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Commerce Department Report On Offshore Outsourcing Finally Sees The Light Of Day

After nearly two years, *Manufacturing & Technology News* has obtained a copy of the elusive Commerce Department report on offshore outsourcing of high tech jobs in the information technology, semiconductor and pharmaceutical industries. The report, which was required by an Act of Congress, was to be submitted to Congress in July 2004. But it was never released, due to fears within the Bush administration that the controversial subject would hurt the president's re-election campaign. Senior officials in the Bush administration, including the head of the Council of Economic Advisors, had publicly embarrassed the Bush team with cavalier statements describing offshore outsourcing of high tech jobs as being good for the U.S. economy.

BY RICHARD McCORMACK

The $335,000, 336-page report obtained last week never saw the light of day. *Manufacturing & Technology News* submitted a Freedom of Information Act request to the Department of Commerce on March 17, 2005, seeking release of the study, but that request was denied. Eventually, what was produced and provided by the Commerce Department in September 2005 was a 12-page document bearing a July 2004 publication date that bore little resemblance to the work done by analysts at the Technology Administration, all of whom have recently been told they will be laid off due to severe budget cuts for the agency and the issuance of a reduction in force (RIF).

Although that 12-page report (at $28,000 per page) was provided to *MTN* and Congress, it was not made available to the public and an electronic copy has never been posted on the Commerce Department's Web site. That summary put a positive spin on offshore outsourcing and includes analysis written by political appointees that was not in the original work.

Democrats on the House Science Committee asked for a copy of the full report in October, 2005, but the Commerce Department denied that request on a specious Freedom of Information Act legal claim that only the political party in power in Congress could require the document's release.

After Republicans on the Science Committee acquiesced to Democrats' demands, the Commerce Department provided Congress with the full document, a copy of which has been provided to *MTN*.

That document is quite different from the original 12-page summary, and it is apparent why Bush's political appointees so vehemently refused its release. The administration "was scared of anything having to do with outsourcing," says one source who is familiar with the report's travails. The Bush team "could not afford even a discussion" of the outsourcing issue.

"The report speaks for itself," said Ben Wu, who

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Competitiveness Takes Back Seat To Political Pork

KEN JACOBSON

If competitiveness is in the eye of the beholder, then Sen. Richard Shelby (R-Ala.) sees a lot more of it — $20 million more, in fact — in biomedical research at the University of Alabama at Birmingham (UAB) than he does in the entire Advanced Technology Program (ATP).

The bill that Shelby crafted as chairman of the Senate Appropriations Subcommittee on Commerce, Justice & Science (CJS) lards the account for Construction of Research Facilities at the National Institute of Standards and Technology (NIST) with

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Feds Spend Big Bucks On Professional Services

The market for providing professional services to the federal government is growing at a rapid rate, increasing from $102 billion in 1995 to $167 billion in 2004, according to an analysis by the Center for Strategic and International Studies (CSIS). The federal government is now spending more money on professional services than it is on hardware.

The number of contractors selling services to the feds is also growing rapidly, from 45,000 in 1995 to 83,000 in 2004. "Most of the growth has come from the entry of firms undertaking small (under $25,000) contract actions," says CSIS. The number of contracts awarded annually has almost doubled to 600,000 in 2004, but the average value of the contracts has decreased from $385,000 in 1995 to $270,000 in 2004. The median contract has also dropped from $63,000 in 1995 to $30,000 in 2004.

"To be competitive, contractors need to win a position on multiple-award federal schedule contracts and then must scramble to win the contract actions," says CSIS. "The declining contract action values imply that firms must compete harder just to sustain level revenues."

CSIS found that the middle-revenue tier of federal service contractors is experiencing a "significant erosion" of its share of the market. Small and large companies are winning more awards. "In 1995, middle-tier companies captured 44 percent of the total value of federal professional services contracts," says the 70-page study entitled "Structure and Dynamics of the U.S. Federal Professional Services Industrial Base 1995 - 2004." But by 2004, the mid-sized companies were able to capture only 29 percent of that value. "Small business set-aside laws and other policies assisting small firms have clearly worked in the professional services industry," says the study.

"Small companies have sustained a 19 to 22 percent market share in the value of prime contracts, and their share of the market is larger if the value of subcontracts is included. The large companies in this industry have been particularly active via mergers and acquisitions and have been able to increase their market share to 49 percent of the total market. Thus the middle tier has been squeezed from above by consolidation and from below by small businesses holding on to their share of the market. How to replenish the middle tier is a key strategic and policy issue for the industry."

The industry has also become more integrated over the past 10 years, and firms are providing services in a variety of market sectors including information and communications services, professional and management services, R&D services, and facilities and equipment related services

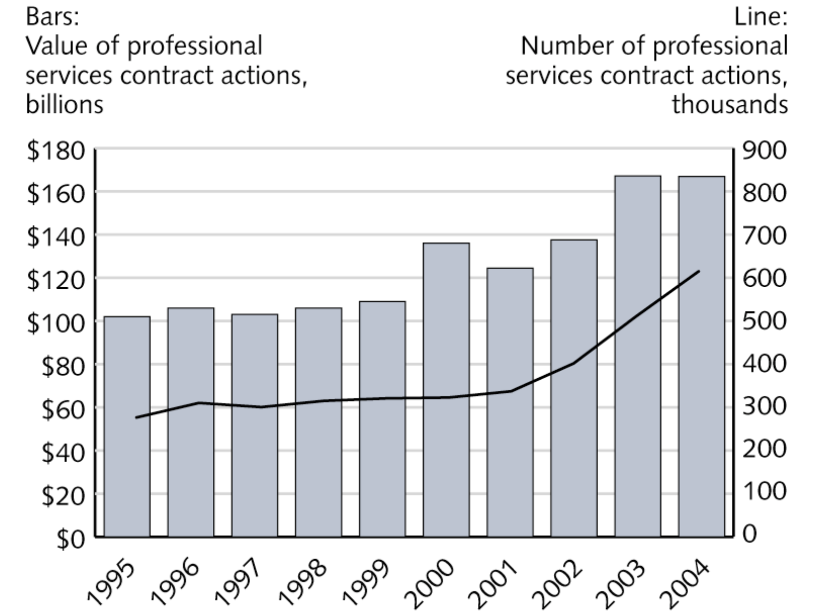
"The professional services industry and the defense hardware - defense platform industry have become more intertwined as the large platform primes have made significant acquisitions in the market," CSIS notes. "The other major shift in the structure of the industry has been the fourfold increase in the number of heavy engineering and construction firms in the ranks of the top 20 contractors, a trend clearly driven by the reconstruction efforts in Iraq and Afghanistan."

