

## Adv Tech 2011-12

### Lane Aviation Academy: Aviation Maintenance - #2 - Avotek Hydraulic System Trainer

#### Summary:

This is a hands-on teaching aid. Students learn the principles of hydraulics and then get to use this trainer to simulate actual problems.

#### Description

The training aid is a self-contained panel with hydraulic components that can be configured to simulate large equipment problems. Hydraulic system trainer will provide comprehensive hands on experience that will reinforce theoretical knowledge and develop troubleshooting skills.

#### Questions and Answers

**How is the initiative linked to the Unit Plans most recently submitted?**

1. How does it continue the achievement of those goals?
2. If this is a continuation of an initiative started last year, make sure that relationship is clear.

**How is this initiative linked to the efficiencies and productivities plans you had last year?**

1. How does it continue the achievement of these plans?
2. If this is a continuation of an efficiency or productivity plan started last year, make sure that relationship is clear.

This initiative has been submitted the last three years.

Extends the use of module based curriculum.

Allows student to see independently how system components work together.

**Describe the resources needed:**

#### Equipment

- 1 Avotech Hydraulic System Trainer (\$6,357 each)

***Request:*** Carl Perkins \$6,357

**What specific measurable program outcomes do you expect to achieve with this initiative? The outcomes should be specific enough to be measurable. Also, outline the method that will be used to determine the results.**

The outcomes should be specific enough to be measurable. Also, outline the method that will be used to determine the results. This trainer will be used in several courses to achieve the course outcomes. Students will have access to this trainer to reinforce their theoretical knowledge prior to working on actual equipment.

**Department Priority:**

16

**Unit Resources:**

There are no unit resources available.

**Funding Request: Carl Perkins**

**Is this a Career & Technical Education program approved by the state and offered through Lane for credit?**

Yes

**If not a Career & Technical Education program, does your request provide considerable support for students enrolled in these programs?**

Yes

**Do you have an advisory committee that meets 2-3 times per year?**

Yes

**If request is for personnel, will funds be used to replace an existing position?**

**How will funding this initiative increase or sustain the academic achievement and technical skills attainment (GPA of 2.0 or better) of Career and Technical Education students?**

Use of the Hydraulic Trainer will increase student skill attainment by reinforcing theoretical knowledge with hands on experience, therefore addressing the different learning styles of students.

**How will funding this initiative increase or sustain the number of CTE students that graduate or receive a one year certificate from Lane and help prepare the students for employment?**

Increased experience and understanding of an important component of aviation maintenance such as hydraulics will make the student more valuable and employable as an Airframe and Powerplant Mechanic.

**EQUIPMENT \$**

6537

**COMPUTER HARDWARE \$**

**COMPUTER SOFTWARE \$**

**MATERIALS & SUPPLIES \$**

**CURRICULUM DEVELOPMENT (Hours)**

**PART-TIME FACULTY \$**

**TIMESHEET STAFF \$**

**TRAVEL \$**

**Can this initiative be partially funded?**

No

**EQUIPMENT \$**

**(E) Explanation of effect of partial funding:**

**COMPUTER HARDWARE \$**

**(CH) Explanation of effect of partial funding:**

**COMPUTER SOFTWARE \$**

**(CS) Explanation of effect of partial funding:**

**MATERIALS & SUPPLIES \$**

**(MS) Explanation of effect of partial funding:**

**CURRICULUM DEVELOPMENT (HOURS)**

**(CD) Explanation of effect of partial funding:**

**PART-TIME FACULTY \$**

**(PF) Explanation of effect of partial funding:**

**TIMESHEET STAFF \$**

**(TS) Explanation of effect of partial funding:**

**TRAVEL \$**

**(T) Explanation of effect of partial funding:**

**Funding Request: Curriculum Development**

**Funding Request: Technology Fee**