



# SFSA CASTEEL REPORTER

Steel Founders' Society of America

a monthly publication  
serving SFSA steel casting industry Members

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## June — 2006

### Casteel Commentary Highlights:

The Casteel Commentary reviews possible strategies that should succeed in the global marketplace. If we look to Europe as a place where a few manufacturers have survived circumstances more challenging than we face, we can identify possible approaches. We can consider a number of these over the next few months. This month we consider the strengths and limits of focusing as a regional supplier.

### SFSA Annual Meeting

Good News, we have booked Charlie Cook, the political pollster and pundit, for our annual meeting. We have arranged for Martin Regalia to present his update on the economy. We have secured Neal Elliot to speak on the situation with energy and the future outlook. Martin Stap will present our SFSA Forecast. This is a must make meeting. The SFSA Annual Meeting will be held in Santa Fe, NM on September 10-12. I would advocate that all members attend. Changing market conditions make this an opportunity not to miss. Registration information will be mailed to SFSA members this month.

### Heavy Section

The SFSA Heavy Section product group will be meeting June 21 and 22 in Carlisle, PA. Details and registration can be found attached to this newsletter.

### Western Division T&O Meeting

The Western Division will be holding their T&O meeting in Tacoma, WA on July 13/14, 2006. The meeting will include a tour of

Atlas Castings & Technology. All SFSA members are invited to the meeting and tour. On July 13 there will be a session including:

How to improve productivity - Spokane Steel, New safety lamp - Chico State University, Security concerns regarding isotopes – Atlas, Hexavalent Chrome - Pacific Steel, Solidification Simulation as a Vendor Qualification – SFSA. The program will be followed by a 6:30 pm Dinner (cost to be advised) and will include a Business Round Table. On July 14, 8:00 am, there will be a Tour of Atlas - it is anticipated that the tour will take 4 hours.

### Plant Tours

SFSA sponsors plant tours for members and most members welcome visits from other members. It is probably useful to remind us all of the expectations when plant tours are conducted. When a plant hosts a tour they have the expectation that their visitors will reciprocate, that they will be willing to allow their host a tour of their facility in the future. The host plant also expects that the visitors are there to look at and talk about process and operations. It is wrong to tour another plant to look for patterns or work that can be taken. It is also wrong to tour another plant to look for employees to recruit. One of the unique strengths of SFSA and our industry is the culture of trust and respect that allows us to work together to improve the industry.

### Research Review

The SFSA Research Review Meeting will be held on August 9 and 10 at the

Wyndham O'Hare Hotel. Program and registration information are attached to this newsletter.

### **International**

China remains a mystery to many of us. SFSA is organizing a plant study tour of China for October. Final details are being worked out and will be distributed when they are finalized. A draft itinerary is attached. Please let Raymond Monroe know if you are interested in this opportunity.

The International Foundry Forum 2006 is organized by the Europeans and is intended to give an overview of the global state of the foundry industry. Leading suppliers and foundries are able to attend by invitation only. This year's meeting will be held September 28-29 at the Hotel Cascais Miragem (<http://www.cascaismirage.com/>) in Lisbon, Portugal. Details are available at <http://www.international-foundry-forum.org/>. R. Monroe will be presenting the industry in North America. If you need more details contact him.

You may also wish to consider joining SFSA next year for a trip to GIFA. This is the largest trade show for foundry equipment. We will also organize plant tours for our delegation in Germany, the Czech Republic and Poland if possible. This will be in June 2007.

### **End Use Survey**

We are trying to complete the industry end use survey for 2005. If you have the forms please fill them out and return them. If you have misplaced the forms, let us know. The forms are available online at <http://www.sfsa.org/enduse>

### **Directory of Steel Foundries**

We still have a few printed directories available. These are printed on paper and placed in a three ring binder. These copies are available for \$200, \$100 for SFSA members. Contact R. Blair if you are interested in purchasing one.

### **Innovation**

Burn in / burn on sand on the surface of steel castings is a costly undesirable condition. Castings are often completely ground to remove this surface layer. This is a layer of sand generally on the surface of the casting that cannot be chipped or pried off. Our research shows that this is due to mold quality. In particular, often this is due to a loss of refractoriness in the sand used for molding. One way this can occur is by the build up of iron oxide in the sand mix. While the iron oxide is often substantially removed in the cooler classifier, changing efficiencies or improper operation can result in an increasing level in the reclaimed sand. There is a chemical test where a sand sample is immersed in HCl and then the iron oxide determined by a chemical titration or by redrying the sample and calculating weight loss. Another simpler test is to take the sample used to determine LOI and use a magnet to remove the magnetic iron oxide. While this is not as quantitative, it will allow an ongoing check of the iron oxide of the sand especially the reclaimed sand.

