MANUFACTURING & TECHNOLOGY NEWS

COVERING INNOVATION, GLOBALIZATION AND INDUSTRIAL COMPETITIVENESS

PUBLISHERS & PRODUCERS, P.O. BOX 36, ANNANDALE, VA 22003
PHONE: 703-750-2664 FAX: 703-750-0064 URL: WWW.MANUFACTURINGNEWS.COM

Friday, April 27, 2007 Volume 14, No. 8

Steelworkers And Employers Combine Forces In A New Washington Trade Association

A new manufacturing trade association is up and running in Washington, D.C. The Alliance for American Manufacturing (AAM), a joint endeavor between steel companies and the Steelworkers Union hopes to help do its part to rebuild the U.S. industrial sector, press for enforcement of trade laws and engage with policymakers and the public in an educational campaign about the importance of manufacturing.

"We don't look at ourselves as just another association," says AAM executive director Scott Paul. "What makes us effective is the equal partnership with the union and their employers who have collaborated creatively with each other before with quite a bit of success because they understand their jobs are on the line." Companies involved are Alcoa, United States Steel, Goodyear, Allegheny Technologies, Mittal Steel and AK Steel.

The association has the financial security that comes from having a steady funding stream that was negotiated by the United Steelworkers in their collective bargaining agreement with steelmakers, leading Paul to use the term "permanency" when describing the alliance's plans.

"The strength we bring to [the Washington advocacy community] is the reach that we have into geographic regions and into congressional offices from some of America's leading companies and their union working together on these issues," says Paul. "The public certainly likes projects where people are coming to work cooperatively. So that will give us a leg up. It's an exciting time for efforts to strengthen manufacturing in America."

The Alliance announced its arrival in Washington with ads in The Hill and Roll Call newspapers and it has already funded research that it will soon be promoting. One is a forthcoming book called "Enforcing the Rules," which looks at the link between

(Continued on page six)

Virginia Tech Shooting Hits Close To Home: 'We Will Prevail'

BY RICHARD McCORMACK

On Thursday afternoon April 19, three days after the shootings at Virginia Tech, my wife and I put our dog in the car and headed south to visit our son, a senior engineering major at the university. As we drove four hours from Washington, D.C., through the Shenandoah Valley, I imagined what it must have been like for the parents of the slain children taking that same drive just a few days earlier, calling repeatedly to their children's cell phones, silently ringing: leaving messages you'd never want to hear. So thankful was I to the Lord that it wasn't me having to take that drive in a state of panic and delirium.

As we approached Blacksburg, I missed the exit for Main Street, a quicker road to my son's apartment. It bothered me. I was tired and anxious to get there and I had added another five minutes to the trip. I sighed and continued for another couple of miles to the main entrance to Tech.

I had not expected to be on campus — anticipating a route that bypassed the school to my son's

(Continued on page four)

A Federal Effort To Measure U.S. Innovation Is Timely

In August of 2006, Commerce Secretary Carlos Gutierrez announced that he was convening a panel of business leaders and academics to assess how best to measure innovation in the U.S. economy. This advisory group, whose first meeting was held in February, will study the impact of innovation on major sectors and will attempt to construct national and sectoral measures of innovation activity and its impact. To institutionalize this initiative, Gutierrez also announced that he is forming a Commerce Department innovation measurement team.

BY CLIFF WALDMAN

It is widely accepted among academic and business economists that innovative activity is essential for healthy productivity growth and global competitiveness. Recent global share and productivity data, which point to emerging productivity and competitive stresses, therefore suggest that the Commerce initiative is well timed.

National Science Foundation numbers suggest that while the U.S. lead in the share of global high-technology manufacturing output remains formidable, there has been slippage. The growth of the U.S. high-tech manufacturing share was relatively weak between 2001 (when it was 41.4 percent) and 2003 (when it was nearly 43 percent), while growth in the much smaller Chinese share was impressive, increasing from 6.3 percent to 9.3 percent in just two years.

More specifically, the National Science Foundation data raise concerns about key research and development intensive industries. For example, the U.S. share of global value-added in medical, precision and optical instrument manufacturing slipped from 39 percent in 1998 to less than 35 percent by 2003, while the European share grew from nearly 34 percent to 37.5 percent and the Chinese share grew from 1.6 percent to 3.1 percent. In pharmaceuticals, the U.S. share of global value-added slipped from 35 percent during 2001 to 32.5 percent during 2003, while the European share edged up from nearly 30 percent to 31.3 percent and the Chinese share increased from 4.5 percent to 6.1 percent.

Given the direct relationship between labor productivity and production costs as well as the central role that cost minimization plays in overall global competitiveness, recent productivity data are disconcerting. There was a significant decline between 2002 and 2006 in the annual growth of total business productivity, from 4.1 percent to 1.7 percent. Of particular note is the near halving of the annual rate of productivity growth between 2004 and 2006, even as annual GDP growth remained strong. This suggests a secular and not just cyclical productivity slowdown.

A close examination of the murkier manufacturing trend points to a potential productivity slowdown for industry, as well. Annual growth in manufacturing labor productivity slowed from 4.8 percent during 2005 to 4.0 percent in 2006 even as manufacturing production growth accelerated from 3.9 percent to 4.6 percent. Production and supply chain reforms have created healthier efficiency gains in manufacturing than the economy as a whole, but the near-term productivity future appears uncertain.

