
BOARD AGENDA ITEM

Information/Discussion _____
Future Action _____
Action x

Item: KCTC Aviation Program – CES Analog Trainers

Submitted by: Tim Peraino

Date: 9/11/23

Recommended by: Kevin Philipps *KP*

Board Meeting Date: 9/18/23

RECOMMENDATION:

It is recommended that the Kent ISD board approve the bid from Azimuth Aerospace in the amount of \$80,000.00 for (25) CES Analog Trainers with fault panels.

Bidder	Cost
Azimuth Aerospace (without fault panels)	\$67,500.00
Azimuth Aerospace (with fault panels)	\$80,000.00
Avotech	\$86,945.00

BACKGROUND:

This purchase was approved as part of the 2023-24 capital outlay process and will be used to support instruction in the KCTC Aviation Electronics program. The CES Analog Trainers with the fault panels provide instructors the ability to induce faults in each trainer, resulting in tailoring each student's training experience.



AZIMUTH AEROSPACE SOLUTIONS, LLC

September 5, 2023

**Cindy Meyer
Kent Career Technical Center**

Re: Quotation for CES Trainers

Dear Cindy,

In response to your request, I am pleased to provide you with the following proposal for (25) CES Analog Trainers. Pricing information is listed in the tables below.

Accessories: Each trainer includes:

1. Accessory kit containing a power cord and 30 banana-style patch cables (10 ea. long, 10 ea. medium, and 10 ea. short length) used to build circuits on the trainers.
2. Breadboard kit used as an expansion tool to easily add additional components and capabilities for the student projects
3. Embroidered cover to protect the trainer during storage or periods of non-use.
4. Copies of instructor and student manuals.

In this proposal, we are offering two models of trainers: the CES 500 and the CES 500F. These two trainers are identical with one exception, the CES 500F adds a fault panel on the rear of the unit allowing the instructor to induce faults in many of the circuits on the face of the trainer, enabling students to learn troubleshooting techniques and practices in a safe and effective manner.

Pricing for CES 500 Modern Electronics Lab Trainers (without fault panel):

Item:	Quantity:	List Price:		Total
CES 500 Modern Electronics Lab Trainer	25	\$2,700.00		\$67,500.00

Pricing for CES 500F Modern Electronics Lab Trainers (w/ fault panel):

Item:	Quantity:	List Price:		Total
CES 500F Modern Electronics Lab Trainer w/Fault Panel	25	\$3,200.00		\$80,000.00

This quote is valid for 90 days.



AZIMUTH AEROSPACE SOLUTIONS, LLC

Company: Azimuth Aerospace/CES Trainers is a veteran-owned small business located in Sparta, Michigan. All of our employees are skilled electronics technicians who are former students of KCTC's Aviation Electronics program. Azimuth Aerospace is a proud supporter of KCTC and the local community, partnering with other West Michigan small businesses for various portions of manufacturing our trainers.

Shipping/Installation: Azimuth Aerospace/CES Trainer will deliver the trainers quoted in this order at no charge and include free on-site installation. We will also include training for each instructor on the general use of the trainers, specific experiments in the student manuals, handling and storage of the trainers, and best practices for effective learning.

Warranty: Azimuth Aerospace/CES Trainers offers a three (3) year limited warranty covering workmanship and manufacturing defects. We will attempt to fix any issues with the trainers on-site unless repairs warrant returning the trainer(s) to our factory located in Sparta, Michigan.

Thank you very much for the opportunity to provide you with this quote. I look forward to working with you to meet your training needs. If you have any questions, please do not hesitate to contact me at 616-581-3539 or email me at williamt@azimuthaero.com. Best Regards,

William Tramper

President – Azimuth Aerospace Solutions/CES Trainers



AZIMUTH AEROSPACE SOLUTIONS, LLC

CES TRAINER STANDARD WARRANTY

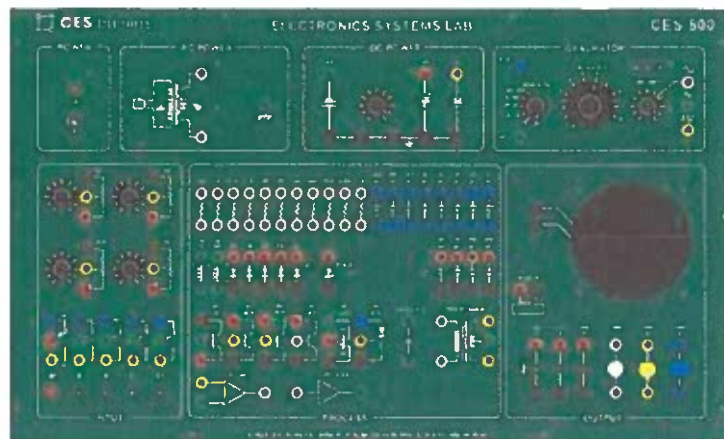
WARRANTY: THESE ITEMS ARE WARRANTED TO BE FREE FROM MANUFACTURING DEFECTS FOR A PERIOD OF THREE YEARS FROM DATE OF SALE. IT IS THE CUSTOMER'S RESPONSIBILITY TO FOLLOW OPERATIONAL INSTRUCTIONS PROVIDED WITH THE UNIT. DAMAGE RESULTING FROM MISUSE OR IMPROPER OPERATION WILL VOID WARRANTY.



