Present: Lowman, F. Young, Kean, Ashworth, Prince and

Valentine

Excused: Howard

Chairman Lowman convened the meeting of the Transportation Committee with representatives of various companies and organizations present to testify on bills A.B. 415, 477, 258 and 480 at 10:45 a.m. in Room 240.

A.B. 415 - Requires high-voltage line safety devices on certain equipment.

Jack C. Cherry, President, Crane Products Manufacturing, Las Vegas, presented a detailed brochure to the committee members and explained his views on the power line bill. His company makes detection devices. The federal government is requiring that by 1972, companies must make safe places for their men to work. The federal government hopes that the states will make further safety standards in construction.

Kean referred to line 3.

Cherry said that employer or operator could be clarified. With accessories, this electronic equipment could cost up to \$850.00 to install.

Ralph Langley, Director, Department of Industrial Safety, Nevada Industrial Commission, presented a list of key points of this bill (see attached sheet). He read NRS 618.100. He presented a brochure from Sigalarm, their price list, basic safety orders, safety and health standards, a brochure on Saf-T-Boom, and a letter from Saf-T-Boom Corporation (see attached). He felt this device could be used to save lives if used as the manufacturer's instructions indicated. The device could be turned down and the men could work within three feet of a power line. The normal distance is eight feet.

Chairman Lowman asked if this could be done by regulation and not be in state law. Response in affirmative.

Brian Firth, Carson City, felt that this bill should create a civil liability on the part of the operator. He did not see how Section 7 could be justified for imposing criminal penalties.

A.B. 477 - Requires walkways on railroad bridges and trestles.

Assemblyman Don Mello explained the purpose of the bill. The danger of fires starting from explosive chemicals and the men not being able to get to the fire could cost a lot of money and the loss of human life. It is a safety aspect. People will usually trespass, but it would still protect these people and the men working on the trains.

Valentine testified for the bill to the other committee members. He advised that it was an oversight that waived the maximum height above the rails. He said that the enforcement of this should be in the Public Service Commission rather than general law.

Willard Marque, Southern Pacific, Engineer, was for the bill. He advised that when bridges were changed, the new ones were built with stress concrete beams. He advised this bill would not require new bridges but only conversions added to the present structures.

Carl Soderblom, representing Southern Pacific and Western Pacific Railroads, was against this bill. He felt that the railroad management should handle this matter and urged that the bill be held in committee. He said this measure has been proposed throughout the several states by the National Brotherhood Unions.

Chairman Lowman asked if the Public Service Commission has the authority to do what this bill purports to do.

Valentine advised that they had the authority. He referred to Order Number 1159 and said he was of the opinion that it was overlooked.

Clark Guild, Jr., attorney representing the Union Pacific Railroad, also referred to Case Number 1159, previously mentioned, by the Brotherhood of Railroad Trainmen in seeking the authority for high cube car authorization. He said that the Public Service Commission does have authority at the present time and read the Order. It says that the train crews are forbidden to ride on top of the cars but there is nothing to limit their walking on top of the cars in an emergency situation. He said there are 44 bridges in the California division of Southern Nevada and 34 of them do not have footrails or handrails. In the Utah division, there are 212 bridges, 41 with handrails and footrails, 171 without. Combining the two areas, California and Utah divisions of 256 bridges, 51 presently do comply and 205 do not comply with the context of this bill. It would cost the railroad about \$1,536,000 to comply if the bill is passed.

Chairman Lowman asked about accidents because of this problem.

Marque advised that three people at one time, plus one at another time, were killed on a bridge near Sparks since he has been working for the railroad.

A.B. 258 - Requires proof of ownership of a vehicle before issuance of certificate of registration.

Richard Herz, Chief, Registration Division, said that they were for the bill as long as they can get the additional personnel required to handle the extra workload that this bill will create. He submitted a list of personnel that would be required. (See attached sheet.)

John Ciardella, Department of Motor Vehicles, said that they support the bill and advised some of the problems they have had regarding registration of out-of-state vehicles.

Chairman Lowman asked how many more people were needed to do the job.

Ciardella advised that Mr. Herz indicated they would need about ten more people.

Lowman then advised that this would require it to be referred to Ways and Means.

Ashworth asked how much money they would receive from the registration of title of these vehicles.

Ciardella advised that it would be about \$8,000 per month (\$100,000 per year), as they would receive \$2 per car, 4,000 cars per month that would be titled here by using a goldenrod copy (non-negotiable title) which could be implemented.

Daryl Capurro, Assistant Manager, Nevada Franchised Auto Dealers Association, advised that there was a technical problem with the first part of Section 10 regarding a cetificate of registration and legal ownership. The problem is that the Department would not issue a certificate of ownership if a loan was held by the bank who would receive the title of ownership. He further advised that there would not be a \$100,000 recovery as the money would be used up in personnel costs.

Winston Richards, Motor Carrier Division, Department of Motor Vehicles, said that one problem in the bill, brought up by Mr. Guinn at the last meeting, was discussed in regard to the prorated registration receipts. The receipt shows they are members of a Compact state. He recommended an exemption on line 2, referring to NRS 706.730 to NRS 706.860.

