

The economic downturn started in 2008 has raised huge challenges for the Aerospace industry, not only for operators such as airlines or cargo carriers, who had to merge to survive, but also in the maintenance industry, at all levels. Very recently, none of us has been surprised to see that American Airlines will be forced to lay off more than 13,000 employees. The division that will most suffer of this restructuration will be the Maintenance division with more than 4,600 employees laid off (more than 35%). As the maintenance costs are seen by the airlines as too high and the operational margin too tight in the USA, companies like TAECO in China or SIA Engineering in Singapore try to attract these airlines to externalize their production out of America, with lower maintenance costs, but hardly monitored quality. European airlines, such as Air France or Lufthansa have already been seduced by the mermaids of profitability at lower quality.

This is where ATEQ-Omicron believes that there is an opportunity on this market to stop this inevitable erosion. In 2008, the company Omicron has been integrated into the ATEQ Worldwide group of companies to make this reality a worldwide one. Today ATEQ-Omicron serves customers such as the French Army, Airbus, Sunwing, Air France, Air China, China Southern, or Thales...

The motto of ATEQ-Omicron, from its inception in 1991, has always been to propose a 3 words-triangle that has made its success around the world : **Affordability, Quality and Service**, by never privileging one to the detriment of the other.

Concretely, this motto turns into reality with the ATEQ-Omicron range of instruments, made of 4 main segments : The, Air Data Testers (ADSE Range), the Battery Testers (EEST Range), the Continuity Testers (AX Range) and the Leak Testers (H Range). On the side, we also manufacture Pitot-Static universal adapters.

Today, ATEQ-Omicron is introducing a revolution in the world of aircraft maintenance: the Air Data Tester ADSE643.

In 2008, when we started market studies all around the world to understand better the offer and bid for Pitot-Static testers, one thing shocked us. Why were the Air Data Test Sets so pricey? Was that because of a specific production process? Was that because of the intrinsic cost of components? As an answer to these questions, ATEQ-Omicron decided to set the prices of its range of Pitot Static testers at half the price of the market for RVSM equivalent Pitot-Static testers. And well, don't worry, ATEQ-Omicron is still a profitable company.

The ADSE643 answers to these questions even deeper by cutting the price of a Pitot Static tester to levels that have never been seen before in the industry of aircraft maintenance for new equipment.

The development of this unit comes from a request from a military customer in Asia, who has asked ATEQ-Omicron to provide them an equivalent to a competitor's unit. It had to be inexpensive and answer military quality standards.

So we did it. And on the way, we decided to make it better. Much better.

On the hardware side, the ADSE643 is a very simple, robust and cost-efficient box. The unit itself only weighs 11 lbs, has autonomy of 14 hours, is RVSM (accuracy is 0,01% of the Full Scale of Ps channel), and can reach altitudes of 50,000ft, rate of climb of 6,000ft/min and speeds up to 650kts. The tester is RVSM-compliant and operates on temperatures from 50°F to 122°F. The generation is made manually and can take a global volume of up to 3 Liters, which makes it complying with the test of Pitot Static systems from the smallest Cessna to a double aisle aircraft such as the Boeing 777-300ER.

We kept the renowned simplicity of use of the ADSE software with only 6 buttons on the ADSE643 : Up, Down, Enter, Cancel, ON/OFF, and Channel Change. There is also the possibility to set up automatic programs that allows making the tester a “shoot and forget” (the test!) unit. The software also features the possibility to perform programmable leak tests on the aircraft. Once the operator is done with the test, he can plug a USB Stick to the unit, get the data from an Excel formatted document, and then put it on his computer for print out or back up.

We also emphasized on the security: this tester features *security calibrated leaks* that turn off if the tester runs out of power because of low battery, or for any other mechanical or electrical problem arising on or off the unit : with the ADSE643, your aircraft is always safe. We have also created a both physical (key) and software (password) security so only accredited people can access to the sensitive data of the tester, such as the creation of automatic tests, the calibration menu, etc...

