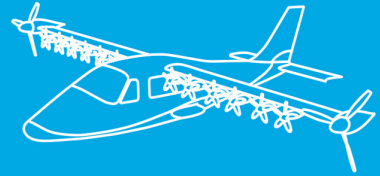
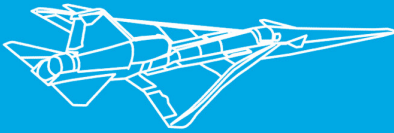


logbook

pilot



Flight Log

FLIGHT LOG
ENDORSEMENT
CODE
LBPI30

STEM ACTIVITY:
Pilot Logbook Activities

OVERVIEW

In this activity, students will be using a fictional pilot logbook and map to learn and practice map reading skills. They will also learn to analyze information found in a logbook.



Grade Level: 3rd-6th



Suggested Time: 1-1½ hours

Background Information

When it comes to airplanes and pilots, there are two very important logbooks that are used: an aircraft flight log and a pilot logbook.

An aircraft flight log, or aircraft logbook, is kept for every airplane. It documents flights, maintenance, and other important information about the airplane.

A pilot logbook is kept by every pilot and documents that individual's flying experience. Whenever a pilot flies, the flight is recorded in their logbook. This provides a historical record of their flight, including what type of aircraft they've flown, how many hours they've flown and much more.

Both aircraft and pilot logbooks from the past provide a unique account of history. For example, the page of the flight logbook shown in Figure 1 is from a US Marine Corps pilot's logbook. The logbook belonged to Lieutenant Colonel Marion Carl and shows some of his flights from 1947. The last entry shows that he set the world speed record at the time by flying at 650.6 miles per hour.

Date	Type of Machine	Number of Machine	Duration of Flight	Character of Flight	Pilot
17	D-558	971	.4	E	J Self
17	D-558	971	.4	E	J
18	D-558	970	.3	R	"
18	D-558	971	.4	R	"
19	D-558	971	.4	R	"
20	D-558	971	.4	R	"
25	D-558	971	.2	R	"
25	D-558	970	.3	R	"

Passengers	Remarks
	Familiarization (Marec)
	Familiarization (Marec)
	Test - Practice Runs
	Test - Practice Runs
	Test - Practice Runs
	Test - Practice Runs
	Familiarization - World Speed Record
	Official Flight Test Section NAS, Patuxent River

Flight Time	Pilot	Pass.
This Month	22.7	
Brought Forward	3580.6	
Total	3603.3	

I certify that the foregoing flight record is correct. Jct - 3.6

Marion E. Carl

Approved: R. D. Schultz
Lt. USN

Figure 1. A page from Lt. Col. Marion Carl's pilot logbook. Source: [US Navy](#)

Activities

1. Three activities are found below; a map reading activity, a pilot logbook activity, and an activity to compare flight routes to driving routes on a map. If done in order, they help students develop the skills necessary to complete the next activity. However, they are also designed to be completed as standalone activities for students who already possess the necessary skills.

Answers

Map Reading Activity:

1. Amelia Mountains
2.
 - ODS to SLK: 120 km
 - AAL to KLR: 210 km
 - SLK to KLR: 180 km
 - SLK to AAL: 150 km
3. SLK (Saint Lucienne Airport)
4. Approximately 200 km
5. Answers will vary
6. Answers will vary depending on the location of the new airport

Pilot Logbook Activity:

1.
 - a. X-57
 - b. 1 hour
 - c. 120 km
 - d. 240 km
2.
 - a. Flight path should be drawn on the map
 - b. 90 minutes (or 1 hour, 30 minutes)
 - c. 540 km
 - d. KLR (Kingston-Lovington Regional Airport) to AAL (Amelia Airport)
3.
 - a. 2 times
 - b. 90 minutes (or 1 hour, 30 minutes)
 - c. The purpose was to deliver medical supplies and then fly back.
 - d. Answers may vary. Some possible answers include that wind affected the airspeed or the plane flew slower with the medical supplies onboard.

