

Intake Guards for Titanic's 35 in. Electric Fan Ventilators

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Introduction

During 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 paper, 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 paper 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.

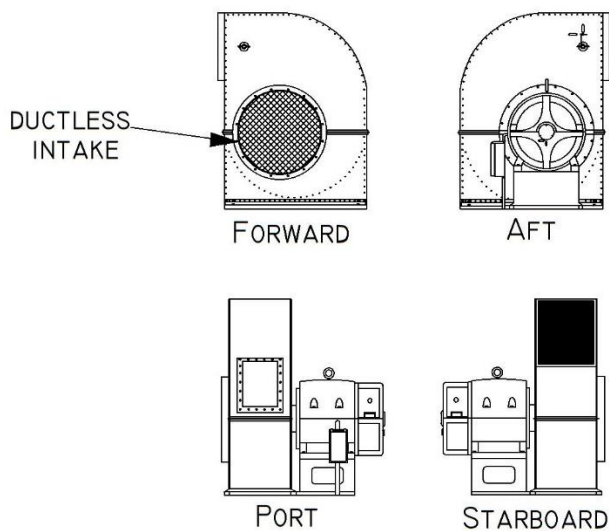


Figure 1

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 a gate 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 a gate attached to the ventilator and the entrance bulkhead to prevent access to the open intake of the ventilator.

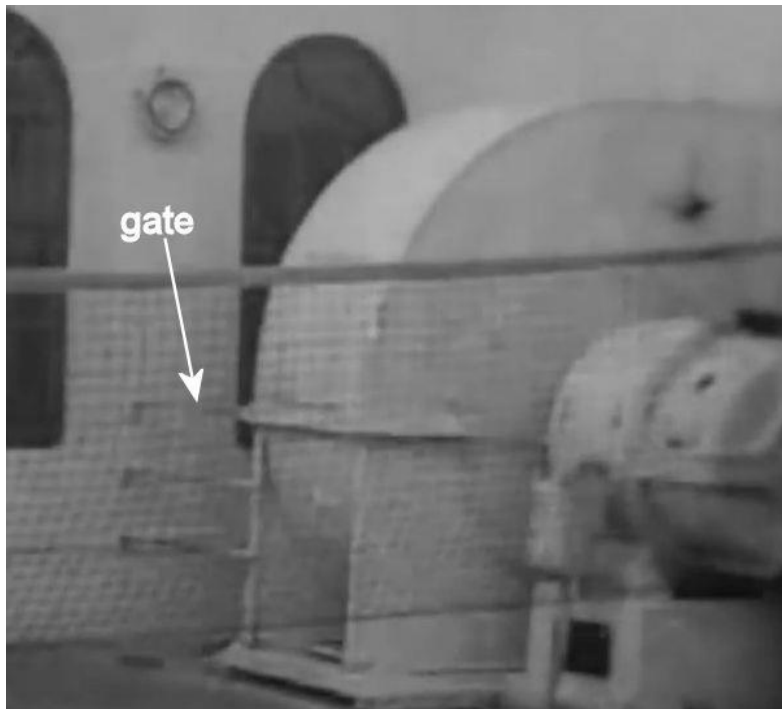


Figure 2

It was thought that this gate method was employed for all the ductless intakes of the 35 in. ventilators on Titanic's boat deck. Recent study of a similar type ventilator on H.M.H.S. Britannic has caused a re-examination of the assumption about gates being used to guard the intake 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 deck house 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 gates around the ventilator.

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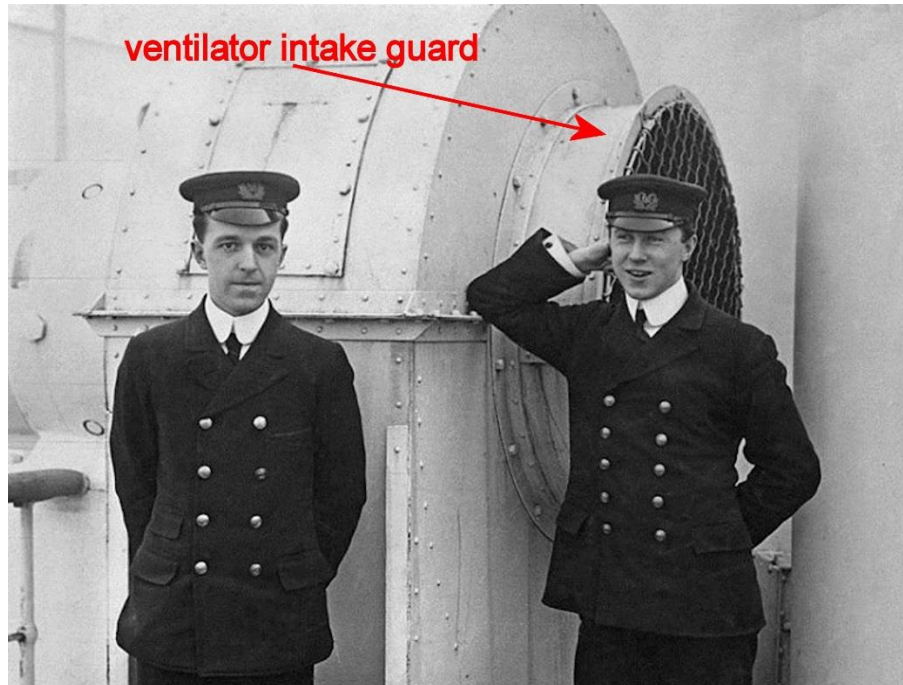


Figure 3

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 show an interior ledge which indicates an intake guard is in place.