The Commerce advisory committee will confront numerous challenges as its seeks to develop national innovation metrics. In the view of this author, three are critical. The distinction between innovation input and innovation output must be considered. Further, the challenge of aggregating the innovation activities of highly diverse industries; and the need for global comparability are of importance.

The inputs that generate new and improved products and business processes are a complex

(Continued on page six)

Members of the Advisory Committee to the Secretary of Commerce on Measuring Innovation in the 21st Century Economy

Ashish Arora, Professor of Economics and Public Policy at Carnegie Mellon
Steve Ballmer, CEO, Microsoft Corp.
David Bernd, CEO, Sentara Healthcare, Norfolk, Va.
James Blanchard, Retired Chairman of the Board and CEO, Synovus Financial Corp, Columbus, Ga.
George Buckley, Chairman, President and CEO, 3M, St Paul, Minn.
Rajesh Chandy, Professor of Marketing, Carlson School of Management, University of Minnesota
Art Collins, Chairman and CEO, Medtronic, Minneapolis, Minn.
Kathleen Cooper, Dean of the College of Business at the University of North Texas
Michael Eskew, Chairman and CEO, UPS, Atlanta, Ga.
Luther Hodges, investment partnerships, Chapel Hill, N.C.
Dale Jorgenson, Professor of Economics at Harvard University
John Menzer, Vice-Chairman, Wal-Mart Stores, Bentonville, Ark.
Samuel Palmisano, CEO, IBM, Armonk, N.Y.
Carl Schramm, President and CEO, Ewing Marion Kauffman Foundation, Kansas City, Mo.
Donald Siegel, Professor and Associate Dean of the Graduate School of Management at the University of California at Riverside

Seventy-Eight Members Of House Join Manufacturing Caucus

The four-year-old House of Representatives' Manufacturing Caucus has attracted 78 members from across the political spectrum, with 36 republicans and 42 democrats participating. It is being chaired by Reps. Don Manzullo (R-Ill.) and Tim Ryan (D-Ohio).

The group plans to hold meetings across the country and promote policies to rebuild the U.S. industrial base. It will concentrate on issues related to workforce education and training, improving innovation, advocating a level playing field for trade, creating cheaper sources of energy and capital for expansion.

"Even though congressman Ryan and I have voted differently on many of our nation's trade policies, we agree that U.S. manufacturing is still under siege at home and abroad and we have come together to champion the necessity for a strong manufacturing sector in the United States," says Manzullo.

The group is planning a meeting in Niles, Ohio, chaired by Rep. Ryan, and in Lafayette, Louisiana, chaired by Rep. Charles Boustany (R-La.). The caucus is also developing a database that highlights federal programs aimed at manufacturing.

Here is a list of the members.

- Don Manzullo (R-Ill.), Co-chairman
- Tim Ryan (D-Ohio), Co-chairman
- John Boozman (R-Ark.)
- Dan Burton (R-Ind.)
- Dave Camp (R-Mich.)
- Steve Chabot (R-Ohio)
- Howard Coble (R-N.C.)
- Vernon Ehlers (R-Mich.)
- Phil English (R-Penn.)
- Paul Gillmor (R-Ohio)
- Phil Gingrey (R-Ga.)
- Virgil Goode (R-Va.)
- Sam Graves (R-Mo.)
- Ralph Hall (R-Texas)
- Robin Hayes (R-N.C.)
- Peter Hoekstra (R-Mich.)
- Bill Jenkins (R-Tenn.)
- Walter Jones (R-N.C.)
- Joe Knollenberg (R-Mich.)
- Thaddeus McCotter (R-Mich.)
- Candice Miller (R-Mich.)
- Tim Murphy (R-Penn.)
- Sue Myrick (R-N.C.)
- John Peterson (R-Penn.)
- Todd Platts (R-Penn.)
- Dennis Rehberg (R-Mont.)
- James Sensenbrenner (R-Wisc.)
- John Shimkus (R-Ill.)
- Bill Shuster (R-Penn.)
- Rob Simmons (R-Conn.)
- Mark Souder (R-Ind.)
- Todd Tiahrt (R-Kan.)
- Michael Turner (R-Ohio)
- Fred Upton (R-Mich.)
- James Walsh (R-N.Y.)
- Jerry Weller (R-Ill.)
- Roger Wicker (R-Miss.)
- Tom Allen (D-Maine)
- Dennis Cardoza (D-Calif.)
- Russ Carnahan (D-Mo.)
- John Conyers (D-Mich.)
- Jerry Costello (D-Ill.)
- Lincoln Davis (D-Tenn.)
- Rosa Delauro (D-Conn.)
- John Dingell (D-Mich.)
- Mike Doyle (D-Penn.)
- Rahm Emanuel (D-Ill.)
- Gene Green (D-Texas)
- Phil Hare (D-Ill.)
- Ruben Hinojosa (D-Texas)
- Jay Inslee (D-Wash.)
- Sheila Jackson-Lee (D-Texas)
- Stephanie Tubbs Jones (D-Ohio)
- Steve Kagen (D-Wisc.)
- Dale Kildee (D-Mich.)
- Ron Kind (D-Wisc.)
- John Larson (D-Conn.)
- Sander Levin (D-Mich.)
- Daniel Lipinski (D-Ill.)
- Jim Marshall (D-Ga.)
- Mike McIntyre (D-N.C.)
- Michael McNulty (D-N.Y.)
- Mike Michaud (D-Maine)
- Brad Miller (D-N.C.)
- John Murtha (D-Penn.)
- Jerrold Nadler (D-N.Y.)
- Grace Napolitano (D-Calif.)
- John Olver (D-Mass.)
- Frank Pallone (D-N.J.)
- Bill Pascrell, Jr. (D-N.J.)
- Collin Peterson (D-Minn.)
- Janice Schakowsky (D-Ill.)
- Louise McIntosh Slaughter (D-N.Y.)
- Bennie Thompson (D-Miss.)
- John Tierney (D-Mass.)
- Mark Udall (D-Colo.)
- Tom Udall (D-N.M)
- Mel Watt (D-N.C.)

