

## Comprehensive Program Review Report

**Institution:** Middle Georgia State University

**Academic Program Name:** Aircraft Structural Technology Associates Degree

**CIP Code:** 47.0607

**College or School:** School of Aviation

**Department:** Aviation Maintenance and Structural Technology

**Date of Last Internal Review:** N/A

**Outcome of Previous Program Review (brief narrative statement):** N / A

**Current Date:** 4/7/2020

**Provost Response:** *Provide a summary related to the program productivity, viability, and quality. If this is the initial review of the program address how the program is/is not meeting the enrollment and credit hour projects contained in the original program proposal. Include a statement of plans for action based on the overall categorical summation contained in the next section.*

The AST associate program within the ASMT department is a steady program. Enrollment started to see a decline in 2016 and 2017, but the need for structural workers is on the rise again; therefore enrollment is back up for the AST associate program. The graduation rate has declined over the last five years, but the associate's degree does not require any additional resources from the AMST department, nor is it a burden to the department. The 22 hours of core are taught by the university faculty from other departments. Employers such as WRALC, Gulfstream Aerospace, and NAVAIR, are actively recruiting our graduates. Federal "Pathways Internships" for AST are increasing. This semester, 13 resumes were submitted for this program to WRALC.

The AST associate program is already in the process of expanding their program to areas outside of Dodge County. They are also working to build their schedule to accommodate dual enrollment to help their program grow. Dual enrollment students that begin the AST associate program at the beginning of their junior year, may complete the program by the end of their senior year.

The AMST department will continue to extend its connections to employers and other institutions. The AST associate degree seems to fit a growing trend in higher education, which is continuing education over a career. The AST certificate graduates are fully marketable to industry. Therefore, many of the AST students choose to pursue the certificate first, and enter the industry. Later, as time allows, and their career path dictates, these graduates can pursue the AAS degree, fully online.

### Categorical Summation

Check any of the following to categorically describe action(s) the institution will take concerning this program.

Program MEETS Institution's Criteria

Program is critical to the institutional mission and will be retained.

Program is critical to the institutional mission and is growing or a high demand field and thus will be enhanced.

Program PARTIALLY MEETS Institution's Criteria and will be re-evaluated in \_\_\_\_\_.

Program DOES NOT MEET Institution's Criteria

Program will be placed on a monitoring status.

Program will undergo substantive curricular revisions.

Program will be deactivated.

Program will be voluntarily terminated.

Other (identify/add text): This program does not require any additional resources and is simply an opportunity for graduates of the AST certificate to earn an AAS if they desire. This program will be retained.

Provost or VPAA Signature: Dr. Michael Gibbons on behalf of the Provost, Dr. Debra Matthews

Date: 4/7/2020



## Comprehensive Program Review Report

**Academic Program Name: Aircraft Structural Technology Associates Degree**

**College or School: Aviation**

**Department: Aviation Maintenance and Structural Technology**

**Date of Last Internal Review: Summer 2019**

**Outcome of Previous Program Review (brief narrative statement, if applicable):**

It was determined that a better partnership with not only the local high school, but also other career academy options needed to be explored and established where possible.

**Current Date: 4/1/2020**

**Executive Summary:** *Provide a summary related to the program productivity, viability, and quality. If this is the initial review of the program address how the program is/is not meeting the enrollment and credit hour projects contained in the original program proposal. Include a statement of plans for action based on the overall categorical summation contained in the next section.*

The role of the Aircraft Structural Technology (AST) program is to prepare the student to enter the aviation industry with the skill set necessary to be a competent entry-level structural mechanic. In addition to this training, the associate's degree graduate has completed 22 hours of college core: English, math, history, etc.

Aviation Structural Technology complements the school of aviation, and helps provide industry with the structural mechanics needed to meet the looming shortages in the industry. As a part of the School of Aviation, it supports the critical workforce development role that Middle Georgia State University plays in Georgia. The AST program is a valuable part of the whole.

