairs Working Group (AFGAWG), legislative arenas. The key legislative issue continued to be revision of specialty metals procurement policies within the Department of Defense (DoD). These policies are applicable to anyone selling fasteners to DoD for use in aircraft, missiles, ships, tanks and other military vehicles and weapons systems. Whatever IFI Division you are a member of, if you sell fasteners to DoD this is directly applicable to you. Therefore, we are providing our Washington Representatives' summary of recent changes.

The President ultimately signed the FY 2008 Defense Authorization Act on January 28, 2008. AFGAWG's government affairs efforts were successful in ensuring that the Act provides fastener manufacturers and distributors with additional flexibilities in providing commercial items to DoD and in complying with the specialty metals provisions.

Following is a summary of changes the Act makes regarding the specialty metals provisions, and specifically those provisions affecting fasteners. The definitions of "commercially available off-the-shelf items (COTS)" and "commercial items" and the FY08 statutory language is available from IFI. *NOTE: DoD issued a Class Deviation on January 29, 2008 making the new statutory language effective for all new contracts. DoD has until mid-June 2008 to issue new regulations based on the new law. AFGAWG will be working to submit public comments on the new regulations as appropriate.*

- Congress has made a fundamental change in how 10 USC 2533b (specialty metals provisions) is applied. Previously, the statute prohibited DoD from using "appropriated funds" to procure items that were non-compliant with the specialty metals provisions. This meant that it was a violation of the Anti-Deficiency Act, punishable by jail time, for a DoD employee to accept a non-compliant item. The new statute prohibits the acquisition of items that are non-compliant, which means that any violations that occur will be considered contract violations only.
- To further increase the flexibility of DoD and industry, Congress took an exemption approach this year, rather than a waiver approach as they did last year. Exemptions are self-implementing and do not require contractors or subcontractors who choose to rely on them to take any steps in advance. Exemptions also remain in effect unless the law is changed, as opposed to waivers, which can be reviewed and rescinded at any time by DoD.
- The new language contains the following major changes/exemptions:
 - Revises the way in which broad class waivers known as domestic nonavailability determinations, or DNADS, can be issued including specific review and public notice requirements. In addition, all previously issued class DNADs, such as the Fastener DNAD, must be reviewed and amended by July 26, 2008 to reflect the new law (*see below for information on the Fastener DNAD*).
 - Provides an exemption to the specialty metals provisions for all electronic components and commercially available off-the-shelf (COTS) items with some exceptions (*see below for fastener-specific exceptions*).
 - Provides a 2 percent de minimus (based on total weight of specialty metals in an item) exemption.
 - Allows for a "market basket" approach in some cases. (*See description of 50% threshold*)

below.)

- Provides the Secretary of Defense with a National Security Waiver.
- The Fastener DNAD must be reviewed and amended as necessary by July 28, 2008 to reflect the new definition of “required form,” which is “in the form of a mill product such as bar, billet, wire, etc.” AFGAWG will continue to work with DoD to provide updated information on the availability of wire rod as appropriate.
- The new language exempts COTS items from the specialty metals provisions EXCEPT for contracts or subcontracts for commercially available off-the-shelf fasteners, unless such fasteners are—
 - incorporated into commercially available off-the-shelf end items, subsystems, assemblies, or components; or
 - commercial items that are purchased under a contract or subcontract with a manufacturer of such fasteners, if the manufacturer has certified that it will purchase, during the relevant calendar year, an amount of domestically melted specialty metal, in the required form, for use in the production of such fasteners for sale to the Department of Defense and other customers, that is not less than 50 percent of the total amount of the specialty metal that it will purchase to carry out the production of such fasteners.”
- While the FY08 Act adds additional layers of complication in many ways, it is important to note that Congress believes they have given DoD and industry additional flexibilities to be able to access the commercial marketplace while ensuring that large, non-commercial items continue to be made with U.S. specialty metals. The devil is always in the details and we need input from fastener manufacturers and distributors on how these new changes are likely to affect you, and what we should be communicating to DoD as they write their implementing regulations.