### **Specification Note**

Specifications apply to a commercial transaction at the point the supplier certifies compliance to the purchaser. This fact is often misunderstood. For example, ASTM A744 for stainless steels restricts welding by requiring reheat treating of all major welds. Some believe that this restricts customers and users. This is not true. Many of these products for example have weld ends and are welded in installation. After the customer accepts the casting, he can do whatever he likes with it. Specifications apply only to suppliers and apply to the casting at the point of the transaction when the requirements are certified to have been met.

## **Environmental Note**

*Courtesy of KERAMIDA*

July of each year is a particularly busy time for environmental compliance deadlines. The following can be used as a quick checklist to confirm your facilities are doing all that is required.

Scrap Selection and Inspection Program - Semi-annual Compliance Report for Jan - June - due July 31, 2006

Compliance Certifications for Air permits - due July 1, 2006

Other additional Emissions Statements and Periodic Reports - Many States have deadlines of July 1, 2006 for Air permit reports

Form R (TRI) reports - due July 1, 2006  
(Don't forget the low thresholds of 10 lbs mercury and 100 lbs lead)

DOT Hazardous Materials Registration Renewal - Applicable to Hazardous Waste generators - due July 1, 2006

Annual PCB Inventory Report - Keep on file at facility - due July 1, 2006.

## **Casteel Commentary**

Globalization forces businesses to rethink their markets and competitors. Pressure from developing countries, particularly China, leads many to conclude that manufacturing will find it difficult to survive for any length of time in North America. We all must try to think through a strategy to prosper even when faced with significant competition. The use of market distorting practices that give our global competitors an "unfair" advantage is unlikely to disappear and we need to overcome this advantage. Strong worldwide demand and high commodity prices are supporting strong demand for steel castings. We need to reposition and reinvest in light of the global pressures we face.

One way to identify successful strategies for import sensitive economies that have high costs and rigid regulations is to look to successful firms in Europe. They have needed to compete with low cost competitors for years and yet they retain manufacturing companies. Even the highest wage countries continue to have manufacturing companies that succeed. Four strategies appear to be common; a regional supplier, a technology leader, a unique processor, or a world-class producer. We may use each of these strategies to prosper. We can look at each of these strategies over the next months in an effort to think through successful approaches to future profits and investments.

## **Market News**

Demand for steel castings remains strong. Some market segments have seen a slowdown in growth but no reduction in the level of current business. The SFSA Trend Cards show continued strong bookings for all steel castings and continued strong shipments. This is also seen in the Census numbers for iron and steel foundries. Steel shipments also remain strong and capital goods orders are still expanding. The high energy prices and rising interest rates are likely to slowdown the consumer by the beginning of next year but high energy and material prices will continue to support capital equipment build schedules even in the face of higher interest rates

Regional suppliers exploit the high cost of locating and maintaining a supply chain. If a medium or smaller company needs a few castings each year then they may have the need for a regional supplier. Even larger companies may need a regional supplier for special work, maintenance or prototyping. The transaction costs of global supply are high enough that they are a barrier to limited order quantities. A regional business exploits proximity, responsiveness, flexibility and reliability.

A regional strategy identifies steel casting buyers that need a limited quantity of steel castings and these castings may be incidental. The castings are incidental in the sense that they represent only a small portion of the customer's product value. The need to informally communicate requirements, work closely with a supplier, resolve problems, and reliably purchase an unfamiliar component makes the regional supplier the supplier of choice for some firms.

To succeed as a regional player, a foundry must have flexibility and diversity. That is, the foundry must be able to pour a number of alloy compositions, in a range of sizes, for a variety of markets. The limits of market demand means that a regional supplier must be content with a small or medium size business. Personal contacts, responsive service, reliable performance, and technical qualifications are essential. While these purchases are not price driven, they need to represent good value. The cost of acquiring the castings should appear to be a good deal when the responsiveness, technical support, delivery response, and shipping are considered.

Margins are typically high but business size is small for these regional businesses. They often have a few special customers that purchase custom castings developed in cooperation with the foundry and relatively difficult for others to make. This core of special products is supplemented by other orders with short delivery times, special requirements, or small quantities. A regional business is a limited opportunity that some smaller plants can exploit to succeed. Every Foundry can develop some regional strategy to convert their location into profitable business.

