

Intake Guards for *Titanic's* 35-inch Electric Fan Ventilators

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Introduction

During a recent study of a particular electric fan ventilator on H.M.H.S. *Britannic*, it was discovered that the intake of the ventilator was protected by an intake guard. This caused a re-examination of *Titanic's* ventilators. In this article *Olympic* evidence will be used to propose a change in our understanding of these *Titanic* ventilators.

Olympic Evidence

The type of electric fan ventilator which will be discussed in this article is of a specific type. It is the 35 in. sirocco electric fan ventilator with no intake ducting such as the swan neck duct which is often seen paired with this particular ventilator. In Figure 1 we see a drawing of this type of ventilator.

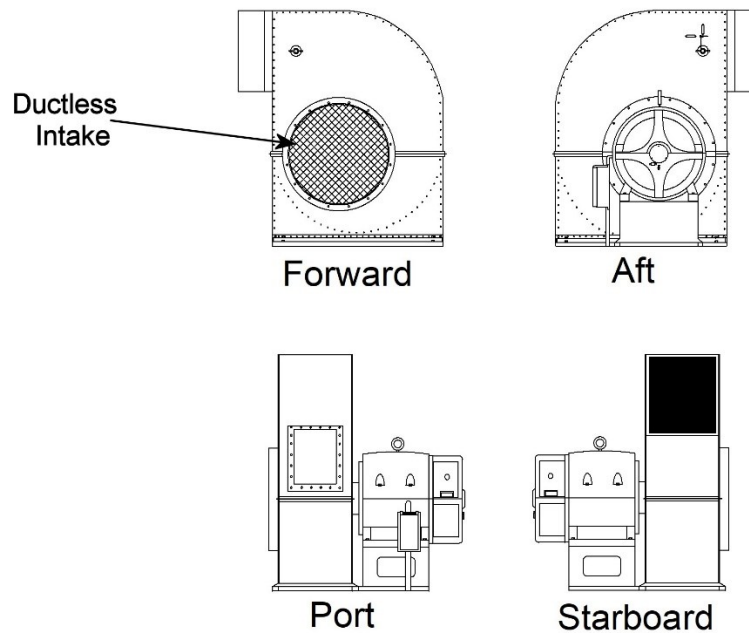


Figure 1

35-inch sirocco electric fan ventilator with no intake duct

The intake opening is covered by a screen. The problem with placing this type of ventilator in areas which have passenger access is that items could be inserted through the screen which could either damage the fan blades or cause injury to a passenger. In order to prevent this, one method which was employed was to place guard railings which restricted access to the intake opening. Figure 2 shows this type of ventilator outside the first-class entrance on the port boat deck of *Olympic*. You can see guard railings attached to the ventilator and the entrance bulkhead to prevent access to the open intake of the ventilator.



Figure 2

Guard railings protecting intake opening

It was thought that this guard railing method was employed for all the ductless intakes of the 35 in. ventilators on *Titanic's* boat deck. Recent study of a similar type of ventilator on H.M.H.S. *Britannic* has caused a re-examination of the assumption about guard railings being used to guard the intakes of these 35 in. ventilators. The first Olympic evidence that confirmed that intake guards were used on her later installed 35 in. ductless ventilators was a photo of the special inverted 35 in. ventilator on the starboard aft corner of the deckhouse under the third funnel. This ventilator is shown in Figure 3. You can see that an extension with its own screen guard is bolted to the intake. This puts distance between the outer screen and the intake opening and prevents any easy access to the intake without having to install guard railings around the ventilator.