The hearing was adjourned at 12:15 p.m.

- A.B. 120 Valentine submitted both copies that had been agreed upon and Mr. Hill's muffler section to be drafted.
- S.B. 133 resulted from an argument between the Highway Department and the City of Reno.
- S.B. 131 new legislation failed to repeal this wording and this bill is necessary. Reference to NRS 489.487 was made.
- S.B. 88 Young wanted to talk to Howard Hill regarding this bill.

A.B. 480 - not heard.

Kean moved "do pass" on S.B. 131 and 133, Valentine seconded, and

it was passed unanimously.

A.B. 415 - Kean moved "do pass", Valentine seconded. Ashworth said that he felt dumptrucks should be amended out of it and just apply to cranes, Valentine agreed. Young, also agreed. Prince and Lowman were against the motion.

Valentine said that NIC had the power to regulate this.

Lowman advised that he would talk further to Ralph Langley.

Kean felt that it could be done cheaper.

A.B. 477 - Ashworth moved to indefinitely postpone, Kean seconded, and it was agreed by everyone except Valentine.

A.B. 258 - Valentine said this bill needs a lot of work. He wanted to draft an amendment.

Lowman asked the committee members about three departmental bill drafts. No conclusion. Chairman will consult with members individually.

The meeting adjourned at 12:25 p.m.

### ASSEMBLY

### AGENDA FOR COMMITTEE ON TRANSPORTATION

85

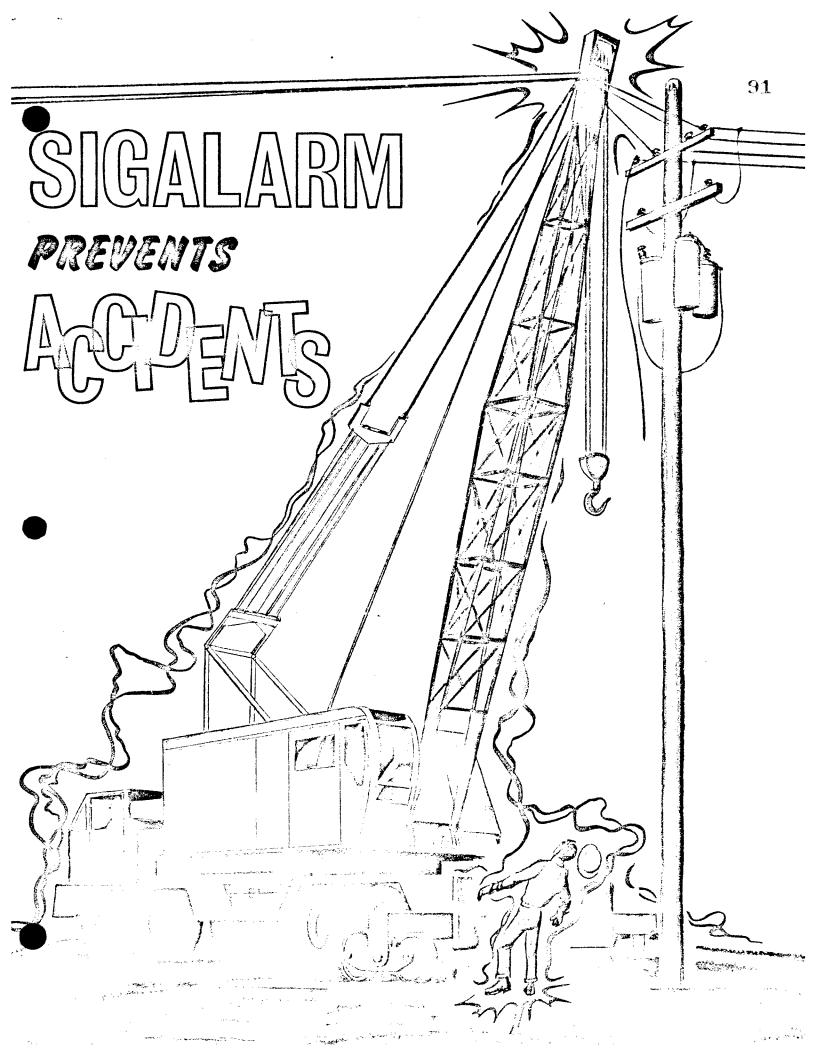
Date MAR. 2, 1971 Time 10:00 a.m. Room 240

