NEXT CLUB MEETING: MAY 21st

Club meetings are held at 7:30pm on the third Monday of the month, except for legal Monday holidays, at the Pyle Adult Community Center, at the southwest corner of Rural & Southern in Tempe. Contests are held on the second Sunday of every month at Rodeo Park at the southeast corner of Ray & Val Vista Roads in Gilbert.

WingTips is CASL’s monthly newsletter and as such always encourages members to submit articles for publication. All material must be given to the editor no later than the monthly contest. The editor also encourages other clubs to use any material from this newsletter, provided proper credit is given.

CHANNELS #16 & #17 have experienced problems at Rodeo Park. Use at your own risk.

Editor:
Chuck Wehofer  480-777-9733
chuck@wehofer.com

A.M.A. CHARTER #2133
FOUNDED IN 1985

CASL OFFICERS 2000-2001

HANK CAPLE  480-963-7028
ADAM JOHNSON  480-539-0336
VERN POEHLIS*  480-945-1957
ERICH VAN SANFORD*  480-857-1026
CHUCK WEHOFER*  480-777-9733
STEVE WILLCOX  602-249-6795

INTERNET ADDRESS:
www.casl.net

LSF
P.O. BOX 3028
Muncie, IN  47302-1028

APR ‘01 EDITION
Well it looks like the hot weather is upon us. We had our first 100 degree day this past week so I guess the cool days will not be back until October. Remember to make sure you have plenty of water, sunglasses, a hat and sunscreen (if needed) when you fly. If you are not careful you can get dehydrated very quickly out in the sun.

Speaking of sun, the club just purchased two shade canopies for the field. They are the semi-permanent types. You can take them down whenever you want but they are not the type that fold up and you haul them out when ever you want. We will leave them out on the field 24/7. These canopies are 10’ by 20’ and 10’ tall. So the two together will provide plenty of shade. Of course you are always welcome to bring your portables out to the field. The only question will be when do we put them up. I guess the best time will be at our last contest of the spring season. While we are flying, as Iain CDs the contest, we can put the two canopies together and get them into the correct spot. So you all come out for the last Spring contest and give a hand for some very cool shade. And then you can fly while you are relaxing under the shade.

During our May contest we will be approving the 2001/2002 Budget and electing a new BOD members that need to replace the outgoing officers. The members that are in need of replacement are the ones with stars next to their names on the front of the newsletter. If you have a desire to run for political office now you can have your chance. As a BOD you can wheel an unimaginable amount of power and control. If you are lucky paid, lobbyists will shower you with expensive gifts and money. You have the ability to control the destiny of the country. Well maybe not all of these things will happen but if you become a Board member you will have lots of fun and very, very low pay. So let me know if you want to run. Your term of office is for two years. And just think; if you win you will have the respect and admiration of all your fellow CASL members, plus all those special perks.

I keep forgetting to get this into the newsletter. So here it goes. At the 2001 SWC some of the winners got very nice mugs as plaques/trophies. The company that supplies all of our trophies will sell those to us at cost if we want to order a couple of cases. These mugs will have the Club logo sandblasted on them as a decorative item. They are the large 20oz size and they are $20 dollars apiece. If I can get a firm 20 confirmed orders I will get 48 of the mugs sent to us. Then as more members want them all they have to do is let me know and I will get them to them. So if you want a mug please let me know by sending me a note via the List serve. I would like to wrap this up fairly quickly if we are going to order them. So let me know no later than our May monthly meeting. Just let me know if you want a mug. If we get the 20 people to order them then I will ask those of you that want them to sent a check to the Club box and away we will go. Remember, just let me know that you want one and we will go from there. But don’t put it off to long.

Another reminder, our May contest is held on the Saturday before “Mother’s Day”, for obvious reasons. The date is Saturday May 12th and it starts at 8:00 am. Iain Glithero will be the CD for this event. The task is a 23-minute Add-Em-Up. This will be the last contest for the spring season. Our next contest will not be until September. So come out and have a last fling before it gets as hot as Hades.

Well that is about it for another month. Remember to stay cool and have some fun. Until next month, keep an eye out for that rising air.
CASL Monthly Contest  
April 2001  
Vern Poehls C.D.

