



Triumph Gulf Coast, Inc.
Trust Fund Application for Funds

Gulf Coast State College

Bay, Gulf, Franklin, Wakulla, Walton, Okaloosa, Santa Rosa, &
Escambia Counties

Gulf Regional Training Center
for
Emergency Satellite Communications, Geospatial Intelligence,
& Unmanned Vehicles in Emergency Response




5230 W. Highway 98
Panama City, FL 32401



288.8017 Awards.-

- (1) Triumph Gulf Coast, Inc, shall make awards from available funds to projects or programs that meet the **priorities for economic recovery, diversification, and enhancement of the disproportionately affected counties. Awards may be provided for:**
- a. Ad valorem tax rate reduction within disproportionately affected counties;
 - b. Local match requirements of s. 288.0655 for projects in the disproportionately affected counties;
 - c. Public infrastructure projects for construction, expansion, or maintenance which are shown to enhance economic recovery, diversification, and enhancement of the disproportionately affected counties;
 - d. **Grants to local governments in the disproportionately affected counties to establish and maintain equipment and train personnel for local action plans of response to respond to disasters, such as plans created for the Coastal Impact Assistance Program;**



Name of Individual: Dr. John R. Holdnak
Name of Entity/Organization: Gulf Coast State College (GCSC)
Background of Applicant Individual/Entity/Organization: Institution of Higher Education
Federal Employer Identification Number: 59-1208155
Contact Information: Mr. Glen McDonald
Primary Contact Information: Mr. Jose Lopez-Baquero, GISP, GEOINT
Title: Assistant Professor Unmanned Vehicle Systems, Business and Technology Division
Mailing Address: 5230 W. Highway 98 Panama City, FL 32401
Phone: (850) 769-1551, Extension 4012
Email: jlopezbaq@gulfcoast.edu
Website: <https://www.gulfcoast.edu/>

The following partners have been briefed and will be informed of ongoing organizations joining the project during its development: Federal Emergency Management Agency, Florida Emergency Preparedness Association, Tallahassee Community College, Naval Surface Warfare Center Panama City, Tyndall Air Force Base, Career Source Gulf Coast, Bay County Economic Development Alliance, Sky Borne Technology, Gulf County Economic Development, Bay County Emergency Management, Gulf County Emergency Management, and Unmanned Safety Institute.

Total amount of funding requested from Triumph Gulf Coast: \$5,094,750 over a 6 year period.
The cost per participant for the six year program is: \$2,254 and a total of 2,260 individuals will be trained in the use of this new technological equipment as well as emergency techniques.

Has the applicant in the past requested or applied for funds for all or part of the proposed project/program? ___ Yes X No

Describe the financial status of the applicant and any co-applicants or partners:

Gulf Coast State College (GCSC) has been serving the educational needs of Bay, Gulf, and Franklin Counties for over 60 years with no issues related to finances or insufficient financial resources. GCSC currently manages and supports grants in excess of \$13 million and has never had any adverse findings or delivery failures. GCSC personnel are knowledgeable of all federal and state laws, rules and regulations and has performed well with no negative financial findings (See **Attachment C**).

Throughout its history, the College has been committed to providing a first-class education to the students in its District Impact Area (DIA), formed by Bay, Gulf, and Franklin counties. This commitment is evidenced by the excellent performance of GCSC graduates who transfer to state universities as well as by consistently high grade point averages and graduation rates that are higher than the Florida college system averages. For the fall 2017 semester, our student body profile was as follows: 5,991 were enrolled, 31% of our students are full time, 60% are females, 28% are identified as minorities or other, 52% are under 21 years of age, and a total of 1,249 students graduated from the different academic programs during the 2017-18 academic year.

Has the applicant or any co-applicants, partners or any associated or affiliated entities or individuals filed for bankruptcy in the last ten (10) years? ___ Yes X No



Eligibility

Pursuant to Section 288.8017, Triumph Gulf Coast, Inc. was created to make awards from available funds to projects or programs that meet the priorities for economic recovery, diversification, and enhancement of the disproportionately affected counties. The disproportionately affected counties are: Bay County, Escambia County, Franklin County, Gulf County, Okaloosa County, Santa Rosa County, Walton County, or Wakulla County. *See*, Section 288.08012.

1. From the choices below, please check the box that describes the purpose of the proposed project or program (check all that apply):

- ☐ Ad valorem tax rate reduction within disproportionately affected counties;
- ☐ Local match requirements of s. 288.0655 for projects in the disproportionately affected counties;
- ☐ Public infrastructure projects for construction, expansion, or maintenance which are shown to enhance economic recovery, diversification, and enhancement of the disproportionately affected counties;
- ☒ Grants to local governments in the disproportionately affected counties to establish and maintain equipment and trained personnel for local action plans of response to respond to disasters, such as plans created for the Coastal Impacts Assistance Program;
- ☒ Grants to support programs that prepare students for future occupations and careers at K-20 institutions that have campuses in the disproportionately affected counties. Eligible programs include those that increase students' technology skills and knowledge; encourage industry certifications; provide rigorous, alternative pathways for students to meet high school graduation requirements; strengthen career readiness initiatives; fund high-demand programs of emphasis at the bachelor's and master's level designated by the Board of Governors; and, similar to or the same as talent retention programs created by the Chancellor of the State University System and the Commission of Education, encourage students with interest or aptitude for science, technology, engineering, mathematics, and medical disciplines to pursue postsecondary education at a state university or a Florida College System institution within the disproportionately affected counties;
- ☒ Grants to support programs that provide participants in the disproportionately affected counties with transferable, sustainable workforce skills that are not confined to a single employer; and
- ☐ Grants to the tourism entity created under s. 288.1226 for the purpose of advertising and promoting tourism and Fresh from Florida, and grants to promote workforce and infrastructure, on behalf of all of the disproportionately affected counties.



2. Sections describing the need for the project


Proposal Title: *Gulf Regional Training Center for Emergency Satellite Communications, Geospatial Intelligence, & Unmanned Vehicles in Emergency Response (G2US)*

Detailed description: On October 10, 2018 the Florida Panhandle was struck by Hurricane Michael, resulting in damages at all levels of life and hurricane insured losses of \$6.65 billion dollars. During and immediately after the storm, communications were off-line and many local government agencies, as well as, local and national first responders were unable to exchange information. Emergency operations were confronted with: 1) inadequate and/or offline ***satellite communications links*** to allow first responders and governmental decision makers to respond to the immediate needs and problems of the community, 2) limited geographic information systems mapping and modeling using aerial assets to support the search and rescue efforts by ascertaining the terrain, 3) lack of trained officials with applicable certifications and skills to perform land, air and water reconnaissance missions using drones, 4) lack of data collection, mapping and 3D modeling of essential sites, and 5) loss of valuable time to serve the immediate needs of those residents in critical and/or unsafe conditions 6) lack of ***underwater searching and mapping equipment*** and trained personnel to aid in the search of ***casualties***, and make preliminary assessments of structural damage to water/shoreline related structures.

It was at this point that most of those working at the county's Emergency Operations Centers (EOCs) realized how degraded ***emergency communications*** had become and the pressing need to update ***equipment and training*** of personnel to support future disasters.

New Challenges-Voluntary Response: The GCSC Unmanned Vehicle Systems (UVS) program emergency response team, formed by program faculty and students, were able to organize an Unmanned Aerial Systems (UAS) drone section within the aviation branch of the EOC to begin reconnaissance flight missions to collect data, mapping, and 3D modeling of essential sites identified by the Bay and surrounding counties EOCs. Unfortunately, the UVS program has no side sonar imaging capabilities and was unable to identify the location of ***casualties trapped*** in the debris of the canals surrounding Mexico Beach. Other concerns were the need to support drone missions to ascertain the terrain by performing flights beyond the visual line of sight (BVLOS) and the need to have a ***mobile communications center*** with ***radar technology*** to monitor the critical airspace related to program activity response during the crisis. Ensuring drones are connected, identified, and managed, makes the airspace safer for drones, planes, helicopters, and the people below them. The feedback obtain after the storm highlighted the need to: 1) identify and purchase the necessary equipment to support future emergency efforts to save lives, 2) the need to implement an ongoing training program to ensure a steady flow of highly skilled emergency response professionals throughout the Panhandle, and 3) create synergy among first responders, EOC personnel, and local volunteers to be prepared to respond immediately to any emergency on short notice.

In all, the GCSC UVS team collected over 10,000 high resolution images for various uses; orthomosaics and 3D models of 5 Base Camps, 20 Fire & EMS facilities, 4 Points of Distribution (PODs), 2 Field Resupply sites, and 5 County facilities. Additionally, the team was tasked with aerial video assessments for situational awareness purposes at Mexico Beach, Parker, Callaway, and Panama City. Currently, GCSC UVS program emergency response team continues to perform missions in support of the Bay County (BC) EOC and deploying qualified students and staff for data collection.




As a response to feedback collected by GCSC UVS personnel, the following capabilities were identified that may alleviate some of identified shortfalls during Hurricane Michael:

- Mobile satellite communications, data, *and local cell LTE networking related to the EOC.*
- Geographic Information Systems support for counties lacking the resources.
- Long endurance UVS flights with live video streaming capability.
- Mobile radio station support for the emergency broadcast station WKGC.
- Mobile relay communications in support of public safety dispatch operations.
- Low level airspace monitoring using SBAND radar with UAS detection capabilities.
- Underwater searching and mapping capability.
- Critical medication delivery to high risk patients (e.g. Insulin).
- Training, storage, and maintenance of technology and equipment.
- Other applications in support of regional incidents.

This proposal will update and keep current the emergency response teams across the eight disproportionately affected counties by: 1) acquiring a satellite mobile unit with all the support equipment (to serve as a communications source for present and future emergency needs of the region), and 2) to train and/or certify first responders, EOC personnel, public safety students from GCSC, as well as, volunteers on the use of this equipment, 3) ensure 723 participants take the applicable CAPE and/or Community Emergency Response Teams (CERT) courses and are employable, 4) ***maximize the potential of local drone companies that could provide coastal surveillance and minor rescue operations to individuals in risk of drowning throughout the panhandle (e.g. Life Guard)***, 5) continue to collaborate with FEMA and other regional partners in the development of the UVS DRT Pilot Program, and 6) to continue supporting research and development ventures such as Threat Trackers (a joint venture between the Naval Surface Warfare Center Panama City, GCSC, and military contractors using drone technology to support maritime and border security missions) 7) ***support and provide training to citizens in the community in the use of HAM Radio, FECD, and Pre/Post disaster safety training*** 8) ***continue to provide and sustain the FEMA Business Continuity training to the community.*** Participants will be trained in the use of emergency geospatial equipment to form teams to support future search, rescue, and recovery efforts in case of an emergency. The emergency geospatial response teams (EGRTs) will be developed as a way of providing geographical information services (GIS) and remotely sensed data to any mutual response for large scale events, as well as, back-up satellite communication solutions. The EGRTs will be trained to work as a unit using the mobile satellite communications center for regional responses during different case scenarios (e.g. the lack of traditional connectivity due to downed communication towers associated with an incident or disaster). The EGRTs could be deployed during: hurricanes, forest fires, active shooter, oil spills, or any other natural/man-made disaster that would create an emergency.

The project goal is to provide the following levels of support:

1. Community - Demonstrate the capabilities of the EGRT's state of the art communications equipment, and trained personnel via demonstration exercises, STEM programs, school visits, static displays, as well as alternative communication methods training sessions for *families*.

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2. State/Local - Provide training in various aspects of the EGRT; equipment use, maintenance, radio operations, satellite networking, and industry certifications.
 3. Federal - Ensure the EGRT assets are allocated in the appropriate task orders with the Federal Emergency Management Administration FEMA.
 4. Commercial – Promote research and develop and contractual niche agreements using UVS to support security coverage during special events, concerts, VIP protection, among others.

During the implementation of the six year project, key staff will: 1) acquire and make available mobile satellite communication equipment with all the support equipment and resources to serve as a communication, and logistical mobile system for future air, land, and water emergency missions during or after manmade or natural disasters, 2) provide updated and ongoing basic, intermediate, and advance emergency communication, UVS, FAA training, and CAPE Industry Certifications to emergency personnel from the eight North West Florida (NWFL) counties to be impacted by the project, and 3) encourage and recruit high school students to enroll and complete a high demanding Science, Technology, Engineering and Mathematics (STEM) career essential to meeting state and national professional development and public safety workforce needs by pursuing an AS degree 4) encourage/recruit *middle school* students in participating in the **FEMA Student Tools for Emergency Planning (STEP)** summer camps and *high school* students to participate in the **FEMA Teen CERT** program complementing their education with additional emergency certificates 5) continue to provide and sustain the FEMA programs: **Business Continuity, Student Tools for Emergency Planning (STEP), and Teen CERT (Community Emergency Response Teams)**.

The proposal will promote transformational economic opportunities by continuing to develop a skilled workforce with emergency/disaster skills using *satellite communications systems* and unmanned vehicle systems (UVS) to save lives. The Bay Economic Development Alliance, Florida's Great Northwest and Opportunity Florida have all identified public safety and STEM related fields of study as a high priority (especially in highly technical UVS and communication skills) as one of the "Targeted Industries" that is important to the diversification of local economies and the availability of high skill/high wage employment opportunities.

The project will bring current and sustain the emergency response needs for those counties located in the Triumph region, impacting EOC, first responders, and volunteers working at the following panhandle counties: Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Franklin and Wakulla. Based on the identified need for individuals with enhanced **Communication** and UVS skills, Gulf Coast State College determined, in conjunction with our educational, economic, and military partners, that it was essential to train professionals in the region to become the **next generation of trained professionals** capable of responding effectively, efficiently, and promptly to any man-made or natural emergency before, during, and after a disaster.

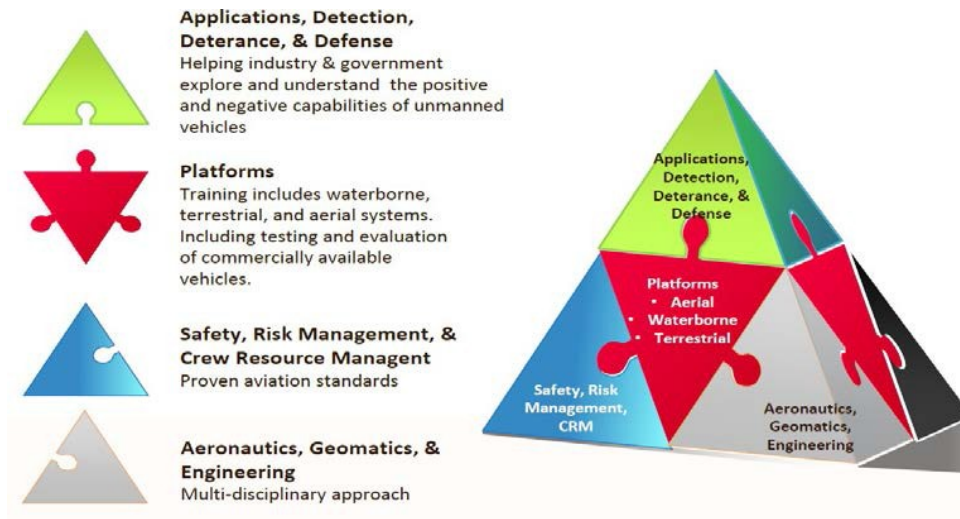
The Gulf Regional Training Center for Emergency Satellite Communications, Geospatial Intelligence, & Unmanned Vehicles in Emergency Response will be an asset that may serve our local military partners in emergency and non-emergency situations as requested for **live video and communications support**.

Location: The project will be located at the GCSC Gulf/Franklin Campus as the primary housing location and relocated as training requires to best serve the disadvantaged coastal counties in the Florida Panhandle, EOC personnel, citizens, volunteers, GCSC, and high school/middle

school students from the college's service area interested in pursuing a UVS, public safety or STEM career.

Evidence the project will promote the economic recovery of the region: This project will support the economic recovery of the region by strengthening its communication and emergency response to future natural and man-made disasters.

Figure 1



The project aspires to support the economic development by identifying and recruiting the best industry talent essential to drive innovation and the creation of industry niches with high paying jobs to ensure the continuity of the project after year six. In addition, the program will support the redirection of resources and train personnel that became available when GKN left the area. GKN donated a large supply of carbon fiber material we are able to redirect towards existing and new industrial/manufacturing partners expanding in/or moving into the region. Other potential applications of UVS technology (such as modifying land, air and water drones by integrating infrared technology and payload capabilities) can support future economic development niches as a result of the implementation of this grant:

1. Monitoring of ditches located in rural and hard to get locations to ensure they are properly maintained, preventing possible flood risk.
2. Monitoring and mapping of inland terrain located in hard to get locations to identify areas for commercial, residential and conservational use.
3. Ascertain and mapping storm water to determine environmental risk to the community.
4. Training the next generation of drone pilots to provide structural maintenance to cell phone and other communication towers, oil platforms and rigs, search and rescue operations, shark and coastal safety monitoring throughout the Florida Panhandle to strengthen the tourism industry, support the insurance industries during the aftermath of a natural or manmade disaster, among others.
5. Support transponder technology to enhance *local cellular communication network* capabilities during an emergency supporting communications among *search and rescue and law enforcement personnel*.
6. Support the development of specialized niches in emerging markets so future professionals can provide a secure and cost effective method to assess and report the conditions of regional infrastructures (building, bridges, among others) with these technological tools.



Timeline: The following is a summary timeline for the proposed project:

- a) September 2020 – Promotion of the approved grant to project stakeholders and the community & designation of project staff and commencement of purchasing orders.
- b) October 2020 – March 2021 – Acquisition of the satellite mobile unit, support resources, promote the project to all stakeholders, and develop all project application forms & releases which will be sent to stakeholders and posted on the college website.
- c) March 2021 – ongoing 2026 – Establish a list of qualified speakers to provide the CERT and CAPE Industry Certifications/workshops, prepare the workshop schedules for year two and beyond, promote the training activities to project partners, local first responders, and NGO volunteers located throughout the Panhandle and encourage them to submit an application to participate in the continuing education initiatives and obtain their respective certification.
- d) July 2020 – ongoing 2026 – Coordinate an annual regional thru national conference on emergency response topics for local first responders, host an annual conference in conjunction with FEPA members and first responders, and collect and analysis data for project reports.

Disproportionately affected counties: Primary: Gulf, Bay, and Franklin counties. Secondary: Escambia, Santa Rosa, Okaloosa, and Walton counties.

3. Explain how the proposed project or program is considered transformational and how it will affect the disproportionately affected counties in the next ten (10) years.

The project will impact the region by providing a valuable mobile emergency satellite communications center to provide immediate search and rescue missions and to assist in the recovery and maintenance of communication services to first responders and residents impacted by a disaster. Two recent events have highlighted the need to improve the establishment of specialized equipment to support the coordination of security measures for the region. These are a recent active shooter event experienced at the beginning of 2018 and the devastation caused by Hurricane Michael. Immediately after Hurricane Michael, first responders and search and rescue teams were faced with a monumental task of coordinating their missions with limited communications, radar, and poor assessment of downed trees and debris across thousands of miles of roads across the Florida Panhandle. The lack of a reliable communication system to coordinate the efforts, as well as, the lack of UVS equipment and trained professionals to assess the region and provide immediate first aid was a major issue and impacted the ability to identify and reach residents cut off and in need of help. These natural and man made events and their immediate consequences highlight the need to increase the tools, resources and specialized training available during the aftermath of a disaster.

During emergencies, disasters, accidents or possible terrorist acts, the college could assist local first responders by providing mobile satellite communications support and trained staff. For those first responders, as well as volunteers, coming from other areas of the country to assist in the recovery efforts, the project would provide updated information and procedures so they can properly assist in the recovery efforts.



The Emergency Geospatial Response Teams (EGRT) will be developed as a way of providing geographical information services (GIS) and remotely sensed data to any mutual response for large scale events, as well as, back-up satellite communications. The EGRTs will support a regional response in an environment lacking traditional connectivity due to damages associated with an incident or disaster. The equipment would be deployed to support EGRTs during hurricanes, forest fires, active shooter, oil spills, or any other natural/man-made disaster that would create an emergency environment.

