

The Incredible Flying Taxi (1080L)

Step 1: Before Reading Poll (Write Your Answer)

Some places are planning to offer air taxi services using "flying taxis." What do you think?

One day, people will use flying taxis more than regular taxis.

- Do you agree or disagree?

Step 2: Article (Read the Article)



Photo credit: Kamran Jebreili/AP

A pilotless prototype of the Volocopter air taxi flies past two skyscrapers in Dubai in 2017.

FRANKFURT, Germany (Achieve3000, February 19, 2019). You're heading to a family reunion in Frankfurt, Germany, and the flight there is a prolonged nightmare. By the time you finally arrive at the airport, it's likely that Grandma's strudel has already been devoured. As you watch the hordes of travelers charging at the taxis and buses so they can leave the airport, you become apprehensive that you might not get to see Grandma at all.

You may have better luck in about 2020, when air taxis are expected to be fully operational at Frankfurt Airport.

That's right—air taxis. Based on drone technology, these electrically powered vehicles will rise vertically and noiselessly into the sky and whisk you away to your destination in a fraction of the time it takes other modes of transportation. The air taxis to be used at Frankfurt Airport are called Volocopters. The Volocopter has 18 rotors, two seats, and a joystick that points the aircraft where the pilot wants it to go. Volocopter is both the German-based manufacturer of this air taxi and the name of the vehicle itself.

Yes, folks, the future is here.

The Volocopter prototype was air-tested in Dubai, United Arab Emirates, in 2017 and proven to be safe and passenger-ready. Frankfurt is now slated to be the first European city to fly Volocopters regularly.

The initial Volocopters may each have a pilot at the helm, but the vehicles are already capable of being partially or completely autonomous, like self-driving cars. This is achieved through a system of more than 100 microprocessors and sensors that automatically adjust the aircraft's position and altitude, manage turbulence, correct pilot errors, and land the vehicle safely, even in an emergency.

The chances of anything going wrong, however, are next to none. Volocopters have built-in safety features designed to keep them in the air, even if their motors fail. Volocopters are also ecofriendly because they're completely carbon- and emission-free.

Twenty-first-century technology doesn't get better than this.

But can the Volocopter take you anywhere you want to go? Not quite. Instead, it'll make an aerial beeline to a "hub," a small, circular landing platform attached to the side of a city skyscraper. It's like a train station for air taxis. Once the Volocopter lands, a conveyor belt glides it inside the building. This clears the platform for the next arrival and allows passengers to disembark the Volocopter comfortably, away from the rain and wind.

The conveyor belt then glides the Volocopter to a power station, where a robot replaces the battery pack. (The battery has enough power for a 17-mile—27-kilometer—ride.) The Volocopter is now ready for its next pickup and drop off.

It's estimated that a single hub can handle as many as 1,000 passengers an hour with smooth efficiency. This should help clear up the transit congestion at Frankfurt Airport, which hosts about 70 million travelers annually.

But airports are just the beginning.

In time, small Volo ports could be set up just about anywhere—on rooftops, above train stations and malls, and at preexisting heliports. And air taxis could very well be the answer to tomorrow's urban traffic. Of course, a system for air traffic management would have to be in place, but we're getting ahead of ourselves.

To start, air taxis will take off in Frankfurt—once the European Aviation Safety Agency develops standards of operation and works out the legalities of pilotless flying. But Frankfurt isn't the only city with plans for regular air taxi service, nor is Volocopter the only air taxi manufacturer.

Welcome to Uber Air!

You guessed it. The car-on-demand tech company is now aiming for the skies. Uber has partnered with several aircraft manufacturers, including Bell Helicopter. Uber and Bell unveiled their own air taxi, Nexus, at the 2019 Consumer Electronics Show in Las Vegas, in the U.S. state of Nevada. Uber hopes to offer the first-ever aerial rideshare networks in Dallas, Los Angeles, and a third location by 2023.

Things are looking up, up, up for air taxis. But with technology being as fast-paced as it is, who's to say that once they get going, something even cooler won't come along? How about a slip-on jetpack vest with matching boot blasters?

