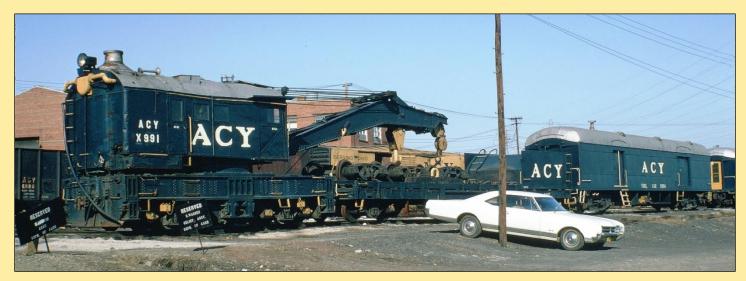
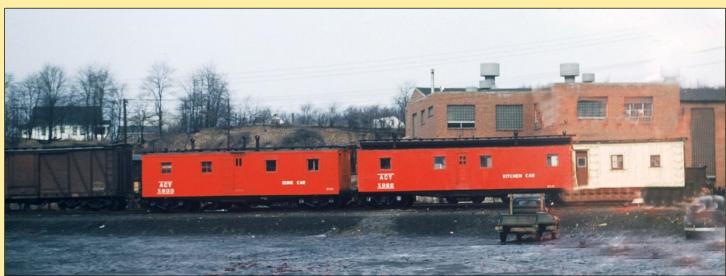
# A.C.&Y. H.S.

# News

**Volume XXII** Number 1 Spring – Summer 2017

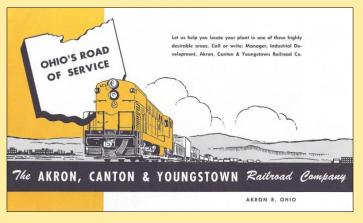
# **AC&Y's Wreck Relief Equipment**





# Plus AC&Y's Brittain Yard Ash Hoists

Official Publication of the Akron, Canton & Youngstown R.R. Historical Society



### http://www.acyhs.org

**Front cover:** In post N&W merger blue attire, AC&Y's relief wreck outfit is staged at Brittain yard in April 1971. At the same site is newly repainted kitchen car X-922 and bunk car X-933 in March 1954. A newly re-sheathed bunk car awaiting red paint also appears. *Jack Keeler courtesy Jim Semon, Ed Beckwith courtesy Chris Lantz.* 

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The A.C.&Y. H.S. News magazine is a noncommercial quarterly publication intended to document and interpret the history of AC&Y and related railroads. Submissions, photographs and prototype information for use in future publications are most welcomed. The Society is a Section 501(c)(3) tax-qualified organization. ISSN #1076-6693

## **Society Book**

#### From the Publications Editor . . .

In April 2015 Morning Sun Books released of our AC&Y-A&BB book publication, the culmination of a two-year effort by a dedicated team of AC&Y-A&BB enthusiasts. The book is still available with a pre-arranged AC&YHS discount through **www.railroadbooks.biz.** All will be pleased with the 128-page publication outlining the captivating history of the AC&Y and A&BB supported by numerous never-seen-before color images.

#### **Editorial**

#### From Bob Lucas . . .

Featured in this issue of our bi-annual News magazine is Part I of AC&Y's wreck relief equipment and MOW cars. It's subject matter whose consideration is long overdue given the extensive roster of fascinating non-revenue cars maintained by the AC&Y and Northern Ohio over the century-long history of the two roads.

The impediments and delays in addressing the relief roster and MOW cars with any authority are understandable. Without doubt, these are the most difficult stories ever undertaken from a documentation standpoint.

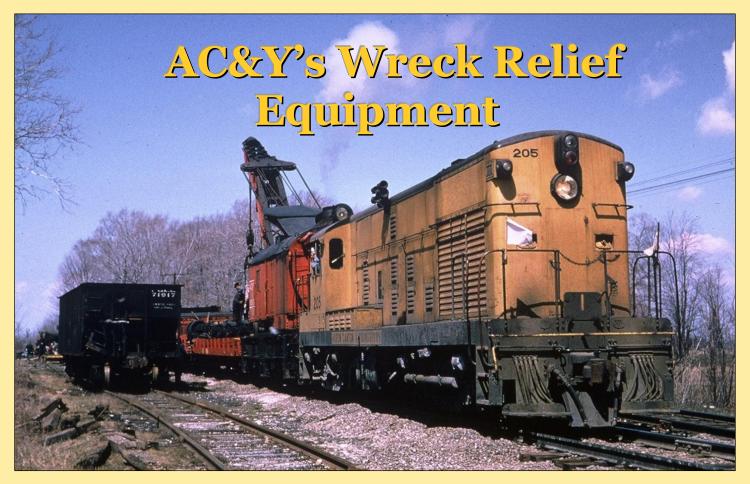
Both revenue and non-revenue equipment was inherited by the AC&Y with the March 1920 lease of the Northern Ohio Railway. In addition to a few revenue freight cars and the MOW equipment, the transfer included two cabooses and at least three passenger cars. All were wood construction (body and under frame) built from 1890 to 1912. Nearly all were in a decrepit state, shortly after deemed non repairable and subsequently scrapped. There are sketchy records of these early 1920 events in the Society Archive. Tying them together has proven to be a major challenge. Altogether, we can account for roughly ninety (90) AC&Y marked wreck relief / MOW cars and eighty (80) belonging originally to the Northern Ohio (NO) Railway. Some are duplicate records meaning some surviving NO cars were remarked as AC&Y "X-series" cars.