This project is based on criteria established by the state colleges and state technical centers aligned with the mission of the Florida College System's Strategic Plan, "to provide access to high quality, affordable academic and career education programs that maximize student learning and success, develop a globally competitive workforce, and respond rapidly to diverse state and community needs." This mission statement strives to encourage Florida Colleges to provide technical training (less than a baccalaureate degree) to support the economic development needs of each service area by providing specialized programs to meet the growing needs of Florida residents.

4. Data available to demonstrate the viability of the proposed project or program.

The Florida Jobs 2030 Report stated the importance of supporting the state's logistic, distribution and safety clusters at mayor ports through drone technology. Ports alone are expected to rise exponentially as, "The growth in the logistics and distribution cluster is expected to be greatest among wholesale trade agents and brokers (14 percent), logistics consulting services (14 percent), and packaging and labeling services (20 percent)".

The need to assess the terrain and to support the recovery efforts were evident as insurance companies relied heavily on UVS technology to assess the damages, insurance losses estimated at \$6.65 billion. Rebuilding the infrastructure and ensuring the security of the region will require highly skilled professionals in UVS and UAS to support careers available in: 1) agriculture, 2) environmental safety, 3) public safety, and 4) airport and port authority security and maintenance 5) Information Technology 6) Project Management 7) Insurance Adjusters 8) Autonomous Vehicles maintenance and repair. Unmanned vehicles are deployed for monitoring, tracking, mapping/surveying, photography and videography, detecting, and maintenance. Drones are especially popular for dangerous or tedious tasks, such as monitoring fires, tracking spills or inspecting runways. According to the 2017 Northwest Florida Forward Strategy Report, these aerospace and defense clusters employ 1,865 and robotic and unmanned vehicles are expected to experience a significant growth in the upcoming years.

5. Describe how you will measure long-term impact of disproportionately affected counties.

Long-term impact of the project will be measured annually by the amount of ongoing first responders and professionals trained and certified in the use of the equipment purchased by the project. Ongoing training and activities will ensure participants and future emergency personnel are knowledgeable and prepared to meet the emergency management needs of the community and to support the transportation, distribution, and logistics needed to perform well in public safety and STEM clusters. The college will coordinate an annual conference on emergency response and communications using UVS and emerging career fields to promote synergy among stakeholders



and to maximize project outcomes and future investments. Through networking, the project will promote efficiency, effectiveness, and accountability and maximization of resources.

6. Describe how the proposed project or program is sustainable.

The Gulf Regional Training Center for Emergency Satellite Communications, Geospatial Intelligence, & Unmanned Vehicles in Emergency Response will be sustainable through training fees, deployment reimbursement from FEMA taskings and research grants and after the first six years, through fee/registrations for the training, workshops and conferences provided. The project can invoice services rendered to **FEMA** and other organizations in need of these services in case of an emergency or for ***drone detection security coverage for large scale public events***. Finally, the project will encourage individuals and other industries to development other applications and commercial niches to support the economic development of the region.

7. Describe how the deliverables for the proposed project or program will be measured.

The following are the deliverables during the six year project:

1. By 2026 a total of 160 Emergency Operation Center, Law Enforcement, Fire, and EMS personnel from the eight counties impacted by Gulf Triumph funds will be trained and certified through workshops and learning by doing activities on how to coordinate logistics procedures during an emergency.
2. By 2026 the project will enroll 40 students in AS degrees programs to include the use of advanced emergency techniques and tools to complement their degree with additional related certifications.
3. By 2026 the project will provide 125 federal FEMA certificates of completion to first responders and Non-Governmental Organizations/Volunteers emergency personnel in ***Advance Emergency Techniques (AET)*** and CERT certifications offered throughout the six year project. The workshops are:
 - a. CERT Emergency Communications Module
 - b. CERT Tools for Leadership Success Module
 - c. CERT Traffic and Crowd Management Module
 - d. Flood Response for CERTs
 - e. CERT Firefighter Rehab
 - f. CERT Exercise Swaps
 - g. CERT Program Manager Course
 - h. CERT Train-the-Trainer Course
 - i. CERT Basic Training Instructor - Unit 3: Disaster Medical Operations Part I
 - j. CERT Basic Training Instructor - Unit 4: Disaster Medical Operations Part II
 - k. CERT Basic Training - Unit 5: Light Search and Rescue Operations
 - l. CERT Basic Training - Unit 7: Disaster Psychology
 - m. CERT Basic Training - Unit 8: Terrorism and CERT

4. By 2026 a total of 750 professionals will be impacted through updated techniques and resources offered through a conference annually.
5. By 2026 a total of 763 professionals will be impacted through CAPE Industry Certifications essential to prepare skilled professionals to support the region in case of an emergency. The following is a list of the suggested topics that will be offered throughout the six year project:

Current CAPE Certifications	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Small UAS Safety Certification		12	14	18	20	20	84
Visual Line of Sight Operator (VSO)		12	14	18	20	20	84
911 Public Safety Tele Communicator		10	12	18	20	20	80
FAA Ground School		18	20	23	23	28	112
STARS GIS Technician		6	10	15	15	20	66
SPACE Geospatial Certification		6	10	15	15	20	66
		64	80	107	113	128	492

Proposed Additional CAPE Certifications

CAPE Certifications to be Submitted	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
HAM Radio Technician Citification		15	15	20	20	20	90
Autonomous Underwater Vehicle Operator Certificate			15	20	20	20	75
sUAS Level I Public Safety Thermography Certification			10	15	15	15	55
sUAS Level I Thermography Certification				8	10	15	33
Level II Thermography Certification					8	10	18
Per Year		15	40	63	73	80	271

These deliverables will be measured by promoting these courses throughout the region and recruiting potential participants for the five stated objectives. A file will reflect the amount of participants registered for each workshop and the support services provided to ensure all participants complete their respective programs, acquire the necessary knowledge and skills as stated in the project, and receive their certifications. Evidence of project formative evaluations will be collected and used to complete the annual reports and to inform the general community of these accomplishments.

Project Outcomes: Project participants will possess the capabilities to: 1) deploy satellite uplink, 2) support emergency communications for their respective EOC's, 3) support live video transmission, and 4) possess valuable CERT and CAPE Industry certifications (See **Attachment F**) to serve the community during an emergency.



Annual deliverables	2019-2025 Timeline																							
	Year 1				Year 2				Year 3				Year 4				Year 5				Total Year 6			
	Quarters																							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1. Creation of account and recruitment of project staff																								
2. Procurement of emergency units																								
3. Preparation of emergency facilities infrastructure																								
4. Train personnel from eight counties					40				60				80				100				280			
5. Certify 125 people in AET ²					32				31				31				31				125			
a. Training on telecomm. equipment.																								
b. Training on repair & support of telecomm equipment.																								
c. Recurring training for the telecomm equipment.																								
d. Systems upgrade training for newer telecomm equipment.																								
6. Annual training focusing on updated techniques					200				200				200				150				750			
7. Completed CAPE Industry Certifications per year					79				120				170				186				208			
8. Middle School participants in FEMA Student Tools for Emergency Planning summer camps	25				35				45				55				60				220			
9. High School participants in the FEMA Teen CERT training certificate	25				35				45				55				60				220			
10. FEMA CERT training workshops for the community in general including senior citizens	50				50				100				100				125				425			



Priorities

1. Please check the box if the proposed project or program will meet any of the following priorities (check all that apply):
 - ☐ Generate maximum estimated economic benefits, based on tools and models not generally employed by economic input-output analyses, including cost-benefit, return-on-investment, or dynamic scoring techniques to determine how the long-term economic growth potential of the disproportionately affected counties may be enhanced by the investment.
 - ☒ Increase household income in the disproportionately affected counties above national average household income.
 - X Leverage or further enhance key regional assets, including educational institutions, research facilities, and military bases.
 - ☐ Partner with local governments to provide funds, infrastructure, land, or other assistance for the project.
 - ☒ Benefit the environment, in addition to the economy.
 - X Provide outcome measures.
 - ☒ Partner with K-20 educational institutions or school districts located within the disproportionately affected counties as of January 1, 2017.
 - X Are recommended by the Board of County Commissioners of the county in which the project or program will be located. (See **Attachment D**)
 - ☐ Partner with convention and visitor bureaus, tourist development councils, or chambers of commerce located within the disproportionately affected counties.



2. Please explain how the proposed project meets the priorities identified above.

Leverage or enhance local and regional assets (GCSC and county EOC's) to provide training and equipment needed to respond to disasters using *mobile satellite communications* and unmanned vehicles.

3. Please explain how the proposed project or program meets the discretionary priorities identified by the Board.

The project responds to the transformational economic demand set forth by Triumph Gulf to support immediate needs of: **1) “affected counties to establish and maintain equipment and trained personnel for local action plans of response to disasters, such as plans created for the Coastal Impacts Assistance Program; 2) to support programs that prepare students for future occupations and careers at k-20 institutions that have campuses in the disproportionately affected counties; and 3) grants to support programs that provide participants in the disproportionately affected counties with transferable, sustainable workforce skills that are not confined to a single employer.”**

This project meets all criteria for Triumph funding and will help create new STEM jobs in several NWFL counties via classroom instruction, hands-on laboratory, and online training. These two components (on-the-job training and opportunities for research and development) form the cornerstone for the GCSC UVS program, where first responders and students can acquire specialized skills needed to support the region during and after an emergency. Participants and students will be well prepared for employment in the dynamic, ever changing field of public safety and emergency management so they have the knowledge and skills to perform the processes that are required, using state of the art equipment and techniques.

4. In which of the eight disproportionately affected county/counties is the proposed project or program located? (Gulf is the primary county to be impacted directly, allowing other counties to benefit from this project)

Escambia **Santa Rosa** **Okaloosa** **Walton** **Bay** **Gulf** **Franklin** **Wakulla**

5. Was this proposed project or program on a list of proposed projects and programs submitted to Triumph Gulf Coast, Inc., by one (or more) of the eight disproportionately affected Counties as a project and program located within its county? Yes X No

6. Does the Board of County Commissioners for each County listed in response to question 5, above, recommend this project or program to Triumph? X Yes No (in process)

Approvals and Authority

1. If the Applicant is awarded grant funds based on this proposal, what approvals must be obtained before Applicant can execute an agreement with Triumph Gulf Coast, Inc.?

Once the project is awarded, the contract would be signed by the College President, then submitted to the GCSC District Board of Trustees. The project will form an Advisory Board formed by college and partnering representatives who will review project progress and provide insights and recommendations during its programmatic and financial implementation.



2. If approval of a board, commission, council or other group is needed prior to execution of an agreement between the entity and Triumph Gulf Coast:

- A. Schedule of upcoming meetings for the Board for a period of at least six months.

The College Board of Trustees meets on a regular basis (See meeting dates in **Attachment E**).

- B. State whether that group can hold special meetings, and if so, upon how many days' notice.

Special meetings are convened by the Chairperson, the President, or a majority of the Board itself if necessary in accordance with Chapter 120, Florida Statutes. (Policy 2.125)

3. Describe the timeline for the proposed project or program if an award of funding is approved, including milestones that will be achieved following an award through completion of the proposed project or program.

The timeline of the project is presented on **page 9 and 13** of the proposal and project staff will meet with the Advisory Board every six months to ensure the project is implemented as stated and that key milestones (trainings, workshops, recruitment of students to the AS program, and attendance at the proposed conference) are performed and completed as anticipated.

4. Attach evidence that the undersigned has all necessary authority to execute this proposal on behalf of the entity applying for funding. This evidence may take a variety of forms, including but not limited to: a delegation of authority, citation to relevant laws or codes, policy documents, etc. In addition, please attach any support letters from partners.

Attachment G reflects those GCSC policies (2.010 and 3.001) stating Dr. Holdnak as the President and institutional official to sign agreements, together with the Board of Trustees.


5. Please provide a Project/Program Budget. Include all applicable costs and other funding sources available to support the proposal.

Funding and Budget: Pursuant to Section 288.8017, awards may not be used to finance 100 percent of any project or program. An awardee may not receive all of the funds available in any given year.

1. Identify the amount of funding sought from Triumph Gulf Coast, Inc. and the time period over which funding is requested.

A. Project/Program Costs:

<u>Construction:</u>	No funds requested
<u>Reconstruction:</u>	No funds requested
<u>Design & Engineering:</u>	No funds requested
<u>Land Acquisition:</u>	No funds requested
<u>Land Improvement:</u>	No funds requested



Equipment Supplies: The amount of funds sought from Triumph Gulf Coast, Inc. for this project totals \$5.1M. During the first two years, 81% of the budget will be invested in the purchase of the assets and to hire the necessary personnel and resources to implement the training activities as stated in the project. From year's three to six, 19% of the budget will support the ongoing training and continued education activities to ensure first responders are ready to respond promptly to an emergency. The primary equipment to perform the necessary activities stated in this project are:

- (1) S200-GBSAA Radar Systems
- (1) Multi-purpose Side Scan Sonar
- (2) VTOL Long Endurance UAS
- (1) L3 IVER3 Autonomous Underwater Vehicle
- (1) RF Scanners
- (1) Pipe Inspection Robot
- (1) Mobile Satellite Communication Center (SCC-EGRT) Vehicle
- (1) Inflatable Boat
- (1) Remotely Operated Vehicle ROV (underwater)
- (1) Safety Equipment PPE (required for operations)
- (2) Thermal/Digital Zoom UAS's
- (2) Small UAS Type 1
- (25) Computers for EGRT training lab (Project Specific)
- (1) Mobile Video Transmitter
- (1) SA-70 Airship & Drone Package
- (1) Nomad Communications Vehicle & (1) RP Strike-C4 Emergency Sup. Unit.
- Additional Communications connections and upgrades.

The total requested budget for equipment for the six year project is \$4,668,000.

Salaries: In order to attain FAA beyond line of sight (BLOS) waiver, the project team must be proficient and updated on new FAA rules. Consequently, the EGRT major capabilities can only be performed by fully trained personnel and not by part-time technicians. The following personnel (a Project Director and two Technicians) are required to support the project during the six years and beyond:

1. **Project Director/Geospatial Intelligence Analyst/ BLOS Pilot** – The project's PD will be required to be a Certified Geographic Information System Professional GISP, Geospatial Intelligence Analyst GEOINT, Certified in Geospatial Intelligence Applications, ROV Operator, Side Scan Sonar Operator, served over 15 years in the military and have over 10 years of experience serving as an UVS specialist. The PI is responsible for overall operation and administration of the program and will serve as the liaison between the college and Gulf Triumph program officers as well as the BLOS PIC. The PD will also serve as the liaison with the local Emergency Operations Center Director during deployment of the SCC-EGRT. This position will be provided by the college.
2. **Technician 1 (Geospatial Intelligence Analyst/ BLOS Payload Operator)** – This technician will serve as the second in command of the team as well as the liaison between emergency management agencies. Responsibilities: Team cross training, maintaining skills currency, scheduling, deployment, re-deployment, and recovery planning/supervision,



Incident Communications Center liaison, communications, and other duties (see G2US technical paper).

3. **Technician 2 (Mechanic/Radar Operator)** will be responsible for the safe operation of the sensors onboard the aircraft as well as the mobile unit. The Radar Operator will serve as the HARRIER S200d Ground-based-Sense-and-avoid (GBSAA) operator and will perform regular maintenance and repair. During operations, the radar operator will monitor the airspace in order maintain separation between manned aircraft and the UAS (see **Attachment A G2US technical paper**).

*All requested salaries during the six year grant period will be split 50%-50% between Triumph and the college.

The total budget requested for salaries for the six year project is \$288,000.

Total salaries and benefits covered by Gulf Coast State College \$989,520 during the six year project.

Other (specify): A total of \$78,750 is being requested for project materials and supplies during the six years of the grant. An additional \$60,000 will support subject matter experts in the field to provide ongoing programs enhancements and expansion during the grant period.

The total budget requested for materials in this six year project is \$138,750.

The total budget requested for the implementation of this project during the six year period as stated above is \$5,094,750.

5. What percentage of total program or project costs does the requested award from Triumph Gulf Coast, Inc. represent? (Please note that an award of funding will be for a defined monetary amount and will not be based on percentage of projected project costs.)

The total project cost requested from Triumph Gulf Coast, Inc. represents 51%.

B. Other Project Funding Sources: GCSC will support the project by providing facilities and administration support to the project during the six year period, paying 100% of the Project Director salary, with the (2) Technician salaries will be split 50% Triumph funds and 50% college, with the distribution for Triumph over 6 years being 100%, 100%, 50%, 50%, 0%, 0% . The total project match provided by GCSC during the six year project is \$4,877,285.

Total amount requested:	\$ 5,094,750
Total other funding:	\$ 4,877,285
Total project cost:	\$9,972,035

The following is table reflects the amount of funding sought from Triumph Gulf Coast, Inc., other funding, and the time period over which funding is requested:




GCSC Technology Center for Emergency Response and Communication Yearly Budget							
	Year 1/2020	Year 2/2021	Year 3/2022	Year 4/2023	Year 5/2024	Year Optional 6/2025	Total
TRIUMPH FUNDING REQUEST							
<u>Equipment</u> – Funds sought from Triumph Gulf Coast, Inc. for this project totals \$4.74M. During the first two years, the budget will be invested in the purchase of the mobile units and to hire and train the necessary personnel and resources to implement the training activities as stated in the project. From year's three to six, the budget will support the ongoing training and continued education activities to ensure first responders are ready to respond promptly to an emergency. Primary equipment list:							
<ul style="list-style-type: none"> 1 S200-GBSAA Radar Systems 	360,000						360,000
<ul style="list-style-type: none"> 1 Multi-purpose Side Scan Sonar 	120,000						120,000
<ul style="list-style-type: none"> 2 VTOL Long Endurance UAS 	190,000						190,000
<ul style="list-style-type: none"> 1 L3 IVER3 AUV 	280,000						280,000
<ul style="list-style-type: none"> 1 RF Scanner 	28,000						28,000
<ul style="list-style-type: none"> 1 Pipe Inspection Robot 	50,000						50,000
<ul style="list-style-type: none"> 1 Satellite Communication Center (SCC-EGRT) 	1,300,000						1,300,000
<ul style="list-style-type: none"> 1 Semi-Rigid Inflatable boat/outboard 	90,000						90,000
<ul style="list-style-type: none"> 1 Remotely Operated Vehicle ROV 	120,000						120,000
<ul style="list-style-type: none"> 1 Safety Equipment PPE Required for Operations 	50,000						50,000
<ul style="list-style-type: none"> 2 Thermal/Dig. Zoom UAS's 	70,000						70,000
<ul style="list-style-type: none"> 2 Small UAS 	10,000						10,000
<ul style="list-style-type: none"> 25 Computers for EGRT training lab 	75,000						75,000
<ul style="list-style-type: none"> 1 Mobile Video Transmitter 	120,000						120,000
<ul style="list-style-type: none"> 1 SA-70 Airship & Drone Package 	900,000						900,000
<ul style="list-style-type: none"> Additional Communications connections and upgrades 	75,000						75,000
<ul style="list-style-type: none"> 1 Nomad All Terrain Communication Center 	800,000						800,000
<ul style="list-style-type: none"> 1 RP Strike-C4 Emergency Supp. Unit 	30,000						30,000
Total equipment requested	\$4,668,000	0	0	0	0	0	\$4,668,000
The total budget requested for equipment to be procured during year one \$4,668,000.							