The Defense Department spent the most of any agency on professional services ($107 billion) in 2004, accounting for 64 percent of the total, followed by the Department of Energy ($18 billion), or 11 percent of the market. The General Services Administration is the third biggest purchaser of services, at $7 billion, or 4 percent of the market.

Some industry segments are growing faster than others. Information and communications services is growing at an annual

(Continued on page six)

Growth of Federal Professional Services Market



(Source: CSIS)

'WHO DOES THE GOVERNMENT WORK FOR? SHARP?'

Sandia Labs' Contract With Sharp Raises Questions About Tech. Transfer Program

A Cooperative Research and Development Agreement (CRADA) signed by Sandia National Laboratories and Sharp Corp. of Japan to develop advanced photovoltaics and fuel cells is raising concern about whether U.S. taxpayers are supporting a Japanese company at the expense of U.S. competitors. A congressional oversight staff member says the intent of the technology transfer program is being subverted by Sandia and the Department of Energy's National Nuclear Security Agency (NNSA), which runs the lab. "Who does the government work for? Sharp?" asks one congressional aide.

The CRADA program was created in the late 1980s as a means to improve U.S. competitiveness in the face of Japan's technological surge. As part of the law creating CRADAs, foreign companies are allowed to work with U.S. national labs, but only on the condition that "products embodying inventions made under the CRADA or produced through the use of such inventions will be manufactured substantially in the U.S.," according to the Federal Technology Transfer Act of 1986 (PL-99502). Sharp does some solar module assembly in the United States, but it manufactures its high-tech photovoltaic cells at its Katsuragi Plant in Nara Prefecture in Japan. Its Web site states that the Sharp Manufacturing Company of America, based in Memphis, Tenn., "produces microwave ovens and copier toner."

Managers with the Department of Energy's headquarters office of the National Nuclear Security Agency, which oversees operation of Sandia, did not respond to numerous calls and e-mails seeking answers to questions submitted by *MTN* about the Sharp CRADA (see box on page 10).

In announcing the agreement in January, Sandia said the technical focus with Sharp "is on portable power applications, such as use of direct methanol fuel cells to power consumer electronics like laptops, cell phones and PDAs." Sharp asked Sandia "to fabricate fuel cells using Sandia's proprietary membranes and catalysts," says the press release. "They will fabricate and test the fuel cells during the 12- to 18-month project under conditions relevant for Sharp's applications....Sandia can apply its extensive materials capabilities to help Sharp bring new products to the market, and Sharp with its extensive electronics and manufacturing expertise will assure the development of commercial mobile power technology that is important for many applications, including man-portable power and distributed sensor networks."

The agreement signed between Sandia and Sharp is proprietary and is not available to the public, explained one DOE official.

Deborah Payne, manager of the CRADA agreements department at Sandia Labs said that every CRADA signed with a foreign-owned company is required to go through an approval process with the Department of Energy and the United States Trade Representative.

If the company does not do a significant amount of manufacturing in the United States, then DOE is required to complete a "Net Benefits Statement." Within this statement, Sandia and the CRADA partner provide information describing the proposed investments the company will make in U.S.-based plants and equipment. They forecast the creation of new jobs in the U.S.; describe proposed enhancements of the domestic skill base; explain how domestic development of the technology will be promoted; forecast the positive impact the agreement will have on the U.S. balance of payments; and describe how the leveraging of government resources will further DOE program goals.

Sandia, a government-owned, contractor-operated lab, did not provide DOE with a Net Benefits Statement.

"It is very, very rare that we do that Net Benefits Statement because it is, quite frankly, very problematic to pass that hurdle," says Payne. "There was no Net Benefits Statement because it wasn't required, because Sharp agreed to substantial U.S. manufacturing. They do substantial manufacturing now and they are intending to." Moreover, Sandia researchers working with Sharp will learn a great deal, given that the

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Cooperative Research and Development Agreements Between Sandia National Labs and Foreign Companies

- **Bruker Daltronics:** Modification of Fourier Transform Mass Spectrometer System to Improve Detection Capabilities.
- **Frola LLC:** Optical Fiber Technology for Industrial Laser Applications.
- **Toyota Technical Center, U.S.A., Inc.:** Science and Technology Development for Automotive Applications.
- **Catalytic Distillation Technologies:** Advances In Process Intensification Through Multifunctional Reactor Engineering.
- **ARC Seibersdorf:** MEMS Field Emission Thruster Development and Test.
- **Tenix Industries PTY Ltd.:** Unattended Water Safety Analyzer.
- **Liekki Oy:** Development of Standardized Double-Clad Fiber for Power Scaling and Fiber Lasers and Amplifiers.
- **Sharp Corp.:** Advanced MEA and Single Cell Prototype Development.
- **Canberra Aquila:** Secure Sensor Platform System Development and Commercialization.

Loading Up On Congressional Pork...

(Continued from page one)

$60 million in funds earmarked for his home state while following the President's budget and House appropriators in zeroing out NIST-managed ATP.

Furthermore, the competitiveness Shelby is eyeing seems not to be that of the U.S. against other world nations in the race for economic survival, but that of Alabama against other U.S. states in the race for federal research dollars.