We hope you will enjoy the Part I relief story together with a story and drawings on AC&Y's steam-era ash hoists at Brittain yard. Perhaps a few modelers will find equipment worthy of replicating in HO, N or O-Scale.

## **Society Archive**

As previously reported, the bulk of our extensive AC&Y-A&BB archive collection was donated to the University of Akron under a "Deed of Gift" Agreement in October 2015. Subsequently, the Society donated nearly \$8,000 to be utilized for specific preservation efforts including the cataloging and re-housing the records into archival approved (acid free) file folders and boxes.

Last year, the Society and the UofA Archive submitted a detailed grant request to Norfolk Southern Foundation for additional funding needed to support this effort. Our request, unfortunately, was not approved. We elected not to resubmit another proposal at this time. Meanwhile, work can begin through application of Society funds. However, we are looking for additional grant opportunities and / or outright donations. If you can help, please contact Vic Fleischer, Head of Archival Services at 330-972-6253 or email Vic at syfleis@uakron.edu.



**Above:** AC&Y's relief wreck train is working a derailment site at Sycamore. The wreck, involving two loaded PPG tank cars and thirteen empty hoppers, occurred on April 4, 1965. Clean-up took place over several days. P&LE hopper 71917 was re-railed and later moved to Brittain for repairs. Six cars were totally destroyed, scrapped on site. *Jim Roberts*.

Perhaps the least known aspect of the AC&Y Railroad was its impressive roster of maintenance-of-way (MOW) and relief equipment. For a small Class I carrier, the amount, type and variety of non-revenue cars to service the 171-mile road was most extraordinary.

Records from 1918 through 1990 show that the AC&Y's MOW and wreck relief equipment roster was comprised of not less than ninety prefix X-cars. The roster included two relief wreck derricks with idlers, six Magor side dump cars, numerous camp bunk cars, storage cars and specialty work cars. While the road was exceedingly frugal, the AC&Y was equally innovative in its adaptations of various worn out and damaged assets. Nothing went to waste if it could be reused in a more efficient manner. There were many examples of near destroyed foreign cars salvaged from online derailments, repurposed by the AC&Y Shops.

In addition, the Northern Ohio (NO) Railway maintained about eighty work cars, all inherited when the AC&Y took control in 1920. Included were forty-four decrepit ballast cars of which nearly all were sold or scrapped by 1922. Just two were serviceable additions to the AC&Y roster. At the time, the AC&Y was an obscure 7-1/2-mile East Akron switching road with no work equipment whatsoever.

A document shows a total of twenty-six (26) wreck relief and MOW work cars on the AC&Y roster as of November 1926. About thirteen were former Northern Ohio bunk, rail and work flats, retained by the AC&Y though 1927.

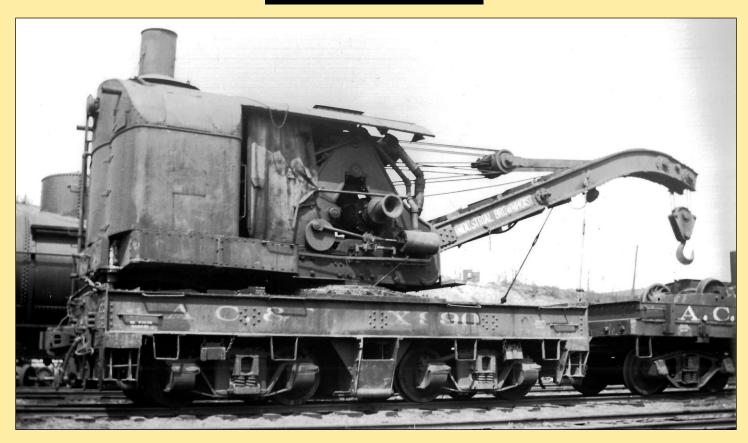
Throughout the next two decades, the AC&Y undertook a substantial upgrading of the Northern Ohio, from bridges to right-of-way improvements to signals. Following WWII, MOW work and relief equipment was rationalized, retired and scrapped. By January 1959, just twenty-three (23) wreck relief and MOW work cars remained. The Brittain relief outfit consisted of:



Wreck Derrick	X-991
Idler Car	
Tie, Rail and Water Car	
Tool Car	
Bunk Car	X-933
Kitchen Car	X-922
Caboose	

In 1967, retirements and changes were made to the wreck relief roster including acquisition of a baggage-mail and baggage car, then surplus to the Erie-Lackawanna. These new additions became AC&Y X-993 and X-994.

# AC&Y Wreck Relief Derricks and their Idlers



**Above:** Wreck derricks and relief outfits were a necessary evil for most railroads. Built by the Industrial Works in 1899, AC&Y's early steam wreck crane X-990 is at Brittain in 1934. AC&Y acquired the crane second hand in April 1929 and sold it to the Maryland & Pennsylvania Railroad in February 1939. It's reported the X-990 was held at Delphos after AC&Y acquired the larger capacity X-991 wreck derrick in May 1935. *Jay Williams collection.* 

