Texas Agricultural Mechanics Committee Summer 2015 Meeting Minutes July 27, 2015 – Waco, TX

Superintendent Dr. Kirk Edney (TAMU), called the meeting to order at 8:15 AM. Those present were Pat Real, J.T. McClellen, Randy Glascock, Mike Teague, Mark Vitters, Jared Rode, Zack Tappan, Jayson Hill, Clint Wilson, Monty Main, Rusty Oaks, Jeff Miller, Robby Bow, Kyle Pate, Blake Chudej, Jay Newton, Daniel Odem, Caleb Gamblin, J P Hancock (TAMU), Doug Kingman (TAMU), Doug LaVergne (TAMU Commerce), Rick Ford (SHSU), Jerome Tymrak (TAMUK), Ryan Saucier (SHSU), Dwayne Pavelock (SHSU), Joe Muller (SHSU), Brandon Whitten (SHSU), William Foehr (SHSU) were present. The minutes of the July 2014 meeting were reviewed. Jared Rode (7) moved that the minutes be approved as presented; the motion was seconded, and passed.

AGRICULTURAL TECHNOLOGY & MECHANICAL SYSTEMS CDE

The National FFA ATMS CDE committee is considering dropping a Skill area – Energy – and adding Small Engines as a stand-alone skill, based on influence from Briggs & Stratton. How closely is the TX CDE aligned to National AFNR curriculum standards? How is the National ATMS CDE addressing the mandate for evaluating team activity participation? Drs. Ford & Saucier said that the Small Engine change may go into effect as part of the 2017 revision cycle.

This is our year to select a new committee superintendent for a 2-year term. Kirk Edney is the current Superintendent, and was elected Secretary in about 2000. No one has expressed interest in the Secretary position since that time. Several have already served as Superintendent – Dr Muller (2 terms at least), Dr Edney (2^{nd} term), Dr Saucier (1 term), Dr. Lawver (1 term). Dr Doug LaVergne (TAMU Commerce) has indicated willingness to serve as Superintendent for the 2016 – 2017 term. He managed the West Virginia State ATMS CDE for 3 years, and the Area 5 & 6 CDE for 2 years. Dr. LaVergne was selected by general agreement, with no other choices offered from the floor.

Dr. Muller said that SHSU may need to increase State CDE entry fees by +/- \$20.00 in 2016. The ATMS CDE lost about \$300 in 2015. There is an effort to unify fees across all CDEs.

The Skill areas for the ATMS CDE 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.

For pertinent study 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 Mechanics and Metal Technologies Agricultural page of the EE web site (http://www.txeducationalexcellence.com/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 2016 Agricultural Technology and Mechanical Systems CDE will be held in conjunction with the other State CDEs hosted by SHSU in Huntsville on Friday, April 29, before the TAMU CDEs on Saturday, April 30, 2016.

Clipboards are required; clear, with no rulers. The CDE needs a supply of 20-25 on hand to loan if necessary. These can be taken up & retained annually. Scantrons will be retained in the Exam room to prevent loss & soiling.

Undated caps will cost in the neighborhood of \$12 – the SHSU Ag Engineering Technology club will look into this opportunity. These could be ordered in advance thru judgingcard.com

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 preferred questions for the State Exam. Calculators will be supplied for ALL students, and distributed at the beginning of the CDE. <u>Students may NOT use their own calculators, or carry them</u> into the CDE. Could online testing improve the quality of the event in the future?

The 2016 CDE theme is Animal Handling, as it relates to Animal Production Systems. Hydraulic squeeze chutes will be the Machinery & Equipment focus. The Electrical Systems Skill area will be A/C electric motors & controls. The Structural Systems Skill area will be Metal Fabrication / stick welding & oxy-fuel cutting.

When Hydraulics is a curriculum area addressed in the ATMS CDE in 2016, study content can be found in adjustments, components, specifics, and schematics. Priefert and McCoy's can be valuable supporters for this area. Rusty Morgan with Morgan Livestock is a good contact for Animal Handling equipment. John Goble with TSTC has an excellent hydraulic training schematic.

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://www.txeducationalexcellence.com/docs2/27174_Reading%20the%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.

It was moved and seconded that the 2017 ATMS CDE Theme be Grain Handling, as related to the Materials Handling system. The written examination will be kept at 100 questions. The motion passed. The suggestion was approved to narrow the machinery focus to grain augers,

regardless of power source. The Energy Systems Skills area will be small compact engines. The Structural Systems Skill area will be Grain Storage Facilities / concrete floors.

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.

Pat Real gave a presentation on changes & considerations for the 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 Show updates on Thursday at 1:15; no major rule changes are anticipated. Project naming is important, since entries are tied to the show database. 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.

