Texas Agricultural Mechanics Committee Summer 2014 Meeting Minutes July 29, 2014

Superintendent Dr. Kirk Edney (TAMU), called the meeting to order at 4:00 pm. Those present were Pat Real, Mark Arnold, J.T. McClellen, Randy Glascock, Roger Jones, Mike Teague, Ed Strange, Mark Vitters, Eric Davis, Michael Tondre, Charlie Dylla, Jared Rode, Ed Strange, Dillon Bradbury, Zack Tappan, David Howell, Barry Randolph, Vinnie Heller, Mark Foreman, John Templeton, Jayson Hill - Katy Tompkins, Mike Jackson, Clint Wilson, Monty Main, Cody Dugat, Rusty Oaks, Eric Harrel, Jeff Miller, John Cochran, Myles Russell, Jeff Kelley, Kenneth Barnes, Solomon Butler, Robby Bow, Kyle Pate, Blake Chudej, Rusty Oaks, Tres Myers, Clint Wilson, Jay Newton, Doug LaVergne (TAMU Commerce), Jerome Tymrak (TAMUK), Ryan Saucier (TX State), Curtis Langley (Tarleton) and Joe Muller (SHSU) were present. The minutes of the July 2013 meeting were reviewed. John Templeton (3) moved that the minutes be approved as presented; the motion was seconded, and passed. Dr. Saucier introduced Dr. Doug LaVergne of TAMU Commerce as a new member of this committee. Dr. Curtis Langley of Tarleton was also in the audience.

A Welding Contest Swap Shop is scheduled for Thursday afternoon; the original facilitator – Paul Simmons - is ill and cannot attend. A general discussion followed. Jeff Miller and John Van Devender (Buna) will proceed and facilitate the workshop. Mr. McClure was informed; the workshop is at 3:00 pm Thursday.

AG MECHANICS PROJECT SHOWS

There will be a workshop on Ag Mechanics CDE project shows and rule changes on Wednesday from 1:15 to 2:45.

Mark Vitters asked the question "Where do semi-trailers compete? In what class do they fit best? Not against gooseneck trailers. I think another class or division is needed." The shows are asked to consider using a 3-man classifying team for projects. Chuck Real said that SALE would start using a 6-man classifying team in 2015.

SALE JAM: trailer width checks will be conducted at Gembler Rd; exhibitors are responsible for adhering to DOT requirements. Participants should know ASABE standards for 3-point hitches and PTOs. Place this information in the documentation. Participants should also know how to convert Kw to Hp, and to convert SI to inches. These are EOC mathematics skills.

There is a workshop on HLSR updates on Wednesday at 3:15; no major rule changes are anticipated. Project naming is important, since entries are tied to the show database. The 2015 HLSR show will be March 20 - 22. Observe Rule #13 – transportation permits must be annual permits, not temporary permits. There will be no sweepstakes awards. The career fair will be available for all seniors participating in the project show.

The San Angelo show continues to improve. The Awards committee is interested in doing what it takes to improve the positioning and popularity / appeal / draw of the show. Exhibits arrive on Wednesday, and a meal is provided. A class has been added for horse-drawn restored equipment. Tractor classes are prior to 1960, and 1961 – 1990.

The Kerrville Regional Show added an Ag Mechanics project show. The Blinn Ag Mech project show and TAMU Kingsville Ag Mech project show are generally held in May.

TRACTOR TECH CDE

The tractor for the 2015 State FFA Tractor Technician CDE is the John Deere 5065.

Tractor rotation: 1 John Deere (2010)

- 2 Case IH (2011)
- 3 Kubota (2012)
- 4 AGCO (2013) Massey Ferguson
- 5 New Holland (2014) **New Holland T4.75 4wd open ROPs.**
- John Deere (2015) **John Deere 5065**, **MFWD**, **cab**, **65 engine hp**, **49 PTO hp**, **12/12 PowerReverser**, **dual mid-valves**, **interim Tier IV emission compliant**
- 7 Case IH (2016)

Some teachers felt an Area-elimination event was needed in southwest TX; something to accommodate teams below I-10 and San Antonio.

