



# NEWSLETTER

December 2003

Vol. 13, No. 4

**CHAPTER OFFICERS**

Chairman  
RYAN JENKINS (471-3262)

Vice-Chairman  
CHRIS LAPOLE (471-4251)

Secretary  
KRICH SAWAMIPHAKDI  
(471-2137)

Treasurer  
HAROLD BURRIER (471-2077)

**EXECUTIVE COMMITTEE**

GARY DOLL  
CARLA GIACOBONE  
DENNIS HUFFMAN  
DAVE MILAM  
SCOTT WADE  
AL WATKINS  
TED YUREK

**SUSTAINING MEMBERS**

CANTON DROP FORGE  
THE EAST OHIO GAS COMPANY  
J&L SPECIALTY STEEL, INC.  
RAM SALES, INC.  
THE TIMKEN COMPANY

**EDITOR**

Carla Giacobone  
The Timken Company  
FSP 01  
PO Box 6931  
Canton, OH 44706-0931  
Phone: 330-471-4639 Fax: 330-471-7416  
E-mail: giacoboc@timken.com

## “Army/NASA Research Efforts for Aircraft Gearing”

Gearboxes for helicopters and aircraft have unique design requirements that call for extreme durability and survivability with minimal weight. At the NASA Glenn Research Center, NASA and Army researchers have worked together for 30 years to improve aircraft gearbox performance. Some recent advances and research objectives for aircraft gearing will be presented.

### About the Speaker.....

Tim Krantz has worked for the U.S. Army for 15 years as a research engineer, working to improve gearing for army helicopters. His work includes a mix of experimental and analytical research along with management of research contracts. Research subjects have included gearing efficiency, gearbox vibration and noise, optimization of system loads, and gear fatigue. His patented method for split-path transmission load sharing is in production on the Army's Comanche helicopter, and his work on gear superfinishing influenced decisions for implementation on the Sikorsky S76 helicopter and the Rolls-Royce LiftFan gearbox for the Joint Strike Fighter.

## February Social Event:

The Canton/Massillon Chapter of ASM will gather at the home of Carla Giacobone to watch the Super Bowl on February 1, 2004. Drinks will be provided -- including homebrew and homemade wine -- as well as dinner. Each guest will be asked to bring a snack as well. Please call Carla if you are interested in participating at 330-471-4639. Directions will follow in the January Newsletter.



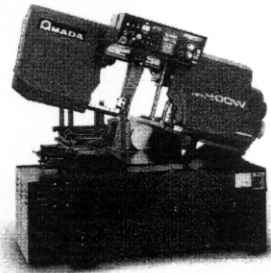
**SAWING SOLUTIONS**  
from Ram Sales Inc.



We can supply your company with the machines and blades for just about any sawing application. From tough alloys to advanced composites, we have the products and expertise to help you.

Contact us for more information or to discuss your application.

P.S. We can help with the easy jobs too!



906 Moe Dr  
Akron Oh 44310

Phone: 800-426-3452  
Fax: 330-630-2828  
www.SAWSand BLADES.com

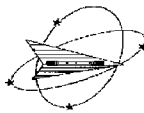


Helping you **predict** and **prevent** maintenance, reliability, compliance and safety problems with:

- Mechanical Integrity Evaluation
- Electrical System Heat Surveys
- Non-Destructive Testing
- Process Machinery Inspection
- Heat Exchanger Assessment
- Lifting Device Safety Inspection
- Energy Loss Identification
- Documentation Services
- QA/QC Auditing

For more information contact:

Bob Roush (330) **494-9436** or **800-321-0878** or write:  
**GFS/NDE**, 5250 Mayfair Road, P.O. Box 2908, North Canton, OH 44720  
broush@gfsnde.com

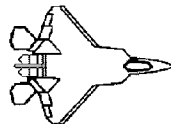


**WESTMORELAND MECHANICAL TESTING & RESEARCH, INCORPORATED**

*Where The Search For Excellence is Never Ending*

Specializing in:

