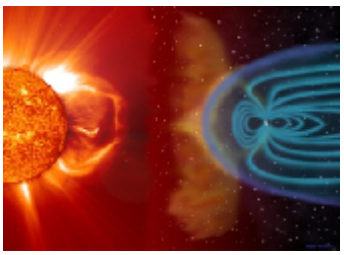
Considerable Fuel Saving Opportunities

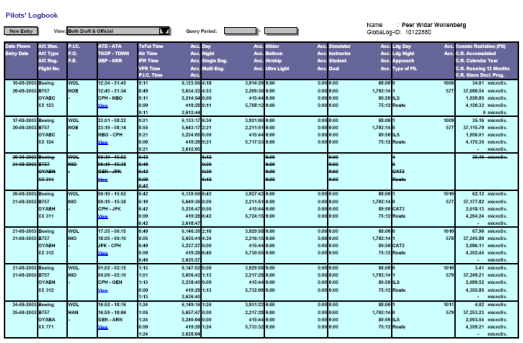
Stop pilots from worrying – and save money!

There should be no doubt that a professional pilot will always attempt to conduct his flight in the most cost-effective way only superseded by the concerns of the safety of his passengers, his crew, and his aircraft. So, if he has reason to suspect – even slightly – that efficiency conflicts with safety there will be no doubt in his mind on how to give priority.



Every pilot knows that for a given combination of aircraft weight and temperature there is a certain flight level at which he covers the greatest distance per unit of fuel (the Optimum Cruising Level). – But if a pilot has reason to believe that a lower altitude will be more safe for his passengers and crew, he will request air traffic control to give him such lower altitude - well knowing this will be more expensive for his company.

From articles and broadcasts in the media flight crews are becoming increasingly more concerned about cosmic radiation and the effects this may have to the health of flight crews. The subsequent talk in the crew rooms will often strengthen the concerns and lead to a tendency of choosing lower flight levels. In Europe we have seen many examples on this lately. – This is very unfortunate, especially in these years where the airlines compete on price efficiency. The extra costs will be hidden in the overall expenses and can only be dealt with after a thorough analysis. For this reason Global Aviation Data A/S has made an analysis with assumed figures and one aircraft type. Other figures and other aircraft types will, of course, reveal other results, but the tendency will be the same: flying lower (or higher) than optimum level results in costs, the extend of which probably is not recognized by most airlines.


Pilots' Logbook

For the example we use an Airbus 330, optimum cruising level FL390, actual cruising level FL350. Fuel consumption an extra 368 KGS per hour.

For the example is used an airline with 100,000 annual operations, an average trip length of 3 hours consisting of 1 hour climb/descent, leaving an average of 2 hours of cruise. Assuming that just 1% of the captains have taken the decision to fly 4,000 feet lower than optimum the result would be an extra annual fuel consumption of 736,000 KGS at a value of USD 644,000.

With proper information and with the secure feeling that the actual exposure is available shortly after the conclusion of the flight, we assume that at least 50% of them will realize that the increased expense (and thereby the decreased competitiveness of their employer) is not balanced by the difference in exposure. Consequently USD 322,000 may be saved.

If the assumed figures do not fit for your company, please notify us, and we shall be happy to make a calculation with figures and aircraft actual for your company.