According to a press release on the senator's web site titled "Shelby Secures Funding for Important Projects in Birmingham Area," the $20 million for UAB would "allow for the construction of another new state-of-the-art facility [that] will play a major role in UAB attaining its goal of being a top 10 recipient of [National Institutes of Health] grants."

In approving Shelby's bill (H.R. 5672) on July 13, the Senate Appropriations Committee simultaneously signed off on earmarks worth $50 million, placed in the selfsame NIST construction account, for the home state of its chairman, Mississippi Republican Thad Cochran. Together, the two neighboring states soaked up $110 million of $123 million in earmarks crammed into that single, $191 million account.

In truth, total earmarks in the account would drop $4 million under the Senate version of H.R. 5672 from their current-year level of $127 million, with Mississippi's share up $10 million and Alabama's down $3 million (see box at right).

And that may be only fitting: NIST is one of three agencies picked by the administration to lead this year's American Competitiveness Initiative (ACI), and the $68 million left for actual laboratory construction at NIST would easily top the $46.7 million appropriated for the purpose this year. That sum, says the report accompanying the legislation, would go to the "safety, capacity, maintenance and repair projects" that NIST accords the "highest priority."

NIST's scientific and technical core programs would get an increase of $72 million under the Senate's version of the CJS appropriations bill as under the House's, to $467 million in 2007 from $395 million this year. The rise conforms to the budget request of the administration, which considers these programs NIST's key contribution to ACI.

The Manufacturing Extension Partnership (MEP) got a pat on the back from Senate appropriators, whose report cites "economic impacts" they say "justify" their decision to go beyond their House counterparts' doubling of the administration's $46 million request and to give it $106 million.

"Based on a sampling of clients surveyed in fiscal year 2005," the report states, "MEP clients indicated that the assistance they received resulted in increased sales of $1.5 billion; retained sales of $4.53 billion; cost savings of $721 billion; and the creation and retention of 43,624

(Continued on next page)

Appropriations Committee Chairmen Load NIST Budget With Pork For Home States: Alabama And Mississippi

Millions of dollars of pork barrel projects headed to Alabama this year from the National Institute of Standards and Technology's construction account will continue to receive funding next year if the Senate version of the Commerce, Justice & Science (CJS) spending bill (H.R. 5672) becomes law. In contrast, no holdovers from 2006 are to be found among the Mississippi institutions slated to get a similar level of earmarked funds in the bill now being considered.

The Alabama projects, whose funding landed in the account when Sen. Richard Shelby (R-Ala.) became chairman of the CJS Appropriations subcommittee last year, are: design and construction of a Science and Engineering Center at the University of Alabama (UA) in Tuscaloosa ($30 million appropriated in 2006, $30 million proposed for 2007); the Biomedical Research Center at the University of Alabama at Birmingham ($20 million each year); the Alabama State University Science and Education Building ($5 million each year); and the City of Tuscaloosa Downtown Revitalization Project ($8 million in 2006, $5 million proposed for 2007).

Last year, the first for Sen. Thad Cochran (R-Miss.) as chairman of the Appropriations Committee, $20 million apiece went to the University of Mississippi Research Park and the National Formulation Science Laboratory at the University of Southern Mississippi. Proposed for this year are $25 million each for a separate research park at Ole Miss, this one dedicated to biotech, and to Mississippi State's Research Technology and Economic Development Park.

While all earmarks may seem local, the Ole Miss Research Park at least makes a claim to national significance on the competitiveness front. The university's vice chancellor for Research and Sponsored Programs, Alice Clark, says the park "will provide a vital link to help the country remain competitive as a knowledge- and technology-based economy."

Shelby's goals for his projects come off somewhat more provincial. The University of Alabama's Science and Engineering Center "will attract the best faculty and the brightest students, keeping UA in the ranks of premier scientific institutions," he boasts in a press release.

As for the $5 million in pork being taken out of NIST for the Tuscaloosa Revitalization project, the release promises that it "will bring more businesses, activity and economic investment to the downtown area."

Small- To Mid-Sized Manufacturers Are Not Looking Overseas For Growth, According To Survey

Small- to mid-sized manufacturing companies are not taking advantage of burgeoning growth opportunities that exist in overseas markets, according to RSM McGladrey, the Minneapolis, Minn.-based accounting and tax firm. Only 26 percent of the 1,031 CEOs and CFOs surveyed by the firm said they are relying on exports for growth. That low number "is discouraging," says Tom Murphy, executive vice president of RSM McGladrey's manufacturing and wholesale distribution practice. "People have to start thinking outside of the box."

Most companies (55 percent) are depending upon introducing new products as a means to grow their companies, followed by increasing brand recognition, adding new services and expanding their sales forces.

Small- and medium-sized manufacturers are not enthusiastically responding to globalization, RSM McGladrey found in its survey of CEOs and CFOs. "Most view the global economy as more of a challenge than an opportunity," says the firm. Adds Murphy: "Given the access to foreign markets that free trade provides, it is surprising that survey respondents do not see the urgency of exporting or supplying to the major multinational companies. They are leaving a lot of business on the table." Exporting would also help shield them from a downturn in their home market.

Half of the survey participants said they don't expect any revenue growth from exports and only about 25 percent said that globalization helped them lower costs. A little more than 40 percent said globalization forced them to lower the prices of their products.

Companies are also not taking advantage of tax credits and other government programs for manufacturers. Less than 10 percent of those surveyed are participating in any single program, and less than 10 percent use state incentive programs, even though there are many that are available. Only 65 percent of manufacturers use state and local tax credits, and 64 percent take advantage of the domestic manufacturers' deduction. Another 61 percent use the R&D tax credit, while only 38 percent use international tax incentives.

The survey found that 58 percent of small- and medium-sized manufacturers believe their company is "thriving and growing," while only 4 percent say they are "declining." But there are headwinds.

Health care costs are increasing and 65 percent of the companies are passing these cost increases onto their employees, resulting in less take-home pay and a workforce that is growing more disillusioned, says Murphy. "As competition for employees heats up, employees are changing companies because of [better] health care plans."