CES 500 MODERN ELECTRONICS LAB TRAINER

2023 MSRP - \$2,700 (CES 500), \$3,450 (CES 500F)

The CES 500 Modern Electronics Lab Trainer is used in a wide range of applications from teaching simple series and parallel electrical circuit operation to advanced electronic principles like oscillators, amplifiers, and radios. It is most commonly used to teach the basic principles of electronics required for technician certifications such as Airframe and Powerplant Mechanics or Aircraft Electronics Technicians. The CES 500 trainer is also used to teach the proper operation of test equipment for analyzing the operation of a circuit, including the use of a digital multimeter for measuring voltage, resistance, and current, and an oscilloscope for viewing AC waveforms.



All CES Trainers feature a self-contained design, eliminating the need for external components or accompanying computer software to run the trainer. Circuit connections are made using banana-style patch cables between test jacks on the face of the trainer for each electronic component. After building a circuit, component values can be easily swapped out simply by moving a set of patch cable connections to the connections of a different component.

The CES 500 trainer is available in two versions, the standard base version, and the 'F' model which adds a switch panel on the rear of the trainer allowing faults to be induced in many of the circuit components depicted on the front panel of the trainer. The faults are not just simple open circuits; short circuits can also be induced allowing instructors to teach troubleshooting of short circuits safely and effectively without worry of damaging the unit or components.



Features & Specifications –

- Self-contained, rugged design.
- Built-in function generator produces sine, square, and sawtooth waves from 1 Hertz to 100 Kilohertz.
- Wide variety of resistors, capacitors, transistors, diodes, and inductors for building circuits.
- Speaker, buzzer, lamps, and LED's for observing circuit operation.
- Extensive instruction manual covering credentialing standards.
- Input Voltage: 110-120 VAC, 60 Hz
- Dimensions: 24.5"W x 14.5"H x 10"D

Azimuth Aerospace/CES Trainers is a veteran-owned small business. CES Trainers are manufactured in Sparta, Michigan. Please visit www.azimuthaero.com/ces-trainers.php. For product information and pricing quotes, please contact us at info@azimuthaero.com or +1.616.581.3539.

Kent Intermediate School District

REQUEST FOR PROPOSAL – 2023 KCTC Aviation Program–CES Analog Trainers

AFFIDAVIT OF COMPLIANCE – IRAN ECONOMIC SANCTIONS ACT
Michigan Public Act No. 517 of 2012

The undersigned, the owner or authorized officer of Azimuth Aerospace Solutions LLC (the "Bidder"), pursuant to the compliance certification requirement provided in the Kent Intermediate School District request for proposal for **2023 KCTC Aviation Program – CES Analog Trainer**, hereby certifies, represents and warrants that the Bidder (including its officers, directors and employees) is not an "Iran Linked Business" within the meaning of the Iran Economic Sanctions Act, Michigan Public Act No. 517 of 2012 (the "Act"), and that in the event Bidder is awarded a Contract as a result of the aforementioned Invitation To Bid, the Bidder will not become an "Iran Linked Business" at any time during the course of performing under the Contract.

The Bidder further acknowledges that any person who is found to have submitted a false certification is responsible for a civil penalty of not more than \$250,000.00 or 2 times the amount of the Contract or proposed Contract for which the false certification was made, whichever is greater, the cost of the Intermediate School District's investigation, and reasonable attorney fees, in addition to the fine. Moreover, any person who submitted a false certification shall be ineligible to bid on an Invitation To Bid for three (3) years from the date it is determined that the person has submitted the false certification.

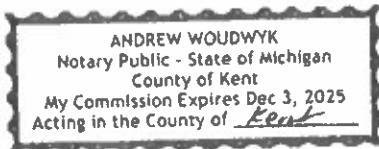
Contractor:

By: William D2
Title: President
Date: 9/7/2023

STATE OF MICHIGAN)
)ss.
COUNTY OF Kent)

This instrument was acknowledged before me on the 7th day of September, 2023, by William Trumper

Andrew Woudwyk
, Notary Public
Kent County, Michigan



My Commission Expires: Dec 3 2025
Acting in the County of: Kent

Kent Intermediate School District
REQUEST FOR PROPOSAL – 2023 KCTC Aviation Program–CES Analog Trainers
FAMILIAL RELATIONSHIP DISCLOSURE STATEMENT

Important: This disclosure statement must be included with your bid - required by state law (P.A. 232 of 2004)

As required by Public Act 232 of 2004, all bids shall be accompanied by a sworn and notarized statement disclosing any familial relationship that exists between the owner or any employee of the bidder and any member of the School Board or the Superintendent of Kent ISD.

The undersigned, the owner or authorized officer of Azimuth Aerospace Solutions LLC
(the Bidder), pursuant to the familial disclosure requirement provided in the attached invitation to bid, hereby represent and warrant, except as provided below, that no familial relationships exist between the owner(s) or any employee of the company and any member of the School Board or the Superintendent of Kent ISD. If such a relationship exists, please explain:

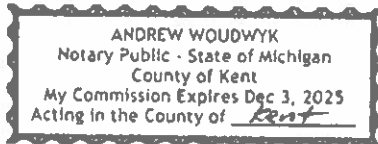
BIDDER: Azimuth Aerospace Solutions LLC
By: William D Trumpet
Title: President

STATE OF MICHIGAN)
)ss.
COUNTY OF Kent)

This instrument was acknowledged before me on the 7th day of September, 2023, by
William Trumpet

Andrew Woudwyk

, Notary Public
Kent County, Michigan



My Commission Expires: Dec 3 2025
Acting in the County of: Kent