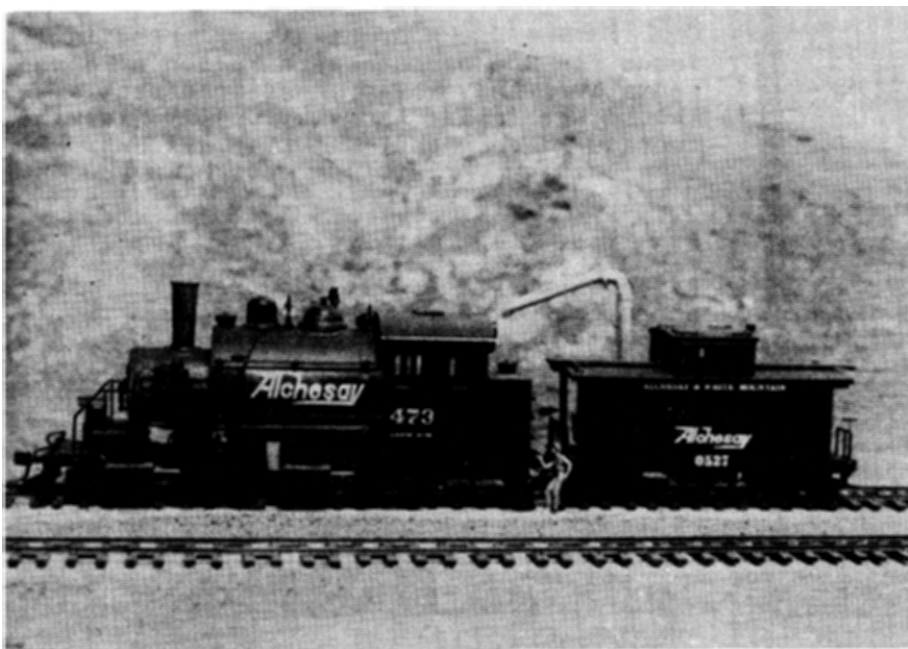


HOTBOX

"the Un-Magazine of Model Railroading"
No. 188. June 1983



Saga

Of

The

Alchesay's

Articulateds





HOTBOX

OFFICIAL PUBLICATION - Great Association of Model Railroading

Issued every month with an additional special mailing of a Directory of Membership during the summer

Annual dues for the TAMR are as follows:

REGULAR: (under 21 years of age) \$10.00

ASSOCIATE: (21 years of age and up) \$9.50

SUSTAINING: (both Regular & Associate) \$15.00

Please address all membership applications, renewals, address changes and complaints of non-receipt of the TAMR HOTBOX to the TAMR Secretary.

TAMR Secretary: Dee Gilbert
Box 132
Harrison, AR
72602-0132

All other HOTBOX business, except where specifically noted, is handled by the Editor. Please address all comments to the Editor.

HOTBOX Editor: Mark Kaszniak
4818 W. George St.
Chicago, IL 60641

DEADLINES: The TAMR HOTBOX welcomes articles, photographs and artwork pertaining to model and/or prototype railroad subjects. All material for publication must be submitted 30 days before the month of publication. The TAMR HOTBOX assumes that all material is submitted for the mutual benefit and enjoyment of the hobby by the membership and thus no payment will be made upon publication.

Extra Board

All the news that fits, we print:

NR Convention- The Northeastern Region of the TAMR will be holding its annual summer convention this year in Philadelphia. It will be held in conjunction with the Greenburg Great Train Show (free admission) on August 5-6-7. Full details on activities are being worked out right now. All interested members should contact: Ted Tait, P.O. Box 930, University of Scranton, Scranton, PA 18510 for further information and registration forms. Following the convention, there will be a six day railfanning jaunt (Aug. 8-13) through Maryland, Virginia, North Carolina and Tennessee. Transportation will be by car and lodging will be by Mother Nature (i.e. tents). Anyone interested in coming along should contact: Ted Bedell, 6 Oak Place, Bayville, NY 11709.