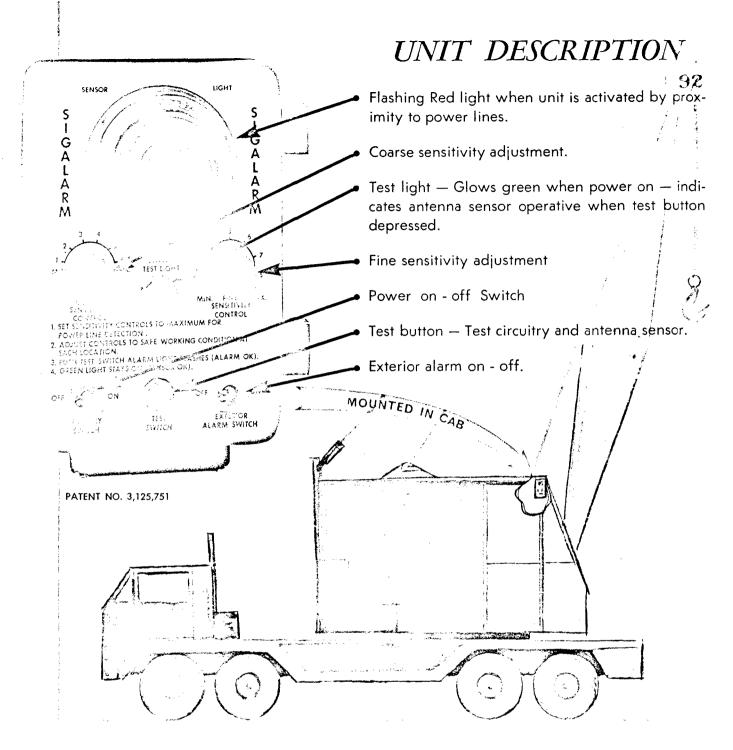
| Bills or Resolutions<br>to be considered |  |         | Subject                                | Counsel requested*                      |  |
|--|--|---------|--|---|--|
| A  | .B. 41                                 | 5       | REQUIRES HIGH-VOLTAGE LINE SAFETY      |   |  |
|  |  |         | DEVICES ON CERTAIN EQUIPMENT.          |   |  |
| A  | .B. 47                                 | 7       | REQUIRES WALKWAYS ON RAILROAD BRIDGES  |   |  |
|  |  |         | AND TRESTLES.                          |   |  |
| A  | .B. 258                                | 3       | REQUIRES PROOF OF OWNERSHIP OF A       |   |  |
|  | ······································ |         | VEHICLE BEFORE ISSUANCE OF CERTIFICATE |   |  |
|  |  | -       | OF REGISTRATION.                       | *************************************** |  |
| А  | .B. 480                                | )       | PROHIBITS DRINKING LIQUOR IN MOVING    |   |  |
|  |  |         | VEHICLE.                               |   |  |
| `  |  |         |  |   |  |
|  |  |         |  |   |  |
|  |  | -       |  |   |  |
|  |  |         |  |   |  |
|  |  |         | SUPERSEDES PREVIOUS AGENDA FOR 3/2/71. | •                                       |  |
|  |  |         |  | ÷                                       |  |
|  |  |         |  |   |  |
|  |  |         |  |   |  |
| *Please                                  | do not                                 | ask fo  | or counsel unless necessary.           |   |  |
|  |  |         | HEARINGS PENDING                       |   |  |
| Date_<br>Subject_                        |  | _ Time_ | Room                                   |   |  |
| Date                                     |  | _ Time_ | Room                                   |   |  |

MR. RALPH LANGLEY, DIRECTOR DEPARTMENT OF INDUSTRIAL SAFETY NEVADA INDUSTRIAL COMMISSION

KEY POINTS OF STATEMENT BEFORE ASSEMBLY TRANSPORTATION COMMITTEE ON A.B. 415 - MARCH 2, 1971

- I. Legislation possibly could be special interest and directed specifically at a safety device called "Sigalarm."
  - "Sigalarm" is manufactured in Las Vegas, Nevada. To my knowledge it is the only device of its kind in production. Visual & Audible Warnings.
- II. DEFINITION OF EQUIPMENT: Equipment could include drilling rigs, sign ladder trucks, backhoes, cranes, derricks, hoists, and forklifts.
- III. ENFORCEMENT: All equipment capable of contact with high voltage lines would be required to have a safety device upon passage of this Bill. The exact number is not known, but would run into the hundreds. (I favor this legislation if it can be enforced.)
- IV. Legislation would not reduce high voltage regulation now in force (eight foot limitation.) (Copy attached.)
- V. NRS 618.100 "SAFETY DEVICE," "SAFEGUARD" DEFINED. "Safety device" and "safeguard" shall be given a broad interpretation so as to include any practicable method of mitigating or preventing a specific danger.
- VII. An audible and visual alarm system would rule out other forms of boom protection, such as dielectric hooks and crane boom protectors.





Sigalarm is a patented solid-state electronic safety device used for detecting the electrostatic field of any alternating current (AC) power line. (It is not designed for use on direct current (DC) lines or shielded cable.)

Warns operator and ground crew — both visual and audible, warning — Easy installation — Compact size approximately 2"x5"x7" — One year warranty — Models available in 6 volt or 12 volt adaptable to 24 volt — Adaptable to all types of equipment — Easy operating instructions — Electronic experience not necessary for installation. Stand by ampere draw ¼ amp. With accessories not to exceed 4 amp.

### VERSATILITY THROUGH ACCESSORY EQUIPMENT



REMOTE LIGHT — A single light for mounting in line of sight of operator. Works simultaneously with light on Sigalarm.