Thirty minutes will be allowed for Part III – Troubleshooting. The interviews will continue to be part of the Tractor Tech CDE activities. One discussion item was "Would it be possible for HLSR to provide 10 sets of specialty tools to be used in Part III?" This would eliminate participants having to transport these bulky tools from their schools to the CDE site, and across the Arena floor during the finals. HLSR does provide specialty tools needed in Part III, and the contestants must ask the judges for the appropriate tool. Tractors will continue to be in the 55 – 60 hp range. These tractor manufacturers recommend use of a 5000 psi pressure gauge; anything less than that rating will not effectively diagnose problems. Regulations for Tier IV Fuel Efficiency standards went into effect in 2014.

AGRICULTURAL TECHNOLOGY & MECHANICAL SYSTEMS CDE

Teachers mentioned that sequenced questions in the Team Activity, where one aspect depends upon correct answers in each of several immediately previous questions, was excessive, and frustrates students.

David Howell suggested that an event tailored for special needs type students might be needed in the future, to accommodate all types of students. A discussion of Welding Contests followed, led by Jeff Miller of Holliday. George Pyle at Angelina College could offer insight for teachers wishing to participate.

The Skill areas are as follows:

Machinery & Equipment systems: repair & maintenance, materials handling, processing, adjustments, metal fabrication

Electrical systems: AC/DC power, electrical safety & standards, sensing devices, electrical wiring, controls, electronics, motors & other electrical loads, operating instructions, manufacturer's recommendations

- Energy systems: mechanical power, chemical power, wind power, solar power, hydraulic power, engine operation, maintenance, troubleshooting, repair
- Structural systems: structures, storage, concrete, masonry, plumbing, electrical, fabrication, construction, building materials, HVAC
- Environmental & Natural Resources systems: water quality, sustainable agricultural practices, soil & water conservation, biological waste handling.

Several teacher comments were brought to the meeting. Jeff Miller felt more time in the Individual Skills rotation was needed. For pertinent information, check the Free Resources page on IMS web site at www.myimsservices.com, and watch for e-mails, Twitter feeds, listservs and postings in the Agricultural Mechanics and Metal Technologies page of the EE web site (http://educationalexcellence.tamu.edu/topic.aspx?ID=19&CID=1). Be sure your e-mail address is accurate, and that TAMU (or other university) e-mails are not rejected as spam. The motion passed. The 2015 Agricultural Technology and Mechanical Systems CDE will be held in conjunction with the other State CDEs hosted by SHSU in Huntsville on Friday, May 1, before the TAMU CDEs on Saturday, May 2, 2015.

Kirk Edney develops the written examination. He will bring a ream of paper for students to use with math problems, and will reserve 140+ calculators from TI for use in all phases of the CDE. Faculty members from the various service providers are asked to provide 30 – 50 questions for the State Exam. Calculators will be supplied for ALL students, and distributed at the beginning of the CDE. **Students may NOT use their own calculators, or carry them into the CDE**. Could online testing improve the quality of the event in the future?

Michael Tondre (7) moved that the 2015 CDE Theme be Row-crop Production, as relates to the Integrated Pest Management (IPM) system. John Templeton moved and Michael Tondre seconded that the written examination be kept at 100 questions. The motion passed. It was suggested to narrow the machinery focus to boom-type spraying equipment. Michael Tondre moved that we focus on boom-type sprayers, and the motion was seconded by John Templeton. The motion passed

To clarify GPS skills, a handheld Garmin eTrex costs about \$110 or so, and is relatively simple to use for area measurement. Accuracy can be a concern; question could address accuracy or global tracking / positioning. GPS components have to be set, calibrated, and observed for operation. Teachers could buy a set of handhelds, and have students participate in geocaching activities. Geocaching is an activity that teaches GPS skills in a local setting.

To clarify Hydraulics, simulation software is available. Would it be possible for Dr. Muller to allow access to this simulation software?

The 2016 CDE theme is Animal Handling, as it relates to Animal Production Systems. Hydraulic squeeze chutes will be the Machinery & Equipment focus.

Teachers felt it was in our best interests to continue using English measurements and tools. IMS has a worksheet on Reading the Micrometer on the TEA Educational Excellence web site at http://educationalexcellence.tamu.edu/docs2/88605 2010%20Reading%20a%20micrometer.pdf

With the revisions in the TEKS, the committee needs to develop better methods for involving craft schools, venues and suppliers such as Lincoln, Tulsa Welding, WyoTech, TSTC, UTI, Stihl, Briggs & Stratton, and Kubota.