**Raymond**

# STEEL FOUNDERS' SOCIETY OF AMERICA

## MEETINGS CALENDAR

### **2006**

June

21/22

Heavy Section Product Group Meeting & Plant Tour, Carlisle, PA

July

13/14

Western Division T&O Meeting and Plant Tour, Tacoma, WA

August

9/10

Research Review, Rosemont, IL

September

9/12

SFSA Annual Meeting, Eldorado Hotel, Santa Fe, NM

December

13/16

National Technical & Operating Conference, The Drake Hotel, Chicago, IL

### **2007**

December

12/15

National Technical & Operating Conference, The Drake Hotel, Chicago, IL

**STEEL FOUNDERS' SOCIETY OF AMERICA  
BUSINESS REPORT**

**SFSA Trend Cards**    3 Mo Avg                      Mar                      Feb  
(%-12 mos. Ago)

**Carbon & Low Alloy**

Shipments	17.3	-4.4	24.0
Bookings	23.9	24.5	30.0

**High Alloy**

Shipments	50.1	74.0	69.0
Bookings	84.2	77.0	114.0

**Department of Commerce  
Census Data**

**Iron & Steel Foundries (million \$)**

Shipments	1,714	1,732	1,705
New Orders	1,774	1,747	1,785
Inventories	1,979	1,960	1,982

**Nondefense Capital Goods (billion \$)**

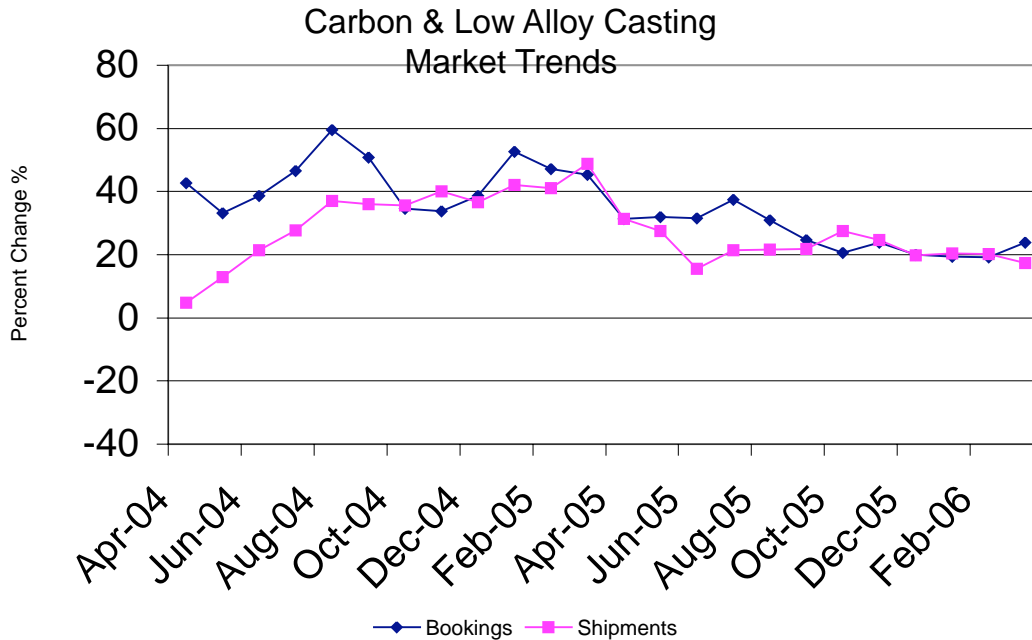
Shipments	71.1	71.7	71.0
New Orders	77.1	84.0	74.4
Inventories	114.9	115.3	114.6

