


# OPERATIONAL INTELLIGENCE

High quality and reliable communications equipment is essential to ATC operations

Benjamin Baier, head of business development, Imtradex

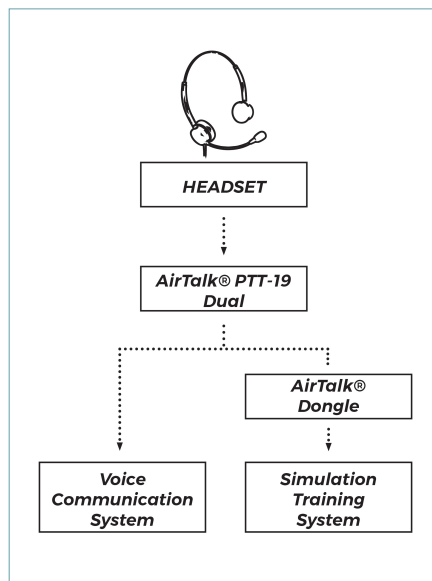
 Training is part of each ATCO not only during apprenticeships, but also during operations. Training is a vital part of an ATCO's job. For best practice training the best solution is to use the exact same tools as for operations. The Imtradex portfolio provides outstanding support for operational and simulation purpose. As one of the leading manufacturers for communication equipment dedicated to the ATC environment, Imtradex is working not only with world's best ANSP's, it is also working closely with the world's leading VCS and radio manufacturer, as well as the leading simulation system provider.

Dedicated to the most competitive operational and simulation efficiency Imtradex is providing their AirTalk Dongle concept, already introduced to ANSP's. In short words: USB connectivity to operational devices.

The AirTalk Dongle provides instant USB technology to connect to the simulation system. The comprehensive technology is not limited to the AirTalk headset series and can be used with others as well. Furthermore, the AirTalk Dongle provides a steady operation efficiency.

Each operational device can be easily adapted to the concept. This simplifies operations for the simulation and reduces the total amount of different devices and hence reduce the total costs of ownerships as well. The headset is a very personal device and has got even more personal in the last years. The AirTalk headset portfolio provides a very complete set of devices and accessories. The headset can be supplied in a single sided (XS), dual sided (XD) or in a stereo/splitting version.

The headsets are supplied in a perfect hand carry bag – to be safely stowed away during the shifts. The bag contains pockets for the respective accessories, i.e. the personalization, the unique Spacer – a tool for making the wearing even more comfortable – or different ear cushions. The ear cushions are available in different sizes and different materials. The CoolMax is a



fabric from the sports industry and is giving a coolness effect to the ears. The other option could be a leatherette cushion.

## 30 years of excellence

Founded in 1992 Imtradex is an owner managed company. Located in Dreieich, Germany, close to the largest and busiest airport Frankfurt/Main and even closer to the DFS center in Langen. This means the company has a good reach all over the globe. Imtradex manufactures its headsets, handsets and PTT buttons for the aviation industry solely in the headquarter in Dreieich. Also, sourcing is done very locally, where it becomes possible.

## Latest developments in ATC

The AirTalk 5000 was introduced in 2020 is already in use at several ANSP's, with more to come soon. The headset design is focused



## *“The headset is a very personal device and has got even more personal in recent years”*

on being lightweight, contributing to the high safety goal of not causing any tiredness due to the weight. Besides the weight, it is highly stable and robust for longevity. The rotating suspension allows any head movement without effecting the fit of the headset itself. The newly introduced CalmNoiseLine (CNL) technology brings the light-weight experience at a new level. The existing effect, due to the light construction, of structure-born noises is disappeared completely. On headsets with CNL technology you can find a small curly cable part close to the headset inlet. This brings further calmness and concentration into the daily operations of the ATCO. Also, the safety of the ATCO is key, especially the hearing of the controllers needs to be safe. Everybody has already heard acoustical peeks in the telephone line or in the radio. Acoustic Shock Protection (ASP) provides

safety to hearing. The system ensures volume peaks are reduced to a safe level.

Furthermore, the existing portfolio of accessories also fits the AirTalk 5000.

