

Technology soars in advancing critical communication, safety for pilots, passengers

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PlaneEnglish is an aviation radio simulator to help new pilots acquire radio

communication skills. Credit: Purdue University

The Federal Aviation Administration has been putting an increased focus on English language proficiency for pilots as the agency looks to ensure safety for passengers through improved communication.

The move means increased attention for a technology called "[Plane English](#)," created by two Purdue University alumni that aims to help new pilots master radio communication skills and better interact with air traffic controllers.

Muharrem Mane, an alumnus from the School of Aeronautics and Astronautics, and Eren Hadimioglu, an alumnus from the School of Aviation and Transportation Technology, created and developed PlaneEnglish. The technology's simulator is now used in dozens of airports across the United States and was recently launched for iOS.

"PlaneEnglish is an [aviation](#) radio simulator to help new pilots acquire radio communication proficiency by developing advanced skills more in realistic environments," Mane said. "We have heard from users that they improve their radio communication skills in one hour through our platform than they do in flying for a dozen hours."

The app-based tool also aims to help new pilots reach FAA and International Civil Aviation Organization standards for Aviation English language use, put in place to ensure safety in the sky.

"We have been analyzing audio training files from the FAA and ICAO and using that data to establish our grading metrics to help users achieve the necessary communication skills to increase their [radio](#) proficiency and aviation safety," Mane said.

PlaneEnglish lessons guide users through simple and complicated interactions with air traffic control on every phase of flight. Each simulation includes visual clues (like altitude, distance from an airport and direction) to provide the [pilot](#) with the situational awareness necessary for communication.

Users are required to respond properly in specific situations, using the correct phraseology, speech rate and other factors. There can be as many as five or six exchanges back and forth with air traffic control. Then users are graded on those responses.

Provided by Purdue University

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