



EXPRO

Potential Dropped Object -13
September 2017

UK Area

Agenda



- Look at a near miss incident with a high potential.
- Examine some of the learning points.
- Ask whether secondary retention should be implemented for the Antiluce catch.

What happened?



- Expro rented 2 x third party spooler units for an offshore job.
- Cable was spooled onto the units by Expro at Expro's Aberdeen base.
- Loaded onto boat on 11 September 17.
- Arrived at the offshore installation on 13 September 17.
- While being lifted aboard installation, crew noticed a door was open.

What happened?



- Spooler units have compartments for accessing mechanism.
- These compartments can also be used for storage.
- Doors checked at Expro Base and the Docks before being loaded onto the supply boat.
- Doors were adjudged to be securely closed with an antiluce drop catch.



What happened



- One door was open when spooler lifted from boat to installation.
- Unsecured toolbox was found inside the compartment.
- Toolbox was supplied by the third party without the knowledge of Expro.



Root Cause Analysis

What happened ?
SPOOLING UNIT ARRIVED ON LOCATION
WITH AN OPEN DOOR AND UNSECURED
TOOLBOX INSIDE

What were the consequences ?
CUSTOMER NCR

Immediate
Cause(s)
(Triggers)

Immediate
Cause(s)
(Triggers)



NO SECONDARY
RETENTION ON
ANTILUCE DROP CATCH

DOOR OPENED IN TRANSIT
(DOCKSIDE TO
INSTALLATION)