**Nondefense Capital Goods  
less Aircraft (billion \$)**

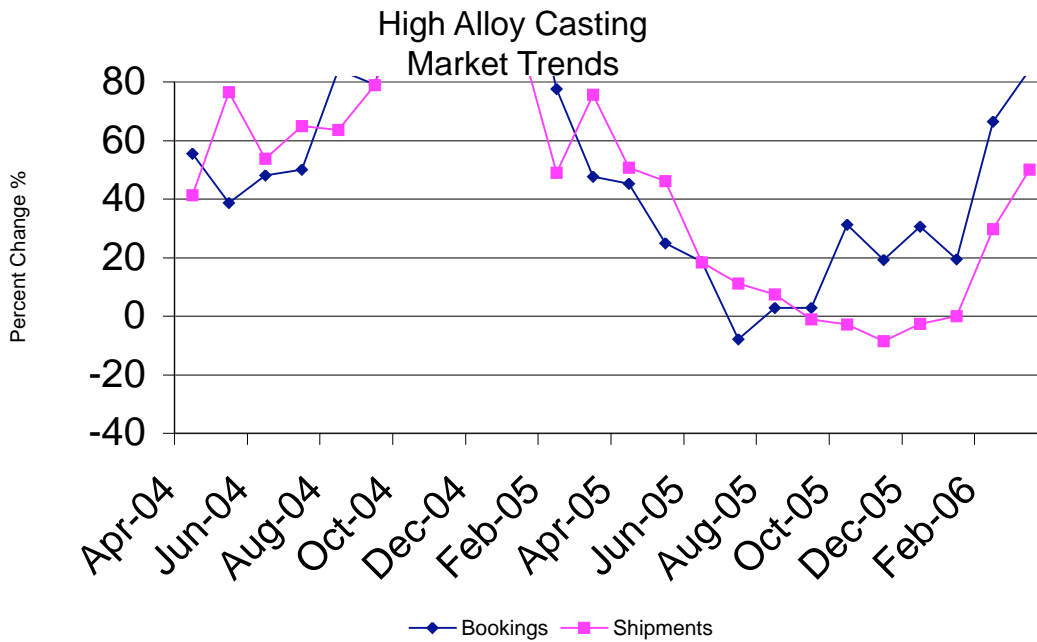
Shipments	65.3	66.2	65.0
New Orders	67.0	69.0	66.4
Inventories	96.1	96.4	96.0
Inventory/Orders	1.44	1.40	1.45
Inventory/Shipments	1.47	1.46	1.48
Orders/Shipments	1.03	1.04	1.02

**American Iron and Steel Institute**

Raw Steel Shipments (million net tons)	9.2	9.8	8.9
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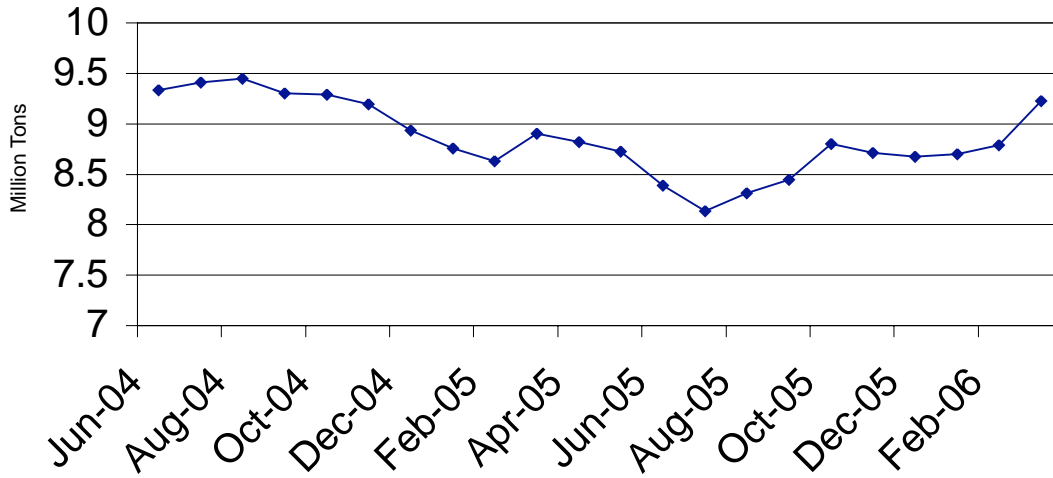
SFSA Postcards