AC&Y Wreck Relief Derricks and their Idlers							
Number	Description	Installment AFE	Installment completed	Retirement AFE	Retirement Work Completed	Original Car	Notes
X-990	50-ton Steam Wreck Derrick	ACY-703	4/12/1929	ACY-966	2/6/1939	Built by Industrial Works – serial #624, Sold to Maryland & Pennsylvania RR	Rebuilt 1928, non-self propelled
X-985	ldler for Steam Derrick X-990	ACY-783	4/12/1929	ACY-966	2/6/1939	Converted AC&Y commercial Flatcar #172	Sold to Maryland & Pennsylvania RR, scrapped 1952
X-991	160-ton Steam Wreck Derrick	ACY-886	5/28/1935	A-1266	9/1/1973	S/H from General Equipment (Industrial Brownhoist) – serial #3051	Self-propelled, Oil burner replacing coal boiler added June 1953
X-987	First Idler for Wreck Derrick X-991	ACY-886	5/28/1935	A-1126	3/25/1969	Converted AC&Y commercial Gondola #1433	Built Nov-1919, transferred to work equipment under AFE-ACY-87
X-995	Second Idler for Wreck Derrick X-991	A-1118	11/15/1968	A-1266	9/1/1973	Converted leased 50' Boxcar #3809	Replaces X-987 & X-988

# Background

Rail-mounted wreck derricks and relief outfits were a necessary evil for most railroads. Both steam powered and diesel powered wreck cranes, aka "Big Hooks", were fascinating and complex machines. They were the forgotten implements of trade during the nostalgic era of railroading. They were not purchased in large numbers; however, nearly every railroad of consequence retained and operated at least one, the AC&Y being no exception. Now, railroads rely on contractors with off-road cranes and bulldozers to handle the cleanup of major derailments and for MOW work.



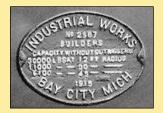
**Above:** AC&Y "Big Hook" X-991 and a bulldozer work to clean up a fourteen car derailment of the Carey Turn at milepost 89 west of Plymouth, Ohio in April, 1967. Traffic was rerouted over the B&O. (*Vaughn Neel*)

There is no record of a wreck derrick on the AC&Y roster between the start of operations in 1913 and arrival of 50-ton steam crane X-990 in April 1929. Prior to control of the Northern Ohio in March 1920, the AC&Y was a 7-1/2 mile switch operation. Train speeds did not exceed 20-MPH. Derailments, while commonplace, likely did not require the services of a "Big Hook".

There is also no evidence of a wreck crane on the Northern Ohio (NO) Railway roster. A steam derrick appears in a distant NO wreck photo taken from Hiles Tower in 1917. Most likely, the NO utilized relief equipment from the LE&W (parent road) when required.

It is also assumed between 1920 and 1929, the AC&Y relied on friendly connections (namely the W&LE) to provide heavy lift capability for wreck clean ups and other right-of-way work (namely bridge replacements).

# AC&Y Derrick X-990



While many are familiar with AC&Y's 160-ton wreck derrick X-991, few are aware of the existence of an earlier 50-ton steam crane and idler, the X-990 and X-985. Little is known about the early history of X-990

except it was built by Industrial Works in 1899 as serial #624. The Industrial Works of Bay City, Michigan introduced the first steam railroad wreck crane in 1883 and would build nearly 3,800 more by 1923. In 1932. facing stiff competition, the company consolidated operations with Brown Hoisting of Cleveland to become Industrial Brownhoist.

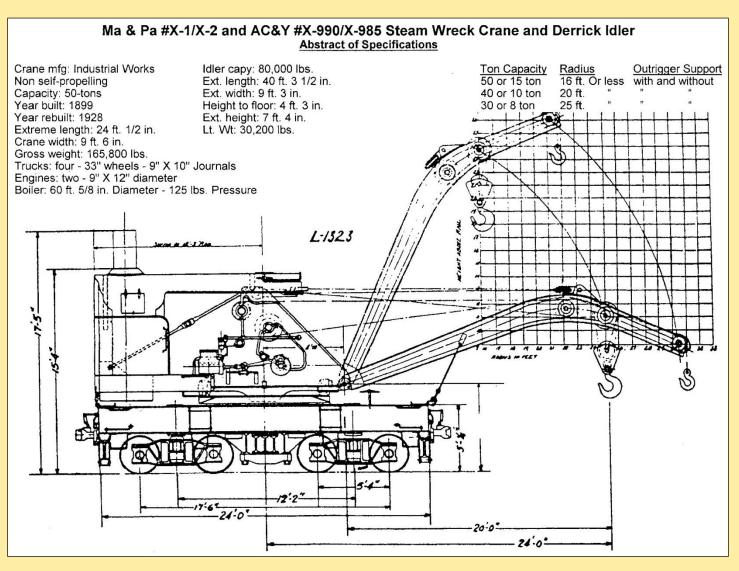
The AC&Y acquired X-990 second-hand in April 1929. It had been rebuilt the prior year. Accompanying the X-990 was derrick idler X-985. It always traveled with the derrick under the boom and carried chains, cable, timbers, fuel (coal), water, trucks and auxiliary equipment. The water tank was insulated, piped to the derrick boiler.

When required for heavy lifts, "outriggers" were extended from the sides and center. Timbers and jacks raised the crane until the coil truck springs were relaxed. The end rail clamps kept the crane in place.

With reintroduction of then stored Class R locomotives to road service, AC&Y acquired a larger capacity crane, duly added to the relief roster in late May 1935. The smaller X-990 continued to be used sparingly through 1938, reportedly held at Delphos.

