

# COAL FATAL

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF MINES

Health and Safety District A

REPORT OF FATAL COAL MINE ROOF-FALL ACCIDENT  
NEWFIELD MINE  
REPUBLIC STEEL CORPORATION  
NORTHERN COAL MINES DISTRICT  
NEWFIELD, ALLEGHENY COUNTY, PENNSYLVANIA  
(Post Office - Verona, Allegheny County, Pennsylvania)

August 26, 1968

by

J. W. Holcomb  
Federal Coal Mine Inspector

Everett Turner  
Federal Coal Mine Inspection Supervisor

Originating Office - Bureau of Mines  
4800 Forbes Avenue, Pittsburgh, Pa. 15213  
W. Dan Walker, Jr., District Manager  
Health and Safety District A

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### INTRODUCTION

This report is based on an investigation made in accordance with the provisions of the Federal Coal Mine Safety Act (66 Stat. 692; 30 U.S.C. Secs. 451-483) as amended.

On Monday, August 26, 1968, about 7 p.m., John Gulish, timberman, was electrocuted when the trolley and feeder wires contacted his left arm while he was trapped under a fall. The accident occurred at an intersection along 6 south haulage road outby 10 west in the Newfield mine. Gulish and his coworker were reinforcing and/or retimbering the roof at the intersection. Gulish, age 60, was married but had no other dependents. He had 35 years mining experience.

The Bureau of Mines was notified of the accident by J. R. Eaton, Mine Superintendent, at 9:30 p.m., August 26, 1968, and an investigation was started the same day.

### GENERAL INFORMATION

The Newfield mine is along the Milltown Road at Newfield, Allegheny County, Pennsylvania. Mine openings consist of two shafts and a slope into the Upper (Double) Freeport coalbed, which in this mine averages 84 inches in thickness.

Employment was provided for 206 persons, of whom 186 worked underground and 20 on the surface. The mine was operated 3 shifts a day, and a daily production of 2,900 tons of coal was loaded mechanically.

Bureau-approved roof-support standards had been adopted, and during the last Federal inspection completed June 3, 1968, the standards were considered adequate and were followed. The standards required 5/8-inch-diameter high-strength steel bolts at least 5 feet in length to be installed, usually on 3- and 4-foot centers lengthwise and crosswise. Safety posts or safety jacks were required to be used during drilling and bolting operations.

Coal was hauled from the working faces with shuttle cars and was discharged into mine cars. Continuous miners were used.

The trolley and feeder lines underground were energized with 275 volts direct-current power by two motor-generator sets on the surface and four rectifier sets underground. Trolley and feeder lines were well installed on insulating hangers, were provided with cutout switches as required, and were protected against excessive overloads by ITE circuit breakers. Frame grounding was practiced.

Information for this report was obtained from an investigation at the scene of the accident and from statements by Albert Rugh, who was working with Gulish, and company officials and employees.

The investigating committee consisted of the following:

Republic Steel Corporation  
Northern Coal Mines District

A. M. Shaffer	Superintendent of Industrial Relations
J. R. Eaton	Mine Superintendent
J. P. Gaines	Mine Foreman
C. H. Cole	Safety Supervisor
Michael Kurimsky	Second-Shift Foreman
Walter Kortze	Third-Shift Foreman

United Mine Workers of America

Harry Stover	President and Acting Chairman of Safety Committee, Local Union No. 6132
Francis McAllister	Board Member, District 5
Michael Timko	Member, Safety Committee, Local Union No. 6132
Nello Zocki	Member, Safety Committee, Local Union No. 6132

Pennsylvania Department of Mines and Mineral Industries

W. E. Ray	Inspector, 1st Bituminous District
John J. Hunter	Inspector, 12th Bituminous District
W. J. Vicinelly	Inspector, 5th Bituminous District

United States Bureau of Mines

J. W. Holcomb	Federal Coal Mine Inspector
Everett Turner	Federal Coal Mine Inspection Supervisor

The last Federal inspection was completed June 3, 1968.

