

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT
GULF OF MEXICO REGION

ACCIDENT INVESTIGATION REPORT

For Public Release

1. OCCURRED

DATE: 16-DEC-2015 TIME: 1845 HOURS

2. OPERATOR: Fieldwood Energy LLC

REPRESENTATIVE:

TELEPHONE:

CONTRACTOR:

REPRESENTATIVE:

TELEPHONE:

- STRUCTURAL DAMAGE
- CRANE
- OTHER LIFTING DEVICE
- DAMAGED/DISABLED SAFETY SYS.
- INCIDENT >\$25K \$54,269.62
- H2S/15MIN./20PPM
- REQUIRED MUSTER
- SHUTDOWN FROM GAS RELEASE
- OTHER

3. OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR
ON SITE AT TIME OF INCIDENT:

6. OPERATION:

4. LEASE:

AREA: VR LATITUDE:
BLOCK: 261 LONGITUDE:

- PRODUCTION
- DRILLING
- WORKOVER
- COMPLETION
- HELICOPTER
- MOTOR VESSEL
- PIPELINE SEGMENT NO.
- OTHER

5. PLATFORM: A-AUX

RIG NAME:

6. ACTIVITY: EXPLORATION(POE)
 DEVELOPMENT/PRODUCTION
(DOCD/POD)

8. CAUSE:

- EQUIPMENT FAILURE
- HUMAN ERROR
- EXTERNAL DAMAGE
- SLIP/TRIP/FALL
- WEATHER RELATED
- LEAK
- UPSET H2O TREATING
- OVERBOARD DRILLING FLUID
- OTHER _____

7. TYPE:

- HISTORIC INJURY
 - REQUIRED EVACUATION
 - LTA (1-3 days)
 - LTA (>3 days)
 - RW/JT (1-3 days)
 - RW/JT (>3 days)
 - Other Injury

- FATALITY
- POLLUTION
- FIRE
- EXPLOSION

- LWC HISTORIC BLOWOUT
- UNDERGROUND
 - SURFACE
 - DEVERTER
 - SURFACE EQUIPMENT FAILURE OR PROCEDURES

COLLISION HISTORIC >\$25K <=\$25K

9. WATER DEPTH: 153 FT.

10. DISTANCE FROM SHORE: 70 MI.

11. WIND DIRECTION: NW
SPEED: 0 M.P.H.

12. CURRENT DIRECTION:
SPEED: 0 M.P.H.

13. SEA STATE: 5 FT.

On December 16, 2015, a crane incident occurred at approximately 6:45pm on Fieldwood Energy's Vermillion 261-A-Aux facility. The Crane Operator and two Production Operators were positioning the boom to make a lift on the top deck near the crane pedestal. During positioning, all parties heard a loud noise and the Crane Operator stopped the job. Upon inspection, they noticed both the crane's boom stops and boom cords were bent/damaged. At this time, the Crane Operator returned the boom back into the boom rest and placed the crane out of service.

On December 29, 2015, Fieldwood Energy reported the event to the BSEE Lake Charles District and a BSEE Inspection Team assembled onsite to conduct an investigation into the incident. The Inspection Team's review of the crane confirmed damage to the boom chords, boom stops, and revealed the extension shaft for the boom hoist limit device was loose and bent. Furthermore, the Team identified that the boom angle indicator was covered with paint overspray and grime making it difficult to read from the Crane Operator's station.

Although a job safety analysis and a pre-use inspection were performed prior to the lifting activities, they failed to identify any deficiencies with the crane nor did they note the potential hazard associated with the close proximity of the load to the crane's minimum boom radius and low lighting conditions. These oversights prevented all parties involved in the lifting activities from taking the proper precautionary measures to correct the deficiencies and mitigate any associated hazards. Neither the Signal Person nor the Crane Operator noticed the boom was nearing the boom stops. The boom reached the upper boom hoist limit device but it failed to function; most likely because the extension shaft was loose and bent thus allowing the boom to exceed its maximum angle height and come into contact with the boom stops. As a result, damage to the crane occurred. Specifically, bent chords on the lower section of the boom and bent boom stops.

18. LIST THE PROBABLE CAUSE(S) OF ACCIDENT:

- The boom hoist limit device failed to function, thus allowing the boom to exceed its maximum angle height and contact the boom stops

19. LIST THE CONTRIBUTING CAUSE(S) OF ACCIDENT:

- During the job safety analysis, all parties failed to identify the associated hazards of the lift due to the close proximity of the load to the crane's minimum boom radius and the low light conditions
- The pre-use inspection failed to identify the extension shaft for the boom hoist limit device was loose and bent.
- Boom angle indicator was covered with paint overspray and grime making it hard to read from the Crane Operator's station
- Neither the Signal Person nor the Crane Operator noticed the boom was nearing the stops

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

- Crane boom
- Boom stops

NATURE OF DAMAGE:

- Bent chords on lower section of boom
- Bent boom stops

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ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRENCE NARRATIVE:

The Lake Charles District has no recommendations for the Office of Incident Investigations.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: **YES**

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

G-892 (W) Operator did not verbally notify the Lake Charles District Manager immediately following the crane incident that occurred on Dec. 16, 2015

I-112 (C) Boom hoist limit device failed to automatically stop the boom hoist winch when the boom reached its maximum predetermined high angle.