While the enrollment numbers for the AAS AST program are small,

- The associate's degree does not require additional resources from the AMST department, nor is it a burden to the department. The 22 hours of core are taught by University faculty from other departments.
- The AST AAS degree seems to fit a growing trend in higher education, which is continuing education over a career. The AST certificate graduates are fully marketable to industry. Therefore, many of our students choose to pursue the certificate first, and enter the industry. Later, as time allows, and their career path dictates, these graduates can pursue the AAS degree, fully online.
- Associates of Aircraft Maintenance Technology are eligible to receive credit toward the Bachelor of Applied Science in Technical Management, with a concentration in Aviation

Management. This degree is offered fully online, and allows one to further advance their career.

In closing, the AAS option is a valuable addition to the AST technical training. It benefits MGA's certificate graduates, by offering them educational opportunities throughout their careers. And it benefits the institution by attracting graduates back to MGA for continuing education.

#### Plans for action

- Continue to develop partnership with 4C Academy in Albany to deliver the AST program dual enrollment.
- Continue to market DE AST to the high schools of Dodge and surrounding counties.
- In cooperation with industry, continue to develop the AST program curriculum to reflect the needs of a rapidly evolving industry.
- Advise certificate of AST graduates of their options for continuing education in the Associates of AST, and the Bachelor of Applied Science in Technical Management.

### Categorical Summation

Check any of the following to categorically describe action(s) the institution will take concerning this program.

Program MEETS Institution's Criteria

Program is critical to the institutional mission and will be retained.

Program is critical to the institutional mission and is growing or a high demand field and thus will be enhanced.

Program DOES NOT MEET Institution's Criteria

Program will be placed on a monitoring status.

Program will undergo substantive curricular revisions.

Program will be deactivated.

Program will be voluntarily terminated.

Other (identify/add text): This program does not require any additional resources and is simply an opportunity for graduates of the AST certificate to earn an AAS if they desire. This program will be retained.

Academic Dean Signature:



Dean of Graduate Studies Signature (when applicable):

Date: 4/5/2020



## Comprehensive Program Review

**FY 2019 – 2020**

**Institution:** Middle Georgia State University

**Academic Program:** Aircraft Structural Technology Associates Degree

**College or School:** Aviation

**Department:** Aviation Maintenance and Structural Technology

**CIP Code:** 47.0607

**Date of Last Internal Review:** Not sure. This is the first review by Martin Kehayes

**Faculty Completing Report:** Martin Kehayes

**Current Date:** 2/13/2020

### 5 Year Enrollment by Campus and Graduation Trends

#### Enrollment

Campus	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	5 YR Growth
Macon	0	0	0	1	0	-100%
Cochran	2	0	0	1	1	-15.91%
Warner Robins	0	0	0	1	1	0%
Dublin	1	0	0	0	1	0%
Eastman	5	6	4	3	8	12.47%
Online	3	2	4	3	4	7.46%
Off Campus	0	0	0	1	0	-100%
<b>Total</b>	<b>11</b>	<b>8</b>	<b>8</b>	<b>10</b>	<b>15</b>	<b>8.06%</b>

#### Graduates

AY 2015	AY 2016	AY 2017	AY 2018	AY 2019	5 YR Growth
2	2	7	6	1	-15.91%

Include a narrative that discusses:

### Narrative

- **Program purpose and mission**

The role of the Aircraft Structural Technology (AST) program is to prepare the student to enter the aviation industry with the skill set necessary to be a competent entry-level structural mechanic. **In addition to this training, the associate's degree graduate has completed 22 hours of college core: English, math, history, etc.**

- **Align of program mission with department, school, and institutional mission**

The mission statement of the University is as follows, *“Middle Georgia State University educates and graduates inspired lifelong learners whose scholarship and careers enhance the region through professional leadership, innovative partnerships, and community engagement”*. Compare that with the School of Aviation mission, *“The School of Aviation educates and prepares students for technical and management careers in the aviation, aerospace, and related industries, who understand the industry and organizations they are part of and the communities they serve”*.

Aviation Structural Technology complements the school of aviation, and helps provide industry with the structural mechanics needed to meet the looming shortages in the industry. As a part of the School of Aviation, it supports the critical workforce development role that Middle Georgia State University plays in Georgia. The AST program is a valuable part of the whole. It would be difficult to imagine a School of Aviation that did not represent the vast part of the aviation industry that is maintenance related.