## DESCRIPTION OF ACCIDENT

At the beginning of the afternoon shift, Michael Kurimsky, shift foreman, instructed Albert Rugh, a new employee, and John Gulish, an experienced timberman, to work together. After entering the mine at 4 p.m., Gulish and Rugh went to 5 south section and unloaded mine supplies. About 6:30 p.m., Kurimsky accompanied them along 6 south haulage road to the third crosscut outby 10 west where they were to continue reinforcing and retimbering where the day-shift crew stopped. After Kurimsky and Gulish examined the area and detected no unsafe conditions, Kurimsky gave instructions for procuring supplies and for reinforcing the timbering at the intersection.

Gulish and Rugh obtained the supplies and returned to the worksite, where they installed two wooden crossbars (5" x 7" x 14') between steel-rail crossbars where the roof had fallen out.

The wooden crossbars and the steel-rail crossbars were supported by steel stringer bars on either side of the entry. The steel stringer bars were supported by posts and pieces of steel rail hitched into the ribs (see attached sketch).

Gulish and Rugh prepared to install a crib on the trolley-wire side of the track. A piece of roof rock was wedged against a post under the stringer bar where the crib was to be installed. Gulish told Rugh to get in the clear while he broke the piece of rock. Rugh started walking along the track inby the intersection and when he was about 25 feet inby the intersection, he heard a sound like a hammer hitting a rock. Immediately thereafter he heard a loud crash and was engulfed in dust. He started to run, then he stopped and looked back and saw that the entire intersection had collapsed. He heard Gulish, under the fallen materials, yelling, "Turn off the power," at least four or five times.

Since this was Rugh's first shift in the mine, he did not know where the cutout switches were located. Looking down the track, he saw the headlight of a locomotive, and he signaled with his cap lamp for the locomotive operator. Rugh informed George Trocki, operator of the locomotive, that Gulish was under the fall and wanted the electric power cut off. Trocki informed others by trolley phone of the occurrence.

Kurimsky, who was at the slope bottom, was notified of the accident by trolley phone. He and Harry Stover, dumper, immediately started toward the scene of the accident and pulled the cutout switch outby the accident site. The trolley feeder wire on the inby side was pulled apart by the fall and Trocki cut the trolley wire at the same location.

Gulish was protected from the falling roof material by the crossbars and the lagging material. When sufficient material was removed to examine Gulish, no pulse or sign of life could be detected. His left arm was extended above his head and was in contact with the trolley and feeder wires. His left arm was burned severely.

When Gulish's body was removed from under the fallen material, it was noted that his left leg was broken. He was taken to the surface where Dr. K. V. Waite pronounced him dead from electrocution at 8:40 p.m.

#### CAUSE OF ACCIDENT

This accident resulted because of the dislodgment of the trolley and feeder wires by a fall of timbers and roof material. The wires contacted the victim's (employee) body while he was trapped under the fall. Factors which could have contributed to the accident were: (1) Failure to guard or deenergize the power wires when working around or under such wires, (2) improper evaluation of a dangerous condition, and (3) failure to install temporary roof supports while retimbering doubtful roof.

#### RECOMMENDATIONS

Compliance with the following recommendations may prevent accidents of a similar nature:

1. When reinforcing heavily overburdened timbers, better evaluation should be made concerning the hazards relevant thereto.
2. Temporary safety supports, such as posts or safety jacks, should be installed when necessary for safety before other operations are begun and as needed thereafter.
3. Heavily overburdened timbers along haulage roads should be unloaded or taken down and the material loaded out.
4. Energized trolley and trolley feeder wires should be insulated adequately or deenergized when work such as timbering is done in the vicinage of such wires.
5. All persons working around uninsulated energized power wires should be familiar with such circuits, including the location of cutout and power-control switches for the circuits.