SFSA Postcards

## Raw Steel Shipments

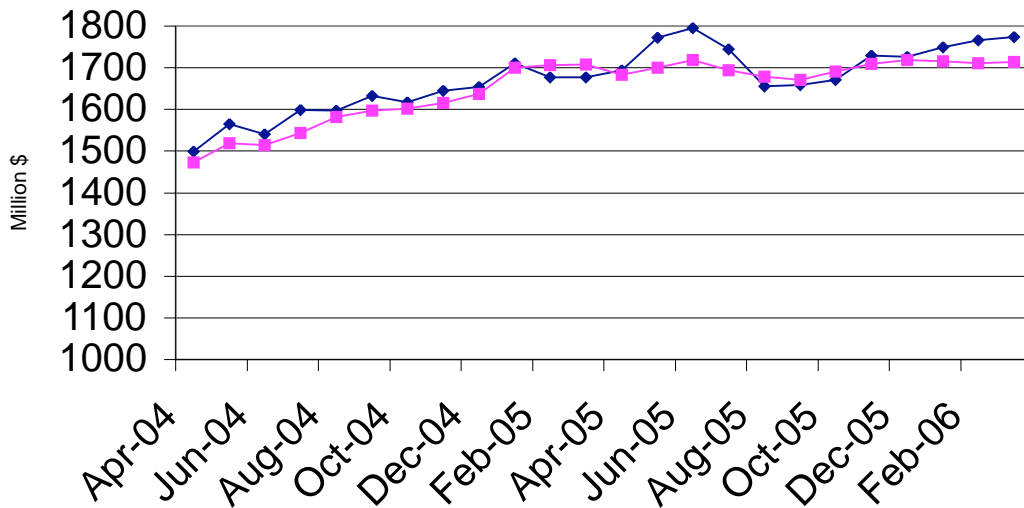
3 month average



AISI Data

## Iron and Steel Castings

3 month average

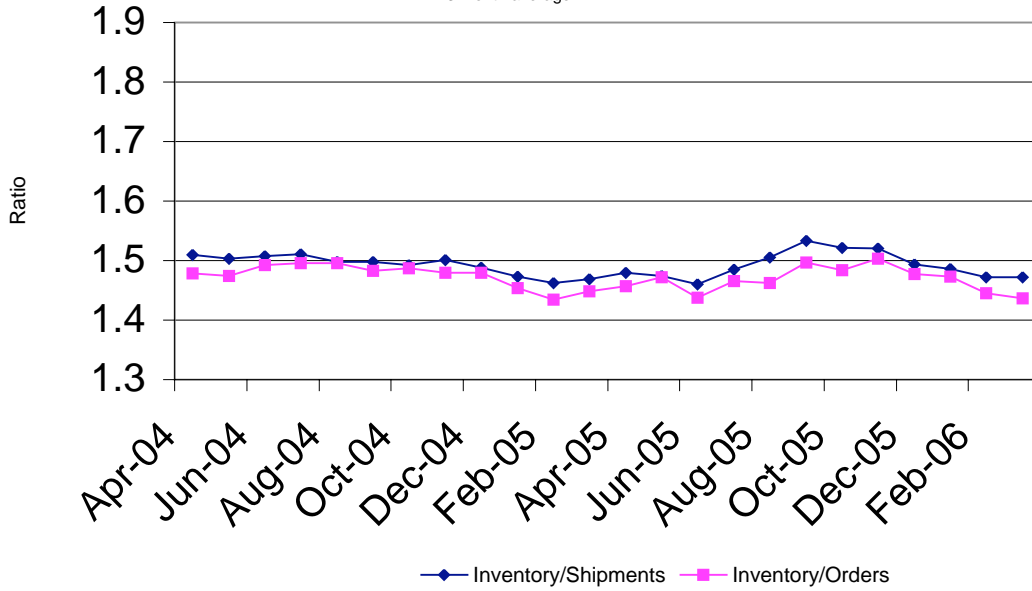


—◆— New Orders —■— Shipments

SFSA

### Nondefense Capital Goods less Aircraft

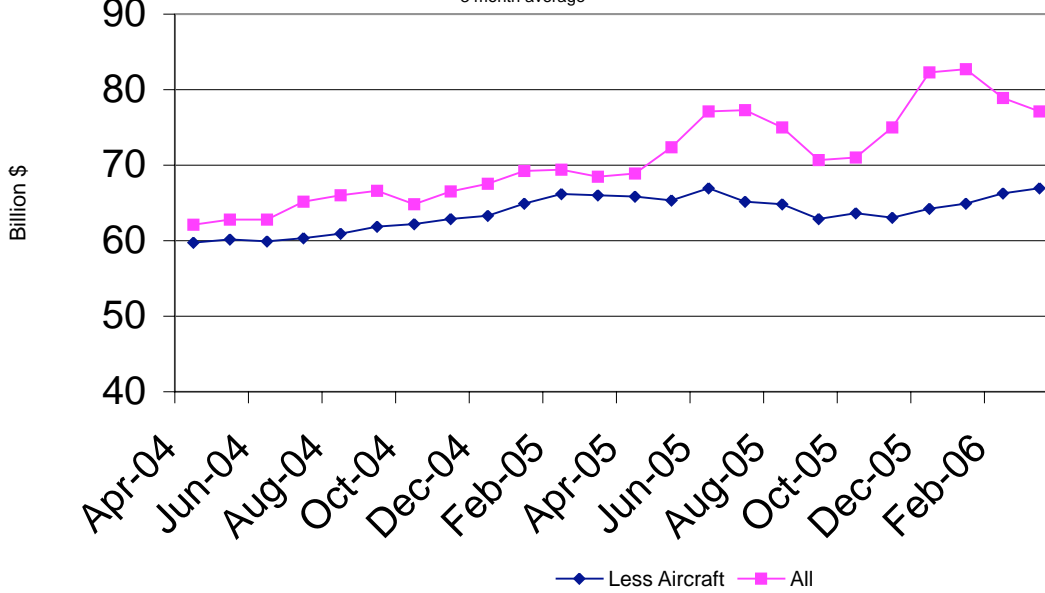
3 month average



Department of Commerce

### Nondefense Capital Goods New Orders

3 month average



Department of Commerce

## **SFSA T&O Divisional and Heavy Section Product Group meeting June 21/22, 2006**

Frog Switch & Manufacturing Company have kindly agreed to host the meeting. The program will include the following;

### **June 21, 1:00 pm**

Technical meeting

Topics to be discussed will include

The use of Solidification Simulation for Vendor Qualification - Malcolm Blair, SFSA

An overview of the foundry applications of SFSA research - Malcolm Blair, SFSA

A novel approach to shift patterns - Bill Reinsel/John Cory, Durametal

Additional speakers will be added to the program as it is developed.

### **June 22, 8:30 am**

Plant tour of Frog Switch & Manufacturing. (<http://www.frogswitch.com/> 600 E. High Street, Carlisle, PA 17013-2654)

Frog Switch continue to be one of producers of largest steel castings by the V-Process.

The manufacturing facilities at Frog Switch are unique and should be of great interest to all SFSA members.

We have reserved a block of rooms for the night of the 21st at:

Hotel Carlisle  
1700 Harrisburg Pike  
Carlisle, PA 17013

Reservations Number: (800) 692-7315

The room rate is \$72.00 per night, and the room block cut-off date is June 1st. You should mention SFSA when making your reservation.

Meeting room name is - Dickinson Room

We need you to register your attendance at the meeting with us at [blairr@sfsa.org](mailto:blairr@sfsa.org) this will give Frog Switch an idea of how a large a group we will be taking the tour.

