FERRIS STATE UNIVERSITY

Manufacturing Engineering Technology

MINUTES OF ADVISORY BOARD MEETING April 13, 2007

Advisors Present: Tim Bublitz of Bradford Company; Stephanie Leonardos of Amerikam; Bill Todd of Michigan Rebuild & Automation; Dave Hegenauer of Big Rapids Products; Matt Aldrich of Big Rapids Components/Haworth; Dave Westphal of Delphi; Dragi Kuzmanovski of Delphi; Joe Nowicki of Laser Dynamics/SME Chapter 38; David Meade of Manufacturing Engineering Department, Western Michigan University; Jon Brief of CBR Industries; Andy Pollard of John Deere Dubuque; Bob Skodzinsky of Gerotech Inc.

FSU Guests: Ron McKean, Dean Krager, David Borck, Shane Wierda.

Program Representatives: Blaine Danley, Bruce Gregory, Gary Ovans, Jim Rumpf, Mark Rusco, Joe Wist, Sandy Morningstar

Introductions and comments by attendees:

- Dave Borck hired full-time last year was previously an adjunct. 8-9 years CNC software experience.
- David Meade Faculty Manufacturing Western Michigan University. Small program all students are off-campus teaching in Muskegon, Battle Creek and Benton Harbor soon to be Lansing. Looking to expand enrollment. All classes are in evening cater to family or married students.
- Bill Todd owner of a small company dedicated to the rebuilding of equipment primarily cutting getting into automation. He likes being a small profitable company. Has hired approximately nine graduates in the past and all have turned to be very fine hires.
- Andy Pollard John Deere. Has been involved with Welding Engineering for past 6-7 years expanding to the Manufacturing side.
- Shane Wierda Graduating Senior this year has been hired in CNC Department of John Deere Dubuque Works.
- Bob Skodzinsky Gerotech in distribution since 1990.
- Joe Wist MATL Science and Manufacturing faculty recently promoted from Assistant to Associate Professor.
- Mark Rusco Faculty primarily in QET in both Grand Rapids and Big Rapids.
- Dave Hegenauer Quality Manager at Big Rapids Products will be graduating from the Quality Certificate program.
- Stephanie Leonardos Amerikam strong relationship with FSU privileged to have ties with FSU.
- John Brief 1989 MFGE graduate of FSU worked for Ford Motor Company then back to school for MBA. Went into sales with Alcoa 17 years in corporate

America – moved back to Traverse City – bought case-work company 1 ½ years ago – agrees with Bill Todd about owning small profitable company. Also an adjunct professor at FSU in Traverse City – represents our school.

- Joe Nowicki Laser Dynamics also representative of SME has now backed off to 40 hours per week since his 71st birthday.
- Tim Bublitz 1997 Graduate of MFGE program at FSU. Bradford Corporation Industrial Packaging company sees product from the manufacturing to assembly. Two divisions expendable and returnable. He does lots of travel.
- Matt Aldrich has been with Haworth for ten years Manufacturing and Quality Departments.
- Bruce Gregory Has been at FSU for 24 years Working on SAE Car students are excited with this project.
- Dean Krager primary instructor for 8th year at FSU. Six years as Manufacturing Engineer graduated from FSU. CNC Courses. Program going through a dramatic change will be very rewarding with big gains.
- Dave Westphal Delphi 1992 graduate of MFGE program at FSU.
- Dragi Kuzmanovski 2000 graduate of MFGE at FSU. Works for Delphi Saginaw hired by Dave Westphal directly out of the program.
- Ron McKean Associate Dean for College of Technology

Gary Ovans

Gary mentions about ice scrapers given to all attendees. Will be ordering dog tags with FSU Manufacturing emblem to attach and give away. Also, shows shirts available as gifts to any and all MFGE Advisory Board members. There is a sheet in folder to turn in if anyone is interested.