I-114 (C) Boom angle indicator is not readable from the operator's station. The boom angle indicator is faded and has paint overspray.

25. DATE OF ONSITE INVESTIGATION:

29-DEC-2015

26. ONSITE TEAM MEMBERS:

Darron Miller / Kim Jackson / Scott Bazinet / Cody LeBlanc /

29. ACCIDENT INVESTIGATION

PANEL FORMED: **NO**

OCS REPORT:

30. DISTRICT SUPERVISOR:

Mark Osterman

APPROVED

DATE: **11-MAY-2016**

Crane/Other Material-Handling Equipment Attachment

Equipment Information

Installation date: **01-APR-80**

Manufacturer: **AMERICAN AERO**

Manufacture date: **05-MAR-80**

Make/Model: **AMERICAN AERO / G15C**

Any modifications since manufactured? Describe and include date(s).

What was the maximum lifting capacity at the time of the lift?

Static: Dynamic:

Was a tag line utilized during the lift? **N**

Were there any known documented deficiencies prior to conducting the lift? If yes, what were the deficiencies?

none documented

List specific type of failure that occurred during this incident. (e.g. cable parted, sticking control valve, etc.)

Boom hoist limit device failed

If sling/loose gear failure occurred does operator have a sling/loose gear inspection program in place?

Type of lift: **DD**

For crane only:

Type of crane: **HYDRAULIC**

Boom angle at time of incident: Degrees: **78** Radius: **10**

What was load limit at that angle? **26880**

Crane equipped with: **B**

Which line was in use at time of incident? **L**

If load line involved, what configuration is the load block: **4** part.

Load Information

What was being lifted? **NO LOAD ATTACHED**

Description of what was being lifted (e.g. 10 joints of 2 3/8-inch pipe, ten 500-lb. sacks of sand, 2 employees, etc.)

incident occurred while positioning the crane over a drum rack

Approximate weight of load being lifted:

Was crane/lifting device equipped with an operable weight indicator? **N**

Was the load identified with the correct or approximate weight? **N**

Where was the lift started, where was it destined to finish, and at what point in the lift did the incident occur? Give specific details (e.g. pipe rack, riser cart, drill floor, etc.)

incident occurred prior to attaching to the load

If personnel was being lifted at the time of this incident, give specific details of lifting device and riding apparatus in use (e.g. 1) crane-personnel basket, 2) air hoist-boatswain chair, other)

Were personnel wearing a safety harness?

Was a lifeline available and utilized?

List property lost overboard.

Rigger/Operator Information

Has rigger had rigger training?

If yes, date of last training:

How many years of rigger experience did rigger have?

How many hours was the operator on duty prior to the incident? 1

Was operator on medication when incident occurred? N

How many hours was the rigger on duty prior to the incident?

How much sleep did rigger have in the 24 hours preceding this incident? 8

Was rigger on medication when incident occurred?

Were all personnel involved in the lift drug tested immediately following this incident?

Operator: N Rigger: Other:

While conducting the lift, was line of sight between operator and load maintained?

Y

Does operator wear glasses or contact lenses? N

If so, were glasses or contacts in use at time of the incident? N

Does operator wear a hearing aid? N

If so, was operator using hearing aid at time of the incident? N

What type of communication system was being utilized between operator and rigger at time of this incident?

HAND SIGNAL

For crane only:

What crane training institution did crane operator attend?

FALCK SAFETY SERVICES

Where was institution located? LOUISIANA

Was operator qualified on this type of crane? Y

How much actual operational time did operator have on this particular crane involved in this incident?

Years: **7** Months: **0**

List recent crane operator training dates.

03JUL2013

For other material-handling equipment only:

Has operator been trained to operate the lifting device involved in the incident? **N**

How many years of experience did operator have operating the specific type of

For other material-handling equipment only:

Was equipment visually inspected before the lift took place?

What is the manufacture's recommendation for performing periodic inspection on the equipment involved in this incident?

Safety Management Systems

Does the company have a safety management program in place? **N**

Does the company's safety management program address crane/other material-handling equipment operations?

N

Provide any remarks you may have that applies to the company's safety management program and this incident?

Did operator fill out a Job Safety Analysis (JSA) prior to job being performed?

Y

Did operator have an operational or safety meeting prior to job being performed?

N

What precautions were taken by operator before conducting lift resulting in ir

Procedures in place for crane/other material-handling equipment activities:

Did operator have procedures written? **Y**

Did procedures cover the circumstances of this incident? **N**

Was a copy available for review prior to incident? **N**

Were procedures available to MMS upon request? **N**

Is it documented that operator's representative reviewed procedures before conducting lift?

N

Additional observations or concerns: