

ENSCO 67

**Uncontrolled Release of Single Joint Elevators
During Casing Lift**

High Potential Incident, 21 January 2007

11:30 hrs

ENSCO 67 - Incident

Uncontrolled Release of SJ Elevators during Casing Lift

- **What happened: Sequence of Events**
- **Incident Causation Model**
- **Investigation Findings**
- **Identification of Root Causes**
- **Corrective Action To Prevent Recurrence**

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What happened.

Introduction of the Casing Running System to the ENSCO 67



CASING RUNNING SYSTEM

This system is design to improve safety and efficiency by:

- eliminating the need for working above the drill floor

- allowing for faster make up times

- allowing casing rotation while circulating



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What happened.

**CASING RUNNING
SYSTEM**

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What happened.

Re-enactment
looking up the V door.

Casing test run using the port
winch to obtain
measurements prior to the
setup of the Casing Running
System

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What happened.



Toolpusher's
operating
position

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What happened.



Re-enactment
Casing hands
unable to see
clearance on
underside of
elevators

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What happened.



Visibility from
Toolpushers position.
Too far away to observe
incorrect size elevators

Casing Hand advised
to move away from
cat walk and stands
in this position

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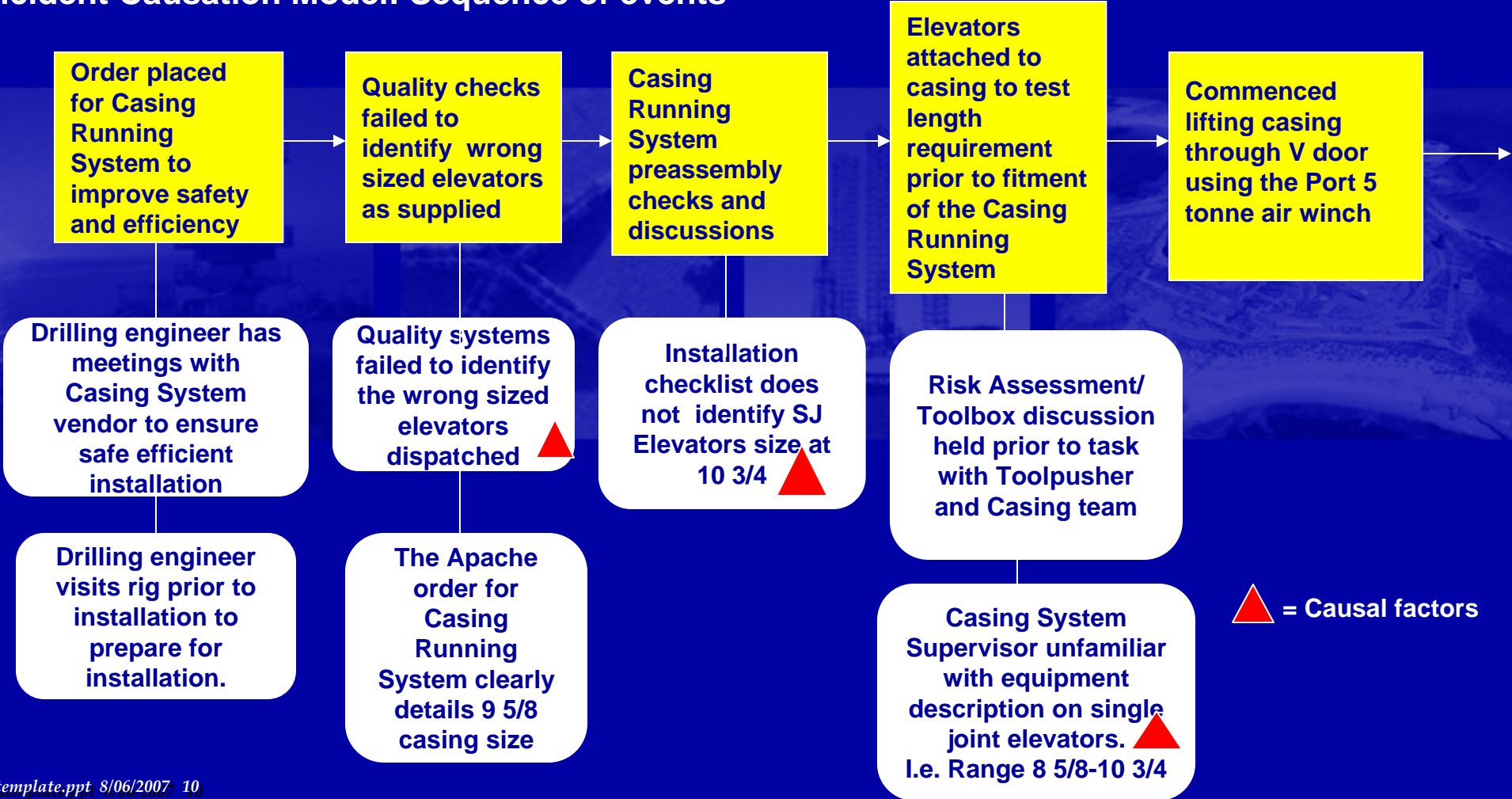
What happened.