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Back Seat To Pork... (Continued from page four)

jobs."

But there was no similar gesture toward ATP, even though many in both industry and policy circles view the program as making a unique contribution to U.S. competitiveness, and even though the Senate in March unanimously approved an amendment (S.Amdt. 3031) to its version of the 2007 Budget Resolution (S.Con.Res. 83) stating that ATP should receive $140 million next year.

"The Committee will allow for the phase-out of activities for ATP," its report states. "No funds are provided in fiscal year for 2007 for ATP, and the committee believes that sufficient funds were provided as part of fiscal year 2006" — for which the program was granted $80 million — "to cover all necessary close-out costs."

While Shelby may have had Alabama on his mind when considering what to do if any surplus cash turned up, his Democratic counterpart on the CJS Appropriations subcommittee, ranking minority member Sen. Barbara Mikulski (D-Md.), apparently was focused not on NIST programs but on those of another institution with a Maryland base: NASA.

Joining with Sen. Kay Bailey Hutchison (R-Texas), Mikulski convinced the Appropriations Committee to accept an amendment providing $1 billion for 2007 "to reimburse NASA for the costs of returning to flight following the Shuttle Columbia disaster and implementation of the Columbia Accident Investigation Board recommendations."

Invited to comment on the defunding of ATP, a Mikulski spokeswoman said that the senator "supports the program, but the President's budget zeroed it out and the subcommittee's allocation was too tight to restore it."

Sens. Carl Levin (D-Mich.) and Mike DeWine (R-Ohio), who offered S.Amdt. 3031, indicated after the Appropriations Committee's approval of H.R. 5672 that they are undecided about whether to go to bat for ATP funding via a floor amendment when the bill comes before the full Senate.

While pointing out that ATP has in past years emerged from the Senate Appropriations Committee with at least some funding — in contrast to this year, when neither house's appropriators has provided it a cent — a spokesman for Levin told *MTN*: "We haven't ruled anything out." Echoed a DeWine spokesman: "We're still looking at all options and discussing what the best course would be for further action."

Not Exporting...

(Continued from page five)

There are as many as one million vacancies in the manufacturing sector, and finding good workers in an economy with a 4.6 percent unemployment rate is becoming more difficult.

Energy costs are also beginning to impact companies, particularly those in the chemicals, metal fabrication and plastics industries. U.S. corporate income taxes remain higher than in 29 other OECD countries; regulations remain burdensome; and litigation costs, which account for almost 3 percent of the U.S. economy, are sapping resources. Mid-sized companies are getting squeezed.

"There are a lot of advocates for small guys and the big guys," Murphy told *MTN*. "But nobody is advocating for the companies in the middle. Somebody has got to start speaking up on their behalf."

Murphy was recently in Washington, D.C., meeting with policy makers to implore them to get serious about policies aimed at improving the environment for U.S. manufacturing. "We're saying we have the data; now we have to put our heads up, speak out and get the government to take actions to give us relief on structural costs."

For a copy of the RSM McGladrey 2006Manufacturing and Wholesale Distribution National Survey, contact Murphy at tom.murphy@rsmi.com.

Export Controls Reduce U.S. Company Sales To China By $10.7 Billion

During the first eight months of 2005, the U.S. government denied $10.7 billion worth of exports to China, according to Francis Record, Acting Principal Deputy Assistant Secretary for Counterproliferation at the State Department. Total exports to China in 2005: $38 billion. "There is in fact no basis to Beijing's claims that we could significantly reduce our trade deficit overnight by simply liberalizing our controls on sensitive items," Record told a recent meeting of the United States- China Economic and Security Review Commission. "I want to emphasize that we will continue to oppose the approval of export licenses for items that we assess will enhance Chinese military capabilities, threaten global security or could contribute to the proliferation of WMD and their means of delivery."

Service Contracts...

(Continued from page two)

rate of 14 percent (to $21.4 billion in 2004), followed by professional administrative and management services, growing at 9 percent (to $42 billion in 2004). Research and development services grew at a 10-year compound annual growth rate of 5 percent, to $41 billion in 2004.

The report, which lists all of the mergers and acquisitions made by the largest providers of professional services to the federal government, is located at http://www.diig-csis.org. Click on the report cover on the front page.

The Top 20 Service Contractors in 1995 *(in millions of $s)*
1 Lockheed Martin, $9,189,708
2. Westinghouse, $3,216,178
3. Boeing, $2,959,228
4. Northrop Grumman, $2,515,868
5. Raytheon, $1,624,159
Subtotals for Top 5: $19,505,141
6. CSC, $1,505,354
7. Rockwell, $1,464,352
8. SAIC, $1,236,287
9. Loral, $1,203,619
10. Sandia Corp., $1,159,740
11. General Electric, $1,121,452
12. TRW, $1,097,035
13. DynCorp, $640,453
14. Newport News, $630,387
15. Bechtel, $496,040
16. IBM, $446,053
17. Unisys, $425,543
18. MITRE, $380,305
19. United Technologies, $377,825
20. General Dynamics, $360,028
Total: $32,049,614

The Top 20 Service Contractors in 2004 *(in millions of $s)*
1. Lockheed Martin, $9,283,701
2. Halliburton, $7,613,166
3. Northrop Grumman, $7,141,335
4. Boeing, $6,990,515
5. Bechtel, $3,560,520
Subtotal for Top 5: $34,589,236
6. SAIC, $3,396,724
7. Raytheon, $2,922,163
8. EDS, $2,142,829
9. L-3, $2,054,880
10. DynCorp, $2,054,708
11. CSC, $1,933,198
12. General Dynamics, $1,736,945
13. Westinghouse, $1,711,543
14. Booz Allen Hamilton, $1,465,329
15. BAE Systems, $1,350,732
16. Sandia Corp., $1,228,251
17. Fluor, $1,217,295
18. CACI, $1,137,641
19. BWXT, $1,123,375
20. Titan, $1,047,445
Total: $61,112,295

Small Manufacturers Make The Case For An Across-The-Board 'Surcharge' On Imports

The U.S. Business and Industry Council (USBIC) is calling upon the federal government to impose a temporary surcharge on imports as allowed under World Trade Organization (WTO) rules, claiming the action would offer "America's only realistic hope of preventing soaring U.S. trade deficits from producing a global economic crack-up."