- **Program age, tracks, concentrations, etc.**

Established in 1996 as part of Heart of Georgia Technical College, the Aviation Structural Technology Program (ASTP) is in its 22nd year at its current location at the Heart of Georgia Regional Airport. The Aircraft Structural Technology program is the oldest of the aviation training programs within the School of Aviation. In 1987, then Heart of Georgia Technical College, opened a satellite campus in Eastman, GA, for the purpose of offering aircraft structural maintenance training. Over the past 30 plus years, this program has provided hundreds of skilled aircraft structural technicians to industry. Many of the aviation businesses in middle Georgia have benefited from these well trained graduates.

The two semester long program consists of 9 classes. To complete the contact hours within two semesters, the student must attend class Monday- Thursday, from 9am until 4:30pm. Part time, dual enrollment students, meet Monday- Thursday, from 1:30pm- 4:30 pm, and may complete the program in two years.

**The associates degree consists of an additional 22 hours of college core credit, seven courses. These core courses are readily transferable into almost any four year degree, and are offered “brick and mortar”, or online.**

- **Accreditation information/status**

The AST program meets the requirements of the University for SACS accreditation. This program does not fall under the oversight of the Federal Aviation Administration, as does the Aviation

Maintenance Technology program. This independence allows for more rapid change in curriculum, to meet the needs of industry.

- **Method(s) of delivery**

The AST certificate program is delivered “Brick and Mortar” primarily, due to the lab intensive courses. Some hybrid courses are being taught at this time, for the more theory based courses, such as blueprint reading, technical math, etc.

The Aviation Maintenance and Structural Technology department is working to expand the geographical area of delivery of the AST program by partnering with the college and career academies. Currently, the AMST department is working with Commodore Conyers College and Career Academy, to make available the AST program for DE in the Albany area.

**Associates of AST can be taken online, or “brick and mortar”.**

- **Changes since last review**

Dual enrollment is now available for the AST program. High school students from Dodge and adjoining counties may take AST courses in the afternoon from 1:30 to 4:30. Dual enrollment students that begin the AST program at the beginning of their junior year, may complete the program by the end of their senior year.

- **Benchmarks of progress**

Traditionally, enrollment in this program has ebbed and flowed in reaction to the hiring needs of Warner Robins Air Logistics Complex. Over the past decade, enrollment in AST has been low, a reflection of the infrequent hiring of the WRALC. The WRALC has operated as if immune from the personnel shortages being observed by much of the aviation maintenance industry. This trend seems to be coming to an end. The WRALC is beginning to show signs of personnel shortages, and is more aggressively recruiting our graduates. Consequently, the enrollment in this program is “creeping” up. Instead of the 4-5 new students a semester, it is closer to 10-12. Even the spring cohort, which is usually smaller than the fall cohort, is showing viable numbers of around 10. In addition, DE in this program is starting to gain traction.

Lastly, MGA has been asked to participate in a collaborative grant proposal, with Georgia Tech, the University of South Carolina, Savannah State, and Triumph Aerostructures. The NASA grant is, in part, to study the viability of additive maintenance and repair on Urban Air Mobility vehicles and Unmanned Air Vehicles. Georgia Tech approached MGA with interest in both of our aircraft maintenance related programs, AST for its focus on manufacturing and repair, and AMT for its focus on continued airworthiness.

- **Plans for action**

- Continue to develop partnership with 4C Academy in Albany to deliver the AST program dual enrollment.
- Continue to market DE AST to the high schools of Dodge and surrounding counties.

- In cooperation with industry, continue to develop the AST program curriculum to reflect the needs of a rapidly evolving industry.
  - **Advise certificate of AST graduates of their options for continuing education in the Associates of AST, and the Bachelor of Applied Science in Technical Management.**
- **Shifting trends and market forces that may impact program demand**

In summary, while the AST program has had its struggles of late, the future looks bright, and continued growth in enrollment looks promising, based on the following indicators:

- Enrollment is slowly, but steadily on the rise.
- Employers such as WRALC, Gulfstream Aerospace, and NAVAIR, are actively recruiting our graduates.
- The high school dual enrollment program is still in its infancy, and has not been adequately marketed to the sizeable population that could benefit from the educational opportunity. This is an area for much growth, and will benefit the economy of the region. High school students, and their parents, are beginning to see the many benefits of a technical education.
- Federal “Pathways Internships” for AST are increasing. This semester, 13 resumes were submitted for this program to WRALC.
- Partnerships with college and career academies show promise for a wider delivery area.

