



THE INTERMITTENT SHORT

January 2010

The December 4th meeting held at Dakota County Technical College featured the Dimension Printer from Stratasys, Inc.

The Dimension is a 3D printer which uses an ABS or ABS Plus (acrylonitrile butadiene styrene) to create a solid object that is functional without the need for curing. The software automatically plots a precise deposition path for Dimension to follow. ABS plastic (in filament form within auto-loading cartridges) is fed into an extrusion head, heated to a semi-liquid state and accurately deposited in layers as fine as 0.007-inch (0.178 mm) thick. After completion of the build, support structures are simply removed by washing in a soap/water solution which may be flushed down the drain.

The printer was demonstrated by Jesse Roitenburg of Stratasys who brought several examples of uses for the printer including medical products and skeletal reproductions taken from CAT scan images. The printer was working during the presentation and by the end it had completed a sample that was ready for use.

One of the interesting uses Roitenburg mentioned was a microwave in the company break room. The door handle had broken so one of the engineers designed a replacement in 15 minutes, sent the instruction to the printer and had a replacement handle in a couple of hours.

You can visit their web site at www.dimensionprinting.com to see a video presentation of the printer and how Jay Leno uses one to create missing parts for his auto collection.

UPCOMING MEETINGS

19 March 2010 Lakewalk Surgery Center
1420 London Rd. Duluth, MN
Town Hall meeting with Steris, meeting starts at 10:30

May-June 2010 **Available**
NCBA Annual Conference September 2010 Location TBD

Contact Mark Rhodes if you are interested in hosting any of these events at: mrhodes@lakewalk.com



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Section 6.8.3 of the IEC 60601-2-4 standard and AAMI DF80 standards require defibrillators to be tested on different resistance loads of 25 Ω , 50 Ω , 75 Ω , 100 Ω , 125 Ω , 150 Ω , and 175 Ω to ensure proper current is delivered to patients with different impedances. Impulse 7000DP plus 7010 Defibrillator Selectable Load Accessory is the only tool available today with capability to test defibrillators beyond 175 Ω . A 200 Ω option gives manufactures the capability to test defibrillators under extreme impedance conditions.

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The CABMET Study Group Sponsored by the NCBA was recently held at the University of Minnesota Medical Center- Riverside Campus-Fairview. Ray Nielson, who used to provide this training decided to step down in providing his annual certification class and highly recommended the CABMET Study Program.

By having the NCBA sponsor the gathering, CABMET waived their teleconference fee of \$140 and attendees only had to pay for the \$60 registration fee. The NCBA is planning on sponsoring another study group in the spring that will be held at the Dakota County Technical Institute. Please refer to the NCBA website (<http://www.ncbiomed.org/>) for more details on this program or go to the CABMET website (<http://www.cabmet.org/study.html>) Additional information will be sent via e-mail as it becomes available.

The CABMET Study group met from Sept 24th through Nov 4th, 2009 with half of the study group taking the Certification exam on Saturday November 7th, 2009. The results of those exams are in and most of the group taking the exam passed.

The group scheduled a follow up conference call with the intent to get feedback on how well the study group prepared people for the exam and invited the president of CABMET, David Scott, to participate.

The group made a couple of suggestions for additional content that could be added for the study group but overall the comments were positive and included the following:

- 1) Focus a little more on anesthesia and ventilators (especially troubleshooting).
- 2) Add more information about networking.
- 3) The subject matter was right on with how the material was covered in the study group.
- 4) Need to really focus on the common problems with equipment when studying.
- 5) Content was 90% on target with what was on the test.
- 6) CABMET is a huge value for the money.
- 7) The study group was worth the time.
- 8) Dave maintained control of the group on the conference line and one way was by muting the phones during the material presentation.

The Intermittent Short

- 9) The group environment was helpful.
- 10) Need to commit to 1 hour every day of studying.
- 11) Started studying with the start of the study group and felt pretty prepared for the exam.
- 12) Schematics were just what was covered in the study group.
- 13) CABMET covered testing skills and how to take a test.
- 14) Of all of the material we received, you should focus more on the CABMET material.

The CABMET Study group is a great opportunity to get ready for the test. Look for more details on the NCBA website on the next NCBA sponsored CABMET study group.

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Meeting Minutes

December 4, 2009

Dakota County Technical College
Rosemont, MN

Called to order at 12:55pm by President Janice Courtois.
Meeting turned over to new President, Jon Crissinger.

Secretary's Report:

Jon Crissinger read the minutes from the September meeting and the November financial audit meeting. Ray N. moved to accept the minutes as written. Scott B. seconded the motion. The minutes were approved as read.

Treasurer's Report:

Jon Crissinger read the financial report from the November audit meeting. Ray N. made a motion to accept the report. Scott B. seconded the motion. The treasurer's report was accepted unanimously.

Old Business:

Vicki S. made an announcement that the CABMET CBET prep course, hosted by the NCBA, was well attended. The class received good reviews.

New Business:

Vicki S. made a motion to explore options for a new and improved website by the next quarterly meeting. Ray N. seconded the motion. The motion was approved unanimously.

Jon Crissinger made an announcement that input is needed for the annual seminar in September 2010. The location will be chosen by the third week of January.

The next quarterly meeting is not determined.

Ray N. made a motion to adjourn the meeting. Scott B. seconded it. The meeting was adjourned at 1:15pm.

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2009/2010 NCBA Officers

President

Jon Crissinger
CHI St. Joseph's Area Health Services
218-237-5592
joncrissinger@catholicealth.net

Vice-President

Brent Bahr
Medtronic
763-514-6856
brent.allen.bahr@medtronic.com

Treasurer

Shelly Crisler
Dept of Veterans Affairs
612-629-7507
shelly.crisler@va.gov

Secretary

Mark Rhodes
Lakewalk Surgery Center
218-728-8572
mrhodes@lakewalk.com

Webmaster

Ken Erickson
Hennepin County
612-873-3389
thewebmaster@ncbiom.org



***Nominations must be submitted to Jon Crissinger by
1 August 2010. (No exceptions)***

Struther's Award of Excellence

The Struther's Award of Excellence is an honor bestowed to a NCBA member every September. Please consider nominating a co-worker, manager, friend who deserves to be recognized for his/her work in the biomedical/clinical engineering field. Send your nominations to Jon Crissinger at joncrissinger@catholicealth.net



Past Struther's Award winners are:

1998 - Dave Pedersen

1999 - Jim Skipper

2000 - Sue Finney

2001 - Vickie Snyder

2002 - Deborah Schweigert

2003 - Ray Nielsen

2005 - Bob Tholand

2006 - Rodney Severson and Jennifer Kriske

2008 Janice Courtois and Jim Hedlund