Trajectory of elevators
2.5 metres above drill
floor while two
floorhands working in
the area

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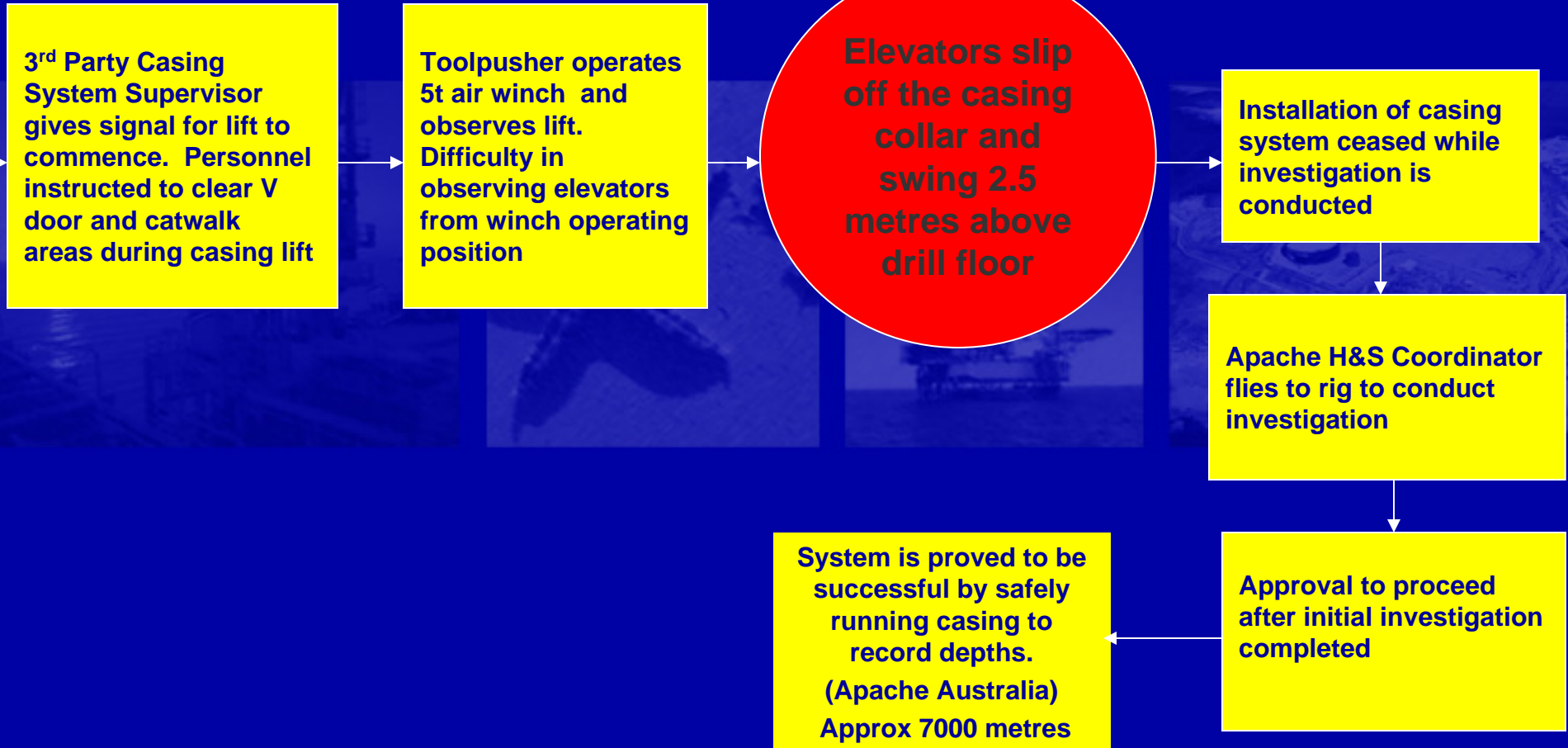
Incident Causation Model: Sequence of events



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The Incident



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Why it happened: Investigation Findings



INEXPERIENCE!
Lead the casing hand supervisor to think that this was the operational range for these elevators

Vendor mistakenly supplied elevators machined for 10 3/4" casing

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Why it happened: Investigation Findings



Casing Hand's view
of elevators.

