PRESENTER: BOB JONES

TITLE: THE AEROSPACE EDUCATION CENTER: STEM AT A MUSEUM?

I. HISTORY/OVERVIEW OF THE AVIATION MUSEUM:

A. First opened in April 1995 at Bluegrass Airport near Lexington.

B. Purpose is to obtain, restore, preserve, and operate historical and vintage aircraft and components and provide a venue for the public to see them up close and learn their history.

1. Thousands have visited from all 50 states and several foreign countries.

2. Several exhibits provide hands-on learning experiences for children.

C. Early on, education became a key component of AMK’s activities.

D. Plans are underway to move AMK to a new location on the west side of BGA.

II. AVIATION CAMPS OF KENTUCKY

A. Began in 1996 with over 7,000 campers attending.

B. Ages are 10-17 with adults allowed at selected camps. Recruiting underserved youth in our area has become a focus.

C. Camps are held at AMK and several other KY cities.

1. In ‘22 we held camps at Cincinnati/Northern KY International Airport, Bowman Field in Louisville, Bowling Green, and Pikeville

2. Several cities have shown interest in hosting camps.

D. Camp Curriculum consists of 4 basic areas of aviation with hands-on experience involving STEM activities.

1. Aeronautics: The science of flight - how an airplane flies, the parts of an airplane, aircraft instruments, different types of airplanes, and careers in aviation.

2. Navigation: Campers learn to plot a course and compute the distance and heading while learning the symbols on an FAA Sectional Navigation chart.

3. Flight Simulator: Campers learn how the basic instruments work, how the controls work, and how to take-off, climb, maneuver, hold a course heading, and land.

4. Flight: Each camper get the opportunity to fly an actual small aircraft with a licensed flight instructor.

E. Outside speakers are used to expose campers to aviation/aerospace career opportunities, including those not directly related to flying.

STEM SATURDAYS

A. Focus is on Elementary and Middle Schools.

B. Sessions are a 3 hour “mini camp” held on Saturday mornings.

C. Sessions focus on STEM activities.

D. Students are exposed to career opportunities in aviation and aerospace.

E. They are grant supported.

AEROSPACE EDUCATION CENTER:

A. Will be a major part of the new museum; AMK is moving to aerospace and STEM education as a primary mission.

1. Reaching out to Central KY school systems to attend

2. Focus will be on recruiting underserved youth

B. The educational and related programs envisioned for the AEC include:

1. Housing the Aviation Camps of Kentucky.

a. Dedicated classrooms

b. Expand the flight simulator room

2. Housing aerospace STEM activities

a. Expand the STEM Saturdays

b. Expand STEM activities to include high school students

3. Aviation and Aerospace Seminar Series

a. The focus will be on careers in the aviation and aerospace industries, especially non-flying careers.

b. The age group will be high school, college, and young adults.

4. Special Interest classes for the general public.

a. Introduction to ground school for aspiring pilots

b. Flight simulation classes

c. seminars on museum exhibits

d. Presentations by aviation and aerospace organizations (FAA,

AOPA, EAA, NASA, TSA, etc.)

5. Corporate and other Private Enterprise Partnerships.

a. Establish contacts with aviation/aerospace companies, especially

those located in Kentucky

b. Build potential donor relationships with these companies

c. Display interactive exhibits provided by those companies

d. Invite these businesses to become sponsors of the education

programs offered by AMK.

6. The AEC will also be offered as a venue for meetings, seminars, or

conferences by outside agencies or businesses.