

**COMMITTEE RECOMMENDATION FOR  
Community & Technical College  
Aviation Maintenance**

**STRENGTHS:**

- High rate of completion. They have increased their number of degrees by about 200% between FY16 to FY20. Student credit hours (SCH) increased about 23% from FY16 to FY20.
- Steady enrollment. Originally allowed 25 students in the late 1960s, and now the FAA allows them up to 35 students.
- Flexible program. Students can transfer in courses from other institutions; also, one of less than 10 programs in the nation where a student can receive their A&P certificate in only 12 months.
- High demand program, especially in Alaska. The program is almost always near capacity.
- Excellent faculty and staff that are experienced and stable. Additionally, they have received TVEP funding to hire one more full-time faculty member (currently in the recruitment phase). This is to help OJT personnel (both military and civilian) to obtain their FAA certification and to help recruit younger people into aviation maintenance.
- The location and facility are attractive to students, as well as supportive of location aviation community events.
- The ability to resume in-person training during the pandemic has been attractive to students around the nation.
- A high rate of underrepresented groups in the program. They usually have more women in the program compared to others around the nation, and the number of Alaska Natives in the program is increasing.

**WEAKNESSES:**

- Funding: Bering Air donated a complete King Air aircraft but did not include the engines, which makes the aircraft not fully functional for training.
- Their building is relatively new, but they still need a welding and painting facility to complete. This means that students must go to an offsite facility for classes which is disruptive to students and requires FAA approval – they are not sure how long the approval will last.
- The Professional Piloting program has several weaknesses. There is no full-time faculty. No flight training available, students can only get ground school classes through this program. The number of degrees has remained relatively constant and SCH decreased about 40% from FY16 to FY20. The number of majors decreased about 7% during the same timeframe.

**OPPORTUNITIES:**

- Continued high demand for aviation mechanics – currently the maximum possible output of graduates is less than half of the statewide demand. UAA also offers an equivalent AFPM program but theirs takes two or more years to complete. The UAF

program helps students who need to return to the workforce ASAP and creates a better student work ethic because of the 40 hour “work week” in class.

- Opportunities to expand on the student population (military, younger students, OJT, minority populations).
- Opportunities to expand into flight training. Program aircraft could be made airworthy for flight training at a relatively low cost.

#### THREATS:

- Pandemic uncertainty, though it’s unlikely to affect mechanics as much as other fields.
- Industry is constantly trying to recruit and attract faculty away, and it’s difficult to attract and retain adjunct faculty.
- Funding cuts and equipment replacement.

#### CENTRALITY TO MISSION:

- Meets UAF’s mission by providing workforce training in a highly needed career field.

#### INDICATORS OF QUALITY:

- Able to complete the full program in 12 months.
- High demand, steady enrollment, and completion numbers.

#### COST-EFFECTIVENESS:

#### SCH

| Metric | Detail          | FY16   | FY17 | FY18 | FY19   | FY20 |
|--------|-----------------|--------|------|------|--------|------|
| SCH    | AFPM - Lower    | 1026.5 | 1068 | 928  | 1134.5 | 1258 |
| SCH    | AVTY - Lower    | 314    | 197  | 173  | 279    | 159  |
| SCH    | AVTY - External | 206    | 88   | 120  | 102    | 40   |

#### Majors

| Metric | Detail                      | FY16 | FY17 | FY18 | FY19 | FY20 |
|--------|-----------------------------|------|------|------|------|------|
| Majors | AAS Aviation Maintenance    | 37   | 28   | 29   | 39   | 30   |
| Majors | AAS Professional Piloting   | 28   | 23   | 28   | 26   | 26   |
| Majors | CT2 Airframe                | 2    | 0    | 1    | 1    | 0    |
| Majors | CT2 Airframe and Powerplant | 47   | 42   | 45   | 48   | 53   |
| Majors | CT2 Powerplant              | 2    | 0    | 0    | 0    | 0    |