The organization, which chiefly represents U.S. domestic manufacturers, declared its position on the occasion of a July 12 "Trade Summit" in Washington, D.C., that it co-sponsored with the AFL-CIO. The labor body, while not coming out definitively for the surcharge, also has it under consideration: "Doing nothing is not an option," Richard Trumka, its secretary-treasurer, declared.

Trumka said that in addition to the import surcharge, whose potential effect USBIC President Kevin Kearns likens to the actual effect of the value-added tax (VAT) levied by 136 of the United States' trading partners, the AFL-CIO is looking at a "trade-balancing quota system" put forward by financier Warren Buffett. (See box at right for details of both plans.)

Explaining USBIC's motivation, Kearns told *MTN*: "In effect, what we are trying to do is save the world trading system, which is entirely out of balance now. Everyone is making money exporting to the U.S., and that can't go on indefinitely, especially since our manufacturing base is being hollowed out."

Trumka delivered a similar message to summit attendees. "Eventually, we must either produce more of what we consume, or be forced to consume less," he told them. "Unless there is a change of direction, the threat of a steep global economic downturn is real.

"If we do not demand a dramatic change in U.S. policies now, we will wake up one day in the not-too-distant future and find that our only comparative advantage is in shopping and debt."

Already, with the nation's trade and current accounts balances deteriorating, Kearns said, USBIC's members "find themselves with their backs to the wall, primarily because of our ill-advised trade policies and our unwillingness to challenge the unfair practices of many of our trading partners."

One of the organization's directors, Douglas Bartlett, chairman of printed circuit board producer Bartlett Manufacturing, laid the problem in the first instance to the "long string of trade agreements" that the U.S. has signed "with highly protectionist low-income countries" — a recipe, he indicated, for encouraging "American high-tech companies in particular to offshore their production."

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Are Tariffs Legal Under WTO Rules?

Article 12 of the General Agreement on Tariffs and Trade (GATT), one of 28 sets of rules underpinning the World Trade Organization (WTO), permits a nation seeking to "safeguard its external financial position and its balance of payments" to impose a temporary surcharge on imports.

This surcharge must be applied equally to goods from all countries of origin — with exceptions possible for goods from some less-developed countries — but not to all categories of goods, as the country imposing it retains discretion as to which categories it shall be applied to.

Article 12 stipulates that trading partners must be consulted regularly "as to the nature of [the] balance of payments difficulties, alternative corrective measures which may be available, and the possible effect of the restrictions on [others'] economies" while the surcharge is in force.

Though the prospect of a surcharge — or tariff — can evoke a powerful reaction, USBIC President Kevin Kearns argues that in reality the value-added tax (VAT) routinely levied by 136 of America's trading partners is also "a form of tariff" and has "almost the same effect as a surcharge" of the same magnitude.

"Our goods going in" to a country using a VAT "have to pay it, while its manufacturers get the VAT rebated on their goods as they're exported," Kearns explains. "So our partners are giving their firms a check that will just about cover any import surcharge."

Warren Buffett's "trade-balancing quota system," meanwhile, would mandate issuing U.S. exporters "Import Certificates" in amounts matching the value of their exports dollar for dollar. As all goods entering the U.S. would need to be accompanied by Import Certificates reflecting their value, imports and exports would forcibly be brought into balance.

The certificates themselves would be traded, and their value at sale would translate to a premium booked on all exports — or a surcharge demanded on all imports. Not only would this encourage U.S. firms to export, it would raise prices of foreign merchandise in the U.S., creating incentives for both firms and consumers here to buy domestically produced goods or making the nation's market less attractive to foreign producers.

Kearns calls this scheme a variant of imposing numerical quotas on imports, a practice also allowed under Article 12 of GATT, in which the right to fulfill the quota is sold at auction. He cautions, however, that for the plan to be WTO compliant, the Import Certificates would have to be sold — and the proceeds from them retained — by the U.S. Treasury. "If the money winds up in private hands," he says, "that would be a subsidy to the exporter," an infringement of WTO rules.

Offshore Outsourcing Report...

(Continued from page one)

was in charge of the report's demise while at the Commerce Department's Technology Administration. Wu now works in the state of Maryland's economic development organization. Phil Bond, who was in charge of the Technology Administration at the time, said he had nothing to do with re-writing the report. He has since been named president and CEO of the Information Technology Association of America (ITAA), an organization that took the lead in Washington in defending the practice of offshore outsourcing of IT jobs.

"As leading companies locate in or contract with labor in other countries, concerns about the shift of work include fears that higher value work may shift from the United States to other locations, impacting U.S. industrial strength and high-salary employment," states a passage in the full study that was deleted in the 12-page version. "Layoffs in the United States, especially in the IT sector, have only exacerbated this concern."

The 360-page version of the report describes the types of IT services and software jobs that are being outsourced. It states the obvious: that Indian outsourcing companies "are expanding staff annually by the thousands." The report describes the reasons for the trend including the fact that "venture capitalists are now encouraging U.S. IT start-ups to use lower-cost offshore destinations for software development to reduce the 'cash burn rate.' "

The report states that there is "growing pressure in corporate America — from customers, consultants, and financial markets — to offshore IT work, as well as growing external and political pressure to stem the flow of American jobs going overseas."

Yet the report also highlights the fact that the impact on U.S. competitiveness "appears to be negligible."

