COMMUNICATION ESSENTIALS

Ensuring controllers can deal with any situation, whether in the tower, center approach or remote towers requires the right communications equipment

Benjamin Baier, head of business development, Imtradex

The right equipment is essential for any ATCO. It does not matter whether you are in the tower, center or approach or if you deal with multiple airports via remote towers. The right choice of provider for the personal communication equipment is important. Imtradex Hoer- and Sprechsysteme GmbH is one of the leading manufacturers of advanced and innovative communication solutions for the ATM environment.

From tower to simulation, every area is covered with innovative products from Imtradex. As a leading light weight manufacturer, Imtradex just recently launched a new lightweight headset for critical communication purposes in control rooms, tower, and other applications – the AirTalk 5000.

Flexible and light

The Imtradex AirTalk 5000 is designed to make your shift as comfortable as possible. The headset is lightweight, but also tough. Imtradex can connect to nearly any voice communication system globally with its long track record of providing reliable communication equipment to ANSPs all over the world. The AirTalk 5000 can be equipped with two different PTT buttons, called the PTT-19 and PTT-13.

The PTT-13 is designed as a pistol grip. It lies well in the hand and can be intuitively used from start up. The PTT-13 is also available in a version including a volume control at the PTT.

The curved housing design of the PTT-19 with its depressed push-to-talk button for no unintentional pressing, lies perfect in the palm of your hand. The connection cable to your choice of VCS system is made especially for the user and is available in different lengths for different use cases. For example, the use of an AirTalk 5000 in the tower requires a different length of the connection cable, up to 7m (23ft) extracted or a shorter version when using it in a center or remote tower environment of up to 3m (10ft) extracted.

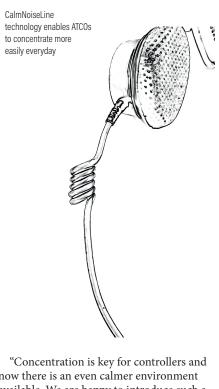
The AirTalk 5000 series is available in a single-sided version, called XS and a dual-sided version, which can either be a mono or stereo / splitting type of headset and is called XD. The state-of-the-art microphones and the opportunity to choose between an electret or dynamic type gives the user a fully flexible option for any voice communication system. These microphones



are designed to meet the needs of ANSP's all over the globe.

Calm down

Calm is one of the top skills an ATCO needs to have for mastering their daily work in the best way. Imtradex is introducing the CalmNoiseLine (CNL) technology for clearing and depressing unwanted and unintended noise from the structure of the lightweight headset. The design of a lightweight headset usually does not allow for an acoustical separation of the cable, the cable inlet and the housing. Hence almost any design of lightweight headsets has to make some sort of compromise in noise. Imtradex's introduction of CNL technology is a key factor to increasing concentration for the ATCO.



now there is an even calmer environment available. We are happy to introduce such a new innovative approach for our reaching a next step for our lightweight customer. This is one step more to our primary goal for the ultimate light weight headset," says Benjamin Baier, head of business development from Imtradex.

Comfort features

The Coolmax ear cushions were introduced to the AirTalk headset to give the highest

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amount of comfort while wearing the headset on shift back in 2008. The technology used is a sport fabric offering immediate removal of any occurring perspiration around the ear. It is well proven because the material is used for shirts, socks, and other clothing for making work more comfortable. There are also other ear cushions in leatherette available.

Different sizes for the ear cushions also give an ideal choice for any user, including a XL version of the ear cushion, which is a more over the ear type.

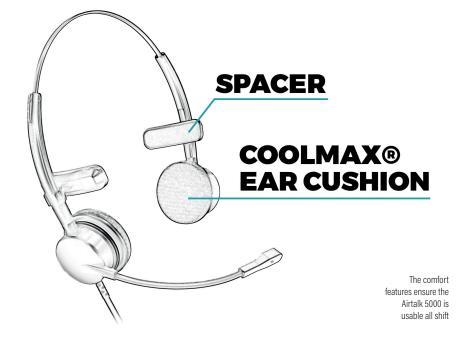
Furthermore, the Spacer distance clips are a highly innovative accessory which any ATCO should know of. The Spacer allows for the allocation of light contact pressure to a more dedicated place above the ear. This means the ear cushion is not directly pressed on your ear, helping to have a better air circulation and less contact pressure directly at your ear.

