FC5117

Posted on 10.08.2022 by Steve Forward

Category: Flight Crew (Commercial)

Report Title Fuel Tables

Initial Report

The company I work for has produced a quarterly fuel & carbon dashboard illustrating Captains' fuel loading decisions based on a graduated position in relation to peers. Those to the left of the fleet statistic chart have loaded extra fuel in addition to company SCF (Statistical Contingency Fuel) and those to the right have loaded minimal down to nothing extra on top of SCF.

This rather blunt tool does not reflect a multitude of variables including the assessed airmanship risks of the day that may be deemed to fall outside of the SCF feed data. Much of fuel carriage assessment comes from years of experience, coupled with accurate modern data feeds such as SCF. Fuel carriage decisions include variable/extreme weather, unforeseen level or route deviations that when assessed fall outside of loaded contingency in terms of perceived risk, as well as a comprehensive knowledge of the company fuel policy. This has never been completely black or white and no doubt never will. Indeed, an excellent decision to carry extra fuel based on the crew's judged risk which subsequently is not used will be shown as discretionary fuel "not required", perversely moving the Captain to the left of the chart. In reality this is discretionary fuel simply "not used". Whether it was "required" or not is down to the judgement the Commander utilising knowledge, experience, flight specific data and the full spectrum of the vagaries of the day ahead. The pilot's arrowed position on the chart simply and crudely represents how much extra fuel was loaded in relation to peer comparison.

Monitoring of SETO (single engine taxi out) & SETI (single engine taxi in) is however a useful area of data supplied, providing it does not encourage "competition". Pilots tend to be competitive in nature. Loading sensible fuel loads should be driven primarily on safe practice, followed by commercial awareness and further today, green credentials. Making this decision competitive in this fashion merely interferes with those safe priorities and indeed the focus ought to be equally on those on the right of the scale who think it's "clever" to blindly rely on SCF data. The unwary will find themselves with low fuel states down a "blind alley", being driven by an unintelligent and false sense of elitism, to immaturely please their positioning on the chart.

Operating at a zero cost index or selecting speeds close to the best lift/drag ratio speeds to save fuel can place the aircraft in close proximity to VLS (Airbus) causing havoc with ATC & other traffic in close proximity (.72 cruise Mach by example is not practical or ideal). This lack of awareness and

due consideration results in other carriers having to alter their trajectories which in turn will damage the collective carbon footprint by increasing collective fuel burn. Further to this if unforeseen turbulence or wake is encountered the safe margins as well as decision options are also compromised.

Enough knowledge exists for all modern commercial pilots to be responsible regarding fuel usage. Intelligent safety orientated and commercial monitoring is no doubt prudent as well as showing responsible carbon footprint awareness. However, to make a competitive incentive to see whom can carry the least fuel can be viewed from a safety perspective as an irresponsible and reckless stance from an airline employer, albeit with good but misplaced motives at heart. Indeed, if a company chooses this behaviour then perhaps a “magnifying glass” ought to be directed at those carrying the least fuel to ensure safe practice.

In summary, the importance of a decision regarding a safe quantity of fuel ought not be influenced by a position on a graph. If it does, then this leads to a question over the quality of Command selection, training and authority regarding safe fuel decisions.

Comment

We’re grateful for the company’s extensive comments explaining the rationale behind the fuel graphs and their intention to enlighten captains as to fleet norms and encourage them to improve their individual environmental carbon footprint. Notwithstanding, it’s human nature to reflect on one’s own performance in relation to others, and some less experienced captains might conceivably perceive implied pressure or incentives to carry less additional fuel even if they felt they needed it in what was ultimately a safety-critical decision. It’s probably fair to say that some captains may habitually carry too much fuel but, equally, there are probably those who are at the other end of the scale and who habitually accept the bare minimum which could also be a cause for concern. Ultimately, the decision on fuel loads is dependent on many factors that are route and weather dependent and, if used in the intended manner, at least the company’s charts and fuel calculations offer a basis for decision-making on the day given that they take route factors into account by using a statistical norm for what additional fuel was required from the last 100 flights.

There are no comments yet.