

**From:** EK-voorzitter <voorzitter@eerstekamer.nl>  
**Date:** Thursday, April 9, 2026, 10:18 AM  
**To:** EK-postbus <postbus@eerstekamer.nl>  
**Subject:** FW: Reactie Onderzoeksraad voor Veiligheid op de opvolging van de aanbevelingen uit het onderzoeksrapport Flare launched with fatal consequences

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**Attachments:**

Memo follow-up Flare launched with fatal consequences.pdf

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**Van:** 5.1.2.e <5.1.2.e@onderzoeksraad.nl>  
**Verzonden:** donderdag 9 april 2026 10:16  
**Aan:** EK-voorzitter <voorzitter@eerstekamer.nl>  
**Onderwerp:** Reactie Onderzoeksraad voor Veiligheid op de opvolging van de aanbevelingen uit het onderzoeksrapport Flare launched with fatal consequences

U ontvangt niet vaak e-mail van 5.1.2.e <5.1.2.e@onderzoeksraad.nl>. [Ontdek waarom dit belangrijk is](#)

Geachte mevrouw Vos,

Hierbij ontvangt u de notitie met de reactie van de Onderzoeksraad voor Veiligheid op de opvolging van de aanbevelingen uit het onderzoeksrapport *Flare launched with fatal consequences*. Deze notitie hebben wij vandaag gepubliceerd op de [onderzoekspagina op onze website](#). Daar zijn tevens de reacties op de aanbevelingen en het onderzoeksrapport te vinden.

Met vriendelijke groet,

5.1.2.e  
*secretaris*  
Afdeling Advies en Communicatie

5.1.2.e  
5.1.2.e <5.1.2.e@onderzoeksraad.nl>



**Onderzoeksraad  
voor Veiligheid**

**Contactgegevens**

[www.onderzoeksraad.nl/home/contact/](http://www.onderzoeksraad.nl/home/contact/)

**Website**

[www.onderzoeksraad.nl](http://www.onderzoeksraad.nl)



# memorandum

**date** 9 April 2026  
**to**  
**reference** 26.0000379  
**investigation** Flare launched with fatal consequences  
**subject** Follow-up to recommendations

**Contact person**

info@onderzoekraad.nl

**Follow-up to recommendations: *Flare launched with fatal consequences***

*Publication date of the report: 25-09-2024*

## 1. About this report

On the night of 1 January 2023, a crew member on board of a Dutch sailing ship in the Pacific Ocean, was fatally injured while launching a flare. The flare was launched in accordance with the instructions but did not function as intended. The flare exploded immediately. On 19 January 2023, the Dutch Safety Board, in consultation with the Spanish manufacturer, issued a warning advising all owners of the Red Rocket Parachute flare L-35/ L-35A (Pirolec) not to use this type of flare. The subsequent investigation focused primarily on the failure mechanism of the flare.

The investigation findings are set out in the report 'Flare launched with fatal consequences'. The Dutch Safety Board concluded that the internal pressure in the flare became excessively high, causing the flare to rupture explosively. This pressure build-up may have been caused by abnormally intense combustion of the contents.

Based on these findings, the Dutch Safety Board issued three safety recommendations, aimed primarily at improving the production process. The Board observed indications of vulnerabilities in production. However, given that no previous accidents had been reported involving this flare type, the Board could not conclude that there was a general or structural deviation in the production system. In light of the accident and the critical role of specified temperature and humidity conditions during the filling and pressurisation phase—when the mixture is prepared and forms the solid propellant—the Board nevertheless considered recommendations necessary.

Despite several reminders by email and telephone, one of the two addressees, Lecea, has not responded to the recommendations. Just before the publication of this memorandum, we came across information that indicates that Lecea ceased to exist. Lloyd's Register Marine Deutschland submitted responses on 25 July 2025 and 9 December 2025. The relevant documents are available on the Dutch Safety Board's website.

This memorandum contains a general conclusion about the follow-up to the recommendations, as well as a short summary of the received reactions per recommendation and a conclusion about its follow-up.

