

Ocean shipping a Rutan design:

How better not to and how to do it right

I shipped a **cosy classic** from Italy to the US in 2011 and a defiant in 2012 from the UK to the US.

The **Cosy** would fit into a 20ft container and I loaded it personally in Italy, the spare span is 2.90m and a container door is 2.40m wide. The craft will fit at a 45degree angle (without the canard, the wings and the wheels).

So far for the theory, in practice the loading was very difficult, the gear and the spare touched the wall and the floor and had to be padded. We used a truck with a crane, but there is not much space above (a big forklift would have been better). We fixed the

wings under the roof of the container with bubble wrap and several straps, we also heavily strapped down the fuselage. It took us about 3h to load it (the driver will wait not much longer). The container shipment was about 3200\$, custom (most of the times they will want to X-ray a shipment like this) and broker fees another 700\$, unloading, help + a fork lift 600\$. No pics from unloading (to busy).

Unloading went smoother than the loading, but the cosy had broken a couple of straps and move about (basically sanded flat a spot on the nose and on the strake end), also one of the wings had broken a strap and an end had fallen on the strake. There is much more movement and jolting in the container shipment than I had imagined.

3 weeks later (changed also the tires) the craft was airborne again

Just tying it down and not using a cradle was not so good



Shipping the Defiant

I bought a Defiant in the UK in 2012. (Shipp or ferry?)

The Shipping is on par or even cheaper than the ferry flight and less unforeseeable (ferry pilot getting stuck in Greenland, or the like). The craft according to UK rules was only certified daytime VFR (no vor/ils, no loran and only a vfr GPS).

So container, the dimensions of the Defiant necessitate a 40ft container (the canard alone is 24ft!). This time I asked a FBO to crate it (from bad experience and the defiant is much heavier) and they designed a wooden crate with wheel to mount the defiant and then just roll it in the container. The wings, canard, gear bow and cowlings had to be removed (the gear bow was a problem, the gear bow cannot just be removed vertically as in long or cozy's, there are fuel lines and controls underneath, so they had to remove 1 wheel pant base, cut a bigger hole in the fuse bottom and slide the bow out sidewise.

Cost, the container was slightly more expensive about 4000\$, the crating was 3000\$, custom/broker was less this time, seems to depend if your shipping company is good and knows it's way around.

Unloading was very easy, apart from the fact that in the UK the forwarder just set the container down on the ground, which seems unheard of in the US. So after intensive head scratching we used a big flatbed truck and a forklift. Then we unscrewed the crate lifted the defiant with a forklift, rolled it upright slipped in the gear bow, bolted it in, attached the wheels and set it down. 3 weeks later, N-numbered and certified.

The wood crate is the only way to assure that you craft arrives unharmed, especially it is bigger than a varieze

unloading



Crating & Loading



Airworthy

