

**CENTRAL TEXAS COLLEGE
INDUSTRIAL TECHNOLOGY DEPARTMENT
WELDING ADVISORY COMMITTEE
May 3, 2007**

Jim McGregor (**Chair**)
Air Gas Welders Supply
626 East Sixth Street
Belton, TX 76513
254-939-1823
Cell: 254-760-1947

Larry Herod
DOL Maintenance
5875 FM 2313
Kempner, TX 76539
512-932-2196 (home)
254-287-3644 (work)

Randy Patterson
WG10-Welder
DOL Maint.
Fort Hood, TX 76544-5027
(254) 287-2752
Randy.Patterson@hood.army.mil

Larry McGregor
1900 South I35
PO Box 1026
Belton, TX 76513
254-935-9353

Richard Weathers
Fugro Consultants LP.
115 Topeka Drive
Waco, TX 76712
Ph: 254-399-9299
Fax: 254-390-
Cell: 254-723-0120

Peter den Harder
Plant Manager
Material Transportation Company
P.O. Box 1358
1408 S. Commerce
Temple, TX 76503

Bill Webster
Fugro Consultant
Welding Inspector
115 Topeka Drive,
Waco, TX 76712
(254) 339-9299

Timothy Walker
Professor Emetrius
3150 FM 30
Kempner, TX 76539

Ex-Officio Members

Tony F. Minica
Kleinfelder
4103 E. Stan Schleuter
Killeen, TX 76542
254-699-1126

Ronnie Turner, Welding Instructor
Larry Gossett, Welding Instructor
Don Mikles, Dean, Central Campus
Billy Hazzard, Department Chair
Dianne Dudley, Department Assistant

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MEMBERS PRESENT:

Jim McGregor (**Chair**), Air Gas Welders Supply, Belton, TX 76513
Randy Patterson, WG10-Welder, DOL Maint., Fort Hood, TX 76544-5027
Richard Weathers, Fugro Consultants LP., Waco, TX 76712
Larry Herod, DOL Maintenance, Kempner, TX 76539
Peter den Harder, Plant Manager, Material Transportation Company, Temple, TX 76503

GUEST:

Derek Johnson, EIT Material Engineer/CWI, Kleinfelder, Killeen, TX 76542

MEMBERS ABSENT:

Bill Webster, Fugro Consultant, Welding Inspector, Waco, TX 76712
Tony F. Minica, EIT Material Engineer, Kleinfelder, Killeen, TX 76542
Larry McGregor, Owner of Air Gas, Belton, TX 76513
Timothy Walker, Professor Emetrius, Retired CTC Instructor, Kempner, TX

EX-OFFICIO MEMBERS

Ronnie Turner, Welding Instructor, Central Texas College, Killeen, TX
Larry Gossett, Welding Instructor, Central Texas College, Killeen, TX
John Mehalick, Lab Assistant, Welding, Central Texas College, Killeen, TX
Don Mikles, Dean, Central Campus, Central Texas College, Killeen, TX
Billy Hazzard, Department Chair, Central Texas College, Killeen, TX
Dianne Dudley, Department Assistant, Central Texas College, Killeen, TX

The meeting was called to order by Mr. Billy E. Hazzard, Department Chair who welcomed the Welding Advisory Committee on behalf of Dr. Anderson, Chancellor and Mr. Mikles, Dean of Central Campus. He thanked the committee for their continued support of the Welding Technology Program and participation on the advisory committee. As a community college, we need to be doing those kinds of things that prepare students to go to work. As committee members, you are telling us what is new in the industry and what we can do to make our program better and make our students more marketable.

Mr. Turner discussed the changes since last year. New chairs and desk were purchased for the classroom and the floor was redone. Mr. Turner said also that there was a revision of the Blueprint book that came out in November. A new version of the textbook for Welding Fundamentals will be released in June. In the instructional package with the textbook, there is an E-Resource CD that has diagrams and pictures which can be inserted into the module book and examinations. We have purchased a new pipe cutter and Computer Numerically Controlled (CNC) plasma cutter. Mr. Turner is beginning to write a new course, Introduction To Layout and Fabrication. The course will include bend radius, pipe bender system, sheet metal brake, sheet metal sheer and the CNC. The CNC will be the jewel of the whole class, laying out things

and being able to do it on the computer; for instance creating an item like a table out of 4 x 4 sheets of 14 gauge steel that the student can utilize when they finish. Equipment in next year's budget will add two pulse Gas Tungsten Arc Welders (TIG) for the TIG course. These machines use cerium tungsten rods which will assist in welding aluminum. Currently, we have 35 students in the course and have had fifteen completers since last year. Last summer, the welding class built two shades for the Shoemaker High School tennis team.