*The Associated Press contributed to this story.
Volocopter (used with permission)*

Dictionary

apprehensive (*adjective*) nervous; fearful

autonomous (*adjective*) able to operate independently or without the guidance of others

congestion (*noun*) overcrowding; a blockage that occurs because of too many cars or people in one place

prototype (*noun*) a trial model or early version

Step 3: Activity (Answer the Questions)

Question 1

What is this Article mainly about?

- (A) Because it hosts about 70 million travelers each year, many of whom take taxis, Frankfurt Airport in Germany is often congested.
- (B) The Volocopter air taxi prototype was tested in Dubai and determined to be both safe and passenger-ready.
- (C) The German-based company Volocopter has announced plans to use a robot to replace the batteries in its air taxis between flights.
- (D) In 2020, for the first time ever, air taxi service will be offered as a transportation method from Frankfurt Airport.

Question 2

Which two words are the closest **antonyms**?

Only some of these words are used in the Article.

- (A) Standards and legalities
- (B) Autonomous and initial
- (C) Prototype and original
- (D) Prolonged and brief

Question 3

This Article would be **most** useful as a source for a student research project on _____.

- (A) Safety features that use microprocessors and sensors
- (B) The future of drone technology being used to transport humans
- (C) A look back at the history of Frankfurt Airport in Germany
- (D) The partnership between Uber and Bell Helicopter

Question 4

Which of these is a statement of fact?

- (A) It is unlikely that Uber's planned aerial rideshare service will be able to compete against Volocopter in the air taxi business.
- (B) Air taxis operated by human pilots will be much more comforting and efficient than autonomous technology controlled by computers.
- (C) The decision to use autonomous vehicles at some of the most congested airports in the world is understandable but unwise.
- (D) Before Volocopters can begin regular takeoffs from Frankfurt, the European Aviation Safety Agency must develop standards of operation for pilotless flying.

Question 5

Which is the closest **antonym** for the word *apprehensive*, as it is used in the Article?

- (A) Unconcerned
- (B) Sincere
- (C) Realistic
- (D) Dissatisfied

Question 6

The author probably wrote this Article in order to _____.

- (A) Inform the reader that the European Aviation Safety Agency is trying to work out the legalities of pilotless flying
- (B) Compare the air taxi created by Volocopter with the one created through a partnership between Uber and Bell Helicopter
- (C) Describe new transportation technology that is expected to make air taxis operational at Frankfurt Airport
- (D) Inform the reader about a Volocopter test in Dubai that proved the vehicle is safe and passenger-ready

Question 7

Which passage from the Article best supports the idea that Volocopters have other benefits besides being an efficient way to handle a large volume of passenger traffic?

- (A) Volocopter is both the German-based manufacturer of this air taxi and the name of the vehicle itself.
- (B) Volocopters are also ecofriendly because they're completely carbon- and emission-free.
- (C) But Frankfurt isn't the only city with plans for regular air taxi service, nor is Volocopter the only air taxi manufacturer.
- (D) But can the Volocopter take you anywhere you want to go? Not quite.

Question 8

Based on the Article, which is most likely to happen next?

- (A) In addition to Volocopter, Uber Air, and Bell Helicopter, other technology and transportation companies will develop air taxis for use in cities where street traffic is heavy.
- (B) Volo ports will be restricted to one high-rise building in each city to avoid having too many air taxis in the air at one time.
- (C) The Volocopter air taxi will become the best option for a parent traveling with many small children.
- (D) After Volocopters start departing from Frankfurt Airport, people will realize that air taxis are more efficient than airplanes and will choose them for long-distance travel.

Step 4: After Reading Poll (Did you change your mind?)

Now that you have read the article, indicate whether you agree or disagree with this statement.

One day, people will use flying taxis more than regular taxis.

- Agree
- Disagree

Step 5: Thought Question (Write Your Response)

Describe the way air taxi services will work. Also, state whether you think these taxi services are the "wave of the future," and explain your reasoning. Use facts and details from the Article in your response.