

## Exploding light and smoke marker

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A Member has reported that two Ikaros man-overboard light and smoke markers, manufactured by Hansson Pyrotech, were returned from one of its ships to its shore-based workshops.

### What happened?

The units had been stored on a pallet and a storeman was in the process of moving each unit to another location.

As he moved one of the units, it exploded with a loud bang, resulting in parts of the assembly shooting across the room. Fortunately he was not struck by flying fragments nor was he otherwise injured. The smoke itself did not activate in the explosion, but instead the smoke powder was widely dispersed.

### The company's investigations identified that:

- The storeman had not released the pin or moved any trigger mechanisms to activate the unit.
- The safety pin was still in the unit when the parts were recovered.
- The unit had been subjected to pressure build up from the way it had been torn apart rather than by normal activation of the smoke system.
- The unit was still within its safety bracket when it was moved.

The unit was subsequently returned to suppliers for further examination and, although it is not conclusive, they have stated that the unit may not have had the safety pin fitted correctly, thereby allowing the detonator to fire but preventing the correct release of the smoke capsule. The resultant pressure build up caused the unit to explode rather than flare off the smoke.

### Conclusion

As this event followed within just a week of IMCA releasing a safety flash on another incident involving smoke flares which did cause serious injury ([Safety Flash 12/01 – Serious incident while checking man-overboard and buoy smoke marker](#)), the company was concerned that there was a fault with these devices which could have caused further injury.

Dialogue with the manufacturers and UK marine authorities is ongoing to further investigate such events. The two manufacturers (the previous notice concerned a Pains Wessex unit) are concerned that there could be a fault with

their units, but their responses have been guarded.

Personnel should be made aware that at least two unexplained incidents have occurred and to avoid handling such devices whenever possible for inspection purposes. If they are to be transported, it should be ensured that the manufacturers' instructions are followed exactly and that the safety pin is correctly fitted.

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