

ALASKA STATE LEGISLATURE

Senator Joe Paskvan

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Sponsor Statement

SB 97: Crane Operator Licenses

Although Alaska has not experienced a major crane accident for several years, the alarm sounded by accidents across the rest of the nation should not be ignored. In the past few years, crane accidents have caused numerous workplace deaths and millions of dollars in property damages. Several accidents caused the death of public bystanders. Although some of these accidents were the result of circumstances beyond the operator's control, a majority resulted from operator error.

Senate Bill 97 is a proactive step to avoid a crane-related catastrophe in Alaska by establishing minimum licensing standards to ensure that operators are adequately qualified. The State of Alaska currently requires licensing for numerous occupations from barbers and hairdressers to veterinarians. Licensing requirements are designed to protect the public by ensuring that individuals are properly qualified to engage in a particular field of expertise. For example, Commercial Drivers License (CDL) requirements help to ensure that individuals operating large commercial vehicles are qualified to operate them safely on Alaska's road system.

Currently, 16 states and 6 municipalities have passed legislation to require crane operator licensing and legislation is pending in 6 more states. The majority of these licensing requirements established a requirement for certification through the National Commission for the Certification of Crane Operators (NCCCO) or an equivalent nationally-accredited training provider.

This legislation will not create a burden on state revenues, as licensing fees will pay for enforcement costs, subject to Legislative appropriation.

This Legislation will help ensure workplace and public safety through the following provisions:

- Licensing with certification through NCCCO or equivalent
- Supervision standards for crane operator trainees
- Standards for reporting crane-related accidents
- Significant penalties for violations
- Sustainable funding for enforcement

I urge your support of this legislation.

SENATE BILL NO. 97

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTY-SIXTH LEGISLATURE - FIRST SESSION

BY THE SENATE LABOR AND COMMERCE COMMITTEE

Introduced: 2/4/09

Referred: Labor and Commerce, Finance

A BILL

FOR AN ACT ENTITLED

1 "An Act relating to the licensing of crane operators; and providing for an effective
2 date."

3 **BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:**

4 * **Section 1.** AS 18 is amended by adding a new chapter to read:

5 **Chapter 64. Crane Operation.**

6 **Sec. 18.64.010. Crane operator license required.** Except as otherwise
7 provided in this chapter, a person may not operate or allow another person to operate a
8 crane used in construction, excavation, or demolition in the state unless

9 (1) the person operating the crane holds a valid crane operator license
10 for that type of crane issued under AS 18.64.015; or

11 (2) the person operating the crane holds a valid crane operator trainee
12 license for that type of crane under AS 18.64.020 and is under the direct and
13 continuous supervision of a crane operator licensed to operate that type of crane under
14 AS 18.64.015.

1 **Sec. 18.64.015. Crane operator licenses.** (a) The department may issue a
2 crane operator license for a mobile, tower, or overhead crane to a person who pays the
3 applicable fee and who meets requirements established in this chapter and in
4 regulations adopted by the department under this chapter.

5 (b) The department may not issue a crane operator license under (a) of this
6 section to a person who does not hold a valid, current certification for the type of crane
7 the person is to operate, issued by the National Commission for the Certification of
8 Crane Operators, or another comparable certifying entity that is accredited by the
9 National Commission for Certifying Agencies and is approved by the department.

10 **Sec. 18.64.020. Crane operator trainee licenses.** (a) The department may
11 issue a crane operator trainee license for a mobile, tower, or overhead crane to a
12 person who pays the applicable fee and meets requirements established by the
13 department in regulations adopted under this chapter.

14 (b) A person holding a crane operator trainee license for a mobile, tower, or
15 overhead crane may not operate that type of crane except under the direct and
16 continuous supervision of a crane operator licensed to operate that type of crane under
17 AS 18.64.015. A crane operator licensee supervising a crane operator trainee may not
18 conduct any other duties other than the direct and continuous supervision of the crane
19 operator trainee while the crane operator trainee is operating a crane.

20 **Sec. 18.64.025. Fees.** The department shall establish by regulation reasonable
21 fees to cover the costs of administration and enforcement of this chapter. Fees
22 collected under this chapter shall be deposited into the building safety account created
23 under AS 44.31.025.

24 **Sec. 18.64.030. Duration of license.** (a) Unless revoked or suspended by the
25 department, a crane operator license is valid for the term of years specified by the
26 department, not to exceed five years. The department shall set the term of a crane
27 operator license issued under AS 18.64.015 to expire on the date of expiration of the
28 certification required under AS 18.64.015(b).

29 (b) Unless revoked or suspended by the department, a crane operator trainee
30 license is valid for the term of months specified by the department, not to exceed one
31 year.

(c) A crane operator license or crane operator trainee license may be denied, revoked, or suspended if the department finds that the person applying for the license or the licensee

(1) knowingly provided false information or omitted material information from a license application;

(2) failed to report an accident as required under AS 18.64.035;

(3) operated or allowed a person to operate a crane in violation of this chapter or a regulation adopted under this chapter;

(4) caused a crane accident or engaged in other conduct that, in the judgment of the department, demonstrates that the person is unfit to operate a crane safely; or

(5) has a medical condition that renders the person unfit to safely operate a crane.

Sec. 18.64.035. Reporting of crane accidents. (a) A person licensed under AS 18.64.015 or 18.64.020 shall report to the department a crane accident that is fatal, results in the in-patient hospitalization of a person, or causes property damage in excess of \$5,000 as soon as possible, but in no event longer than eight hours after the accident.

(b) The report required under (a) of this section may be made by telephone, facsimile transmission, electronic mail, or in person to the nearest office of the division of labor standards and safety established under AS 23.10.075. The report must state the name of the individual making the report, the name of the licensee involved in the accident, the location of the accident, the date and time of the accident, a contact person for the licensee and the telephone number of the contact person, a brief description of the accident, the number of deaths or hospitalized persons, and the extent of any injuries or property damage resulting from the accident. If the licensee is unable, because of circumstances beyond the control of the licensee, to make the report required under this section, the report may be made by a person on behalf of the licensee. The notification required by this section is in addition to any notification required of employers under AS 18.60.058.

Sec. 18.64.040. Violations; penalties. (a) A person violates the provisions of

1 this chapter if the person

2 (1) operates a mobile, tower, or overhead crane without a license for
3 that type of crane issued under AS 18.64.015 or 18.64.020, or allows a person to
4 operate a crane without a valid current license for that type of crane issued under
5 AS 18.64.015 or 18.64.020;

6 (2) allows a crane operator trainee to operate a crane without the direct
7 and continuous supervision of a crane operator licensed to operate that type of crane as
8 required under AS 18.64.020; or

9 (3) fails to report a crane accident as required under AS 18.64.035.

10 (b) Notwithstanding any other provision of law, upon finding that a person has
11 committed a violation of this chapter, the department may assess a civil penalty not to
12 exceed

13 (1) \$5,000 for each violation that is a first violation that does not result
14 in a death or serious injury;

15 (2) \$50,000 for each violation that is not a first violation or that results
16 in a death or serious injury.

17 (c) A person who knowingly violates (a) of this section is guilty of a class B
18 misdemeanor.

19 **Sec. 18.64.050. Powers of the department.** (a) The department shall adopt
20 regulations necessary to carry out the purposes of this chapter.

21 (b) The department may, on its own motion, conduct investigations, hold
22 hearings, make findings, and issue orders necessary to implement and enforce the
23 provisions of this chapter.

24 **Sec. 18.64.060. Notice and hearing.** (a) The department shall adopt
25 regulations under AS 44.62 (Administrative Procedure Act), consistent with due
26 process of law, that govern the practice, procedure, and conduct of all investigations,
27 hearings, and proceedings that the department holds under this chapter.

28 (b) The administrative adjudication procedures of AS 44.62 (Administrative
29 Procedure Act) do not apply to hearings under this chapter before the department,
30 except that the final administrative determination by the department is subject to
31 judicial review as provided in AS 44.62.560 and 44.62.570.

1 **Sec. 18.64.070. Procedure for civil penalties.** (a) The department shall
 2 provide to a person who the department finds has violated this chapter under
 3 AS 18.64.040(b) written notice of a civil penalty imposed under this chapter, a
 4 statement of the reason for the civil penalty, a copy of the applicable procedures, and
 5 notice of the opportunity to request a hearing through the commissioner. A request for
 6 a hearing must be in writing and clearly state the issues to be raised at the hearing.

7 (b) If a person who is provided written notice of a civil penalty under (a) of
 8 this section fails to request a hearing within 30 days after issuance of the notice, the
 9 right to a hearing is waived, and the violation or violations and any civil penalty
 10 identified in the notice become the final decision of the department and are not subject
 11 to judicial review.

12 (c) A hearing decision issued under this section is a final administrative
 13 decision of the department subject to review by a superior court under AS 44.62.560
 14 and 44.62.570.

15 **Sec. 18.64.080. Exemptions.** This chapter does not apply to

16 (1) an individual who has a valid certificate of fitness, as required by
 17 AS 18.62.010, performing electrical line work if

18 (A) the crane used has a manufacturer's rating capacity of less
 19 that 17.5 tons; and

20 (B) the individual has received at least 40 hours of training,
 21 approved by the department, relating to the operation of the crane;

22 (2) an officer or employee of the United States government operating a
 23 crane within the scope of the person's official duties;

24 (3) a member of a police or fire department operating a crane within
 25 the scope of the member's official duties;

26 (4) other persons as may be determined under regulation by the
 27 department.