Cato Says Trade Deficit Is A Reflection Of Economic Vibrancy

The U.S. trade deficit last year of $836 billion is widely considered to be a drag on economic growth, but there is no evidence to prove that assumption, according to the Cato Institute's Center for Trade Policy Studies. "The consensus on trade deficits and growth ignores the actual record of the U.S. economy in recent decades and the positive correlation of imports to domestic production," say Cato.

The consensus that trade deficits are a drag on the economy was on "full display" in February shortly after the Commerce Department release of the full-year trade numbers for 2006. Even the Commerce Department said higher trade deficits would reduce economic growth for the year.

But there is a "glaring problem" with linking burgeoning trade deficits with slower growth in GDP: "the evidence does not support it," says Cato. "In fact, the evidence more comfortably fits the alternative interpretation that an expanding economy promotes rising imports and an expanding current account deficit."

By comparing the current account balance to economic growth since 1980, a worsening deficit is almost always correlated with faster economic growth, and when the deficit is "improving," economic growth is worse. "In those years since 1980 in which the current account deficit actually shrank as a share of GDP, real GDP growth averaged 1.9 percent," according to Cato's research. In the years when the deficit grew at a modest pace of between 0.0 percent

(Continued on page 10)

Va. Tech Shooting... *(Continued from page one)*

townhouse. We took a right turn onto campus, drove a quarter mile past the visitor's center and approached the big "VT" letters on the left of the road. And I shuddered. Here we were, suddenly at the site of calamitous pain and bloodshed, the uninterrupted focal point of the global media for the past three days. It knocked the air out of my lungs. I struggled to take a breath. My chest constricted; speechless, dizzied.

These events — Columbine, Waco, Jonesboro, Oklahoma City, 9/11, the Washington sniper, the Amish elementary school, the Iraq war and now Virginia Tech — are no longer an aberration but are defining the new American culture: one of unfathomable loss of innocents at the hands of suicidal maniacs. What nightmare awaits us next?

We drove slowly through the quiet campus, feeling beat up from the week's events. We arrived and hugged our son and his roommates. They are all incredible people; struggling with the inexplicable, but maintaining a sense of humor, one of them hilariously mocking the killer's idiotic video performance.

Thank God for the youth of today. Our politicians, business leaders and academicians should stop castigating them for being indolent or ill equipped for the future, because they are neither.

In the days following the tragedy, the students at Virginia Tech defended themselves with the utmost rectitude from a second wave of snipers — this time the press corps — and they gallantly rallied around their beloved university, around each other and around their embattled leaders. In the face of despair and in a state of shock, they showed us the future of our nation: one of hope, inspiration and tolerance.

I have three children, ages 23, 22 and 18. For 23 years, I have resented criticism about the deplorable state of our youth and our educational system. There are an incalculable number of extremely bright, energetic and infinitely talented, motivated children and young adults, none of whom have ever been "left behind." Need evidence? Only 12 percent of the applicants to MIT were accepted for the 2007 school year, or 1,533 out of 12,433. "It was very, very hard to select such a small number of students in such a large and stellar applicant pool," said former MIT dean of admissions Marilee Jones. Or how about Stanford, which sent letters of acceptance to 1,715 of the 23,956 applicants, 7 percent. Even a huge school like Virginia Tech received 19,000 applications for a freshman class of 5,000.

Read the obituaries of the fallen Virginia Tech students and you know how much worse off the world will be without them, and that is only 32 students in a school of 26,000.

Our children have been flailed by politicians and armchair critics and pundits, self-fashioned smarter-than-anybody-else people, none of whom were in my house as my children stayed up until 1:30 a.m. on weeknights completing their AP history papers, studying for tests in calculus, physics and chemistry, writing stories on deadline for the high-school newspaper or — this very night — reading "Brave New World" by Aldous Huxley. And it wasn't me pushing them, either. They did it on their own.

It is time for the critics to shush up. We have put a lot on our children: the real-life specter of a calamitous death at the hands of madmen; a seemingly terrorized future with regards to a "generational" global war on terror; the specter of an ecological catastrophe; and enormous budget and trade deficits that they will have to pay off someday, somehow. And dare not mention the cost and sacrifice involved in providing and getting an education today. Our society has pulled the rug out from under them. They're on their own, yet they exude a collective and refreshing sense of optimism and confidence.

