

**Machine Trades Advisory Meeting Minutes**  
**December 9, 2009**  
**SBVC Sun Room 11:30am – 1:00pm**

**Attendees:**

Dave Aston	San Bernardino Valley College
Amanda Moody	San Bernardino Valley College
Paschal Walsh	Anco International Inc.
Michael Kerwin	NTMA National Tool Machining Association
Gary Sladek	HAAS Automation
Bill Clarke	San Bernardino Valley College
Gary Kelly	Dean, SBVC Technical Division
Joe Ratcliff	San Bernardino Valley College
Larry Elssmann	Milor High School
Chris Mitchel	American Custom
Kay Ragan	VP, San Bernardino Valley College
Michael Bermudez	Walker Corporation
Erich Lewis	Kelly Space and technology

**11:30pm – 12:00pm Lunch**

**Meeting start 12:00pm**

**Chris Mitchel** from SPE presented a Life time Achievement award to Dr. Bill Clarke for his excellence in the plastic industry

**Items discussed per agenda provided**

**Bill Clarke** gives an overview of the Machine trades curriculum that was emailed out to all advisory members. Looking at what the program is doing and where it needs to go. Reviews 17 courses in all with a power point presentation included.

**Mach 010x2 review:**

Success rate of NIMS testing for SBVC students in the past was only at 60-70%, which in any case is not very good. 1 year ago, we developed a course that Mr. Dave Aston teaches, which prepares the students, on what to expect out of the test.

**Dave Aston** shared that the class focuses on showing the math portion, how to look up information not just using the standard text, and how to absorb all the information to be prepared as possible for the examination. This coming Monday our first class of 27 will be taking the NIMS certification test.

**Bill Clarke** stated that there has been a recommendation by some industry leaders to make the Mach 010x2 an online course. Some feel that it will better serve the students as a whole, some of whom work full time better by being able to access this type of curriculum on line. Now to transfer this over to on-line systems will take a 1 year, so that we may development the curriculum and get through all the approvals.

**Larry Elssmann** stated that he would very much like to see this course on-line, it would allow him to better teach his High School students in his own classroom environment.

**Recommendation approved to Develop on-line class for Mach 010**

**Michael Bermudez** shared that an online course would be very beneficial to students who also work fulltime. Walker Corporation had a few employees that were not able to take courses this semester due to extra shifts and time constraints. A course like this would be a big plus to both industry and the student.

**Gary Sladek** asked why would we writ new curriculum if there is already curriculum out there being used by other schools

**Bill Clarke** answered SBVC write and develops it own curriculum, but we could also incorporate some supplemental information in this curriculum.

**Recommendation approved by committee to utilize Learn HAAS material as e-text**

**Machine 021,022, 123, and 124 Basic Machine classes were reviewed.**

Industry recommended that the basic machine course be continued due to there importance of basic skills needed to run high technology equipment. Gary Sladek recommended that Learn HAAS e-text material be used to support basic concept sin manufacturing.

Committee recommended: Machines be maintained and upgraded with DRO direct read outs to increase accuracy of machine tools.

## **Mach 070**

**Bill Clarke** explains that the basics of programming are essential for every student being certified t. We can take a student and teach them math, and how to apply it, but the basic skills of machining are still necessary.

**Paschal Walsh** shared that the basic skill programming class is essential to students. The course guides and teaches the student how to wrap their head around computer programming and how this program will cut a tool.

**Gary Sladek** shared that there is a HAAS (learn HAAS) programming module software that teaches all of the basic skill programming. **He recommended that Learn HAAS be used as an e-text for this program. Committee agreed.**

**Larry Ellsmann** explained that his High School students do very well with the classroom setting, and feels that both the classroom and online courses are beneficial to students.

**Bill Clarke** stated that it seems that the students could benefit from the learn HAAS programming, and by using these supplemental devices we could better serve the student in the high skill training. This “E” book can teach the students all processes they need to be a high skilled technology employee.

### **Recommendation by committee:**

Modifications need to be made to MACH 070 by looking into supplemental devices such as Learn HAAS and adding this to the curriculum

**Gary Sladek** stated that at UC Irvine, the students must first use and train on learn HAAS before they ever use a machine. He also stated that another benefit is you can have an administrator option, where you will be able to keep track of your student’s progress.

