

*The*  
**GOLDEN  
SPIKE**



VOLUME XIII

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NUMBER 11

TIMETABLE

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WORK DAY

Saturday, November 22, 1986 at the track

MONTHLY MEETING

Friday, November 21, at 7:30 P.M. at the Cordova Recreation and Park District Building, Rancho Cordova, California (Chase Drive next to the High School). The "Buffet Car" will be hosted by Terry Willes and Nadene Willes. The program for the evening will be presented by Milon Thorley. It will be a film on the "U.P. Challenger #3985", pulling a railfan tour train.

RUN DAY

Sunday, November 23, snack bar will be closed.

"NOTE"

Marilyn Drews, our wonderful "Snack Bar" hostess has informed me that the "Snack Bar" will be closed for the remainder of the year, and she will not open again until the March 1987 run day. So if you come out and run be sure to bring your own box lunch & drinks.

COMING EVENTS

Don't forget our annual "New Years Day" run on Jan. 1, 1987, which by the way will be on a Thursday. Most of the time we have fairly decent weather. So come on out and start the new year with a "Hot Boiler" and some good running.

EDITORS DESK

As you may have read in last months "Spike", I have volunteered to take over the "Golden Spike" for the present time. This is a new thing for me, so you will have to forgive me if I "Goof Up" at times or forget things. It will take a little time to get used to it. I want to thank the previous editors, Joan Merkh and Randy Merkh, plus Roger & Matthew, for a job well done. They deserve a big vote of thanks from all the club members.

"DUES"

1987 dues are coming up. Dues invoice is attached to this letter. Remember that if you pay prior to January 1 you get a break on regular dues.

MEMBER - \$30.00  
PRIOR TO JAN. 1 - \$28.00  
ASSOCIATE - \$15.00

The November general meeting will be "Election Night" for new club officers, as per "By-Law Change", passed earlier this year. From the nominating committee, of Milon Thorley and Don Juergenson, we have the following club members who have volunteered to be club officers for 1987.

Pres.	Warren Sharrett
Vice Pres.	Dick Quiring
Treas.	Stan Hindsley
Secty.	Lori Esselbach
Supt.	Amandes Drews
Train Master	Bob Lovell

Remember that nominations can still be made from the floor at the November meeting. Also, only full dues paying members can vote. Associate members do not have voting rights.

NOTES OCT. GEN. MEETING

At the Oct. general meeting and for our "Fall Meet", we had a nice visitor down from Oregon, Mr. Ed St. John. He gave us a briefing on his own railroad and expansion plans, he and his partners have, for further expansion. He is going to add 2000 feet to the main line plus open up a new trestle 390 feet long. There are 75' min. radius on the railroad so he can accommodate almost any engines.

The door committee, for the new box car, Ed Yungling and Earl McKenzie tell us that they have purchased some steel for the doors and are working up a design for installing them. When this project is completed, we will be able to transfer some car storage and other things to the box car. Remember it all takes time and effort to get it done. Please contact Ed if you would like to help out.

Had some show and tell for the meeting also. Don Juergenson had a shop made Rotary Vice Table, that he made. It turned out real nice. John Bailie had a "Hit & Miss" gas engine made from a "Stuart" engine kit. Did a nice job John. Ed Yungling had one axel set of drivers for a "GS4" engine that he is building. Ed really does nice work. Henry Stefani showed us a beautiful "Steam Water Pump" that he made from "Modeltec Magazine" drawings. He also is starting a new project a 1½ scale Shay and brought along one of the trucks. Jim Durham made new "Name Signs" for locations on our RR. He had them up for the "Fall Meet" and they sure looked good. Jim and John Bailie are also making up patterns & castings for "Diaphragms", for "SVLS" car brake systems. Warren Sharrett showed us a miniture church building with steeple he is constructing. Just all kinds of things going on. Bill Fischer gave us a run down on the latest for Kay & Bills Book, "Baggage Car with Lace Curtains". Hard Cover copy now and also to be printed in Braille, and made into "Talking Tapes" by the state. Good wishes to Bill & Kay.

PAGE THREE

(Continue from Gen. Meeting)

Mary Shelley gave us a short talk on her duties and job as a "Tour Guide" for "Amtraks" Sacramento to Reno run. She says they have to read from prepared scripts, but that they do have some input to what goes into them. If anyone going to Reno wants a guided tour, besides the railroad tracks, call Mary and she can tell you the next time it's her turn at the "Mike".