The burden of the war in Iraq is also falling squarely on their shoulders. Our young soldiers are courageous and heroic. Their entire generation will be carrying the scars from this conflict for the remainder of their lives together. No other generation is currently carrying such a heavy load. Yet do you hear them complain? Ever?

If you need to experience the future of this country, to gauge the character of our youth and the inspiration and hope that they provide for mankind, then log onto the Virginia Tech Web site and watch the convocation that was held the day after more than 170 bullets were shot in four classrooms. President Bush's benediction was among his finest showings in six years.

Watch the event through to the end, for the final minutes capture for eternity one of the great moments in American history. When the Earth is waste and void, when the darkness is upon the face of the deep, the human spirit does prevail.

At the end of the convocation, after the grieving students have listened to the adults, they get to have their collective say — in a cathartic, unplanned and exhilarating 30-second burst of energy; a release of unfathomable tension and grief; a redemptive moment that burns itself to memory. As my wife observed, it is as if they were opening the gates of heaven to their fallen peers.

Thank you young Hokies for showing us the true character of your generation. We needed that. You will prevail.

http://www.hokiesports.com/convocation.html

High-Speed Rail: Sometimes The French Get It Right

BY LLEWELLYN KING

Analysis of the French election paints France as the new Sick Man of Europe. This is the indictment: taxes are too high; the bureaucracy is too powerful; the trade unions are too influential; and the immigrant population is too separate, ghettoized in the banlieue.

Much of this is true, but it is not the whole story. There is another France — one with global horizons, talented scientists, and a strong sense of self.

It is just that the French model is not the American model. French entrepreneurship and creativity is often expressed through state-run corporations or corporations in which the state has a major voice. These include Airbus, the airplane manufacturer; Electricite de France, the world's leading nuclear utility; and Areva, which is selling nuclear plants around the world.

Big engineering fits the French model. At least it does so in the present structure of the French state. Of all the triumphs France can claim, none is greater than high-speed rail (train a grande vitesse).

On April 3, a specially-modified French high-speed train broke the world rail speed record, reaching 357 miles per hour in eastern France. Only an experimental levitating train has gone faster.

Much of Europe has been the beneficiary of French train technology. Brussels and Paris are now in easy reach of London.

In November, when the British complete a vast tunnel under London, travel time will fall even further. The London-Brussels trip now takes 2 hours and 20 minutes, but in November it will only take an hour and 51 minutes. Travel time from London to Paris will shrink from 2 hours and 35 minutes to 2 hours and 15 minutes. Anyone want to get into the security line at the airport?

A group of European executives associated with the high-speed train network has been in Washington promoting its ideas and, yes, gloating over Europe's lead in ground transportation. At a press conference here, they said high-speed trains use one-third the land of highways and one-ninth the energy of airplanes. More. Michael Davies of Eurostar, the operating company between London and the continent, also claimed that their service is "carbon-neutral," presumably because so much of the electricity comes from France's nuclear network.

The lesson for America here is that Old Europe has a few tricks up its sleeve. And European governments have invested in infrastructure, while investment has languished in the United States. Amtrak is underfunded, unreliable and accident-prone. As a consequence, we have become heavily dependent on cars and airlines, which are major contributors to congestion and pollution.

Even Europe's low-cost airlines have been squeezed by the "TGV effect." High-speed trains provide more convenience, economy and expedition. Since 1981, when TGVs first began running in France, European governments have embraced high-speed surface transportation as necessary for quality of life and economic growth.

Europe's high-speed trains work because they are not upgrades of traditional trains. They require dedicated track, and the trains themselves are unitary — the cars are hinged to each other to provide stability. And although the French are euphoric — at a time when they could use some euphoria — about the speed record, there are upper limits to the speed at which trains can travel. The French designers think the optimum is around 250 mph, and they doubt that a train can run at more than 400 mph. At that speed, the pantograph — the device that pulls down the electricity from an overhead line — would lose its effectiveness. Also, according to the French, noise and vibration would become unacceptable. Even so, the French-designed high-speed trains are a transportation breakthrough as significant as the jet airliner was in its day.

High-speed train service is Europe's equivalent of the U.S. interstate highway system.

While European politicians have been drawn to infrastructure, American politicians have depended on the free market to solve all of the nation's problems. Some of these are coming home to roost — health care and transportation. "Rebuild America" would be a great slogan for a presidential candidate.

— Llewellyn King is editor & publisher of White House Weekly, and former editor & publisher of The Energy Daily, New Technology Week and Defense Week. His column can be read at http://www.kingpublishing.com/.

Stop Criticizing The WTO, Says Council On Foreign Relations

The United States has benefited from the World Trade Organization, and it is "reckless" for members of Congress and others to criticize the "fragile" organization, says a study from the Council on Foreign Relations. The WTO's dispute settlement system "reflects a delicate balance between toughness and respect for sovereignty," writes Robert Lawrence, professor of international trade and investment at Harvard University's John F. Kennedy School of Government and a member of the President's Council of Economic Advisors from 1998 to 2000. "Rather than criticizing the result, U.S. policymakers and legislators should invest more energy in defending it."