The full report that wasn't released also contains a long (and sobering) section on the shift of the U.S. semiconductor industry to offshore locations. Again, the 12-page Bush administration release differs markedly from the one the Commerce Department quashed. It states that U.S. semiconductor companies "are hiring more engineers overseas than in the United States" due to their need to "reduce labor and operations costs and serve the growing customer base in Asia."

In the long term, the U.S. risks losing high-end R&D and design jobs because, as semiconductor fabs move to Asia, high-skilled jobs move with them, states the report. The design centers that U.S. companies are "rapidly" creating in Asia "do not support local customers but support the home office with lower-cost designers," says a section of the report that was deleted from the one that was released. "The cost of employing a design engineer in Ireland, Taiwan, China or India has been estimated to be 50 to 90 percent lower than in the United States." It further states that, "the number of engineers employed offshore by U.S. semiconductor companies rose by more than 10,000 between 2000 and 2003, while engineers employed in the United States dropped by 4,000 during the same period, according to estimates by the Semiconductor Industry Association."

The unreleased version of the report ventured into issues impacting the continued loss of semiconductor industry jobs. "With fewer companies investing in new wafer manufacturing in the United States, process R&D co-located with leading edge facilities may also decline, resulting in fewer high-skill jobs for U.S. graduates. Offshoring of design work can also impose downward pressure on U.S. wages and reduce the demand for U.S. design engineers. As the number of overseas design centers increases, it may draw foreign talent from the United States."

The unreleased report also addressed the potential of offshore outsourcing in the pharmaceutical industry. Deleted from the final version was a discussion of how skyrocketing health care costs could lead to pharmaceutical companies deciding not to make future investments in the United States. "It may be...that investment incentives and the global geography of capabilities and infrastructure will shift in the years ahead in ways that will help other countries' pharmaceutical industries take on a larger role than at present in the global pharmaceutical innovation engine," says the report that the Commerce Department refused to release.

The design centers that U.S. semiconductor companies are "rapidly" creating in Asia "do not support local customers but support the home office with lower-cost designers."

The unreleased report provides a comparison of the average annual pay for global software workers:

United States: $63,000
Japan, $44,000
Canada: $28,174
Indonesia: $12,200
Thailand: $11,124
Russia: $7,500
Philippines: $6,550
Poland: $6,400
Hungary: $6,400
Pakistan: $4,860
China: $4,750

Assistant U.S. Trade Rep Says China Should Not Feel Threatened By Increased Trade Litigation

BY RICHARD McCORMACK

U.S. multinational companies that have established operations in China say a more muscular approach to China by the U.S. government could spark a trade war. It's better to use quiet, patient diplomacy in negotiating on issues related to China's currency, subsidies and legal issues related to intellectual property.

But that technique is not working, and it's time for China to realize that a more aggressive approach by the United States "is not a sign of an adversarial relationship, but rather a sign of a mature one," says Timothy Stratford, Assistant U.S. Trade Representative. "Disputes between the United States and Europe, for example, have not obscured the benefits of our billion-dollar-a-day trade relationship," Stratford told a recent meeting of the United States-China Economic and Security Review Commission. "Rather, knowing that litigation is a real option tends to have the benefit of focusing the minds on viable solutions."

Chinese officials should not believe that a trade complaint brought against it by the United States is an act of hostility, but a normal event. "This is a matter where I think we'll continue to need to do some explanation, but I will say that thus far, China's reaction to the auto parts case [filed earlier this year] has been relatively muted, which I think is an appropriate response, and so we hope that we can continue along that basis."

Since the World Trade Organization entered into force in 1995, the European Union has been sued 63 times, while the United States has been sued 86 times. Since 2001, The U.S. and EU have each brought 16 cases; Brazil has brought 22 WTO cases; and Korea 10. "But in many ways, China has been an anomaly in terms of its isolation from the WTO dispute settlement process," says Stratford. "Despite it's growing economic presence, China has been the defendant in exactly one case brought by the United States, and now a second case [involving auto parts]."

Now that China's four-year transition to being a full WTO member is almost complete, the U.S. will be pressing for greater accountability and enforcement, says the trade rep. The United States is "recalibrating" the way it deals with China on trade issues. "China has not yet fully embraced the key WTO principles of market access, non-discrimination and national treatment, nor has China fully institutionalized market mechanisms and made its trade regime predictable and transparent," says Stratford.

The USTR says it vows to take a more aggressive approach to China, but it needs help from U.S. industry. Stratford says his agency does not want to pursue cases it knows it cannot win. "In our discussion with industries [that] have concerns about subsidies and about other matters, we have said that if you can help us put together the information and if we can evaluate it and come to the conclusion that we would win the case, then we are willing to take these sorts of cases to the WTO."

Stratford says the USTR will continue to put pressure on China without filing cases with the WTO. "Sometimes the best way to get where you want to go is by nudging rather than hitting over the head with a baseball bat. Having said that, we don't have unlimited patience on these things."

U.S.-China Commission Tells Congress To Take Aggressive Approach To China

The U.S. Congress should aggressively pursue China for its unfair trade practices, according to the U.S-China Economic and Security Review Commission, a congressionally sponsored organization. After a day-long hearing earlier this year on the subject of China's industrial subsidies, the USCC issued a list of recommendations for Congress to pursue.

Congress should consider imposing an immediate across-the-board tariff on Chinese imports "at the level determined necessary to gain prompt action by China to strengthen significantly the value of the RMB," says the USCC Chairman Larry Wortzel and Vice Chairman Carolyn Barthomew in correspondence to Sen. Ted Stevens, president pro tempore of the U.S. Senate and Rep. Dennis Hastert, Speaker for the House.

The commission says Congress should pressure the United States Trade Representative to bring more cases against China in the World Trade Organization. It says Congress needs to pass legislation to make countervailing duties applicable to non-market economies and repeal the new shipper bonding privilege that has allowed many importers of Chinese goods to avoid payment of antidumping duties. It also recommends that the Commerce Department and USTR analyze China's recently filed industrial subsidy report and provide a detailed analysis to Congress of those subsidies that are not included.