In March 1939, wreck derrick X-990 and idler X-985 were sold to the Maryland and Pennsylvania (Ma & Pa) for \$2,750 becoming the noted X-1 steam crane and X-2 idler. Interestingly, the sale was brokered by AC&Y's J.M. Hood, then President of the American Short Line Association. The newly acquired idler had a short life on the Ma & Pa. X-2 was converted to flatcar 125 in 1941 and scrapped in 1952. A second X-2 may have retained the insulated water tank from the first X-2?

Still under steam, X-1 served the Ma & Pa until 1979. Due to FRA inspection with many boiler flues needing replacement, X-1 was retired. Despite hopes that X-1 would go to the Railroad Museum in Strasburg, it was deemed too heavy to move over poor roads and was unceremoniously scrapped in January 1998.





**Above:** Repainted steam wreck derrick X-990 and idler X-985 (first X-985) are seen at Brittain yard in September 1935. The 50-ton derrick is believed to be painted black with a red (lead) roof. *Jay Williams collection.* 



**Above:** AC&Y's X-990 steam derrick and idler X-985 (first X-985) are held on the Brittain Stores track in 1935 with caboose 50. The piping leading from the roundhouse boiler to X-990 provided a ready source of preheated water in case the wreck outfit was needed for emergency clean-ups or right-of-way work train assignments. *Jay Williams collection*.



**Above:** Though out-of-service, Emons era MPA (Maryland & Pennsylvania) X-1 is seen in July 1986 at York, PA. Then 87-years young, the old steam wreck derrick unfortunately did not survive the scrapper's torch despite valiant efforts to find a new home. Reportedly, the former AC&Y X-990 was too heavy to be moved over poor roads. *Alan Mende* 

# AC&Y Derrick X-991

AC&Y's iconic relief wreck derrick X-991, the second owned by the road, was purchased secondhand from General Equipment for \$21,650 (later reduced by credits). It was shipped from Bay City to Akron via PM-Toledo-C&O-Carey-AC&Y at "no more than 10-MPH", placed in service in May 1935 after installation of a new steam boiler and other modifications. The 160-ton capacity derrick was manufactured by Industrial Brownhoist of Bay City, serial #3051. The original build date and owner are unknown. X-991 weighed 246,500# and was self-propelled with a maximum travel speed of 3.5 MPH. It could handle an 11 percent grade with a tractive effort of 29,500#. It had a 400 horsepower engine with a water tank capacity of 470 gallons and held 2,000# of coal.

The X-991 steam derrick was reconditioned in June 1953 under AFE-A-514 for \$1395 including replacement of the coal fired steam boiler with a new oil fired burner (boiler). The X-991 was finally retired in September 1973 along with the second idler X-985, having served the AC&Y for nearly forty years.

Supporting the X-991 steam derrick was a home built boom idler car, designated X-987. Records show this car was converted commercial gondola #1433, one of sixty-seven wood side 40' IL gondolas purchased by the AC&Y in 1919. All were 40-ton steel under frame cars, built or rebuilt by Magor Car that year.



Above: X-987 at Brittain in Sept. 1946. Bob's Photo.

The X-987 was equipped with no auxiliary gear other than three replacement trucks and was "thru piped" to allow water transfer to the X-991 steam derrick from the accompanying X-986 equipped with a water tank.

The X-987 derrick idler remained in service virtually unchanged for thirty-four years until retired in March 1969. Records also indicate the car had been in MOW work service prior to installation supporting the X-991.

A second idler, X-995 was installed in November 1968 replacing X-987. This idler was originally AC&Y 3809, a leased 50' single-sheathed auto boxcar, one of the ex-Frisco cars built in 1930. The car was rebuilt by Brittain shop forces. The X-995 had a much shorter service life in idler service, having been retired and sold for scrap in September 1973.



**Above:** On display at Brittain yard in 1935 is the AC&Y's newly arrived 160-ton capacity relief wreck derrick X-991. Note the fresh paint and light colored roof, either white or aluminum gray. Typically, AC&Y's relief roster was later bright red with gloss black paint applied to the frame, underbody and trucks. The boom proudly proclaims the manufacturer, Industrial Brownhoist Company of Bay City, Michigan. **Bruce Triplett, Bob Lucas collection.** 



**Above:** AC&Y's relief wreck derrick X-991 was photographed at Brittain yard with boom idler car X-987 in May 1957 about four years after it was refurbished. Originally in bright red attire, AC&Y's X-991 was repainted blue shortly after the AC&Y merger into the N&W System in 1964. *Ed Kirstatter*.



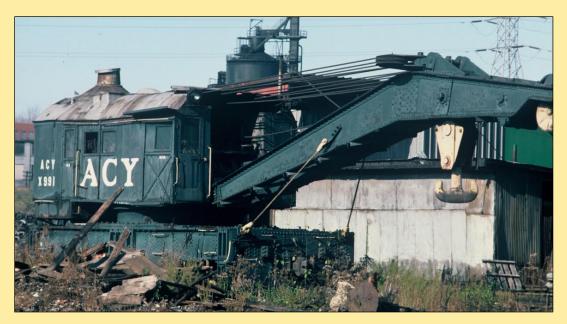
**Above:** AC&Y's wreck derrick X-991 was purchased May 1935 and retired September 1973. It was always steam powered as seen in this undated photo sometime after 1948. Under AC&Y's dieselization program, a new oil fired burner was installed in June 1953, replacing the coal fired boiler. The X-991 was often utilized for work assignments beyond derailment clean-ups. **Bob Richardson, courtesy DeGolyer Library – SMU – Dallas, Texas.** 



**Above:** Good images of AC&Y derrick idler X-995 are surprising rare. Converted from leased 50' boxcar 3809 in November 1968, the X-995 was retired in September 1973 after less than five years service. It appears the water tank was salvaged from tie-rail-water car X-986. *Michael Bradley collection*.