TRACTOR TECH CDE

The tractor for the 2016 State FFA Tractor Technician CDE is the Farmall 60A.

Tractor rotation:1Kubota (2012)2AGCO (2013) Massey Ferguson3New Holland (2014) New Holland T4.75 4wd open ROPs.4John Deere (2015) John Deere 50655Case IH (2016) Farmall 60A, 2WD / MFD, ROPS, 60 engine HP,
51 PTO HP, 8X8 mechanical shuttle transmission, Tier 4B/Final

emission compliant

There will be a Tractor Technician CDE rules committee meeting at 1:00 pm on Monday in the Lone Star / Ranger room. This is for elected committee members to work into the Texas FFA CDE rules revision cycle.

For several years, some teachers felt an Area-elimination event was needed in southwest TX; something to accommodate teams below I-10 and San Antonio. On February 3, 2016, a Tractor Tech CDE Area elimination event will be held in Gonzales for Areas 7 & 10.

HLSR provides 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. 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.

PD CONFERENCE & OTHER DEVELOPMENT OPPORTUNITIES

Having our annual Committee Meeting on Monday morning helped; we are the first committee to meet, and our ATMS CDE recommendations will be complete as a result of this early meeting; faculty members who previously had conflicts with the Teacher Educator meeting are now able to attend both. Our "Ag Mech Focus Day" is 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 December or January. It appears that someone is having success in submitting presentation proposals. The Ag Mech Swap Shop led by Mr. Charles Prause one year was very successful.

A general discussion regarding professional development followed. Dr. Muller spoke on weld quality in show projects. He felt too many teachers stop at & never get past short-arc MIG applications (3/8", below 250 v). He felt teachers need to upgrade skills training to include A10 and A20 pulsed arc & spray arc technology, and promote flux-core welding where possible. One solution might be a root pass with a stick electrode, and a cover pass with MIG.

Ag Mech. workshops are generally a good option. 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 2015

Year	2016	2017	2018	2019	2020
System	Animal Production	Materials Handling	Processing	Plant Production	IPM
Theme	Animal Handling	Grain Handling			
Machinery & Equipment systems Skill Area	Hydraulic squeeze chutes	Grain augers			
Enviro & Natural Resources systems Skill Area					
Energy systems Skill Area		Small compact engines			
Electrical systems Skill Area	A/C electric motors & controls				
Structural systems Skill Area	Metal Fabrication / stick welding & oxy-fuel cutting	Grain storage facilities / concrete floors			

Upcoming Activities for 2015 – 2016 school year

Date	Activity	Location
October	State Fair Ag Mech & Tractor Rest. Project Show	Dallas
10/10/15	Austin County Fair Trac Tech CDE	Bellville
12/9/15	Gonzales Invitational Trac Tech CDE	Gonzales
12/9 – 12/13	Lincoln Welding Workshop	SHSU
12/12/15	Schoppa's Farm Supply Trac Tech CDE	Wharton
01/09/2016	Brazos FFA Alumni Inv. Trac Tech CDE	Wallis
January	Regional Ag Mechanics Project Show	Kerrville
January	Southwestern Expo Ag Mech Project Show	Ft. Worth
January 22	Tractor Technician CDE – Areas 1, 2, 4	Canyon / WTAMU
January 29	Tractor Technician CDE – Areas 3, 6, 9	Huntsville / SHSU
February	Agricultural Mechanics Project Show	San Angelo
February 3	Tractor Technician CDE – Areas 7 & 10	Gonzales
February 10	Tractor Technician CDE – Areas 5 & 8	Waco
Feb 26 – 28	JAM Project Show	San Antonio
March 14	State Tractor Technician CDE	Houston
March 18 - 20	Ag Mechanics Project Show	Houston
March	TX State University Invitational ATMS CDE	San Marcos
March	Practice ATMS CDE	College Station
March	Practice ATMS CDE	Huntsville
March 31	SFASU Invitational ATMS CDE	Nacogdoches
March 28	WTAMU Invitational CDEs	Canyon
April 9	Area 4 & 8 ATMS CDE	Stephenville
April 12	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 14	Area 10 ATMS CDE	Kingsville
April 29	State ATMS CDE	Huntsville
May 2016	TAMUK Ag Mechanics Project Show	Kingsville
May 2016	Blinn College Ag Mechanics Project Show	Brenham
July 2016	Ag Mechanics Swap Shop	Corpus Christi
July 2016	TX Ag Mechanics Committee Meeting	Corpus Christi
July 2016	Ag Mechanics Workshops	Corpus Christi

There being no further business, the meeting was adjourned at 10:30 AM.