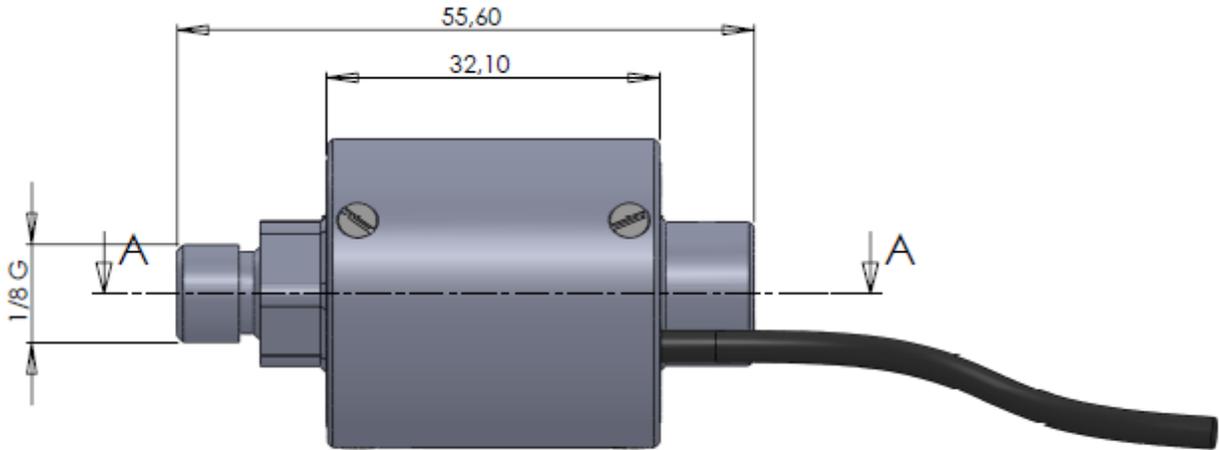
Options will be available for the ADSE643: The possibility to add external automatic pumps to replace the manual generation. Also, Ultra Low Speed (ULS) option will be available, in order to test helicopters speedmeters at very low speeds.

Now, one could wonder where the trick is. Indeed, how did we make all of that possible?

The answer is simple: ATEQ-Omicron has developed everything for this new unit, and each part designed has been seen as a portion of a whole to make this tester an amazing product.

For the weight, the anodized metallic black casing has been studied to be as strong and as light as possible for remote operations. The new regulation system was also thought in a way to considerably reduce the weight of the unit, while maintaining optimum regulation performance with a 1 foot and 1 knot incrementation possibility.

For the accuracy, we are introducing with this unit our brand new home-made pressure sensor TAPT (for Thermo-regulated ATEQ-Omicron Pressure Transducer). With the TAPT, it is now possible to forget about the operational temperature because the ADSE643 gives unprecedented stability, hysteresis and repeatability over time at temperatures ranging from 50°F to 122°F.



About the autonomy, the tester itself comes with 2 batteries, each of them being able to last 7 hours. The big change is that the operator can now replace the battery when the previous one is too low. It virtually gives an unlimited autonomy.

The interoperability of the unit makes it possible to plug an automatic pressure and vacuum pump (option) in replacement of manual pump generation.

The tester finally comes with a bag specially designed for the ADSE643, which you can carry on your chest and therefore perform the tests remotely with ease and comfort.

While developing this product for our military customer, we have come to realize the huge benefits that this unit could bring to small and medium sized aircraft maintenance centers. This unit is now extremely versatile in the way that it is made for two types of very different customers: First, the Maintenance Repair Centers all across America who want to dramatically reduce their maintenance costs while testing any aircraft with RVSM standards for the Ps and Pt channel according to the FAR 91.411 rules, and then the military customers who need to have an operational unit on the field, available at all times thanks to its ruggedized case and great autonomy.

In one word, this tester is a military grade product that repair centers will love, at an incredible price and quality of manufacturing. It all comes wrapped up with the ATEQ high quality Service.

Because our testers do more, and cost less.

It's that simple.

For additional information on the ADSE643 and other ATEQ-Omicron products please contact AvionTEq at 310-649-0400 or email to sales@avionteq.com.

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