FALL MEET

Once again we had a very nice and successful "Fall Meet". The weather held up for us again and so both days were beautiful for running. The new addition of our box car and caboose really set to mood for railroading.

We had a great turn out of members who operated their equipment for their own pleasure and also operated for the benefit of the public who come out to see all of our fine engines. They were Warren Sharrett, Dick Finn, Paul Quiring, Craig Craddock, Glen Strawn, Don Yungling, Daryl Mc Quirk, Ken Willes, Terry Willes, Warren Wagner, Scott Durham, Bill Roscoe, Joe & Al Df Freitas, Frank Fine, Ed Spall, Dennis Gramith, Don Broadhead, Alan Shiffley, Erich Quiring, Bob Bonsor, and Howard Shrader, who always puts on a great show with his stationary steam engines and misc. equipment. We also had Ed Reiter, a welcome visitor, from the San Luis Southern, and a member of L.A.L.S. If I missed someone I apologize.

Erich Quiring had a christening for his new diesel engine that he just completed. He obtained the prints from R.R. Supply Corp. and then built it from the track up with few commercial parts. For a first time project and effort he did a splendid job.

I would like to thank all of the members of "SVLS" who gave of their time to help make this a fine meet. All of you who helped in the yard area, the passenger area, on the switches, and the main line, and the "Snack Bar". You are the ones who made it a great meet.

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The club owes a big thanks to the following members for there help on lasts months work day prior to the "Fall Meet". Due to there effort the track & grounds were in tip top shape. Howard Shrader, Warren Wagner, Marilyn & Amandus Drews, Dennis & Judy Gramiths, Earl McKensie, Henry Stefani, Ken Willes, Jim Durham, Scot Durham, Dick Quiring, Mike O'Connor, Warren & Robie Sharret.

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Matt Fairlie, an associate member of "SVLS" passed away June 27, 1986. He was a member of several "Live Steam Clubs" and contributed greatly to ~~the~~ hobby over the years. The membership of "SVLS" wish to convey their belated condolences to Madeline Fairlie and family.

I would like to thank all that participated in the exhibition of the "SVLS" at Railfair in Roseville, November 86.

Those displaying were Rose and Henry Stefani with their Hiesler and Raritan. Ken Willes with one of the old work horses of the "SVLS" #99. Terry Willes' juice jack was there also. A new one on display was Amandus Drewes' Mogul. Another old favorite was the Chloe, up on blocks, chugging away and whistle blowing, bell ringing all on compressed air, owned by John Bailie. John also furnished the air compressor. Ed Yungling was proud to put on display his partiality finished GS4. Scott Durham's brought parts and pieces of his foundry work and equipment. Last, but not least was Warren Wagner's track speeder and its a good thing it was there, because if it wasn't he wouldn't have had a place to tie off the large helium ballon he brought.

Thanks again, Al Shelley

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"Visiting Member From Fresno Gets "Chili" Reception at Fall Meet"

Glen Strawn stood innocently watching Marilyn Drewes as she set up the Snack Bar on Saturday morning of the Fall Meet. Marilyn was busily trying to thaw out a football sized chunk of frozen home made chili. As she turned it over in the roaster, the spoon slipped off the end of the chunk and propelled a fist sized portion in westerly direction. Marilyn said later, "I didn't even have to look, I heard the beans hitting Glen's nylone jacket like machine gun bullets." It would have taken two cameras to decide whether Marilyn or Glen was the most surprised. The group of people in the immediate area could not have even pointed one camera as the shole performance was so well timed that all anyone could do was laugh until it hurt. Now Marilyn will not only be known for her delicious Hot Dogs, but also as the hands down best "shot" in any chili competion.

"FOR SALE"  
\$1050.00

"Little Gasser" Engine. Needs assembly. Includes tools, 2 engines, pair riding car trucks, pair brass couplers. Some machine work required. Contact John Livesay, 916-991-4063 in Sacramento or write him at P.O. Box 722, V.H.S. Yountville, CA 94599.

S.V.L.S. Received a letter from Dwight Durkee, Sec. Western Region "IBLS". Its about a new book out called "The Machinist's Bedside Reader". By Guy Lautard. Guy has written many articles that have appeared in "Live Steam", and possibly "Modeltec Magazine". There is an add for this book in the Oct. 86 Modeltec, it is \$16.95 postpaid in U.S. Order from Guy Lautard, 2570 Rosebery Ave. West Vancouver, British Columbia, Canada V7V 2Z9.