Lastly, MGA serves many valuable roles in the middle Georgia community. One is as an access institution. The Aircraft Structural Technology program contributes in this role. With one year of training, a Georgia citizen can gain access into the aerospace industry. This program is very affordable, does not require a large investment of time, and has enabled many of our citizens to lift themselves up into a career, or retrain after a layoff. While the AST program has been weathering recent storms, the skies seem to be clearing, and the future looks promising. Aircraft Structural Technology has helped many, and promises to help many more.

#### **Some final notes on the associate’s degree option for AST.**

- **The associate’s degree does not require additional resources from the AMST department, nor is it a burden to the department. The 22 hours of core are taught by University faculty from other departments.**
- **The AST AAS degree seems to fit a growing trend in higher education, which is continuing education over a career. The AST certificate graduates are fully marketable to industry. Therefore, many of our students choose to pursue the certificate first, and enter the industry. Later, as time allows, and their career path dictates, these graduates can pursue the AAS degree, fully online.**
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**Management. This degree is offered fully online, and allows one to further advance their career.**

**In closing, the AAS option is a valuable addition to the AST technical training. It benefits MGA's certificate graduates, by offering them educational opportunities throughout their careers. And it benefits the institution by attracting graduates back to MGA for continuing education.**

***\*The narrative should be as direct as possible and no longer than three pages.***

## IERB Comprehensive Program Review Rubric and Evaluation

Date Reviewed: 2/28/2020

Program Reviewed: Aircraft Structural Technology Associates Degree

**Contextual Notes:** Summarize any demographic or environmental factors described in the introduction that might significantly impact assessment of the program

After a decade of slow growth, the WRALC has begun to aggressively hire graduates from this program. Additional opportunities with other institutions provide avenues for further growth.

Area of Focus	Exemplary Area	Satisfactory Area	Area of Concern	No Evidence	Notes
Enrollment	<i>This program has significantly positive enrollment trends and robust credit hour production</i>	<i>This program has stable or moderately positive enrollment trends and healthy credit hour production</i>	<i>This program has negative enrollment trends and weak credit hour production</i>		It was noted that enrollment is slowly, but steadily on the rise.
<b>Graduation Trends</b> USG benchmark:  <b>Bachelor's Degrees:</b> 10 graduates/year  <b>Graduate, Associate's or Certificates:</b> 5 graduates/year  <small>Programs falling under these benchmarks are designated as "low performing"</small>	<i>Three year rolling average greatly exceeds USG minimum benchmark for degrees conferred</i>	<i>Three year rolling average meets or exceeds USG minimum benchmark for degrees conferred</i>	<i>Three year rolling average does not meet USG minimum benchmark for degrees conferred; the program is "low performing" by USG definition</i>		With the increase in enrollment, we are hopeful that the graduation trend will increase.

## IERB Comprehensive Program Review Rubric and Evaluation

### Program Strengths of Note:

- Addition of dual enrolled students is a great way to grow the program.
- Graduates are being actively recruited by WRALC, Gulfstream Aerospace, and NAVAIR.
- Collaborative NASA grant proposal with Georgia Tech, University of South Carolina, Savannah State, and Triumph Aerostructures is a great opportunity.
- Partnership is being formed with the 4C Academy in Albany to deliver the AST program dual enrollment.
- Advisement on further education opportunities serves to benefit the program graduates and the institution.

### Areas of Concern:

- How are the 5 year growths calculated? The percent does not seem to make sense.

### Other Comments:

- It sounds like this program is experiencing growth. The students are able to gain employment in the aerospace industry or to further their education at the institution.
- Does the fact that some students complete the program in two semesters and the part time/dual enrollment may complete the program in two years adversely impact your graduation rate?