



Press Release

Nyköping 10<sup>th</sup> July 2014

## CTT awarded Cockpit Humidification for Irkut`s MC-21

**NYKÖPING, Sweden, July 10<sup>th</sup>, 2014** CTT SYSTEMS ("CTT"), the market leader for non-condensation systems in commercial aircraft structures and the world's leading provider of humidification products for cockpit, crew rest and passenger cabin areas, today announces that JSC PDC Teploobmennik selected CTT for Cockpit Humidification of the Irkut`s MC-21 Aircraft Family.

JSC PDC Teploobmennik, based in Nizhny Novgorod Russia, is tier-1 supplier for the Integrated Air Management system on the MC-21 aircraft. The CTT Flight Deck Humidifier will be base line equipment (i.e. standard equipment on all MC-21 aircraft).

The MC-21 is in development phase, with the first test flight scheduled for 2015 and entry into service in 2017, will be produced by Irkut and Yakovlev Design Bureau of the United Aircraft Corporation (UAC) group. The MC-21 will encompass three twin-engine short- and mid-range aircraft versions with 150 to 210 passengers. The aircraft program has total commitments of 276 aircraft including 175 firm orders.

"We are pleased with the decision to standard equip the MC-21 with our cockpit humidifiers, comments Torbjörn Johansson CEO of CTT SYSTEMS."

### About Teploobmennik

JSC PDC "Teploobmennik" is one of the leading Russian companies for aerospace industry specializes in design, development and manufacture of Aerospace Environmental Control Systems (ECS) and equipment. Using its unique competence and more than 70 years of experience, JSC PDC "Teploobmennik" was selected as a tier-1 supplier for the Integrated Air Management System and Wing Anti-Ice System on the MC-21 aircraft.

Also visit: [www.teploobmennik.ru](http://www.teploobmennik.ru)

### About Irkut and MC-21

JSC "IRKUT Corporation" is one of the leading Russian aircraft manufacturer, and is a subsidiary of UAC ("United Aircraft Corporation" JSC), a supplier in a number of civil and military programs, as well as producing components for Airbus aircraft.

The MC-21; "Магистральный Самолёт 21 века" - "Magistralny Samolyot 21 veka" - "Airliner of the 21st Century"); is developed in partnership with global manufacturers of aircraft systems and components; targets a new generation passenger aircraft in the 150-210 seat segment.

Read more... <http://www.uacrussia.ru/en/models/civil/ms-21/>

### About CTT SYSTEMS (Publ.)

Cair™ is focused on the passengers' health and comfort by providing humidification of the extremely dry aircraft cabins without causing condensation. Cair™ gives a pleasant relative humidity of around 20%, compared to 3-5% without, for the passengers, thereby reducing dry air related problems (e.g. fatigue, jet-lag, red eyes, dry skin, spread of virus diseases).

The Cair™ system is based on evaporative cooling technology and uses a method that effectively precludes the transfer of bacteria within the aircraft. The dual-purpose system increases humidity for greater comfort and incorporates the Zonal Drying™ System to counter condensation problems.





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CTT's Zonal Drying™ System has been selected as basic equipment for the new B787 "Dreamliner" and CTT's humidifiers are options in crew rest compartments and on the flight deck. The A380 offers CTT's humidifiers as option in crew rest compartments. CTT will also supply the Zonal Drying™ system and the Cair™ system for the A350 aircraft, as options.

CTT is the de-facto standard for non-condensation systems preventing condensate water to accumulate (read: excess weight) in commercial aircraft structures and the dominating provider of humidification products for cockpit, crew rest and cabin areas. CTT's products Zonal Drying™, Cair™, Flight Deck and Crew Humidifiers are standard or optional equipment on the Boeing 787, Airbus A350 and the A380.

### About CTT products

Zonal Drying™ - non-condensation – Basic equipment for B787 and BFE for B737

CAIR™ - Premium Cabin Humidification – SFE on A350 and retrofit products for B777, A330 and A380

Crew Rests Humidification – Basic Equipment on the 787-CRC SFE and SFE on A380/A350

Some *dry facts* on long-haul traveling

- The only humidity contribution in an aircraft is from passengers and crew
- The cabin with less seat density and with the highest cost per seat is ironically the one with the lowest humidity!
- The Relative Humidity (RH) is lower than 5% in First Class and 7-10% in Business Class
- Crew Rest Compartments typically encompass a RH well below 5 %
- The extremely dry air in the cabin cause human discomfort, such as cold and allergy symptoms, sleeping difficulties, dry skin and eyes and general fatigue.
- Medical studies prove that even a slight RH-increase from extremely low levels, is beneficial to health, as the increased humidity improve tear film stability and nasal patency. It also reduces headaches and ocular, nasal and dermal dryness symptoms.

CAIR™ - Cabin Humidification a landmark in premium traveling

- Airlines no longer are limited by the extreme-dry-air-law-of-nature setting the statutory condition for their in-sky offering
- Passenger will benefit more from all cabin interior investments such as seating – feeling more at ease and pleased
- Passengers and Crew gain from improvements in wellbeing, rest and over-all experience
- Flavors will be more accessible in the palate and healthier too, with no need to over doze anything such as salt or sugar
- Increased Humidity is an 'enabling ingredient' for more varieties, new species, flavors and combinations in the sky

Zonal Drying™ - by eliminating fuselage condensation both operational and maintenance costs will be lowered through:

- lowered fuel consumption (i.e. lower aircraft weight - 200-300 kg on A320/B737 due to elimination of accumulated water),
- improved operational reliability (i.e. less corrective maintenance),
- consistent insulation performance (i.e. water reduces insulation performance),
- reduced fuel burn also has a positive impact on the environment and finally
- Condensation issues are increasingly important to airlines as fuel stands for some 40 % of OPEX.

2013 ATW AWARD WINNER IN THE AVIATION TECHNOLOGY CATEGORY





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**For additional information:**

Torbjörn Johansson, President, CTT Systems AB.

Tel. +46-155-205901 alt. mobile. +46-70-665 24 46, or E-mail: [torbjorn.johansson@ctt.se](mailto:torbjorn.johansson@ctt.se)

Also visit: [www.ctt.se](http://www.ctt.se)

This information is disclosed by CTT Systems AB in accordance with the Swedish Securities Markets Act, the Swedish Financial Instruments Trading Act, or the requirements stated in the listing agreements. The information was submitted for publication on 10<sup>th</sup> of July 2014 at 09:50 (CET).

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CTTs products Zonal Drying <sup>TM</sup>, Cair <sup>TM</sup>, Flight Deck and Crew Humidifier are standard or optional equipment on Boeing B787, Airbus A350 and A380. CTT has today more than 500 systems installed in more than 30 airlines worldwide. CTT has now 21 years of operating experience on the Zonal Drying <sup>TM</sup> system plus 15 years on Cair <sup>TM</sup> and Crew Humidifier systems. IATAs report on fuel-saving measures is now including Zonal Drying <sup>TM</sup> as one of the few available fuel-saving systems for retrofitting.

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