30 years of being an excellent partner for ANSP's all over the globe led to the development of the brand-new AirTalk PTT-19 Dual. The just newly released PTT provides a dual PTT capability for the ATCO to enhance communication capabilities at hand. The PTT-19 Dual is based on the already existing and multiple thousand times fielded PTT-19. The same comfort is provided to the dual PTT version. The cable outlets are ideally placed for the best usability and a long lifetime. The PTT buttons are available in different colours and can be ordered with an embossed printing and a safety bulk in between the two buttons. So, the visual and tactile sense can be addressed to have the highest safety. The

most versatile PTT-19 Dual fits perfectly into the palm of your hand, as the original design of the PTT-19. The new PTT is adapted into the complete AirTalk family.

As already introduced before, the new AirTalk PTT-19 Dual is also a great success story. The product is designed for simplifying operations for the Air Traffic Controller, especially in remote tower operations, which is also one of the first projects for the new product.

The customer was used to having a dual PTT option on a hand microphone in the local tower application. During the switch to the remote location the use of headsets was also preferred and the question of a dual PTT was raised. The ATCO is now wearing headsets and doesn't need to switch TX channel each time at the voice switch at the touch screen. They can now use the PTT button as comfortable as possible, and the Scandinavian customer is now able to do the job easier and safer than before.

### **The AirTalk family**

Imtradex has a wide variety of products for the ATC communication needs. The company is a complete provider of communication equipment for the ATM area. Starting with various options for a handset, Imtradex has two choices of devices – the handset HS3 and the handset HS4. The classic design of the HS3 makes it a very easy to handle device. Due to the high flexibility the devices can be used in nearly any situation. The big PTT button on the handle is perfectly placed. The device can be delivered as a REED or non-REED version, as a USB type or just an analogue device. The correct adaptation to the VCS system is done by Imtradex.

The second handset is the HS4 with its modern design. It has a RJ connector on the bottom side and can be easily connected to a wide range of systems. There is also an option with USB. It is available in two options, with or without PTT. Increasing interested are also shown in the hand

microphone section of Imtradex. The latest launch was the HT-2 Base device, which is a device dedicated to usage in the tower. The device is used to be like a classical hand microphone, but the big foot plate enables an easy stand of the microphone. For tower applications this brings great advantages, as you can easily place the device wherever you are. The crystal-clear microphone capsule transmits audio signals for the best transmission.

Also, the new Aurelis ATC device is a good choice for using with VHF radios in a tower or any other smaller places. The Aurelis hand microphone is well shaped and is a rubber line equipped device, which allows for safe holding in the hand. It can be equipped to all radios. The PTT-button is perfectly fitted, and the device has a great shape. It can be easily mounted into the car or at the control room, to be used and stowed away easily.

Furthermore, Imtradex provides a classic hand microphone. HT-2 is a cylindrical shaped device. Made of aluminium it is rugged and robust. The PTT button is easy to reach. The device can be easily fitted to the VCS system of the customer choice and with the correct connector. There are plenty of customization options. Together with the latest USB technology the HT-2 can also be easily used in the simulation area.



The PTT option



The AirTalk dongle

## Customer success

High flexibility and customization are a key qualification Imtradex is offering to their global partners and customers. Together with the high knowledge dedicated to the different VCS systems and different manufactures, it was the major decision factor for a big customer in the Middle East.

Due to the different locations and different systems there was a need to uniquely identify the headsets of each location and each system. The customer requirements are fulfilled within several different headsets. The headsets differ in colour and are different in the length of the connection cable to provide a purpose driven variant for tower and centre operations. In total there are 17 different variants supporting the individuality of the customer requirements.

Imtradex is an owner managed company with a high and dedicated knowledge to the ATC market. The requirements of the global ATCO community are very well taken into account on each new development, especially the small details such as the unique Spacer or the CoolMax ear cushion types, as well as the specific development of the new AirTalk 5000 for the ATC market. Furthermore, high flexibility and customization is a key factor for the success of Imtradex in the global market. There are also new and interesting things in the pipeline. Stay tuned for details during the year, the company says! ❖