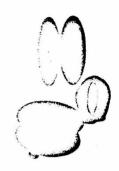
EXTERIOR LIGHT — Visual exterior signal where audible signals are not desired.





EXTERIOR ALARM HOWLER — Audible sounding device for warning driver and ground personnel when Sigalarm is activated. Sound differs from horn signals to avoid confusion. Tone adjustable.

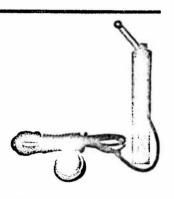
MANUAL REEL WITH 200' ANTENNA SENSOR — A manually-operated reel which mounts in the boom allowing the addition or removal of sections in the boom. Recommended where frequent boom length changes are made. Sensor length controlled by reel to accommodate any length boom up to 250'.

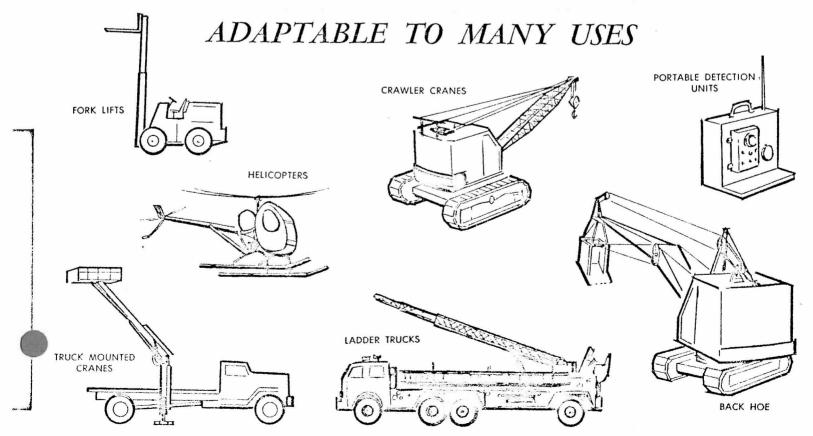




AUTO REEL WITH 40' ANTENNA SENSOR — An automatic reel which will extend and retract the sensor cable with the operation of any equipment with telescopic boom. (Hydraulic booms, forklifts, back hoe, etc.)

BOOM ALARM — (visual): An adjustable accessory which activates an amber light in cab that cautions the operator that the boom is raised to a safe maximum degree of height or approaches the boom stops.

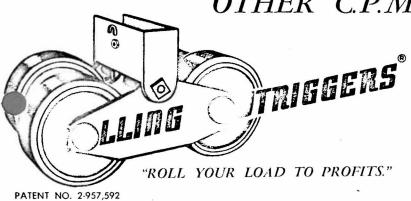




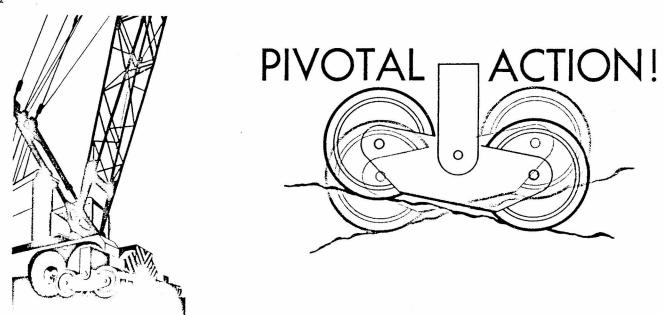
Years of design, research and development has produced todays SIGALARM reliability. Highest grade of Silicon diodes and transistors used to insure quality. Solid-state circuitry eliminates the costly maintenance of power supplies and tube replacement. All components are epoxsy encapsulated. Extended environmental testing has proven the capability of SIGALARM to operate in temperature ranges from -70°F to +200°F.

### SIGALARM SHOULD BE THE EYES AND EARS OF YOUR OPERATOR TODAY





FOR ALL MAKES, MODELS, AND CAPACITIES OF CRANE EQUIPMENT.