<p>Salaries – In order to attain FAA beyond line of sight waiver, the project team must be proficient and maintain currency IAW FAA guidelines. The EGRT major capabilities can only be performed by fully trained technicians. The following staff are required to support the project:</p> <p>1. Project Director/Geospatial Intelligence Analyst/ BLOS Pilot – The PD is responsible for overall operation and administration of the program and will serve as the liaison between the college and Gulf Triumph program officers as well as the BLOS PIC. Compensation for this position estimated at \$85,000 annually will be provided by the college.</p> <p>2. Two Technicians (Electronics Engineer/BLOS Payload Operator and Mechanic/Radar Operator) –This staff is responsible of maintaining the vehicle and serving as the liaison between the GCSC and emergency management agencies. Duties: Team cross training, skills currency, scheduling, maintaining deployment, and recovery planning/supervision, incident communications center liaison, and other duties. The Mechanic/Radar Operator will be responsible for the safe operation of the sensors on board the aircraft as well as the mobile unit. The Radar Operator will serve as the HARRIER S200d Ground-based-Sense-and-avoid (GBSAA) operator. Wages are calculated @ \$48,000 each with a 0% annual increase, college will assume all costs for increase in compensation.</p>	0	0	0	0	0	0	0
	96,000	96,000	48,000	48,000	0	0	288,000
Total salaries	96,000	96,000	48,000	48,000	0	0	288,000
The total budget requested for project salaries for the six year project is \$288,000.							
Materials and supplies – Distribution to local audience as training for K-12 students and workshops offered during the six year grant to serve up to 5,000 people annually.	2,500	15,250	15,250	15,250	15,250	15,250	78,750
Total materials & supplies	2,500	15,250	15,250	15,250	15,250	15,250	78,750
The total budget requested for materials & supplies during the six year project is \$78,750.							



Total Deployment							
The total budget requested for travel for staff during the six year project is \$0.							
Contractual – The project is requesting funds to contract FLIR Thermography instructors for Thermography Certifications and provide expert training.	0	0	20,000	20,000	20,000	0	60,000
Total contractual	0	0	20,000	20,000	20,000	0	60,000
The total budget requested for contractual during the six year project is \$60,000.							
Total Requested	4,766,500	111,250	83,250	83,250	35,250	15,250	\$5,094,750
GULF COAST STATE COLLEGE MATCH							
Salaries: Technician salaries will be split 50% Triumph funds and 50% college, with the distribution for Triumph over 6 years being 100%, 100%, 50%, 50%, 0%, 0% .	85,000	85,000	133,000	133,000	181,000	181,000	798,000
Total salaries match	85,000	85,000	133,000	133,000	181,000	181,000	798,000
Fringe Benefits (24%)	20,400	20,400	31,920	31,920	43,440	43,440	191,520
Total compensation match	105,400	105,400	164,920	164,920	224,440	224,440	989,520
GCSC Match – GCSC will support the project by providing institutional support to ensure accountability and project success by providing the following:	140,000	140,000	140,000	140,000	140,000	140,000	840,000
1. Use of Wi-Fi access, common space for group activities, utilities services, communication, and designation of college personnel to support the sound administration of the project as well as the reporting requirements.							
2. Designation of office facilities and equipment for project personnel.							
3. Designation of College personnel to support its implementation.							
4. UVS Program equipment and systems already on hand.	172,765	150,000	125,000	100,000	75,000	50,000	672,765
5. Skyborne Technology Match	2,375,000						2,375,000
Total in-kind match	2,687,765	290,000	265,000	240,000	215,000	190,000	3,887,765
Total other support	2,793,165	395,400	429,920	404,920	439,440	414,440	4,877,285
Total GCSC match							\$4,877,285
Total Project Cost	7,544,265	416,250	363,250	338,250	265,250	215,250	\$9,972,035
Total project cost							\$9,972,035

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6. Please describe the types and number of jobs expected from the proposed project or program and the expected average wage.

It is anticipated that by providing the training and resources, emergency management Teams will be better prepared to respond promptly, effectively and efficiently to an emergency. Based on labor market information available for Northwest Florida, beginning engineering technicians completing their A.S. degrees at GCSC are expected to earn approximately \$45,583 dollars annually.

7. Does the potential award supplement but not supplant existing funding sources? If yes, describe how the potential award supplements existing funding sources. X Yes ___ No

The project complements academic programs offered by the college by providing additional certifications that will allow students as well as the public the opportunity to acquire an additional skill that each community will have trained professionals and/or emerging industries to support the economic development of the region.

Applicant understands that the Triumph Gulf Coast, Inc. statute requires that the award contract must include provisions requiring a performance report on the contracted activities, must account for the proper use of funds provided under the contract, and must include provisions for recovery of awards in the event the award was based upon fraudulent information or the awardee is not meeting the performance requirements of the award. X Yes No

Applicant understands that awardees must regularly report to Triumph Gulf Coast, Inc. the expenditure of funds and the status of the project or program on a schedule determined by Triumph Gulf Coast, Inc. X Yes ___ No

Applicant acknowledges that Applicant and any co-Applicants will make books and records and other financial data available to Triumph Gulf Coast, Inc. as necessary to measure and confirm performance metrics and deliverables. X Yes No

Applicant acknowledges that Triumph Gulf Coast, Inc. reserves the right to request additional information from Applicant concerning the proposed project or program. X Yes No



ADDENDUM FOR LOCAL ACTION PLAN

1. Program Requirements

- A. Describe how the proposed award will establish and maintain equipment and trained personnel for local action plans of response to respond to disasters.


The College will provide lifetime maintenance of the equipment. Topics covered in the *training activities* will focus on updated holistic, disaster response, and emergency themes and techniques necessary to have a skilled workforce capable of responding to any emergency during and after the event. Participants will be trained with state-of-the-art equipment at Gulf and North Bay campuses, using realistic *immersive scenarios*, performing emergency drills together with first responders and multi-agency representatives, as well as, students from our academic programs. These drills will allow participants to acquire the necessary skills to react promptly to any emergency, as well as, to ensure a steady flow of professionals to supply the workforce demands of the region. Additional funds will be acquired through grant initiatives, as well as, special projects to provide continued education to local first responders and use of the equipment for training purposes. If an emergency occurs, project staff can promptly respond to the needs of the region, provide the services to the community and proceed to invoice these services through emergency relief funds (e.g. FEMA).

Project staff will continually collaborate with the Boards of County Commissioners of the eight counties and their staff to assess county vulnerabilities and needs so proactive measures can be taken to resolve these issues prior to their occurrence. These ongoing initiatives will strive to avoid or minimize the vulnerabilities identified and contribute to the safety of its residents.

- B. Describe the type and amount of equipment and trained personnel that will be established or maintained by the proposed award.

The equipment described in detailed in the budget narrative and essential to ensure the long-term security of the region in case of any emergency will be maintained and is available immediately upon a request to local partners from the region. In case of a natural or manmade emergency, local partners can utilize the project equipment and complete the proper invoices to Federal and State agencies for its use. These funds will be reinvested in acquiring additional equipment and resources to ensure the project has state of the art equipment available at all times. As new technology is acquired, additional workshops, training, drills, conferences, and certifications will be provided. The College will update its continuing education program to revise existing courses and include additional topics as innovative procedures are developed (E.g. training local LEA police to ensure local schools are safe from an act of terrorism). Special fees will be developed for such trainings, thus ensuring the continuity of the project after the funding period.

- C. Identify the specific local action plans (e.g., Coastal Impacts Assistance Program) that will benefit from the proposed award.



The project will support the existing Comprehensive Plan and Local Mitigation and Emergency Management Plans in the designated eight counties, by providing data and project support to assist the county in its economic development, social and security plans to improve resident's quality of life. Selective objectives and policies will be impacted by the project as a result of the support provided by the Technology Center for Emergency Response and Communication during and after the funding period.

- a) The project will be impacting the following goals expressed in the Gulf County Comprehensive Plan:

Project staff will impact the counties by providing the necessary data and visual aids to support recovery efforts and visual maps that will assist in their ongoing action plans.

- b) The project will provide assistance to the county by providing the following:

1. Collecting data to support the preparation of proposal to request funds from the Mitigation Grant program, Community Block Grants, and any other special post-disaster funding.
2. Provide reference information to assist the County in the identification of suitable recovery mitigation projects.
3. Assist the County by mapping the area to support future land use maps and zoning regulations as well as to support the County's participation in the Community Rating System by identifying Special Flood Hazard Areas (SFHA) or Flood Insurance Rate Maps.
4. To assist the County's ongoing: a) Hazard Identification and Vulnerability Assessment, b) Hurricane/Tornado Vulnerability, and c) Drought, Heatwave, and Wildfire impact reports and recovery efforts.

Project staff will gladly participate in ongoing Gulf County Local Mitigation Strategy meetings and will provide additional insights through data collection and analysis (E.g. drones will allow stakeholders to map the many miles of channels and acres of land to support the economic and environmental plans in place by the counties).

- D. Provide a detailed explanation of how the proposed award will connect to a broader economic recovery, diversification, enhancement of the disproportionately affected counties and/or enhancement of a targeted industry.

The project will assist Emergency Management Teams from the eight counties by using the *Mobile Satellite Communications System* and UVS to assist in disaster recovery efforts and ensuring the data collected will define those immediate needs so recovery efforts and funds can be provide to aid in the recovery efforts. By ensuring the assessment of the regions infrastructure and assessing its strength, weaknesses, opportunities, and threats (SWOT), project staff will contribute to the economic development by providing data to prioritize the recovery efforts. In addition, the project will potentially impact *middle school students* and *high school students* in the proposed counties in via the *STEP* and *Teen CERT* programs in a *Pre-Event* setting.




E. Detailed description of the quantitative data indicating how the project will be promoted:

- Economic recovery – The project can support future search, rescue and recovery missions if needed during an emergency as well as support the safety of residents and visitors traveling to the region by providing the following support initiatives to these industries:
 - Tourism – The project team will be able to deploy assets to aid local responders with digital photogrammetry, aerial live video feed, airspace support with the S200-GBSAA, Geospatial Intelligence during high volume events and will be able to facilitate information during evacuations.
 - Airport and airline industry – Project staff and the equipment can provide **mobile satellite communications support** and the **S200-GBSAA** radar to assist in air traffic safety immediately after a natural phenomenon (hurricane or a tornado) to ensure planes, helicopters, and drones are accounted for and contribute to decrease the potential risk of collisions. The project could support potential VIP visits performed by federal, state or national delegations (e.g. support security measures during President Trump’s recent visit to Panama City Beach). The Northwest Florida Beaches Airport alone received over 900,000 passengers in 2017. Other regional airports benefiting from the project are the Destin Fort Walton Beach Airport, as well as, the Pensacola International Airport.
 - Insurance companies – Considering the region hurricane insured losses latest estimate was \$6.65 billion dollars, the need for specialist to assist in mapping the damages is of utmost importance in the economic recovery of the region.
 - Telecommunications – Hurricane Michael highlighted the importance of ensuring a steady line of communication immediately after any disaster. During the storm and in its immediate aftermath, the areas impacted by the hurricane lost most communications. As a result of this pressing need, the lack of an effective and efficient communication system contributed to delays in the search and rescue missions that may have resulted in more saved lives. In order to help establish local back-up emergency communications, the project will be able to deploy **Mobile Satellite Communications Support** and **tethered drone/aerostat** (with local cellular repeating capabilities). In addition, the **Family Emergency Communications Device** being developed at GCSC can be provided to some communities. Over reported 30 fatalities were documented as a direct impact of the hurricane.
- Enhancement of a Targeted Industry – The project will enhance the regions first responder and emergency management ability to serve the needs of the community. During the aftermath of the hurricane over 1,500 sanctioned missions were coordinated throughout the region, ranging from search and rescue efforts to provide residents essential first aid kits and food and water.

2. Additional Information

- A. What is the location of the local action program that will be supported by the proposed award?

The immediate location of the local action program to be served by the project is Gulf County. Throughout the six year project, project staff expects to train first responders and volunteers from Gulf County as well as professionals from the eight counties impacted by Gulf Triumph funds. The project will also take into consideration the USFWS’s Coastal Impact Assistance Program (CIAP) by supporting the mapping of: 1) conservation, protection, or restoration of coastal areas including wetlands;



2) providing data to mitigate potential damages to fish, wildlife, or natural resources; 3) to support the regions strategic planning and the administrative costs of complying with these objectives; 4) providing information and data to support federally-approved marine, coastal, or comprehensive conservation management plans; and 5) identifying potential areas to assist in the mitigation of the impact of outer Continental Shelf activities.

B. Detail the current status of the local action plans (*e.g.*, new plans, existing plans, etc.) that will be supported by the proposed award and provide a detailed description of when and how the proposed award will be implemented.

While local action plans related to emergency response and communications are presently being implemented, this project will provide all necessary resources to assist the eight designated counties in utilizing information and capacity provided by the use of unmanned vehicle systems. Project staff will contribute their expertise and equipment to improve each plan and provide the following:

1. Ongoing training and certifications to first responders and NGO representatives on the use of UVS.
2. Increase the amount of highly skilled professionals prepared to respond to any emergency using UVS throughout each county.
3. Monitor trends in new technology and future expansion to regional airports as technology develops new need of support.

Each County Emergency Manager (CEM) has been entrusted with the responsibility of preparing all emergency preparedness, response, recovery and mitigation efforts in their counties. Ensuring each CEM has qualified personnel trained in the use of UVS working together to ensure the general public, as well as, the economic base of each county is better prepared to respond to any emergency or disaster and recover promptly.

Being prepared for a disaster or emergency is a vital part of living on the Gulf Coast of Florida and it is everyone's responsibility. County Emergency Manager have a variety of publications, information, and tools available to assist residents and visitors to know to respond to an unexpected. The narrative section represents a detailed description of when and how the proposed award will be implemented to enhance the responsiveness and capabilities of those charged with protecting the public.

C. Provide any additional information or attachments to be considered for this proposal.

See a visual representation of this project located in **Attachment B** of this proposal.

I, the undersigned, do hereby certify that I have express authority to sign this proposal on my behalf or on behalf of the above-described entity, organization, or governmental entity:

Name of Applicant: Gulf Coast State College

Name and Title of Authorized Representative: Dr. John R. Holdnak President

Representative Signature: 

Signature Date: August 7, 2019 / April 23, 2020



ATTACHMENTS

- A. Technology Center Unmanned Vehicle Systems program Technical Paper
- B. Advanced Technology Center Unmanned Vehicle Systems program
- C. Link to GCSC financial statements detailing its financial status
- D. Gulf County - Board of County Commissioners Support Letter (The support letter is being processed and will be included in an updated version)
- E. Board of Trustees monthly schedule
- F. 2018-2019 CAPE Industry Certification Funding List, Updated
- G. GCSC policies (2.010 and 3.001)
- H. SA-70 Airship & Drone Package

A. Technology Center Unmanned Vehicle Systems program Technical Paper

Gulf Regional Training Center for Emergency Satellite Communications, Geospatial Intelligence, & Unmanned Vehicles in Emergency Response (G2US)

Emergency Geospatial Response Team (SCC-EGRT)

1. Background/ Narrative

In the days and hours preceding hurricane Michael's landfall, the Gulf Coast State College's Unmanned Vehicles Systems Program pre-positioned some aerial assets at the Bay County EOC (BCEOC). Assets included the capabilities for limited geographic information systems as well as photogrammetric mapping software. The intent was to provide rapid assessment capabilities, search and rescue support, and recovery phase volumetric measurements. Part of the UVS program emergency response team comprised of volunteers and students trained in the FEMA disaster response methodology as well as FAA Part 107 certified.

During the storm communications were degraded to the point of becoming non-existent. As a result, many local government agencies were not able to continue to exchange information, including the GCSC UVS program emergency response team or college leadership. WKGC radio station was able to continue to broadcast essential emergency information until electrical power went off line and the emergency power generation system failed. Soon after the winds subsided, college personnel were able to establish emergency power and the radio station began broadcasting essential information. It was at this point that most of us realize how degraded emergency communications had become.

As the GCSC UVSP program coordinator, it was imperative that Prof. Lopez reestablish communications with college leadership as well as volunteers. However, there were no methods of communication available for sending or receiving information. Since Prof. Lopez's shelter in place location was near the Washington County EOC (WCEOC), and after 28 hours of extrication efforts, he was able to walk 2 miles to the WCEOC to report and assist with the limited resources at hand until he could re-establish communications with the BCEOC.

Actions at Washington County Emergency Operations Center

Upon reporting to the emergency operations director, Prof. Lopez indicated that he was capable of limited geographic information systems mapping and modeling but had no aerial assets. Prof. Lopez then was directed to the Palm Beach County Regional Task Force leadership that was assigned to augment the WCEOC. Subsequently, he explained to the task force that Washington County did have aerial assets that could be used but needed to be requisitioned from the Florida Panhandle Technical College (FPTC). As a result of this exchange, Prof. Lopez was able to acquire a few aerial assets as well as one pilot from FPTC and one pilot from the Washington County Sheriff's Department (WCEOC). In addition, using the FEMA requisition process, the task force was able to assign an additional 2 pilots with internal assets from the Santa Rosa County Sheriff's Department (SRCO). In summary, Prof. Lopez was able to establish an unmanned aerial systems section for rapid assessment and mapping for WCEOC. This allowed responders to gain an overall perspective of the damage sustained in certain areas in order to concentrate assets in the most needed locations. On the evening of day two after landfall, Prof. Lopez was able to use a satellite text messaging system to inform the college administration of the situation and his readiness to report to the BCEOC. He was then able to receive a cellular connection and was advised by the college president that the route to the BCEOC was clear.

Arrival and Actions at the Bay County Emergency Operations Center

Upon arrival at the BCEOC, Prof. Lopez reported to the GIS section for instructions. After being briefed on the current situation in the County, Prof. Lopez assembled the GCSC UVS program emergency response team to prepare the equipment that was pre-positioned at the EOC. The team was assembled by Prof. Lopez as the coordinator with the assistance of two UVS program students as well as augmented by the private drone company OffShore UAS. As a result, the GCSC UVS program emergency response team was able to organize a UAS (Drone) section within the aviation branch of the EOC to begin reconnaissance flights, data collection, mapping, and 3D modeling of essential sites identified by the BCEOC.

In all, the UVS team collected over 10,000 images for various uses; orthomosaics and 3D models of 5 Base Camps, 20 Fire & EMS facilities, 4 Points of Distribution (PODs), 2 Field Resupply sites, and 5 County facilities. Additionally, the team was tasked with aerial video collection for situational awareness purposes; Mexico Beach, Parker, Callaway, and Panama City. After Gulf Coast State College was able to re-open for classes, GCSC UVS program emergency response team was partially demobilized and returned to the main campus. Mission requests for UAS/mapping support have continued till present day.

One important issue that our program encountered was the persistent requests for live video broadcast from the most damaged areas i.e. Mexico Beach. However, the capabilities for such a request were not available as this type of operation requires specialized equipment and personnel. This type of **Beyond Line of Sight Operation (BLOS)** is highly technical and requires full time personnel to acquire and maintain Federal Aviation Administration certifications (See Attachment C pages 14 & 15). Moreover, the idea of organizing this type of training, equipment, and the modularity of the proposed TCERC was discussed and proposed by Prof. Lopez and BCEOC personnel **three years prior** to Hurricane Michael's landfall but the project did not gain the necessary support for funding. As a result, during the initial recovery phase and after multiple requests by the EOC for live video from Mexico Beach, frustration was expressed and agreed by State leadership. Present during this interaction and demonstrable frustration were the Florida State Governor as well as other State leaders.

Another issue our team was made aware of was a request for side scan sonar imaging for the search of missing casualties in Mexico Beach. Although Prof. Lopez is a subject matter expert in side scan sonar imaging, the UVS program does not have the equipment necessary to fulfil this request or train responders on how to use side scan sonars. Moreover, it was determined that equipment and personnel previously trained by Prof. Lopez in other agencies was not available, operational, or trained personnel available. As a result, the city of Mexico Beach had to contract a private company to perform the mission. Furthermore, during a conference held at the BCEOC, the college hosted responders impacted by Hurricane Michael, at this conference the Mexico Beach police chief stated **"...with the capabilities proposed, you could have gone to my residence and seen the destruction of my patrol vehicle...you could have dropped a handheld radio...you could have determined if my officers were ok?"** The answers to his statements were yes.

Consequences

In response to critical shortfalls encountered during all phases of emergency response during Hurricane Michael, the Gulf Coast State College Unmanned Vehicle Systems Program is proposing the creation of the Gulf Regional Training Center for Emergency Communications, Geospatial Intelligence, & Unmanned Vehicles in Emergency Response (**G2US**).