Mr. Hazzard added that two more computers were put in the budget for next year. Mr. Turner has found an interactive DVD which supplements the introductory safety course. The students respond really well so we have put in the budget for four more interactive DVDs. Last June when Mr. Turner attended the WECM conference, one of the issues raised was to take out or modify the blueprint class and incorporate computer aided drafting. Conveying your concerns expressed at last year's advisory committee that idea was not adopted. Mr. Turner learned at the conference that other schools have added the plasma cam to their programs and found that if you can interest an art student to take a class, you may now have a student interested in welding who may go all the way through the welding program.

Mr. Hazzard discussed that we were in the process of amending the TXDOT contract. We have five instructors that teach 18 different classes for the state and were programmed to teach 80 classes this year. One of the things that have long been recognized is that of the six welding classes we teach, five of them were inadequate in length. There was just not enough time in the course to teach what the students really needed to learn. We were trying to teach the general shop class in eight hours which included safety, introduction to oxy fuel (cutting and welding), and introduction to shield metal arc welding. This is just one example. At one time, we taught the bridge certification class. None of the students passed which is not a good track record if we were trying to certify students D1.5. Since then, we have been looking for a way to produce better welders for TXDOT. The five classes varied from eight to sixteen hours. He and Mr. Walker started back in August preparing for their first presentation in October to the Standing Committee on Training in Austin. They went back in January for a decision before that same committee. Across the board, all five classes were increased from eight or sixteen to 32 hours. The entry level class, General Shop, is now a pre-requisite for all of the classes that we teach. The General Shop class, a four day class, is followed by the Basic Shielded of Metal class, another four day class, and then, the third class, Advance Shielded Metal which has the provision to certify students at D1.1. Once they have completed the three classes, they can now take the Bridge Certification class. The other two classes are Gas Tungsten Metal Arc and Gas Metal Arc Welding. With the approval in January, the contract had to be amended. Beginning May 21st, we will be teaching a class in San Angelo and are programmed to teach 10 more welding classes between now and the end of the August.

Mr. Weathers said one of the things they are seeing is that some companies who have been traditionally hands on are now investigating robotic welders for fabrication work. It used to be just specialized work but now fabrication shops have begun to look into it. Secondly, there is a big need for welders that can read blueprints. In a lot of our industrial jobs, primarily general construction jobs, they are seeing semi-qualified people trying to make welds and definitely a lot of people who cannot read blueprints. People coming out of our training program are trained to the point to be supervisors.

Mr. Herod said that the army is sending their welders to Aberdeen and he asked if we have considered coming to Ft Hood. He said that he had some soldiers who had attended Aberdeen and when they worked for him, were not qualified. Mr. Hazzard said he is not sure where training requirements were handled, by the G3 or something through the Ed Center. Mr. Herod said that when he took our course that if a student went through the complete program and did not pass something, they had to take it over. Mr. Hazzard explained the open-entry, self paced program. Mrs. Dudley also stated that if a student does not pass a class that the student could not take the next class until they had completed the requirements for the class he or she was currently in. Additionally, Mr. Hazzard explained the Tuition Assistance program whereby the army pays for the soldier's classes. Mr. Turner said that he would talk to Mr. David and Mr. Pruitt, Army Warrant Officers who are welding students, to see what is Aberdeen teaching.

Mr. den Harden stated that he is in need of people who know how to read blueprints. Mr. Turner asked Mr. den Harden about getting the material and drawing of a battery stand for our Advanced Fabrication class. The project would require the student to tack it together based on a real industrial drawing. The student will work with something that has stress points and must consider the heat factor so that it does not warp and stay flat. It will be a good learning tool and could be the practical exam for Advance Layout Fabrication class.

Mr. Johnson said that he is a new Certified Welding Inspector (CWI). He went through the seminar put on by American Welding Society (AWS) and one of the comments made by the person presenting the seminar was that, at this time, there is a big demand for CWIs in the industry and a number of people on the committee agreed. It is something we could look at. Mr. Turner said that back in the late 80s and early 90s that we had a program for the CWI seminar. We still have some equipment that he has incorporated into the blueprint class. The next to the last module, Module 7, in the Blueprint class is all about testing. It does not go into detail about CWI nor code books. If Mr. Turner has a student who might be interested in the CWI, he has all of the code books and other books for the CWI which will help the student to prepare.

Mr. Hazzard asked the Committee Members if there was a need to continue the programs. The committee agreed that there was a definite need. All members present agreed that the Welding Technology Programs.

The committee members completed the annual evaluation of the Welding Technology Program and the Contact Information Form.

Mr. Hazzard thanked everyone for attending the meeting and expressed his appreciation for their assistance and support of the Welding Technology Program. Everyone was invited to tour the facilities

Dianne Dudley
Recorder/Department Assistant
Industrial Technology Department

Billy Hazzard
Department Chair
Industrial Technology Department