

Airbus have designed a jet that can help eliminate the hassles involved with flying long distances to a great extent, including fatigue and disorientation that often comes with jetlag. Their A350 XLB has, among several other features, LED lights that mimic the sun's natural glow to maintain the body's internal clock, better known as the circadian rhythm.



Jetlag is caused when one travels over long distances in a short period of time. The mismatch between your body's perception of the time of day with the actual environment causes several short-term but annoying health issues. Sleep disturbance is quite common among them. For example, it might be 3 pm upon arriving in Los Angeles, but your body's natural clock is still set at 6 pm New York time. If this disturbance in the circadian rhythm—usually noticed among people who work night shifts or are constantly exposed to artificial lighting—becomes chronic, it can have long term effects on your body. It puts you at risk for conditions like heart disease and obesity. The cause why jet lag affects our body is because it throws off our normal night-time production of the hormone melatonin, which helps us for our nightly slumber. The main objective of A350's LED design is to trick the body in the other direction, by exposing us to artificial sunlight that changes throughout the flight as the sun ordinarily does while we are at home.

Secretary of the U.S. Navy Ray Mabus has directed that LED lighting be installed in U.S. Navy ships under construction as part of a strategy designed to help increase these ships' time on-station, decrease time spent on maintenance, and prevent shipboard injuries. Program managers for all new construction ships have been directed to pursue installation of LED lighting. Their reduced drain on the ship's electrical load, compared to conventional florescent bulbs, translates to increased time between refueling, which means more time on-station. LEDs have already been installed on more than 170 Navy ships.