QUEEN OF THE SKIES
The Legacy of the Lockheed Constellation
AN EDUCATIONAL PROGRAM FOR SECOND AND THIRD GRADE STUDENTS

This is a free, hands-on educational program designed for students in the Second and Third Grades centered on the current exhibition *QUEEN of the SKIES: The Legacy of the Lockheed Constellation*. The program includes directed looking, finding objects and images, and exploring the history of aviation and air travel, along with a hands-on activity to learn about the basic principles of powered flight by making and flying paper airplanes.

The program is guided by experienced museum and library staff and runs 45 minutes. Additional activities are also available. Please see the California Department of Education Content Standards on page 4 for the subject areas that are addressed in this program.

*QUEEN of the SKIES* can accommodate up to approximately 30 students at a time. Special arrangements can be made for groups larger than 30.

PROGRAM PLAN

SCHEDULE:

- Students arrive at the aviation museum and library and deposit bags, jackets, etc.
- Staff introductions, welcoming remarks, and description of the two planned activities.
- Students are divided into two groups.
  
  One group will do the postcard **FIND IT! ACTIVITY** through an exploration of the *QUEEN of the SKIES* exhibition.

  One group will do the **FLY IT! ACTIVITY** by discussing how airplanes fly and then making and flying paper airplanes.

- Allow 15–20 minutes for each activity, then groups will switch activities.
- Conclusion and wrap-up.

**NOTE:** Additional guided museum activities and airport tours are also available to extend class visits as described on page 5.
**FIND IT! ACTIVITY**

**OBJECTIVES:**

- Look closely at the *QUEEN of the SKIES* exhibition
- Compare Constellation airliner models to modern airliners at the airport
- Imagine what it would be like to fly in one of these airliners that your grandmother or great grandmother might have flown in
- Learn about the Lockheed Constellation and the routes and destinations it served in the 1940s and 50s
- Compare inflight meals and services on the Constellation with those available today
- Compare historic flight attendant and captain uniforms with those worn by flight crews today
- Learn about the different jobs of flight crews

Students are divided into teams of two or three. Each team receives a FIND IT! postcard with an image and description of an object that they must find in the exhibition. Once all teams have found their objects, the group explores and discusses all the found objects together through questioning and directed looking.

Below are examples of the *FIND IT!* postcards. Cards are designed for second and third grade reading levels.

Can you guess which airport this is?  
Which model is most like this airplane?

Can you find Frank Sinatra?  
Which model is most like the airplane behind him?

Can you find these plastic dishes?  
What is for dinner on this flight?

Why are these passengers all dressed up?  
Which model is most like this airplane? What is it called?
FLY IT! ACTIVITY

OBJECTIVES:

• Understand the basic principles of how an airplane flies
• Learn about the different ways an airplane can move: pitch, roll, and yaw
• Make a paper airplane and test fly it

Students learn about the basic principles of how an airplane flies using a simple wing section and models. Students demonstrate the pitch, roll, and yaw movements of an airplane with their bodies. Each student makes a paper airplane and then test flies it. Selected students can measure results.

Example of a paper airplane pattern for the FLY IT! ACTIVITY
QUEEN of the SKIES relates to the following California Department of Education content standards:

**GRADE TWO**

**HISTORY/SOCIAL STUDIES:**
2.1 Students differentiate between things that happened long ago and things that happened yesterday.

2.1.2 Compare and contrast their daily lives with those of their parents, grandparents, and/or guardians.

2.5 Students understand the importance of individual action and character and explain how heroes from long ago and the recent past have made a difference in others’ lives.

**PHYSICAL SCIENCES:**
K–2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

K–2-ETS1-3. Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.

**GRADE THREE**

**HISTORY/SOCIAL STUDIES:**
3.3 Students draw from historical and community resources to organize the sequence of local historical events and describe how each period of settlement left its mark on the land.