1.1. Mission

The mission of the **G2US**, and the Emergency Geospatial Response Team is to fill the technological gap in disproportionately affected counties before during and after a natural or man-made disaster. Encourage the effective use of unmanned systems by emergency responders and emergency management agencies by deploying, promoting, training, documenting, analyzing, and generating actionable intelligence to support emergency management agencies.

1.2. Resource Capabilities

The **G2US** will serve as an umbrella for the Unmanned Vehicle Systems Program A.S. as well as the Emergency Geospatial Response Teams. The emergency geospatial response teams will be developed as a way of providing geographical information services (GIS) and remotely sensed data to any mutual response for large scale events as well as back-up satellite communications solution in an effort to stabilize local cellular connectivity. The EGRTs will be designed as a vehicle for regional response in an environment lacking traditional connectivity due to damage associated with an incident or disaster. The EGRTs could be deployed during: hurricanes, forest fires, active shooter, oil spills, or any other natural/man-made disaster that would create an emergency environment.

Some capabilities to alleviate the identified shortfalls during H. Michael include;

- Mobile satellite communications, data, and **local cell LTE networking**.
- Geographic information systems support for counties lacking the resources.
- Long endurance flights with live video streaming capability.
- Mobile radio station support for the emergency broadcast station WKGC.
- Mobile relay communications in support of public safety dispatch operations.
- Low level airspace monitoring using SBAND radar with UAS detection capabilities.
- Underwater searching and mapping capability.
- Critical medication delivery (Insulin).
- Training, Storage, and Maintenance of technology and equipment.
- Cellular network provider “Flying Cows” and/or Aerostat communications broadcasting capabilities.
- Backup communications delivery.

1.3. Primary Equipment

- (1) S200-GBSAA Radar Systems
- (1) Multi-purpose Side Scan Sonar
- (2) VTOL Long Endurance UAS
- (1) L3 IVER3 Autonomous Underwater Vehicle
- (1) RF Scanners
- (1) Pipe Inspection Robot
- (1) Mobile Satellite Communication Center (SCC-EGRT) Vehicle
- (1) Inflatable Boat
- (1) Remotely Operated Vehicle ROV (underwater)
- (1) Safety Equipment PPE (required for operations)
- (2) Thermal/Dig. Zoom UAS's
- (2) Small UAS Type 1
- (25) Computers for EGRT training lab (Project Specific)
- (1) Mobile Video Transmitter
- (1) 1 SA-70 Airship and Drone Package

- Additional Communications connections and upgrades.

1.4. Personnel

In order to attain FAA Beyond Line Of Sight (BLOS) waiver, the team must be proficient and must maintain currency. Consequently, the EGRT major capabilities can only be performed by fully trained personnel and not by part-time technicians.

1.4.1. Executive Director

The proposed team will have an Executive Director that will serve as the person responsible of the TCERC, UVS program, and the EGRT team as well as the liaison between emergency management agencies.

Responsibilities:

- Center director
- Oversee the GCSC UVS program
- EGRT team leader.
- FEMA UVS DRT Pilot Program Coordinator.
- Team cross training.
- Maintaining skills currency.
- Scheduling.
- Budgeting.
- Recruiting.
- Deployment, re-deployment, and recovery planning/supervision.
- Incident Communications Center liaison.
- Communications.
- Other duties.

1.4.2. Electronics Engineer/ BLOS Pilot

The UAS Pilot will be responsible for the safe operation of the long endurance flight aircraft (BLOS) as well as serve as a UAS technician. Additional duties will include maintenance, repair, and training of communications equipment.

Also called: Electro-Mechanic, Electro-Mechanical Technician (E/M Technician), Electronic Technician, Engineering Technician

What they do:

Operate, test, maintain, or calibrate unmanned, automated, servo-mechanical, or electromechanical equipment.

May operate unmanned submarines, aircraft, or other equipment at worksites, such as oil rigs, deep ocean exploration, or hazardous waste removal.

May assist in testing and designing robotics equipment.

On the job:

Test performance of electromechanical assemblies, using test instruments such as oscilloscopes, electronic voltmeters, or bridges.

Read blueprints, schematics, diagrams, or technical orders to determine methods and sequences of assembly.

Inspect parts for surface defects.

1.4.3. Geospatial Intelligence Analyst/ BLOS Payload Operator

The UAS Payload Operator will be responsible for the safe operation of the sensors onboard the aircraft as well as serve as a UAS technician and back up pilot.

Also called: IP/Mosaic Technician, Production Manager, Project Manager, Research Associate

What they do:

Apply remote sensing technologies to assist scientists in areas such as natural resources, urban planning, or homeland security.

May prepare flight plans or sensor configurations for flight trips.

On the job:

Collect geospatial data, using technologies such as aerial photography, light and radio wave detection systems, digital satellites, or thermal energy systems.

Verify integrity and accuracy of data contained in remote sensing image analysis systems. Integrate remotely sensed data with other geospatial data.

1.4.4. Mechanic/ Radar Operator 1

The Radar Operator will serve as the HARRIER S200d Ground-based-Sense-and-avoid (GBSAA) radar. During operations, the Radar Operator will monitor the airspace in order maintain separation between manned aircraft and the UAS. In addition, this position will serve as the EGRT Mechanic.

What they do:

Automotive service technicians and mechanics typically do the following:

- Identify problems, often by using computerized diagnostic equipment
- Plan work procedures, using charts, technical manuals, and experience
- Test parts and systems to ensure that they work properly
- Follow checklists to ensure that all critical parts are examined
- Perform basic care and maintenance, including changing oil, checking fluid levels, and rotating tires
- Repair or replace worn parts, such as brake pads, wheel bearings, and sensors
- Perform repairs to manufacturer and customer specifications
- Explain automotive problems and repairs to clients

Although service technicians work on traditional mechanical systems, such as engines, transmissions, and drivebelts, they also must be familiar with a growing number of electronic systems.

Service technicians use many different tools, including computerized diagnostic tools and power tools such as pneumatic wrenches, lathes, welding torches, and jacks and hoists. These tools usually are owned by their employers.

1.4.5. Electro-mechanical Technician/ Radar Operator 2

The Radar Operator will serve as the HARRIER S200d Ground-based-Sense-and-avoid (GBSAA) radar. During operations, the Radar Operator will monitor the airspace in order maintain separation between manned aircraft and the UAS.

Electro-mechanical technicians typically do the following:

- Read blueprints, schematics, and diagrams to determine the method and sequence of assembly of a part, machine, or piece of equipment
- Verify dimensions of parts, using precision measuring instruments, to ensure that specifications are met
- Test the performance of electro-mechanical assemblies, using test instruments
- Install electronic parts and hardware, using soldering equipment and hand tools
- Operate, test, or maintain robotic equipment
- Analyze and record test results, and prepare written documentation

Electro-mechanical technicians install, maintain, and repair automated machinery and computer-controlled mechanical systems in industrial settings. This kind of work requires knowledge and training in the application of photonics, the science of light. Electro-mechanical technicians also test, operate, or maintain robotic equipment at worksites. This equipment may include unmanned submarines, aircraft, or similar types of equipment for uses that include oil drilling, deep-ocean exploration, or hazardous-waste removal. These technicians also work on energy projects involving solar power and wind.

2.1. Community

Demonstrate the capabilities of the EGRT's, state of the art communications equipment, and trained personnel via demonstration exercises, STEM programs, school visits, and static displays.

2.2. State/Local

Provide training in various aspects of the EGRT; equipment use, maintenance, radio operations, satellite networking, and industry certifications. Including, Beyond Line of Sight Operations (BLOS)

2.3. Federal

Ensure the EGRT asset is allocated in the appropriate task orders with the Federal Emergency Management Administration FEMA. Continue collaboration with FEMA's UVS DRT Pilot Program.

2.4. Commercial

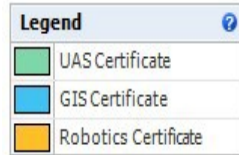
Attain contractual agreements to support counter UAS security coverage during special events, stadiums, concerts, VIP protection.

3. GCSC Unmanned Vehicle Systems Program A.S.

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards relevant technical knowledge and skill needed to prepare for further education and career in the transportation, distribution and logistics career cluster; provides technical skill proficiency, and includes competency – based applied learning that contributes to the academic knowledge, higher – order reasoning in problem – solving skills, work attitudes, general employability skills, technical skills, and occupation – specific skills; and knowledge of all aspects of the transportation, distribution and logistics career cluster.

The content includes but is not limited to communications, ethics, mathematics, science, management, psychology, unmanned systems, private pilot ground school, electronics data acquisition and control, robotics, and the water surface unmanned systems, operation and application of unmanned systems and techniques to defeat an unmanned vehicle.

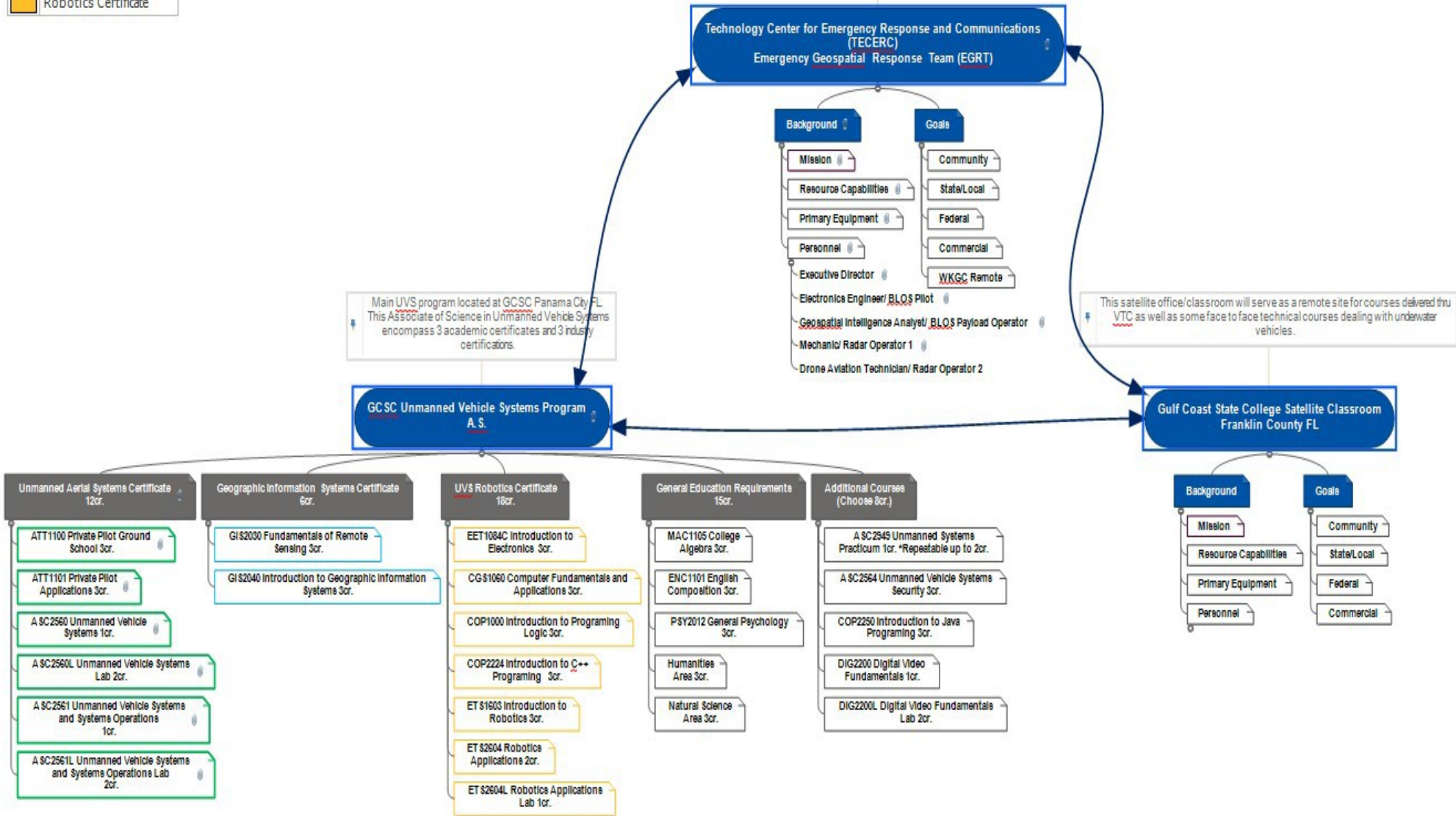
GULF COAST STATE COLLEGE UVS



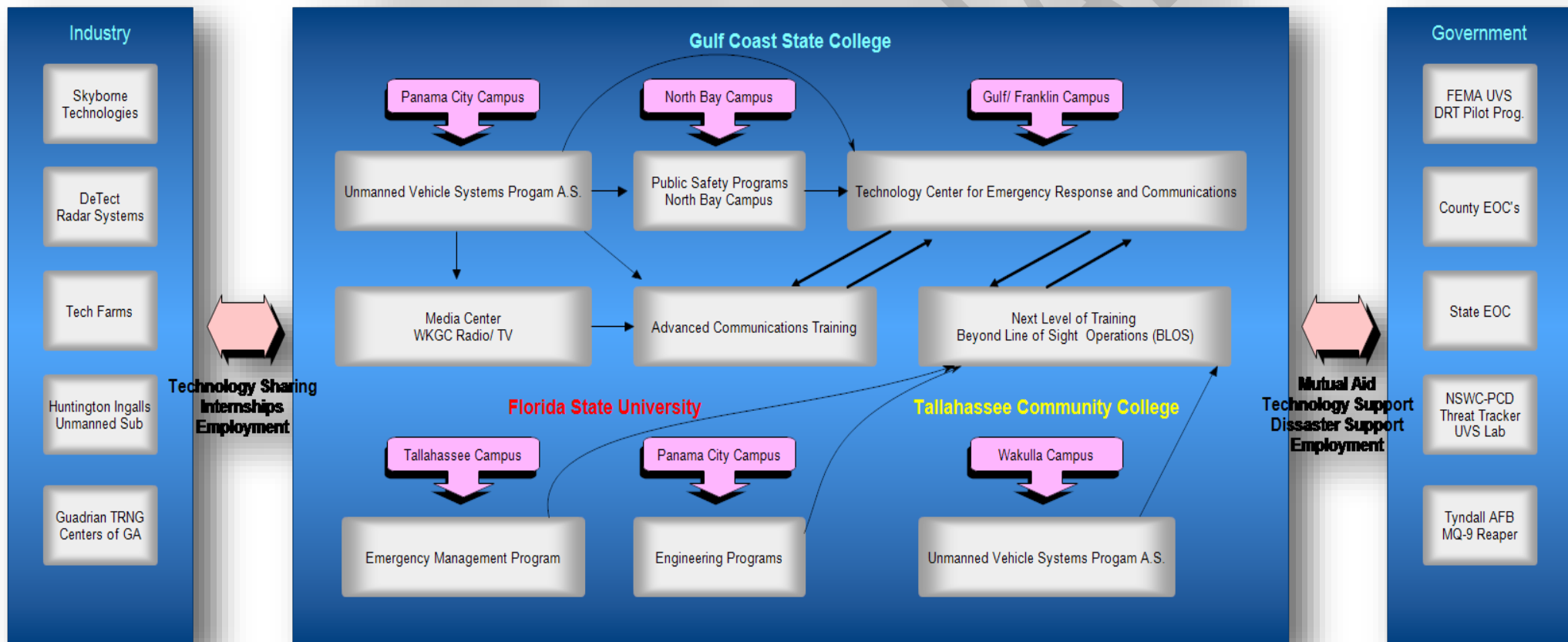
UVS Certificate programs located at GCSC Gulf/ Franklin campus in Port St. Joe FL. The initial certificate programs encompass 3 academic certificates and 3 industry certifications that are part of the A.S in Unmanned Vehicle Systems Program at the GCSC Panama City Campus as well as other engineering technology programs.

Main UVS program located at GCSC Panama City FL. This Associate of Science in Unmanned Vehicle Systems encompass 3 academic certificates and 3 industry certifications.

This satellite office/classroom will serve as a remote site for courses delivered thru VTC as well as some face to face technical courses dealing with underwater vehicles.



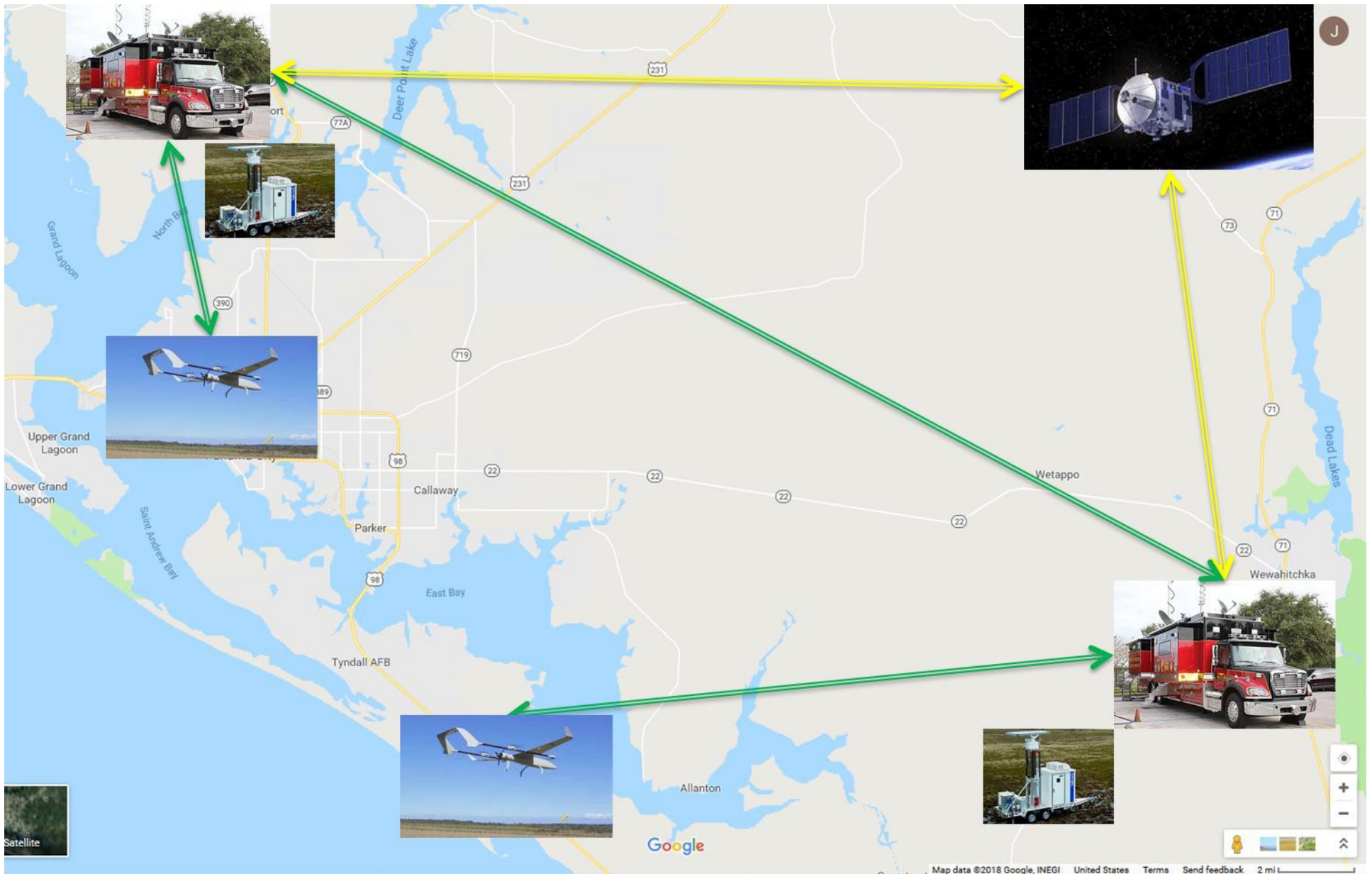
Unmanned Vehicles/Communications Stakeholders