CR Meet- The Central Region is planning a meet over the July 9-10 weekend. Planned activities are a trip to West Chicago, IL for the "Railroad Days" festival featuring C&NW #1385, a ten-wheeler, a slide show and maybe a trip out to the Illinois Railway Museum. Interested parties should contact Gerry Dobey (145 E. Kenilworth Ave., Villa Park, IL 60181) or the HOTBOX Editor for details.

Chicago '83 Ltd.- The Midwest Region's of the NMRA Fall Convention to be held at the O'Hare Hilton on October 21-22-23 is offering TAMR members a special discount rate. The cost for TAMR members (19 or younger) will be \$7.50 for the convention and \$15.00 for the banquet. Normal adult full convention registration (including banquet) is \$30.00. The Chicago Division of the TAMR is hoping for a large turnout and special TAMR activities are in the works. More information regarding convention activities will be forthcoming soon. Watch this column for further announcements.

NR Rep - The address given in the last issue for the Northeastern Region's Representative, Andy Taylor, was incorrect. It should have read: Andy Taylor, 29 Tidewinds Terrace, Marblehead, MA 01945. Please make the appropriate correction in your listing.

Survey - As of this writing (early June), reader survey response has been less than enthusiastic. We urge you to return the completed surveys so that we may judge how well the TAMR is serving you and what programs you'd like to see started in the near future. Please respond!



Getting To Know You

Any member, new or veteran, who has not already had his/her life story poured out to the world through these pages is invited to send an autobiography of about three paragraphs for publication. This is a reader oriented section which depends on you for support. We hope to include this column as often as there is material for it.

Hello! My name is MICHAEL BARTH and I have recently joined the TAMR. I am fifteen years of age and live in Victorville, CA. Here trackage is shared by the Santa Fe and the Union Pacific. I am an avid railfan and modeler. At trackside, I enjoy photographing and recording trains plus taking movies as well. My modeling tastes run primarily to diesels and my favorite railroad is the Union Pacific. I also really enjoy riding Amtrak and my favorite train is the "Coast Starlight."

CRUMMY NEWS



BY MARK KASZNAK, EDITOR

MODEL PHOTOS

The announcement (elsewhere in this issue) of the HOTBOX's second annual photography contest should spur some interest. Preliminary reader survey results indicate that you want to see more TAMR sponsored contests and this is the HOTBOX's way of helping out in this area. Although we can expect a fairly good turnout for the prototype section due primarily to the long lead time and the number of railfans in the TAMR, our model section probably will not be as well patronized. This may be due to the fact that most modelers have little interest in photography and most railfans accomplish little modeling. Thus how about a team effort? If you are primarily a railfan who knows some modelers, offer to take a few pictures of their pikes. Likewise, if you are a modeler, see if you can get someone knowledgeable in photography to take some pictures of your pike. As an added bonus, if both these "team effort" participants are TAMR members, we will award both of you equal prizes if your entry is among the winners.

I realize that model photography isn't that easy, so I'd like to pass along a few pointers to help you get acceptable results. I am no expert in this field, but I have experimented and read a number of articles on the subject. If anyone else has some pointers that they'd like to pass along, I will be most happy to publish them for the aid of our members. Now I'm going to assume that you'll be using black & white film (so as to enter the contest), that you are able to control the aperture and shutter speed of your camera and that what you see in the viewfinder is what you will get on the film.

Rule number one is to keep camera placement low. Think of yourself as an HO size (or whatever scale you're modeling) person taking a picture of the prototype. The standard 3/4 view is fine as it shows the front and side

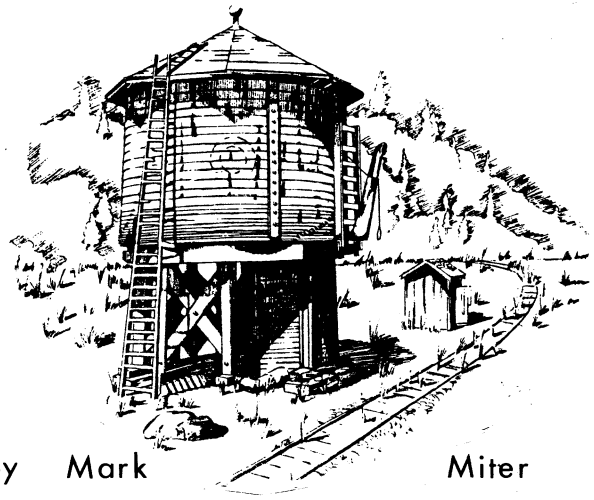
detail of your models. Remember that as you focus your camera, the area of maximum sharpness is 1/3rd in front and 2/3rds behind. Thus if you focus on the cab of your locomotive, the whole unit should be in relatively good focus.