CHANCE TRODUCTS WARRENCE GO



### SIGALARM PRICE LIST

**FEBRUARY 1, 1965** 

|   | itock<br>No. | Description  | Approx.<br>Shipping<br>Weight | Price<br>6 or 12 Volt |
|---|--------------|--|-------------------------------|-----------------------|
| , | 1.           | STANDARD EQUIPMENT OF BASIC SIGALARM—MODEL PLM: Complete with all cables and associated hardware for bolted or welded installations; antenna sensor and fittings for 80' of boom; installation and operating instructions; warranty and registrations cards.   | . 7#\$                        | 597.50                |
|   |              | ADD FOR EXTRA AND OPTIONAL EQUIPMENT:  |                               |                       |
| 2 | 2.           | Booms over 80', add for additional antenna sensor for stock No. 1.   |                               | .20 ft                |
| 3 | 3.           | EXTERIOR ALARM—HOWLER (Audible): Activated simultaneously with SIGALARM light. Sound differs from horn used for signaling. Alerts driver and ground personnel. Tone-adjustable. Complete with cables and associated hardware for installation.   | 5#                            | 46.00                 |
| 4 |              | EXTERIOR LIGHT (Visual): Activated simultaneously with SIG-ALARM light. Used to alert ground personnel where audible sound not desired.  | 3#                            | 14.50                 |
| 5 | 5.           | REMOTE LIGHT: Interior of cab. Installed when SIGALARM unit is located out of direct line of sight of operator.  | 2#                            | 4.95                  |
| 6 |              | AUTOMATIC ANTENNA SENSOR REEL: An automatic reel which will extend and retract antenna sensor cable up to 40'. Necessary on installations with telescopic booms, backhoes, forklifts, fire truck ladders, etc. Maximum boom extended 50'. Additional antenna sensor lead cable, add 20 cents per foot. | 10#                           | 42.00                 |
| 7 |              | MANUAL REEL WITH 200' ANTENNA SENSOR CABLE: A manually operated reel which mounts in the boom butt, recommended where frequent boom extension changes are made.  | 19#                           | 74.00                 |
| 8 |              | BOOM ALARM (Visual): An adjustable accessory which activates an amber light in cab that cautions the operator that the boom is raised to a safe maximum degree content or approaches the boom stops: Complete with cables and associated hardware.   | 4#                            | 46.00                 |

Crane Products Manufacturing Co., Inc., reserves the right to change specifications and prices without notice in order to follow its policy of constantly striving to manufacture a better product.

All prices net, F.O.B. Las Vegas, Nevada

Special applications quoted on request.

4.46 No employee other than the operator is permitted to operate of ride on electric trucks, traveling cranes or monorails, except one other employee when such employee is learning to operate or is making repairs.

4.41 When working around or near machines and apparatus care shall be taken to prevent confine into conductive or direct contact with live or moving parts. Working around moving or live parts is prohibited unless authorized to do so.

- 4.42 Provision for Proximity of High-Voltage Lines. No person, firm, or corporation, or agent of same, shall require or permit any employee to perform any function in proximity to high-voltage lines; to enter upon any land, building or other premises and there to engage in any excavation, demolition, construction, repair, or other operation; or to erect, install, operate, or store in or upon such premises any tools, machinery, equipment, materials, or structures (including house moving, well drilling, pile driving, or hoisting equipment) unless and until danger from accidental contact with said high-voltage lines has been effectively guarded against in the manner hereinafter prescribed.
- 4.43 Clearance or Safeguards Required. The operation, erection, or transportation of any tools, machinery, or equipment, or any part thereof capable of vertical, lateral, or swinging motion; the handling, transportation, or storage of any supplies, materials, or apparatus; or the moving of any house or other building, or any part thereof, under, over, by, or near high-voltage lines, is hereby expressly prohibited, if at any time during such operation, transportation, or other manipulation it is possible to bring such equipment, tools, materials, building, or any part thereof within 8 feet of such high-voltage lines. Except, however, that when such high-voltage lines have been effectively guarded against danger from accidental contact, either by:

(a) The erection of mechanical barriers to prevent physical contact with high-voltage conductors;

(b) De-energizing of the high-voltage conductors and grounding where necessary;

(c) Removal of the high-voltage conductors; Then, and only then, may the 8 feet clearance above mentioned be reduced. The 8 feet requirement shall not be reduced by movement due to any strains impressed (by attachments or otherwise) upon the structures supporting the high-voltage line and upon any equipment, fixtures, or attachments thereon.

4.44 Warning Sign Required. The owner, agent, or employer responsible for the operations of equipment, shall post and maintain in plain view of the operator on each crane,

46

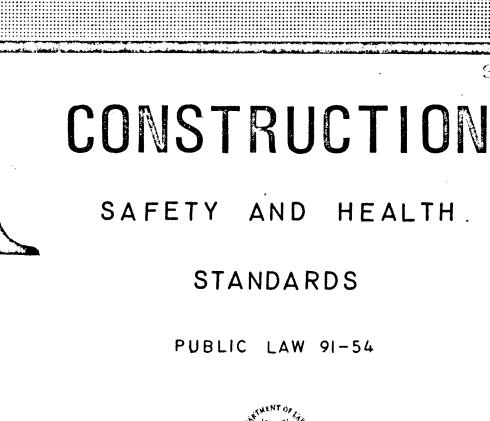
derrick, power-shovel, drilling-rig, hay stacker, piledriver, or similar apparatus, any part of which is capable of vertical, lateral, or swinging motion, a durable warning sign legible at 12 feet reading: "Unlawful to operate this equipment within 8 feet of high-voltage lines.'

4.45 Notification to Power Company and Responsibility for Safeguards. When any operations are to be performed, tools or materials handled, equipment is to be moved or operated within 8 feet of any high-voltage line, the person or persons responsible for the work to be done shall promptly notify the operator of the high-voltage line of the work to be performed and shall be responsible for the completion of the safety measures, as required before proceeding with any work which would impair the aforesaid clearance.