#### Degrees

| Metric  | Detail                      | FY16 | FY17 | FY18 | FY19 | FY20 |
|---------|-----------------------------|------|------|------|------|------|
| Degrees | AAS Aviation Maintenance    | 3    | 12   | 6    | 9    | 5    |
| Degrees | AAS Professional Piloting   | 1    | 4    | 2    | 2    | 2    |
| Degrees | CT2 Airframe                | 1    | 0    | 0    | 0    | 1    |
| Degrees | CT2 Airframe and Powerplant | 11   | 19   | 14   | 13   | 19   |

|         |                |   |   |   |   |   |
|---------|----------------|---|---|---|---|---|
| Degrees | CT2 Powerplant | 0 | 1 | 0 | 0 | 0 |
|---------|----------------|---|---|---|---|---|

## FTEs

| Metric | Detail       | FY16 | FY17 | FY18 | FY19 | FY20 |
|--------|--------------|------|------|------|------|------|
| FTEs   | Adjunct FTEs | 0.9  | 0.9  | 0.5  | 0.5  | 0.4  |
| FTEs   | Faculty FTEs | 2.3  | 2.3  | 2.3  | 2.3  | 2.3  |
| FTEs   | Staff FTEs   | 1    | 0.7  | 0.2  | 0.3  | 0.4  |

## Expenditures

| Metric                     | Program                 | Detail       | FY20      |
|----------------------------|-------------------------|--------------|-----------|
| Instructional Expenditures | Airframe and Powerplant | Unrestricted | 1132297.5 |
| Instructional Expenditures | Professional Piloting   | Unrestricted | 22270.9   |
| Salaries and Benefits      | Airframe and Powerplant | Unrestricted | 418442.1  |
| Salaries and Benefits      | Professional Piloting   | Unrestricted | 22010     |

## Aviation Maintenance AAS

| RECOMMENDATION:       | ADDITIONAL COMMENTS: | DATE FOR FOLLOW-UP: |
|-----------------------|----------------------|---------------------|
| Continuation: 7 votes |                      |                     |
| Abstain: 1 vote       |                      |                     |

## Professional Piloting AAS

| RECOMMENDATION:                              | ADDITIONAL COMMENTS:                                 | DATE FOR FOLLOW-UP: |
|----------------------------------------------|------------------------------------------------------|---------------------|
| Continuation w/<br>improvement plan: 7 votes | Develop a plan for<br>sustainability of the program. | Report in one year. |
| Abstain: 1 vote                              |                                                      |                     |

## Airframe Certificate

| RECOMMENDATION:                              | ADDITIONAL COMMENTS:                                                                      | DATE FOR FOLLOW-UP: |
|----------------------------------------------|-------------------------------------------------------------------------------------------|---------------------|
| Continuation: 1 vote                         |                                                                                           |                     |
| Continuation w/<br>improvement plan: 2 votes |                                                                                           |                     |
| Revision or restructure: 4<br>votes          | Explore transferring in of<br>complementary (Powerplant)<br>credential and support taking | Report in one year. |

|                 |                                                                                                                                           |  |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------|--|
|                 | remainder courses to receive Airframe & Powerplant certificate (with the goal of deleting separate Airframe and Powerplant certificates). |  |
| Abstain: 1 vote |                                                                                                                                           |  |

#### **Airframe & Powerplant Certificate**

| RECOMMENDATION:                  | ADDITIONAL COMMENTS:                                                | DATE FOR FOLLOW-UP: |
|----------------------------------|---------------------------------------------------------------------|---------------------|
| Continuation: 1 vote             |                                                                     |                     |
| Revision or restructure: 5 votes | See comment above, as it applies to all three certificate programs. |                     |
| Abstain: 2 votes                 |                                                                     |                     |

#### **Powerplant Certificate**

| RECOMMENDATION:                  | ADDITIONAL COMMENTS:                                                | DATE FOR FOLLOW-UP: |
|----------------------------------|---------------------------------------------------------------------|---------------------|
| Continuation: 1 vote             |                                                                     |                     |
| Revision or restructure: 5 votes | See comment above, as it applies to all three certificate programs. |                     |
| Suspension: 1 vote               |                                                                     |                     |
| Abstain: 1 vote                  |                                                                     |                     |