Rule number two, use the smallest aperture possible. So set the aperture ring to the highest f-stop, say f.16, f.22 or even f.32, if you have it. Why? Because one of the laws of optics states: As you move closer and closer to your subject, the depth of field gets shallower and shallower. This means that as you focus on your prize winning model from say two feet away, the model scenery around it becomes fuzzy. The resulting picture will then look flat, dull and toy-like. However, the depth of field will increase as the aperture becomes smaller (f-stop goes higher). It will also increase as the lens focal length decreases. Thus if you switch from a "normal" (50-55 mm) to a "wide-angle" (35-28mm) lens, your overall scene will become less fuzzy at a given aperture. Yet, seeing as the wide-angle lens "takes in" more of the scene, you will probably have to move your camera even closer (maybe even on the layout itself) to avoid distracting background clutter.

Rule number three--be sure to have even lighting. You can accomplish this in any number of ways. Use a flash unit, shoot outdoors in sunlight or use the available light and make a time exposure. Since the last is the more complicated, I will briefly explain the procedure. First, you must support your camera so that it doesn't move during the time exposure. A tripod is good for this, but so is the layout. As you are taking the picture at the smallest aperture, you must determine the proper shutter speed to use with it. If you want to use your camera's built in light meter, here is a procedure that has worked for me in the past. Set up your models and camera for the photograph. Then set your aperture ring to the smallest f-stop, say it's f.2.8. Then find a shutter speed using your camera's built in light meter. Let's say it was found to be 1/30th of a second. Now you have to do a little figuring. Each time the f-stop is increased one full stop, the exposure time must be doubled. This is how the camera works. Thus if you increase the f-stop to f.4 (the next full stop), your shutter speed must be decreased to 1/15th of a second (doubled). We continue in this manner till we reach your lense's highest f-stop; so f.5.6 at 1/8th of a second, f.8 at 1/4th of a second, f.11 at 1/2th of a second, f.16 at 1 second and f.22 at 2 seconds. Thus we should expose the model scene for 2 seconds at f.22. Some cameras can do this by setting the shutter speed dial,

(continued on page 5)

Saga of the Alchesay's Articulateds



By Mark

Miter

The Alchesay & White Mountain RR was a predominantly narrow gauge road located in the White Mountains of eastern Arizona. The line was built at the turn of the century to service the lumber, cattle and mining industries of the region. Naturally, motive power was required at the head end of all freight movements and the Alchesay usually supplemented their roster with used locomotives from the Colorado narrow gauge lines. Most of the Alchesay's motive power resembled that of the D&RGW with the exception of two K-32 class locomotives, number 472 and her sister, number 473.

By the 1920's, the Alchesay was in a desperate need for new motive power. The small 'C' class 2-8-0's that made up the majority of the roster were simply not enough for the increased tonnage the road was handling. Double or triple heading was required on most larger runs and the costs of supplying each locomotive and extra crew wages was becoming expensive. The only sensible alternative was to find more powerful locomotives. The Alchesay--always looking for a way to save a buck--thought it would make use of some of its unused locomotives by combining them into new, more powerful motive power. Somewhere along the line, someone suggested experimenting with articulated locomotive designs since they had proven to be quite successful on standard gauge railroads elsewhere. The executive board agreed and the okay was given for the construction of an experimental narrow gauge articulated.