4.46 The foregoing sections shall not be construed as applying to, and are not intended to apply to, the construction, reconstruction, operations, and maintenance of overhead electrical conductors (and their supporting structure and associated equipment) by authorized and qualified electrical workers; nor to the authorized and qualified employees of any person, firm, or corporation engaged in the construction, reconstruction, operation, and maintenance of overhead electrical circuits or conductors (and their supporting structures and associated equipment) of rail transportation systems, or electrical generating, transmission, distribution, and communication systems.

This section when applied to railway systems, shall be construed as permitting operation of standard rail equipment, which is normally used in the transportation of freight and/or passengers, and the operation of relief trains, or other equipment in emergencies, at distance of less than 8 feet from any high-voltage conductor; but shall be construed as prohibiting normal repair or construction operations at distance of less than 8 feet from any high-voltage conductor by other than properly qualified and authorized persons (or employees under the direct supervision of an authorized person who is familiar with the hazards involved), until the safety provisions of the foregoing sections have been complied with.

4.48 All machine tools, including connected portable equipment, shall be effectively grounded as specified in Article 250 of the latest edition of the National Board of Fire Underwriters-National Electrical Code for Electric Wiring and Apparatus. All exposed noncurrent carrying metal parts of portable electrical equipment operated at more than 110 volts shall be grounded regardless of use or location.





DRAFT I

-JAN.1971-

FOR DISCUSSION PURPOSES ONLY

U.S. DEPARTMENT OF LABOR BUREAU OF LABOR STANDARDS WASHINGTON, D.C. 20210

- (15) Except where electrical distribution and transmission lines have been de-energized and visibly grounded at point of work or where insulating barriers, not a part of or an attachment to the equipment or machinery, have been erected to prevent physical contact with the lines, equipment or machines shall be operated proximate to power lines only in accordance with the following:
- (i) For lines rated 50kV or below, minimum clearance between the lines and any part of the crane or load shall be 10 feet;
- (ii) For lines rated over 50kV, minimum clearance between the lines and any part of the crane or load shall be 10 feet plus 0.4 inch for each 1 kV over 50kV, or use twice the length of the line insulator but never less than 10 feet;
- (iii) In transit with no load and boom lowered, the equipment clearance shall be a minimum of four feet;
- (iv) A person shall be designated to observe clearance of the equipment and give timely warning for all operations where it is difficult for the operator to maintain the desired clearance by visual means;
- (v) Cage-type boom guards, insulating links, or proximity warning devices may be used on cranes, but the use of such devices shall not alter the requirements of any other regulation of this part even if such device is required by law or regulation;
- (vi) Any overhead wire shall be considered to be an energized line unless and until the person owning such line or the electrical utility authorities indicate that it is not an energized line and it has been visibly grounded;
- (vii) Prior to work near transmitter towers where charges can be induced in the equipment or materials being handled, the transmitter shall be de-energized or tests shall be made to determine if voltages are induced on the crane. The following precautions shall be taken when necessary to dissipate induced voltages:
- (<u>a</u>) The equipment shall be provided with an electrical ground directly to the upper rotating structure supporting the boom; and

i, or

:he

et.

- (b) Ground jumper cables shall be attached to materials being handled by tall-boom cranes when current is induced while working near energized transmitters. Crews shall be provided with non-conductive poles having large alligator clips or other similar protection to attach the ground cable to the load.
- $(\underline{\mathbf{c}})$  Combustible and flammable materials shall be removed from the immediate area prior to operations.



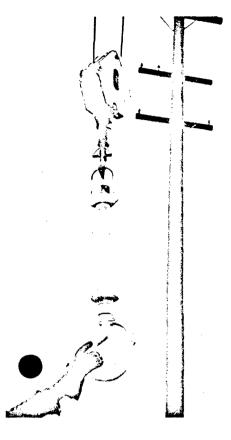
Crane Boom Shield and Safety Link

\*Prevent Hi-Voltage Accidents!



# Insulated Sale III

## for cranes and hoists!



Use—Bullard insulated safety links are easily and quickly connected between hook and load, producing a safety barrier which protects hook tenders and riggers from high voltages. They are designed to prevent current from reaching the men on the ground.

On cranes they protect hook tenders if the boom contacts high voltage. On hoists they prevent welding current from reaching the hoist motor rope, chain and mechanism. On pullers they form a safety barrier.

Capacities—Safety factors— Bullard safety links are rated at the same safe working loads as the hooks they support, from 5 to 50 tons (4 to 1 safety factor) and dielectric strength of 50 KV.

Construction — Saftey links have inside core of two pieces of steel separated by an insulated centerpiece. Around this core is wound tough fiber glass roving thoroughly saturated with epoxy resin for a strong positive bonding and a final coating of epoxy resin and silicone for moisture resistance.

Tests—Each link is tested two times its rated KV capacity and four times its rated tonnage. Accredited laboratory test reports furnished with each link.