**PHYSICAL SCIENCES:**
3-PS2-1. Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.

3-PS2-2. Make observations and/or measurements of an object’s motion to provide evidence that a pattern can be used to predict future motion.
During the 1950s, commercial aviation was expanding rapidly, and many passengers were flying for the first time. Improved aircraft were needed by the airlines to lower costs, attract new customers, and gain advantages over competitors. The fast, large-capacity Lockheed Constellation, with its unique dolphin-shaped fuselage and distinctive triptail, was the premier long-range airliner of the era. QUEEN of the SKIES presents the legacy of this magnificent airplane through a selection of airline uniforms, models, promotional objects, inflight equipment, and passenger service items.

**TWA (Trans World Airlines) winter air hostess uniform and insignia** c. 1955
Designer: Oleg Cassini; Manufacturer: Briny Marlin
wool, cotton, metal, leather
SFO Museum, Gift of TWA Clipped Wings International, Inc.
2002.113.005, .028–.032
L2015.2201.001–.003

**TWA (Trans World Airlines) captain uniform** c. 1955
wool, cotton, metal, plastic, leather
Jacket, cap, and pants: courtesy of American Airlines C.R. Smith Museum
Hat badge: SFO Museum; Gift of Edwin I. Power, Jr. and Linda L. Liscom
1998.126.033
L2015.2201.061

**TWA (Trans World Airlines) Lockheed Constellation meal service advertisement (detail)** early 1950s
paper, ink
Gift of Thomas G. Dragges

**TWA (Trans World Airlines) meal service set** 1950s
melamine plastic, cloth, metal, paper
SFO Museum
Gift of Thomas G. Dragges
L2015.2203.001–.013, .018–.020, .039, L2015.2203.001–.008

Meal service tray: SFO Museum; gift of TWA Clipped Wings International, Inc.
2002.113.238
L2015.2201.014

THE AVIATION MUSEUM AND LIBRARY AT SFO

The San Francisco Airport Commission Aviation Library and Louis A. Turpen Aviation Museum opened in December 2000 as part of SFO Museum. Museum visitors and library patrons of all ages can discover and learn about the history of air travel and the role that commercial aviation plays in our everyday lives.

The aviation museum and library is housed within an architectural adaptation of San Francisco’s original 1937 airport passenger lobby. The permanent collection focuses on the history of commercial aviation with an emphasis on the West Coast and the Pacific region. Museum exhibitions and research services in the library and archives are offered free to the public. Educational programs are held in this unique facility, which is also available for private events. Open hours are 10:00 a.m. to 4:30 p.m., Sunday through Friday, and closed Saturdays, holidays, and special events. It is located pre-security and admission is free.

TO SCHEDULE EDUCATIONAL PROGRAMS AND TOURS, CONTACT:
Gabriel Phung
650 821 9911
education@flysfo.com
YOUR VISIT TO SFO MUSEUM

SFO IS A GREAT DESTINATION FOR YOUR CLASS!

• Museum and library admission, educational programs, and tours are all free.
• Educational programs and tours can be customized for higher grades, mixed ages, and special needs students.

YOU CAN EXTEND YOUR VISIT

• Bring your lunch and sit in the public dining areas adjacent to the aviation museum, or select from the many restaurants at SFO.
• Take a tour of the airport and ride the AirTrain (by prior arrangement and availability).
• Meet the trained service dogs of the SFPD Airport K-9 Unit and see them in action (by prior arrangement and availability).
• Visit other museum exhibitions at SFO. (Schedules are subject to change, please check www.flysfo.com/museum/exhibitions for updated information).

TRANSPORTATION

• Take Public Transportation:
  Take BART directly into SFO International Terminal, where the aviation museum and library are located. Take SamTrans Routes KX and 292 directly to SFO. Take Caltrain to BART for service to SFO.
• By School Bus/Charter Bus:
  Parking for buses is available at no charge by prior arrangement only.
• By Car:
  Groups booked for educational programs can park in Airport garages and Airport parking tickets can be validated at the aviation museum at no charge.

For more information on transportation to SFO go to: www.flysfo.com
For the aviation museum and library location go to: www.flysfo.com/museum/aviation-museum-library/hours-directions