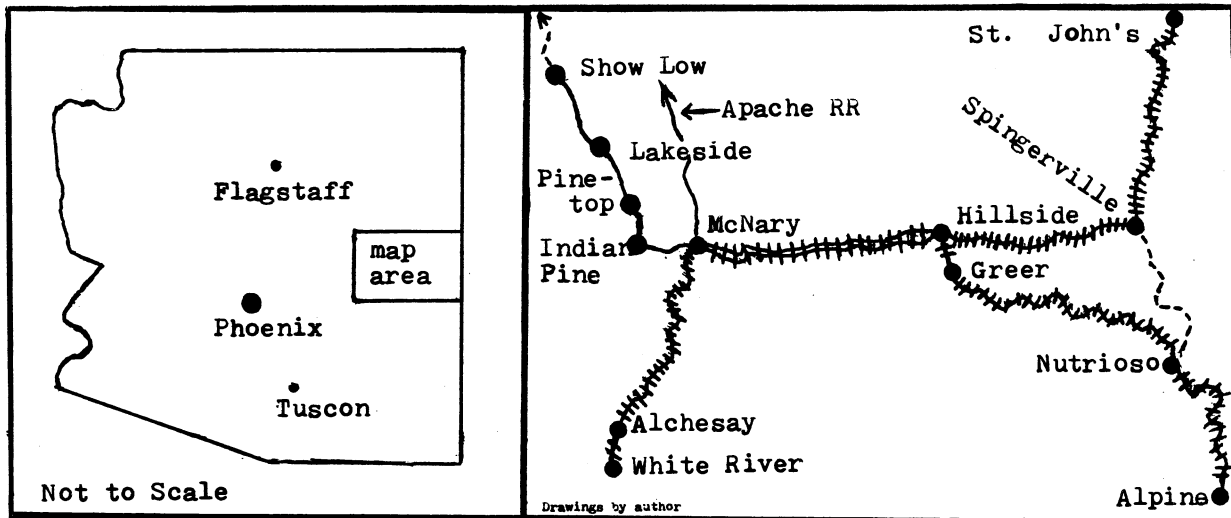
Work began quickly. A narrow gauge outside frame from a 2-8-0 was the starting point. The frame was cut in two, reinforced and equipped with new drive rods and cylinders from a Baldwin. The boiler and cab came from one of the road's standard gauge 0-6-0 saddle tank switchers. When the two were combined, the result was a compact saddle tank 2-4-4-0 which barely measured 37'-6" over the footboards--not much longer than a narrow gauge boxcar! This engine was numbered 472.

While her size may not have been much, her performance was incredible. With a tractive effort of 31,500 pounds, she could easily outpull the Rio Grande's K-27 2-8-2's and twice as much as the Alchesay's old C-16 2-8-0's. The executives were nothing short of impressed.

Following the outstanding success of engine 472, work began on engine 473. The 473 was built by using the entire chassis from consolidation 376 and the cab, boiler and tank from the standard gauge 0-6-0 #01, which was the first standard gauge locomotive purchased by the Alchesay. Engine 473 was completed in November of 1923 and was every bit as impressive as her sister. The main secret to the success of these locomotives was due to their saddle tank construction. Instead of having the traditional tender for holding water, these locomotives held their water in tanks slung over the boiler. This places more weight over the drivers and helped increase the unit's traction considerably. Due to their extreme power, these two engines were often used on parts of the line where grades were steep and trains long, most notably the stretch of track from Greer to Alpine (see map).

It is interesting to note that the 472 and 473 were the last new locomotives built for the Alchesay narrow gauge. This is probably due to economic reasons. The great Depression a few years later severely crippled the railroad and from World War II on, the Alchesay began to buy or lease locomotives from the Rio Grande almost exclusively.

While these two engines had their advantages, there were a few disadvantages as well. One problem was satisfying their voracious appetites for water. Due to the dual set of cylinders, water was consumed quickly. In some cases, this meant that extra water had to be carried. The 472 was notorious for derailments and a serious mishap near Alpine in the early 50's rendered her useless. Her



LEGEND
 ##### Narrow Gauge
 _____ Standard Gauge
 ##### Dual Gauge
 ----- Abandoned trackage

parts were used to keep the 473 in tip-top shape. 473 lasted a little longer being used on occasional runs until the end of operations in 1965. No records exist of 473's final disposition, but it is assumed that she was scrapped like her sister. However, it has been rumored by many that this engine may be stored on a ranch near Greer. Investigations of this rumor have so far been fruitless.