28 **Sec. 18.64.099. Definitions.** In this chapter,

29 (1) "commissioner" means the commissioner of labor and workforce
 30 development;

31 (2) "construction, excavation, or demolition" means

(A) construction, excavation, demolition, erection, alteration, repair, removal, movement, or dismantling of buildings or other structures, and all related operations, except for operations related to a manufacturing facility or power house;

(B) construction, excavation, demolition, alteration, or repair of sewers, trenches, caisson, conduits, pipelines, or roads, and all related operations;

(3) "crane"

(A) means a machine, whether fixed or mobile, that has a power-operated winch, load line, and boom capable of moving laterally through rotation of the machine on a carrier, that has a manufacturer or professional engineer stamped rated weight lifting capacity greater than five tons, and that is used for lifting or lowering a load and moving the load horizontally;

(B) includes a hydraulic crane, crawler crane, wheel-mounted crane, truck crane, traveling crane, and gantry crane;

(C) does not include a fork lift, digger derrick truck, aircraft, bucket truck, knuckle boom, stacker, lift truck, power shovel, backhoe, dragline, excavator, front-end loader, bulldozer, derrick, power or chain hoist, or vehicle or machine not using a power-operated winch and load line;

(4) "department" means the Department of Labor and Workforce Development.

* **Sec. 2.** AS 44.31.025 is amended to read:

Sec. 44.31.025. Building safety account. The building safety account is created in the state treasury. The legislature may appropriate money from the account for necessary costs incurred by the Department of Labor and Workforce Development in the administration of AS 05.20, AS 18.60.180 - 18.60.395, 18.60.800 - 18.60.820, [AND] AS 18.62, and AS 18.64. Nothing in this section creates a dedicated fund or dedicates the money in the account for a specific purpose.

* **Sec. 3.** The uncoded law of the State of Alaska is amended by adding a new section to read:

1 TRANSITION: LICENSING OF CERTAIN CRANE OPERATORS BY PRIOR
 2 EXPERIENCE. (a) Notwithstanding any contrary provisions of AS 18.64.010 - 18.64.099,
 3 enacted by sec. 1 of this Act, a person who provides proof satisfactory to the Department of
 4 Labor and Workforce Development that the person had at least 2,000 hours of employment as
 5 the operator of a mobile, tower, or overhead crane, as defined by AS 18.64.099, enacted by
 6 sec. 1 of this Act, before the effective date of sec. 1 of this Act, may qualify for a crane
 7 operator license for that type of crane without meeting the certification requirements of
 8 AS 18.64.015(b), as enacted by sec. 1 of this Act. A crane operator license for a type of crane
 9 issued under this section may be renewed, notwithstanding the certification requirements of
 10 AS 18.64.015(b).

11 (b) The Department of Labor and Workforce Development may not accept an
 12 application for license by prior experience under this section more than one year after the
 13 effective date of sec. 1 of this Act.

14 * **Sec. 4.** The uncodified law of the State of Alaska is amended by adding a new section to
 15 read:

16 TRANSITION: REGULATIONS. The Department of Labor and Workforce
 17 Development may proceed to adopt regulations necessary to implement the changes made by
 18 this Act. The regulations take effect under AS 44.62 (Administrative Procedure Act), but not
 19 before the effective date of the statutory change.

20 * **Sec. 5.** Section 4 of this Act takes effect immediately under AS 01.10.070(c).

21 * **Sec. 6.** Except as provided in sec. 5 of this Act, this Act takes effect January 1, 2010.

FISCAL NOTE

STATE OF ALASKA
2009 LEGISLATIVE SESSION

Fiscal Note Number:

Bill Version:

SB 97

() Publish Date:

Identifier (file name):

SB097-DOLWD-MI-03-16-09

Title

Crane Operator Licensing

Dept. Affected: Labor and Workforce Development

RDU

Labor Standard & Safety

Component

Mechanical Inspection

Sponsor

Senate Labor and Commerce

Requester

Senate Labor and Commerce

Component Number

346

Expenditures/Revenues

(Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

	Appropriation Required	Information					
OPERATING EXPENDITURES	FY 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Personal Services		36.2	36.2	36.2	36.2	36.2	36.2
Travel		5.0	5.0	5.0	5.0	5.0	5.0
Contractual		6.8	6.8	6.8	6.8	6.8	6.8
Supplies		2.0	2.0	2.0	2.0	2.0	2.0
Equipment							
Land & Structures							
Grants & Claims							
Miscellaneous							
TOTAL OPERATING	0.0	50.0	50.0	50.0	50.0	50.0	50.0

CAPITAL EXPENDITURES

CHANGE IN REVENUES (1157)

FUND SOURCE

(Thousands of Dollars)

1002 Federal Receipts							
1003 GF Match							
1004 GF							
1005 GF/Program Receipts							
1037 GF/Mental Health							
1157 Worker Safety Account		50.0	50.0	50.0	50.0	50.0	50.0
TOTAL	0.0	50.0	50.0	50.0	50.0	50.0	50.0

Estimate of any current year (FY2009) cost:

None

POSITIONS

Full-time							
Part-time							
Temporary							

ANALYSIS: (Attach a separate page if necessary)

This bill establishes requirements for crane operator licensing. Upon passage of the bill, the department will be required to establish licensing standards and fees by regulation. The department anticipates using existing staff and has unutilized expenditure authorization which can be used to cover the costs of issuing the licenses and administering and enforcing the law. However, Building Safety Account revenue resulting from the fees will be necessary to support the authorization. Costs for the program activities are estimated at: Personal Services - \$36.2, Travel - \$5.0, Contractual - \$6.8, and supplies - \$2.0. Revenue is estimated based on a fee of \$50.00 per year for 1,000 licensees. If actual costs differ from these estimates, the licensing fees will be adjusted with the first license renewals.

Prepared by: Grey Mitchell, Director

Division: Labor Standard & Safety

Approved by: Click Bishop, Commissioner

Agency: Department of Labor and Workforce Development

Phone 465-4855

Date/Time 3/16/09 11:22 AM

Date 3/16/09

Crane Operator Licensing Sectional Analysis

Section 1 establishes a requirement for a crane operator working in construction, excavation or demolition to be licensed and certified. It also requires the Department of Labor and Workforce Development to establish regulations for licensing requirements, to include certification through the National Commission for the Certification of Crane Operators or equivalent, fitness, trainee standards and fees. This section also establishes the following provisions:

- licensing fees deposited in Building Safety Account for enforcement of chapter;
- duration of license not to exceed five years;
- conditions for denying, suspending or revoking a license;
- crane accident reporting conditions and requirements;
- definitions for violations and civil and criminal penalties;
- department powers to adopt regulations and hold hearings;
- procedures administering civil penalties, appeals and hearings;
- definitions for exemptions; and,
- definitions for terms used in the chapter.

Section 2 amends AS 44.31.025 to allow the Legislature to appropriate funding for crane operator licensing enforcement through fees contributed to the Building Safety Account.

Section 3 amends uncodified Alaska law to establish a temporary grandfather provision to allow a crane operator license applicant to forego certification requirements by providing proof of 2,000 hours of experience. The experience must be obtained prior to the effective date and the application must be made within one year of the effective date.

Section 4 amends uncodified Alaska law to authorize the Department of Labor and Workforce Development to adopt regulations under the Administrative Procedures Act, with an effective date not before January 1, 2010.

Section 5 establishes an immediate effective date for section 4.

Section 6 establishes a January 1, 2010 effective date for the remaining sections.

Crane Accidents in Alaska under jurisdiction of Alaska Department of Labor and Workforce Development					
DATE	COMPANY	ADDRESS	CITY	CASE #	OUTCOME
5/4/1987	KC Construction	Chakok Rd & the River	Anchor Point	15266281	No Fat/Hosp
5/4/1987	Rollins Truck & Tractor	Chakok Rd & the River	Anchor Point	15266299	1 Fatality
5/11/1987	Aleutian Constructors J.V. of CRK & Associates Inc/Walsh & Co.	Aleutian Camp Naval Air	Adak	2532760	1 Fatality
6/14/1988	M. Hobbs Construction	Salmon Creek Fish Hatchery	Juneau	103670386	1 Hosp/1 Inj
9/9/1988	Steel Engineering and Structural Metal	Shopping Center	Ft. Wainwright	2536829	1 Hosp
10/26/1988	Porta Shop	5641 Glacier Hwy	Juneau	2537165	No Fat/Hosp
7/19/1989	File Construction Co	AK National Guard Float Fac.	Juneau	103660122	1 Fatality
7/26/1989	B.C Excavating Co	601 Muldoon Rd	Anchorage	103663829	1 Hosp
11/29/1994	Whitestone SE Logging Co.	Anita Etolin Is.	Wrangell	105857650	1 Fatality
8/10/1995	Henry F. Scepurek	Hyer Road	Wasilla	105872360	1 Fat/ 1 Inj
9/5/1995	Hamilton Construction	Unknown	Skagway	124075557	1 Fatality
9/20/1997	CRK & Associates Inc	Aleutian Camp Naval Air	Adak	105869838	1 Fatality
8/22/2001	Neeser Construction	Providence Dr.	Anchorage	303698377	No Fat/Hosp

Crane Accidents in Alaska under jurisdiction of federal Occupational Safety and Health Administration					
EVENT DATE	INSPECTION DATE	COMPANY	CITY	CASE #	OUTCOME
5/18/1995	5/23/1995	Lynden Inc, Alaska Marine Lines	Ketchikan	109433425	1 Fatality
3/27/1992	4/1/1992	All Alaskan Seafood, Inc	St George Is.	107108201	6 Injuries
7/13/1987	7/16/1987	Dutch Harbor Seafoods-M/V Galaxy	Dutch Harbor	101898351	1 Fatality
12/15/1984	12/16/1984	Alyeska Pipeline Service Compar	Valdez	1529908	1 Fatality

Prepared by Alaska Department of Labor and Workforce Development, Labor Standards and Safety Division (Jan 2009)

Does not include crane accidents under the jurisdiction of the U.S. Coast Guard and the Mine Safety and Health Administration (USDOL)

STATE OF ALASKA

Department of Labor and Workforce Development

OFFICE OF THE COMMISSIONER

SARAH PALIN, GOVERNOR

P.O. BOX 111149
JUNEAU, ALASKA 99811-1149

PHONE: (907) 465-2700
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August 11, 2008

3-2-1 Construction Incorporated
1376 Airline Dr
North Pole, AK 99705-8603

To whom it may concern:

Serious crane accidents across the country are making news this construction season. Crane accidents in Nevada, New York, Florida, Oklahoma and Texas have claimed the lives of workers and public bystanders this year. Although we have not had a significant accident involving a crane for several years in Alaska, the national trends reflect that proactive solutions should be considered.