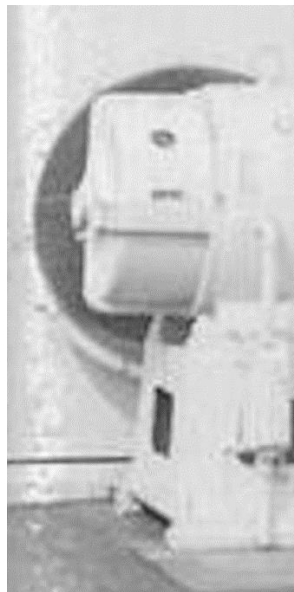


Figure 4

Titanic

All of these types of ventilators with intake guards for which it is proposed that Titanic would have had, do not have visible intakes in any photos 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 five ventilators on Titanic in red which would have had these intake guards. The ventilator on the aft side of the third funnel deck house and the one on the forward side of the tank room may have been exceptions. This area was within the engineers promenade. However, first class passengers could theoretically pass aft through the barriers. Therefore passengers could theoretically be within the engineers promenade so I also chose to equip the ventilators there with intake guards.

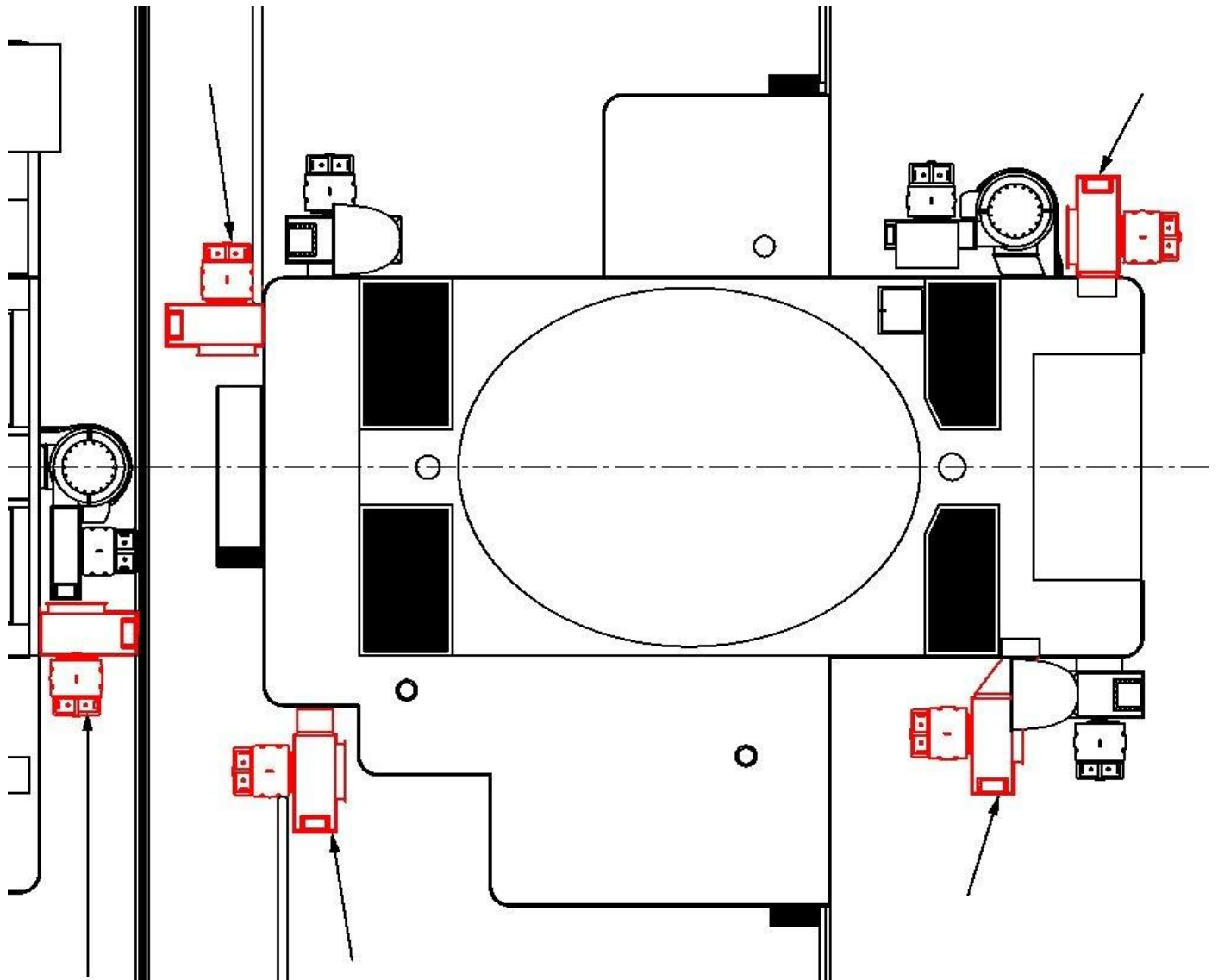


Figure 5

Conclusion

Olympic and Britannic evidence suggests that the five 35 inch ductless electric fan ventilators which were near the third funnel deck house of Titanic had their intake openings protected with an 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 from the Olympic evidence to Titanic.