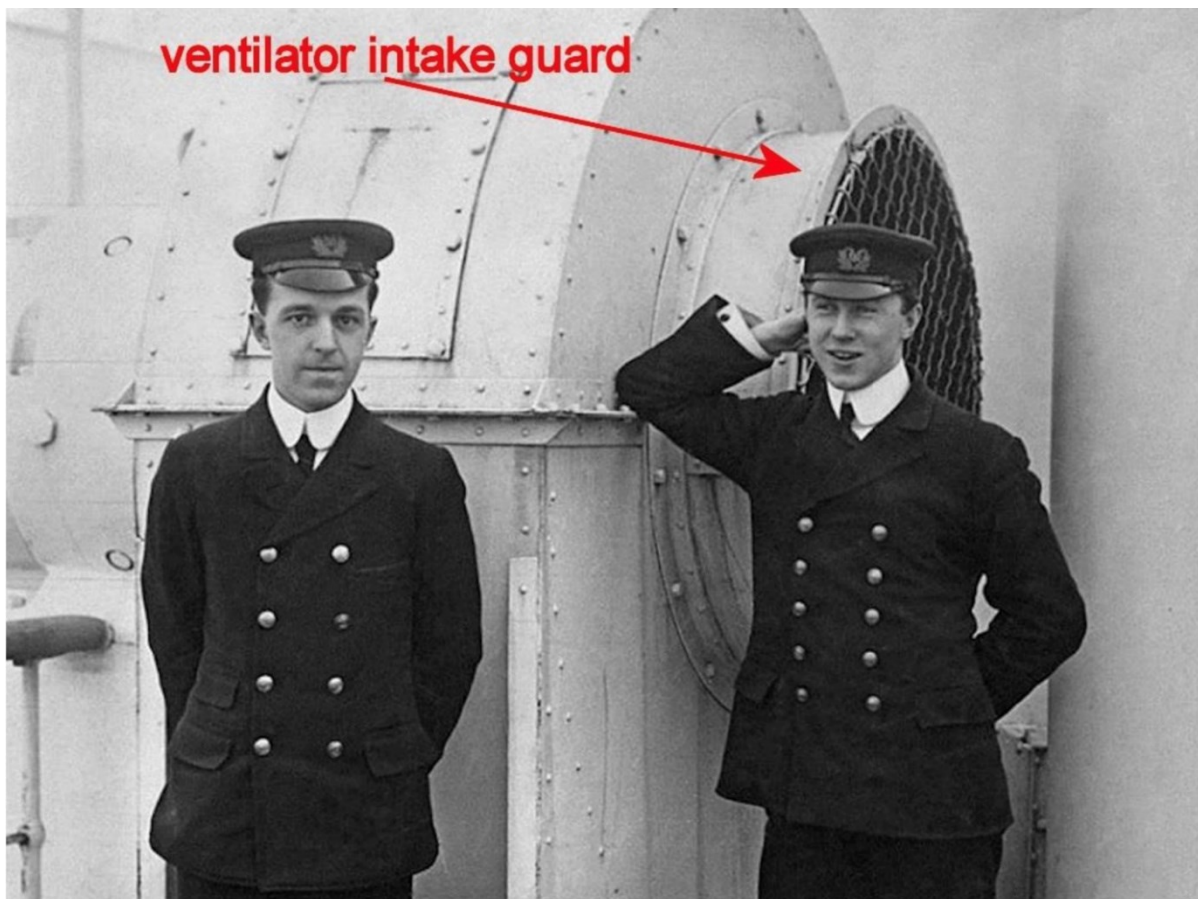


Figure 3

Ventilator intake guard on *Olympic*

Titanic had an identical ventilator in the same location. The next location which would let us know if this type of intake guard was used with the conventional configuration of the 35 in. ductless ventilator was on the starboard forward aspect of the deckhouse under *Olympic's* third funnel. In Figure 4 we see the intake of this ventilator. It is more difficult to see the intake

guard from this angle but the lower part of the opening shows an interior ledge which indicates that an intake guard is in place.



Figure 4

Ventilator intake guard on *Olympic*

Titanic

All of these types of ventilators with intake guards for which it is proposed that *Titanic* would have had, do not have visible intake guards in any photos of *Titanic* and they are missing from the wreck. I believe it is reasonable to extrapolate the *Olympic* evidence to *Titanic*. There are numerous other examples where we have had to do this and I don't believe it is unreasonable in this case. Figure 5 shows the three ventilators on *Titanic* in red which would have had these intake guards. The 35 in. ventilator on the aft side of the third funnel deckhouse and the one on the forward side of the tank room were within the engineer's promenade and, as such, the area was off limits to passengers.