The Alaska Department of Labor and Workforce Development is evaluating potential solutions to help minimize crane accidents in Alaska. Ensuring that crane operators are qualified through a certification and licensing process is one of the potential solutions. At the moment, 15 states and six municipalities require crane operators to be certified, but several more are currently considering certification requirements.

The attached survey form is designed to solicit your input regarding this critically important issue. If you would like to make additional comments beyond the survey format, please do. Submit your completed survey forms by fax to (907) 465-6012 or mail them to the following address:

Tina StClair
Crane Certification Survey
DOLWD, Labor Standards and Safety
P.O. Box 111149
Juneau, AK 99811-1149

Sincerely,



Clark Bishop
Commissioner

Enclosure: Survey Form

Alaska Department of Labor and Workforce Development
Crane Operator Certification Survey
Fax to 907-465-6012

1. How many times has your company used a crane¹ in the past five years?

None 1-10 11-20 21-30 Over 31

2. How many times has your company overseen a work site where subcontractors or other entities used a crane in the past five years?

None 1-10 11-20 21-30 Over 31

3. Does your company currently require crane operators to be certified through the National Commission for the Certification of Crane Operators (NCCCO) or other organization accredited by the National Commission for Certifying Agencies?

YES NO

4. Do you consider crane operator qualification certification to be an important method to help minimize accidents associated with cranes in Alaska?

YES NO

5. Should a person in Alaska be required to be certified by a nationally accredited organization and licensed by the State of Alaska before being allowed to operate a crane?

YES NO

6. If you answered "yes" to question #5, please answer the following questions:

a. What is the minimum crane lifting capacity which should require certification and licensing?

All Cranes 5 to 9.9 tons 10 to 17 tons 17.5 to 99 tons 100 tons plus

b. What is the minimum crane boom length which should require certification and licensing?

All Cranes 25 - 49 Ft 50 - 99 Ft 100 - 149 Ft 150 Ft Plus

c. Should a trainee license be established to allow for crane operation under the supervision of a licensed crane operator?

YES NO

7. Are there any industries that should be exempted from crane operator certification and licensing?

YES NO

a. If yes, which industries?

¹ "Crane" means a power-operated hoisting machine that has a power-operated winch, load line and boom, moving laterally by the rotation of the machine or a carrier and has a manufacturer-rated lifting capacity of five tons or more. It does not include a forklift, digger derrick truck, aircraft, bucket truck, knuckle boom, trolley boom or any vehicle or machine not having a power-operated winch and load line.

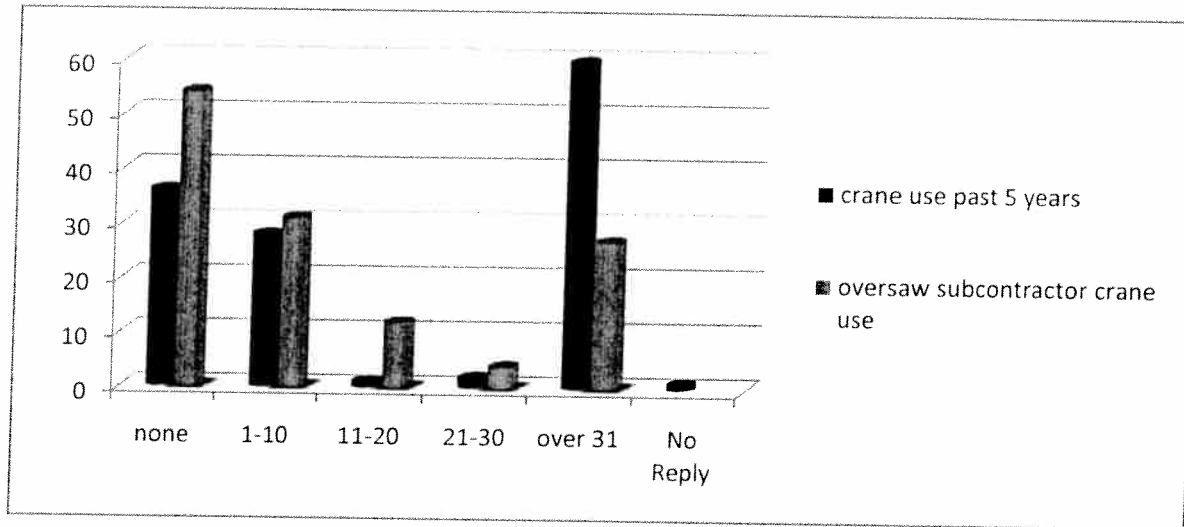
Crane Operator Survey 2008

Alaska Department of Labor and Workforce Development

Mailed to 569 organizations likely to operate cranes
128 responses received

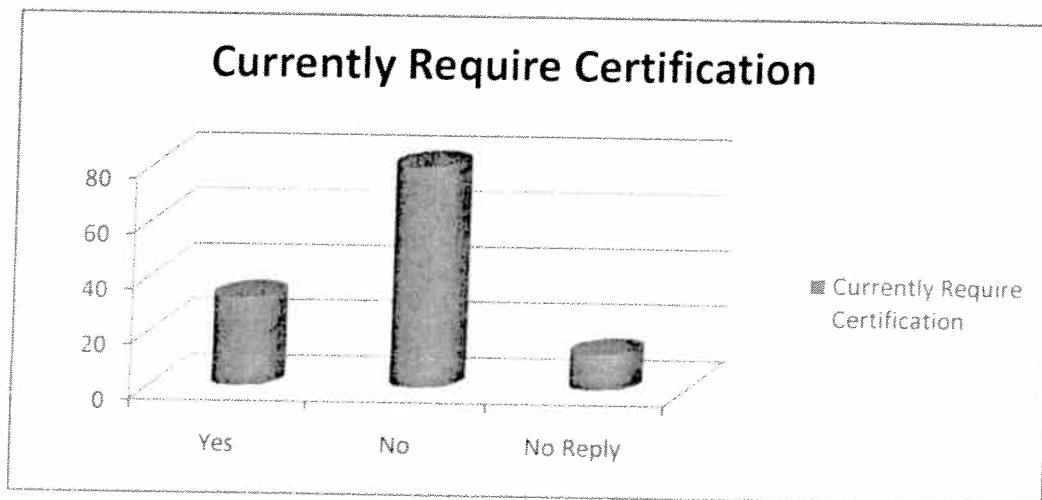
1. How many times has your company used a crane in the past five years?

Crane Use	none	1-10	11-20	21-30	over 31	No Reply
crane use past 5 years	36	28	1	2	60	1
oversaw subcontractor crane use	54	31	12	4	27	



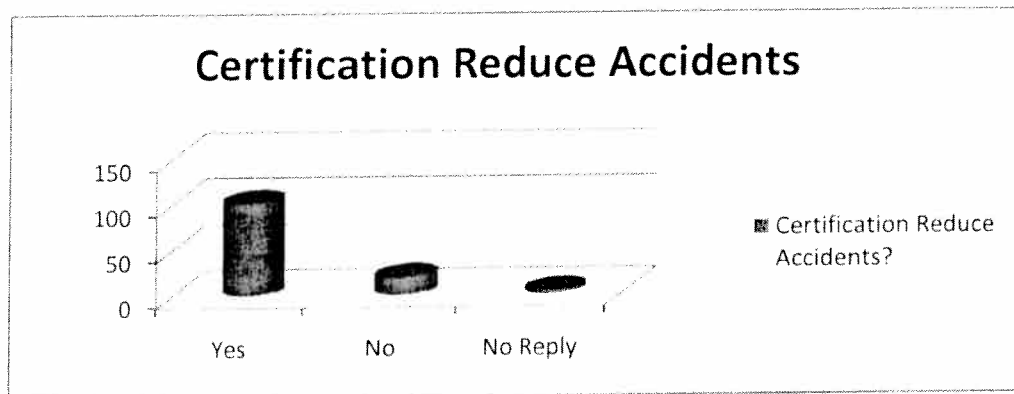
2. Does your company currently require crane operators to be certified through the National Commission for the Certification of Crane Operators (NCCCO) or other organization accredited by the National Commission for Certifying Agencies?

Currently Require Certification	Yes	No	No Reply
	32	80	13



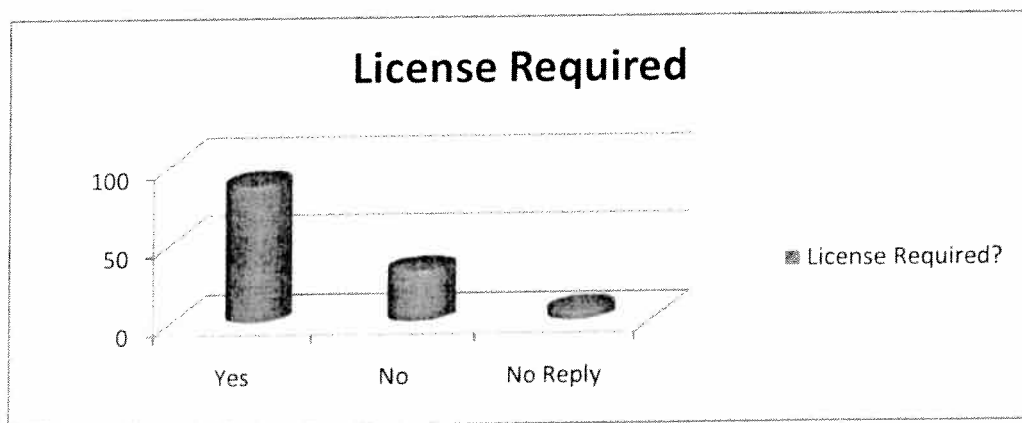
3. Do you consider crane operator qualification certification to be an important method to help minimize accidents associated with cranes in Alaska?

