



## TO PAINT OR NOT?

Making a choice between shiny and colourful

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Passenger aircraft are designed to be efficient machines, meant to move people from A to B. Form follows from function and aesthetics hardly play a role in the requirements. This is a different story for an airline; when buying your multi-million dollar aircraft some careful consideration must be given to the hundred thousand dollar paintjob. An aircraft livery bridges the gap between engineering and art by allowing creativity yet serving a purpose.

### STANDING OUT

A bit of a no-brainer but for many airlines the livery is their public identity. While the badge sometimes suffices as a feel-good factor while driving a car, to the average passenger it matters not if they are sitting in an ancient B747 or an equally cramped A340. It is the unique colour and style that is remembered for airlines; if a picture of the sky is shown with some sort of orange prop, Easyjet will be thought of first (or a Dutch football championship edition of the prop).

Here in Europe things are kept modest though, simple colours and schemes with the occasional arty detail on the vertical tail (for example British Airways) are commonplace. Some American airlines however have decided to make standing out an absolute priority. Frontier airlines have

different animals painted on their aircraft's tails and affectionately named the aircraft in relation to that, as such you may find yourself flying on Grizwald Grizzly Bear or Wally the Gray Wolf. The low-cost carrier Southwest Airlines keep things less intricate, but have decided to go for clashing and vibrant colours on their aircraft making them hard to miss.

### SAVING COSTS?

There is, however, an alternative to matte paint with any colour of your choosing. Some airlines choose to barely paint their aircraft at all leaving it a shiny shell; American Airlines is/was a good example of this. Besides giving the aircraft a somewhat antique look, leaving off two layers of paint does save weight on the aircraft. There is a cost to this though that practically offsets these savings. According to Boeing a fully painted aircraft should be repainted about every four years but an unpainted aircraft must be polished with a special compound at least three times a year. Calculations done by the company indicate that leaving off the paint is in fact marginally more expensive to operate.

The environment is another factor to take into consideration when painting your aircraft. Painting releases volatile organic compounds and carcinogenic substances which are somewhat detrimental to the

health of the painters. While this may not be the case for polishing, this activity can release harmful solvents into the atmosphere. In practice local laws and facilities may determine the choice between painting or not.

The final consideration relates to regular maintenance tasks. The mechanisms to slow down corrosion are different between painted and unpainted aircraft, but both need to be washed regularly. In fact an unpainted aircraft will need to have dirt and dust washed of even more to keep its shiny appearance. The downside for painted surfaces is, however, that cracks are corrosion hotspots and must be dealt with promptly.

### A MATTER OF TASTE

In conclusion the livery of an aircraft will be based mostly on the message an airline wants to convey. With the exception of very complicated designs, the cost of choosing between painting or not remains about the same meaning funding is not a factor. Also when considering that the paintjob must be renewed every four years, it offers airlines an opportunity to play around once in a while. As such it is not at all surprising to see a speciality livery, such as a classic or anniversary theme, standing at the gate. ✈