



BMETS Newsletter

August 2008

<http://www.BMETs.org>

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THE PRESIDENT'S THOUGHTS

I hope everybody is having a nice summer. Fall is coming and we are preparing for the 25th anniversary as well as the scholarship dinner in January. I would like to take a minute to thank the membership for their support of our programs and of what we have been trying to do with the organization. We are currently working on ways to better market our web page: being able to perform credit card transactions, offering better web links, and getting a revenue stream for scholarships with donor incentives. We average 1300 hits per day on our web site and need to find a way to make it a revenue generator.

My concerns this year are the May bash, the lack of interest and the need for ideas that are affordable yet fun. We would like to try a cruise but this option is costly. I would love member input as it is your money and we are entrusted to take care of it and spend it wisely. Please be involved in the foundation stages of planning (give us suggestions). Thanks and have a great August.

Respectfully,
Rob Bain CBET, MS
President



Rob Bain

Membership Drive !!

This is our 25th Anniversary Year. We should be breaking all records for membership this year. Everyone needs to spread the news and hand out membership applications to your fellow BMETs. (See page 3)

Our 25 Anniversary Celebration is at our September Monthly meeting. Lets spread the news and get as many BMETs as we can to that celebration. (See page 6)

THE VICE PRESIDENT'S QUILL

Ralph Wells, Sr. told me he was going to retire in July. He said to me "I got my first pay check in my name at the age of 12 and I have not stopped since. I think after 55 years of working that I need to learn how to relax." I thought about that for a while; we have another BMET retiring and not one person with his caliber of knowledge, experiences, hardships and triumphs to replace him. That makes me sad a little; he was a good colleague and a friend. Didn't really like his mannerisms at first but then he grew on me. Can you find someone like that in your shop? Are we losing the battle towards getting younger blood into the field? What have you done to find the same type of person with the same type of enthusiasm for Biomedical Equipment Repair, Maintenance, Engineering, Clinical Engineering and all the other mirrored jobs that we do every day on the "Job?"

Last March, I went to my daughter's school for Career Day. I had 30 minutes to show and try my best to explain just what a Biomedical Equipment/Clinical Engineer does for a living. Basically, how does my job translate to a class of 8 and 9 year olds. I did my best to entertain and teach them what WE do by taking a DVM – show how much resistance we all have between to wet fingers, a VSM, with leads, SpO2 probe, and a simulator – kids loved it when I call it a Chicken Heart. It was fun. I liked that they were interested. They asked some pretty tough questions too, but my point is what are WE as a group doing to get the young, early-aged kids involved? Have we gotten to the High Schoolers yet?

Ok, enough of the VP's thoughts, let us get to the meat of the message. **MEMBERSHIP DRIVE** has started!!! As the Chairman of the Membership committee I have the duty of informing everyone to please send in your Membership applications – Corporate or Individual memberships must be in before September 12, 2008, if not then the cost of the 25th Anniversary Party will be the same price and you sign your membership papers at the door. Spouses, Significant others, and Guests are \$30.00 at the



Chris Jones, Sr.

door. A door prize will be given out to the member that brings the most Guests to become an active member of BMETS. Send this out to our brothers and sisters around the State of Maryland, Delaware and Virginia. If you know of someone within these states pass this newsletter on. My personal message to these people is "email me." If you would like to start a Chapter or if you have interest in starting a society closer to your area of living and work, I'd love to talk to you. Let's talk about branching out to others around the region.

See you all in September.

Chris Jones, Sr. MCP CPACS Assoc.
Vice President B.M.E.T.S.

**List of Members that Donated
to the BMETS Scholarship
Fund This Month**

No Donations for This Month

BMETS

Baltimore Medical Engineers and Technicians Society

Application for Individual Membership

Full Name: _____
 Address: _____
 City: _____ State: _____ Zip: _____ - _____
 Job Title or Expertise: _____
 Health Care Facility or Business: _____
 Business Phone: (____) _____ Fax Number: (____) _____
 E-Mail Address: _____

Check
Box

\$45 *†		Regular - Clinical engineers, biomedical engineers, biomedical equipment technicians, or managers and supervisors employed by a hospital, educational institution, manufacturer, or shared service, and actively involved in the field of biomedical instrumentation or engineering.
\$45 *†		BMET Associate - A classification that allows individuals directly working with the field to participate in the areas defined by the bylaws.
\$45 *†		Associate - Individuals interested in joining the Society but not qualified for membership in another classification.
amount		Scholarship Fund – I wish to donate \$ _____ to the BMETS Scholarship fund
////////////////////////////////////		
Free † Circle choice		Retired - Individuals who have been qualified for regular membership but are now retired from employment. Student - Full-time student of Howard County Community College, Johnson Technical Institute, and ECPI in a clinical engineering, biomedical technology Active Military – Reserves or National Guard
\$200	///////// ///////// /////////	(see Web Site for Corporate Membership Application.) Corporate - Any Hospital, Educational Institution, Equipment manufacturer, or Independent Service organization with more than one person to join. Corporations may register up to 5 individuals for \$200.00

Newsletters are sent in an e-mail format ONLY?