EGRT EQUIPMENT



EGRT BEYOND LINE OF SIGHT (BLOS) DEPLOYMENT CONCEPT



EGRT COMMUNICATION RELAY FUTURE CONCEPT

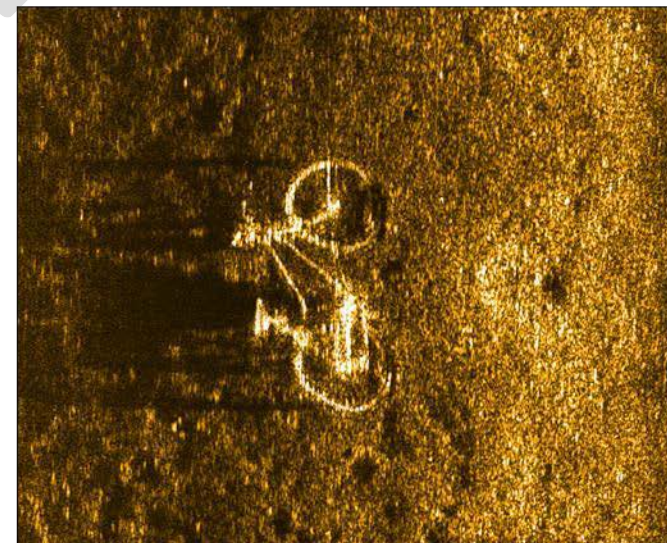
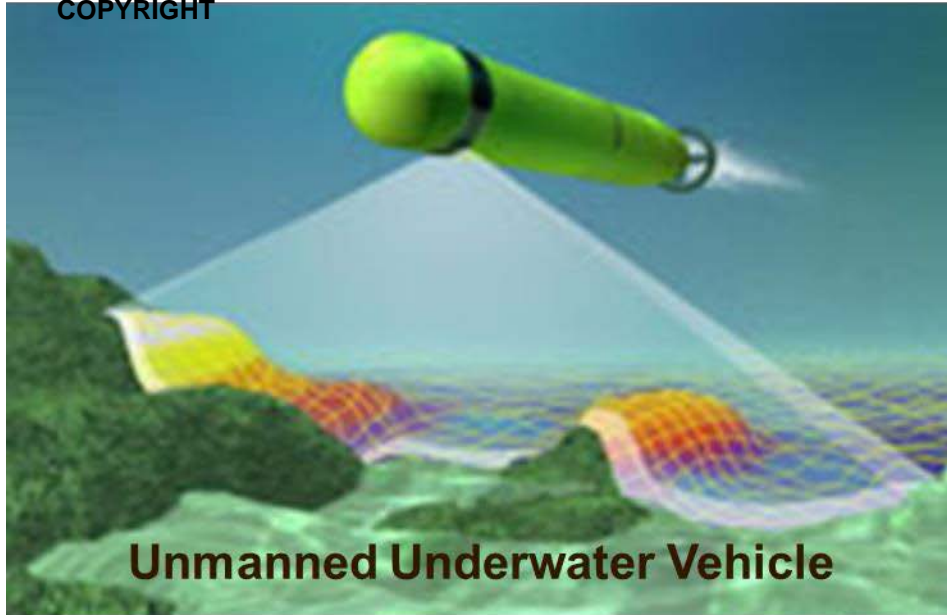
© COPYRIGHT



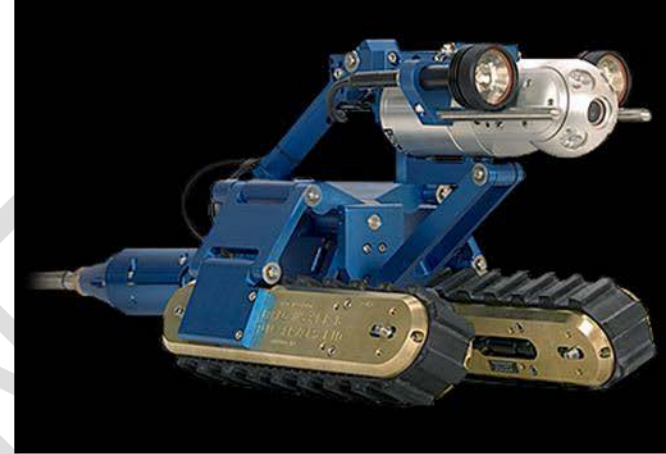
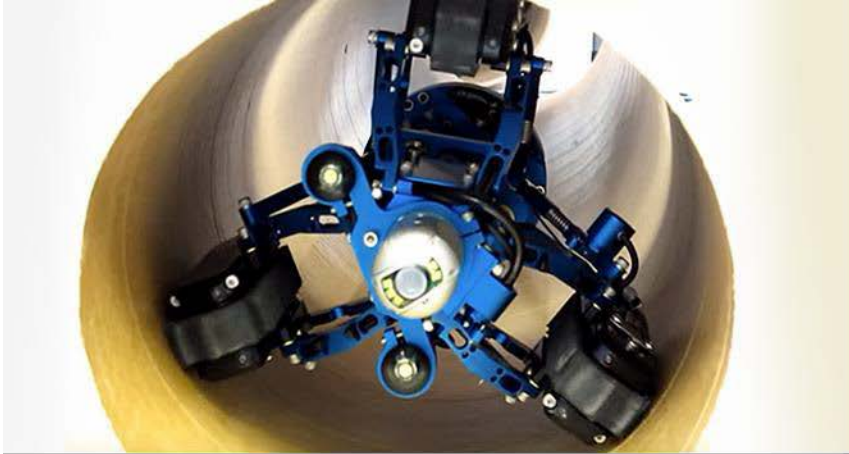
©

EGRT UNDERWATER SEARCHING AND MAPPING CONCEPT

COPYRIGHT



EGRT PIPE/COLLAPSE STRUCTURE ROBOTS FOR SEARCH AND RESCUE



EGRT LIFE GUARDING CONCEPT USING UAS'S (DRONES)



B. Advance Technology Center
Unmanned Vehicle Systems
program



Advanced Technology Center

Unmanned Vehicle Systems Program

The ATC “Future Forward” Philosophy



Innovative Partnerships

Breaking boundaries across business, industry, government, and K-20 education

Unmanned Vehicle Systems

Training, Testing & Evaluation of commercially available unmanned systems

Regional Economic Development

Leading the high-tech cluster emerging within Northwest Florida, part of the NCATC network

Evolving Workforce

Enabling the formation and expansion of high-skill, high-wage jobs across the technology sectors, leading to an increased quality of life throughout our area and beyond

Entrepreneurial Culture

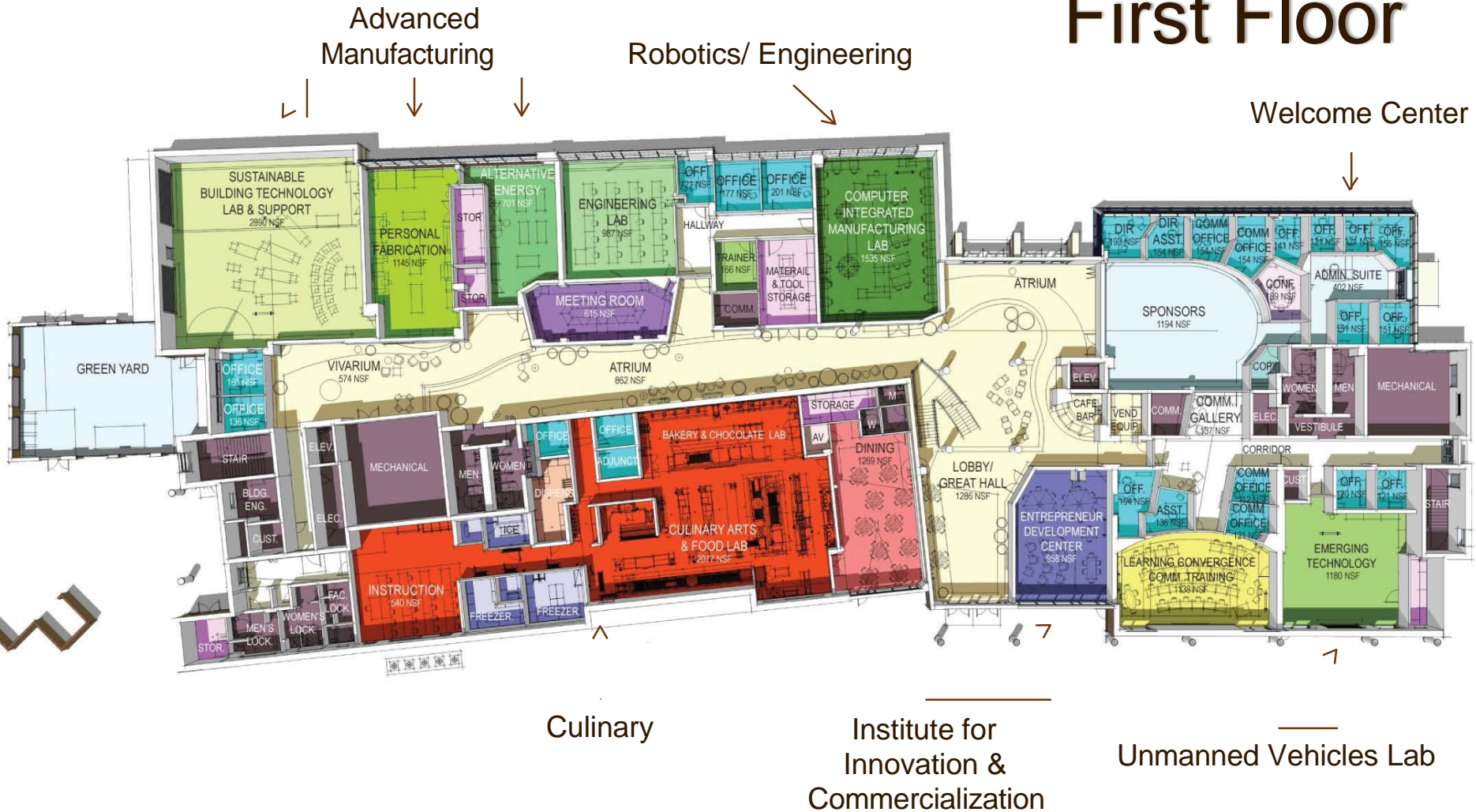
Connecting venture capital to entrepreneurs, celebrating innovation, embracing new models to create more jobs



GCSC Main Campus Located in Panama City FL



First Floor

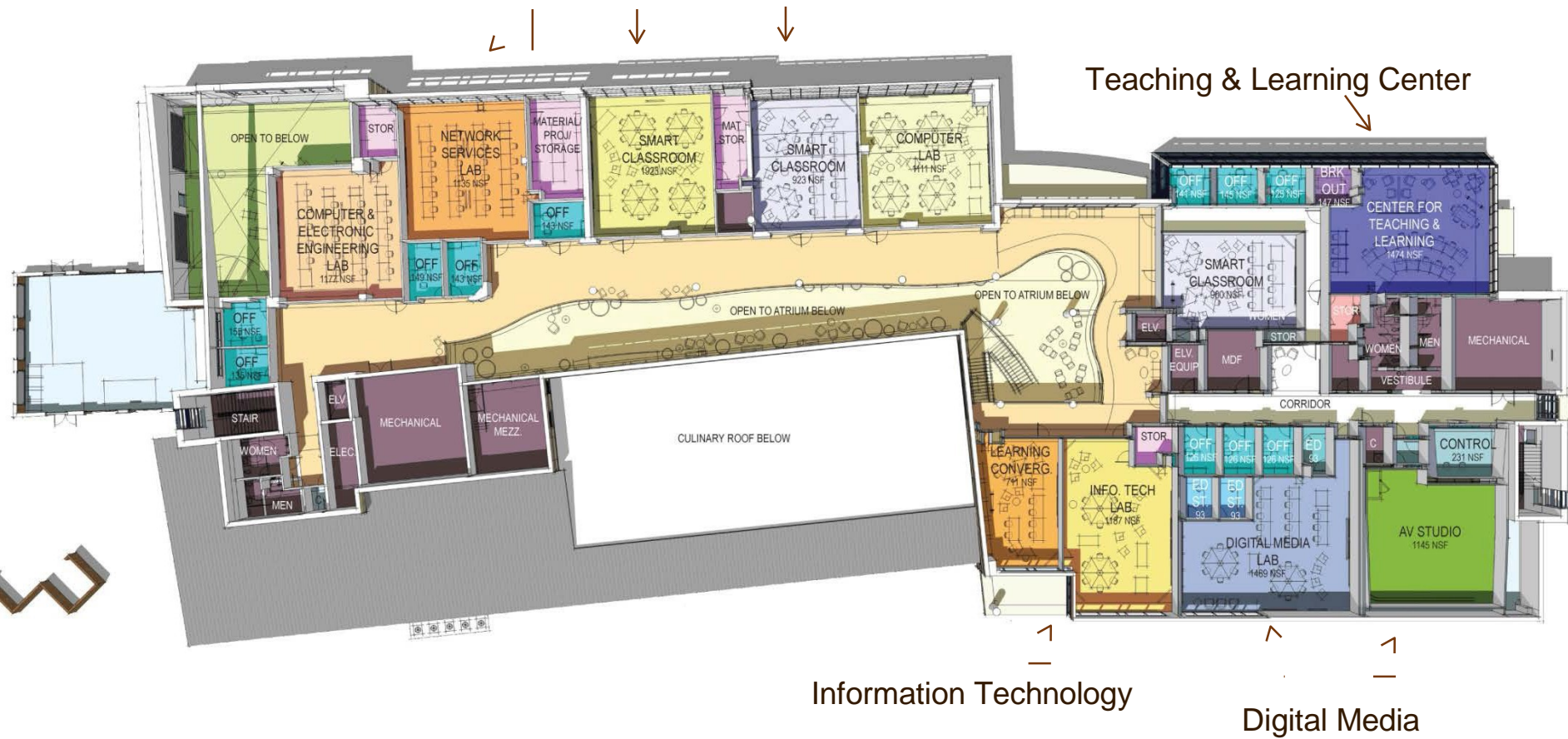


Advanced Technology Center

Second Floor

Cybersecurity

Teaching & Learning Center



Advanced Technology Center

Third Floor

Drafting, Design, GIS,
& Remote Sensing Lab

Green Roof

Global Conferencing &
Workforce Training



Demo Kitchen & Rooftop Seating

Advanced Technology Center

Current GCSC UVSP Capabilities & Partnerships

- The Advanced Technology Center (ATC) can host workshops, meetings, and conferences.
- The ATC is global conferencing capable.
- AS/ Unmanned Vehicle Systems (articulating agreement with Embry-Riddle Aeronautical University.)
- Custom training for Aerial, Terrestrial, & Waterborne platforms.
- UVS Methodologies development.
- Commercial UVS testing & evaluation.
- Red Teaming.
- Tabletop Exercises.
- Critical review & analysis of existing counter UVS plans.
- Threat Emulation.
- Multiple training sites and environments.
- Multi-agency collaboration.
- Education Partnership with NSWCCD.
- Education and UVS consulting partnership with TechFarms (<https://techfarms.com/>)
- Collaborating agreement with local UAS detection company, DeTect (<http://www.detect-inc.com/>)
- Collaborating agreement with RSAE Labs, a MESH technology development company (<http://rsaelabs.com/>)

UVS Program Foundation



Applications, Detection, Deterance, & Defense

Helping industry & government explore and understand the positive and negative capabilities of unmanned vehicles



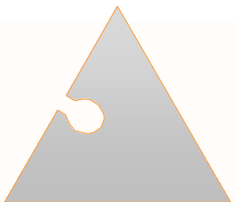
Platforms

Training includes waterborne, terrestrial, and aerial systems. Including testing and evaluation of commercially available vehicles.



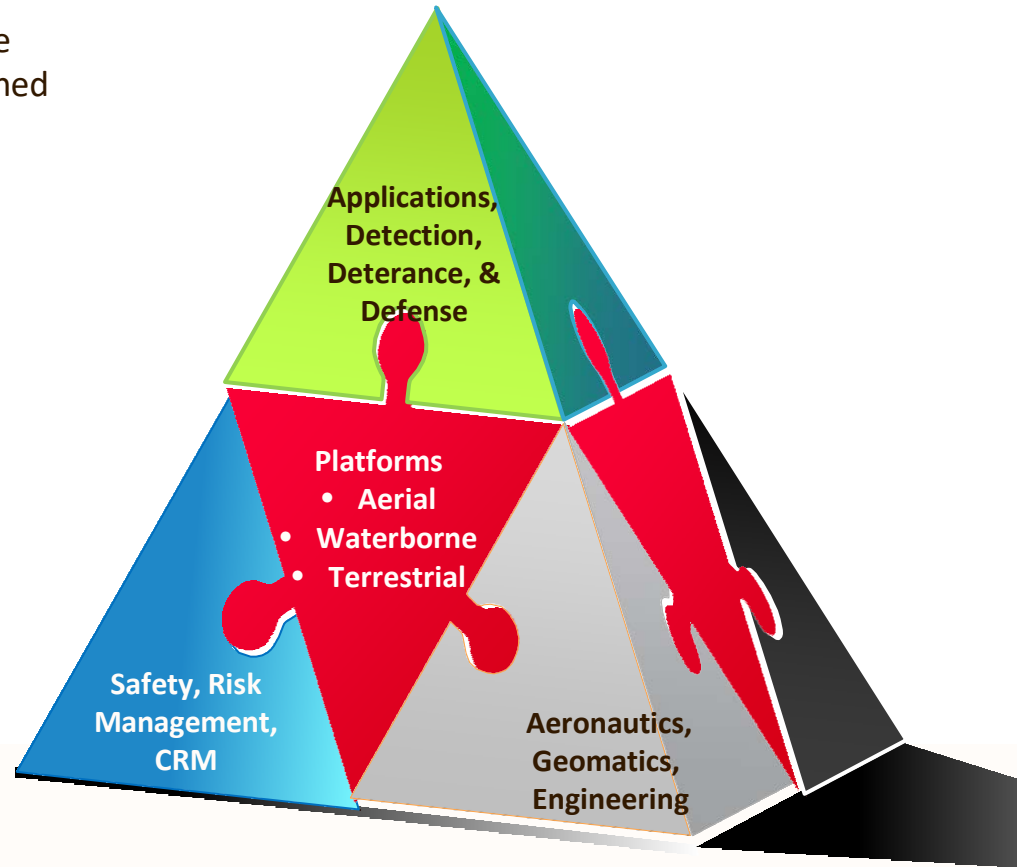
Safety, Risk Management, & Crew Resource Management

Proven aviation standards



Aeronautics, Geomatics, & Engineering

Multi-disciplinary approach



Public Safety Training Facility, North Bay Campus



Bay County EOC

Training Pond

Firearms Range

Fire Training Tower

2 Driving Pad/ UAS Launch & Recovery

Google Earth

lat 30.301000° lon -85.660496° elev 26 ft eye alt 1576 ft

GCSC Satellite Campus & Airfield, Port St. Joe FL

GCSC Gulf/Franklin Campus



Costin Airfield

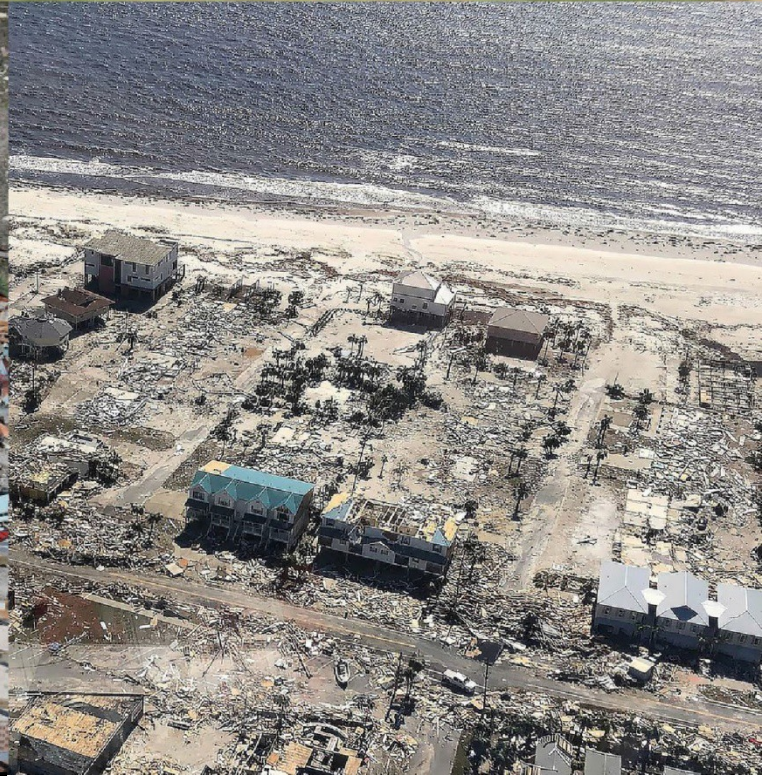


Google Earth

Imagery Date: 10/16/2015

lat 29.764041° lon -85.286049° elev 14 ft eye alt 19600 ft

What if?



