

**DATE:** November 15, 2017

**SUBJECT:** New Academic Program  
Austin Peay State University  
Aviation Science, Bachelor of Science  
(CIP 49.0102—Professional Helicopter Pilot)

**ACTION RECOMMENDED:** Approval

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**PROGRAM DESCRIPTION**

The proposed Aviation Science Bachelor of Science (BS) program with a concentration in rotor-wing is committed to preparing aviation professions by providing state of the art pilot training and combining it with a broad undergraduate education concentrating on aviation-related business, flight training and management, emergency services, and law enforcement. Graduates of the proposed program at Austin Peay State University will obtain their Private Helicopter Pilot certification, Commercial Helicopter Pilot certification, along with their Certified Flight Instructor (CFI) certification, and CFI Instrument Helicopter certification while earning the BS degree in Aviation Science.

The proposed program, housed in the Department of Engineering Technology, will appeal to veterans including those who have completed some helicopter flight training but have not obtained FAA certifications or an undergraduate degree, as well as civilians. All ground school aviation classes will be available at Fort Campbell. In air flight training courses will operate from the Outlaw Field Regional Airport.

**INSTITUTIONAL GOVERNING BOARD APPROVAL**

The proposed Aviation Science BS program was approved by the APSU Board of Trustees on September 14-15, 2017.

**PROPOSED IMPLEMENTATION DATE**

August 2018

**RELEVANCE TO INSTITUTIONAL MISSION AND STRATEGIC PLAN**

Austin Peay State University is a comprehensive university committed to “raising the educational attainment of the citizenry, developing programs and services that address regional needs, and providing collaborative opportunities that connect university expertise with private and public resources.” The degree program in Aviation Science fits well with the overall mission of APSU and supports the Governor’s Drive to 55 program. Austin Peay State University is committed to

raising educational attainment and supporting workforce needs in Tennessee and particularly in the greater Clarksville-Ft. Campbell region.

**CURRICULUM**

The program requires completion of 120 credit hours. The curriculum components consist of 42 credit hours of general education; 36 credit hours for the Aviation Science major field core; and 42 credit hours for the Rotor-Wing concentration. Students complete the general education and Aviation Science courses at the Austin Peay Center at Ft. Campbell. The flight training portion of the program will take place at Clarksville-Montgomery County Regional Airport (Outlaw Field), which is adjacent to the Ft. Campbell Army base. An existing aviation hangar will be used for on-site classrooms and lab training.

Austin Peay State University will initiate an agreement with a selected flight training company to lease the aircraft for flight training. This company will be responsible for all flight scheduling and aircraft maintenance. It is estimated that the proposed program will require one aircraft for every 10 students. A safety management program will be established that provides for the highest possible level of safety for all personnel to include students, faculty, staff, and general public. Processes and log forms will be created to keep permanent records of all safety checks.

APSU will begin the accreditation process with the Aviation Accrediting Board International (AABI) in 2020 and seek accreditation in 2022, upon completion of their first graduating class per AABI requirements. Additionally, as a FAA flight training school, APSU must be recertified every 24 months to ensure compliance with federal regulations. In order to be eligible for recertification, an 80 percent pass rate of certification exams are required.

Contingent upon Commission approval, APSU will submit a Substantive Change Prospectus to SACSCOC in December 2017. The Substantive Change Prospectus is required when an institution offers a new academic program that is substantially different from their existing program inventory. Approval from SACSCOC must be granted before APSU is permitted to enroll students in the proposed Aviation Science BS program.

**PROGRAM PRODUCTIVITY**

Enrollment and graduation projections are conservatively based on the Rotor-Wing Aviation program at Southern Utah University. The proposed BS Aviation Science program will be offered year round on the APSU academic schedule with five 7 ½ week terms per year.

|                   | <b>2018</b> | <b>2019</b> | <b>2020</b> | <b>2021</b> | <b>2022</b> |
|-------------------|-------------|-------------|-------------|-------------|-------------|
| <b>Enrollment</b> | 25          | 35          | 45          | 45          | 45          |
| <b>Graduates</b>  | --          | --          | --          | 17          | 24          |

## **PROGRAM DUPLICATION**

No other public university in Tennessee offers a similar academic program. Other aviation programs in the state train pilots with fixed-wing aircraft.

## **EXTERNAL JUDGEMENT**

On June 29, 2017, Dr. Ed Steigerwald, Assistant Professor and Executive Director of Aviation Operations with Middle Georgia State University, conducted a campus visit to evaluate the proposed program. His written report recommended the development of a baccalaureate program incorporating a prior learning assessment to allow individuals to enter the program with credit for pilot certifications. The proposed BS program is compliant with Dr. Steigerwald's recommendations.

## **EMPLOYER DEMAND AND OPPORTUNITIES FOR PROGRAM GRADUATES**

According to the Bureau of Labor Statistics, the overall employment of commercial pilots including helicopter pilots is projected to grow 10 percent from 2014 to 2024, faster than the average for all occupations. Commercial pilots are projected to add jobs in various industries, including ambulance services and support activities for air transportation.

APSU is geographically located within 10 miles from Ft. Campbell. The base is home to the 101<sup>st</sup> Airborne Division with a Combat Aviation Brigade and is known world-wide for their expertise in the use of helicopters in combat situations. The proposed program will be particularly attractive to veterans that have completed some helicopter flight training but have not obtained FAA certification.

## **INSTITUTIONAL CAPACITY TO DELIVER THE PROGRAM**

The addition of the proposed Aviation Science program to APSU's College of Science, Technology, Engineering and Mathematics will allow for continued focus on the STEM fields. The Departments of Mathematics and Statistics along with the Department of Physics and Astronomy will directly support the concentration courses by providing statistical skills as required by the FAA and the physics courses necessary for students to understand the field of aviation science.

The proposed program will be offered through the Department of Engineering Technology. APSU intends to hire a program director that will monitor each phase of the rotor wing pilot and applied knowledge training activities. Currently, there is one adjunct faculty member to provide guidance and experience to the program. The Executive Director of Aviation Sciences at Southern Utah University has assisted APSU to determine how to qualify flight instructors as faculty to meet accreditation requirements. By the 5<sup>th</sup> year of the program, APSU will employ a total of three ground instructors, 14 flight instructors, and two support staff employees.

APSU intends to utilize the services of a contractor to provide hangar space, aircraft, insurance, maintenance and scheduling. The primary rationale for this in lieu of direct leasing or purchasing is to minimize the initial program cost with minimum financial risk.

#### **ASSESSMENT AND POST-APPROVAL MONITORING**

An annual performance review of the proposed program will be conducted for the first five years following program approval. The review will be based on benchmarks established in the approved proposal. At the end of this period, the campus, institutional governing board, and Commission staff will perform a summative evaluation. The benchmarks include, but are not limited to, enrollment and graduation, program cost, progress toward accreditation, and other metrics set by the institution and agreed upon by governing board and Commission staff. If benchmarks are not met during the monitoring period, the Commission may recommend that the institutional governing board terminate the program. If additional time is needed and requested by the institutional governing board, the Commission may choose to extend the monitoring period.