POTENTIAL
DROPPED OBJECT

NO EXPRO DOCUMENTED
REQUIREMENT FOR
SECONDARY RETENTION
ON ANTILUCE DROP CATCH

ANTILUCE DROP CATCH
DESIGNED NOT TO REQUIRE
SECONDARY RETENTION

COMPARTMENT CONTAINED
AN UNSECURED TOOLBOX

UK OIL & GAS INDUSTRY
BEST PRACTICE DOES
NOT STATE IT'S A
REQUIREMENT

EXPRO HAVE NOT
FORMALISED STAFF
KNOWLEDGE TO ADD
SECONDARY RETENTIONS
TO ANTILUCE DROP CATCH

TOOLBOX NOT CONSIDERED
AS A POTENTIAL DROPPED
OBJECT OR
UNSECURED LOAD
BY 3RD PARTY

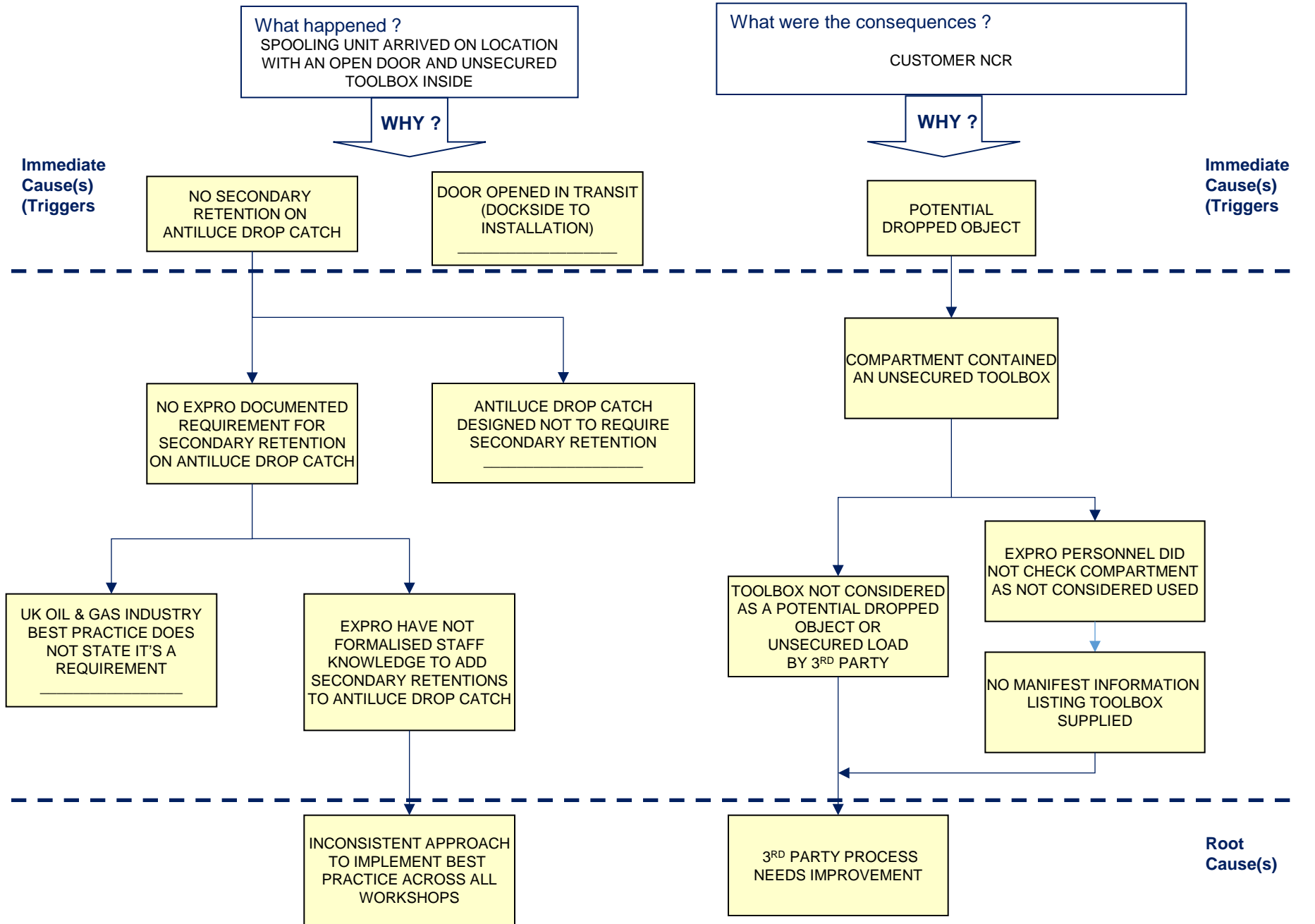
EXPRO PERSONNEL DID
NOT CHECK COMPARTMENT
AS NOT CONSIDERED USED

NO MANIFEST INFORMATION
LISTING TOOLBOX
SUPPLIED

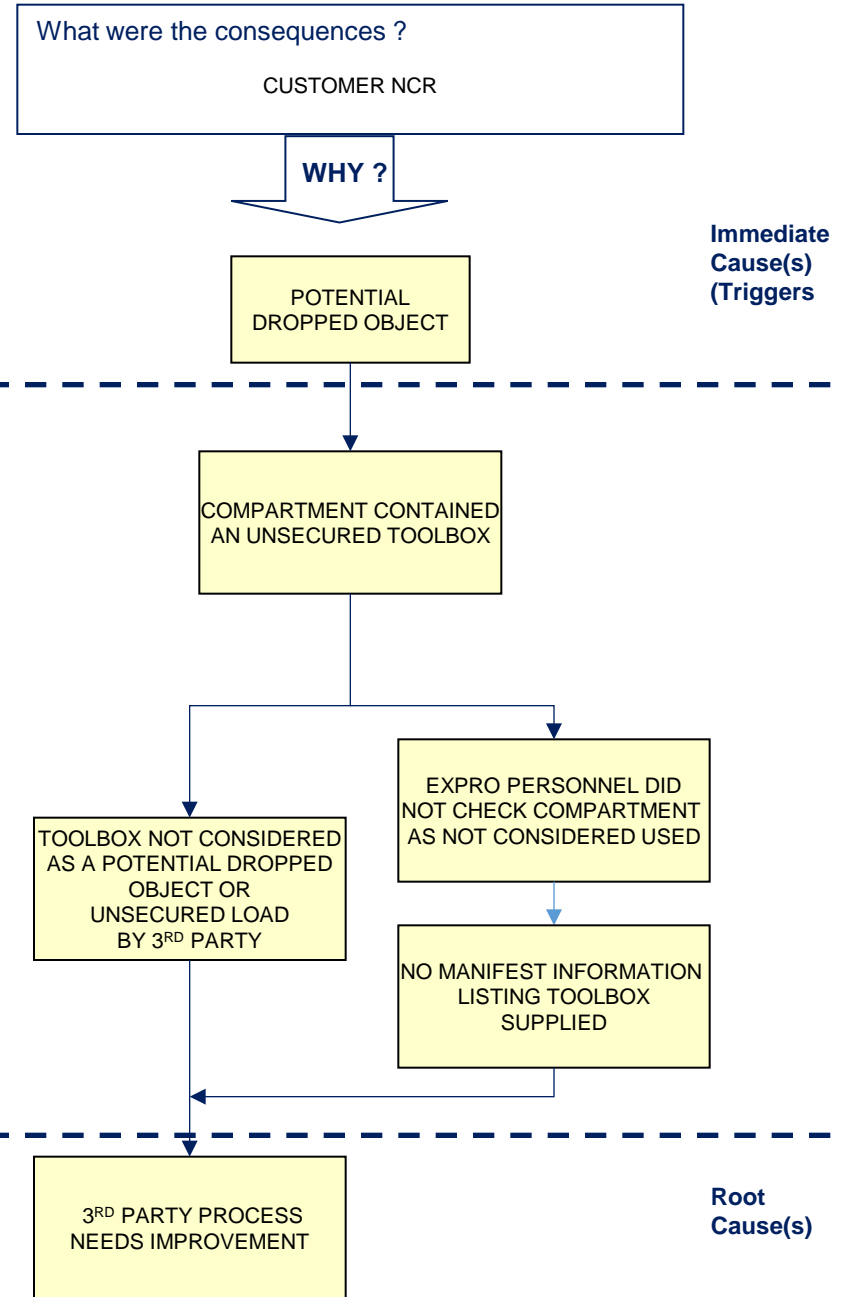
INCONSISTENT APPROACH
TO IMPLEMENT BEST
PRACTICE ACROSS ALL
WORKSHOPS

3RD PARTY PROCESS
NEEDS IMPROVEMENT

Root
Cause(s)



Root Cause Analysis



What were the consequences ?
CUSTOMER NCR

WHY ?

POTENTIAL
DROPPED OBJECT

Immediate
Cause(s)
(Triggers)

Did not perform a thorough incoming inspection.

Assumed that our vendor would have taken all necessary steps.