	Yes	No	No Reply
Certification Reduce Accidents?	101	19	4



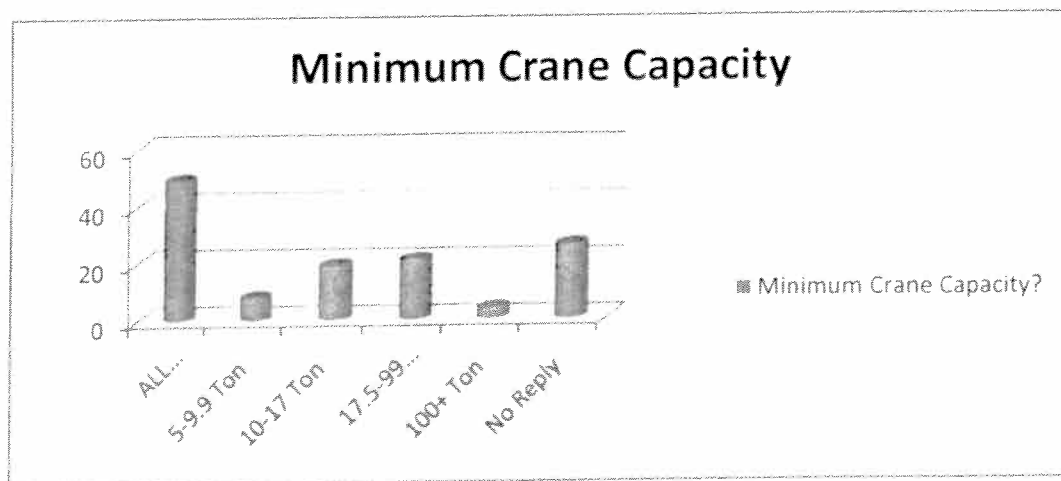
4. Should a person in Alaska be required to be certified by a nationally accredited organization and licensed by the State of Alaska before being allowed to operate a crane?

	Yes	No	No Reply
License Required?	87	32	6



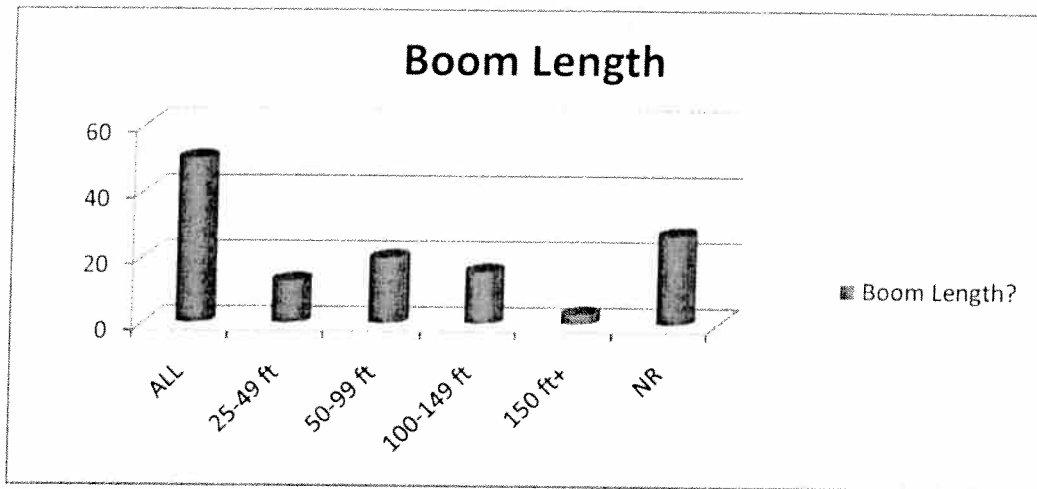
5. What is the minimum crane lifting capacity which should require certification and licensing?

	ALL CRANES	5-9.9 Ton	10-17 Ton	17.5-99 Ton	100+ Ton	No Reply
Minimum Crane Capacity?	49	8	19	21	4	26



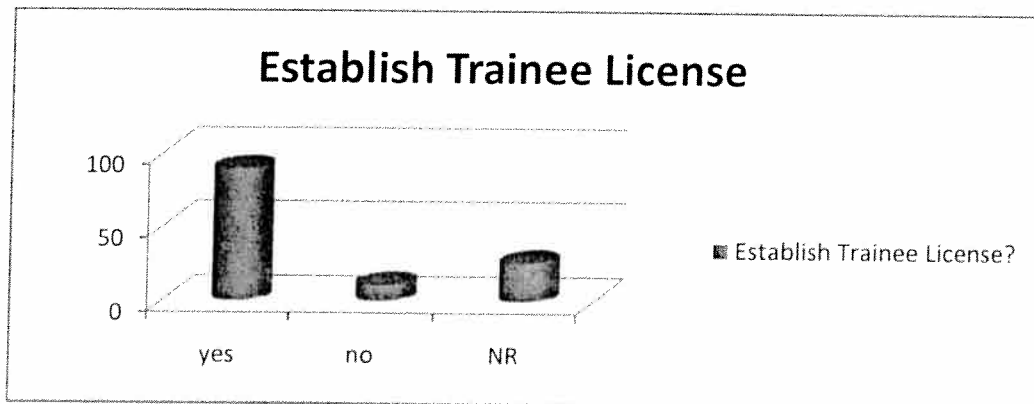
6. What is the minimum crane boom length which should require certification and licensing?

	ALL	25-49 ft	50-99 ft	100-149 ft	150 ft+	NR
Boom Length?	50	13	20	16	3	27



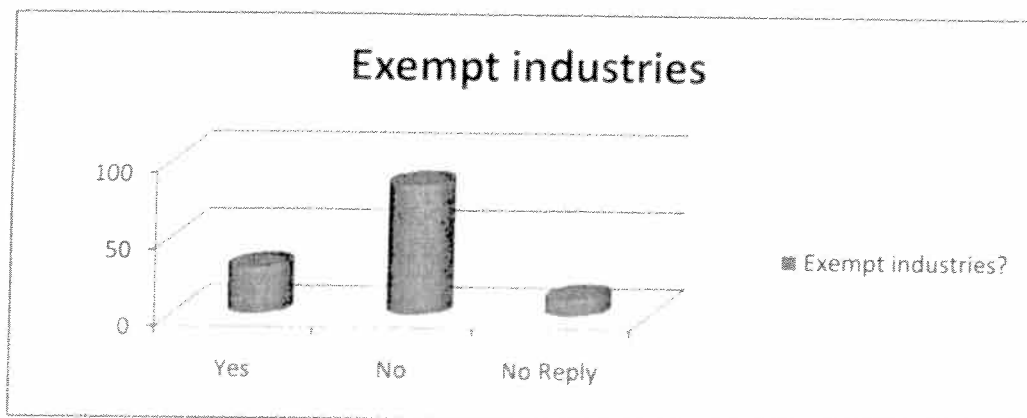
7. Should a trainee license be established to allow for crane operation under the supervision of a licensed crane operator?

	yes	no	NR
Establish Trainee License?	89	11	26



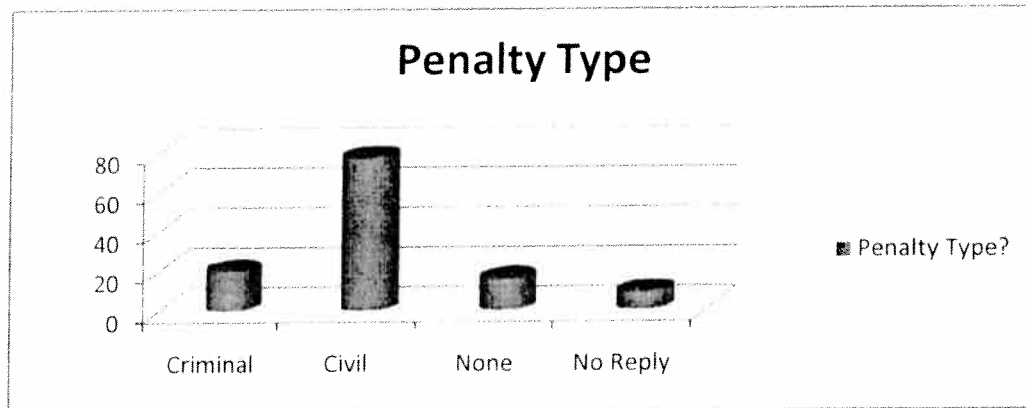
8. Are there any industries that should be exempted from crane operator certification and licensing?

	Yes	No	No Reply
Exempt industries?	30	84	11



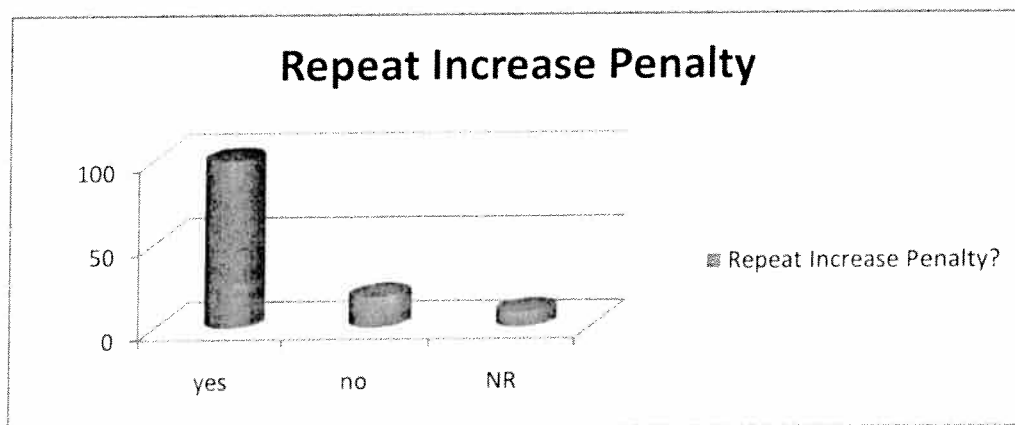
9. If licensing and certification are required, what would be the most appropriate penalty for a violation of operating a crane without a license?

