

Easily digestible Aerospace Principles revealed for K-12 Students and Educators. These lessons will be sent on a bi-weekly basis and allow grade-level focused learning. - AIAA STEM K-12 Committee

JACKIE COCHRAN

Female aviator. Record setter. Awarded the Distinguished Service Medal. Consultant to NASA. Although she came from humble beginnings, Jackie Cochran reached great heights, both figuratively and literally.

GRADES K-2

Each of the websites below has a biography of Jacqueline Cochran. After reading over one or all of them, share some of the highlights with your students and display a few of the photos.

National WASP World War II Museum website <http://waspmuseum.org/jackie-cochran-biography/>

Biography.com website <http://www.biography.com/people/jacqueline-cochran-9252061>

National Aviation Hall of Fame <http://www.nationalaviation.org/cochran-jacqueline/>

Wings Across America website

http://www.wingsacrossamerica.us/wasp/jacqueline_cochran.htm

Britannica.com <http://www.britannica.com/biography/Jacqueline-Cochran>

GRADES 3-5

Rather than reading or paraphrasing the information for your students (as in the K-2 lesson), split them up into small groups and assign a website to each group. Have the groups take notes on the key events listed in the biography as they read. When the class comes back together as a whole, construct a timeline including all the events that have been noted from the different websites.

Extension idea: have students pursue independent research on famous female aviators (civilian or military), or astronauts. Then compare the time periods of the different women. Did (or do) any of them know each other? Perhaps some of them competed in the same races or served together in the WASPs. What accomplishments made each of them famous? Here are a few names to start with: Ruth Law, Amelia Earhart, Cornelia Fort, Bessie Coleman, Sally Ride, Mae Jemison, and Anne Morrow Lindbergh.

GRADES 6-8

The PBS history series, *American Experience*, has an episode titled “Fly Girls” which covers the story of the Women Airforce Service Pilots. You may find information about the film at <http://www.pbs.org/wgbh/amex/flygirls/index.html>. Support materials include a timeline and an interactive map which could be displayed for the class and used to give a quick overview of the topic.

Extension idea: watch the film and use the teacher’s guide for discussion before and after viewing. This film and the support materials from PBS would make an excellent resource to introduce the topic of women as aviators and especially as military pilots. Biographical sketches of Jacqueline Cochran, Cornelia Fort, and Nancy Harkness Love are provided, along with details about the formation and militarization of the WASPs. Special features include descriptions of the B-29 airplane, its use by the WASPs, video clips of the Superfortress in flight, and diagrams of the plane. There is even an excerpt from chapter 5 of the book, *A WASP among Eagles: A Woman Military Test Pilot in World War II*, by Ann Baumgartner Carl.

GRADES 9-12

Along with the suggestions from grades 6-8 to use the “Fly Girls” film (either small clips, or the entire episode), as a springboard into the topic, there are additional materials available from PBS that could be used in the classroom. Among these special features are: transcripts of interviews with WASP veterans, official statistics of WASP service, several pieces of official correspondence relating to the WASP program, an extract from a pilot’s log book, letters and articles written by the service members, songs from the WASP songbook, and a few documents related to the B-29.

Extension idea: The Women in Aviation International website

<https://www.wai.org/pioneers/100womenscript.cfm> has a list of what the organization considers to be the 100 most influential women in aviation and aerospace. Students could create their own timelines and include famous firsts, record setters and record breakers, etc.