We really weren’t sure how the weather was going to turn out today, but it proved to be a great day for flying. It started out fairly cool with a breeze out of the southwest. This held true for the contest. Jackets were taken off and put on as the sun hide behind clouds from time to time.

The task for the day was Vern’s infamous 3, 5, 7.5 minute duration. All times were normalized to 900 points and the landing was worth 100 points. The landing zone was a “bowtie” affair with a 100 point spot at the middle, 75 points for the narrow section of the bowtie, 50 points for the wide section, and 25 points anywhere in the grass. It was easy to score, and was just different. It was an open launch window and the pilots declared which one of the three flights it was at the completion of the flight.

We really didn’t expect much lift to begin with, but Jim Stidham completed a 7.5 minute flight from the very first launch of the contest. There were many max flights with inevitable sink thrown in. Pilots were seen skied out at times, and scratching for lift at telephone pole height. It was fun. The final Scores are below. I’ll attach a spreadsheet with the scores round by round if your are curious.

We finished flying by about 11:00. I got to eat lunch with my wife and kids. Thanks to all the pilots who worked to make this go. Phillip Brister for helping with setup and teardown. And thanks to Skip Richards for running such a good stop watch.

<table>
<thead>
<tr>
<th>Open Class</th>
<th>1. STIDHAM, J</th>
<th>2971</th>
<th>7. ROSEBERRY, M</th>
<th>2740</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. POEHLS, V</td>
<td>2962</td>
<td>8. VAN SANFORD, E</td>
<td>2700</td>
</tr>
<tr>
<td></td>
<td>3. TROUT, C</td>
<td>2893</td>
<td>9. BRISTER, P</td>
<td>2614</td>
</tr>
<tr>
<td></td>
<td>4. HITZEL, J</td>
<td>2877</td>
<td>10. HOFFER, G</td>
<td>2200</td>
</tr>
<tr>
<td></td>
<td>5. LAIRD, J</td>
<td>2847</td>
<td>11. RICHARDS, S</td>
<td>2143</td>
</tr>
<tr>
<td></td>
<td>6. RUSSELL, M</td>
<td>2846</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 2Meter Class     | 1. POEHLS, V  | 2915 | 5. TROUT, C     | 2413 |
|                  | 2. STIDHAM, J | 2915 | 6. ROSEBERRY, B | 2322 |
|                  | 3. HITZEL     | 2827 | 7. BRISTER, P   | 2281 |
|                  | 4. VAN SANFORD, E | 2713 | 8. HOFFER, G    | 2065 |

CASL Membership Annual Renewal Time

It is that time of year again my fellow CASL members to renew your membership to this great organization. I am including the 2001/2002 CASL Membership form in this month’s newsletter. Please fill it out completely. Even if you are a Life member I am in need of your info. As you can see from the web site I make a real effort to keep our Freq. chart up-to-date and the only way I can do that is off the forms. For the guys that have just recently joined I will be sending you a note to let you know how much you have to send in.

Let’s not drag it out in sending in your renewal form & dues. You all know how crabby I get when I have to complain and harangue you all to send the stuff in. The cut-off date is June 1st.

Please make sure you fill out the form completely, I still need a couple of your AMA numbers. Also, if you have a new email address please make I get it.

Just for your information. If you are wondering about the cost of membership and its value, we have yet to raise our dues. We started this club in 1985 at $20 per year and 15 years later we are still charging the same price. Not bad if you consider what inflation has been over these past fifteen years!
### OPEN CLASS