The WTO has reduced the need for the United States "to resort to unilateral retaliatory measures, limiting an important source of tension between the United States and its partners," writes Lawrence in the study entitled "The United States and the WTO Dispute Settlement System." The system has been helpful in opening foreign markets to U.S. exports, he writes. "Further, the dispute settlement mechanism curbs the protectionist instincts of U.S. trade policymakers and so underpins prosperity by acting as a counterweight to less productive but politically influential domestic industries."

Enforceable trade rules "offer the best hope of forestalling a tit-for-tat

(Continued on page 10)

Steelworkers...(From page one)

applying trade laws and generating wealth in the United States. "It goes to the heart of the opposition's argument, which is when you enforce trade laws you raise prices for consumers in this country," Paul explains. The book "does an economic analysis of that."

Authors Greg Mastal, Larry Chimerine, John Mangus, and Andrew Szamosszegi, all well regarded in trade law and economics, dispel the argument that enforcing trade laws hurts the U.S. economy because consumers end up paying more for products. "When you compare [those savings] to wages, the tax base and the profits that are foregone by not holding our trade partners accountable, it finds that, on average, there is a 50-to-1 benefit of enforcing our trade laws," says Paul. "We will have the resources to disseminate the work that we do and to produce high quality work that is comparable to what policymakers and others are used to seeing."

The group also intends to collaborate with other organizations working to reduce health care and energy costs, improve education, promote the importance of manufacturing to national security and improve the image of manufacturing. "We think that by working together we have a better shot to do something than by pointing fingers at each other," says Paul. "We're unique and we're a hybrid of the union and the companies they bargain with which makes for a powerful partnership. It is one that you rarely find in Washington. This is what will make us different."

Among the staff working for the Alliance for American Manufacturing are:

Scott Paul, executive director, was the principal lobbyist for the Industrial Union Council at the AFL-CIO.

Horace Cooper, deputy director, is an assistant professor of constitutional law at George Mason University School of Law and senior fellow with the National Center for Public Policy Research. He worked on Capitol Hill as counsel to House Republican Majority Leader Richard Armey from 1999 to 2001 and in the current Bush administration as deputy director of Voice of America and as the chief of staff and counsel for the Department of Labor's Employment Standards Administration.

Jonathan Swain, communications director, worked for two years at Angie's List and for eight years as press secretary for Indiana Gov. Joe Kernan.

Mike Wessel, senior advisor, is president of The Wessel Group and serves as a member of the U.S.-China Economic and Security Review Commission. He is a member of the Council on Foreign Relations and is a staff advisor to the Labor Advisory Committee of the USTR. He worked for 20 years on the staff of House Democratic Leader Richard Gephardt.

For more information, set your browser to www.americanmanufacturing.org.

Innovation...(Continued from page two)

mixture of labor, capital and other types of resources in combination with an investment of research time that vary greatly among industries. Because new and improved products and processes themselves are reflected in total factor productivity growth, it is measures of innovation inputs that are missing and need to be the focus of new sectoral and national measures.

Some question whether national indicators can be constructed at all given the broad diversity of industries in the modern U.S. economy. How do you aggregate the innovative activities of a steel plant and an Internet firm? If a clear and empirically translatable definition of innovation input is developed, the aggregation problem can be managed. Government economists and statisticians have been able to calculate aggregate values for employment, capital investment, profitability and other economic measures in spite of industrial diversity because they have clear working definitions of these parameters.

Creating globally comparable innovation metrics is a considerable challenge given the growing number of production and market share competitors to the United States. But global comparability is essential as emerging competitors develop their own innovative infrastructures. The members of the advisory committee will find it useful to examine the Eurozone innovation tracking system, which utilizes a fairly sophisticated Community Innovation Survey (CIS). The CIS questionnaire is designed to collect information about product and process innovation as well as organizational and marketing innovation.

In spite of the many challenges, the Commerce Department effort will clearly reap rewards. National innovation measures will allow policymakers to benchmark U.S. activities against key competitors in addition to providing clues as to the appropriate set of policies that are needed to maintain a competitive level of innovation input. Sector measures will allow businesses to benchmark their activities against a national average and perhaps against international averages. Well-constructed innovation metrics will be critical tools for U.S. success in the evolving global economy.

The advisory group is seeking comments from interested parties. To submit your ideas or for more information, go to http://www.innovationmetrics.gov/.

— Clifford Waldman is an economist at the Manufactures Alliance/MAPI, and council director to the Information Systems Management Council and Manufacturing Council.

OUR HEROES

***Manufacturing & Technology News* editor Richard McCormack was in Elgin, Ill., this week, giving a speech at the Manufacturers' Resource Conference at the Elgin Community College sponsored by the Elgin Area Chamber of Commerce.**

He passed out index cards and asked the 100 or so attendees to write down their hero. Here's the response:

