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SOUNDS AMAZING

A NEW SOFTWARE PACKAGE IMPROVES THE QUALITY OF IN-FLIGHT ANNOUNCEMENTS IN AIRCRAFT CABINS AND AIRPORT TERMINALS

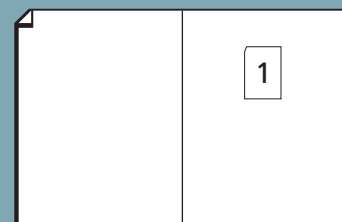


AviaVox, a Dutch manufacturer of automatic intelligent announcement systems for airports and airlines, has expanded its activities to support the announcements that are made by cabin staff and pilots during the flight. Extending to aircraft from its usual airport services, AviaVox has added another software package to support the daily information needs of passengers while they are travelling.

Frequent travellers will undoubtedly be familiar with the sounds being broadcast by the loudspeakers in the cabin, polluting the air with nothing but noise, and providing no useful information. In fact the sound quality of the announcements is often so poor that one wonders why they are made in the first place. The laboured attempts to address passengers in languages other than those usually spoken by the cabin crew or pilots only make things worse, and the situation deteriorates further once the aeroplane is in the air: the noise of the engines immediately drowns out any announcements emanating from the loudspeakers.

So why are these bad-quality announcements still being made? First of all, some of them are compulsory by law, particularly in the case of safety regulations and security. Other announcements are intended to provide passengers with flight information, such as the conditions in the air, transfer information and weather conditions at the destination. All these announcements are very useful as long as they are made in an audible and correct way.

1. AviaVox has developed a new technology to make computers speak



The audio equipment in aircraft, particularly the loudspeakers, is often of a low quality due to budget constraints. This does nothing to improve the quality of the announcements in environments with a lot of ambient noise. Having said that, larger aeroplanes today are equipped with monitors that support the audio announcements with video. This combination works well, because the moving images enforce the often bad-quality announcements in a positive way. But what about all the aircraft that have no screens in the passenger areas? These share the same issues:

- Cabin staff voices are not selected to make announcements;
- Cabin staff are not trained to make aircraft announcements;
- In a majority of cases, cabin staff only speak their native language;
- Pilots in the cockpit are isolated from the cabin and do not hear themselves speaking through the loudspeakers in the cabin, and therefore cannot correct bad audibility;
- If English is spoken, it is often heavily accented;
- The acoustic limitations within the cabin are not dealt with;
- The high ambient noise is not adequately dealt with;
- The quality of the loudspeakers and microphones is often poor;
- The effectiveness of announcements is low because too much information is provided to passengers;
- Pre-recorded announcements are not flexible to deal with dynamic changes.

These factors all create an announcement that cannot be understood by many of the passengers. In the case of frequent travellers this is of less importance as they do not tend to listen to the announcements; for them it is only noise that they have not asked for. But people who do not fly regularly feel insecure because they have not been able to listen to information that could have been essential.

AviaVox has now enabled the use of its phoneme software in the cabins of aircraft, creating more intelligible audible announcements in multiple languages that can be understood by virtually every passenger on an aircraft



All these issues have been identified by AviaVox, a company that has developed a new technology to make computers speak. AviaVox's systems use a special phoneme technology and are being used successfully by large airports

such as London Heathrow, Moscow, Amsterdam and New Delhi.

Phonemes are very small digital speech fragments that, when used in a specific combination, create a single word; a compilation of these words eventually generates complete sentences that can be spoken by a computer. A word like 'passengers' can be composed of 36 different digital speech fragments, just to get the intonation, speed, volume and 'bridging' to other words right. The system software can truly be considered as 'artificial intelligence' because it has the ability to let the computer behave as if it were a human being.

This implies that intelligent actions are taken when the system cannot compile a specific word. It simply leaves out the word it cannot compose and replaces it with something else, adapting the complete grammar of the sentence in order to still make a sensible announcement. These kinds of dynamic adaptations normally belong to intelligent living creatures that

have evolving capabilities for which they have trained their brains. The AviaVox system can do it as well.

AviaVox's systems share one thing in common: they all support the daily operations of staff in the aviation world by making effective, high-quality, audible announcements in order to adequately inform passengers. This is done at airports, guiding travellers from one point to another, and within the restricted areas of the boarding gate to support the boarding procedures of an individual airline. For the latter application the system can create more than 0.8 trillion kinds of grammatical constructions – if they were printed, they would require about 2,000 trucks with a 10-tonne capacity just to move the paperwork around.

AviaVox has now enabled the use of its phoneme software in the cabins of aircraft, creating more intelligible audible announcements in multiple languages that can be understood by virtually every passenger on an aircraft. Information provided includes weather conditions at the destination, flying height, catering, entertainment programmes on board, and also courtesy announcements and information about connecting flights, changing gate numbers, security, safety, and so on.

In this way, travellers are pleasantly guided and informed from the moment they set foot in an airport until the moment they arrive at their destination. AviaVox has once again been able to deliver an innovative software package to the aviation market, closing the gaps in the overall information chain and meeting the expectations and requirements of passengers.



***More than 180 million passengers
listen to AviaVox announcements!***

***Artificial Voice systems by AviaVox.
It's more than crystal clear!***

We integrate our speech system with your (existing) Flight Information System, Gates and PA-System, so that you can make announcements with high intelligibility in multiple native foreign languages. Contact us for a demonstration.

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