



Aircraft Fabrication & Assembly Program (AFAB) and Airframe & Powerplant Program
Advisory Meeting Minutes

Date & Time: Thursday, November 06 2014 2:00 pm to 3:15pm

Location: Antelope Valley College TE7 building, room 101 (Structure's lab)

Agenda Topics: Dr. Cowell opened the committee meeting, welcoming everyone and thanking them for attending the meeting. Ms. Clinton informed the members that the AFAB & A&P program have combined their advisory committees into one committee and meeting, and asked everyone to introduce themselves.

Program Update:

- A. Review of the reorganization of the Technical Education Division
 - a. Ms. Clinton informed the committee members that there was a reorganization of the division at the college and that Nursing and Health Sciences, Business and Computer Studies and the Technical Education Divisions have been combined into one single division, Career Technical Education Division, with Dr. Karen Cowell as the Dean.
- B. Summer 2014: AFAB 115 class will be offered
 - a. Ms. Clinton informed the committee that one section of AFAB 115 will be offered in summer 2015.
- C. Annual Program Review 2014-15
 - a. Ms. Clinton informed the committee that both the AFAB and A&P programs completed their annual program review, and that there were no significant changes noted.

Airframe Manufacturing Technology B.S. Degree:

- A. Proposal Timeline
 - a. Ms. Clinton gave the committee background information on SB850 (information packet attached to the agenda) and the tight deadlines set by the Chancellor's Office. Dr. Cowell also provided additional background and timeline information.
 - b. Mr. Knudson addressed the committee. He stated that this would be an opportunity not only for the college and the community, but also the aerospace/aviation industry. Because the Antelope Valley is considered the Aerospace Valley, he felt that the college had a good chance of being selected as one of the 15 pilot colleges. He also informed the committee that the BS degree could not duplicate any degree at either the UC or CSU educational institutions.
Ms. Holden added that being able to offer a bachelor degree locally would also be a positive for families due to support and financial issues. Mr. Dothage added that this opportunity was overdue for the valley, and that 4-year institutions are not close by,



ANTELOPE VALLEY COLLEGE

and that there is an obvious hole or gap in this area concerning this degree, and there is a definite need to close the gap.

B. Degree Requirements

- a. Ms. Clinton asked the committee to review the Draft Airframe Manufacturing Technology BS Degree proposal. Focusing on the second page, the committee went over the proposal. Several suggestions were made to the proposal and are as follows:
 - i. Human Factors in Aviation Technology was supported by the committee
 - ii. Introduction to Space Manufacturing Technology was removed from the proposal because the manufacturing processes were the same as used in airframe aircraft structures.
 - iii. Safety in Aviation is still up for further discussion. Some committee members felt that it should stay embedded within the AFAB and AERO courses and free up a slot for another advance course. However, some committee members expressed that the following items similar to Hazmat processes and procedures could be emphasized at a higher academic college level within this course. Mr. Gonzales added that company and process regulations and appliances could be added to this course.
 - iv. UAV Manufacturing Technology was also removed from the proposal for the same reason that item ii was removed; the manufacturing processes were the same as used in airframe aircraft structures.
 - v. Aviation Labor was supported by the committee and Human Resources concepts are going to be considered as part of this course.
 - vi. Aviation Logistics was overwhelmingly supported by the committee, the committee stressed material manufacturing as a strong emphasis for this particular course (ME's)
 - vii. Capstone Courses: There was a lengthy discussion on training and instruction methods. Ms. Holden stressed the advantages of internships. Faculty agreed with Ms. Holden, citing on-the-job training and internships as a very valuable educational tool, however it has been difficult for the college's aeronautic programs to develop internships with the local aerospace/aviation industries. Ms. Holden cited California laws and regulations as being the road block for most companies in setting up internships. Mr. Dothage informed the committee that Northrop Grumman offers internships for engineers and if our proposal is successful, he will contact the internship office and work with us in trying to set up internships for the Airframe Manufacturing Technology BS degree.
 - viii. Theory in Low Observables was a course that suggested by Mr. Gonzales and the committee supported this addition.
 - ix. Manufacturing Testing and Inspection was also suggested by the committee. This course was not to focus solely on NDI testing and inspection. This course was to focus on the manufacturing testing and inspection processes.
 - x. Lean Manufacturing (Six Sigma and 5S's) this course was identified by the committee.
 - xi. FOE Migration this course was identified by committee members.
 - xii. Avionics, Fiber Optics and Tooling were also courses that were identified by committee members.

In closing, the committee members stressed the importance of focusing this degree towards



manufacturing technology, and not toward engineering. Courses need to focus on development of mid-level and senior manufacturing managers and management. In addition, Mr. Dothage indicated that there was a definite need and that Northrop Grumman has hired approximately 100 students from the AFAB program and he expects that 50% of those hires would be interested in this B.S. degree.

C. Staff Support

- a. Ms. Clinton informed the committee that if the college is selected as one of the 15 pilot programs the college would need not only staff support (adjunct instructors from their industries), there would also be a need for industry expert support for the development of not only the courses, but the curriculum as well. The college staff emphasized that they want to create a degree program that industry not only recognizes and supports, but also is instrumental in its development. All committee members present acknowledge this needs and agreed to support the college. Mr. Dothage stated that Northrop Grumman was 100% behind the college in pursuit of this degree.

Skyrocket:

A. Background Information

- a. Mr. Knudson informed the committee that California Air and Space Museum in Los Angeles contacted the college and wanted the Skyrocket. He informed them that they could not have the aircraft. He also informed the committee that there are only 3 Skyrockets in the world, one is at the Smithsonian, the other is in Chino, and the third one is here at Antelope Valley College.

B. Upkeep and Repairs

- a. Mr. Knudson informed the committee that we have a donor who has provided \$11,000 in funding for the initial repair, and has endowed \$10,000 for ongoing maintenance for the Skyrocket. However, we need help in identifying specific folks to repair and refurbish our Skyrocket and was hoping that the members of the advisory committee would be able to provide us with some assistance and or information, ideas. Mr. Knudson had to leave to attend another meeting and asked if the committee members would think about this issue and contact one of us if they had any ideas or could support this effort.

Additional Items: None

Adjournment: 3:15 pm



Attendance Record: [Thursday, November 06, 2014]

Print Name	Affiliation/role	Signature
Robert Browne	Browne's Aircraft	Owner/AVC Adjunct Faculty
Michele Chebahtah	Unit Training Manager at United States Air Force	Edwards AFAB
Lisa Holden	Director of HR	The Spaceship Company
Ruben Gonzales	Manager Learning & Development	Lockheed Martin
Orville Dothage	Manager Integration	Northrop Grumman
Michael Vogenthaler	Principal	California City High School
April Roberts	Inspector/AERO Student	Scaled Composites
Edward Knudson	Superintendent/President	Antelope Valley College
Bonnie Suderman	Vice President Academic Affairs	Antelope Valley College
Karen Cowell	Dean	Antelope Valley College
Maria Clinton	AFAB Faculty Chair	Antelope Valley College
Jack Halliday	AERO Faculty Chair	Antelope Valley College
Ty Mettler	AERO Faculty Chair	Antelope Valley College
Patti Browne	AERO classified staff	Antelope Valley College
Jack B. Halliday	AERO classified staff	Antelope Valley College

Revised November 22, 2011