

University of Central Missouri
and
Summit Technology Academy
Aviation Collaboration

June 15, 2019

LS City Council and LS Economic Development Council
Presented by Joe Mullins



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Programs

- Avionics
- Pilot
- Unmanned/Drone

*Creating Career Pathways
for High School,
Non-traditional and
University Students*



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Avionics

- The electronic systems used on aircraft, artificial satellites and spacecraft
- Systems include communications, navigation, the display and management of multiple systems and the hundreds of systems that are fitted to aircraft to perform individual functions



Avionics

Aircraft Avionics

- Communications
- Navigation
- Monitoring
- Aircraft flight-control system
- Fuel system
- Collision-avoidance system
- Flight recorders
- Weather system
- Aircraft management system

Mission or Tactical Avionics

- Military communications
- Radar
- Sonar
- Electro-optics
- ESM/DAS
- Aircraft networks



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10 Avionics Technologies*

- Space-based ADS-B for reduced oceanic separation
- Electric hybrid aircraft
- Autonomous taxi
- Open Mission Systems (OMS) software
- Internet protocol suite
- Internet protocol version 6 (IPv6)
- Supersonic avionics
- Turning airplanes into communications satellites
- Neural sensing
- Robot co-pilot

**Just a few of the concepts being researched*



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Existing Programs/Potential Partners

- Central Florida Aerospace Academy
 - <http://www.polkacademies.com/cfaa/Tracks.asp>
 - <http://www.polkacademies.com/TV/tvProfile.asp?id=40sqTESIXiM>
- Embry-Riddle
 - <https://erau.edu/gaetz-aerospace-institute/>
- Gulf Coast
 - www.GCA.aero



Avionics & Aviation Players in Discussion with UCM and STA

- AEA (Aircraft Electronics Association)
- Duncan Aviation
- Kansas City Business Aviation Association
- FAA (Federal Aviation Administration)
- Gulf Coast Avionics
- Garmin
- Marsh & McLennan Agency, Aviation
- EAA (Experimental Aircraft Association) Chapter 91
- Atlantic Aviation
- Airshare
- Tipton Hill
- and more...



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Avionics – Next Steps



- Build Advisory Board
- Build curriculum and program with industry input
- Engage City of Lee's Summit and LS Economic Development Council in planning and program development where possible
- Determine location of programs
- Marketing and program rollout



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Pilot Flight Program

- Currently assessing resources
- Expected rollout after launch of Avionics Program
- **NEEDED:** Flight instructors



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