#### Selection and ordering data

Order hook and link as complete unit. Please specify the following:

- 1. Tonnage
- 2. KV value
- 3. Attachments

4. Hoist

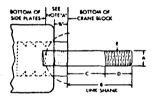
Make and Model

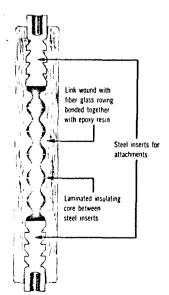
Tonnage Frame Year Made Serial no.

Type: Air Electric Hand

5. Shank dimensions:

| Α | <br>В | <br>С |  |
|---|-------|-------|--|
| D | E     |       |  |





50 KV Insulated Safety Links are produced in 5, 10, 15, 20, 25 and 40 ton capacities.

Each Safety Link is equipped with one stud. Links are available with two studs, safety gate hook, or hook without safety gate. Swivel bail available for 5, 10, 15 ton links; fixed bail 20 ton up.

As all insulated safety links are manufactured to meet specific requirements, quotations will be made based on tonnage and attachments required. Include tonnage and make of crane when ordering.

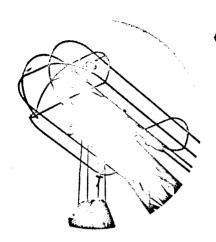
Manufactured by:



National Distributors: Saf-T-Boom Corporation

## These SAFETY DEVICES

## satisfy military and state safety regulations...

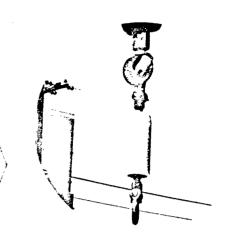


### SAF-T-BOOM

protects from accidental hiline contact when working UNDER the power line.

### SAFETY LINK

protects load lines when the boom is working ABOVE power lines.



## NOW! 2-1117 PROTECTION at modest cost!

### HERE'S HOW SAF-T-BOOM AND SAFETY LINK PAY DIVIDENDS —

Prevents accidents. Increases work per day. Reduces overhead. Eliminates costly work stoppage. Speeds construction. Installed in 20 minutes. Low first cost. Two-year equipment write-off.

### PROFITS GO UP WHEN ACCIDENTS GO DOWN

Work goes faster, profits go up when your crane operator spends his full time working rather than losing time watching for hot wires. More work is performed, as costly shutdowns always occur when there is a serious accident. Safe operation offers an additional saving bonus through reduced insurance rates. Premiums are normally based on accident experience . . . the lower the accident frequency . . . the lower the rate. Insurance companies have had to pay claims up to \$125,000 on crane hi-line accidents.

### 🔆 SAVES ON LABOR AND MATERIALS

Operators have found, that in many cases, they are not required to have a signalman or to build expensive barriers when a crane is equipped with a SAF-T-BOOM and a link. In dollars and cents, just 30 days' average wages for a signalman or less than the cost of a large barrier will pay the full cost of a SAF-T-BOOM. The device can be fully depreciated on a 2-year equipment write-off.

### LIFE-SAVING, HIGH VOLTAGE PROTECTION ADDED IN MINUTES

Your own maintenance crew can install a SAF-T-BOOM and Safety Link right on the job site in as little as 20 minutes . . . they can remove it just

as easily for installation on another crane when desired. Lightweight and easily adapted, these devices require no special knowledge or tools for their installation. Once on the crane, nothing further is required for years of safe operation.

#### ☆ FULLY PROVEN

SAF-T-BOOMs and Safety Links have been proven on hundreds of cranes throughout the country. Many states have already passed laws requiring this type of equipment — others are now considering similar legislation. The armed Forces have approved and are using SAF-T-BOOMs. (Federal Class 3815).

#### 🔅 FITS ALL BOOMS

Mobile, track and rail cranes can be protected by SAF-T-BOOMs except when designed with auxiliary jib booms. A special SAF-T-BOOM underguard can be ordered to protect the belly of the crane when it is necessary to reach over wires. Installation of a SAF-T-BOOM does not impair the operator's vision or affect the mobility of the crane. SAF-T-BOOMs and Safety Links stay on the equipment and move as part of the crane from job to job.

#### NO MAINTENANCE

There is nothing to wear out on these safety devices. The steel SAF-T-BOOM frame is protected by three coats of Steelcote Epo-lux. Epo-lux is an epoxy base coating applied to a thickness of fifteen mils. It has a dielectric strength of 2,000 volts per mil of thickness. Routine inspection is all that is needed to keep SAF-T-BOOM and Safety Link in first class working condition.

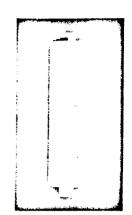


## Tested and Accepted for Life-saving Protection!



A vastly improved Epoxiglas insulator, rugged and dependable, developed by A. B. Chance Company, gives Saf-T-Boom still greater reliability and effectiveness. Withstands tremendous shock and vibration in use.

"Safety Link" glass fiber insulator construction affords massive strength and insulator capacity thoroughly tested to in excess of 100,000 volts. Structural safety factor is 4 to 1!