My model of 473 began as a Model Die Casting static locomotive kit. I bought the kit with hopes that it could somehow be powered. Little did I know what lay ahead for me. First step was to cut the 2-8-0 chassis in half. Zamac is a most enduring metal and it took awhile with the hacksaw before the division was complete. I then filed the wheel wells, modified and adjusted the drive rods and crossheads and assembled the drivers. The drivers were adjusted until I could roll each set down a smooth board without binding. This helped to ensure smooth operation. I wasn't pleased with the horrible pilot truck supplied, so I installed a Precision Scale Company K class pilot truck with a modified wheel in its place. This really improved the appearance.

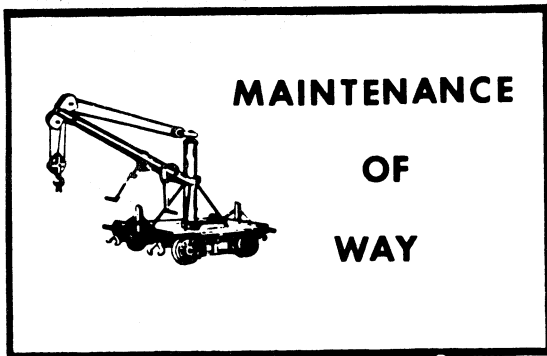
Next came the body shell. As it came, the shell was too long and a piece of the saddle tank had to be cut out and the body refitted together. I panicked here because I would have to measure and cut the shell by hand. My butcherlike accuracy wouldn't do. A slight error in the cutting and refitting could throw the model out of whack. Thus I proceeded with utmost caution and thankfully everything went together fine. I detailed the cab and boiler with brass castings from Kemtron, P.S.C. and Cal-Scale--all glued into place with ACC. The drive unit is one of Northwest Short Line's flea units modified to narrow gauge, fitted with 36" drivers and powered with track sliders. The drive unit is

mounted on the rear drivers and held in place by a complex set screws and brackets. Removal of this unit is very time consuming and I hope I never have the need to do so.

Unfortunately, the power that was evident in the prototype is sadly lacking in my model. Numerous adjustments and additions of weight have failed to improve tractive effort enough for hauling cars. This may mean that the locomotive will be forever static. Too bad as the unit's massive appearance and outside frame counterweights make for a very impressive model. It would be a shame to have to reduce this fine piece of machinery to a permanent residence on some siding. Hopefully a solution will be found and someday I'll be able to thrill to the majesty and power that made up the Alchesay's K-32 class articulateds.

CRUMMY NEWS (cont'd from page 3)

but with others you must use the "B" or "T" setting for a time exposure. The way to do this is to set the shutter speed dial to "B" (or "T") and then hold the shutter down (preferably with a cable release to prevent camera shake), time the exposure with a watch and then release the shutter button. It is best to bracket these exposures, so do one at 2 seconds, another at 3 and maybe one at 4 and then use the best results. The film is relatively inexpensive and you need only to have enlargements made of your favorite shots. I look forward to seeing some of your results!



M of W is a product review column written by our members on model railroading and railfanning items that may be of interest to you. All the opinions presented are those of the reviewer and are not necessarily those of the TAMR or the HOTBOX. Please submit reviews to the HOTBOX Editor.

Western Pacific's Diesel Years by Joseph Stradac. Overland Models, Inc., RR12, Box 445, Muncie, IN 47302. 208 pp, softcover \$18.95

If your interest in prototype railroads runs to the Western Pacific as mine does, this book should be considered a wealth of information. Strapac offers the evolution of Western Pacific's first and second generation diesel locomotives as well as those locomotives that pooled with the railroad.

Although this book is a few years old and operations have changed since the merger, it does do a nice job of covering the WP's territory. In addition, photographers of the caliber of Ted Benson, Joe McMillan, Bob Long and Harre Demoro make each black & white photograph tell a story. I heartily recommend this book to anyone modeling the WP or visiting the area.