Proposed

Gulf Regional Training Center for Emergency Satellite Communications, Geospatial Intelligence, & Unmanned Vehicles in Emergency Response (**G2US**) Emergency Geospatial Response Team (**SCC-EGRT**)

In response to critical shortfalls encountered during all phases of emergency response during Hurricane Michael, the Gulf Coast State College Unmanned Vehicle Systems Program is proposing the creation of the Gulf Regional Training Center (**G2US**). The **G2US** will serve as an umbrella for the Unmanned Vehicle Systems Program A.S. as well as the Emergency Geospatial Response Team (**SCC-EGRT**).

Some capabilities to alleviate the identified shortfalls during H. Michael include;

- mobile satellite communications and data networking.
- geographic information systems support for counties lacking the resources.
- long endurance flights with live video streaming capability.
- mobile radio station support for the emergency broadcast station WKGC.
- mobile relay communications in support of public safety dispatch operations.
- low level airspace monitoring using SBAND radar with UAS detection capabilities.
- underwater searching and mapping capability.
- critical medication delivery (Insulin).
- many other applications in support of regional incidents.

Gulf Regional Training Center for Emergency Satellite Communications, Geospatial Intelligence, & Unmanned Vehicles in Emergency Response (G2US)

The mission of the Unmanned Vehicle Systems Institute for Emergency Response, Emergency Geospatial Response Team, and the Disaster & Emergency Response Village is to fill the technological gap in disproportionately affected counties before during and after a natural or man-made disaster. Encourage the effective use of unmanned systems by emergency responders and emergency management agencies by deploying, promoting, training, documenting, analyzing, and generating actionable intelligence.

Unmanned Vehicle Systems Program (UVS)

The mission of the Unmanned Vehicle Systems Program is preparing students in the repair, design, and the operation of sensor centric unmanned platforms.



GULF COAST STATE COLLEGE

GULF REGIONAL TRAINING CENTER (G2US)
EMERGENCY GEOSPATIAL RESPONSE TEAM (EGRT)



GULF COAST STATE COLLEGE

GULF REGIONAL TRAINING CENTER (G2US)
EMERGENCY GEOSPATIAL RESPONSE TEAM (EGRT)

Concept Example

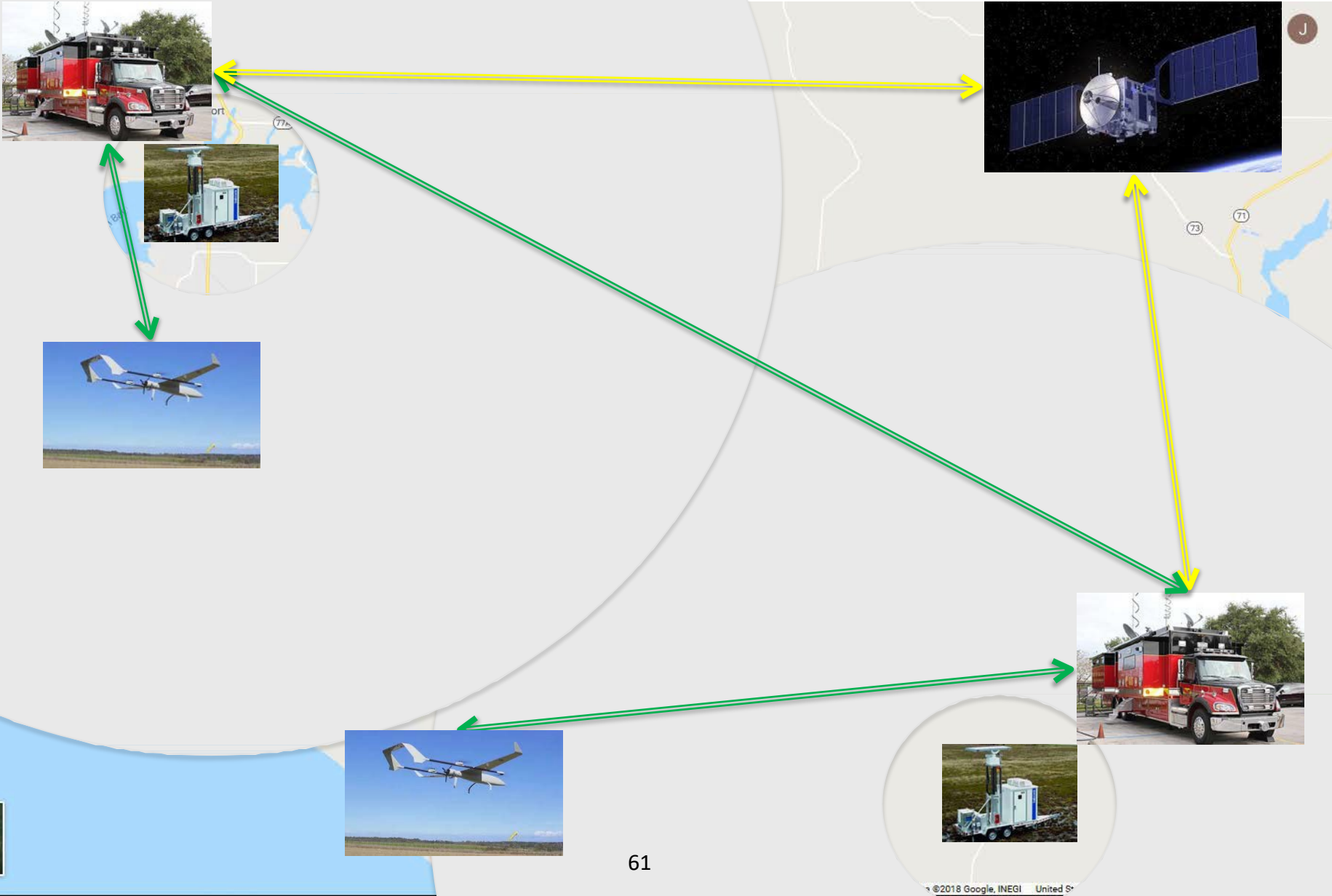
Insitu ScanEagle UAS Helps Fight Oregon Wildfires

Insitu's Rapid Response Team Aids Hurricane Harvey Disaster Relief Efforts



GULF COAST STATE COLLEGE

GULF REGIONAL TRAINING CENTER (G2US) EMERGENCY GEOSPATIAL RESPONSE TEAM (EGRT)



Unmanned Vehicle Systems Program

Preparing students in the repair, design, and the operation of sensor centric unmanned platforms.

Contact Information:

Glen McDonald

VP Strategic Projects & Economic
Development

gmcdonald@gulfcoast.edu

(850) 769-1551 ext. 3805

David Figueroa

Associate Director Resource Development
Institutional Effectiveness & Strategic
Planning

dfigueroa1@gulfcoast.edu

(850) 873-3510

Jose A. Lopez-Baquero, GISP, GEOINT

Assistant Professor

UVS Program Manager

jlopezbaq@gulfcoast.edu

(850) 769-1551 ext. 4012

C. Link to GCSC financial statements detailing its financial status.

Audit

Link to the website where the Gulf Coast State College most recent audit report can be located:

https://flauditor.gov/pages/pdf_files/2019-046.pdf

Link to the website where the Gulf Coast State College most recent financial audit report can be located:

https://flauditor.gov/pages/pdf_files/2018-142.pdf

**D. Bay and Gulf County - Board
of Commissioners Support Letter
and Gulf County
Emergency Management Support
Letter**



BOARD OF COUNTY COMMISSIONERS

840 West 11th Street
Panama City, Florida 32401
Telephone: (850) 248-8140
Fax: (850) 248-8153

October 1, 2019

BOARD OF COUNTY
COMMISSIONERS

www.baycountyfl.gov

340 WEST 11th STREET
PANAMA CITY, FL 32401

COMMISSIONERS

TOMMY HAMM
DISTRICT I

ROBERT CARROLL
DISTRICT II

WILLIAM T. DOZIER
DISTRICT III

LEITH BAKER
DISTRICT IV

PHILIP GRIFF GRIFITTS
DISTRICT V

ROBERT J. MAJALA JR.
COURTNEY MARGARET

Dear Triumph Board Members,

As chairman of the Bay County Board of County Commissioners, I am writing this letter in support of the Technology Center for Emergency Response and Communication application that is being submitted by Gulf Coast State College (GCSC).

After Hurricane Michael, Bay County faced unprecedented destruction. The type of equipment and support that is being proposed by GCSC would have made a tremendous difference in our ability to conduct search and rescue, damage assessments, and communicate with first responders immediately after the storm and in the weeks to come. Having the use of unmanned vehicles and trained staff to assist in these efforts would have saved time, resources and most importantly, increased the safety of first responders trying to conduct search and rescue and damage assessments in very dangerous environments.

We are also very supportive of the training that will be available through this proposal. The concept of providing the equipment and training to first responders in the eight counties of the Panhandle will be of great assistance to the counties and to first responders throughout the Panhandle. The resulting cadre of trained personnel that can be deployed in the event of a manmade or natural disaster will provide tremendous benefits and prevent possible loss of life.

In conclusion, we are extremely supportive of this proposal and the many benefits it would provide to the first responders in our community and the region. We appreciate the opportunity to provide our support to this worthwhile project.

Please contact me if you have any questions or need additional information.

Sincerely,

A handwritten signature in blue ink, appearing to read "Philip Griff", is written over a horizontal line.

Philip "Griff" Griffitts
Chairman
Bay County Board of County Commissioners

BOARD OF COUNTY COMMISSIONERS GULF COUNTY, FLORIDA

1000 CECIL G. COSTIN SR. BLVD., ROOM 302, PORT ST. JOE, FLORIDA 32456

PHONE (850)229-6106 * FAX (850) 564-7503

EMAIL: bocc@gulfcounty-fl.gov Website: www.gulfcounty-fl.gov Date
and Time of Meetings* Fourth Tuesday@ 9:00 A.M., E.T.

September 10, 2019

Dear Triumph Board Members,

As chairman of the Gulf County Board of County Commissioners, I am writing this letter in support of the *Technology Center for Emergency Response and Communication* application that is being submitted by Gulf Coast State College.

After Hurricane Michael, Gulf County faced unprecedented destruction. The type of equipment and support that is being proposed by GCSC would have made a tremendous difference in our ability to conduct search and rescue, damage assessments and communicate with first responders immediately after the storm and in the weeks to come. Having the use of unmanned vehicles and trained staff to assist in these efforts would have saved time, resources and most importantly, increased the safety of first responders trying to conduct search and rescue and damage assessments in very dangerous environments.

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Please contact me if you have any questions or need additional information.



Sandy Quinn, Chairman





GULF COUNTY EMERGENCY MANAGEMENT

1000 Cecil G. Costin, Sr. Blvd.
Port St. Joe, Florida 32456

Email: pmelson@gulfcountry-fl.gov
Web Site: www.gulfcoun ty-fl.gov

Voice: (850) 229-9110
Fax: (850) 229-9115

August 9, 2019

Dear Triumph Board Members,

I am writing this letter in support of the *Technology Center for Emergency Response and Communication* application that is being submitted by Gulf Coast State College. As the Emergency Management Director of Gulf County for the past 26 years, I know from firsthand experience, how essential having this type of equipment and support is to a community that is responding to a disaster.

The challenges that all emergency management directors impacted by Hurricane Michael faced immediately after the storm were unprecedented. The type of equipment and support that is being proposed by GCSC would have made a tremendous difference in our ability to conduct search and rescue, damage assessments and communicate with first responders immediately after the storm and in the weeks to come. Having the use of unmanned vehicles and trained staff to assist in these efforts would have saved time, resources and most importantly, increased the safety of first responders trying to conduct search and rescue and damage assessments in very dangerous environments.

We are also very supportive of the training that will be available through this proposal. The concept of providing the equipment and training to first responders in the eight counties of the Panhandle will be of great assistance to emergency managers and first responders throughout the Panhandle and should result in a cadre of trained personnel that can be deployed in the event of a manmade or natural disaster.

In conclusion, I am extremely supportive of this proposal and the many benefits it would provide to the first responders in our community and the region. As I told the team from Gulf Coast State College, the availability of this equipment and training would be a dream come true.

As always, if you have any questions or need additional information please call me at (850) 229-9110.

11 Nelson, Director
Gulf County Emergency Management

**F. 2018-2019 CAPE Industry
Certification Funding List,
Updated**

2018-2019CAPE Industry Certification Funding List, Updated

DOE Code	Certification/Credential Title	Issuing Organization/Provider	New to List	Primary Career Cluster ¹	Type (CAPE Industry Certification, CAPE Acceleration Industry Certification, CAPE Digital Tool Certificate)	Certification Version, if applicable	Differentiated Waiver of Certification Requirements ²	Weight
ABAYC003	Marine Electrical Certification	American Boat & Yacht Council		Transportation, Distribution & Logistics	CAPE Industry Certification			0.2
ACSMD002	Certified Personal Trainer	American College of Sports Medicine		Human Services	CAPE Industry Certification			0.1
ADESK002	Autodesk Certified User - AutoCAD	Autodesk		Architecture & Construction	CAPE Industry Certification	AutoCAD 2014 or later		0.2
ADESK008	Autodesk Certified User - Revit Architecture	Autodesk		Architecture & Construction	CAPE Industry Certification	Revit Architecture 2012 or later		0.2
ADESK011	Autodesk Certified User - Inventor	Autodesk		Engineering and Technology Education	CAPE Industry Certification	Inventor 2014 or later		0.2
ADESK021	Autodesk Certified Professional - AutoCAD	Autodesk		Architecture & Construction	CAPE Industry Certification	AutoCAD 2015 or later		0.2
ADESK023	Autodesk Certified Professional - AutoCAD Civil 3D	Autodesk		Architecture & Construction	CAPE Industry Certification	AutoCAD 2015 Civil 3D or later		0.2
ADESK024	Autodesk Certified Professional - Inventor	Autodesk		Engineering and Technology Education	CAPE Industry Certification	Inventor 2015 or later		0.2
ADESK025	Autodesk Certified Professional - Revit Architecture	Autodesk		Architecture & Construction	CAPE Industry Certification	Revit Architecture 2015 or later		0.2
ADESK029	Autodesk Certified Professional - 3ds Max	Autodesk		Architecture & Construction	CAPE Industry Certification	3ds Max 2015 or later		0.1
ADESK031	Autodesk Certified User - 3ds Max	Autodesk	Yes	Architecture & Construction	CAPE Industry Certification			0.1
ADOBE002	Adobe Certified Expert (ACE) - After Effects	Adobe Systems		Arts, A/V Technology & Communication	CAPE Industry Certification	After Effects CC 2015 or later		0.1
ADOBE003	Adobe Certified Expert (ACE) - Illustrator	Adobe Systems		Arts, A/V Technology & Communication	CAPE Industry Certification	Illustrator CC 2015 or later		0.1
ADOBE004	Adobe Certified Expert (ACE) - InDesign	Adobe Systems		Arts, A/V Technology & Communication	CAPE Industry Certification	In Design CC 2015 or later		0.1
ADOBE005	Adobe Certified Expert (ACE) - Photoshop	Adobe Systems		Arts, A/V Technology & Communication	CAPE Industry Certification	Photoshop CC 2015 or later		0.1
ADOBE007	Adobe Certified Expert (ACE) - Premiere Pro	Adobe Systems		Arts, A/V Technology & Communication	CAPE Industry Certification	Premiere Pro CC 2015 or later		0.1
ADOBE010	Adobe Certified Associate (ACA) - Dreamweaver	Adobe Systems		Arts, A/V Technology & Communication	CAPE Industry Certification	Dreamweaver CC 2015 or later		0.2
ADOBE011	Adobe Certified Associate (ACA) - Flash/Animate	Adobe Systems		Arts, A/V Technology & Communication	CAPE Industry Certification	Animate CC 2015 or later		0.2
ADOBE013	Adobe Certified Expert (ACE) - Acrobat	Adobe Systems		Arts, A/V Technology & Communication	CAPE Industry Certification	Acrobat X Pro or later		0.1
ADOBE018	Adobe Certified Associate (ACA) - Premiere Pro	Adobe Systems		Arts, A/V Technology & Communication	CAPE Industry Certification	Premiere Pro CC 2015 or later		0.1
ADOBE020	Adobe Certified Associate (ACA) - Illustrator	Adobe Systems		Arts, A/V Technology & Communication	CAPE Industry Certification	Illustrator CC 2015 or later		0.1
ADOBE021	Adobe Certified Associate (ACA) - InDesign	Adobe Systems		Arts, A/V Technology & Communication	CAPE Industry Certification	In Design CC 2015 or later		0.1
ADOBE022	Adobe Certified Associate (ACA) - Photoshop (Creative Cloud 2015 or later)	Adobe Systems		Arts, A/V Technology & Communication	CAPE Industry Certification	Photoshop CC 2015 or later		0.1
AHLAE010	Certified Front Desk Supervisor	American Hotel and Lodging Association Educational Institute		Hospitality & Tourism	CAPE Industry Certification			0.1
AIOPB001	Certified Bookkeeper	American Institute of Professional Bookkeepers		Business Management and Administration	CAPE Industry Certification			0.2
AMAMA001	Certified Medical Assistant (CMA)	American Association of Medical Assistants		Health Science	CAPE Industry Certification			0.2
AMDDA002	Certified Apprentice Drafter - Architectural	American Design Drafting Association		Architecture & Construction	CAPE Industry Certification			0.2
AMDDA003	Certified Drafter - Architectural	American Design Drafting Association		Architecture & Construction	CAPE Industry Certification			0.1
AMDDA004	Certified Drafter - Mechanical	American Design Drafting Association		Architecture & Construction	CAPE Industry Certification			0.1
AMDDA005	Certified Apprentice Drafter - Mechanical	American Design Drafting Association		Architecture & Construction	CAPE Industry Certification			0.1
AMEDT005	Registered Phlebotomy Technician (RPT)	American Medical Technologists (AMT)		Health Science	CAPE Industry Certification			0.2
AMSPT002	Certified Phlebotomy Technician	American Society of Phlebotomy Technicians		Health Science	CAPE Industry Certification			0.2
APPLE002	Apple Certified Technical Coordinator	Apple, Inc.		Information Technology	CAPE Industry Certification			0.2
APPLE018	Apple Certified Pro (ACP) - Logic Pro X	Apple, Inc.		Arts, A/V Technology & Communication	CAPE Industry Certification			0.1