#### Saf-T-Doom Insulator

Tests performed with pole ridge on right side and insulator at 45° to the horizontal. Dry withstand test: 113,000 v. for 1 minute Wet withstand test: 62,000 v. for 10 seconds

All values corrected to standard condition.

### Safety Link

Dielectric test:

Size:

20 ton

Rated Voltage:

50,000 v.

Test Voltage:

100,000 v.

Results: No sign of distress. No flashover.

No puncture.

#### ☼ COMMENTS FROM SAF-T-BOOM USERS . . .

"We have never spent as much as a dime on the up-keep of our Saf-T-Boom, nor have we damaged any overhead lines, nor injured anyone."

"The operation of the crane has been in no way limited by the installation of the Saf-T-Boom. "This item has been classified as standard Federal Class 3815."

"To my knowledge, not a single death has occurred from a boom hi-line contact where the Saf-T-Boom was used."

"The Saf-T-Boom came in contact with the hitension lines some three or four times. No one was injured and no damage was done to wires. "My two sons would be alive today if our crane had been protected by a Saf-T-Boom.'

#### 🌣 SAF-T-BOOM USERS (Partial list) . . .

New York Central Railroad Bethlehem Reynolds Metals Corporation Aluminum Company of America • Virginia Carolina Chemical Corporation • U.S. Air Force • U.S. Navy • U.S. Army Ordnance Depots • The Mead Corporation • Indiana State Highway Department • Fairfax County, Virginia • City of Little Rock, Arkansas City of Jacksonville, Florida HannaOre Mining Company of Minnesota • Bearden Lumber Company • Federal Equipment Company of Canada

SAF-T-BOOM (for any size crane) F.O.B. Little Rock \$575.00\* Ship Wt. app. 260 lbs., length 16 ft. \*Subject to change without notice

SAFETY LINK prices subject to variations in tonnage, capacity and attachments. From 5 ton to 40 ton sizes available. Write, submitting crane tonnage, for price.



## Safety in Construction

# SAF-T-BOOM CORP.

RECEIVE Saves Lives COUNTRY TO SAN

APR 1 : 1983

Audit Division

Legal Division

1613 MAIN STREET. LITTLE ROCK, ARK. FRANKLIN 5-3291

April 14, 1965



104

LEGISLATIVE COURSEL &J., EAU

Research Division

ive Council

Director of Legislative Council State Capital Carson City, Nevada

Dear Director:

We are pleased to present for your approval the following information and hope that you might pass it on to some of your leading legislators for further study and, or action.

Of course, in some states the labor departments have the authority to promulgate such regulations for protection of people working around cranes. Saf-T-Boom and Safety link will almost eliminate the hazard that is taking so many lives each year in U. S.

Of course, no safety device is 100% safe, but in a recent survey conducted by the U. S. Air Force throughout all of their bases, it was ascertained that cranes equipped with Saf-T-Boom on crane boom and Safety Link in load line gave 90% protection against electrical accidents. These statistics are available from the Air Force. Immediately after this survey was made, a directive was sent out to all bases in U. S. and abroad, directing that all mobile cranes used in proximity of electric lines, be equipped with protective devices to eliminate these costly accidents.

The states of Florida and Tennessee were used by us as pilot states in proving how lives lost from Electrocutions could be cut down or eliminated entirely. The following are statistical results after manditory codes were placed in effect in these two states. Florida deaths were cut from 10-1958 to 1-1960. Not one injury on cranes using our safety devices. Tennessee from 17-1958 to 1-1961. Definite proof lives can be saved cheaply.

Six states now have legislation requiring safety devices when cranes operate around electric lines. These states are; Arkansas, Florida, Georgia, Tennessee, Rhode Island, and Oklahoma.

Saf-T-Boom and Safety Link have been tested by responsible laboratory.

Director, Legislative Council

2

April 14, 1965

The National Safety Council says there are over 500 persons electrocuted each year in U. S., excluding those burned, which points out the necessity of trying to force some protection for these working people.

If you find that some legislator is interested in handling this type of program I would appreciate correspondence from him.

Yery truly yours,

Senator Joe L. Anderson

JLA:pd

Enc./Brochure

Re: Assembly Bill No. 258 - Artie Valentine

ISSUING TITLES AND REGISTRATION ON EVERY VEHICLE REGISTERED IN THE STATE OF NEVADA

This would mean that a Suspense receipt and Temporary License would have to be issued. In order to keep the records and assist the customer in obtaining his Nevada Title and license plates the following personnel would be needed:

Senior Clerk Typist - Counter, in Las Vegas Office - (3)

Senior Clerk Typist - Counter, in Reno Office - (2)

Account Clerk to handle Suspense Fees, in Las Vegas Office (1)

Account Clerk to handle Suspense Fees, in Reno Office (1)

Senior Clerk Typist to type additional Titles, Carson City Office (2)

Senior Clerk or Account Clerk to handle filing Suspense Licenses and advise all 17 offices in the State of the status of each Suspense receipt (1)

With the additional personnel that would be required it would cost the state an estimated \$54,420 for salary plus postage costs.