Other issues receiving the Division’s attention during the year were:

- The NADCAP/PRI initiative to force additional aerospace fastener manufacturers audits – which we have stalled.
- The FAA Inspection General’s screw thread conformity working group documents and practices – which we have a Task Group in place to close this out.
- Efforts by the Aerospace Industries Association (AIA) and the National Association of Manufacturers (NAM) to reform export controls regulations including the International Trafficking in Arms Regulations (ITAR) to reflect today’s global marketplace and the need for the defense industrial base to remain competitive while protecting national security – several efforts are underway by the Administration and Congress to begin addressing these issues, specifically the appropriate method for addressing the export of FAA-certified components.
- Quality issues focused C=0, QSL and QML – which will be a forever discussion.

Mr. Pat Meade continued as IFI’s very successful Manager of the Aerospace Division, which was ably led by Chairman Mike Lawler, PCC – SPS and Technical Chair Owe Carlsson, ALCOA FASTENING SYSTEMS.

DIVISION III: AUTOMOTIVE INDUSTRY FASTENER GROUP (AIFG)

Division III continued its usual hectic pace, with meetings every other month. Chapter 11 filings in the upper tiers continued and the Division’s programs stayed focused on protecting receivables and in understanding the structural changes taking place in the automotive marketplace, which are huge and resulted in the very

significant reductions in the Detroit-3 auto builds throughout the year. This fueled the initiative to increase knowledge on how to do business with the Japanese OEMs and how to diversify traditional automotive fastener suppliers' customer bases. Interaction and information sharing with USCAR, AIAG, OESA and PMA continued at an active and useful level.

During the "What's New" section of each Division III meeting, the Division heard presentations on a variety of subjects immediately useful in their operations. These ranged from technical topics and supply contract issues to what will drive the availability and price of raw material in the months ahead.

The Division was ably chaired by Steve Paddock, MACLEAN-FOGG COMPANY and Vice Chaired by Kurt McKinney, KAMAX L.P. The fifth annual "John D. Fischer" Memorial Golf Tournament was hosted at the Birmingham Country Club and won by Porter McLean, Mike Beauregard, Scott Brown-Borden and Steve Paddock.

ASSOCIATE SUPPLIERS' DIVISION

The Associate Suppliers' Division (ASD) continued the very valuable series of presentations on Achieving Zero Defects in the fastener manufacturing process. A CD was produced capturing all the elements of these presentations and supplied to the IFI Membership in a form such that their own company names, logos, and company front end could be added for use as a marketing tool.

ASD also supplied speakers to both Division II and Division III on topics of particular interest to those groups.

At the Fall Meeting, ASD supplied an excellent panel on the Use of Boron Steel in Fasteners in Europe, where its use far exceeds that of in North America with a significant price advantage.

The Division was ably chaired by Leo Monroe, NATIONAL MACHINERY, L.L.C. and Ed Koneczny, THE MAGNI GROUP.

STRATEGIC PLANNING FOR 2007

The IFI Strategic Plan developed in 2007 is provided in its entirety as follows:

STRATEGIC PLAN 2007-2010

The Industrial Fasteners Institute (IFI) Strategic Planning Committee met at IFI headquarters in Independence, OH August 6-7, 2007. This report is their recommendation to the Board of Directors and the Membership as to modifications to the Institute's Strategic Plan originally developed in 2000-2001. Much of the 2000 Strategic Plan's recommended Vision, Mission and Operational Values remain on target going forward to 2010 and is basically unchanged. These are:

IFI's Current Vision – to be the globally recognized, North American focused, leading association representing the interests of the manufacturers of mechanical fasteners and formed parts, and the key suppliers to the industry, fostering their working together to shape the future of the industry.

IFI's Mission – to represent the industry to its suppliers, customers, the government and the public at large to advance the competitiveness of the Member Companies in a global marketplace.

IFI's Operational Values – to be Member driven, Board led, focused on continuous improvement in the process of serving our Members in their voluntary participation in the development of business, technical and government affairs programs and issues important to the industry's success.

Key Issues and Trends Reviewed for the Period 2007-2010 included:

- 1) The United States and global economies.
- 2) The impact of foreign competition on domestic producers and options for dealing with same.
- 3) Technology issues that are or will come into play.
- 4) Costs – raw material, energy, government regulation, labor and training, health care, and the internal and contract costs of manufacturing.
- 5) The erosion of the ability of small and medium sized manufacturers to compete globally due to the unlevel playing field and current large incentives to invest in manufacturing offshore.
- 6) At the present time, the IFI will respect the overall benefits driven by "free trade," will promote the need for "fair trade" and will stay clear of "competitive advantage" issues between Member Companies.