PD CONFERENCE & OTHER DEVELOPMENT OPPORTUNITIES

There will be an annual Ag Mechanics CDE Update for one of the conference sessions. Our annual Committee Meeting will also be on Monday; however, some faculty members may have conflicts with the Teacher Educator meeting. Our "Ag Mech Focus Day" seems to be returning as "Days," which is fine. We will contact VATAT regarding open opportunities for presentations for future PD Conferences. The Conference Planning Meeting is held annually in January. It appears that someone is having success in submitting presentation proposals. The Ag Mech Swap Shop led by Mr. Charles Prause last year was very successful.

A general discussion regarding professional development followed. Teachers suggested that Ag Mech. workshops held at local high schools might be a good option. This has been done in the past, with some success. PD activities should be tied to the TEKS, and to workforce development opportunities. Applied mathematics workshops can be very appropriate, and supply lists should be a part of the handouts for any workshop. A \$75 fee schedule is pretty reasonable and registration could be hosted through judgingcard.com. Texas Southwest Machinery and Lincoln Welding are interested in being a part of workshop offerings, as they have in the past. A laser leveling / topography workshop might be useful. Workshops should be 2-day offerings, with 1 day of theory and 1 day of practice. Working with ESCs is a good option as well. It might be wise to create some sort of trailer workshop rotation, based on sites or products.

Agricultural Mechanics CDE Individual Student Skill Area Rotation - Revised July 2014

Year	2015	2016	2017	2018	2019
System	IPM	Animal Production	Materials Handling	Processing	Plant Production
Theme	Row-crop	Animal			
	production	Handling			
Machinery	Boom-type	Hydraulic			
&	sprayers	squeeze			
Equipment		chutes			
systems					
Skill Area					
Enviro &	GPS				
Natural	(see notes				
Resources	for				
systems	clarification)				
Skill Area	,				
Energy	Hydraulics				
systems	,				
Skill Area					
Electrical		A/C electric			
systems		motors &			
Skill		controls			
Area					
Structural		Metal			
systems		Fabrication /			
Skill		stick welding			
Area		& oxyfuel			
		cutting			

Upcoming Activities for 2014 – 2015 school year

Date	Activity	Location
October	State Fair Ag Mech & Tractor Rest. Project Show	Dallas
10/11/14	Austin County Fair Trac Tech CDE	Bellville
October	South Plains College Welding Contest	Levelland
12/9 – 12/13	Lincoln Welding Workshop	SHSU
December 12	Schoppa's Farm Supply Trac Tech CDE	Wharton
01/10/2015	Brazos FFA Alumni Inv. Trac Tech CDE	Wallis
January	Regional Ag Mechanics Project Show	Kerrville
January 15	Tractor Technician CDE – Areas 5, 7, 8, 10	Waco
January	Southwestern Expo Ag Mech Project Show	Ft. Worth
January 23	Tractor Technician CDE – Areas 1, 2, 4	Canyon / WTAMU
January 30	Tractor Technician CDE – Areas 3, 6, 9	Huntsville / SHSU
Feb 24 – 26	Agricultural Mechanics Project Show	San Angelo
Feb 27 – March 1	JAM Project Show	San Antonio
March 16	State Tractor Technician CDE	Houston
March 20 - 22	Ag Mechanics Project Show	Houston
March 28	TX State University Invitational ATMS CDE	San Marcos
March	Practice ATMS CDE	College Station
March	Practice ATMS CDE	Huntsville
March 28	WTAMU Invitational CDEs	Canyon
April 7	SFASU Invitational ATMS CDE	Nacogdoches
April 9	Area 4 & 8 ATMS CDE	Stephenville
April 10	Area 3 & 9 ATMS CDE	Huntsville
April 7	NCTC Invitational ATMS CDE	Gainesville
April 11 - 12	Area 1 & 2 ATMS CDE	Lubbock
April 11	Area 7 ATMS CDE	San Marcos
April 8	Area 5 & 6 ATMS CDE	Commerce
April 9	Area 10 ATMS CDE	Kingsville
May 1	State ATMS CDE	Huntsville
May 2015	TAMUK Ag Mechanics Project Show	Kingsville
May 2015	Blinn College Ag Mechanics Project Show	Brenham
July 2015	Ag Mechanics Swap Shop	Waco
July 2015	TX Ag Mechanics Committee Meeting	Waco
July 2015	Ag Mechanics Workshops	Waco

There being no further business, the meeting was adjourned at 5:30 pm.