

INDRA AND iALTITUDE DEVELOP THE FIRST SIMULATOR THAT TRAINS MILITARY PILOTS TO PREVENT HYPOXIA IN THE CABIN FROM LACK OF OXYGEN

- **It is a innovative system that will be implemented in the Aerospace Medical Instruction Center to train Air Force pilots**
- **It recreates, in a controlled manner, the conditions that cause hypoxia in high-altitude flights and measures pilots' physical and cognitive reaction while completing a mission**
- **The system will help them detect symptoms to react to a situation that, while exceptional, would be critical for their safety**

Madrid, December 3, 2018.- Indra, one of the leading global consulting and technology companies and one of the world's leading simulation manufacturers, is working together with iAltitude, a company specializing in high altitude sports training, in the development for the Spanish Air Force of a new flight trainer, the first of its kind in the world, which incorporates a hypoxia system that reproduces the conditions of low oxygen availability which air force pilots can encounter during high-altitude flights.

The pressure in a fighter aircraft cabin decreases as it gains altitude, thereby reducing the oxygen low availability in the air. To overcome this problem, pilots use a backup oxygen mask to breathe. However, if something fails, they must be able to identify the symptoms that precede hypoxia, a dangerous state that can cause loss of consciousness in a few seconds. They will be able to react quickly only if they receive adequate training.

To this end, Indra has integrated iAltitude's normobaric hypoxia equipment in the C101 jet, the same one in which Spanish pilots train before they take control of an F18 or Eurofighter, (FT-CNH: Flight Trainer-Controlled Normobaric Hypoxia).

This system regulates the oxygen concentration pilots receive through their mask, reducing it progressively to analyze their resistance and reaction capacity.

Instructors can monitor trainee pilots physical and cognitive response in real time when faced with realistic flight situations that replicate real operations. Any change in their physiological variables or in the speed with which they react to the stimuli will be recorded for analysis.

With these data, the Aerospace Medicine Instruction Center will have one of the most advanced tool available to design training programs and strengthen pilots' skills, abilities and safety.

The center will measure and manage all their conditions in a centralized and unified manner. The objective is to prepare them so that they can face a risk that, albeit exceptional, is critical for their safety.

Until now, training in hypoxia was mainly performed in hypobaric and normobaric sealed chambers, in which he or she can perform some exercises to detect loss of ability, not linked although to flight tasks. This new system will offer a more realist environment.

With Indra and iAltitude's training, air force pilot training has taken a real leap forward. Hypoxia tests are now completely integrated with flight training. The capabilities of each pilot are evaluated in all kinds of circumstances and conditions, measuring their ability to complete the usual flight procedures second to second.

About iAltitude

iAltitude is an engineering and technology company focused in the development of airspace and sports hardware and software. Founded in 2015, it has developed markets' most advance altitude simulated

training system to provide total assurance to its users. In the last year, with Spanish Air Forces, it has successfully carried out several R&D projects with the Aerospace Medicine Instruction Center. Right now, iAltitude is immersed in an airspace-engineering project aimed to analyze and increase human being reaction to problems derived from lack of oxygen to guaranty safety <http://www.ialtitude.es/>.

About Indra

Indra (www.indracompany.com) is one of the leading global technology and consulting companies and the technological partner for core business operations of its customers world-wide. It is a world-leader in providing proprietary solutions in specific segments in Transport and Defense markets, and the leading firm in Digital Transformation Consultancy and Information Technologies in Spain and Latin America through its affiliate Minsait Its business model is based on a comprehensive range of proprietary products, with a high-value focus and with a high innovation component. In the 2017 financial year, Indra achieved revenue of €3.011 billion, with 40,000 employees, a local presence in 46 countries and business operations in over 140 countries.