- Bill Gates (2)
- Jack Welsh (2)
- Walt Disney (3)
- Chris Brady: "Launching The Leadership Revolution."
- Alan Greenspan
- Malcolm Baldrige: "For inspiring the Baldrige Award."
- Gottlieb Wilhelm Daimler
- Gerhard Richter
- Peter Jackson
- Henri Matisse
- Neil Young
- Bono
- Joe Strummer
- Tom Scholtz
- Lincoln Foundation in Illinois
- James Michener
- Ernest Hemingway
- Sean Connery
- Clint Eastwood
- Oprah Winfrey: "For raising and contributing to awareness of issues and concerns both positive and negative."
- Emeril Lagasse: "Success in creative endeavor combined with intelligence and hard work and willingness to learn; success through being himself; gives back to the world."
- Jack Bauer "24"
- Rachel Ray: "With a little planning, great things can happen."
- Lucille Ball: "Always positive, always looking for solutions to the present problem."
- Colin Powell (3)
- Ronald Reagan (3)
- George Bush (2): "For trying to do good, perhaps sometimes unsuccessfully."
- Michael Chertoff
- Barak Obama
- Nancy Pelosi
- Norman Schwarzkopf (2): "For the way he commanded people and technology resources with stunning effect."
- Bill Clinton
- Jimmy Carter
- Gerald Ford
- JFK (4): "Inspired me to get an aerospace engineering degree with his challenge to 'put a man on the moon by the end of the decade.' "
- FDR
- Winston Churchill
- Teddy Roosevelt
- Abe Lincoln (2)
- Thomas Jefferson
- Peter Jennings
- Katie Couric
- Diane Sawyer
- Michael Jordan: "For his passion and ability to get the most out of his teammates."
- Walter Payton (2): "He never gave up as a football player and he died preaching that same 'attitude.' "
- Herschel Walker
- Wayne Gretsky
- Paul McVeigh
- Frank Lloyd Wright
- Stephen Hawking
- Albert Einstein
- Isaac Newton
- Galileo Galilei
- Leonardo da Vinci
- God (2)
- Jesus (2)
- Mother Theresa
- Pope John Paul
- "None" (15): "Not a sports figure...Sure as hell not a career politician...I guess we could really use a hero about now."
- Vicky Armel (Detective with the Fairfax County Police Dept. killed May 8, 2007, by an 18-year-old.)
- Teachers
- Inventors and innovators (2)
- Active military personnel (3)
- Christian Missionaries
- Entrepreneurs
- Doctors
- "Anyone who gives more than receives; 'gives to give.' The balanced individual who takes the leap to self employment and contributes to the community."
- Father (7)
- Mother (4)
- Sister (3)
- Brother
- Mother & Sister "Who were my predecessors' with breast cancer and I did not know what they went through until I was diagnosed myself."

Letter To Editor

Ross Perot said if we open up trade like we have done that you would hear a "giant sucking sound," and that's what's taking place. For some reason, both political parties are for trading with these countries when they know the only people to benefit are the large business owners, corporations and foreign countries. However, the middle class in the United States is currently getting hurt, and it ultimately controls a large part of the U.S. economy. When it hurts sooner or later we all will hurt.

How much is enough? Do we really need to break the wheel before we start repairing it? Greed in the corporate world and among shareholders is a real problem and at some point these people will need to figure out where their heart is. If it's with another country, then please move there, work there and make your money there.

The United States is a place that is envied. Now we have people who want to fix the rest of the world. They think replacing labor, technology, IT and other jobs with those in foreign countries will somehow work out because Americans will figure out something else to do and spend their money on products that are imported. Maybe, but a large portion may not make it at all. Many people are not cut out to be entrepreneurs.

We need to realize that even construction jobs are being taken over by illegal immigrants without a hand slap.

This will probably not even be read, however, it seems as though we are being treated like sheep: lied to and manipulated. For what?

We used to have hurricanes. Refineries were shut down for maintenance in the past without adding 30 cents to a gallon of gas. What changed?

Now corn prices are going up because of ethanol, increasing the cost of most food products. Bill Gates wants foreigners to enter and work in the United States because he wants to hire the best talent. But the foreigners don't have a $100,000 student loan to pay back. They don't have to afford to live in the United States while going to school. They didn't put their parents in big-time debt. Now why would a 3.2 GPA foreign student get picked over a 3.5 GPA U.S. student? Because "Bill" gets a bigger tax break by hiring them. He should get a bigger tax break by hiring within the United States. That would help solve the problem.

Out of all the people who defaulted on their loans or lost their homes to foreclosure how many of them lost their job to outsourcing and couldn't pay their mortgage anymore?

What happened to the United States? What will become of our kids if we keep following this horrible path? It is a game that needs to end.

—Norman Dale
Dale.Norman@us.bosch.com

Challenger's Suggestions For Nervous Job Holders

The Citibank announcement of 17,000 job cuts on April 11 is the largest single job-cut announcement outside of the automotive industry since 2005, according to Challenger, Gray & Christmas, the outplacement firm. With the Citibank job cuts, the U.S. financial sector has now announced 33,432 job cuts so far in 2007, compared to 15,253 during the same period last year. Only 6,138 of the financial sector job losses this year are related to the slowdown in the housing and mortgage lending industry, with the remainder aimed at reducing costs.

From January 2004 through the first quarter of 2007, the automotive industry announced 370,000 job cuts.

Massive recent layoffs from other companies including Kraft, Pfizer, Sprint, Coca Cola and Circuit City are a warning for tens of thousands of workers wanting to keep their jobs, says Challenger. To stay employed, workers need to pay close attention to their performance. They should postpone any upcoming vacations, become an "information vacuum," keep a perfect attendance record, keep supervisors updated on all their achievements and make sure that they're well liked, Challenger advises.