(Make sure your email is entered above.)

May we publish all this information in the BMETS Directory? ___ Yes ___ No

Are you willing to serve as a: ___ BMETS Officer? ___ Committee Member?

_____ RSVP for September 18, 2008, 25 Year Anniversary Celebration Dinner, Thursday, 6-10 pm

Signed: _____ Dated: _____

Mail to: Vickie Chapman, 7279 Procopio Cir., Columbia, MD 21046

NOTE: The Corporate Membership is a separate membership form located on the B.M.E.T.S. web site listed below.

† Your application is subject to acceptance by the Membership Committee.

Website: www.BMETS.org

FDA Preliminary Public Health Notification: Possible Malfunction of Electronic Medical Devices Caused by Computed Tomography (CT) Scanning

Date July 14, 2008

Dear Healthcare Professional:

This is to alert you to the possibility that the x-rays used during CT examinations may cause some implanted and external electronic medical devices to malfunction, and to provide recommendations to reduce the potential risk. Most patients with electronic medical devices undergo CT scans without any adverse consequences. However, FDA has received a small number of reports of adverse events in which CT scans may have interfered with electronic medical devices, including pacemakers, defibrillators, neurostimulators, and implanted or externally worn drug infusion pumps. There have been similar reports in the literature. It is possible that this interference is being reported more frequently now because of the increased utilization of CT, the higher dose-rate capability of newer CT machines, an increase in the number of patients with implanted and externally worn electronic medical devices, and better reporting systems. We are continuing to investigate this issue while working with device manufacturers and raising awareness in the healthcare community. To date, no patient deaths have been reported from CT scanning of implanted or externally worn electronic medical devices.

Adverse events

In the reports received by FDA, the following adverse events were likely to have been caused by x-rays from CT scans:

- Unintended "shocks" (i.e., stimuli) from neurostimulators
- Malfunctions of insulin infusion pumps
- Transient changes in pacemaker output pulse rate

Note that malfunctions of this kind, which can result from direct exposure of the medical device to the high x-ray dose rates generated by some CT equipment, are different from those related to MRI scanning, which are caused by strong electric and magnetic fields.

Recommendations

Before beginning a CT scan, the operator should use CT scout views to determine if implanted or externally worn electronic medical devices are present and if so, their location relative to the programmed scan range.

Background

Experimental studies with anthropomorphic phantoms have demonstrated the potential for high dose rate CT irradiation to affect implanted cardiac rhythm management devices. Some occurrences in patients, which involved neurostimulator and pacemaker devices, have also been reported to FDA and appear in the literature. Electronic medical devices that theoretically could be affected by CT x-rays include, but are not limited to:

- cardiac pacemakers,
- implantable cardiac defibrillators,
- neurostimulators,
- drug infusion pumps, including insulin pumps,
- cochlear implants, and retinal implants.

(While theoretically possible, reports of CT interference with cochlear implants and retinal implants have not been received to date.)

Problems with electronic medical devices that might be caused by CT scanner interference include:

- generation of spurious signals, including cardiac defibrillation pulses
- misinterpretation of signals produced by the x-rays as actual biological signals
- missed detection of actual biological signals
- resetting or reprogramming of device settings

The type of effect, if any, is likely to depend on the device type, the manufacturer and the model.

GE to acquire Vital Signs for \$860 million

Thu Jul 24, 2008, By Scott Malone

BOSTON (Reuters) - General Electric Co (GE.N: [Quote](#), [Profile](#), [Research](#), [Stock Buzz](#)) said on Thursday it would acquire medical-device maker Vital Signs Inc (VITL.O: [Quote](#), [Profile](#), [Research](#), [Stock Buzz](#)) for \$860 million, a move to expand its \$17 billion health care operation into the single-use products market.

By buying Vital Signs, GE, which makes high-tech medical equipment such as machines that administer anesthesia, gets access to an additional revenue stream -- consumable supplies that must be replaced with each patient.

"Equipment is like an automobile and the single-use product is sort of like the gasoline," explained Terry Wall, chief executive of Totowa, New Jersey-based Vital Signs.

"For every operation you obviously need an anesthesia machine," said Wall, "but your machine is going to last you five to 10 years where every single operation you need a new single-use anesthesia circuit."

Vital Signs shares surged on the news of the \$74.50 per share cash offer, a 28.4 percent premium to Vital Signs' \$58 close on the Nasdaq on Wednesday. The offer is above the shares' 52-week high of \$61.20 reached on May 9.

Omar Ishrak, president and CEO of GE Health Care's clinical systems unit, said that the deal, due to close in the fourth quarter, would be a boost to earnings next year at the second-largest U.S. company by market capitalization.

"We expect this business to grow at double-digit rates," Ishrak said. Vital Signs last year earned \$19.2 million on \$205.3 million in net revenue, which takes into account the effect of rebates on the company's products.

GE said the deal values Vital Signs at \$860 million net of cash and investments. It said that shareholders with a 37 percent stake in Vital Signs have agreed to vote in favor of the deal.