"SVLS" has recieved a donation of 2 boxes of "Amtrak Super Liner Buttons" from Amtrak. This donation is from Dave Adams, a local ticket taker from the Sacramento Amtrak station. Thank you Dave.

## THOUGHTS ON THREADING

I am convinced that 90% of the time building a locomotive is spent drilling and tapping... or at least it seems that way. The care and precision so painstakingly lavished on a myriad of parts pales to insignificance with the threading operations. The problem? Devilish small taps just waiting until you are almost to depth and then gleefully dintegrating flush with the surface of the part.

Rather than discuss the fuse lengths and type of Hercules powder needed for removing the little beggars, I would prefer to examine some preventive strategy:

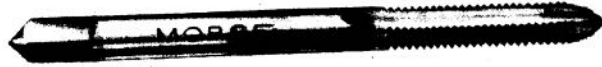
Tap Selection - There are a number of different tap styles that are available and some seem to work better than others.



- a. Straight flute - the one most common in kits, hardware stores and catalogs. Also the one that seems to break the easiest due to chip clogging and binding. Be sure to "back off" regularly so chips break and fall out.

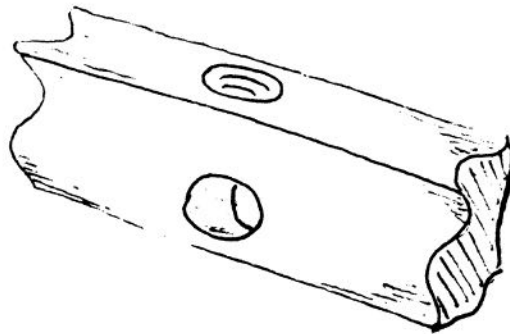


- b. Spiral flute - a specialty tap that is designed to lift chips out of deep holes the same way as a drill does. Excellent results with soft metals like aluminum, in part because of the shearing cutting action caused by the flute spiral.



- c. Spiral pointed - also called a "gun tap". The special grind on the end of the tap not only provides a shearing cut, it also turns the chips so they are driven out ahead of the tap. This means no chips to clog the flutes. It also means its not well suited for blind holes. Never-the-less, this is the only tap as far as I'm concerned. It starts easier, cuts cleaner, seems to stay sharp longer, and greatly reduces binding that causes breakage.

NOTE: If you can, drill a cross hole at the bottom of a blind hole so chips can clear... makes tapping easier.



Tap Drill Size - the size of hole to drill threading, it is normally calculated for 75% thread depth. In other words, the hole is oversize so the top 25% of an internal thread

is removed. There are tap drill charts available from many sources, usually free. A simple formula for calculating fractional sizes is:

$$\text{major diameter} - 1/\text{TPI} = \text{tap drill size}$$

for example: tap drill size for a 3/8 x 16 thread

$$3/8 - 1/16 = 5/16$$

Why 75% thread? The torque required is less by 66% while strength loss is only 5%.

If a 75% thread reduces torque and the potential breakage problem, then a 50% thread should reduce it even more.

The following chart provides drill size and percent thread for the common machine screw sizes used in model making:

<u>TAP SIZE</u>	<u>DRILL</u>	<u>PERCENT THREAD</u>
2 - 56	No. 51	82
	No. 50	69
	No. 49	56
3 - 48	5/64	77
	No. 46	67
4 - 40	No. 44	80
	No. 43	71
	3/32	56
5 - 40	No. 39	79
	No. 37	65
6 - 32	No. 36	78
	No. 33	62

NOTE: My own preference is to work in the 60% range.

LUBRICATION - An absolute must! Reduced friction, cleaner threads, and chip flushing all contribute to less tap breakage.

Steel - A sulfurated cutting oil. Pipe thread cutting oil is readily available.

Brass - Sulfurized cutting oil; it can be thinned 25% with Kerosene.

Aluminum - Kerosene, solvent.

Cast Iron - Always dry, the graphite in cast iron is lubricant enough and any added oil simply gums up the chips.

There it is folks! The last of the three. Its up to the rest of you to contribute now. You should be able to look forward to some exciting articles and projects by Dennis Gramith on a clever quartering jig; Ed Yungling on turning wheels and flanges; Al Shelly on a super slick method of machining steam passages in cylinders.