**Above:** The AC&Y wreck outfit is working a rear-on collision involving NKP GP-7 447 and a 700-series caboose in June 1956 on the NKP at Mogadore. The X-991 derrick is now oil fired. *Ed Beckwith, Chris Lantz collection*.



A symbol of the Left: hardworking glory years, AC&Y's signature wreck derrick X-991 sits dejected at the I.A. Barnett scrap yard in Barberton about 1980. The derrick yielded 250,000 pounds of scrap To the dedicated steel. AC&Y men who cleared derailments: the derricks are gone now! You take the derrick away from the man, but you can't take the man out of the derrick!

Doug Edwards.

# **Wreck Derrick Operations**

hen a major mishap occurred on the AC&Y, a call went out for the relief outfit. The crew was mustered to Brittain yard and the wreck train left as fast as possible. Railroads typically stationed "Big hooks" every 75-100 miles in order to reopen a line for normal traffic. Expedited handling of the wreck derrick was vital due to speed restrictions. AC&Y's Employee Timetable No. 26, effective January 1, 1956, imposed 25-MPH maximum speed on trains handling wreck derricks, meaning it took nearly seven hours to reach Delphos.

The same timetable identifies the relief outfit in 1956 and identifies other operating rules:



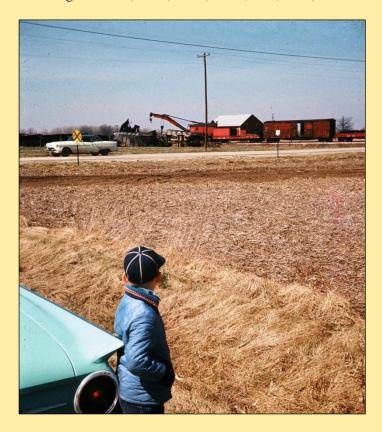
Wreck Derrick	X-991
Idler Car	X-987
Tie, Rail and Water Car	X-986
Tool Car	X-963
Bunk Car	X-933
Kitchen Car	X-922
Caboose	52

- a. Maintenance of the relief outfit, supplies for and personnel are under the direct supervision and responsibility of the General Car Foreman.
- b. The outfit will be lined up in the order listed with the boom trailing while in transit. The outfit will be stored on Brittain repair track #7 with derrick facing out on west end. A locomotive will be kept ready at Brittain at all times. The outfit will not be used west of Akron on AC&Y property except as a unit and when so used the Wreckmaster and eight men must accompany it. This will not prevent the Maintenance of Way (MOW) Department using the derrick with its regular personnel in other work trains provided arrangements are made to tie up at points where communications are available and men are ready for call. The derrick as a gross weight of 249,190 pounds and has a new rated capacity of 150-tons.
- c. The handling of other cranes and similar outfits will be governed of judgment of Conductor in charge of relief outfit train.
- d. Conductors handling derrick will not move same through turnouts without first ascertaining as to whether wedges have been removed.
- e. Wreckmaster, officer or employee having charge of relief outfits, either system owned or rented, will be responsible to secure return of all equipment temporarily used such as trucks, chains, emergency knuckles, etc. Such person will see that every item of supply and equipment is repaired or replaced and returned to stock before outfit is returned to Brittain.
- f. While on the road, the relief outfit will be under the general direction of the Officer-in-charge.

g. The Wreckmaster must assume responsibility for correct practices for clearing the wreck, safe working conditions, properly blocking derrick, knowing that flag protection has been provided, provide for the protection of all employees and spectators, assure outriggers are properly deployed and that sufficient clearance is available before swinging derrick. When operating the derrick, the Wreckmaster is permitted to give all orders related to clearing of the wreck

Most derricks including both AC&Y's X-990 and X-991 had two main hoists. The auxiliary hook, located at the end of the boom, did not lift as much as the main hook. It had a greater reach and was suitable for moving most debris and cars. The function of the main hoist was to lift and drag locomotives back to the roadbed and onto the rails. Cable slings, chains and spreader bars were used with the main hoist. The hook itself was never attached directly to the load.

When the relief outfit neared the wreck site, the derrick and idler boom car would be switched out. The locomotive would then push the derrick up to the wreck. Two derricks would often work a job, one from either end. There are many examples of this on the AC&Y with the second derrick usually rented connecting railroads including the C&O, NKP, NYC, B&O, Erie, PRR, etc.