--Roger Arnold

ReGear set for Athearn 4 axle diesels, HO scale, Ernst Mfg. Inc., P.O. Box 248, Brightwood, OR 97011. \$5.98

This is an excellent product that the hobby has needed for a long time. The nice feature about this regear set as opposed to others is that with it, you retain the flywheels. When the new gears are installed, the locomotive runs about half the original speed which closely mirrors the prototype's speed range.

Assembly involves removal of the stock trucks and disassembly of the stock gears. Don't throw any of the old gears away as the regear set uses one of the stock axle gears and a stock 23 tooth gear. The instructions and diagrams are clear and easy to follow. Before putting the trucks back on the frame, be sure to check the wheel gauge and make sure the gears line up correctly and the wheels turn freely. It shouldn't take much more than 10 minutes before you have the engine back on the track and rolling--at a much more prototypical speed!

--Chris Brindamour

HO scale EMD GP18, Associated Hobby Manufacturers (AHM), 401 E. Tioga St., Philadelphia, PA 19134. \$14.00

The EMD GP18 was first introduced in 1959. This 1800 horsepower model was designed to be a more powerful version of the GP7's and GP9's serving many railroads. Although small by today's standards, the GP18 did see service on many railroads performing a variety of freight, passenger and switching duties.

AHM's GP18 model comes in 18 different road names including the Union Pacific, Santa Fe, Soo Line, Rock Island and a special commemorative Bicentennial N&W model. My model was painted and lettered for the Western Pacific. The paint was applied in a nice even coat. Also, the plastic handrails are very fragile and on my model were broken in two places. This was easily corrected with a little glue.

The model comes with a blinking Mars light on the cab roof. On my model, this draws power from the motor as it runs causing jerky operation so I immediately disconnected it. The model still ran poorly, even more so at slow speeds. So I cleaned and lubricated the gears and added some additional weight to improve traction although this did little to help performance. I reasoned that the problem might be electrically oriented even though the unit picks up from eight wheels. So I fashioned two pickup shoes from aluminium foil and added one to each side of the unit. After hooking them up, the locomotive ran perfectly and pulls about twenty freight cars on a level track. A dummy version of this model is also available.

--Michael Barth

Alco S2/S4 conversion shell, HO scale, Cary Locomotive Works, 508 Cary-Algonquin Road, Cary, IL 60013 \$15.95

An excellent, detailed, all metal conversion body kit for the Athearn SW1500 or Baldwin switcher drive. The kit includes a one piece body which requires minor sanding along the seam and filing off the sprue that prevents the steps from bending. The kit has a separate stack, fan grill, air horn, cab back and footboard castings. It also has brass sand fill lids, cab roof and hand rails and stanchions. Some of these castings require a little filing. Overall, the two most difficult steps are gluing the cab roof and handrail construction. Both are easily handled if time and care are taken. The only modification that needs to be done to the Athearn chassis is to file down the four corners of the frame. This body adds quite a bit of weight to the engine which provides increased traction as well as better electrical pickup.

--Chris Brindamour

HOTBOX

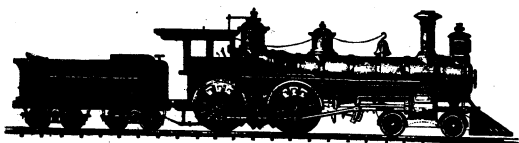
Photography

CONTEST

Preliminary survey results indicate that many of you would like to see more contests in the TAMR. Thus we thought it would be a good time to announce this year's photography contest. We are giving you plenty of warning as to the deadline, so we expect a large turnout this year. Without further ado, here are the rules:

RULES

- 1) The contest will be divided into two sections, model and prototype.
- 2) Only glossy black & white prints measuring at least 5x7 inches and no larger than 8x10 inches will be accepted.
- 3) A description of the subject plus a brief description of the photo techniques used must accompany each photo submitted.
- 4) Each participant is limited to a maximum of three (3) entries in any combination of model or prototype photos.
- 5) All participants must be TAMR members in good standing.
- 6) Awards will be presented to the first, second and third place winners in each section. If volume in a particular section does not justify three awards, less will be awarded. Winning entries will be published in the HOTBOX as space permits.
- 7) Judging will be performed by the HOTBOX staff and the decision of the judges is final.
- 8) HOTBOX staff members are prohibited from participating in this contest.
- 9) Photos will be returned provided sufficient postage and a sufficient size envelope accompanys them.
- 10) All entries are to be submitted to the HOTBOX Editor and must be received no later than September 30, 1983.



