UASTEP Advisory Committee Minutes

Date: 7/17/2017, 1-2PM

Location: Palomar College (NS-127)

Members Present:

Alex Sainz, City of San Marcos

Melisa Caric Lee, Compass Rose GIS

Phil Davis, Del Mar College

Hannah Walchak, Escondido Creek

Conservancy

Joseph Kerski, ESRI

Roy Batchelor, Fallbrook Land Conservancy

Will Shakespeare, Fallbrook Land

Conservancy

Todd Hill, Independent contractor Jay Baker, Independent contractor

Brian Simpson, National University

Nelson Altamirano, National University

Wing Cheung, Palomar College Daniel Finkenthal, Palomar College

Brenda Morris, Palomar College

Sean Figg, Palomar College

Mark Bealo, Palomar College

Bill Melton, Port of San Diego

Andrew Morino, Port of San Diego

Jesse Gipe, San Diego Economic

Development Corporation Mike Ritter, Slant Range

Ken Yanow, Southwestern College

Jesus Ulloa-Higuera, Sweetwater Union

High School District

Jo Schubert, UC Irvine

Cindy Hanson, UCSD

Bobby Jones, UCSD

Emily Perkins, USGS

Chris Carter, Virginia Space Grant

Consortium

Dave West, Vista High School

Vinny Lostetter, Vista High School

Candiya Mann, Washington State University

I. Introductions

- II. Evaluation results from Palomar's Drone Conference were shared with attendees.

 Over 140 people registered for the conference, and approximately 120 attended the event. In particular, some notable statistics shared are:
 - a. 87% of attendees said that the conference met their expectations
 - b. 90% of attendees said that the presentations or workshops were of high quality
 - c. 83% of attendees plan to attend future drone conferences at Palomar College
 - d. 64% of attendees plan to implement what they have learned at the conference
- III. The four primarily goals for the recently funded National Science Foundation project were reviewed with attendees:

Goal 1: Program and Curriculum Development and Improvement (Lead: Wing, Ken)

Goal 2: Professional Development for Educators (Lead: Sean)

Goal 3: Strengthening Business and Workplace Competencies (Lead: Wing, Ken)

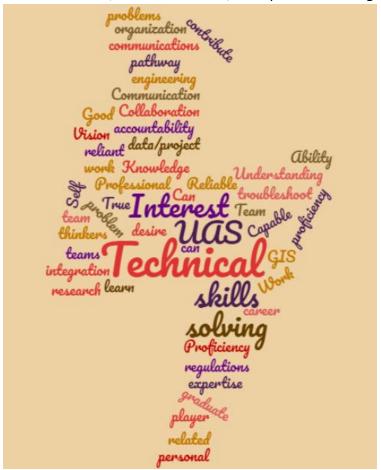
Goal 4: Student Outreach and Summer Academies (Lead: Mark, Jo)

Attendees were reminded that the goal leads merely ensure the tasks under each goal are completed satisfactorily and on time, and various team members are responsible for completing the tasks that they have committed to.

Joseph reminded the team of the need to test modules developed by the professional development workshops (see goal 2), and research their efficacy in impacting student learning or attitude toward UAS careers.

- IV. Curriculum will be developed based on the input from our local advisory committee as well as results from various regional DACUMs (Designing a curriculum). DACUMs for UAS technology have been completed in various parts of the country by NSF funded projects/centers like GeoTEd-UAS (Virginia), UASTEC (Texas), and the GeoTech Center (Planned for Northern California). The UASTEP team plans to discuss the results with its advisory committee in future meetings in order to determine if a separate DACUM is needed for Southern California.
- V. Attendees were asked to answer and discuss a number of questions to help guide the future development of the UASTEP. Highlights from the survey and brief discussions are provided below:
 - a. 44% of our attendees are already using drones in their workplaces
 - b. 42% of our attendees have a designated department or individuals responsible for drone operations. 18% of our attendees who answered "other" cited insufficient funding, legal expertise, staffing, and hardware as reasons for potentially contracting drone operation out to external partners.
 - c. 27% of our attendees are interested in providing internships or employment opportunities to graduates of Palomar's drone program.

d. Word cloud analysis of the open-ended responses provided by attendees for the most desirable qualities among candidates for internships or employment are "technical skills", "interest in UAS", and "problem solving".



- e. 69% of our attendees agreed or strongly agreed that the drone labor market will experience tremendous growth in the next five years. 8% neither agreed nor disagreed, and 23% provided no answer.
- f. Most respondents at the advisory meeting believed that a college certificate such as Palomar's Certificate of Achievement
 (http://www.curricunet.com/palomar/reports/program_report.cfm?programs_i_d=1671) + experience is the typical education requirement for a drone operator.