- Mechanical Testing (Tensile, Stress/Creep, Charpy)
- Fracture Toughness (J1C, K1C, COD, Short Rod)
- Chemical Analysis
- Heat Treat Capabilities (Specializing in Aluminum)
- Full Machining Capabilities
- Fatigue Testing (Low & High Cycle, Da/Dn)
- Metallographic and Microhardness



For All Your Testing Needs, Contact:  
P.O. Box 388, Old Route 30, Westmoreland Drive  
Youngstown, PA 15696 USA  
Phone: (724) 537-3131; Fax: (724) 537-3151  
E-Mail: admin@wmtr.com; Web-Site: http://www.wmtr.com

Now Accepting All Major Credit Cards!



Mechanical Testing  
Chemical Analysis  
Fastener Testing



Materials Testing Laboratory  
Fastener Testing

**ICS** Converters of Cellulose Sponge

1350 Home Ave Akron, Ohio 44310

Custom fabrication of standard & compressed sponge for a wide range of industrial applications including;

**Laboratory, Electronics, Steel Finishing, Maintenance,** plus hundreds of others. Call for more information and samples.

1-800-737-9671 or Visit our Web-Site [icsponge.com](http://icsponge.com)



OLYMPUS

**B & B Microscopes, Ltd.**

SALES - SERVICE - REPAIR

E-Mail: [BBMicro@USAOR.NET](mailto:BBMicro@USAOR.NET)  
888-SCOPES-0 Voice Mailbox: 161  
(888-726-7370)  
Fax: 724-934-0310 - All Orders  
Telephone: 724-934-3811 / 800-433-1749

**Andre Domino**

**ADVERTISE WITH US!**

Place your advertisement in ten issues of the monthly NEWSLETTER / Announcement for the following rates (discount for Chapter Sustaining Members). Contact Mark Carlson at (330)471-3609 for details.

Up to 2 sq. in. @ \$50.00

Up to 7 sq. in. @ \$75.00  
(Business cards included)

Up to 15 sq. in. @ \$150.00

**CHAPTER SUSTAINING MEMBERS**

**Canton Drop Forge & Manufacturing Co.  
Dominion East Ohio  
J&L Specialty Steel, Inc.  
Ram Sales, Inc.  
The Timken Company**

**COME VISIT US ON THE WEB!**  
**[WWW.ASM-CANTON.ORG](http://WWW.ASM-CANTON.ORG)**

ASM International  
Carla Giacobone - FSP-01  
The Timken Company  
PO Box 6931  
Canton, OH 44706-0931

**ADDRESS CORRECTION REQUESTED**



CANTON - MASSILLON CHAPTER

[www.asm-canton.org](http://www.asm-canton.org)

The Materials  
Information Society

**2003-04 ASM Canton-Massillon Chapter  
Technical Meeting Schedule**

**2<sup>ND</sup> Wednesday Each Month**

<u><b>Date</b></u>	<u><b>Topic</b></u>	<u><b>Speaker</b></u>
September 10, 2003	In-Situ Visualization of Metallurgical Processes	Prof. Seetharaman Sridhar
October 8, 2003	CF8C-Plus: Hi-Temp Stainless	M. Pollard
November 17, 2003	Thoughts on Timken At Rolando's w/ AISE	Bill Bowling
December 10, 2003	Army/NASA Research Efforts for Aircraft Gearing	Tim Krantz
January 14, 2004	TBA	TBA
February 1, 2004	Superbowl Party	Social Event
March 10, 2004	Commercially Pure Titanium	John A Mountford, Jr
April 14, 2004	<b>Trustee Visit:</b> Materials Technology and Trends on Boeing Aircraft	Rodney Boyer
May 12, 2004	Richard Childress Racing Student Night	David Holden
June	Golf	Skyland Pines