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APPLE019	Apple Certified Support Professional	Apple, Inc.		Information Technology	CAPE Industry Certification			0.2
APPLE020	Apple Certified Pro (ACP) - Final Cut Pro X	Apple, Inc.		Arts, A/V Technology & Communication	CAPE Industry Certification			0.2
AVIDT001	Avid Media Composer Certified User	Avid		Arts, A/V Technology & Communication	CAPE Industry Certification			0.1
AWELD001	Certified Welder	American Welding Society		Manufacturing	CAPE Industry Certification			0.1
CARCH001	Chief Architect User Certification	Chief Architect, Inc.		Architecture & Construction	CAPE Industry Certification			0.1
CARCH002	Chief Architect Certified Apprentice	Chief Architect, Inc.		Architecture & Construction	CAPE Industry Certification			0.2
CERHB001	Biotechnician Assistant	Center for Excellence for Regenerative Health Biotechnology at University of Florida		Manufacturing	CAPE Industry Certification			0.2
CISCO003	Cisco Certified Entry Network Technician (CCENT)	Cisco Systems, Inc.		Information Technology	CAPE Industry Certification			0.1
CISCO004	Cisco Certified Network Associate (CCNA)	Cisco Systems, Inc.		Information Technology	CAPE Industry Certification			0.2
CISCO005	Cisco Certified Network Professional (CCNP)	Cisco Systems, Inc.		Information Technology	CAPE Industry Certification			0.2
CISCO011	Cisco Certified Network Associate Security (CCNA Security)	Cisco Systems, Inc.		Information Technology	CAPE Industry Certification			0.2
CISCO013	Cisco Certified Network Associate Wireless (CCNA Wireless)	Cisco Systems, Inc.		Information Technology	CAPE Industry Certification			0.1
CISCO017	Cisco Certified Network Professional Wireless (CCNP Wireless)	Cisco Systems, Inc.		Information Technology	CAPE Industry Certification			0.1
CISCO018	Cisco Certified Internetwork Expert Routing and Switching (CCIE Routing & Switching)	Cisco Systems, Inc.		Information Technology	CAPE Industry Certification			0.2
CNCISI001	Mastercam Certified Programmer Mill Level 1 (CPgM1)	CNC Software Inc.		Engineering and Technology Education	CAPE Industry Certification			0.1
CNCISI002	Mastercam Associate Certification - Mill Design and Toolpaths	CNC Software Inc.		Engineering and Technology Education	CAPE Industry Certification			0.1
COMPT001	CompTIA A+	Computing Technology Industry Association (CompTIA)		Information Technology	CAPE Industry Certification			0.2
COMPT002	CompTIA CDIA+	Computing Technology Industry Association (CompTIA)		Arts, A/V Technology & Communication	CAPE Industry Certification			0.1
COMPT005	CompTIA Linux+	Computing Technology Industry Association (CompTIA)		Information Technology	CAPE Industry Certification			0.2
COMPT006	CompTIA Network+	Computing Technology Industry Association (CompTIA)		Information Technology	CAPE Industry Certification			0.2
COMPT007	CompTIA Project+	Computing Technology Industry Association (CompTIA)		Information Technology	CAPE Industry Certification			0.2
COMPT008	CompTIA Security+	Computing Technology Industry Association (CompTIA)		Information Technology	CAPE Industry Certification			0.2
COMPT009	CompTIA Server+	Computing Technology Industry Association (CompTIA)		Information Technology	CAPE Industry Certification			0.2
COMPT016	CompTIA Cybersecurity Analyst (CySA+)	Computing Technology Industry Association (CompTIA)	Yes	Information Technology	CAPE Industry Certification			0.1
CPREC001	Child Development Associate (CDA)	Council for Professional Recognition		Education & Training	CAPE Industry Certification			0.2
DIGIT001	STARS GIS Technician	DigitalQuest, Inc.		Information Technology	CAPE Industry Certification			0.1
DIGIT002	SPACE Geospatial Certification	DigitalQuest, Inc.		Information Technology	CAPE Industry Certification			0.1
ESRIC001	ArcGIS Desktop Entry	ESRI		Information Technology	CAPE Industry Certification	ArcGIS 10.3 or later		0.2
ETAIN006	Avionics Electronics Technician	Electronics Technician Association International		Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
ETAIN008	Associate Certified Electronics Technician (CETa)	Electronics Technician Association International		Transportation, Distribution & Logistics	CAPE Industry Certification			0.2
FANUC001	FANUC Certified Robot Operator - 1 (FCR-01)	FANUC America Corporation	Yes	Engineering and Technology Education	CAPE Industry Certification			0.1
FDMQA002	Certified Nursing Assistant (CNA)	Florida Department of Health		Health Science	CAPE Industry Certification			0.1
FDMQA030	911 Public Safety Telecommunicator	Florida Department of Health		Law, Public Safety & Security	CAPE Industry Certification			0.2
FEDAA002	FAA Aviation Maintenance Technician - General	Federal Aviation Administration		Transportation, Distribution & Logistics	CAPE Industry Certification			0.1

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FEDAA007	FAA Pilot - Instrument	Federal Aviation Administration		Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
FEDAA011	FAA Private Pilot	Federal Aviation Administration		Transportation, Distribution & Logistics	CAPE Industry Certification			0.2
FEDAA013	FAA Ground School	Federal Aviation Administration		Transportation, Distribution & Logistics	CAPE Industry Certification			0.2
FEDAA015	FAA Ground Instructor - Basic	Federal Aviation Administration		Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
FLADA001	Florida Automobile Dealers Association (FADA) Certified Technician	Florida Automobile Dealers Association		Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
FLAQA001	Aquaculture Technician	Florida Aquaculture Association		Agriculture, Food and Natural Resources	CAPE Industry Certification			0.1
FLDEP003	Wastewater Treatment Plant Operator Level C	Florida Department of Environmental Protection		Agriculture, Food and Natural Resources	CAPE Industry Certification		Waiver of work experience requirement	0.1
FLDEP006	Water Treatment Plant Operator Level C	Florida Department of Environmental Protection		Agriculture, Food and Natural Resources	CAPE Industry Certification		Waiver of work experience requirement	0.1
FLENG001	Engineering Core certification	Florida Engineering Society		Engineering and Technology Education	CAPE Industry Certification			0.1
FLFBR001	Agritechnology Specialist Certification	Agricultural Education Services and Technology Inc.		Agriculture, Food and Natural Resources	CAPE Industry Certification			0.2
FLFBR002	Agricultural Biotechnology Specialist Certification	Agricultural Education Services and Technology Inc.		Agriculture, Food and Natural Resources	CAPE Industry Certification			0.1
FLFBR003	Agricultural Communications Specialist Certification	Agricultural Education Services and Technology Inc.		Agriculture, Food and Natural Resources	CAPE Industry Certification			0.1
FLFBR004	Agricultural Mechanics Specialist Certification	Agricultural Education Services and Technology Inc.		Agriculture, Food and Natural Resources	CAPE Industry Certification			0.1
FLFBR005	Animal Science Specialist Certification	Agricultural Education Services and Technology Inc.		Agriculture, Food and Natural Resources	CAPE Industry Certification			0.2
FLFBR006	Agricultural Unmanned Aircraft Systems Specialist Certification	Agricultural Education Services and Technology Inc.		Agriculture, Food and Natural Resources	CAPE Industry Certification			0.1
FLFBR007	Agriculture Associate Certification	Agricultural Education Services and Technology Inc.		Agriculture, Food and Natural Resources	CAPE Industry Certification			0.2
FLFBR008	Forestry Specialist Certification	Agricultural Education Services and Technology Inc.		Agriculture, Food and Natural Resources	CAPE Industry Certification			0.1
FLFBR009	Agriculture Systems Associate Certification	Agricultural Education Services and Technology Inc.	Yes	Agriculture, Food and Natural Resources	CAPE Industry Certification			0.1
FLFBR010	Natural Resources Specialist Certification	Agricultural Education Services and Technology Inc.	Yes	Agriculture, Food and Natural Resources	CAPE Industry Certification			0.1
FLSFM005	Fire Fighter I	Florida Department of Financial Services, State Fire Marshal, Bureau of Fire Standards & Training		Law, Public Safety & Security	CAPE Industry Certification			0.1
FLVMA002	Certified Veterinary Assistant (CVA)	Florida Veterinary Medical Association		Agriculture, Food and Natural Resources	CAPE Industry Certification			0.2
FMAIN001	Precision Sheetmetal Operator - Level I (PSMO)	Fabricators & Manufacturers Association, International (FMA)		Manufacturing	CAPE Industry Certification			0.2
FNGLA001	Certified Horticulture Professional	Florida Nursery Growers and Landscape Association		Agriculture, Food and Natural Resources	CAPE Industry Certification			0.2
GRBCI002	LEED Green Associate	Green Building Certification Institute		Architecture & Construction	CAPE Industry Certification			0.2
HBINS002	Pre-Apprenticeship Certificate Training (PACT), Building Construction Technology	Home Builders Institute		Architecture & Construction	CAPE Industry Certification			0.1
HVACE001	HVAC Excellence Employment Ready - Heat Pump	HVAC Excellence		Architecture & Construction	CAPE Industry Certification			0.2
HVACE002	HVAC Excellence EmploymentReady - Air Conditioning	HVAC Excellence		Architecture & Construction	CAPE Industry Certification			0.2
HVACE011	HVAC Excellence Employment Ready - Electrical	HVAC Excellence		Architecture & Construction	CAPE Industry Certification			0.2
IEMSR001	Emergency Medical Responder	International EMS Registry		Health Science	CAPE Industry Certification			0.1
IHKBZ001	CNC Production Specialist	IHK-Bildungszentrum		Manufacturing	CAPE Industry Certification			0.2
IHKBZ002	Electronics Technician for Industrial Engineering	IHK-Bildungszentrum		Manufacturing	CAPE Industry Certification			0.2
IHKBZ003	Industrial Mechanic	IHK-Bildungszentrum		Manufacturing	CAPE Industry Certification			0.1
IHKBZ004	Mechatronics Fitter	IHK-Bildungszentrum		Manufacturing	CAPE Industry Certification			0.2
IHKBZ005	Precision Machinist	IHK-Bildungszentrum		Manufacturing	CAPE Industry Certification			0.2

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INTUT001	Quickbooks Certified User	Intuit		Business Management and Administration	CAPE Industry Certification			0.2
ISCET002	Electronics System Associate (ESA)	International Society for Certified Electronics Technicians		Manufacturing	CAPE Industry Certification			0.2
MICRO017	Microsoft Office Specialist Master	Microsoft Corporation		Information Technology	CAPE Industry Certification	Office 2013 or later		0.2
MICRO052	Microsoft Certified Trainer (MCT)	Microsoft Corporation		Information Technology	CAPE Industry Certification			0.1
MICRO069	Microsoft Office Specialist (MOS) Bundle Certification (3 of 6)	Microsoft Corporation		Information Technology	CAPE Industry Certification	Office 2013 or later		0.2
MICRO070	Microsoft Technology Associate (MTA) - Database Administration Fundamentals	Microsoft Corporation		Information Technology	CAPE Industry Certification			0.2
MICRO074	Microsoft Technology Associate (MTA) - Software Development Fundamentals	Microsoft Corporation		Information Technology	CAPE Industry Certification			0.1
MICRO076	Microsoft Technology Associate (MTA) - Windows OS Fundamentals	Microsoft Corporation		Information Technology	CAPE Industry Certification			0.1
MICRO077	Microsoft Technology Associate (MTA) - Security Fundamentals	Microsoft Corporation		Information Technology	CAPE Industry Certification			0.1
MICRO078	Microsoft Technology Associate (MTA) - Networking Fundamentals	Microsoft Corporation		Information Technology	CAPE Industry Certification			0.1
MICRO080	Microsoft Technology Associate (MTA) - HTML5 Application Developer Fundamentals	Microsoft Corporation		Information Technology	CAPE Industry Certification			0.2
MICRO086	Microsoft Certified Solutions Associate (MCSA) - Windows Server 2012	Microsoft Corporation		Information Technology	CAPE Industry Certification			0.1
MICRO102	Microsoft Technology Associate (MTA) - Mobility and Devices Fundamentals	Microsoft Corporation		Information Technology	CAPE Industry Certification			0.2
MICRO103	Microsoft Technology Associate (MTA) - Introduction to Programming Using Block-Based Languages	Microsoft Corporation	Yes	Information Technology	CAPE Industry Certification			0.1
MICRO104	Microsoft Technology Associate (MTA) - Introduction to Programming Using JavaScript	Microsoft Corporation	Yes	Information Technology	CAPE Industry Certification			0.2
MICRO105	Microsoft Technology Associate (MTA) - Introduction to Programming Using HTML and CSS	Microsoft Corporation	Yes	Information Technology	CAPE Industry Certification			0.1
MICRO106	Microsoft Certified Solutions Associate (MCSA) - Windows Server 2016	Microsoft Corporation	Yes	Information Technology	CAPE Industry Certification			0.2
MSSCN002	MSSC Certified Logistics Technician (CLT)	Manufacturing Skills Standards Council (MSSC)		Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
NACFS001	Modeling & Simulation (M&S) Certification	National Center for Simulation		Information Technology	CAPE Industry Certification			0.2
NAHUC001	Certified Health Unit Coordinator (CHUC)	National Association of Health Unit Coordinators, Inc.		Health Science	CAPE Industry Certification			0.1
NASME001	NASM Certified Personal Trainer (CPT)	National Academy of Sports Medicine		Human Services	CAPE Industry Certification			0.1
NATEX001	Air Conditioning Service Technician	North American Technician Excellence		Architecture & Construction	CAPE Industry Certification			0.2
NATEX002	Air Conditioning Installation Specialization	North American Technician Excellence		Architecture & Construction	CAPE Industry Certification			0.2
NATEX003	Air to Air Heat Pump Installation Technician	North American Technician Excellence		Architecture & Construction	CAPE Industry Certification			0.2
NATHA002	Certified EKG Technician (CET)	National Healthcareer Association		Health Science	CAPE Industry Certification			0.1
NATHA003	Certified Medical Administrative Assistant (CMAA)	National Healthcareer Association		Health Science	CAPE Industry Certification			0.1
NATHA006	Certified Patient Care Technician (CPCT)	National Healthcareer Association		Health Science	CAPE Industry Certification			0.1
NATHA007	Certified Phlebotomy Technician (CPT)	National Healthcareer Association		Health Science	CAPE Industry Certification			0.2
NATHA010	Certified Pharmacy Technician (CPhT)	National Healthcareer Association		Health Science	CAPE Industry Certification			0.2
NATHA011	Certified Electronic Health Record Specialist (CEHRS)	National Healthcareer Association		Health Science	CAPE Industry Certification			0.1
NCATT001	Aircraft Electronics Technician (AET)	National Center for Aerospace and Transportation Technologies (NCATT)		Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
NCATT003	Aerospace / Aircraft Assembly (AAA)	National Center for Aerospace and Transportation Technologies (NCATT)		Transportation, Distribution & Logistics	CAPE Industry Certification			0.2
NCCER005	NCCER Carpentry - Level 1 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER008	NCCER Construction Technology (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.2

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NCCER010	NCCER Electrical - Level 1 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER013	NCCER Electronic Systems Technician - Level 1 (Secondary)	National Center for Construction Education & Research (NCCER)		Manufacturing	CAPE Industry Certification			0.1
NCCER018	NCCER HVAC - Level 1 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.2
NCCER025	NCCER Masonry - Level 1 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER026	NCCER Plumbing - Level 1 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER032	NCCER Carpentry - Level 2 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER033	NCCER Carpentry - Level 3 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER034	NCCER Carpentry - Level 4 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER036	NCCER Concrete Finishing - Level 1 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER038	NCCER Electrical - Level 2 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER039	NCCER Electrical - Level 3 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER040	NCCER Electrical - Level 4 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER041	NCCER Electronic Systems Technician - Level 2 (Secondary)	National Center for Construction Education & Research (NCCER)		Manufacturing	CAPE Industry Certification			0.1
NCCER044	NCCER Masonry - Level 2 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER045	NCCER Masonry - Level 3 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER046	NCCER Painting - Level 1 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER047	NCCER Painting - Level 2 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER048	NCCER Painting - Level 3 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER061	NCCER Welding - Level 1 (Secondary)	National Center for Construction Education & Research (NCCER)		Manufacturing	CAPE Industry Certification			0.1
NCCER062	NCCER Welding - Level 2 (Secondary)	National Center for Construction Education & Research (NCCER)		Manufacturing	CAPE Industry Certification			0.1
NCCER069	NCCER Plumbing - Level 2 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER070	NCCER Plumbing - Level 3 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER071	NCCER Plumbing - Level 4 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER081	NCCER HVAC - Level 2 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER082	NCCER HVAC - Level 3 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER083	NCCER HVAC - Level 4 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.1
NCCER084	NCCER Industrial Maintenance Mechanic - Level 1 (Secondary)	National Center for Construction Education & Research (NCCER)		Manufacturing	CAPE Industry Certification			0.1
NCCER085	NCCER Industrial Maintenance Mechanic - Level 2 (Secondary)	National Center for Construction Education & Research (NCCER)		Manufacturing	CAPE Industry Certification			0.1
NCCER086	NCCER Industrial Maintenance Mechanic - Level 3 (Secondary)	National Center for Construction Education & Research (NCCER)		Manufacturing	CAPE Industry Certification			0.1
NCCER098	NCCER Manufactured Construction Technology - Level 1 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.2
NCCER099	NCCER Manufactured Construction Technology - Level 2 (Secondary)	National Center for Construction Education & Research (NCCER)		Architecture & Construction	CAPE Industry Certification			0.2
NCSBN002	National Licensed Practical Nurse (NCLEX-PN)	National Council of State Boards of Nursing		Health Science	CAPE Industry Certification			0.2
NIASE002	ASE Master Automobile Technician	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.1
NIASE003	ASE Master Medium/Heavy Truck Technician	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.1

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NIASE005	ASE Automobile/Light Truck Technician: Automatic Transmission/Transaxle (A2)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.2
NIASE007	ASE Automobile/Light Truck Technician: Brakes (A5)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.2
NIASE008	ASE Automobile/Light Truck Technician: Electrical/Electronic Systems (A6)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.2
NIASE009	ASE Automobile/Light Truck Technician: Engine Performance (A8)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.2
NIASE010	ASE Automobile/Light Truck Technician: Engine Repair (A1)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.2
NIASE011	ASE Automobile/Light Truck Technician: Heating and Air Conditioning (A7)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.2
NIASE012	ASE Automobile/Light Truck Technician: Manual Drive Train and Axles (A3)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.2
NIASE013	ASE Automobile Service Consultant (C1)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.1
NIASE014	ASE Automobile/Light Truck Technician: Suspension and Steering (A4)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.2
NIASE016	ASE Medium/Heavy Truck Technician: Brakes (T4)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.1
NIASE017	ASE Collision Repair and Refinishing Technician: Mechanical and Electrical Components (B5)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.1
NIASE018	ASE Collision Repair and Refinishing Technician: Non-structural Analysis and Damage Repair (B3)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.1
NIASE019	ASE Damage Analysis and Estimating Certification (B6)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.1
NIASE020	ASE Medium/Heavy Truck Technician: Diesel Engines (T2)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.1
NIASE021	ASE Medium/Heavy Truck Technician: Drive Train (T3)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.1
NIASE023	ASE Medium/Heavy Truck Technician: Electrical/Electronic Systems (T6)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.1
NIASE025	ASE Medium/Heavy Truck Technician: Gasoline Engines (T1)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.1
NIASE026	ASE Medium/Heavy Truck Technician: Heating, Ventilation, and A/C (HVAC) (T7)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.1
NIASE029	ASE Collision Repair and Refinishing Technician: Painting and Refinishing (B2)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.1
NIASE031	ASE Medium/Heavy Truck Technician: Preventive Maintenance Inspection (PMI) (T8)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.1
NIASE032	ASE Collision Repair and Refinishing Technician: Structural Analysis and Damage Repair (B4)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.1
NIASE033	ASE Medium/Heavy Truck Technician: Suspension and Steering (T5)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification		Waiver of work experience requirement	0.1
NIASE076	ASE Auto Maintenance and Light Repair (G1)	National Institute for Automotive Service Excellence		Transportation, Distribution & Logistics	CAPE Industry Certification			0.2
NIASE077	ASE Entry-level - Auto: Automatic Transmission/Transaxle (AT)	National Institute for Automotive Service Excellence	Yes	Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
NIASE078	ASE Entry-level - Auto: Automobile Service Technology (AS)	National Institute for Automotive Service Excellence	Yes	Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
NIASE079	ASE Entry-level - Auto: Brakes (BR)	National Institute for Automotive Service Excellence	Yes	Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
NIASE080	ASE Entry-level - Auto: Electrical/Electronic Systems (EE)	National Institute for Automotive Service Excellence	Yes	Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
NIASE081	ASE Entry-level - Auto: Engine Performance (EP)	National Institute for Automotive Service Excellence	Yes	Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
NIASE082	ASE Entry-level - Auto: Engine Repair (ER)	National Institute for Automotive Service Excellence	Yes	Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
NIASE083	ASE Entry-level - Auto: Heating and Air Conditioning (AC)	National Institute for Automotive Service Excellence	Yes	Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
NIASE084	ASE Entry-level - Auto: Manual Drive Train and Axles (MD)	National Institute for Automotive Service Excellence	Yes	Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
NIASE085	ASE Entry-level - Auto: Suspension and Steering (SS)	National Institute for Automotive Service Excellence	Yes	Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
NIASE086	ASE Entry-level - Collision: Mechanical and Electrical (ME)	National Institute for Automotive Service Excellence	Yes	Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
NIASE087	ASE Entry-level - Collision: Non-structural Analysis and Damage Repair (NS)	National Institute for Automotive Service Excellence	Yes	Transportation, Distribution & Logistics	CAPE Industry Certification			0.1