This plan review was based on a macro look at the industry both in North America and around the world and a detailed Environmental Scan by IFI member companies, from which conclusions and recommendations were drawn with respect to the IFI's strengths, weaknesses, opportunities and threats, which follow in summary, and based upon which the strategic planning recommendations are made.

GLOBAL FASTENER DEMAND

- The total global demand for fasteners in 2007 was \$49 Billion
- The end use demand for the \$49B was:
 - \$18.1B (37%) – Motor Vehicles
 - \$8.8B (18%) – Construction
 - \$5.9B (12%) – Electrical Products
 - \$16.2B (33%) – Aerospace, MRO, Industrial Machinery & Other
- The geographical distribution of the demand was:
 - \$14.3B (29%) – North America
 - \$11.6B (24%) – Western Europe
 - \$17.2B (35%) – Asia Pacific
 - \$5.9B (12%) – Latin America, E. Europe, Africa and Middle East

REGIONAL DEMAND TRENDS AND EMERGING MARKETS

- North America – overall 4% per year growth is projected
 - U.S. – average growth 4-6%
 - Mexico – above average growth > 6%
 - Canada – below average growth < 4%North America's overall market share is projected to be down 2%
- Western Europe – overall 3% per year growth
 - UK, France, Italy, Germany, Spain, Scandinavia, etc. – below average growth < 4%
 - Central Europe – average growth 4-6%
 - Western Europe overall market share projected to be down 2%
- Asia Pacific – overall 7% per year growth
 - China and S.E. Asia – above average growth – 7-10%
 - Russia – average growth – 4-6%
 - India – above average growth – 7%

Japan and S. Korea – below average growth < 4%

Australia – average growth 4-6%

Asia Pacific overall market share projected to be up 3%

- Latin America, Africa and Middle East – overall 6% per year growth

E. Coast S. America – above average > 6%

W. Coast S. America – average growth 4-6%

Africa – average growth 4-6%

Middle East – mixed average and above average 4 to > 6%

General overall market share projected to be up 1%

NORTH AMERICAN FASTENER MARKET

<u>Market Segment</u>	<u>2007</u>	<u>2010 Projected</u>
Total	\$14.0 Billion	\$16.0 Billion
Automotive	\$4.6B (33%)	\$5.1B (32%)
Aerospace	\$1.8B (13%)	\$2.3B (14%)
Electronics	\$1.4B (10%)	\$1.6B (10%)
Medical Devices	\$1.2B (9%)	\$1.6B (10%)
Industrial Machinery	\$1.9B (14%)	\$2.3B (14%)
Distribution/MRO	\$2.9B (21%)	\$3.2B (20%)

- The N. American market's compound annual growth rate during the period 2007-2010 is projected to be 3.6%.
- In N. America, Mexico's growth rate should be the highest at 5.9%.

U.S. FASTENER MARKET IMPORTS/EXPORTS 2006

- U.S. Fastener Exports \$2.3B
- U.S. Fastener Imports \$3.8B
 - Taiwan \$1.31B
 - China \$0.73B
 - Japan \$0.53B
 - Canada \$0.38B
 - Germany \$0.19B
 - U.K. \$0.08B

S. Korea	\$0.08B
All Others	\$0.49B

- In the period 2006-2010 the projected compound annual growth rate for exports is 4.7% up to around \$2.7B and for imports is 6.6% up to around \$4.8B.
- A significant portion of the U.S. exports are aerospace fastener products.

THE IFI INTERNAL ENVIRONMENTAL SCAN

Our internal Environmental Scan was based on responses from 29 of our then 81 fastener producing companies (36%) representing 99 facilities with 11 companies having 1 site, 10 companies with 2-6 sites and 3 with 10+ sites. Company sizes ranged from 1 company with 25 or less employees to 4 companies with 500 to over 1,000 employees.