Sandia's Sharp CRADA...

(From page three)

company is a world leader in electronics. That knowledge will benefit future collaborations between Sandia and U.S. companies.

Ultimately, the U.S. taxpayer will benefit from the agreement "because of the advanced state it will take the technology in order to have the kinds of technologies that are available to the U.S. economy that would be potentially marketed by Sharp," says Payne.

Will DOE follow up on the work after the CRADA ends to assure that products generated from the agreement are being manufactured in the United States? "What we track is the IP that is developed as a result of the CRADA," Payne responds. "We would track how they use the IP/patentable information."

When signing a CRADA with a foreign entity, DOE is required to provide U.S. companies developing similar technologies with a "Fairness of Opportunity" notice. This notice is meant to provide them with an equal opportunity to participate in a similar CRADA. "We show through a wide variety of mechanisms that we are trying to establish U.S. partners and we can't get anybody else interested in partnering in this technology," says Payne. This Fairness of Opportunity campaign is conducted "by advertising the fact that we have a technology in an area and research partnerships are being solicited," Payne explains. "In the case of Sharp, most of that technology area was advertised through conferences that our scientists attended, through Web pages that announce things, and publications that Sandia puts out."

But that apparently is not how things worked with the Sharp CRADA. Taking credit for the agreement is New Mexico Gov. Bill Richardson, former Secretary of Energy, who traveled to Japan in June 2003 on an economic development mission. The CRADA had been "in negotiation since June 2004, following Gov. Bill Richardson's meeting with Sharp's executives in Tokyo to sign an MOU between New Mexico and Sharp," states an Oct. 18, 2005, press release from the New Mexico Economic Development Department. That press release says the New Mexico Economic Development Department "has successfully brokered a joint technology research agreement between Sharp Corp, the world's leading producer of solar photovoltaic components and systems and Sandia Corp., operator of Sandia National Laboratories, announced Rick Homan, New Mexico's Secretary of Economic Development."

The press release further states that "Sharp will be able to take advantage of the research capability, superb solar environment for testing and prototype manufacturing capabilities within the State of New Mexico, said Takahi Tomita, director of Sharp Solar Systems Group. This in turn will help us continue to bring advancements to market in solar energy and other clean energy technologies."

Payne of Sandia says her staff "has to attest to me, including the principal investigators, what kind of efforts they went through to get [U.S.] partnerships in this area." DOE would not allow *MTN* to speak with Sandia's principal investigator, stating that all the technical information to be provided is contained in Sandia's press release.

The intent of the Technology Transfer Act of 1986 was to improve the technical capability of U.S. industry, equipping companies with leading-edge technologies they need to compete against fierce competitors like Sharp. "We very much would love to have U.S. companies come to Sandia," says Payne. "Trust me, my job is to ensure that we get cooperative agreements with U.S. companies. But when we have a mission imperative for the development of a technology in a certain area, we don't have U.S. companies willing to invest in Sandia, that is when the foreign option is looked at. It has been very distressing to me as a U.S. citizen that the U.S. companies are downsizing so much in their research and development areas in their own companies and with the labs."

Payne says it's important to know

(Continued on next page)

The following questions were submitted by *Manufacturing & Technology News* to the Department of Energy's headquarters staff on June 2, 2006. There was no response provided, despite repeated calls and e-mails from *MTN* seeking answers.

- What are some of the parameters for CRADAs involving foreign companies?
- What is the rationale for U.S. taxpayers to be providing resources for the technology development of a foreign firm, given that CRADAs were created to help improve the competitiveness of U.S. companies?
- Was there a USTR review of the Sharp agreement?
- Were U.S. companies given equal opportunity to participate in a similar CRADA? Were they notified of Sandia's intent to work with Sharp?
- What proof do you have that Sandia and its principal investigator tried to establish a similar type of collaboration with U.S. companies?
- Do you have a Fairness of Opportunity statement associated with the Sharp CRADA?
- Did you require that Sharp manufacture in the United States any product that resulted from the intellectual property developed in conjunction with Sandia?
- Did you do a Net Benefits Statement for the Sharp CRADA? If not, why?

Tariffs... (Continued from page seven)

Nor has enforcement of such pacts been helpful, according to Bartlett, who accused U.S. leaders of having "winked at predatory foreign trade practices" and "failed miserably to open foreign markets to U.S.-made products," above all by "ignoring the subtle but effective nontariff barriers that protect our foreign competitors."

Bartlett predicted that, "without big changes," his own industry's "days as a provider of high-wage jobs and as a major innovator are numbered." With production leaving for foreign shores, "it makes no sense to keep the research and development and engineering and design back in the United States.

"Anyone who knows anything about real-world manufacturing knows that the factory floor and the lab form a continuous feedback loop," he pointed out, adding: "Unfortunately, virtually none of our trade and economic policymakers know anything about real-world manufacturing."

National Farmers Union President Tom Buis, also on the dais, charged U.S. trade negotiators with an analogous weakness. The agricultural sector's vulnerability to foreign competition, he indicated, stems from their passing over factors that should have been fundamental to agreements.

"The Free Trade Agenda for agriculture is based around what they call the 'Three Pillars of Trade': market access (reduction of tariffs and duties); elimination of trade-distorting export subsidies; and the elimination of trade-distorting domestic subsidies," Buis said.

"All of these should be negotiated, but they alone do not level the playing field. What has not been negotiated is the foundation of international trade: currency manipulation; labor standards; [and] environmental, health and safety standards."