<table>
<thead>
<tr>
<th>NAME</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
<th>NOV</th>
<th>TOTAL</th>
<th>CLS</th>
<th>PLC</th>
</tr>
</thead>
<tbody>
<tr>
<td>STIDHAM, J</td>
<td>994</td>
<td>948</td>
<td>1000</td>
<td>1000</td>
<td>958</td>
<td>968</td>
<td>974</td>
<td>880</td>
<td>997</td>
<td></td>
<td></td>
<td>3942</td>
<td>E</td>
<td>1</td>
</tr>
<tr>
<td>RUSSELL, M</td>
<td>908</td>
<td>926</td>
<td>901</td>
<td>968</td>
<td></td>
<td>958</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3693</td>
<td>S</td>
<td>2</td>
</tr>
<tr>
<td>HITZEL, J</td>
<td>926</td>
<td>895</td>
<td>891</td>
<td>968</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3680</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>LAI RD, J</td>
<td>966</td>
<td>993</td>
<td>762</td>
<td>958</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3679</td>
<td>S</td>
<td>4</td>
</tr>
<tr>
<td>TROUT, C</td>
<td>226</td>
<td>944</td>
<td>928</td>
<td>974</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3072</td>
<td>E</td>
<td>5</td>
</tr>
<tr>
<td>BRISTER, P</td>
<td>339</td>
<td>898</td>
<td>758</td>
<td>880</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2875</td>
<td>S</td>
<td>6</td>
</tr>
<tr>
<td>VAN SANFORD, E</td>
<td>0</td>
<td>898</td>
<td>449</td>
<td>909</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2255</td>
<td>S</td>
<td>7</td>
</tr>
<tr>
<td>RICHARDS, S</td>
<td>691</td>
<td>759</td>
<td>0</td>
<td>721</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2171</td>
<td>S</td>
<td>8</td>
</tr>
<tr>
<td>POEHL'S, V</td>
<td>960</td>
<td>0</td>
<td>0</td>
<td>997</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1957</td>
<td>E</td>
<td>9</td>
</tr>
<tr>
<td>BOUTHILL, R</td>
<td>0</td>
<td>1000</td>
<td>890</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1890</td>
<td>E</td>
<td>10</td>
</tr>
<tr>
<td>HOFFER, G</td>
<td>384</td>
<td>621</td>
<td>0</td>
<td>741</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1746</td>
<td>E</td>
<td>11</td>
</tr>
<tr>
<td>ROBERTS, B</td>
<td>355</td>
<td>699</td>
<td>420</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1474</td>
<td>S</td>
<td>12</td>
</tr>
<tr>
<td>ROBERTSON, J</td>
<td>1000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1000</td>
<td>E</td>
<td>13</td>
</tr>
<tr>
<td>BARRIE, D</td>
<td>988</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>988</td>
<td>E</td>
<td>14</td>
</tr>
<tr>
<td>CYR, J</td>
<td>0</td>
<td>944</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>944</td>
<td>S</td>
<td>15</td>
</tr>
<tr>
<td>PLUMMER, S</td>
<td>936</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>936</td>
<td>E</td>
<td>16</td>
</tr>
<tr>
<td>CLARK, D</td>
<td>892</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>892</td>
<td>S</td>
<td>17</td>
</tr>
<tr>
<td>WILLCOX, S</td>
<td>886</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>886</td>
<td>E</td>
<td>18</td>
</tr>
<tr>
<td>ROSEBERRY, B</td>
<td>883</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>883</td>
<td>E</td>
<td>19</td>
</tr>
<tr>
<td>HANSON, G</td>
<td>858</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>858</td>
<td>S</td>
<td>20</td>
</tr>
<tr>
<td>WENZLICK, D</td>
<td>687</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>687</td>
<td>E</td>
<td>21</td>
</tr>
<tr>
<td>MOR, M</td>
<td>395</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>395</td>
<td>S</td>
<td>22</td>
</tr>
<tr>
<td>LANGENWALTER, M</td>
<td>0</td>
<td>0</td>
<td>369</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>369</td>
<td>E</td>
<td>23</td>
</tr>
</tbody>
</table>