All the headsets will be delivered in the AirTalk bag. The bag allows a safe and stable storage of the headset while it is not in use. On the top side, you can fix the headset with the headband to the bag. On the bottom side, you can safely stow away your PTT button and the connection cable. There are smaller pockets available to have the accessories and spares within reach, such as the different ear cushions or the Spacer.

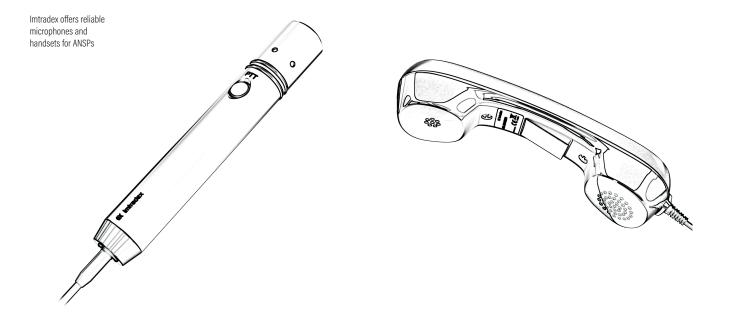
Rounding up the AirTalk family

For a complementary portfolio Imtradex is also offering more than the headsets. ANSP also need handsets and microphones. Imtradex offers such devices as well. The classic design of the handset HS3 is well known. The handset is very flexible with several different choices, such as reed contact, USB or even different microphones. Every connection to the VCS system is based on the customer and can be perfectly adapted to individual needs.

Furthermore, there is a hand microphone type available for an easy use. The HT2 hand microphone consists of an anodized aluminum housing for the highest stability and long operating times. The flexible choices for connection to a VCS is also available, as the length of the connection cable varies on the several use cases for the customer. The PTT is protected against unintended pressing. A different choice could be our just newly release HT2 Base



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version. The HT2 Base is a combination from desk microphone and hand microphone types. It has a big footprint for ease of use and a stable design. The grip to housing is intuitive and the PTT button can be handled well. The combination allows a multiple use in tower or center applications.

Training and simulation

Training and simulation is key for every ATCO, especially in times where traffic is very unstable. Training and simulation shall be as close as possible to the operational requirements. On the military side it is called train as you fight. Meaning that any procedure is trained and can be intuitively and adding just a USB connection to it. The dongle can be flexible used and has a compact size for being able to even use it in a home office training environment. The Imtradex USB technology allows an easy connection to Windows and Linux based operating systems. A more advanced possibility brings the AirTalk SimBox for the ANSPs. It includes the opportunity to have also a trainer connected to the system. The trainer can hear anything and would be able to interrupt with priority into the simulation and training session if needed.

The Imtradex USB technology offering digital noise processing for the best quality in any environment, especially in

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used in case of an emergency. The best situation is when the training and simulation equipment is the same as the operational. There are several ways to achieve such a comparison with Imtradex.

First of all, the headsets and PTT buttons are also available as a USB device already operating with existing training and simulation software provider. But it is only way connecting the headsets, handsets, and microphones to it. One of the other options would be to use the AirTalk USB dongle. A small dongle for use at the simulation system to connect the operational headset combination with the noise cancelling microphone on the headsets. Furthermore, we offer a unique serial number for each of our headsets, so the customer is able to adjust the volume for each of the same headsets separately.

Stay tuned for more

Imtradex's product and technology pipeline is full of exciting new products and innovative features. One of them is the AirTalk BlueRevario wireless push-to-talk button. As new technology develops further, so too does the safety and reliability of such technologies. The BlueRevario combines the handy ergonomics of the PTT-13 button with state-of-the-art wireless technology. The device is highly interesting for applications such as tower or control rooms.

Another interesting new feature is the addition of NFC (near-field communications) technology to the AirTalk product family. From autumn some products will be able to be tagged with a smartphone. The user will then get access to a specific database to learn more about the product, available services and spares. They will then be able to download the manuals and check the latest product and training videos or just as easily contact Imtradex. Also, the option to receive the latest news right away with a push notification to the smartphone will be available in the future.

Overall approach

"The Imtradex team is highly motivated to support our clients, ANSPs around the world alongside our long-term partners and our first level support team. There will be an even further increase of support thanks to our soon to be introduced introduced NFC approach," says Ralf Kudernak, owner and CEO of Imtradex.

The company operates out of Germany, close to the busiest airport in Germany, Frankfurt/Main and even closer to the headquarter of the German ANSP DFS, in Dreieich. From there they support their worldwide partners and ANSP's with everything they need for their communication equipment. �