#### ACKNOWLEDGMENT

The cooperation of the company officials, employees, U.M.W.A. officials, and State mine inspectors during this investigation is gratefully acknowledged.

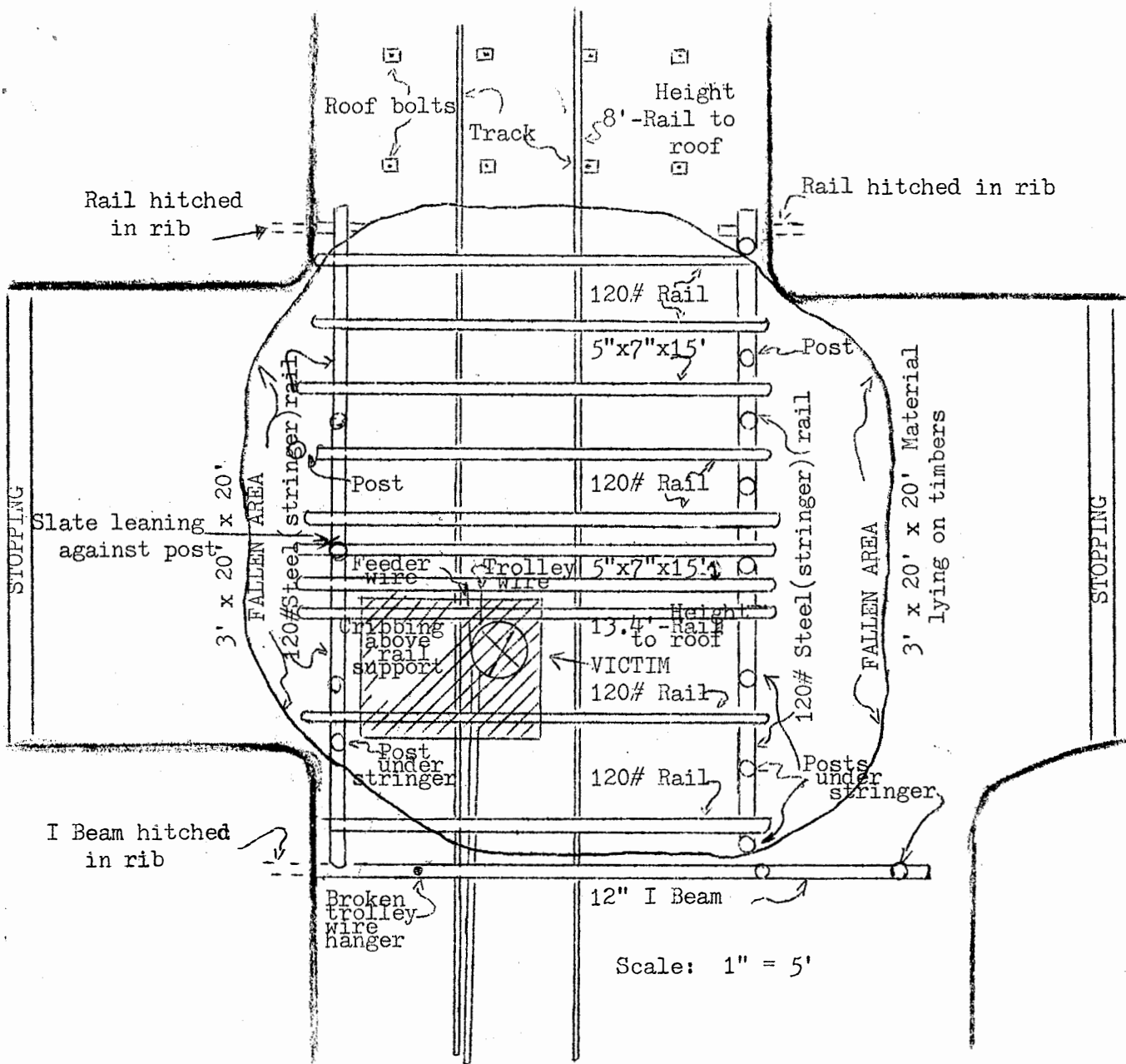
Respectfully submitted,

/s/ J. W. Holcomb

J. W. Holcomb

/s/ Everett Turner

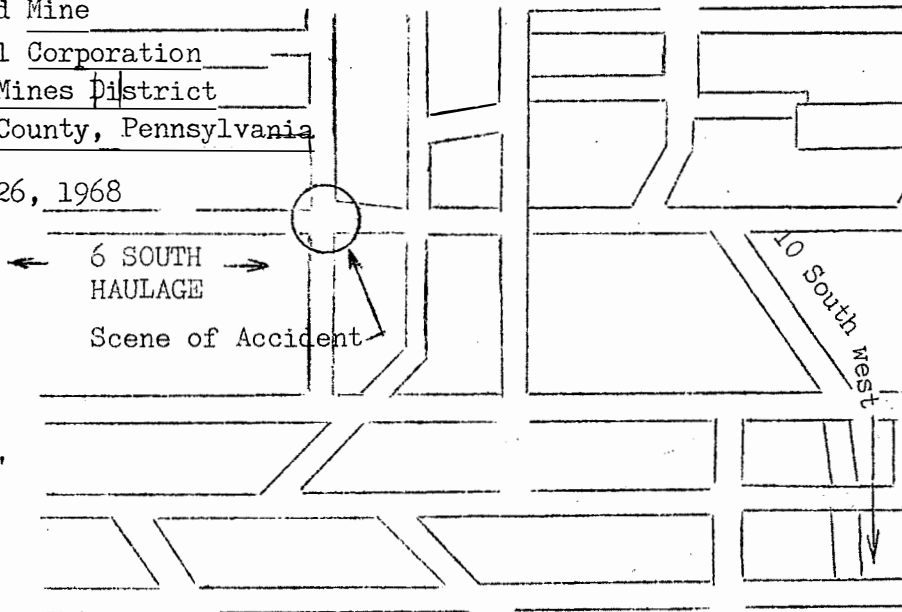
Everett Turner



Sketch of Scene of Fatal Coal Mine Roof-Fall Accident.  
Newfield Mine

Republic Steel Corporation  
Northern Coal Mines District  
Newfield, Allegheny County, Pennsylvania

August 26, 1968



Scale: 1" = 100'

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF MINES

REPORT OF ROOF-CONTROL SURVEY  
(Bolting)

Date September 19-20, 1968 Investigator G.W. Chastain Field office Pittsburgh, Pa.

Company Republic Steel Corporation Mine Newfield  
Northern Coal Mines District

Town Newfield County Allegheny State Pennsylvania  
(Post Office-Verona, Allegheny County, Pennsylvania)

Coalbed Upper (Double) Freeport Thickness 84" to 96"

Employees 206 Shifts 3 Production 2,900 tons

Date of last roof-control survey (roof-bolting) March 21-22, 1968

Number of roof-control surveys previously made (roof-bolting) 11

1. Method of mining Block

2. Describe loading methods Continuous-mining machines and caterpillar-mounted loading machines.

3. Are pillars recovered? Yes

4. Method of pillar recovery Block

5. Width of entries 16' and 18' Rooms DNA Crosscuts 16' and 18' Pillar splits or lifts 16' and 18'

6. Has roof-bolting plan been approved? Yes

7. Were drawings of roof-bolting plan on file in mine office? Yes Posted on bulletin board? Yes Posted underground? No

8. Were officials and workmen familiar with requirements of the roof-bolting standards? Yes

9. Describe immediate roof Thinly bedded laminated shale from 0 to 15 feet in thickness in which clay veins were occasionally present. In areas where the shale was absent the immediate roof was sandstone.