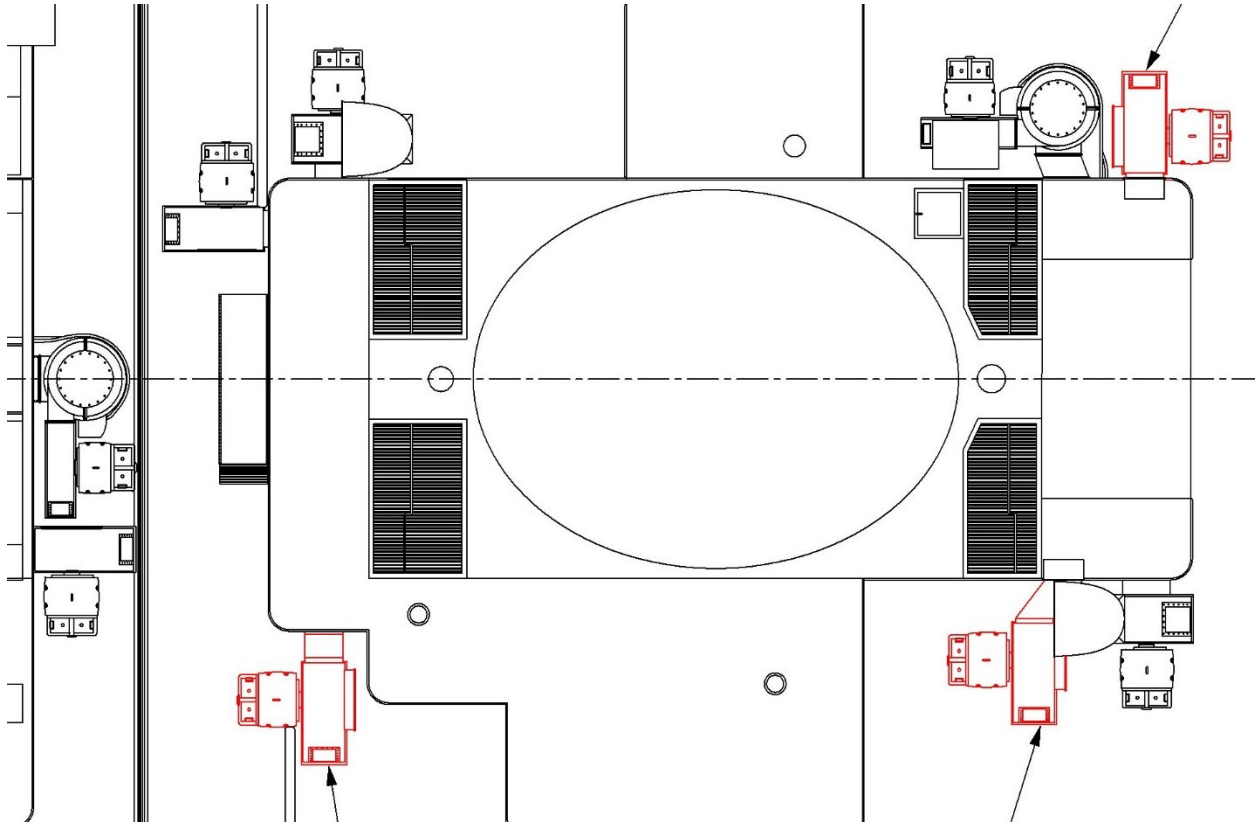


Figure 5

35 in. ductless ventilators on *Titanic* with intake guards

Conclusion

Olympic and *Britannic* evidence suggests that the three 35-inch ductless electric fan ventilators which were near the third funnel deckhouse of *Titanic* had their intake openings protected with an extended intake guard. There is no direct *Titanic* evidence but many ventilator installations on the three sister ships had close similarities such that it is not unreasonable to extrapolate for the *Olympic* evidence to *Titanic*.