- ECONOMIC ISSUES OF MOST CONCERN TO THE MEMBERS

No. 1 – The industry's customers and their issues

No. 2 – Raw material cost

No. 3 – The domestic economy and manufacturing's role in it

No. 4 – A tie between global competition issues and health care cost

A continuing flow of information from IFI on these issues was the key desire expressed plus about half thought we should broaden our general advocacy activities in Washington. The other half thought we should leave general advocacy to NAM and the other larger associations and continue to focus on what has been our very successful approach of "rifle shot" advocacy.

- TECHNICAL ISSUES AND NEEDS MOST SOUGHT BY THE MEMBERS

No. 1 – New technology aimed at process improvements to achieve zero defects

No. 2 – Access to consistently good quality raw material at world prices

The suggestions were for the industry's suppliers to spend very focused time listening to the very specific needs and issues the fastener manufacturing members have so as to develop what's really needed and not to try to sell just what's available.

- THE DESIRED TECHNICAL/ENGINEERING SUPPORT WANTED BY THE MEMBERS

No. 1 – That IFI continue to monitor and advise on domestic and international government legislative and regulatory actions that impact the industry.

No. 2 – That IFI continue to monitor and advise on domestic and international standards and proposed changes to standards and other issues that directly impact the industry.

No. 3 – That IFI have the capability to provide the membership and the industry with technical interpretative assistance and provide industry specific tools to facilitate same.

Supplementing the top three were the desire to be able to develop IFI standards where a “standards gap” may exist; the desire to move into electronic media as the vehicle to provide standards information; and the desire for IFI to make available ADVANCED technical seminars as members’ in-house technical staff continues to be rationalized.

- THE CHIEF POLITICAL AND REGULATORY CONCERNS FOR THE MEMBERS WERE

No. 1 – The lack of U.S. Government support for domestic manufacturing concerns and issues and the Government no-value-added cost imposed on manufacturers

No. 2 – The continuing upward spiral of health care cost

No. 3 – U.S. trade policy and the current unlevel playing field

The overwhelming belief is that our own government may be domestic manufacturing’s worst enemy. Continued involvement in our Government Affairs (GA) initiatives was considered an important Institute priority, with a continuing of our fastener industry “rifle shot” approach vs. adopting a “shotgun” general advocacy approach to our GA program.

- KEY MARKET FACTORS IMPACTING THE DOMESTIC FASTENER INDUSTRY

No. 1 – The reality that the fastener industry’s key customers are losing market share to foreign competitors and the tough barriers to entry to becoming suppliers to those new foreign suppliers.

No. 2 – The international “globalization” and “off shoring” of production by U.S. OEMs and upper tier producers.

No. 3 – The continuing “cost down” demands by key industry customers.

The recommendations for addressing these issues included continuing presentations by experts on what is occurring, why, future expected trends, and the careful evaluation of where opportunities might exist to impact these actions by focused government affairs or key customers’ information initiatives.

- CURRENT DEMOGRAPHIC TRENDS IMPACTING THE INDUSTRY

No. 1 – The rising cost of providing health care benefits to the workforce

No. 2 – The aging of the workforce and the increasing difficulty of finding skilled replacements

IFI is one of five associations jointly offering a pooled health care coalition to Member companies with an association owned reserve component to stabilize premiums. Time will tell if this works. Workforce training programs at the entry and skilled level will be evaluated in the immediate future as a strategic objective.

- CURRENT BUSINESS COMPETITION FACTORS IMPACTING THE INDUSTRY

No. 1 – Raw material cost

No. 2 – OEMs and upper tiers production shifts to offshore

The desire expressed here was for continuing information and analysis as to what is happening and what the trends indicate. Identifying what remedies exist and what actions can be taken, if any, was the end product sought.

The survey indicated that 85% of respondents ranked the value of IFI membership to be good to excellent, indicating our strategic direction seems to be correct. The primary challenges identified were to find new non-dues revenue sources to lower dues – allowing more membership building – and thus the distribution of the cost of operation over a broader base; maintaining the IFI's image as the principal technical organization for the industry in North America and around the world; and continuing to provide the membership with the best information available to allow each company to make its own best decisions in its own best interest. Using and enhancing our government affairs clout to the benefit of the industry appeared in many of the response areas surveyed.