**Bill Clark** discussed the partnership with HAAS, and how the facility is being upgraded to meet the HTEC quality.

### **Master cam Program**

**Bill Clarke** reviewed the Master Cam curriculum.

**Dave Aston** asked would it not be recommended that all the machines be upgraded to USB capability.

**Gary Sladek** answered although some machines are USB capable, or some still use floppy, we really need to have all of the above, simply because that is a real world concept

**Gary Kelly** asked if learn HAAS would be able to be applied to Master Cam

**Matt Harlow** answered yes it could be applied, in fact if it would it would cut down time that we could generate codes instead of having to go back multiple times to generate just code that we need. It can be uploaded right in to the simulator and make it much more easier for the students

**Paschal Walsh** asked if it would be possible to upgrade software where we could create our own posts

**Gary Sladek** answered that is more of a Master Cam issue then the machine itself, but Master Cam does have a post processor

**Committee Recommendation:**

Contact Master Cam regarding post specifics, Contact name Arlene Ellison (spelling of name may be incorrect)

**Solid Works Mach 075 #2 Course**

**Dave Aston** explained that 2 semesters is not enough time to learn solid works through any kind of system

**Bill Clarke** asked if solid works could maybe fit into a design program with Judy Jorgenson; since design is not really taught with in machine trades

**Erich Lewis** added that before he hires any machinist that, that person better have solid works training and experience.

**Bill Clarke** asked if the college should may start offering intermediate and advanced course in solid works so that the student spend enough time getting trained

**Paschal Walsh** stated that employer are looking for people to run these machines not just people who can work on the computers all day

**Michael Bermudez** shared that employers need people from all skill sets, not just machinist or computers but from every area.

**Gary Sladek** discussed that to get these people with different skill sets trained; we have to start at the earliest stage. High School and Middle Schools can be a good ground to find students who I technical inclined, let them know that these are the steps you need to take if you are serious about this industry. His example of getting students motivated and informed is “shop in the box”

**Larry Elssmann** added that his high school students who are interested in this field are very open to learning everything and anything you throw at them. We just need to motivate the students who are inclined to this industry

**Paschal Walsh** also added that employers also look for talent and speed, those to items are very important to employers

### **Machine 090B Blueprint**

**Joe Ratcliff** discussed that we need to start implementing new procedures and standards when it comes to the CMM courses.

**Joe Ratcliff** gives overview of CMM course requirements

**Michael Bermudez** stated that you need a CMM course, but private training courses are very costly; however everything is now standardized and documented so I feel that updating the CMM inspection course would be a great idea for the college to do.

### **Committee Recommendation:**

**Develop an ISO program that incorporates CMM technology and metrology. The committee recommended developing a new CMM/Metrology class. Joe Ratcliff will develop the course.**

**Gary Sladek** displays a inspection probe that the NTMA use in their classrooms, it is part of their ISO machining program. **The committee recommended that machine probes be purchased to enhance the programs certification capability, as well as provides the students skills in this process.**

**Joe Ratcliff** explains that he feels the probe inspection is also a great idea to incorporate. Showing the in process inspection is very valuable to the students combined with metrology.

### **Plaque Presentations:**

**Bill Clarke** presented 2 plaques to Michael Bermudez of the Walker Corporation for being a valuable supporter and partner of SBVC for the last 5 years; as well as to Gary Sladek for also being a valuable supporter and partner of SBVC in the effort to maintain the highest level quality for students the last 2 years.

### **HAAS Presentation**

**Gary Sladek** presented information regarding the HAAS Corporation, the full meaning of HTEC and what is to be a HTEC site. Gary also shared that SBVC has been selected out of many other high tech sites to hold the first annual Southern California HTEC event; where we will be bringing in about 100 – 150 educators to inform them of these types of facilities, and really what HAAS can do.

**Gary Sladek** continues on by touring the committee through the HTEC website, including the Europe websites, and their facilities

### **Key points:**

- Manufacturing and what we do
- Everything and anything who has been touched in some way by this industry can get a job
- These are high paying jobs that do not go away, It may have up's and downs but these jobs are always available.

HAAS is dedicated to worldwide education. This industry touches everybody in life, from your cell phone, to your classroom supplies.