3/20/2017

**Palomar College HVAC Advisory Committee Meeting Minutes**

Two Advisory Committee meetings were held to discuss the HVAC program at Palomar College, the two meeting were held at different times to allow for larger participation and members schedules. Meetings were held at the Palomar College Escondido Center in room 505, one the classrooms to be used by the HVAC program. The first meeting commenced at 10:00 AM and ended at 11:30 AM, the second meeting commenced at 6:00 PM with one person attending and he had to leave due to another commitment.

Ed Kirk the instructor and chairperson for the program introduced himself and ask for attendees to introduce themselves, attendees introduced themselves.

Ed Kirk provided a brief description of the program followed by a discussion for the need to start up and continue an air conditioning/refrigeration and heating program at Palomar College. Everyone in presence confirmed a need for the program with comments about the shortage of qualified technicians to fill existing jobs and the difficulty to provide ongoing training for employees wanting to improve their jobs skills. Barry Valentine commented he recently hired a new employee who received his training at a private training institution in Texas and there is very little opportunity for training in Southern California and he supports this program. Ed Kirk ask for a vote to establish an HVAC program at Palomar College and all members voted for the startup of the program.

The floor was opened to discuss anything of interest to the attendees,

Barry Valentine stated the need for “hands on training” and equipment required so students could work with real equipment, Ed Kirk explained that the program would be starting up in room 505 for the first year until remodeling could be completed. The current goal is to add an outdoor working lab to room 505 which will be the indoor lab and room 506 will be a dedicated lecture room. Members agreed on the need for HVAC equipment and tools so students will have something to work with.

The use of simulation software and computer based programs were discussed. Members discussed great interest in applying modern technology to enhance learning experiences. Members agreed the younger generation is used to computer technology and the need for high technology in the HVAC environment and agreed on the need and use of modern technology.

Darrell Beeney brought up the need for Natural Gas and Propane in the lab and the need for hands on training using both gasses in the lab. In the interest of consumer safety there is a need for applied training with both gasses used in furnaces for heating.

Adam Tillotson stated there should be training and lab experience on older equipment along with newer technology since consumers in this area tend to get much longer use from heating and cooling equipment because of our milder climate and some people just try make their equipment last as long as possible.

Adam Tillotson has offered to assist in our program and acquire equipment for training purposes from suppliers at reduced prices that aren’t up to current energy standards but meet our training needs.

Ed Kirk stated that Trane Corp. has offered to partner in our program with the sale of equipment and assistance in setting up and meeting local training needs for our community along with NC3 Certification. A representative from Trane Corp. was going to attend our Advisory Committee meeting but didn’t show up.

Ed Kirk started a discussion about curriculum with the following courses in process and ask for recommendation.

ACR 101 Air Conditioning, Heating and Refrigeration: Mechanical

ACR 102 Air Conditioning, Heating and Refrigeration: Electrical

ACR 103 Air Conditioning, Heating and Refrigeration: Heating

ACR 105 Refrigerant Recovery

ACR 110 Advanced Air Conditioning, Heating and Refrigeration

ACR 112 Automation and Controls

Barry Valentine ask about some sort of short term training so students could apply for employment and get a job without having to have an AA Degree, Ed Kirk added that there will be a certificate available and other members noted that students could work while attending classes.

Barry Valentine ask about day classes, there was some discussion about joint credit with high schools allowing high school students to attend Palomar College classes.

Ed Kirk expressed interest in industry and community partnerships and stated he has been reaching out for help in starting up the HVAC program. Trane Corp. has replied and expressed interest in helping along with NC3 for certification in commercial and residential equipment. Adam Tillotson said he has contacted Carrier Corp. and is working on equipment availability and pricing.

Ed Kirk has contacted The Southern California HVACR Consortium to maintain consistency with curriculum, credit transfers and stackable certificates, members agreed that with this process.

There was discussion among members about areas of subject matter that could be included in the curriculum;

* Adam Tillitson introduced the need for California Title 24 Verification and H.E.R.S. rater verification (Home Energy Rating System) training.
* Safety and safety training.
* Controls training, with over 40 different manufactures and types of systems there is a need to work out some basic training and lab setup that could apply in as many areas as possible. Ed Kirk said his goal was to install chilled water equipment to include pumps, small cooling tower, water source heat pumps, fan coils and different controls applications. Members agreed and Barry Valentine reinforced the need for water source heat pumps.
* Members also agreed with the need for residential gas furnaces and air conditioning equipment, light commercial equipment, package and split heat pumps.

Ed Kirk said there would probably be two phases in the program start up due to time involved in remodeling the lab and tool room. The first phase would require some smaller pieces of equipment and several training simulators that could be easily moved around and also be used in the long term. Members agreed.

Ed Kirk offered that one or two classes be offered this fall, ACR 101 and ACR 102, and be advertised and open for enrollment when curriculum completes the review process, members agreed.

Ed Kirk stated that another goal for the program is to hire instructors, part time to get the program up and running and there will be a need for a full time instructor in a year or two.

Before closing the meeting Ed Kirk ask if attendees would agree to contribute in the Palomar College HVAC Program and continue to be members of the Advisory Committee, all agreed.

Attendees:

Chair - Charles “Ed” Kirk

Instructor HVAC

Palomar College

1140 W. Mission Road

San Marcos, CA 92069

760-744-1150 ext. 2740

ckirk@palomar.edu

Barry Valentine

Metropolitan Heating & Air Conditioning

532 Via Del Caballo

San Marcos, CA 92078

877-777-3050

[metrosandiego@gmail.com](mailto:metrosandiego@gmail.com)

Darrell Beeney

West-Pac Air Conditioning Heating Controls

P.O. Box 460786

Escondido, CA 92046

760-746-6101

Adam Tillotson

Southcoast Heating & Air Conditioning, LP

2373 La Mirada Drive

Vista, CA 92081

760-941-7000

[atillotson@amsofusa.com](mailto:atillotson@amsofusa.com)

Ed Edmonds

Edco Distrubuting

3140 Scott Street

Vista, CA 92083

760-598-3830

Jon Kropp

Prop 39 Director

San Diego/Imperial Community Colleges

619-660-4045

[Jonathan\_Kropp@gcccd.edu](mailto:Jonathan_Kropp@gcccd.edu)

Dennis C. Lutz, Professor, Department Chair

Trades and Industry Department

Palomar College

1140 West Mission Road

San Marcos, CA 92069

760-744-1150

[dlutz@palomar.edu](mailto:dlutz@palomar.edu)