**Above:** A young boy is enthralled with the activity involving an AC&Y derailment near Plymouth in 1958. *Vaughn Neel, AC&Y HS Archive.* 

# AC&Y's Wreck Relief Outfit – Auxiliary Cars (all time)



**Above:** Pictured in this undated photo at Brittain yard are three mainstays of the AC&Y's relief wreck train outfit: Bunk car X-933, kitchen car X-922 and caboose 42. Number 42 would later be replaced by caboose 52 and was spelled at times by caboose 41. The kitchen and bunk car appear in fresh Tuscan red paint, probably in the early 1940's applied over the silver-gray scheme in the photo on the next page. **Bob Richardson, Munshower collection, Society Archive.** 

AC&Y Relief Wreck Outfit Auxiliary Cars							
Number	Description	Installment AFE	Installment completed	Retirement AFE	Retirement Work Completed	Original Car	Notes
40	Caboose	?	1920	A-222	June 1948	Built 1905 by International Car, Chicago for a western RR	Reassigned June 1948 as Stores car #6, later scrapped
41	Caboose	?	1920	A-105	July 1946	Built 1905 by International Car, Chicago for a western RR	
42	Caboose	?	1920	A-222	June 1948	Built 1905 by International Car, Chicago for a western RR	Reassigned June 1948 as Stores car #7, later scrapped
52	Caboose	?	8/1/1923	A-1266	12/31/1962	Home shop built from AC&Y commercial boxcar #512	Damaged at Carey May 1959, later scrapped
X-922	Kitchen / Diner Car	ACY-563	9/29/1926	A-1035	9/9/1966	Converted PRR XL Boxcar #532031, reconditioned ACY-703	Damage by fire, sold to Luntz for scrap, AB brakes in April 1950, AFE-A-314
X-933	Kitchen / Bunk Car	ACY-664	5/12/1928	A-1126	11/13/1968	Converted AC&Y commercial Flatcar #162	AFE-ACY-703 and A-314 cover subsequent additions, AB brakes in April 1950
X-963	Tool Car	A-78	12/26/1945	A-1126	11/13/1968	Converted CBQ #46425	B/O on AC&Y, CBQ settled for scrap value, AB brakes in April 1950, A-314
X-986	Rail-Tie-Truck Car	ACY-799	4/19/1930	A-1126	3/25/1969	Converted AC&Y commercial Gondola #1400, received X-983 tank Feb 1950, A-307	Built Nov-1919 by Magor Car, AB brakes in April 1950, A-314
X-993	Bunk / Kitchen	A-1069	1967	?	9/1/1973	Converted E-L baggage #L-1811	
X-994	Tool Car	A-1059	9/30/1968	?	?	Converted E-L REA baggage #2023	



**Above:** On repair track #7 at Brittain is relief bunk car X-933 and kitchen car X-922 followed by caboose 41. The photo is believed dated 1948. *Bob Richardson, Munshower collection, Society Archive.* 



**Above:** At same location at Brittain is the wreck relief outfit in July 1946 with caboose 40. Also in view is tie car X-989, extra gang rail flat X-988, tool car X-983, derrick X-991 with idler X-987. It is believed the tie and rail cars were assigned to the MOW Dept., not usually in the standing wreck relief outfit. *C. W. Burns, Society Archive collection.* 



**Above:** AC&Y's relief outfit is working a derailment west of Chatfield in 1939. Appearing are the familiar trio of support cars: Caboose 42, Kitchen Car X-922 and Bunk Car X-933. The latter two appear in a circa late 1930's distinctive silver-gray paint scheme. **Bob Richardson, Munshower collection, Society Archive.** 





**Above:** A former Pennsy boxcar was converted in 1926 to AC&Y's relief wreck X-922 kitchen diner car. The X-922 appears respectively at Brittain in 1953 and 1952. Retirement came in 1966. *Bill Nixon collection, Bob's Photo.* 



**Above:** In 1967, AC&Y acquired Erie-Lackawanna's Baggage Car number L-1181 car for conversion to Kitchen / Bunk X-933, replacing both X-922 and X-933. The L-1181 has arrived at Brittain yard in 1967. *Bob Lucas collection*.

Right: Adorned in N&W "Pevler" blue attire, this shot shows AC&Y's new kitchen bunk car X-993. It was formerly the Erie – Lackawanna's baggage combination L-1181 and was retrofitted by Brittain shop forces in 1967. The X-993 was assigned to the wreck relief outfit, but lasted only six years. It was sold for scrap in September 1973. Bob Lucas collection.



Right: The X-933 bunk car is found at Brittain in September 1946, just after cessation of WWII hostilities. It is believed both the X-933 bunk and X-922 kitchen cars were permanently assigned to the relief wreck train for more than thirty years.

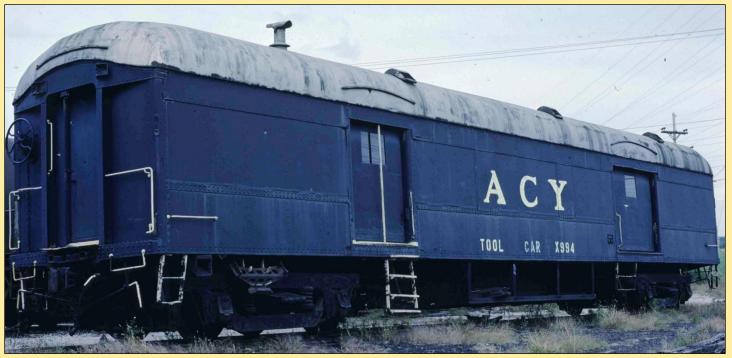
Bob's Photo.



**Right:** At Brittain yard, the X-933 bunk car is showing its years just before it was sold for scrap in 1968. While both X-933 bunk and the X-922 kitchen cars were assigned to the relief wreck train, it is possible undocumented cars also served in that capacity. **Bob Lucas collection.** 







**Above:** The tool car was an important member of the relief wreck outfit. The X-963 and its replacement, X-994 served in that capacity as detailed in the spreadsheet. *Ed Kirstatter, Bob Lucas collection*.