Key strength areas identified were the opportunities for networking; the in-process shift to modernizing access to technical information; making effective use of our government affairs acumen; and leading collaborative efforts in the world of standards to the benefit of our members all were seen as critical.

NEW STRATEGIC GOALS

To those ends, the committee added three focuses for the period 2007-2010 in addition to continuing the current Vision, Mission and Operational Value in effect:

1. Focus on rifle shot opportunities in the government affairs arena that specifically help the industry, or segments of the industry, enhance their competitiveness in the domestic and world market.
 - getting government off domestic manufacturing's back

- pushing for rules-based international trade and the end of currency manipulation
 - reducing health care cost
 - insuring access to world priced raw materials and energy
 - work to end specific legislative and regulatory bottlenecks hurting the industry's competitiveness
2. Focus on IFI's organization and new non-dues revenue program opportunities to allow for dues rationalization and new Company and Associate membership development.
- reorganization of the technical aspects of the engineering function to more effectively focus on member needs
 - the new IFI Technology Connection program
 - refine the P & I Committee's role and function to capitalize on the IFI brand name value
 - the new On Line Store for one-stop shopping for the industry's standards, text books, information tools and industry unique software
 - producing a combined Inch/Metric Fastener Standards edition published annually using the desktop publishing tools already available
3. Review the Institute relationship with its domestic peer groups, the government, international peers, the public, the industry's key customer segments and the industry's key suppliers to determine if programs might be developed to enhance our members' effectiveness and efficiency in competing in the global economy.
- Where today does distribution fit in the supply chain models applicable to the different industry segments – could they fit in the IFI for a specific segment if unrepresented elsewhere?
 - What impediments exist to domestic fastener manufacturers participation in the different supply chains – how do we penetrate the “new domestics” in automotive, appliance, etc? What can IFI do to facilitate that?
 - How do we demonstrate the unique value domestic manufacturers bring to the table for domestic OEMs and key tier suppliers?
 - What fastener related/type manufacturers exist out there for which IFI could become a very natural home? Medical fasteners, non-traditional construction fastening systems and other to be identified specialty fastener suppliers.

Calendar of Meetings and Events

2008

JAN. 24	Division III Meeting	Birmingham, MI
MAR. 15 – 19	IFI ANNUAL MEETING	TORREY PINES – La Jolla, CA (rate \$335) LA JOLLA HILTON (rate \$260) - walk way to Torrey Pines Lodge
MAR. 19	Division II Meeting and ALMA Meeting	In conjunction with IFI Annual Meeting TORREY PINES – La Jolla, CA
APR. 15 – 17	ASME B18 Committee Meetings	Salt Lake City, UT
APR. 29 – 30 MAY 1	FTI Coldforming Workshop FTI Fastener Treatment Workshop	IFI Headquarters, Independence, OH IFI Headquarters, Independence, OH
MAY 5 – 7	ASTM International Committee Meetings	Denver, CO
MAY 20 – 21	National Industrial Fastener Show / East (Exhibits May 21 only)	Columbus, OH
MAY 22	Division III Meeting	Birmingham, MI
JULY 17	Division III Meeting & Golf Outing	Birmingham, MI or Chicago, IL
SEPT. 14 – 16	IFI FALL MEETING	THE RITZ-CARLTON, REYNOLDS PLANTATION (rate \$249) Greensboro, GA
OCT. 13 – 19	ISO Meetings	TBD
NOV. 2 – 4	National Industrial Fastener Show / West (Exhibits Nov. 3-4)	Las Vegas, NV
NOV. 16 – 19	ASTM International Committee Meetings	Miami Beach, FL
NOV. 27	<i>Thanksgiving</i>	
DEC. 2 – 4	ASME B18 Committee Meetings	Clearwater, FL
DEC. 25	<i>Christmas</i>	

2009

MAR. 21 – 24	IFI ANNUAL MEETING	LOEWS VENTANA CANYON RESORT (rate \$280) Tucson, AZ
JUN 8 – 10	Fastener Tech '09	Rosemont (Chicago), IL
SEPT. 26 – 28	IFI FALL MEETING	FOUR SEASONS HOTEL VANCOUVER (rate \$235 U.S.) Vancouver, BC, Canada