Failed to appreciate we are responsible for what leaves our yard.

COMPARTMENT CONTAINED
AN UNSECURED TOOLBOX

TOOLBOX NOT CONSIDERED
AS A POTENTIAL DROPPED
OBJECT OR
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BY 3RD PARTY

**EXPRO PERSONNEL DID
NOT CHECK COMPARTMENT
AS NOT CONSIDERED USED**

NO MANIFEST INFORMATION
LISTING TOOLBOX
SUPPLIED

3RD PARTY PROCESS
NEEDS IMPROVEMENT

Root
Cause(s)

Root Cause Analysis



- Need to ensure we understand the kit we hire
- Need to inspect the kit we hire
- Need to ensure the kit we hire is safe for transport

Root Cause Analysis

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Cause(s)
(Triggers)

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RETENTION ON
ANTILUCE DROP CATCH

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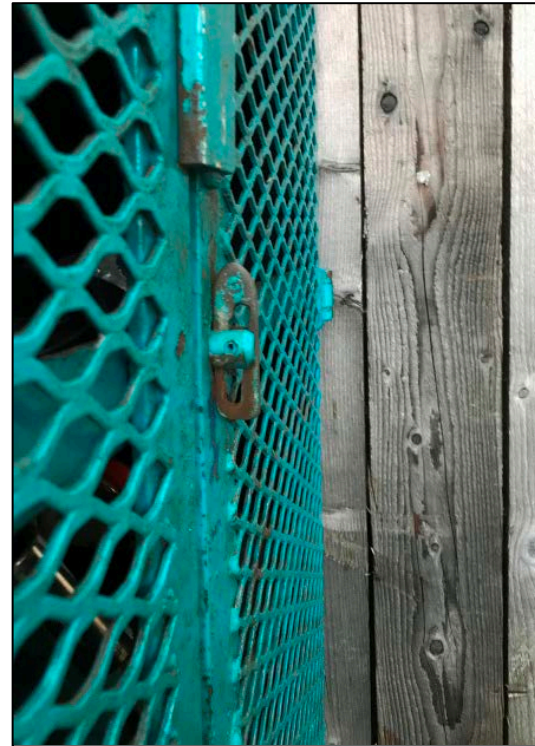
INCONSISTENT APPROACH
TO IMPLEMENT BEST
PRACTICE ACROSS ALL
WORKSHOPS

Root
Cause(s)

What happened



Antiluce drop
catch



Antiluce drop
catch in use

Root Cause Analysis

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Cause(s)
(Triggers)