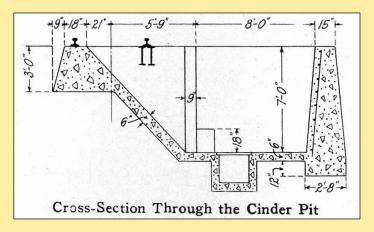


**Above:** AC&Y's X-986 tie, rail and truck car was found at Brittain about 1958. Converted in 1930 from circa 1919 revenue gondola AC&Y #1400 and modified in 1950, it served forty years until retired in 1969. *Ed Kirstatter*.

# **AC&Y's Brittain Yard Ash Hoists**

## First Installation - 1921 to 1946 - Article from October 8, 1921 Railway Age

t the engine terminal of the Akron, Canton & Youngstown at Brittain, Ohio, is an ash handling system which presents a number of interesting features in ash disposal at cinder pits. Essentially, the system consists of a depressed pit below a track where engines may be "spotted" and dumped before entering the roundhouse, a steam discharging arrangement by which ashes may be removed from the pit and discharged into a cinder car. The cinder pit, constructed of concrete, extends 12 ft. (inside dimension) along the track and about 10 ft. to one It is divided into two compartments by a concrete wall which extends entirely across the pit parallel to the track except for a vertical opening of 21/2 ft. at the center; the cross section in the drawing is taken at the center.

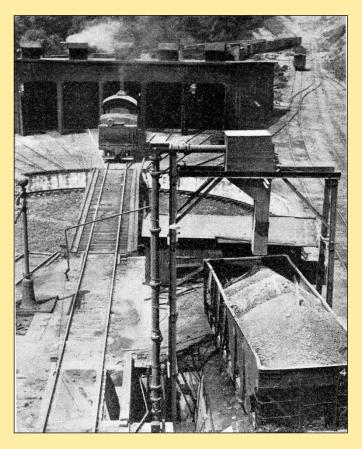


The compartment thus formed, which is below the track, is so constructed that the three outside walls of the pit slope from their tops to the bottom of the opening in the cross position, while the other compartment has a level bottom which makes it possible for a man to rake ashes from below the track through the opening in the partition and over the trap of the ash handling arrangement. The latter is similar to equipment installed in power plants, etc., whereby ashes and cinders are removed by the force of steam injected into that end of the pipe line below the floor. The steam for this operating system is obtained from the engines on the cinder track, each locomotive being equipped with a quick acting screw connection in the steam dome.

This plant was put in operation January, 1921, and is reported to be giving satisfactory service.

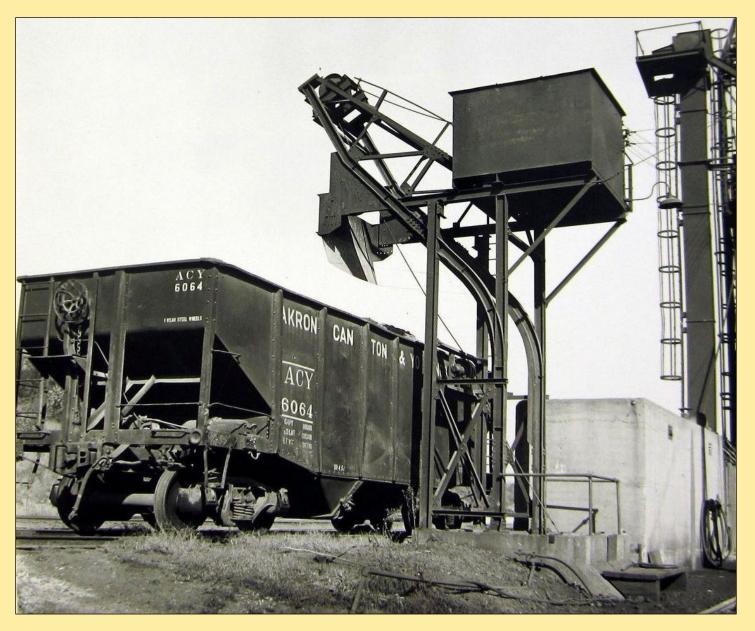
Originally, it was intended that the cinders should be discharged from the pit immediately upon being

dumped, but it was found that the pit afforded a sufficient capacity to permit the dumping of about three locomotives before cleaning of the pit was With respect to operation of the required. installation, it was found that the complete cycle of dumping ashes and removing them from the pit required from 15 to 20 min., distributed as follows: 10 min. for "pulling" the fire, 5 min. for blowing the cinders and from 2 to 3 min. for connecting and disconnecting the steam connection to the engine. The operating of for blowing the cinders out of the pit and into a cinder car requires considerable steam. The amount of steam remaining the locomotive has always been sufficient to move the locomotive into the roundhouse. It has been found best not to wet down the cinders while it the pit, the established practice to spray the water into the pipe conveyer at the upper end, thus killing any fire remaining in the ashes or coals.



The ash system is a product of American Steam Conveyor, Chicago, Illinois. We are indebted from the information and illustrations of this equipment to S.S. Senter, Chief Engineer of the Akron, Canton & Youngstown.