Under side clearance not
visible from above

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Preventing reoccurrence: Short term measures taken

- Job stopped pending the investigation
- Elevators taken out of service

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TapRoot

Why it happened: Root cause analysis

Causal Factor

Root Cause

What happened to allow this to take place

Unsafe Acts/Conditions

Quality systems failed to identify the wrong sized elevators

Quality Control

QC NI (Needs Improvement.)
Quality inspection or verification was deficient. QC standards may not have been specified and was beyond the capabilities of the inspection techniques or measurement devices or inspectors not adequately trained

Equipment supplied not as requested i.e. 9 5/8"

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TapRoot Preventing reoccurrence: Corrective action plan

Root Causes

Corrective actions

Due date

Responsibility

Quality Control

QC NI (Needs Improvement)
 Quality inspection or verification was deficient. QC standards may not have been specified and was beyond the capabilities of the inspection techniques or measurement devices or inspectors not adequately trained.

Vendor Manager to review internal systems and present report and assurances to client on system improvement.

1st March 07

**Vendor Manager/
 Procurement
 Superintendent**

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TapRoot

Preventing reoccurrence: Corrective action plan


Root Causes	Corrective actions	Due date	Responsibility
<div data-bbox="46 649 541 1209" style="border: 1px solid white; padding: 10px;"> <p><u>Quality Control</u></p> <p><u>Work Direction</u></p> <p><u>Training</u></p> </div>	<div data-bbox="619 511 1333 698" style="border: 1px solid white; padding: 5px;"> <p>Improved QA/QC from Vendor with documented evidence provided prior to any further supply</p> </div> <div data-bbox="640 812 1312 1063" style="border: 1px solid white; padding: 5px;"> <p>Job planning/pre job checklists to be reviewed prior to commencement of work</p> </div> <div data-bbox="640 1193 1312 1380" style="border: 1px solid white; padding: 5px;"> <p>Vendor of specialised equipment to supply formal advice on competency of installer personnel prior to acceptance of work</p> </div>	<div data-bbox="1375 544 1627 665" style="border: 1px solid white; padding: 5px;"> <p>1st March 07</p> </div> <div data-bbox="1375 876 1627 1015" style="border: 1px solid white; padding: 5px;"> <p>Immediately</p> </div> <div data-bbox="1375 1209 1627 1347" style="border: 1px solid white; padding: 5px;"> <p>1st March 07</p> </div>	<div data-bbox="1669 544 1974 665" style="border: 1px solid white; padding: 5px;"> <p>Vendor Manager/ Procurement Superintendent</p> </div> <div data-bbox="1669 876 2005 1015" style="border: 1px solid white; padding: 5px;"> <p>Rig OIM/ Apache Drilling Supervisor</p> </div> <div data-bbox="1669 1177 1984 1364" style="border: 1px solid white; padding: 5px;"> <p>Vendor Manager/ Procurement Superintendent</p> </div>

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HSE Incident Alert



Subject: Near Miss Casing slide at rig ramp

WHAT happened?
10 ¾" Single Joint Elevators were mistakenly used during a practice run to pick up one joint 9 5/8" Casing, resulting in pipe slide at the ramp.



HOW did it happen?
The single joint elevators were installed on to the 9 5/8 in. casing which was then hoisted, using the floor winch until the pin end of the casing had passed over the Bump Stopper, approx. 8 ft along catwalk from bottom of V-door on the Catwalk.

The Winch Operator then proceeded to come down to seat the joint into position.

On the way down, the single joint elevators slid upwards over the casing collar of the 9 5/8 in. casing, causing the pin end of the casing to slide along the catwalk into the casing Bump Stopper approx. 4 ft.

No personal injuries or equipment damage were incurred.

WHY did it happen?

- Inappropriate use of single joint elevator
- Failure to check internal dimension of single joint elevator
- Failure to plan and coordinate right equipment shipment
- Inadequate single joint elevator and lack of measures

PREVENTION MEASURES PROPOSED

- Develop a new JSA including the inspection of single joint elevators by service personnel and relevant drilling contractor and client personnel
- Implement the shipment of back up tools for similar jobs with different range of internal diameters
- Communicate this incident to the rest of the employees in Asia Pacific and the rest of the world to

Comments
If you need additional information about this alert please contact:
P. Colston paul_colston@tescocorp.com
S. Beyk simon_beyk@tescocorp.com

Alert No.	Issued by:	Reviewed by:	Approved by:	Date:
APBU-001	P. Colston	S. Beyk	W. Schneider	March 15, 2007

Industry wide Safety Alert issued by vendor



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A collage of four images related to oil and gas operations, including a crane on a rig, a close-up of a valve, an offshore platform, and an aerial view of a wellhead.

Questions?