SUMMARY FOR FE-01-03
SELECTED AND POSSIBLE CONTRIBUTING FACTORS

SELECTED FACTORS

Railroad: CSX Transportation, Incorporated
Location: Waycross, Georgia
Region: 3

Month: January
Date: Jan. 14, 2003
Time: 12 p.m., EST

Data for Fatally Injured Employee(s)

Bridge Mechanic
46 years old
27 years of service
Last rules training: Oct. 9, 2002
Last safety training: Jan. 13, 2002
Last physical: June 3, 2000

Data for All Employees (Craft, Positions, Activity)

Craft: Maintenance of Way

Positions:

MOW crew
Fatally injured Bridge Mechanic
Two additional Bridge Mechanics
Two Crane Operators

Crane Operator from Florence (Trainer)

Activity:

Preparing an American Crane for shipment.

EVENT

During the MOW crew's attempt to dismantle the crane's rear counter weight and boom, the counter weight fell, crushing the right index and ring finger of the Bridge Mechanic who had placed his hand on the crane deck to regain his balance. The Bridge Mechanic received surgery, but died as he was taken from the operating room to recovery.

SUMMARY FOR FE-01-03 CONTINUED

POSSIBLE CONTRIBUTING FACTORS

PCF No. 1

The MOW crew failed to use proper procedures for the safe dismantling of the crane's rear counter weight and boom.

PCF No. 2

Crane manuals, which were available to the crew, lacked instructions on the proper removal of the crane's counter weight.

PCF. No. 3

The crew received inadequate training in the maintenance and safe operation of the crane, which was brought to the Waycross yard from Florence, South Carolina, about a month prior to the fatal incident, for use in replacing retarders at Waycross yard.

REPORT: **FE 01-2003**

RAILROAD: CSX Transportation, Incorporated (CSX)

LOCATION: Waycross, Georgia

DATE & TIME: Jan. 14, 2003, 12 p.m., EST

EVENT[1]: During the work crew's attempt to dismantle the crane's rear counter weight and boom, the counter weight fell, crushing the right index and ring finger of the Bridge Mechanic, who died following surgery, the following day.

EMPLOYEE:

Craft:	Maintenance of Way (MOW)
Activity:	Preparing an American Crane for shipment
Occupation:	Bridge Mechanic
Age:	46
Length of Service:	27 years
Last Rules Training:	Oct. 9, 2002
Last Safety Training:	Jan. 13, 2002
Last Physical:	June 3, 2000

CIRCUMSTANCES PRIOR TO THE ACCIDENT

On the morning of Jan. 14, 2003, three Bridge Mechanics and two Crane Operators went on duty at 7 a.m. at Rice Yard in Waycross, Georgia. The Crane Operators received their job briefing at the Road Master's office and the Bridge Mechanics received their job briefing at the job site. The five employees were assigned to prepare an American Crane for shipment. The crane was located on the Hays Track (AO 1) located near Tower A, near the west end of the yard. This was a stub end track, with no other tracks located within 100 feet.

One of the Crane Operators showed up about 8 a.m. and conducted another job briefing on how to dismantle the rear counter weight and boom. They began work on the boom, then proceeded to the rear of the crane to lower the counter weight.

The weather was clear, and the temperature was 60° F.

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[1] "Event" is defined as "occurrence that immediately precedes and directly results in the fatality." Possible contributing factors are identified in the following report and attached summary.

THE ACCIDENT

The three Bridge Mechanics and a Crane Operator started to remove the top pins from the hydraulic rams attached to the top of the counter weight. The Crane Operator began operating two small levers at the rear of the crane to move the hydraulic cylinders up and down. After the top pins were removed, they began removing the lower pins on the right side, facing the rear of the crane. The second Crane Operator showed up at this time.

The second Crane Operator said he would have to remove his bucket before he could use the crane to help. While taking off the bucket, he found a leak in one of the fittings. He told the others he would need to find the mechanic to get a part, then left.

The first Crane Operator and the Bridge Mechanics continued to work on the lower right pin. The pin came out part of the way, then got in a bind. The Bridge Mechanics moved around to the left side of the crane and removed the lower pin with few problems. They returned to the right side of the crane and made another attempt to remove the right pin. It still would not come out. The second Crane Operator returned about this time and said he had to replace the fitting on his crane before he could help.

The Bridge Mechanics and the first Crane Operator backed a truck up to the counter weight to provide a platform from which to work. Two of the Bridge Mechanics placed a hydraulic track jack between the pin and the counter weight in an attempt to pry it out. One Bridge Mechanic held the jack while the other operated it. The pin came out, but when it did, the jack fell, causing one of the Bridge Mechanics to lose his balance and place his hand on the deck of the crane. The counter weight fell with the removal of the pin and crushed the right index and ring finger of the Bridge Mechanic who had placed his hand on the crane deck.

The two Crane Operators transported the injured Bridge Mechanic to the local hospital in Waycross. They arrived at the hospital at about 12:15 p.m. The Bridge Mechanic received medical attention, but it was determined he needed surgery, and the hospital was not equipped to handle the type of procedure he needed.

The Bridge Mechanic was transported by Emergency Medical Services to Memorial Hospital in Savannah, Georgia, where medical personnel told him they could surgically save his fingers. The operation would be a routine 2-hour surgery scheduled for 5:30 p.m. the following day, January 15.

The surgery proceeded without incident on January 15, but as the Bridge Mechanic was being taken from the operating room to recovery, he passed away.

POST-ACCIDENT INVESTIGATION

Inspection of the crane by representatives of the Federal Railroad Administration and railroad personnel disclosed no equipment defects. All crane manuals were in place, but there were no instructions in the manuals for the proper removal of the crane counter weight.

Interviews with the two Crane Operators and the two Bridge Mechanics revealed that the employees could not remember the proper procedure to remove the crane's counter weight. The crane was brought to Waycross from Florence, South Carolina, around November 2002, for use in replacing retarders at Waycross yard. Because the Crane Operator in Waycross was not familiar with this type of crane, an Operator from Florence came down for about three weeks to train him and the Bridge Mechanics. The day the attaching of the counter weight and removal for travel were discussed, the Waycross Operator was not present, just the Bridge Mechanics. In the interviews, all Bridge Mechanics said they were not sure about the proper way to dismantle the counter weight.

APPLICABLE RULES

The FRA's investigation disclosed no violation of CSX rules. There are no Federal regulations applicable to the removal of a crane counter weight.

In an attempt to avert a similar occurrence in the future, CSX issued instructions and conducted training on the proper procedures for dismantling a crane counter weight.