— KEN JACOBSON

Rail Industry Reduces Costs, But Investment Risks Are Imminent

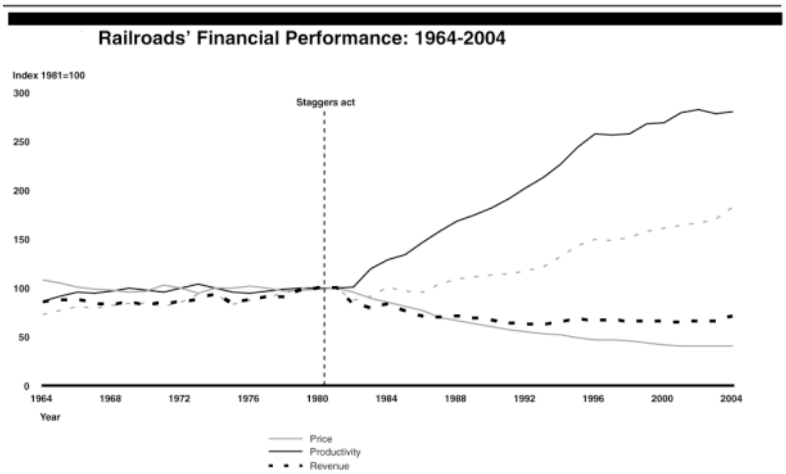
The performance of the freight railroad industry has improved substantially over the past 20 years, but some shippers are still captive to high rates, according to an analysis by the Government Accountability Office. Railroad industry financial health is much better, even though rates have only increased marginally over the years.

"Concerns about competition and captivity remain because traffic is concentrated in fewer railroads and some shippers are paying significantly higher rates than others," says GAO. But it is difficult to determine the true number of shippers that are captive to their railroad "because proxy measures can overstate or understate captivity," states GAO. "GAO's preliminary analysis indicates that while captivity may be dropping, the share of potential captive shippers that are paying the highest rates...has increased."

The rail industry expects to see significant growth in shipments over the next 15 to 25 years, but its ability to meet that demand "is largely uncertain," says GAO. The federal government might soon be asked to make major investments in the freight rail infrastructure of the nation, such as the $100 million project funded last year in Chicago.

"Federal involvement should occur only where demonstrable public benefits exist and where a mechanism is in place to appropriately allocate the cost of financing these benefits between the private and public sectors and between national, state and local interests."

For a copy of the report "Freight Railroads: Preliminary Observations on Rates, Competition and Capacity Issues" (GAO-06-898T, go to http://www.gao.gov/new.items/d06898t.pdf.



(Source: Association of American Railroads)

Sharp CRADA... (From page 10)

that the Sharp is not receiving any government funds. "It is 100 percent Sharp funded, albeit I do recognize that U.S. companies should get first dibs at being able to invest in our national labs," she says.

Critics of the Sharp CRADA say now is not the time for a major U.S. national laboratory to help improve the capability of a Japanese company in the strategic energy technology areas of fuel cells and photovoltaics. The U.S. trade deficit in goods with Japan reached a record last year of $82.5 billion. Moreover, Japan produces 45 percent of the world's output of photovoltaics (at 824 megawatts), followed by Europe with 28 percent of world production (513 megawatts). The United States, which produces 9 percent of the world's PV output (at 155 megawatts) is in danger of falling into fourth place in world production behind China, which produces 8 percent of the world's output (151 megawatts) and is in the ascendancy. "The United States — once the global leader in PV manufacturing — fell in market share from 11 percent in 2004 to less than 9 percent," says the Solar Energy Industry Association. "Japan remains the dominant country in PV manufacturing."

Most U.S. Firms Are Not Making Money In China

The majority of multinational companies that have opened operations in China are losing money there, according to research conducted by Usha Haley, director of the Global Business Center at the University of New Haven. Only about one-third of the U.S. companies operating in China have ever made a profit there, "and profits have been concentrated in the hands of a few companies, that basically do not face competition from local companies," mainly those in the fast-food sector, says Haley.

Five U.S. companies account for a disproportionate share of profits earned in China: General Motors, Ford and Chrysler combined for about $500 million in profits in 2003, followed by Yum Brands (owner of KFC with 1,200 restaurants in China) with about $200 million in profits; and McDonald's, also with $200 million in profits. Most companies with Chinese operations do not disclose whether they're making money there.

"Total China earnings for U.S. foreign affiliates including all sources of profits, licensing and royalties was $8.2 billion," Haley told a recent meeting of the United States - China Economic and Security Review Commission. "That sounds like a lot, but in 2004, U.S. foreign affiliates earned $7.1 billion in Australia with 19 million people, $8.9 billion in Taiwan and South Korea with a combined population of 70 million, and $14.3 billion in Mexico with 95 million people."

Reed works with a lot of U.S. companies in China. "In some sense, greed propels them," he says. "They see the Chinese market. They see the potential. They go there. They establish themselves. They start producing. Sometimes they have no choice. The Chinese government puts down technology transfer as a condition. You can't get in unless you give up your technology. You can't get in unless you get into a joint venture with a local partner. Then these American companies' core competencies get hit — that core competence that they put a lot of money and time and energy into — is gone."

U.S. companies setting up operations in China tend to do so with the intent of selling into China's massive market. But that doesn't happen. U.S. firms end up exporting back into the world market "because the Chinese market proved a mirage," says Haley. "It proved to be a mirage because the Chinese market has systematically been exaggerated....The people are generally poor. When you sell to that market, you have to make a great many modifications and you have to most importantly reduce price, and what happens with the companies we looked at is when they introduce a product into the market, within about two or three years, there are ripoffs, and then within three or four years, they start competing on price alone, and the margins become razor thin, and they can no longer get any profits back.

"Remember, these companies have invested a lot in brand name advertising, research and development; they have to get some returns on that. And very soon, they find the market has evaporated and they're no longer making profits. At this point, they have their facilities up. They want to export.

"This is a vicious cycle because it has continued to contribute to a downward spiral in prices, and that is because the engines of production are there and companies are there and they've got everything set up. What do they do?

"Philips is a company we studied that did this. They went there to sell television sets to a billion Chinese and found that the market did not exist. However, the Chinese government started throwing subsidies — free land, free utilities, cheap labor, etc., and Philips found out that it could manufacture and assemble cheaply. The Chinese are very good on the factory floor, and Philips could export back to home markets."

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