We look forward to seeing you in Carlisle.

Malcolm

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Malcolm Blair VP Technology, SFSA  
Chairman/Secretary ISO TC17/SC11

## **Western Division T&O Meeting, July 13/14, 2006**

The Western Division will be holding their T&O meeting in Tacoma, WA on July 13/14, 2006. The meeting will include a tour of Atlas Castings & Technology. **All SFSA members are invited to the meeting and tour.**

### **July 13, 1:00 pm**

Tentative program:

How to improve productivity – Spokane Steel

New safety lamp – Chico State University

Security concerns regarding isotopes – Atlas

Hexavalent Chrome – Pacific Steel

Solidification Simulation as a Vendor Qualification – SFSA

6:30 pm Dinner (cost to be advised) will include a Business Round Table.

### **July 14, 8:00 am**

Tour of Atlas – it is anticipated that the tour will take 4 hours.

The T&O meeting will be held at the Sheraton Tacoma Hotel 253 572 3200. The room rate \$119, and the **cut-off date for hotel reservations is 6.22.06. You should mention Atlas when making your reservation.**

Hotel address:

Sheraton Tacoma Hotel

1320 Broadway Plaza

Tacoma, WA 98402

**Please register your attendance and whether you will be attending the dinner meeting this will allow us to have a good idea of the head count for the tour.**

As always when taking a tour you are offering Atlas an invitation to tour your facility.

*Malcolm*

Malcolm Blair

VP Technology, SFSA

Chairman/Secretary ISO TC17/SC11

**SFSA - Carbon and Low Alloy Research Review meeting - 8.9/10.06**  
**Wyndham O'Hare Hotel**

This is your opportunity to hear in great depth from all of the carbon and low alloy researchers. Your input will help guide these programs. Make a note of the dates and plan to attend.