Introduction of Ron McKean - COT Associate Dean

Gary turns it over to Ron McKean to give College and University updates. Ron mentions that he has learned a few things. Graduates are successful and that every two years that you serve on this board, you look one year younger.

Ron came here in 1990 in the Electrical Engineering Department – thought it would be short-term. This town and school are nice places to work and raise families. Teachers focus on the success of students. Faculty continues to be more aggressive about convincing students to participate in extra-curricular activities.

The Rube Goldberg Award – based on a cartoonist, Rube Goldberg, this contest was to see who could create a machine with a very simple process with as many steps as possible. FSU won this award nationally by squeezing orange juice from an orange in 345 steps. This has been on the Today show and will be on Jimmy Kimmel Live on April 20th. This has also been submitted as a world record in number of steps.

Formula 1 Car – April 18th – will run WRFS testing. There is competitions for endurance testing, acceleration testing, quality and performance. Shane Wierda is working on the shifting system of this car. A new car is built every year, but each car has two years – first year is design and development and the second year is performance. Students are very enthusiastic with this project.

Tom Oldfield could not attend. He is beginning his second year as Dean of the College of Technology. There has been a big difference in climate of COT. He is big on donations and scholarship which have been on hold with this college for many years. The College of Technology has gone through three deans quickly. The atmosphere has changed since Mr. Oldfield has served as Dean.

Funding is being challenged continuously. COT needs to develop partnership with industry. We are looking hard into developing endowed scholarships. As Tom and Kaci approach your company with requests, please listen to them.

College of Technology enrollment is good. Lost a few heads for this fall but count is expected to be strong in Fall 2008.

MFGE programs are looking for ways to 1) improve enrollment; enhance image and convince viable future students. We need to convince the media that manufacturing is not dying. Gary suggests changing the name "manufacturing" to "industrial". Challenges we face – need to increase enrollment – establish funding – develop facilities and curriculum. Ron thanks all advisory board members for taking their time to be here.

Current Status of Program and Highlights of this past year: Gary Ovans shows website on overhead – media constantly changing – encourage members to go in and check out the website.

Current enrollment on-campus 40 (but we want that higher); off-campus – 44 (number is misleading – a number of students are part-time students – full-time jobs, parents, etc.) This number does not include adjunct

2005-06 graduates = 23. Salaries for MFGE graduates is usually greater than \$50,000.00. Placement in recent years in Michigan, even though it may take a little time, is 100%.

Some students need to go to a community college to get their grades up.

MFGE Faculty Update: Blaine Danley and Joe Wist – both with metallurgical degrees. Jim Rumpf – has been voted in as FFA President so will be down to only ½ time faculty. Gary asks members if any of them would be interested in teaching. Faculty for Statistics and/or Material Science is in high demand. The MFGE Faculty must work together to solve manpower deficiencies

Budget: 2005/06 Carryover - \$347.00 S&E Fixed income was \$18,024.00. Tom Oldfield is working hard to increase the size of pie that each department gets a piece of. Off-Campus incentive earn \$11,381.00 in 2005-06.

John Deere Foundation donated \$10,000 in 2005/06 for tooling purchases for the program. This year (2006/07) John Deere Foundation is expected to donate another \$6,000.00.

Sandvik-Coromant offers a tooling donation of approximately \$5000 in tools as well as a serious discount on the purchase of tools throughout the academic year.

Hurco provided a spindle at a significantly discounted price to replace the one which had burned up.

Faculty – Professional Development – Jim Rumpf – Annual ASEE – giving a Presentation as well as reviewing papers. Dave Borck applied for professional development grants to upgrade skills. Faculty are encouraged to secure grants and take advantage of opportunities such as these.

Awards Banquet – April 27 at Holiday Inn – Buffet Dinner. Scholarship recipients will be formally recognized. John Deere last year provided four - \$3000 scholarships and this year will be offering two - \$3000 scholarships.

Website: Dean's office student helps build website. Gary took Board through website to view past students and their positions now – some on the Advisory Board now.