2018-2019CAPEIndustryCertificationFundingList, Updated

DOE Code	Certification/Credential Title	Issuing Organization/Provider	New to List	Primary Career Cluster ¹	Type (CAPE Industry Certification, CAPE Acceleration Industry Certification, CAPE Digital Tool Certificate)	Certification Version, if applicable	Differentiated Waiver of Certification Requirements ²	Weight
NIASE088	ASE Entry-level - Collision: Painting and Refinishing (PR)	National Institute for Automotive Service Excellence	Yes	Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
NIASE089	ASE Entry-level - Collision: Structural Analysis and Damage Repair (SR)	National Institute for Automotive Service Excellence	Yes	Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
NIASE090	ASE Entry-level - Truck: Brakes (TB)	National Institute for Automotive Service Excellence	Yes	Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
NIASE091	ASE Entry-level - Truck: Diesel Engines (DE)	National Institute for Automotive Service Excellence	Yes	Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
NIASE092	ASE Entry-level - Truck: Electrical/Electronic Systems (TE)	National Institute for Automotive Service Excellence	Yes	Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
NIASE093	ASE Entry-level - Truck: Steering & Suspension (TS)	National Institute for Automotive Service Excellence	Yes	Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
NIFMS001	NIMS Machining Level I - CNC Milling: Programming Setup & Operations	National Institute for Metalworking Skills (NIMS)		Manufacturing	CAPE Industry Certification			0.2
NIFMS002	NIMS Machining Level I - CNC Turning: Programming Setup & Operations	National Institute for Metalworking Skills (NIMS)		Manufacturing	CAPE Industry Certification			0.2
NIFMS007	NIMS Machining Level II - Manual Milling Skills II	National Institute for Metalworking Skills (NIMS)		Manufacturing	CAPE Industry Certification			0.2
NIFMS008	NIMS Machining Level I - Turning Operations: Turning Between Centers	National Institute for Metalworking Skills (NIMS)		Manufacturing	CAPE Industry Certification			0.2
NIFMS010	NIMS Machining Level I - Turning Operations: Turning Chucking Skills	National Institute for Metalworking Skills (NIMS)		Manufacturing	CAPE Industry Certification			0.2
NIFMS012	NIMS Machining Level II - Grinding Skills II	National Institute for Metalworking Skills (NIMS)		Manufacturing	CAPE Industry Certification			0.2
NIFMS013	NIMS Machining Level I - Drill Press Skills I	National Institute for Metalworking Skills (NIMS)		Manufacturing	CAPE Industry Certification			0.2
NIFMS014	NIMS Machining Level I - CNC Milling: Operations	National Institute for Metalworking Skills (NIMS)		Manufacturing	CAPE Industry Certification			0.1
NIFMS015	NIMS Machining Level I - CNC Turning: Operations	National Institute for Metalworking Skills (NIMS)		Manufacturing	CAPE Industry Certification			0.1
NIFMS016	NIMS Machining Level I - Grinding Skills I	National Institute for Metalworking Skills (NIMS)		Manufacturing	CAPE Industry Certification			0.1
NIFMS017	NIMS Machining Level I - Manual Milling Skills I	National Institute for Metalworking Skills (NIMS)		Manufacturing	CAPE Industry Certification			0.1
NIFMS018	NIMS Machining Level II - Drill Press Skills II	National Institute for Metalworking Skills (NIMS)		Manufacturing	CAPE Industry Certification			0.1
NIFMS019	NIMS Machining Level II - CNC Milling Skills II	National Institute for Metalworking Skills (NIMS)		Manufacturing	CAPE Industry Certification			0.1
NIFMS020	NIMS Machining Level II - CNC Turning Skills II	National Institute for Metalworking Skills (NIMS)		Manufacturing	CAPE Industry Certification			0.1
NINSC001	Certified LabVIEW Associate Developer (CLAD)	National Instruments Corporation		Engineering and Technology Education	CAPE Industry Certification			0.1
NRAEF001	Foodservice Management Professional (FMP)	National Restaurant Association Educational Foundation		Hospitality & Tourism	CAPE Industry Certification			0.2
NRAEF002	National ProStart Certificate of Achievement	National Restaurant Association Educational Foundation		Hospitality & Tourism	CAPE Industry Certification			0.2
NRAEF003	Certified Food Protection Manager (ServSafe®)	National Restaurant Association Educational Foundation		Hospitality & Tourism	CAPE Industry Certification			0.2
NREMT001	Emergency Medical Technician (EMT)	National Registry of Emergency Medical Technicians		Health Science	CAPE Industry Certification			0.2
NREMT003	Emergency Medical Responder (EMR)	National Registry of Emergency Medical Technicians		Health Science	CAPE Industry Certification			0.1
NRFSP001	Certified Food Safety Manager	National Registry of Food Safety Professionals		Hospitality & Tourism	CAPE Industry Certification			0.2
ORACL001	Oracle Certified Associate (OCA): Database	Oracle Corporation		Information Technology	CAPE Industry Certification			0.2
ORACL004	Oracle Certified Associate (OCA): Java Programmer	Oracle Corporation		Information Technology	CAPE Industry Certification			0.2
ORACL005	Oracle Certified Professional (OCP): Java Programmer	Oracle Corporation		Information Technology	CAPE Industry Certification			0.1
PROSO003	Certified Internet Web (CIW) E-Commerce Specialist	Certification Partners		Information Technology	CAPE Industry Certification			0.2
PROSO006	Certified Internet Web (CIW) Database Design Specialist	Certification Partners		Information Technology	CAPE Industry Certification			0.2
PROSO016	Certified Internet Web (CIW) Internet Business Associate	Certification Partners		Information Technology	CAPE Industry Certification			0.1
PROSO017	Certified Internet Web (CIW) JavaScript Specialist	Certification Partners		Information Technology	CAPE Industry Certification	Version 2.0 or later		0.2

2018-2019CAPE Industry Certification Funding List, Updated

DOE Code	Certification/Credential Title	Issuing Organization/Provider	New to List	Primary Career Cluster ¹	Type (CAPE Industry Certification, CAPE Acceleration Industry Certification, CAPE Digital Tool Certificate)	Certification Version, if applicable	Differentiated Waiver of Certification Requirements ²	Weight
PROSO018	Certified Internet Web (CIW) Network Technology Associate	Certification Partners		Information Technology	CAPE Industry Certification			0.1
PROSO020	Certified Internet Web (CIW) Site Development Associate	Certification Partners		Information Technology	CAPE Industry Certification			0.2
PROSO021	Certified Internet Web (CIW) Web Design Professional	Certification Partners		Information Technology	CAPE Industry Certification			0.1
PROSO022	Certified Internet Web (CIW) Web Design Specialist	Certification Partners		Information Technology	CAPE Industry Certification			0.2
PROSO023	Certified Internet Web (CIW) Web Development Professional	Certification Partners		Information Technology	CAPE Industry Certification			0.1
PROSO024	Certified Internet Web (CIW) Web Foundations Associate	Certification Partners		Information Technology	CAPE Industry Certification			0.1
PROSO025	Certified Internet Web (CIW) Web Security Associate	Certification Partners		Information Technology	CAPE Industry Certification			0.1
PROSO027	Certified Internet Web (CIW) Advanced HTML5 & CSS3 Specialist	Certification Partners		Information Technology	CAPE Industry Certification			0.2
PRSVA001	Graduate - Certified Appliance Professional (GCAP)	Professional Service Association		Manufacturing	CAPE Industry Certification			0.1
PTCBD001	Pharmacy Technician	Pharmacy Technician Certification Board		Health Science	CAPE Industry Certification			0.2
RECFN001	RECF Pre-Engineering Certification	Robotics Education and Competition Foundation		Engineering and Technology Education	CAPE Industry Certification			0.1
RECFN002	RECF Robotics Certification	Robotics Education and Competition Foundation		Engineering and Technology Education	CAPE Industry Certification			0.1
SOCTE004	Broadband Premises Installer (BPI)	Society of Cable Telecommunications Engineers		Arts, A/V Technology & Communication	CAPE Industry Certification			0.1
SOLID003	Certified Solidworks Associate-Academic (CSWA-Academic)	Dassault Systems Solidworks Corporation		Engineering and Technology Education	CAPE Industry Certification			0.2
SPACE001	Aerospace Technician	SpaceTec		Engineering and Technology Education	CAPE Industry Certification			0.1
TAFLP001	Accredited Legal Professional (ALP)	NALS...the Association for Legal Professionals		Business Management and Administration	CAPE Industry Certification			0.2
TAFLP002	Professional Legal Secretary (PLS)	NALS...the Association for Legal Professionals		Business Management and Administration	CAPE Industry Certification			0.2
TAFOM001	Certified in Production and Inventory Management (CPIM)	American Production and Inventory Control Society (APICS)		Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
TBOOM001	Toon Boom Certified Associate (Harmony Premium)	Toon Boom Animation		Arts, A/V Technology & Communication	CAPE Industry Certification	Harmony Premium 12.2 or later		0.1
TBOOM003	Toon Boom Certified Associate (Storyboard Pro)	Toon Boom Animation		Arts, A/V Technology & Communication	CAPE Industry Certification	Storyboard Pro 4.2 or later		0.1
TBOOM004	Toon Boom Certified Associate (Harmony Advanced)	Toon Boom Animation	Yes	Arts, A/V Technology & Communication	CAPE Industry Certification			0.1
USINS001	Small UAS Safety Certification	Unmanned Safety Institute		Transportation, Distribution & Logistics	CAPE Industry Certification			0.2
USINS002	Visual Line of Sight System Operator (VSO)	Unmanned Safety Institute		Transportation, Distribution & Logistics	CAPE Industry Certification			0.1
FEDAA004	FAA Aviation Mechanic Technician - Airframe	Federal Aviation Administration		Transportation, Distribution & Logistics	CAPE Acceleration Industry Certification			1.0
FEDAA010	FAA Aviation Maintenance Technician - Powerplant	Federal Aviation Administration		Transportation, Distribution & Logistics	CAPE Acceleration Industry Certification			0.5
MSSCN001	MSSC Certified Production Technician (CPT)	Manufacturing Skills Standards Council (MSSC)		Manufacturing	CAPE Acceleration Industry Certification			0.5
CERTI803	IC3 - Computing Fundamentals	Certiport, A Pearson VUE Business		N/A	CAPE Digital Tool Certificate	IC3 Global Standard 4 or later		0.025
CERTI804	IC3 - Key Applications	Certiport, A Pearson VUE Business		N/A	CAPE Digital Tool Certificate	IC3 Global Standard 4 or later		0.025
CERTI805	IC3 - Living Online	Certiport, A Pearson VUE Business		N/A	CAPE Digital Tool Certificate	IC3 Global Standard 4 or later		0.025
DIGIT802	Rapid Prototyping & 3D Design Beginner	DigitalQuest, Inc.	Yes	N/A	CAPE Digital Tool Certificate			0.025
FABLE801	Animation-ish	FableVision Learning	Yes	N/A	CAPE Digital Tool Certificate			0.025
PROSO801	ICT – Database Essentials	Certification Partners		N/A	CAPE Digital Tool Certificate			0.025
PROSO802	ICT – Gaming Essentials	Certification Partners		N/A	CAPE Digital Tool Certificate			0.025
PROSO803	ICT – Multimedia Essentials	Certification Partners		N/A	CAPE Digital Tool Certificate			0.025
PROSO804	ICT – Programming & Logic Essentials	Certification Partners		N/A	CAPE Digital Tool Certificate			0.025
PROSO805	ICT – Web Design Essentials	Certification Partners		N/A	CAPE Digital Tool Certificate			0.025
PROSO806	ICT - Communications Essentials	Certification Partners	Yes	N/A	CAPE Digital Tool Certificate			0.025
PROSO807	ICT - Computing Essentials	Certification Partners	Yes	N/A	CAPE Digital Tool Certificate			0.025
PROSO808	ICT - Cybersecurity Essentials	Certification Partners	Yes	N/A	CAPE Digital Tool Certificate			0.025

2018-2019CAPEIndustryCertificationFundingList, Updated

DOE Code	Certification/Credential Title	Issuing Organization/Provider	New to List	Primary Career Cluster ¹	Type (CAPE Industry Certification, CAPE Acceleration Industry Certification, CAPE Digital Tool Certificate)	Certification Version, if applicable	Differentiated Waiver of Certification Requirements ²	Weight
PROSO809	ICT - Spreadsheet Essentials	Certification Partners	Yes	N/A	CAPE Digital Tool Certificate			0.025
PROSO810	ICT - Word Processing Essentials	Certification Partners	Yes	N/A	CAPE Digital Tool Certificate			0.025

¹ Based on the skills needed to earn the certification and the area of CTE programs whose instruction best prepares for the certification. For certifications that align with more than one cluster, the cluster with programs most closely linked to the certification requirements was chosen.

² Section 1008.44(3), Florida Statutes gives the State Board of Education authority to differentiate age, work experience, and other requirements.

G. GCSC policies (2.010 and 3.001)



MANUAL OF POLICY

TITLE	Authorization	POLICY 2.010
LEGAL AUTHORITY	SBEAR 6A-14.024, 6A-14.060, 1001.63 F.S.	PAGE 1 of 1

Effective July 1, 1968, the Gulf Coast State College Advisory Committee became the District Board of Trustees of Gulf Coast State College. The college is established as a part of The Florida College System serving Bay, Gulf, and Franklin counties. As a public state college, it is subject to the control of the Gulf Coast State College District Board of Trustees and is under the regulations of the Florida Department of Education, Division of Florida Colleges, as well as the rules of the State Board of Education.

The District Board of Trustees of Gulf Coast State College is the official corporate name. The board is a body corporate.

The District Board of Trustees, in accordance with the references listed above, has been given broad responsibilities of supervision and policy making in relation to personnel, curricula, finance, and the general operation of the college. The management responsibilities reside with the President of the College.

Date Adopted/Amended: 7-1-76, 2-16-89, 9-9-99, 5-8-03



MANUAL OF POLICY

TITLE	Administrative Organizational Structure	POLICY 3.001
LEGAL AUTHORITY	1001.61, 1001.64, 1001.65 F.S.	PAGE 1 of 1

The President of the College is the chief executive officer of the college. All components of the college and all aspects of its operation are answerable to the District Board of Trustees through the president. The president shall carry out duties and responsibilities as assigned by the District Board of Trustees, by law, and by State Board of Education rules. The president is assisted by the administrative staff, faculty, and career service personnel. The college is organized internally through two closely related patterns: (1) individual positions of responsibility, and (2) action teams, task forces, standing committees, and Executive Council.

In addition to the specific areas of responsibility assigned to individual members of the staff and faculty, other duties may be assigned at the discretion of the president and/or administrative officers of the college.

Date Adopted/Amended: 2-4-71, 7-1-76, 2-16-89, 11-13-08, 1-15-15



*Disaster Relief Communications
5G/Broadband Airborne Platform
with Drone Package/Mobile Station*



NEXT GENERATION Disaster Relief Aerial Platforms



The **Dyneema** outer envelope fabric is highly puncture resistant (10x stronger than steel)

Dyneema fibers are also virtually transparent to radar / ideal for military surveillance

Highly resistant to water, weather and UV rays and is light enough to float

Lands/takes off similar to a helicopter

Provided with state-of-the-art airship avionics

Utilizes Proprietary **Reverse – Ballonet Technology**

Lands in water

DATT Technology (Detachable Airship from a Tether)

Long flight durations

Cargo capacity-1000 lbs.

Rise and land vertically

Great low speed maneuverability / ground handling

Loses less helium / more autonomy

Minimize solar loading and diurnal temperature changes

Certified and regulated by FAA and local regulatory guidelines

Launch & Recover Drones-5G/Broadband package

Long Shot Software & Unmanned avoidance system

Tether Automated Winch System (**TAWS**)

Sentinel communication link



Raytheon IR Camera Mounted



SA70-12-Specifications



Specifications:

Model:	SA-70
Serial Number:	SA-70-12
Diameter:	70 Feet
Engines:	4- Rotax 912is; option for Hybrid
Propellers:	4- AirMaster reversable/carbon fiber
Altitude:	0 to 10,000 feet
Speed:	54 MPH
Cruising speed:	20-35 MPH
Lifting Gas:	Helium
Duration of Flight:	8 to 24 hours/Tethered long duration
Flight Operations:	Manned or unmanned configuration
Flight control:	Vectored Thrust
Hull:	Dyneema- advanced anti-bacteria
Inner envelope:	Capran
Payload:	1000 lbs (additional)
Camera:	Optional Raytheon or L3 HD/IR
Drone Package:	2 Drones

Exhibit A**Gulf Regional Training Center**

Budget

Estimated construction start date: N/A

Estimated education component start date: August 2020

	Equipment	Salaries & Benefits	Materials & Supplies	Contractual, & GCSC Match	Total
Project Total					
2020-2021	7,215,765.00	201,400.00	2,500.00	140,000.00	7,559,665.00
2021-2022	150,000.00	201,400.00	15,250.00	140,000.00	506,650.00
2022-2023	125,000.00	212,920.00	15,250.00	160,000.00	513,170.00
2023-2024	100,000.00	212,920.00	15,250.00	160,000.00	488,170.00
2024-2025	75,000.00	224,440.00	15,250.00	160,000.00	474,690.00
2025-2026	50,000.00	224,440.00	15,250.00	140,000.00	429,690.00
	-	-	-	-	-
	-	-	-	-	-
Project Total	7,715,765.00	1,277,520.00	78,750.00	900,000.00	9,972,035.00
Triumph					
2020-2021	4,668,000.00	96,000.00	2,500.00	-	4,766,500.00
2021-2022	-	96,000.00	15,250.00	-	111,250.00
2022-2023	-	48,000.00	15,250.00	20,000.00	83,250.00
2023-2024	-	48,000.00	15,250.00	20,000.00	83,250.00
2024-2025	-	-	15,250.00	20,000.00	35,250.00
2025-2026	-	-	15,250.00	-	15,250.00
					-
					-
Triumph Total	4,668,000.00	288,000.00	78,750.00	60,000.00	5,094,750.00
Grantee					
2020-2021	-	105,400.00		140,000.00	245,400.00
2021-2022	-	105,400.00		140,000.00	245,400.00
2022-2023	-	164,920.00		140,000.00	304,920.00
2023-2024	-	164,920.00		140,000.00	304,920.00
2024-2025	-	224,440.00		140,000.00	364,440.00
2025-2026	-	224,440.00		140,000.00	364,440.00
					-
					-
Grantee Total	-	989,520.00	-	840,000.00	1,829,520.00
GCSC UVS Program Match					
2020-2021	172,765.00				172,765.00
2021-2022	150,000.00				150,000.00
2022-2023	125,000.00				125,000.00
2023-2024	100,000.00				100,000.00
2024-2025	75,000.00				75,000.00
2025-2026	50,000.00				50,000.00
					-
					-
Match Source 1 Total	672,765.00	-	-	-	672,765.00

SKYBORNE Technology

2020-2021	2,375,000.00				2,375,000.00
2021-2022					-
2022-2023					-
2023-2024					-
2024-2025					-
2025-2026					-
					-
Match Source 2 Total	2,375,000.00	-	-	-	2,375,000.00