Here's your chance to get valuable back issues of the HOTBOX for your collection. We have printed a great deal of useful information over the past two years and you should take advantage of this offer. For instance, the first five issues of 1981 contained a review of scenery techniques for model railroads. Then our module series began in 1981 and ran through most of 1982. If you like to see what other teen modelers are doing in the hobby, 1981 contained some terrific layout articles. All back issues are available for 50¢ each and quantities on some issues is very limited (especially early 1981). Once these are gone, this offer will not be repeated. Don't miss this great opportunity. Order from the HOTBOX Editor and make checks or money orders payable to the TAMR. Please avoid sending cash. All sales of back issues go into a special fund to help pay for photos in the HOTBOX.

Jan-Feb 1981 - Saugus & Pacific mRR, Kuranda Rwy., Styrafoam Scenery, What's In a Name?, columns
March-April 1981 - Corpulse & Capillary mRR, Freight Platform, Island Transport mRR, Getting Plastered, columns.
May-June 1981 - CS&A mRR, Modern Rail Museum, Putting in Some Zip, columns.
July-August 1981 - Evolution of a Jct., Modular Concept-1, Shining Mtns. mRR, Water-Soluble Scenery, columns.
Sept.-Oct. 1981 - Alchesay & White Mtn. mRR, Plate Girder Bridge, Modular Concept-2, Conventional Scenery, columns.
Nov. - Dec. 1981 - Modified Trackplan, Improving Athearn Locos, Blue Grass Eastern mRR, Modular Concept-3, Camera Ready Decal Art, columns.
Jan. 1982 - Modular Concept-4, Photo Contest winners, Midway Northern mRR, Crossing Flasher, columns.
Feb. 1982 - Modular Concept-5, DW&P--International Connection, Peg modeling notes, Peg loco & car roster, columns.
March 1982 - Pass Exchanging, Modular Concept-6, Layout Design, Model RRing by Mail, columns.
April 1982 - Pass Contest winners, Gilpin & the Spices, Modular Concept-7, Tankcar Loader, B&O mRR, columns.
May 1982 - Dioramas, TEEN TRAK, columns.
June 1982 - TEEN TRAK, Great Plains mRR, Stockyard, Motive Power on a Budget, columns.
July 1982 - TEEN TRAK, C&NW - IA Div. mRR, Scale Weather, columns.
August 1982 - RRing Italian Style, TEEN TRAK, Maintenance Cards, columns.
Sept. 1982 - Kitbash a Boxcab, TEEN TRAK, Movies, columns.
Oct. 1982 - Northwoods '400' mRR, TEEN TRAK, columns.
Nov. 1982 - Eastern RRing in 8x12, TEEN TRAK, Lichen, columns.
Dec. 1982 - Working with Brass, columns.

**ON THE
POINT:**

(Top) A&WM #473 stopping for water with a caboose hop. The caboose is from E&B Valley and is lettered with the improved version of the Alchesay flying herald
(Bottom) A&WM #473 rounding a curve heading for a pine knoll with a tank train. Both tank cars shown are scratchbuilt with the second still needing final detailing.

Photos by Mark Miter

Turn to page 4 to learn how and why A&WM #473 was built in the saga of the Alchesay's articulateds.

MARKERS:

ARRIVING NEXT ISSUE:

Another page from the journal of the Layout Planning Service. Jim Kobrinetz explains how another model pike was designed. Then our "Techniques You Should Know" series continues and this time we are going to tackle layout wiring. The first installment will feature dual cab control wiring. All this, plus our usual columns will be rolling your way in the "firecracker special" consist of the "Un-Magazine of Model Railroading."

Note: The number that appears after your name on your address label is the last issue you are entitled to receive under your current membership. A renewal notice will be included with that issue of your HOTBOX. Please renew promptly to avoid missing any issues.

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PLACE
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