Send your registrations to [blairm@sfsa.org](mailto:blairm@sfsa.org) - Registration is free.

We look forward to seeing you at the Wyndham

Malcolm Blair

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**Program**

**8.09.06**

12:30 pm Registration  
12:45 pm Welcome and Introductions  
1:00 pm Melting Efficiency - Peaslee, UMR  
1:45 pm Lost Foam Steel - Richards, UMR  
3:00 pm Break  
3:15 pm Cleaning room and heat treatment - Frank Peters, ISU  
4:15 pm Surface indications - John Griffin, UAB

**8.10.06**

8:30 am The following items will be presented by Richard Hardin and Kent Carlson of UI

1. Inclusion formation – mechanism and location of inclusions in steel castings
2. Hot Tears prediction
3. Service performance “V” indications
4. Distortion of castings in casting and heat treatment
5. Burn on/in – how can the tendency be predicted and reduced?

A 15 minute break will be taken at ~10:30 am

The meeting should adjourn at lunchtime.

SFSA has a block of rooms at Wyndham O'Hare Hotel for the night of August 9th, 2006.

The single/double rate is \$134.00 per night, and has overnight parking charges of \$16.00. The cut-off date for rooms in the block is July 19th, thereafter; reservations will be taken on a space available basis. Please call the hotel at (847) 297-1234 and ask for the Steel Founders' Society rate. The hotel is located 1.5 miles from O'Hare and offers complimentary airport transportation to & from O'Hare. Go to the "Bus/Shuttle Center" phone board to let them know that you have arrived, and the shuttle will be sent for you.

Wyndham O'Hare Hotel  
6810 N Mannheim Road  
Rosemont, IL 60018  
Phone: (847)-297-1234

Dear International Trade Professional,

Below is a list of upcoming int'l trade events, which our office is organizing or co-sponsoring/supporting. We hope that you will be able to join us for at least one of them! You can also access this list as well info on other upcoming int'l events & missions at <http://www.buyusa.gov/uppermidwest/events.html>

Best Regards,

Debra H. Rogers  
Senior International Trade Specialist  
U.S. Department of Commerce  
Commercial Service - Chicago  
T: 312-353-6988  
\*co-located with US Exim Bank and SBA at the U.S. Export Assistance Center

**June 5 and 6, 2006 - Individualized Telecom Market Assessments on Vietnam, Russia, Pakistan , Saudi Arabia - Chicago**

TIA and the U.S Commercial Service, U.S. Department of Commerce, are pleased to announce that Industry Specialists from a number of U.S. Embassies/Consulates are available at Globalcomm to provide individualized market assessments for US exporters regarding prospects and issues specific to those markets. Industry Specialists from Vietnam, Russia, Pakistan, and Saudi Arabia can provide industry information, contact names within the industry, country business practices, and the marketability of your product. In addition, companies can also meet with a representative from the Export-Import Bank of the United States (Exim). EXIM enables U.S. companies, large and small, to turn export opportunities into real sales by assisting in financing the export. EXIM can also assume credit and country risks that the private sector is unable or unwilling to accept To register for an appointment with these Specialists, please use the following web link. Act now as time is short and there are only a very limited number of slots. <http://www.buyusa.gov/eme/globalcomm2006.html>

**June 6, 2006: Getting Paid for your Exports to China - Webinar**

This webcast program emphasizes transaction financing, covering different payment methods used for sales to China, what to be aware of in getting your money out, and steps you can take to mitigate these risks and challenges. Discussion includes an export loan case study. Brought to you by the Small Business Administration and the U.S. Department of CommerceChina Business Information Center. Discussion Topics will include Transaction-Specific Due Diligence, Credit Risk Insurance, Trends in Methods of Payments, U.S. Government Guarantee Programs, and an Export Loan case study. Time: 11:00 am – 12:30 pm CST; Location: Your Office or Home Computer; Cost: FREE. Register at <http://www.buyusa.gov/oregon/gettingpaidwebinar.html>

**June 7, 2006: Exporting to Vietnam: Opportunities & Advice – Chicago**

U.S. Department of Commerce Commercial Specialist Le Anh will brief area companies and educational institutions on the Vietnamese market for U.S. goods & services (including U.S. education & training). Mr. Anh's work focuses on export assistance to U.S. entities in the following sectors: medical equipment, health care services, education & training, banking & financial services, franchising, advertising, & tourism. The briefing will be held at the U.S. Dept. of Commerce Chicago Export Assistance Center, 200 W. Adams, Suite 2450. Time: 10:00. An education-specific roundtable discussion/brownbag on the Vietnamese demand for U.S. education will be also be held - from 11:30-12:30. Cost: None. Please RSVP to: Jennifer Springer at 312-353-3749 or [jennifer.springer@mail.doc.gov](mailto:jennifer.springer@mail.doc.gov), or Debra Rogers at 312-353-6988 or [debra.rogers@mail.doc.gov](mailto:debra.rogers@mail.doc.gov).