	Criminal	Civil	None	No Reply
Penalty Type?	20	77	16	9



10. Should the penalty increase for repeat offenses?

	yes	no	NR
Repeat Increase Penalty?	99	18	9



total surveys received	128
total surveys sent	569

exempt industries:	#	Comments	Comment
	1		residential home construction & owner builder site;
	1		commercial fishing vessels; seafood processing cranes;
	1		stationary decks for unloading vessels
	1		dragline, excavation use, log handling, maintenance
	1		operators on smaller units (hydro)
	1		commercial fishing
	1		fishing canneries, harbors
	4		seafoods
	4		fishing industry
	1		residential construction & small commercial
	3		shipping or cargo shipping
	1		harvesting and transporting non-full time year around work
	1		possibly boats fishing in the EEZ
	1		crane repair
	1		transportation
	2		all
	1		marine
	1		dragline duty cycle machine
	1		fishing & seafood processing
	1		remote industries

State Legislation Matrix

National Commission for the Certification of Crane Operators (NCCCO) Report: 5/29/2008

States	Effective Date	NCCCO Recognized?	Is 'NCCCO' referenced in requirement?	Standards Referenced	Requirements for Mobile, Tower, and/or Overhead Cranes?	Certification must be accredited?	Mobile Crane Definition	Maximum Load Capacity (Mobile)	Tower Crane Definition (if available)
California	06/01/05	Yes	No	ASME B30.3 30.4, 30.5	Mobile Tower	NCCA	A machine for lifting or lowering a load and moving it horizontally, in which the hoisting mechanism is an integral part of the machine. A self-propelled crane equipped with a boom and mounted on a chassis which is supported on either rubber tires, crawler treads or railway wheels running on railroad tracks.	Above 7.5 tons	A crane in which a boom, swinging jib or other structural members is mounted on a vertical mast or tower.
Connecticut	10/01/82	No	No	ASME B30.3 B30.4, B30.5	Mobile Tower	No, Examining Board for Crane Operators	A mobile, carrier-mounted power-operated hoisting machine utilizing a power-operated boom which moves laterally by rotation of the machine on the carrier.	Above 5 tons	used in construction, demolition or excavation work
Hawaii	10/01/03	Yes	Yes	ASME B30.5	Mobile	advisory board	Maximum lifting capacity of more than 5 tons	Above 5 tons	N/A
Massachusetts	N/A	No	No	N/A	Mobile Tower	No	Hoisting Machinery: A device intended to raise, lower, suspend or support cargo	Above 500 pounds	Hoisting Machinery: A device intended to raise, lower, suspend or support cargo
Minnesota	07/01/07	Yes	No	N/A	Mobile	Yes	maximum lift capacity of greater than 5 tons on a construction site.	Above 5 tons	N/A
Montana	10/01/05	Yes	Yes	N/A	Mobile, Tower, Overhead (construction only)	No	A machine with a hoisting mechanism that is integral to the machine and that is used for lifting and lowering a load and for moving it horizontally.	At least 6 tons	A tower crane of any capacity
Nevada	01/01/07	Yes	No	ASME B30.3, 30.4, 30.5	Mobile Tower	NCCA	A machine which has a movable boom which lifts and lowers a load and moves it horizontally, and is designed so that the mechanism which lifts the load is an integral part of the machine.	At least 7.5 tons or at least 25 ft of usable boom	A crane that is regularly assembled and disassembled for use at various sites, including cranes on which the operating radius is adjusted by means of boom lifting mechanism, or by means of a trolley traveling a horizontal boom, or by a combination of the two
New Jersey	04/01/04	Yes	Yes	ASME B30.5	Mobile	NCCA	A power-operated hoisting machine used in construction, demolition or excavation work that has a power-operated winch load line and boom moving laterally by the rotation of the machine on a carrier.	At least 10 tons	N/A
New Mexico	07/01/95	Yes	No	ASME B30.3, 30.4, 30.5	Mobile Tower	No, Regulations and Licensing Department	carrier-mounted, track or crawler type power-operated hoisting machine that utilizes a power-operated boom capable of lateral movement by the rotation of the machine on the carrier.	N/A	used in construction, demolition or excavation work
New York (excluding NYC)	06/01/72	No	No	N/A	Mobile Tower	No	carrier-mounted, power operated hoisting machine utilizing hoisting rope and a power operated boom movable laterally by rotation of the machine on the carrier.	Above 5 tons or 40 ft of boom	More information available http://www.labor.state.ny.us/formsdocs/vp/cr23subpart6.pdf
Oregon	01/01/92	No	No	N/A	Mobile, Tower	No	capacity of 5 tons or greater	At least 5 tons	Tower and Winch Cranes
Rhode Island	N/A	No	No	N/A	Mobile, Overhead Electric	No	No person shall operate or be in direct charge of hoisting or excavation equipment which uses gasoline, steam, diesel, electric or compressed air of five (5) horsepower or more without obtaining a license to do so as provided in this chapter.	N/A	N/A
Utah	07/01/07	Yes	Yes	ASME B30.5	Mobile	NCCA	A power-operated hoisting machine used in construction, demolition, or excavation work that has a power-operated winch load line and boom moving laterally by the rotation of the machine on a carrier.	At least 10 tons	N/A
Washington	01/01/10	Yes	No	N/A	Mobile, Tower, Overhead	Yes	A power-operated equipment used in construction that can hoist, lower, and horizontally move a suspended load, multipurpose machines when configured to hoist and lower by means of a winch or hook and horizontally move a suspended load	N/A	Tower cranes (fixed jib, hammerhead, lifting self-erecting), pedestal cranes, overhead and gantry cranes (out of mobile crane definition)
West Virginia	09/01/01	Yes	Yes	ASME B30.5	Mobile	No	A power-operated hoisting machine used in construction, demolition or excavation work, which has a power-operated winch and load line and a power-operated boom that moves laterally by the rotation of the machine on a carrier.	At least 5 tons	N/A

With Crane Operator Certification, California Sees Fewer Incidents

Crane-related fatalities and injuries in California have declined sharply after more than four years of training and testing that produced more than 10,000 certified crane operators in the state, according to the Division of Occupational Safety and Health (DOSH).

Fatalities dropped to just two between June 1, 2005 and May 31 of this year from 10 between June 1, 2002 and May 31, 2005, which was just before the crane operator certification requirements (General Industry Safety Orders §5006.1) took effect. DOSH Principal Engineer Larry McCune and Graham Brent, executive director of the National Commission for the Certification of Crane Operators (NCCCO), briefed the Cal/OSH Standards Board last month on the latest crane statistics.

Injury incidents in the relative periods went from 30 to 13.

"You can see there's a serious reduction" in incidents after the certification standard took effect, McCune told the board. Even though statistics may not tell the whole story, "This is certainly a positive trend," he said.

Brent noted that NCCCO-certified crane operators number more than 10,000 now. (Operating Engineers Local 12 in Southern California also certifies crane operators.) From 2004 to 2007, NCCCO issued certification cards to 8,916 operators.

Cause and Effect? Crane Incidents before and after operator certification		
June 1, 2002-May 31, 2005		
	Fatal Incidents	Injury Cases
High-Voltage Contact	5	7
Struck by Loads	4	18
Mobile Cranes Overturned	1	6
Total Cases	10	30
June 1, 2005-May 31, 2008		
	Fatal Incidents	Injury Cases
High-Voltage Contact	1	4
Struck by Loads	0	3
Mobile Cranes Overturned	1	6
Total Cases	2	13

Mobile crane operators make up the vast majority of the ranks; NCCCO has certified 368 tower crane operators to date.

Between 2004 and 2008, the certification organization reports that 15,286 crane operators took more than 45,000 exams, with an overall pass rate of 68%. Candidates took an average of 2.9 exams, including a core test plus specialty exams. "This means that candidates generally only tested on the type of crane that they were likely to use on the job and did not try to become certified in all of the various crane types," Brent said.

Fixed-cab and swing-cab telescopic cranes were most frequently selected for certification.

NCCCCO administered 20,865 hands-on exams to 14,416 mobile crane operators, with a pass rate averaging 78%.

In the tower crane program, 713 candidates took the NCCCCO written exam and 559 took the practical.

Testing has leveled off in recent years to 25%-30% of the volume in 2005. "But "there is still a tremendous amount of testing taking place," Brent said.

NCCCCO is developing certification programs for crane signalpersons, riggers and articulating-boom mobile crane operators.

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Crane-Related Occupational Fatalities

Fact Sheet
July 2008
www.bls.gov

Crane-Related Occupational Fatalities

Crane safety has been in the forefront of the news due to the recent crane accidents in Houston, New York City, Miami, and Las Vegas.

The most recent data are for 2006; in that year, there were 72 crane-related fatal occupational injuries, down from an average of 78 fatalities per year from 2003 to 2005. These include all fatalities where the source of the injury was a crane, the secondary source of the injury was a crane, or where the worker activity was operating a crane¹.

In 2006 there were no multiple fatality incidents involving cranes; however 6 fatalities in 2005 and 8 fatalities in 2004 were the result of multiple fatality incidents involving cranes.

In 2006, 30 crane-related fatalities were caused by being struck by falling objects. Only 9 of these fatalities were due to the crane striking them. The other workers were killed when an object the crane was transporting fell from the crane onto them.