Modest Growth In Tech Jobs

The United States high-tech industry is slowly coming out of its slump. The country added 150,000 new jobs in the high-tech sector in 2006, up from 87,000 new jobs created in 2005. But only 5,100 of the new tech jobs created last year were in manufacturing, according to the latest "Cyberstates" report from the AEA, formerly known as the American Electronics Association.

Software services and engineering and tech services employment were up by 88,500 jobs and 66,300 jobs, respectively, in 2006. Only the communications services industry continues to struggle, losing 13,300 jobs in 2006.

California led the nation in net job creation in 2005, the latest year for data. Florida saw the second largest gain, adding 10,900 tech jobs in 2005. Virginia surpassed Colorado to lead the nation with the highest concentration of tech industry workers as a percent of the private sector workforce (8.9 percent).

Venture capital investment in the technology industry rose by $285 million in 2006 to $12.7 billion. Technology accounts for half of all venture capital investments. R&D expenditures by technology companies increased 22 percent in 2004, the most recent data available, totaling $70.6 billion, a record amount, says the report.

NIST: First Authorization Since '92

The House Science Committee has done something that it hasn't done since 1992: it has passed an authorization for the National Institute of Standards and Technology (NIST). The "Technology Innovation and Manufacturing Stimulation Act of 2007" (HR-1868) authorizes funding for NIST through 2010, and places the agency on a trajectory for a doubling of its laboratory research budget in eight years. It also provides the basis for funding the Manufacturing Extension Partnership at a growing rate. And it changes the Advanced Technology Program, long criticized as corporate welfare, to the Technology Innovation Program.

Joint Strike Fighter Program Office Is Going Lean

BY MIKE WALL

The U.S. Joint Strike Fighter (JSF) program office is the latest Defense Department organization to jump on the lean path. Lockheed Martin is leading a team of five major defense contractors including Northrop Grumman, BAE Systems, General Electric and Pratt and Whitney to develop and test the JSF, which has been designated the F-35 Lightning II. The OEM development team has been applying lean principles to the development, production and testing phases of the JSF to reduce the cost and lead time of these processes. The program is expected to produce more than 3,000 airplanes with a projected total production life cycle worth $240 billion. The first fighters, at a projected cost of $82 million each, are scheduled to be delivered in 2010 to the U.S. Air Force.

However, the JSF program office is not waiting until 2010 to begin identifying and removing waste from the maintenance and sustainment processes necessary to keep the fighter operational once it's deployed to the field. British Royal Navy Captain Graham Rowell, the Joint Strike Fighter sustainment business planning leader, has been given the task of coordinating the improvement efforts of military units in nine countries along with the OEM development team to improve sustainment processes before the aircraft is fielded.

The U.S. Air Force, Navy and Marines will fly the jets along with air forces in the United Kingdom, Australia, Canada, Denmark, Italy, the Netherlands, Norway and Turkey. Each has its own process for maintaining aircraft and making needed modifications. These multiple processes increase lead time, complexity and cost of maintaining the aircraft.

The JSF program office is using lean tools and techniques such as value stream mapping and analysis to examine maintenance and sustainment processes for aircraft currently in service, such as the F16 and A10, to identify waste that can be designed out of future JSF processes. Sustainment processes include things like configuration management, problem reporting and resolution, asset management, supply and logistics.

As much as possible, the JSF program office hopes to reduce the variation in work sequences among the various military services of the nine partner countries. Creating one process will help meet the program's goal of making it as easy as possible to coordinate F-35 units in combat, if needed, while at the same time reducing the cost of maintenance. Over 50 representatives from these units participated in the first value stream analysis sponsored by the JSF program office in February. Numerous opportunities for improvement were identified and an action plan was developed to implement specific improvement activities over the next 12 months.

Lean improvement activities can be as simple as reorganizing a work area to keep tools, parts and information easily accessible, or standardizing work sequences so that essential tasks are performed in the same way with the same results by all persons assigned to the task. It also can entail eliminating office reports, signature requirements, hand-offs, queue times and rework procedures that add steps, time and cost but no value to the final product or process.

"We're trying to implement a lean approach right from the beginning as opposed to going in and leaning up an approach that is already out there," says Rowell.

The ultimate objectives are to reduce life-cycle maintenance costs and problem resolution response times while increasing operational readiness. Rowell hopes to have the new processes in place before the JSF goes into service in 2010.

— Mike Wall is president of Better Enterprise Solutions Corp. and a former 20-year veteran of Boeing specializing in lean maintenance, repair and overhaul. He worked on the UK Harrier fighter from 2001 to 2003, and helped save more than $100 million by implementing lean maintenance procedures.

Subprime Loans Could Plague Auto Industry

U.S. automobile dealerships might be headed for some financial trouble caused by sub-prime loans made to financially risky buyers. Last year, auto dealerships initiated almost $50 billion in sub-prime new vehicle loans, according to J.D. Power and Associates. That total represents 1.85 million of the 9.5 million customers who financed their vehicles through their dealership.

"While it is unlikely that subprime auto lenders are exposed to the same level of risk as subprime home mortgage lenders because auto lenders do not have variable rates, the potential still exists for increased charge-offs," says David McKay, senior director of auto finance and insurance at J.D. Power. "Any tightening of the subprime market would leave the lenders and the automakers that have heavy portfolios of subprime customers exposed to increased losses and vehicle sales in the future business."