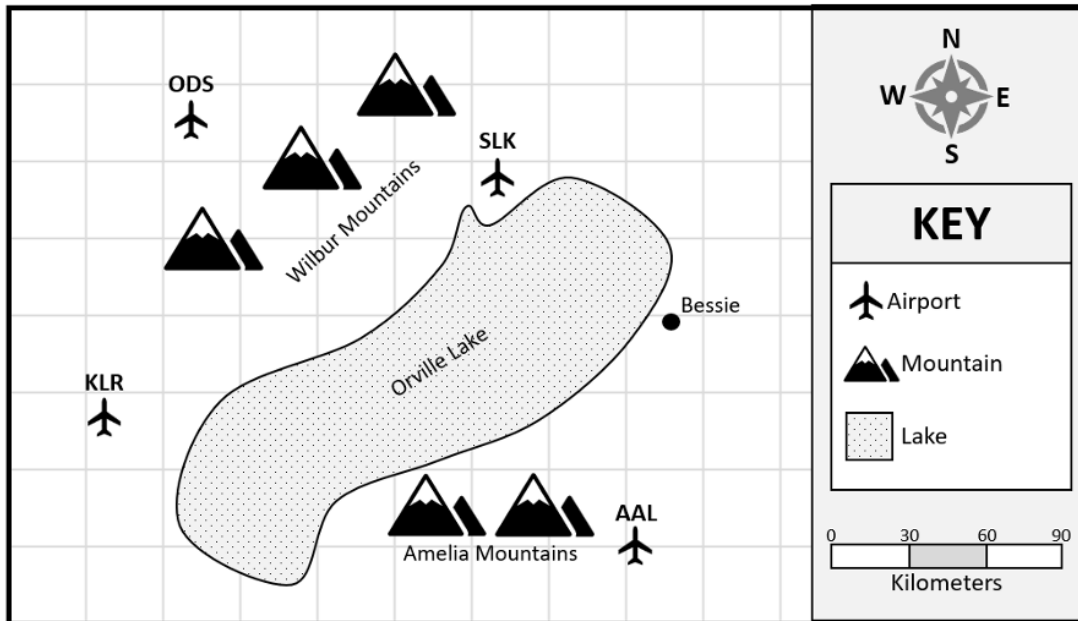
Routes Activity:

1.
 - 150 km
 - Approximately 250 km
 - Answers will vary. Some possible answers include it is quicker or it may be safer.
2. Flying is 120 km and driving is approximately 220 km, so it is about 100 km shorter to fly.

Name: _____

Date: _____

MAP READING ACTIVITY



The map above shows an area which has 4 different airports. Each airport is identified by an airport code found on the map. Use the information on the map to answer the following questions.

1. If an airplane were to fly straight from the Amelia Airport (AAL) to Kingston-Lovington Regional Airport (KLR), which mountains would the pilot have to fly over? _____
2. Use the scale to figure out the distance an airplane would fly if it were to fly straight between the two airports listed below:
 - From the Oxford Airport (ODS) to the Saint Lucienne Airport (SLK): _____
 - From the Amelia Airport (AAL) to the Kingston-Lovington Regional Airport (KLR): _____
 - From the Saint Lucienne Airport (SLK) to the Kingston-Lovington Regional Airport (KLR): _____
 - From Saint Lucienne Airport (SLK) to the Amelia Airport (AAL): _____
3. Which airport is located closest to Orville Lake? _____
4. How far is it from the southwest corner of Orville Lake to the northeast corner of the lake? _____
5. A new airport needs to be built near the city of Bessie (shown on the map). Draw this new airport on the map and make up a name and airport code for the new airport.
 - Airport name: _____
 - Airport code: _____
6. How far would a flight straight from the Oxford Airport to the new airport be? _____

Use the map and pilot logbook to answer the following questions. The airport codes are given in the box.

1. On December 1, Orville flew from Kingston-Lovington Regional Airport to Oxford Airport and back.
 - a. What type of airplane did Orville fly for this trip?
 - b. What was the total flight time for this trip (the combined time of the flight to Oxford Airport and the flightback)?
 - c. What is the distance between the Kingston-Lovington Regional Airport and the Oxford Airport?
 - d. Assuming he flew straight from one airport to the other, what was the total distance Orville flew for this trip?