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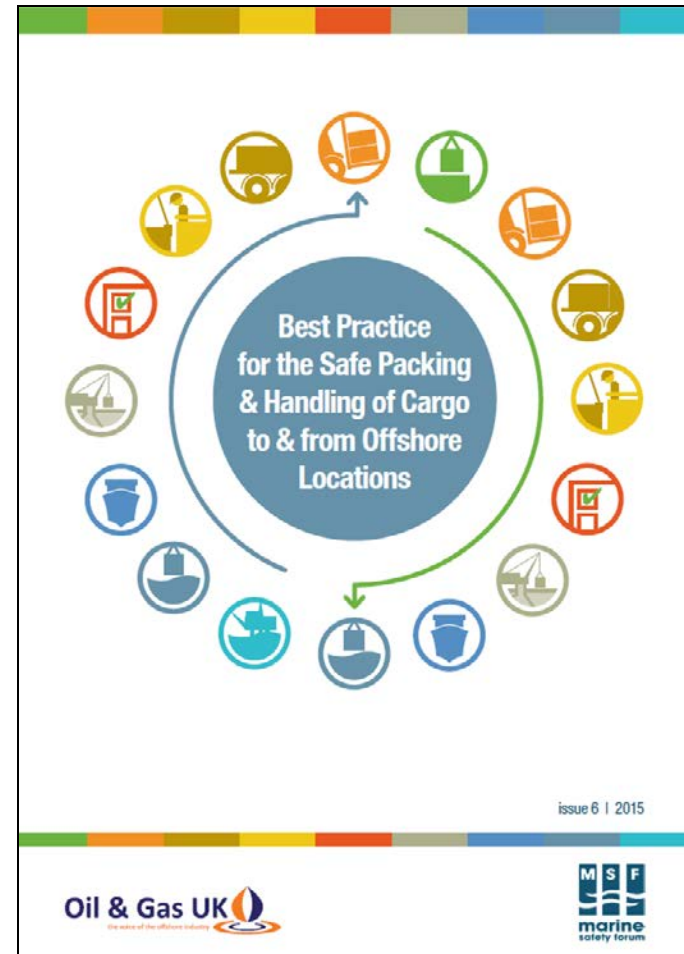
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TO IMPLEMENT BEST
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Root
Cause(s)

Antiluce Drop Lock



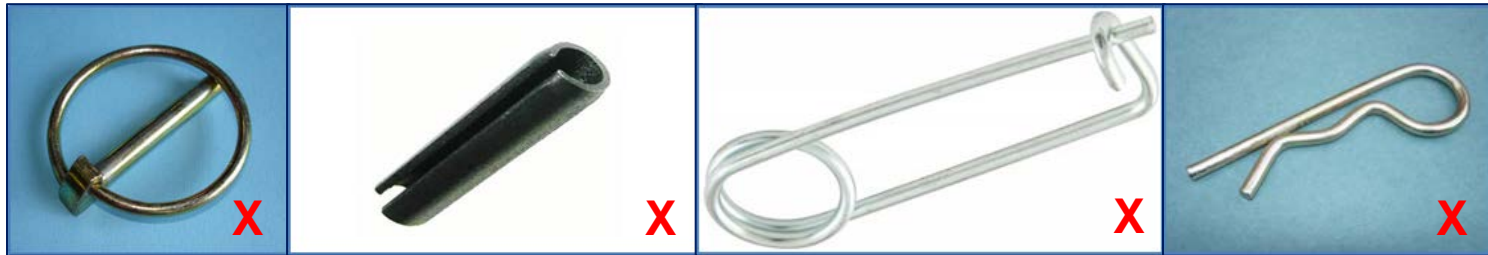
- The antiluce drop catch is designed not to require secondary retention.
- It does not appear in the O&G UK best practice as requiring secondary retention.



Antiluce Drop Lock



- Prior to the incident Expro had been looking a secondary retention options.
- There was no documented requirement within Expro to do so at the time.



- Considered: lynch pins; r-clips; spring / roll / nappy pins and other options.
- All pictured above could be easily knocked off or spring open at height causing further drops issues.

Antiluce Drop Lock



- Current solution is a cable tie.



- At time of incident there was no documented requirement for cable tie or other secondary retention.
- Cable ties had not been applied to the spoolers.
- 2 in-house checks did not pick this up due to lack of documented requirement.



- Following the incident:
- Secondary retention **MUST** be in place on all units with antiluce drop locks for both outward and inward transportation.
- Our third party lifting Engineers have been instructed to check for secondary retention on drop catches.
- Recommended size of the Tie-Wrap is between 4.7mm and 13.2mm for drop locks.



- Need an understanding of the kit you hire
- Perform through incoming inspection
- Secondary retention is important as primary retention may fail

Questions:



- How did the drop lock come undone on the boat?
- Should all antiluce drop catches in the oil industry have secondary retention?
- Is there a better solution than the cable tie?