The industry has been aggressively pushing sales through riskier loan practices. The average loan term has increased from 62 months in 2004 to 64 months in 2006. Down payments as a percentage of transaction price have declined from 19 percent to 16 percent during that period.

Subprime loans account for 25 percent of all loans in the compact car segment, followed by pickups (22.5 percent) and sports cars (19.6 percent). The lowest segment is full-sized, at 7.5 percent.

"At the origin level, the domestic automakers have the most exposure to the subprime market, with 22.2 percent of their loans or leases falling in this category in 2006," says the J.D. Power analysis. "Asian automakers' subprime business in 2006 was 17.4 percent of total, while European subprime loans and leases were 11.3 percent of total."

Don't Criticize WTO...(From page five)

use of protective barriers that would further contribute to the deterioration of support for trade," according to Lawrence, who is a senior fellow at the Institute for International Economics. "Contrary to what many policymakers suppose, vigorous dispute settlement tribunals make the revival of the Doha Round more likely."

The United States has repeatedly been found to be in violation of WTO rules because of such things as cotton subsidies and steel tariffs. Yet "grand proposals for reform are fundamentally misguided," writes Lawrence, There are, however, some "realistic fixes" that could improve the WTO dispute settlement system.

The WTO should allow more participation by multinational corporations and non-governmental organizations "that have a stake in the proceedings"; it should allow public hearings before the dispute settlement panels; allow countries to appeal decisions in which the panel has authorized the plaintiff to retaliate; and increase the resources of the dispute settlement mechanism "so as to accelerate decision-making," says the study.

The United States Department of Commerce and the U.S. Trade Representative should also be more active in using the dispute settlement process as a means to open export markets. The U.S. needs to improve its "record of compliance with WTO rulings," says the study. And the United States should create a panel "to examine incidences of U.S. violations of WTO rules and recommend steps to avoid recurrence."

The 51-page report is located at http://www.cfr.org/content/publications/attachments/WTO_CSR25.pdf.

Cato: Deficit Is Okay...(From page three)

and 0.5 percent, GDP growth averaged 3.0 percent. But in the years that the deficit increased by more than 0.5 percent of GDP, real GDP grew by an average of 4.1 percent.

"In other words, economic growth has been more than twice as fast, on average, in years in which the current account deficit grew sharply compared to those years in which it actually declined," Cato notes. "If trade deficits drag down growth, somebody forgot to tell the economy....Absent any real evidence, the standard assumption that trade deficits are a drag on growth should be re-examined before it is repeated again uncritically."

The analysis, "Are Trade Deficits a Drag on U.S. Economic Growth?", is located at http://www.freetrade.org/pubs/FTBs/FTB-027.html.

U.S. Companies Lead World In R&D Spending

The 2,000 largest companies in the world conducting research and development increased their investment in R&D by 7 percent in 2005 to $471 billion, according to the European Union's Industrial R&D Investment Scoreboard. The average growth among the top 1,000 EU-based companies was 5.3 percent, compared to the previous year's "near stagnation," say the EU. Non-EU companies increased their investment by 7.7 percent.

"The list of 10 R&D investors includes more companies from the U.S. due mainly to the appreciation of the U.S. dollar against the euro in 2005," says the EU's Office of Industrial Research and Innovation.

Ford, Pfeizer and General Motors were the top three in worldwide R&D spending, followed by DaimlerChrysler. "The average R&D intensity of U.S. companies is higher than that of EU companies," notes the EU. Four out of the top six were automobile manufacturers (with Toyota in sixth place). Eighteen of the top 50 R&D investors were American companies; 18 were European companies; 10 were from Japan. Two were from South Korea and two were from the United Kingdom.

"Worldwide R&D investment continues to be highly concentrated in automobiles and parts, IT hardware and pharmaceuticals and biotechnology," says the EU ranking. "Each of these sectors has a similar share of worldwide R&D, around 18 percent, and together account for more than half of global R&D investment."

The rankings list the 1,000 top EU companies, the top 1,000 non-EU companies and the top companies by industrial sector and EU member states. For each company, they list R&D investment, net sales, number of employees, R&D to net sales ratio, market cap and capital expenditures. The rankings are contained in the report "Monitoring Industrial Research: The 2006 EU Industrial Investment Scoreboard" (technical report EUR 22348EN — ISSN 1018-5593), located at http://iri.jrc.es.

MANUFACTURING & TECHNOLOGY NEWS (ISSN No. 1078-2397) is a publication of Publishers & Producers, P.O. Box 36, Annandale, VA 22003. On the Web at: www.manufacturingnews.com.

PHONE: 703-750-2664. FAX: 703-750-0064. E-MAIL: editor@manufacturingnews.com.

Annual Subscription Price: $495. Frequency: Twenty-two times per year.

Editor & Publisher: Richard A. McCormack (richard@manufacturingnews.com)

Web Technical Coordinator: Krishna Shah (krishna@manufacturingnews.com)

Business Manager: Anne Anderson (anne@manufacturingnews.com)

Electronic distribution of a PDF version of this publication within an organization is available at a reasonable rate.

Subscribers have access to the Manufacturing & Technology News Web site, which includes a keyword searchable archive of the past eight years of Manufacturing & Technology News. PDF versions of the publication are available for download. Register in the "Subscribers Only" section at www.manufacturingnews.com for electronic delivery.