Of the cranes that were specified in the fatality, mobile, truck, and rail mounted cranes, and overhead cranes represented the type of crane involved for the majority of fatalities. Overhead cranes typically have a hook-and-line mechanism on a horizontal beam that runs along two widely separated rails, whereas mobile cranes are usually cranes that are mounted and travel on top of mobile devices such as trucks or rail cars². In 2006, 26 fatalities involved mobile, truck or rail mounted cranes. Nineteen involved overhead cranes.

In 2006, workers employed as construction laborers (10 fatalities); electricians (8); and welders, cutters, solderers, and brazers (6) were the most likely to be killed in crane-related incidents. Crane and tower operators accounted for only 3 fatalities.

Twenty-six workers were killed in crane-related incidents while working in the private construction industry in 2006. Most notably, 6 died working in highway, street, and bridge construction. Manufacturing (17 fatalities) and mining (7) had the next largest number of fatalities in the private sector. Three workers employed by a government entity were killed in crane-related incidents in 2006.

From 2003 to 2006, the most fatal occupational injuries involving cranes occurred in Texas (42). Florida (27), California (25), and Louisiana (17) also had large numbers of crane-related occupational fatalities.

SOURCE: Bureau of Labor Statistics (BLS), July 30, 2008. Fatality data are from the 2006 Census of Fatal Occupational Injuries. This Census is designed to count worker fatalities; therefore, all of the statistics in this fact sheet refer to on-the-job fatalities and do not include other persons who may have

¹ The source of injury or illness identifies the object, substance, bodily motion, or exposure which directly produced or inflicted the injury. The secondary source of injury identifies the object, substance, or person that generated the source of injury or that contributed to the event or exposure. The source and secondary source are based on the Occupational Injury and Illness Classification (OIICS) manual. More information on OIICS can be found here: <http://www.bls.gov/iif/osh/oiccs.htm>. The worker activity describes what the worker was doing at the time of the fatal injury or exposure. Worker activity is an internal codes used by the Census of Fatal Occupational Injuries (CFOI) program.

² Definitions from http://en.wikipedia.org/wiki/Overhead_crane

been killed in crane-related incidents. Fatal injury data for 2007 will be available in the upcoming release scheduled for August 2008.

More information is available from <http://www.bls.gov/iif> or by calling 202-691-6170.

Crane-related fatal occupational injuries¹, 1997-2006

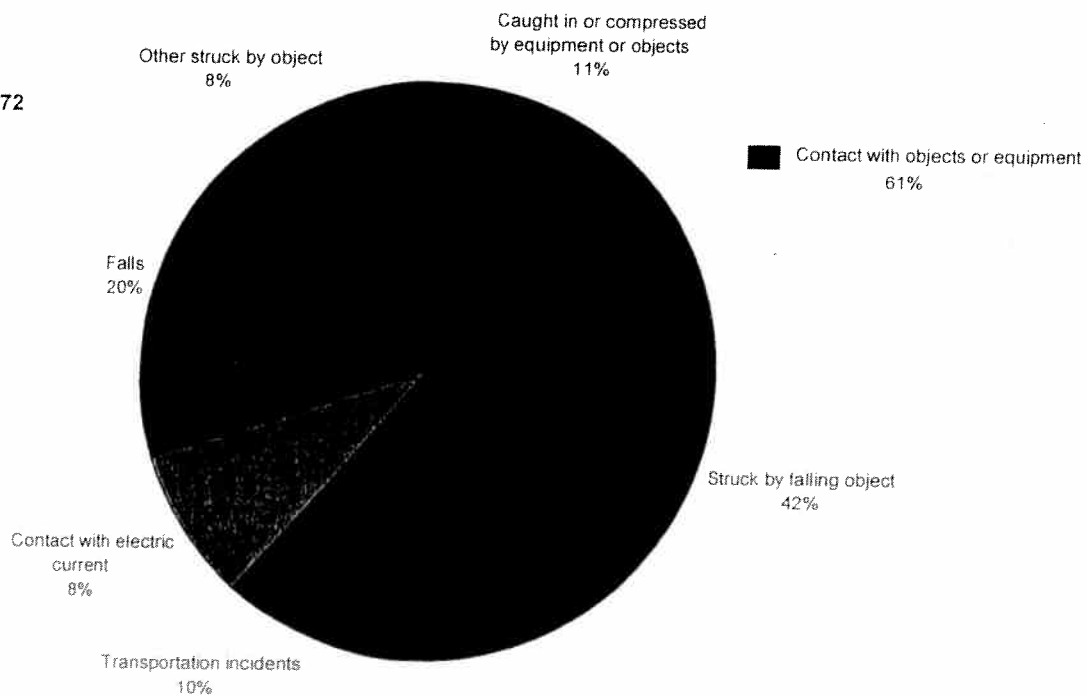
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Crane-related fatalities	97	93	80	90	72	80	62	87	85	72

¹ Includes fatalities where the source of injury was a crane, where the secondary source of the injury was a crane, or where the worker activity was operating a crane.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, in cooperation with State, New York City, District of Columbia, and Federal agencies, Census of Fatal Occupational Injuries.

2006 Crane-related Occupational Fatalities by Event or Exposure

Total Fatalities= 72



Crane-Related Deaths in Construction and Recommendations for Their Prevention

Introduction

The deaths of six construction workers and a bystander, along with injuries to 24 construction workers and first responders in a New York City crane collapse March 15, 2008, set off an alarm within the construction community and city dwellers living in the shadow of large scale projects. Just 10 days later, a 20-foot crane section in Miami fell 30 stories, killing two construction workers and injuring five. New Yorkers, already jittery from the first crane collapse, saw another crane fall in their city May 30, which killed two construction workers and injured one worker and one bystander.

The first New York crane collapse garnered much media attention because of the scale of the event – a high death toll among workers and a visitor killed when the crane’s boom crushed a residential building. But injury and death to bystanders is not a first-time occurrence. Selected examples of crane-related bystander deaths collected from news reports are included in Table 1.

In 2003, OSHA formed a Crane and Derrick Negotiated Rulemaking Advisory Committee (C-DAC) of representatives from industry, labor and government to develop a new safety standard for the construction industry to aid in reducing the number of fatalities. The committee first met in July 2003, and reached a consensus on regulatory language for the new standard on July 9, 2004. In May 2008, OSHA published its semiannual agenda and announced that the proposed crane standard will be published for public comment in the Federal Register in August 2008.

In light of the large number of recent fatalities, CPWR examined the data from the Bureau of Labor Statistics (BLS) to evaluate trends over time and propose recommendations to prevent future injury and death.

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Methods

Construction industry fatality data for the 2-digit BLS Standardized Industrial Classification (SIC) Codes 15, 16 and 17 for 1992 through 2002 were identified in the Census of Fatal Occupational Injuries (CFOI) database. For 2003-2007, the 2002 North American Industry Code System (NAICS) codes 236-238 were used. The resulting data were entered into a Microsoft Excel 2003 database for analysis.

Construction worker deaths related to cranes were identified by selecting all records with the source code 34* (Cranes). (This does not include non-construction crane-related deaths from maritime, mining and general industry.) Records involving aerial lifts, and scissor lifts were excluded, but crane man baskets were included.

The CFOI narratives including event, occupation and establishment codes of the crane-related deaths were used to classify deaths by cause, occupation and establishment size. This report identifies the main causes of death, the types of cranes involved in fatal incidents, the trades of those who died, and the size of the employer experiencing the greatest number of fatalities.

Results

A total of 323 construction worker deaths involving 307 crane incidents were identified from 1992-2006, an average of 22 construction worker deaths per year. Figure 1 shows the number of deaths by year. There were 12 multiple-death incidents in this time period, resulting in a total of 28 deaths.

Four main types of cranes have been associated with crane-related fatalities. Of the 307 fatal crane incidents, 216 (71%) involved mobile or truck cranes. Sixteen of the fatal incidents involved tower cranes (5%), 13 involved floating or barge cranes (4%), and 12 involved overhead cranes (4%). The remaining 66 reports were not sufficiently detailed to determine the type of crane involved or do not meet BLS publication requirements.

Causes of death

Of the total 323 crane-related deaths, 102 were caused by overhead power line electrocutions (32%), 68 deaths were associated with crane collapses (21%), and 59 deaths involved a construction worker being struck by a crane boom/jib (18%). (See Table 2.)

Half of all electrocutions, the leading cause of death, were associated with the crane boom or a crane cable contacting an overhead power line. The rest involved contact of an overhead power line with unspecified parts of the crane. Mobile cranes were involved in 80 of the 95 overhead power line fatal incidents. Table 3 describes worker activities leading to electrocutions. Those activities involved workers on foot touching or guiding

the crane load or cables, workers operating the crane – including several operators who were electrocuted after jumping from the crane, and workers on foot touching the crane.

Crane collapses were the second leading cause of death. An unstable, uneven or icy surface on which the crane was sitting accounted for 12 fatalities (20%). Overloading the crane accounted for another 10 deaths (16%). In five cases (8%), the crane load or boom shifted. In 56% percent of the reported cases, there was no information provided as to the cause in the CFOI narrative. Of the 59 crane collapses, 37 involved mobile cranes.

The third leading cause of crane-related deaths is struck by the crane boom or jib. Fifty-two of the 59 struck-by crane booms or jib deaths were caused by a falling boom or jib. Almost half of these deaths (48%) occurred while workers were dismantling the boom. In most of these cases, the pins holding the boom sections together were removed without adequate support to prevent the sections from falling. In 12% of these cases, the deaths occurred while lengthening the boom. The remaining seven workers were struck by swinging booms in an unspecified manner. Of the 59 struck by boom/jib fatalities, a minimum of 35 deaths were caused by mobile cranes.

Trades Involved

Construction laborers experienced the greatest number of crane-related deaths between 1992 and 2006 (total of 96 or 30%), followed by heavy equipment operators (74 deaths or 23%), which included 50 crane and tower operators. In addition, 40 supervisors/managers/administrators died in crane-related incidents (12%), as did 18 ironworkers (6%), and 17 mechanics (5%). Other trades with fewer numbers of deaths included electrical workers, truck drivers, welders and carpenters (totaling 24%).