## Second Ash Hoist Installation – 1946 to 1956 – Ross & White



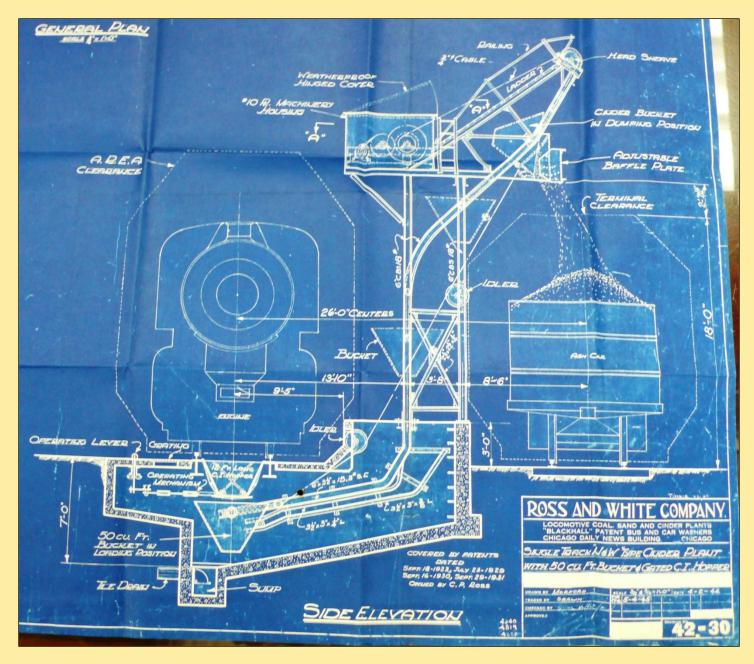
**Above:** The Ross & White ash hoist / cinder conveyor is featured at AC&Y's Brittain terminal. **Bob Lucas collection.** 

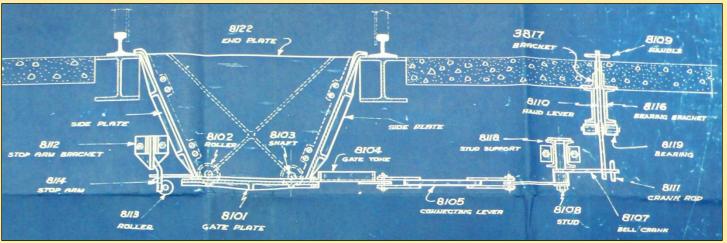
In September 1945, the War in the Pacific was Loncluded and the post-WWII economy was about to explode. Positive experience with an ALCO-GE switcher (#D-1) led the AC&Y to conclude the operating economies, efficiency and reliability of diesel electric locomotives were overwhelming! Nevertheless, it would take the AC&Y ten years (1945-55) to fully execute the transition from steam to diesel. Meanwhile, the AC&Y continued to make substantial investments in steam service infrastructure. In 1946, the AC&Y completed installation of a new 90-foot turntable from American Bridge at the Brittain terminal replacing the original 75foot table, thus allowing long-distance tenders to be added to the four ex-NKP Light 2-8-2's. A total of twenty-six steam locomotives were maintained at the Brittain terminal and two diesels (#D-2 arrived September 1945).

A new ash hoist / cinder conveyor was installed in April 1946, replacing the old steam ash hoist system which had served since 1921. The new cinder plant came from Ross & White, an "N&W Type" single track electric hoist with a 50-cubic foot bucket. It was retired along with the remaining steam locomotives in 1955.

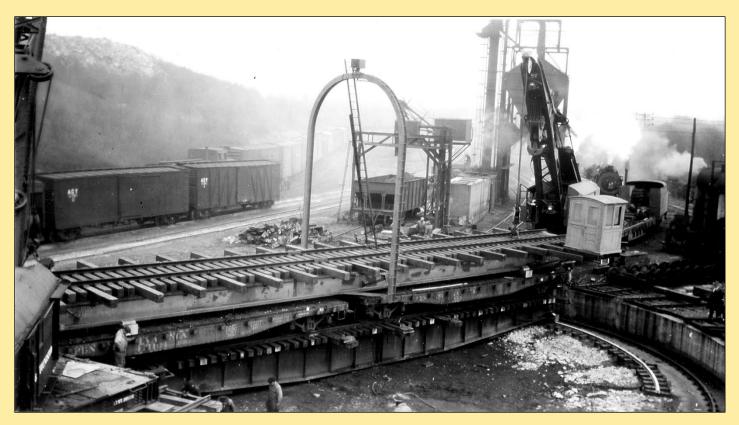
Curiously, there is no evidence of cinder plants at other AC&Y terminals, namely at Delphos, Carey, New London and Plymouth. Fires were dropped at any of these terminals must have been cooled and the ash / cinders removed by manual labor.

There is also no record on the disposition of ash / cinders at Brittain. Perhaps there was a market for this byproduct? Many foreign hoppers appear in photos.





**Above:** Complete **blueprint** drawings of the Ross & White cinder conveyor are found in AFE-A-96. The AC&Y Archive collection is now housed at the University of Akron Archive in downtown Akron. *AC&Y HS Archive collection donated by Norfolk Southern foundation*.



**Above:** This image shows several details worthy of comment. First, the installation of the new 90-foot turntable at Brittain in late 1946 required deployments of both AC&Y X-991 steam derrick and a steam crane rented from the W&LE. Next, both the original steam ash hoist and new Ross & White conveyor are visible beyond the turntable arch. The circa 1921 hoist may have been retained pending assured flawless operation of the new electric ash conveyor. Lastly, just left of the arch is the only known image of the first AC&Y Stores car number 4. **AC&Y HS Archive.** 



**Above:** The busy AC&Y Brittain terminal as it appeared in 1925 with the original steam ash hoist. AC&Y HS Archive.