

# ATM FLY-WARE®

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## Special Points of Interest:

- Aircraft Fittings
- Line Array Stress
- Standards Watch



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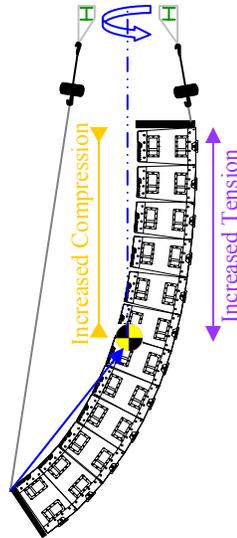


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# Fly Paper

## Stress Lines

There is no question that line arrays have swept the audio industry by storm over the last few years. If we're not careful, they might sweep something (or someone) else away too!



The total accumulated load occurring behind the cluster's center of gravity is distributed back through the array; and can manifest itself as torsion on the enclosures, the suspension grid, and eventually the structure.

## Standards Watch

BSR E1.8 Entertainment Technology-Loudspeaker Enclosures Intended for Overhead Suspension-Classification, Manufacture and Structural Testing; the committee has approved the draft and it is going out for final public review. Please download and comment on it at [www.esta.org](http://www.esta.org)

## Fittings = Fittings, RIGHT...?

Aircraft fittings come in different shapes and sizes. Some look very similar to one another, and others are obviously differentiated in some way. What is important to realize is that many aircraft fittings are actually not rated for overhead suspension. However, if you do your shopping right, fittings rated for overhead suspension are easy to obtain. Just follow these simple rules:

1. Fittings must be certified compliant with overhead lifting equipment standards.
2. A minimum design factor of 5:1 must be used to calculate the working load limit (WLL).
3. The fitting must be constructed in a way that is repetitively consistent (e.g. forged steel is good, cast metal is bad).
4. Purchases must be made from suppliers that are fully aware of the overhead suspension application and accept the liability associated with it.

The following represents many of the aircraft fittings in the marketplace along with this Author's opinion as to their use in overhead suspension applications.

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## Sound & Video Rigging Systems