Overall, 103 of the 323 construction workers were employed by subcontractors with fewer than 10 employees. Fifty-one individuals worked for employers with over 100 employees. Twenty of the construction workers who died on the job were self-employed.

Conclusions and Recommendations

The findings of this analysis indicate the number of crane-related deaths reported by CFOI is significant. The main causes of worker deaths were electrocution, collapse, or struck by crane parts or crane loads. More than half of the deaths were among construction laborers and heavy equipment operators. Employees working for small contractors represent a large portion (about one-third) of the total number of deaths. Most crane-related deaths involved mobile cranes.

Possible explanations for these findings are a lack of worker and supervisor training, lack of jobsite safety plans, lack of adequate crane inspections, and lack of proper investigation and reporting of crane accidents and fatalities.

Specific recommendations to reduce and prevent future injuries and fatalities are as follows:

First, crane operators should be certified by a nationally accredited crane operator testing organization, such as the National Commission for the Certification of Crane Operators (NCCCO)*. Presently only 15 states and a few cities⁶ (including New York City) require certification or licensing of crane operators, and some have their own certification program. We recommend that states and cities should require certification by a national certification organization for reasons of standardization of qualifications and to promote the transfer of credentials between states.

Second, riggers who attach the load to the crane and signalpersons who visibly or audibly direct the crane operator on where to place the load should be certified. NCCCO will in the future offer certifications for these types of workers.

Third, crane inspectors should also be certified. OSHA requires that employers designate a competent person⁷ to inspect machinery and equipment prior to each use, and during use, to make sure it is in safe operating condition [29 CFR 1926.550(a)(5)]. OSHA also requires annual inspections. For some work activities, such as use of cranes for maritime activities and work at nuclear plants, OSHA may require a higher degree of inspection. However, since inadequate inspections have been implicated in work-related crane deaths, we recommend that crane inspectors should have the same degree of qualification as crane operators.

Fourth, in addition to other mandated inspections, cranes must be inspected thoroughly by a certified crane inspector after being assembled or modified, such as the “jumping” of a tower crane.

Fifth, according to the proposed OSHA consensus standards on cranes, only trained workers should assemble, modify or disassemble cranes, and they should always be under the supervision of a person meeting both the definition of qualified person⁸ and competent person specified in the standard. In many instances, especially with rented cranes, there are no trained personnel present when cranes are set up and dismantled. This issue must also be addressed.

Sixth, crane loads should not be allowed to pass over street traffic. If rerouting is not possible, then streets should be closed off when loads pass over streets and pedestrian walkways.

Seventh, more complete reporting of data, particularly after a crane collapse, is necessary. OSHA should conduct more thorough investigations of crane-related fatalities and capture more complete data in its reporting system.

Eighth, after OSHA publishes the proposed crane and derrick safety construction standard in August 2008 for public comment, all efforts should be made to speed up the adoption of the C-DAC consensus standard and the additional recommendations provided in this report.

* Such certification organizations should be accredited by a nationally recognized accrediting organization such as the American National Standards Institute (ANSI), should administer written and practical tests to determine the knowledge and skills of the applicant, and meet other standard accreditation criteria.

⁶ California, Hawaii, Minnesota, Montana, Nevada, New Jersey, New Mexico, Utah, Washington (as of 2010), and West Virginia require or recognize NCCCO certification of crane operators as part of their state licensing program. Connecticut, Massachusetts, New York, Oregon, and Rhode Island have their own licensing programs. Among cities, New Orleans and Omaha require or recognize NCCCO certification of crane operators; Chicago, Los Angeles, New York City, and Washington, D.C., have their own licensing program.

⁷ A competent person, according to OSHA, is one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous or dangerous to employees, and *who has authority to take prompt corrective measures* [italics added for emphasis] to eliminate them. [29 CFR 1926.32(f)]

** A qualified person means a person who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated the ability to solve/resolve problems relating to the subject matter, the work, or the project.

References

Jamieson, R. [2006] "The Fall and Rise of a Crane Operator." *Seattle Post-Intelligencer*, Dec. 14.

Kates, B. [2008]. "Pain of the Cranes." *New York Daily News*, March 24.

Kilborn, P. [1989]. "San Francisco Crane Collapse was no Fluke." *New York Times*, Dec. 17.

LaBar, G. [1999]. "Three Workers Die When 'Big Blue' Falls at Stadium." *Occupational Hazards*, July 15.

MSNBC staff. [2008] "Crane Collapse Kills Two and Unsettles New Yorkers," May 31. www.msnbc.msn.com/id/24889155/print/1/displaymode/1098/ (Accessed May 30, 2008.)

OSHA [1990]. *Analysis of Construction Fatalities – the OSHA Database 1985-1989*. Washington, DC: U.S. Department of Labor, Occupational Safety and Health Administration.

Walter, L. [2008]. "Miami Crane Collapse Kills 2, Injures 5." *Occupational Hazards*, March 6.

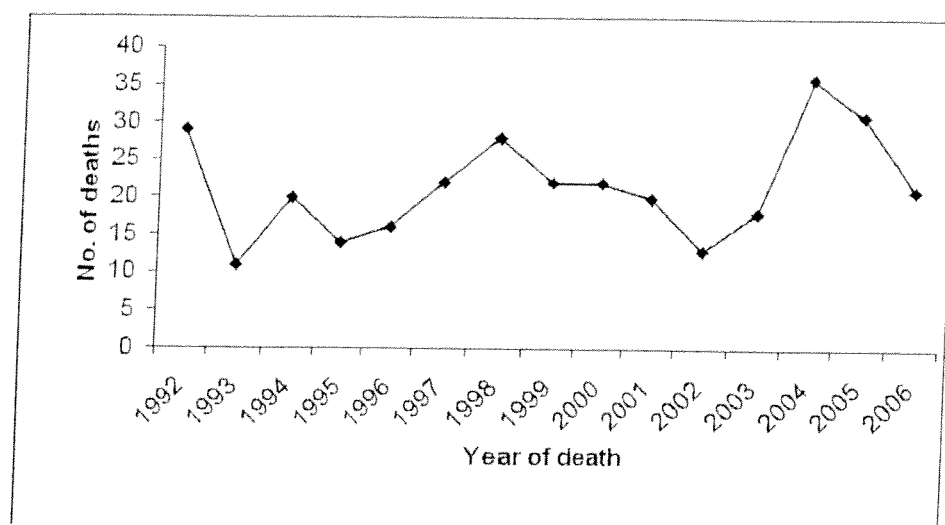
Ward, K. [2008]. "'It Was Gone': String of Problems Led to 51 Deaths at Willow Island." *The Charleston Gazette*, April 27.

Ware, P. [2008]. "OSHA Begins Investigating Crane Collapse in New York that Killed Seven, Injured 24." *BNA OSH News*, March 20.

Table 1. Examples of Fatal Crane Incidents

Date	Location	Description
4/27/78	Willow Island, WV	Crane lifting bucket of cement collapsed onto scaffold inside cooling tower. Construction workers: 51 dead Source: [Ward, 2008]
11/29/89	San Francisco, CA	Tower crane fell 16 stories while being jumped. Construction workers: 4 dead Bystanders: 1 dead; 22 injured Source: [Kilborn, 1989]
11/14/99	Milwaukee, WI	“Big Blue” tower crane collapsed at stadium and struck three workers in a crane basket. Winds 25-30 mph. Construction workers: 3 dead Source: [LaBar, 1999]
9/29/06	New York, NY	4-ton chunk of steel fell from crane crushing a taxi. Bystanders: 5 injured Source: [Kates, 2008]
11/16/06	Bellevue, WA	Crane collapsed on a condo. Construction workers: 1 injured Bystanders: 1 dead Source: [Jamieson, 2006].
3/15/08	New York, NY	Tower crane collapsed while being jumped, damaging several buildings. Construction workers: 6 dead, 13 injured Bystanders: 1 dead, 11 first responders injured Source: [Ware, 2008]
3/25/08	Miami, FL	20-foot section crane fell 30 stories while jumping the crane. Construction workers: 2 dead, 5 injured Source: [Walter, 2008]
5/30/08	New York, NY	Crane cab, boom, and machine deck separated from the tower mast and collapsed onto the street Construction workers: 2 dead, 1 injured Bystanders: 1 injured Source: [MSNBC staff, 2008]

Figure 1. Crane-Related Deaths in Construction by Year, 1992-2006*



* Data from 2006 are preliminary; data from 1992-2005 are revised and final.

Source: U.S. Bureau of Labor Statistics Census of Fatal Occupational Injuries Research File

Table 2. Causes of crane-related deaths in construction, 1992-2006

<i>Cause of death</i>	<i># deaths</i>	<i>%</i>
Overhead power line electrocutions	102	32%
Crane collapses	68	21%
Struck by crane booms/jibs*	59	18%
Struck by crane loads	24	7%
Caught in/between	21	7%
Struck by cranes**	18	6%
Other causes***	31	10%
Total	323	****

* 52 of 59 struck by crane booms/jibs were due to falling booms/jibs

** Includes 10 run over by mobile cranes

*** Other causes includes 14 struck by other crane parts and 9 highway incidents

**** Does not add to 100 due to rounding.

Source: U.S. Bureau of Labor Statistics Census of Fatal Occupational Injuries Research File

Table 3. Activity of construction workers electrocuted by overhead power lines, 1992-2006

<i>Contact with overhead power lines</i>	#	%
Worker on foot touching/guiding load or cables	40	39%
Operating crane*	32	31%
Worker on foot touching crane	19	19%
Other**	11	11%
Total	102	100%

* Includes 7 deaths of operators who jumped from crane

** Includes 6 deaths of workers on foot near crane

Source: U.S. Bureau of Labor Statistics Census of Fatal Occupational Injuries Research File

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CPWR – The Center for Construction Research and Training is a 501-c-3 organization affiliated with the Building and Construction Trades Council, AFL-CIO, and serves as the research arm of the BCTD. CPWR provides safety and health research and information for the construction trades and industry. For more information, visit www.cpwr.com.