**June 7, 2006: Inside Trade Finance - Chicago**

One-day seminar designed to educate local firms on international trade financing basics. The seminar introduces several advanced techniques that will teach American companies how to successfully conduct international trade transactions. U.S. government export assistance programs will also be introduced. "Inside Trade Finance" is organized by National City Bank with support from the U.S. Export Assistance Center. Location: National City bank located at 1 N. Franklin St., Chicago, Illinois. Visit [www.NationalCity.com/seminars](http://www.NationalCity.com/seminars) for the complete "Inside Trade Finance" agenda, or to register for the event.

**June 8, 2006: Leveraging Financial Strategies for Success in International Markets - Rockford**

Seminar sponsored by the Illinois Global Partnership with: Charter One Bank; RSM McGladrey; Coface North America; The Datamyne Inc.; Rockford Chamber of Commerce; International Trade Association of Greater Chicago; U.S. Export Assistance Center Rockford. Keynote speaker: James H. Lambright, Chairman and President, Export Import Bank, Washington, D.C. Topics include: Financing International Sales Using Letters of Credit & Documentary Collections; Creative Ways to Finance Your Working Capital Needs; Arranging Financing for Your Foreign Buyer; Beyond the Border: Know Your Trading Partner; Export Tax Incentives; Demystifying Pricing in Foreign Currencies. 7:30 a.m. – 4:30 p.m., Cliffbreakers, 700 West Riverside Boulevard, Rockford, IL. Members & clients of sponsoring organizations - \$25; Non-members - \$35. For information and registration, please call 312/425-7000 or e- mail: [rsvp@illinoisglobal.org](mailto:rsvp@illinoisglobal.org). REGISTRATION DEADLINE: JUNE 6.

**June 8, 2006: China IPR Webinar Series: Enforcement - Webinar**

On June 8 2:00pm – 3:30pm EST, the China IPR webinar series will continue with a program on "Joint Enforcement Actions: A discussion of collaboration and joint efforts within industries on Anti-counterfeiting and Piracy Efforts". To register, please email your contact information to [CHINAIPR@mail.doc.gov](mailto:CHINAIPR@mail.doc.gov). The program is free and is part of an ongoing series running from May until December.

**June 9, 2006: Saudi Arabia Individualized Market Assessments - Chicago**

Commercial Specialist Ishtiaq Hussain from Commercial Service – Saudi Arabia will be available to meet with companies for one-on-one individualized market assessments who are interested in exporting to the Saudi market. Mr. Hussain's industry specialities are: Safety & Security, Telecom, Information Technology, Power & Water, Air-Conditioning, Process Control, Food Equipment, Education, and Hardware/Tools. Time: 10am-4pm Central Time, Morning & Afternoon 30 Minute Slots Available , Location: 200 W. Adams, Suite 2450, Chicago, IL 60606, Cost: \$25.  
Contact: Monica Toporkiewicz at 312-353-8059 or [monica.toporkiewicz@mail.doc.gov5](mailto:monica.toporkiewicz@mail.doc.gov5)

**September 8, 2006: Minority Enterprise Development (MED) Week 2006 - Chicago**

Save the Date for this Global Trade Workshop to be held Friday, September 8, 2006 from 8:00 a.m to 12:00 noon at the Hyatt Regency, 151 E. Wacker Drive. Minorities interested in tapping into the multi-million dollar global trade network by doing business internationally. This workshop will specifically focus on financing programs, free trade services, and public/private sector resources. Presiding over the workshop is a panel of government experts which will include the U.S. Department of Commerce, U.S. Small Business Administration, Illinois Trade Office and Export Import Bank. These agencies will share valuable information on how to take advantage of government financing programs and free trade services. For more information, contact Constance Green at 312-353-4798 or [connie.green@mail.doc.gov6](mailto:connie.green@mail.doc.gov6) .

