## How aircraft got their Red and Green running lights©

I have developed a possible sequence for the development of red and green running lights on ships and aircraft. I would like to make the following case, derived from a variety of sources, for what I believe happened. All of the basic information is available in common reference books but I can't find any record equating this knowledge to the final conclusion.

## The Historical Process:

Before the invention or application of a rudder to ships, they were steered by large boards near the stern. These boards could be on one or even on both sides of the stern. Gradually the boards, called *steer*boards, came to be on just the right side. This eventually led to the right side being called the *star*board. The location of this steerboard on the right meant that the captain maintained a command proximity to this right stern position. The captain's cabin and Quarter Deck position is on the right side of ships to this day. (The reason the captain of an aircraft is on the left is a postscript)

To protect the steerboard, the placing of such a sailing ship beside a wharf meant that the left side of the ship would be the side of choice. From the left side another board was used for loading and unloading the ship. This *loading* board eventually led to the left side of the ship being known as the *lar*board side. The vocal distinction between starboard and larboard in a high wind could easily lead to misinterpretation.

We must now move to the 15<sup>th</sup> Century. During this period England and France were having one of their periodic disagreements. The English decided to boycott French products including wine. Seeking another source of wine the English turned to Portugal. Portugal produced a red wine, which when fortified (made more alcoholic), was suitable to the English taste. A trade agreement resulted between England and Portugal with English cloth being exchanged for Portuguese wine.

The major port used for shipping wine out of Portugal at that time was known as *O Porto*. *O Porto* is located in northwest Portugal and is now known as Porto. The increased trade into this port could have precipitated the need that "starboard" and "larboard" be modified. The left docking and loading side of the wine trade ships at *O Porto* would have made the change to the term "port" both possible, practical, and logical.

The combination of the Latin porto (to carry), the practicality of docking to the left side, and need for a more distinctive term for the left side of a ship leads me still further. It is not very difficult to see how the word port became associated with the red of Portuguese wine. There should be little doubt that the ships of the wine trade would acquire a characteristic red color on the left side. The combination of the left side of the ship being the side nearest the port or loading side, the port of O Porto, and the red wine lead me to suggest such was the process. Red along with the word port became the accepted identification for the left side of a ship. The selection of green lights for the right side follows more directly. I suggest that the red and green of the Portuguese flag have become the running lights of the world. Thus, even in

its decline as a seafaring nation, Portugal still shows its colors more than any other nation.  $\,$