(continued)

10. Describe roof-bolting standards in detail       Bolts installed with equipment  
mounted on continuous-mining machines were in staggered rows of 2 with the  
rows not more than 3 feet apart to within 4 feet of the face. Bolts install-  
ed with other types of equipment were on 3- and 4-foot centers across and  
4-foot centers lengthwise to within 4 feet of the face. The length of  
continuous-miner runs was limited to the distance the miner could be advanced  
without the operator going inby the last roof supports. Safety jacks or  
safety posts were required during drilling and bolting operations, and persons  
were prohibited from going inby roof supports except to install roof supports.  
Roof bolts were 5/8-inch-diameter high-strength steel 5 feet or more in length  
anchored with expansion shells. Bearing plates were 6- by 6- by 3/8-inch  
flat or 6- by 6- by 1/4-inch embossed steel. Wooden cap pieces with 3- by 3-  
by 1/4-inch flat steel plates or regular bearing plates between the wood and  
the boltheads were used where greater bearing area was desired.
11. Were roof-bolting practices in compliance with the Federal Coal Mine Safety  
Act, Federal Mine Safety Code, and adopted roof-bolting plan?       Yes
12. Recommendations       None
13. Safety improvements during survey       None

/s/ G. W. Chastain

G. W. Chastain  
Roof-Control Investigator



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF MINES

REPORT OF ROOF-CONTROL SURVEY  
(Timbering)

Date September 19-20, 1968 Investigator G.W. Chastain Field office Pittsburgh, Pa.

Company Republic Steel Corporation Mine Newfield  
Northern Coal Mines District

Town Newfield County Allegheny State Pennsylvania  
(Post Office-Verona, Allegheny County, Pennsylvania)

Coalbed Upper (Double) Freeport Thickness 84" to 96"

Employees 206 Shifts 3 Production 2,900 tons

Date of last roof-control survey (timbering) March 21-22, 1968

Number of previous roof-control investigations (timbering) 4

1. Method of mining Block

2. Describe loading methods Continuous-mining machines and caterpillar-mounted loading machines.

3. Are pillars recovered? Yes

4. Method of pillar recovery Pocket-and-wing

5. Width of entries 16' and 18' Rooms DNA Crosscuts 16' and 18' Pillar splits or lifts 16' and 18'

6. Have timbering standards been adopted? Yes

7. Were drawings of standards on file in mine office? Yes Posted on  
bulletin board? Yes Posted underground? No

8. Do adopted standards include requirements as to size of roof supports? Yes.

Minimum diameter of posts 5 inches, crossbars 5 by 7 and 6 by 8 inches by 14  
and 16 feet, crib blocks 5 by 6 by 30 inches, cap pieces 2-1/2 by 6 by 18  
inches, and wedges 12 by 4 by 1 inch tapered to 0.

9. Were roof supports installed in a workmanlike manner? Yes

(continued)

10. Were officials and workmen familiar with requirements of the timbering standards? Yes
11. Describe immediate roof Thinly bedded laminated shale from 0 to 15 feet in thickness in which clay veins and slickensided formations were occasionally present. In areas where the shale was absent the immediate roof was sandstone.
12. Describe minimum timbering standards in detail Crossbars on 4-foot centers to within 18 feet of the face with at least one crossbar ahead of the continuous-miner operator at all times, at least five breaker posts and/or cribs in all openings to the gob adjacent to pillar lifts, and a crib on each side of push-out stumps at four-way intersections. The standards also required that additional roof supports be installed where necessary, and prohibited persons from going inby roof supports except for the purpose of installing roof supports.
13. Were timbering practices in compliance with the Federal Coal Mine Safety Act, Federal Mine Safety Code, adopted standards, and suggestions for improvements of standards as outlined in previous roof-control survey reports? Yes
14. Recommendations None
15. Safety improvements during survey None

/s/ G. W. Chastain

G. W. Chastain  
Roof-Control Investigator