Andy Pollard asks if there is any web-based training going on?

Gary responded that there is not currently but they are looking into it.

Joe Wist: Booth at SME Great Lakes Conference – to get more recruitment – Grand Rapids.

Bruce Gregory: Congratulates Joe Wist on his new leadership with SME – he is really on task and is doing a great job.

Break: - 10:40 – 10:55

Report from Blaine Danley regarding Material Science: Blaine Danley and Joe Wist teach Material Science – Facilities improvements in lab. Blaine offers to take members a tour this afternoon. There is new paint, lighting, cabinetry. A new piece of equipment is the optical emission spectrometer. Blaine appeals to the members for new materials that their companies might be using in the next 5-10 years. Samples are needed to have on-hand to study their properties and characteristics. Blaine asks the members if they have any questions. Stephanie expressed her concerns with environmental issues and business issues. Please share your knowledge with Blaine. Blaine asks members to set out business cards.

Report from Joe Wist regarding Curriculum/Assessment: Last year with tooling program to recruit in High Schools 20-50% tooling – all others are transfers externally. Need to bring them in a track to MFGE. Grand Rapids is 100% transfer. In the past there have been lots of constraints. We are looking at numerous changes. It's easier to fill 2+2 than 0+4. Waive four credits (from 128 to 124) with 0+4. Joe presents a flow chart. This has taken a lot of eight credit courses and split them. Questions and comments are positive. Gary remarks that this should help transfers know where they're going. Stephanie states that this should overcome a lot of obstacles. Joe says this is strategically smart and there would be no new courses. This should be a selling point for students. Tim Bublitz states that this should strengthen – elements – understanding— other facets. He works with two other FSU grads. They have talked openly with him and really wish that was available. High schools will love it.

Marketing Strategies: Need personal visits with high schools. Bruce Gregory states that there is a need for automation concentration and this should work with existing courses. We are creating concentrations, not creating classes. Just combine existing to create new.

Tim Bublitz expresses that we should be pushing the business fundamentals. Some can't do simple things such as balance books . . . these fundamentals do not exist in the programs. His business created a 2-day commitment in house to teach basic accounting. Gary: Need to bring back economics. Jon Brief agrees with Tim Bublitz. MFGE plant seed in their heads. Employees need to understand business basics.

At last meeting, a decision to pre-test and post-test for certified manufacture engineer exam. Cost is \$90.00 – we should pursue. David Meade – mentions that you can self-test on CD. Joe Wist – these are not bench-marked against other schools.

Bob Skodzinsky – **Haas Automation:** What is Haas Automation? Started with rotary indexers . . . now over 100 products . . . have a 1,000,000 sft. building. Extremely automated. Export half. Haas has one of the largest booths in Chicago Machine Tool Show. Haas shipped \$750,000,000 in machine tools. 1,300 employees – 200 are engineers. Michigan Haas Factory Outlet/Gerotech Inc – one product line "focus". 1,100 customers in Michigan. 29 companies with 50 locations. The goal is to acquire machine tools easily. Prices are on website – you can build your tools on the web. Assist, install and train. Now in Europe. In 2004, they moved into Asia.

Haas Technical Education Center Program – extended to 600 schools in country. See calendar of events. Encourage to bring faculty and students. Haas has an annual teaching event.

Factory or college, two-day event, field trip opportunities. Project "Lead the Way" – trying to get traction in Michigan to understand the technology in MFGE. Indiana put \$2 Million in teaching. www.pltw.org. Dave Borck has used Haas website – lots of information – all manuals downloadable.

Stephanie – excellent meeting – incorporated many issues.

Gary says there are new brochures coming. Please take one or request more if you have the opportunity to hand them out.

SME Golf – Wednesday, June 20 – mid-morning

Adjourned at 12:10 PM

Thanks to all who participated.

Respectfully submitted, Sandy Morningstar, Department Secretary