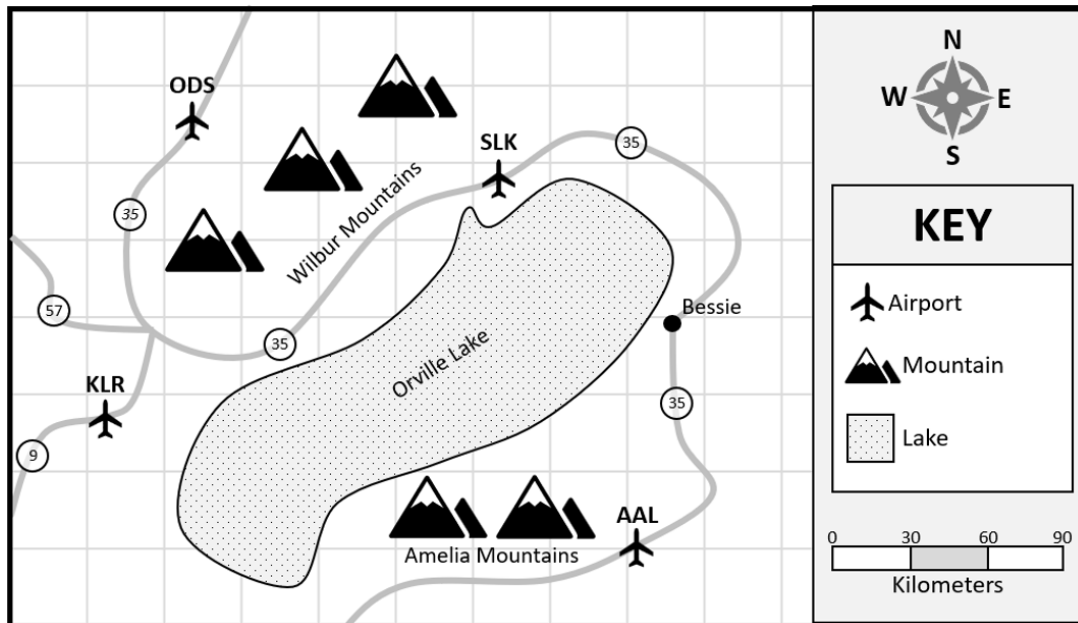
AIRPORT CODES
AAL — Amelia Airport
KLR — Kingston-Lovington Regional Airport
ODS — Oxford Airport
SLK — Saint Lucienne Airport

2. On December 5, Orville left from Kingston-Lovington Regional Airport. His flight took him over two other airports before landing back where he began.
 - a. On the map, draw all three parts of Orville's flight path from December 5.
 - b. What was the total flight time for this flight?
 - c. Assuming he flew straight from one airport to the next, what was the total distance flown on December 5?
 - d. Which of the three parts of this flight covered the longest distance?
3. On December 9, Orville flew the FT-67 which is an electrically powered flying taxi.
 - a. How many times did Orville land the FT-67 on December 9?
 - b. What was Orville's total flight time on December 9?
 - c. What was the purpose for Orville's flights on December 9?
 - d. The flight from Saint Lucienne Airport to Oxford Airport took longer than the flight back. What could be a possible reason that the first flight took longer than the second one?

Name: _____

Date: _____

ROUTES ACTIVITY



The map above shows an area which has 4 different airports. Each airport is identified by an airport code which can be found on the map. The airport names for each code can be found in the box below.

Use the information on the map to answer the following questions. A piece of string might be helpful in making measurements to answer some of the questions below.

A new electrically powered flying taxi was just brought to the area. It is used to bring people and things from one airport to another.

1. The flying taxi is used to bring people from Amelia Airport to Saint Lucienne Airport.
 - a. If the flying taxi flies straight from Amelia Airport to Saint Lucienne Airport, how far does it fly?
 - b. If the passengers were driven there instead, they would travel along Route 35. How far of a drive would this be?
 - c. Besides the difference in the distances driving versus flying, what might be another advantage to flying the passengers instead of driving them?
2. A hospital near Oxford Airport needs medical supplies that are at the Saint Lucienne Airport. How much shorter is it to fly between these two airports than it would be to drive between them?

AIRPORT CODES

AAL — Amelia Airport

KLR — Kingston-Lovington Regional Airport

ODS — Oxford Airport

SLK — Saint Lucienne Airport

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