## 2. General conclusion on follow-up to the recommendations

Overall, the Board concludes that the follow-up to the recommendations has been partly adequate, with a clear difference between the two addressees. Lecea has not responded to any of the recommendations, despite repeated reminders. By contrast, Lloyd's Register Marine Deutschland has cooperated constructively and provided clarifications and documentation, including the crucial Suspension Information, which demonstrates that the products concerned—and related products within a broader category of potentially hazardous MED<sup>1</sup> products (including life-buoy smoke signals)—have been withdrawn from the market.

During follow-up discussions, Lloyd's clarified that type approval pertains exclusively to a product's design, not to the production process. The Board acknowledges that its recommendation referred to type approval even though the investigation did not identify a design defect, but rather shortcomings in the production process. This wording may therefore have led the addressee to interpret the recommendation in a way that did not fully align with its mandate.

Given that the relevant products have been withdrawn and no further production is taking place, the residual safety risks identified in the investigation have been eliminated. The Board therefore considers the recommendation addressed to Lloyd's to be fulfilled and expresses appreciation for Lloyd's cooperative approach during the follow-up process.

## 3. Follow-up per recommendation

### Recommendation I

*To Lecea (as the manufacturer of the Pirolec flare)*

Integrate control measures into the production process to prevent the prepared mixture from being exposed to excessive ambient temperatures and/or excessive humidity for too long.

### *Response by Lecea*

Lecea has not provided any response to the Dutch Safety Board regarding measures taken to follow up on this recommendation. Despite repeated written and verbal reminders, the manufacturer has not supplied information on whether control measures have been implemented to prevent exposure of the flare mixture to excessive temperatures and humidity during production. As a result, the Board has no insight into the steps taken to mitigate the risks identified in the investigation. Just before the publication of this memorandum, we came across information that indicates that Lecea ceased to exist.

1. Marine Equipment Directive

#### *Assessment of follow-up*

Because Lecea has not responded, the Board cannot determine whether the recommended control measures were introduced into the production process. However, the Suspension Information provided by Lloyd's confirms that the relevant flares – and related MED products – were withdrawn from the market. As a result, no further units were being produced or placed into circulation, effectively removing the acute risk associated with shortcomings in the production process. While the broader safety risk has been eliminated through market withdrawal, the Board concludes that Lecea has not fulfilled the recommendation, as no evidence of improved production controls has been provided.

### **Recommendation 2**

#### *To Lecea*

Integrate control measures into the process to ensure that the cardboard inlay is always present in the motor unit.

#### *Response by Lecea*

See response to recommendation 1 above.

#### *Assessment of follow-up*

See assessment of recommendation 1 above.

### **Recommendation 3**

#### *To Lloyd's Register Marine Deutschland (as the notified body)*

Verify whether the working method and the prescribed quality steps, on the basis of which the type approval for this type of flare was issued, are still valid. Include monitoring of air temperature and humidity in the elaboration of this recommendation.

#### *Response by Lloyd's*

Lloyd's reports that the flares—and a broader category of potentially hazardous MED products (including life-buoy smoke signals)—were suspended as of 18 September 2024. The accompanying Suspension Information confirms that the relevant products have been withdrawn from the market. Lloyd's further clarified during a meeting with the Dutch Safety Board in December 2025 that type approval relates exclusively to product design and not to the production process. Because the Board's investigation did not identify a design defect, but rather shortcomings in production, Lloyd's explained that the recommendation, as phrased, did not fully align with its mandate as a notified body. The Board acknowledges that referring to "type approval" in the recommendation may have put the addressee on the wrong footing. Despite this, Lloyd's acted cooperatively and provided relevant documentation and explanations.

*Assessment of follow-up*

Following further discussion with Lloyd's, the Dutch Safety Board concluded that the formulation of the recommendation was not sufficiently aligned with the scope of type approval, which does not cover production processes (i.e. the area in which the Board identified shortcomings). Nonetheless, the suspension of all affected products ensures that no further units are produced or placed on the market. The Suspension Information provided by Lloyd's confirms that both the specific flares and related MED products have been withdrawn, eliminating the possibility of similar incidents involving these products. In light of this and Lloyd's constructive cooperation, the Board concludes that the recommendation has been fulfilled and that the risks identified in the investigation have been effectively addressed.