March 26, 2008

Two Workers Are Killed in Miami Crane Accident

by DAMIEN CAVE

MIAMI — Two construction workers died and five were injured Tuesday when a seven-ton section of crane fell 30 stories onto a Miami home made famous by the film “There’s Something About Mary.”

Fire and rescue officials said the collapse occurred about 1:45 p.m. as a construction crew tried to lengthen the crane for work on a 46-story luxury high-rise overlooking Biscayne Bay. The 20-foot section dangled, witnesses said, before dropping through the roof of a Spanish-style home that the contractors used as an office.

The crash felt like a small tremor, an earthquake,” said David Martinez, 31, who had been working on the fourth floor of the high-rise building. “You could hear all the tiles falling in.”

Several of the workers inside were caught under the crane’s yellow metal arm or the rubble it caused. One died at the site and another at a local hospital. Among the five injured, one was in critical condition, said Lt. Ignatius Carroll, a spokesman for the Miami Fire-Rescue Department.

Lieutenant Carroll said the cause of the collapse had not been determined, but the circumstances appeared to differ from those of a New York City crane collapse 10 days earlier that left seven dead.

In that case, a six-ton steel collar meant to help hold the crane in place broke free and plummeted from 18 stories high, leading the entire crane to detach from the building and fall toward the ground, with one section landing on a town house.

The Miami accident more closely resembled one in New York on Sept. 29, 2006, when a 13-foot section of crane fell 10 stories and injured five people.

The names of those killed and injured here were not released, but at least one worked for Bovis Lend Lease Buildings Inc., the contractors overseeing construction of the building.

Harry Costello, a senior vice president of the company, said in a statement, “Our hearts are heavy at this moment for the two deceased individuals, including one of our own employees and the additional injured workers.”

The statement said the crane was operated by Morrow Crane, a subcontractor. The company’s Miami office did not respond to several telephone and e-mail messages seeking comment.

It was not clear when or whether the crane had been recently inspected. Florida neither licenses nor regulates

cranes, and a county provision approved this month — which requires that cranes match the wind-speed standards of permanent buildings — will take effect next week.

State legislators, after failing to pass measures covering cranes in recent years, are also considering new legislation.


At the scene, on North Bayshore Drive just north of downtown, workers gathered between the damaged home and the high rise — the Paramount Bay, scheduled to open next spring with condominiums starting at \$850,000, and featuring private elevators to every residence.

The house, they said, was known as the “the Mary house” — where Cameron Diaz's character, Mary, lived in the 1998 comedy that also starred Ben Stiller. The 1920s-style Mediterranean home was being used as the project's safety office.

Solange Reyner contributed reporting.

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Four die in Houston crane collapse

Some of injured are in critical condition after refinery accident

BREAKING NEWS

MSNBC News Services

updated 2:26 p.m. AKT, Fri., July. 18, 2008

HOUSTON - The largest mobile crane in the nation collapsed at a Houston oil refinery Friday, killing four workers and injuring six others, a company vice president said.

The crane, capable of lifting 800,000 pounds, fell over at a LyondellBasell refinery in southeast Houston about 2 p.m. The large crane fell on or knocked a smaller, nearby crane.

Witnesses said an alarm sounded, and employees ran to a lunch tent that was designated as an emergency evacuation area. However, the crane toppled on top of the tent, killing some inside, KRPC-TV, an NBC affiliate in Houston, reported.

"It sounded like a building — sounded like a building fell," Stacy Davis, a worker, told KRPC-TV. "I looked back. I was on my way to evacuate the plant and I looked back and I seen the arms coming down. After that, I just seen a lot of black smoke."

The massive, deep-red crane lay on top of a smaller, bright-yellow crane on the grounds of the refinery. Ambulances and fire trucks were lined up outside.

The casualties were in the area of the crane, but officials weren't certain whether they were on the crane or under it, said Jim Roecker, the company's vice president for refining.

Three of the injured were treated and released at the scene, said Houston Fire Department Assistant Chief Omero Longoria. Two severely injured workers were taken by helicopter to Memorial Hermann-Texas Medical Center hospital and the other injured worker was taken to a hospital by ambulance.

The crane, whose exact dimensions were not immediately available, belonged to Deep South Crane & Rigging. Roecker described it as the nation's largest mobile crane.

The crane had not been scheduled to do any work Friday, but Roecker said its engine was idling after it hit the ground.

'Traumatic experience'

"This is a traumatic experience for all of us. We have to focus on the safety and health of our employees," Roecker said.

Mattie Graham stood with her husband, Deep South worker Horace Graham, at the plant near the scene of the accident.

"I'm thinking about their families. He could have been there today," she said, gesturing to her husband.

The refinery has about 3,000 LyondellBasell workers and 1,500 contract workers, Roecker said. He said all personnel at the plant were accounted for, and the plant was operating as usual.

The crane was delivered in pieces and assembled on site about a month ago. It was brought in to remove large drums from inside a coking unit whose roof had been cut off to allow the crane access, Roecker said.

Largest in the world

The Houston refinery is one of the world's largest for processing high-sulfur crude oil. The facility itself covers about 700 acres along the Houston Ship Channel at the city limits of Houston and Pasadena.

East Texas Crane Academy president Joe Bob Williams, whose company has certified crane operators for Lyondell, said it's unusual for such cranes to fail because of the number of people involved in their maintenance.

"It's really odd for these cranes to have any issues because there are so many eyes looking in," Williams said.

Crane safety has been getting extra scrutiny in recent months because of an alarming number of crane-related deaths in places such as New York, Miami and Las Vegas.

In New York City, two crane accidents since March have killed nine people — a greater number than the total deaths from cranes over the previous decade.

An Associated Press analysis in June found that cities and states have wildly varying rules governing construction cranes, and some have no regulations at all, choosing instead to rely on federal guidelines dating back nearly 40 years that some experts say haven't kept up with technological advances.

Texas led the nation with 26 crane-related fatalities in 2005 and 2006, according to federal statistics. Cranes in Texas operate without any state or local oversight, leaving that job to federal regulators.

Texas is one of 35 states that do not require crane operators to be licensed. Earlier this year in Dallas, city officials found that eight of 23 cranes being used across the city had uncertified operators at the controls.

OSHA standards require cranes to undergo annual inspections, but it is a self-policing mandate for crane owners. Federal law requires that inspection records be kept, but not submitted.

Roecker said OSHA and other regulatory agencies had been notified of Friday's accident.

Lyondell Chemical, a U.S. company, and the Dutch firm Basell were rivals until they announced a \$12.1 billion deal last July to create one of the world's largest chemical companies.

On the chemical side, Lyondell produces ethylene, a crucial precursor to a range of other chemicals, as well as propylene oxide, which is also used in producing a variety of chemical products. Basell focuses on polyolefins, common types of plastic.

The Associated Press and Reuters contributed to this news report.

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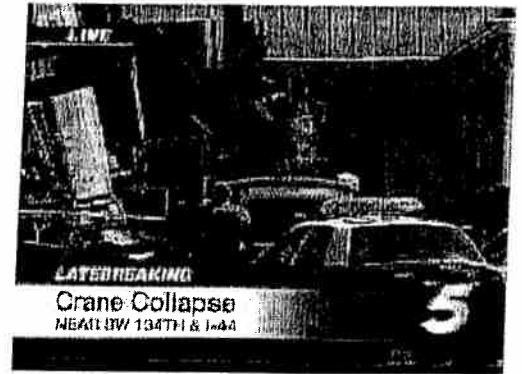
Man Watching Steeple Ceremony Killed When Crane Collapses

Dozens Attended Church Ceremony In Southwest Oklahoma City

POSTED: 10:47 am CDT July 24, 2008

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Related To Story



Video: 1 Killed In Crane Collapse

OKLAHOMA CITY -- One of dozens of churchgoers watching a steeple being mounted on top of a newly constructed building in southwest Oklahoma City was killed when a crane collapsed on top of his vehicle, fire officials said.

More Coverage: [Video: 1 Killed In Crane Collapse](#) | [Images From The Scene](#) | [Sky5: Raw Video From Crane Collapse](#)

Winfred Stafford, 80, was killed while watching the ceremony at the newly constructed South Pointe church, located at Southwest 134th Street and Straka Farms Terrace just west of Interstate 44.

His 78-year-old wife was injured and taken to St. Anthony Hospital in good condition. Witnesses told Eyewitness News 5 that the woman was in the back seat of a vehicle talking to a friend when the crane overturned.

Witnesses said she was able to get out of the vehicle, but her husband was in the front seat and unable to get out in time. People gathered at the ceremony were shouting for the couple to get out of the way of the falling crane.

Fire officials said the church is an additional campus to the Grace Assembly of God church, located at Southwest 4th Street and Young Avenue.

Officials with the U.S. Department of Labor and OSHA are at the scene investigating.

The name of the victim's wife has not been released.

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Construction Worker Killed in Texas Crane Accident

Posted by Chrissie Cole

Wednesday, June 11, 2008 6:33 AM EST

A crane hook plunged to the ground killing a construction worker when the cable snapped, according to police.

Workers were examining the damaged cable extending from the crane that was atop a several-stories-high unfinished building, but a full investigation will be launched.

The name of the worker has not been released, pending family notification.

The worker was a subcontractor for TXI and the crane was provided by Lewis Equipment Co.

Officials from the Occupational Safety and Health Administration are investigating the cause of the deadly crane accident. Work has been halted at the high-rise condominium site until the investigation is complete.

Find this article at:

<http://corpuschristi.injuryboard.com/workplace-injuries/construction-worker-killed-in-texas-crane-accident.aspx?googleid=243190>

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