CALENDAR OF EVENTS
CHECK THE WEB PAGE FOR UPDATES

September 18 — 25th Anniversary Celebration

October 16 — Monthly Meeting—Topic, Speaker, Place to be announced later

November 19 — Monthly Meeting—Topic, Speaker, Place to be announced later

B.M.E.T.S- "25th Year Anniversary Celebration Dinner"

* Not many Organizations make it to this milestone "Let's Celebrate"

Date: September 18th, 2008

Time: 6 p.m.

Location: Town & Country Caterers. <http://www.town-countrycaterers.com>
2319 Hammonds Ferry Road, Baltimore, Maryland, 21227

Members Event -(2008-2009 Membership year). Free for BMET members—Guest Fee \$30.00

Membership dues may be paid at door or received by BMETS Treasurer, prior to September 12th, 2008, for access to event. "No Exceptions".

RSVP is still required by 9/12/08.

Send RSVP after you have paid your membership dues for 2008-2009 membership year.

"Bull and Shrimp Feast"

Menu to follow on separate flyer.

Beer, wine and soda included (mixed drinks by cash bar).

Vendor Sponsored Event - No Formal Presentation.

As of May 1st, vendors sponsoring event:

- * 1st Call BioMedical, Inc.
- * Fluke BioMedical
- * Destiny Surgical Products/Skytron
- * Trisonics
- * Strickler Medical, Inc.

Brian Zelubowski

25th year Anniversary Celebration Chairman

TOOLS OF THE TRADE



DranTech ULTRA Precision Digital Multimeter

Dranetz-BMI is proud to feature the DranTech ULTRA Precision Digital Multimeter. This multimeter is unlike any other multimeter and data logger on the market, providing bench DMM capabilities and accuracy in one very portable hand-held instrument for R&D labs, industrial applications, universities, government authorities, testing stations, manufacturing and QA. Benefits/Features include:

- Precision multimeter (V, mA, \dot{U} , HZ, °C/°F) and data logger.
- 1,200,000 digit display, 6 1/2 digit high resolution for: DC/AC+DC voltage: 100 nV/1micro V
DC and AC+DC Current: 100 picoA
- TRMS AC+DC
- Milliohmmeter with 2 and 4 wire connection, Resolution: 0.1 mOhm, Kelvin Connection
- Precision temperature meter, °C and °F, for Pt100/Pt1000 sensors with 2/4 wire connection, resolution 0.01 °C/°F, for J and K thermocouples, resolution: 0.1 °C/°F, internal and external reference junction can be selected
- Large data memory: 128kB
- Automatic or Manual Measuring Range Selection

Contact Dranetz-BMI Sales at 800-372-6832 for more information and for our data specs, please visit: <http://www.dranetz-bmi.com/products/prodspec.cfm?prod=62>

BMETS Web Site Statistics

July 2008 = 18999 Total Hits

June 2008 = 28174 Total Hits

May 2008 = 21871 Total Hits

BMETS Monthly Meeting Sponsors for 2008



For ultrasound parts, probes, or service, call 1-800-248-4153.

EVERYTHING ULTRASOUND

<http://www.axessultrasound.com/>



<http://www.rell.com>



<http://www.rsti-training.com/>



<http://www.skytron.us/>



<http://global.flukebiomedical.com/busen/home/default.htm>



<http://www.echoserve.com>



<http://www.globestar.com>

Tad Bit of History

B.M.E.T.S Newsletter

From the Past:

Newsletter Date: November 1995; *Volume 13 Number 3*.

Hello fellow BMETS. I am writing this column as a concerned Healthcare Professional. I have been in the Bio-Medical Maintenance field a long time (a lot longer than I like to admit). I have been in the Medical Field even long than that. I have been a "go-for" and I've been "in charge". Through all of this, both in the military service and in the civilian community the main theme was and is the same "Get the job done / Get the patient treated".

In my first article this year I wrote, "I have seen many ideas, practices and concerns come and go and come again." Some cyclic things change a little as they come around or sometimes they change a lot, but the general idea remains the same. "Cycles" are real things and all one has to do is be on the lookout for them. For all of you that were at our last meeting, you remember the subject of "Good Manufacturing Practices Regulations." This is not a new concept. I did fade away the last time because of the complexity of the record keeping. I believe that it will not die a slow death this time though. Why? Because it is a good idea. OEMs can use the data to improve their products, but we can use the data also. Knowledge is power. The power we need to justify a recall, eliminate an OEM from a purchase proposal or force a consideration on a service contract. OEMs have been collecting data for many years on their equipment. Service reports during warranty and then continuing if the item was under contract. How did they use that information? Want to speculate? How can we do that? There are so many manufactures and some many pieces of equipment. The record keeping will overwhelm us! Well ladies and gentlemen; if this legislation passes you will see the eminent demise of the manual record keeping system. Most organizations use computer record keeping system sooner or later. It all boils down to "Common Sense". "Be flexible. Do your job and remember the customer is your reason for being here." All else will follow in its own cycle.

This being said by Robert G. Cromartie, CBET President of BMETS November 1995, *Volume 13 Number 3*.