### 2-METER CLASS

<table>
<thead>
<tr>
<th>NAME</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
<th>NOV</th>
<th>TOTAL</th>
<th>CLS</th>
<th>PLC</th>
</tr>
</thead>
<tbody>
<tr>
<td>STIDHAM, J</td>
<td>920</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>936</td>
<td>970</td>
<td>928</td>
<td>879</td>
<td>0</td>
<td>0</td>
<td>974</td>
<td>3920</td>
<td>E</td>
<td>1</td>
</tr>
<tr>
<td>HITZEL, J</td>
<td>632</td>
<td>932</td>
<td>829</td>
<td>790</td>
<td>828</td>
<td>879</td>
<td>799</td>
<td>828</td>
<td>0</td>
<td>0</td>
<td>829</td>
<td>3363</td>
<td>S</td>
<td>2</td>
</tr>
<tr>
<td>VAN SANFORD, E</td>
<td>0</td>
<td>925</td>
<td>956</td>
<td>931</td>
<td>828</td>
<td>879</td>
<td>799</td>
<td>828</td>
<td>0</td>
<td>0</td>
<td>828</td>
<td>2812</td>
<td>S</td>
<td>3</td>
</tr>
<tr>
<td>TROUT, C</td>
<td>206</td>
<td>949</td>
<td>799</td>
<td>828</td>
<td>828</td>
<td>879</td>
<td>799</td>
<td>828</td>
<td>0</td>
<td>0</td>
<td>828</td>
<td>2781</td>
<td>E</td>
<td>4</td>
</tr>
<tr>
<td>ROSEBERRY, B</td>
<td>470</td>
<td>898</td>
<td>0</td>
<td>797</td>
<td>797</td>
<td>879</td>
<td>799</td>
<td>828</td>
<td>0</td>
<td>0</td>
<td>828</td>
<td>2164</td>
<td>E</td>
<td>5</td>
</tr>
<tr>
<td>BOUTHILL, R</td>
<td>0</td>
<td>925</td>
<td>726</td>
<td>0</td>
<td>726</td>
<td>828</td>
<td>799</td>
<td>828</td>
<td>0</td>
<td>0</td>
<td>828</td>
<td>1651</td>
<td>E</td>
<td>6</td>
</tr>
<tr>
<td>POEHL'S, V</td>
<td>521</td>
<td>0</td>
<td>0</td>
<td>1000</td>
<td>1000</td>
<td>829</td>
<td>799</td>
<td>828</td>
<td>0</td>
<td>0</td>
<td>828</td>
<td>1521</td>
<td>E</td>
<td>7</td>
</tr>
<tr>
<td>HOFFER, G</td>
<td>0</td>
<td>567</td>
<td>0</td>
<td>708</td>
<td>708</td>
<td>828</td>
<td>799</td>
<td>828</td>
<td>0</td>
<td>0</td>
<td>828</td>
<td>1275</td>
<td>E</td>
<td>8</td>
</tr>
<tr>
<td>ROBERTSON, J</td>
<td>1000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1000</td>
<td>1000</td>
<td>E</td>
<td>9</td>
</tr>
<tr>
<td>CYR, J</td>
<td>0</td>
<td>940</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>940</td>
<td>940</td>
<td>S</td>
<td>10</td>
</tr>
<tr>
<td>BRISTER, P</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>783</td>
<td>783</td>
<td>828</td>
<td>799</td>
<td>828</td>
<td>0</td>
<td>0</td>
<td>828</td>
<td>783</td>
<td>S</td>
<td>11</td>
</tr>
<tr>
<td>BARRIE, D</td>
<td>771</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>771</td>
<td>771</td>
<td>E</td>
<td>12</td>
</tr>
<tr>
<td>SPEPAK, D</td>
<td>629</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>629</td>
<td>629</td>
<td>S</td>
<td>13</td>
</tr>
<tr>
<td>LANGENWALTER, M</td>
<td>0</td>
<td>0</td>
<td>520</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>520</td>
<td>520</td>
<td>E</td>
<td>14</td>
</tr>
</tbody>
</table>

******************************************

Just another reminder on the Dues. They can only be mailed in or sent via PayPal. Do not ask the C.D. to take the money or the Membership Form. Just send in the stuff to the club P.O. Box.
Central Arizona Soaring League

Membership Form for 2001 / 2002

Please fill out the following form, even if you are a Life Member, any changes in your status need to be updated. Frequency usage should be filled out in the order that they are used. Comments can have anything to do with the running of the club, from contests to meetings to the way the club spends its money. If you have any special requests for tech topics, types of contests please include those. **Dues must be post-marked no later than June 30, 2001 to keep your records current.** This will be the only Dues notification that you will receive. **Dues are $20 per year for all current AMA members.** Family memberships are $30 per year and for members, 16 years or less, dues are $10 per year. Life memberships are $250, which can be paid over a five-year period. If you have paid the full amount after November 30th your dues are at half the normal rate.

Name: _____________________________________________________      AMA#:_____________   LSF #:__________

Address: ___________________________________________________________________________________________

City: _____________________________________      ST: ______   ZIP:____________  H Phone:___________________

W Phone: _______________________________    E-Mail:___________________________________________________

Frequency: ________________________________________________________________________________________

Comments: ________________________________________________________________________________________

_________________________________________________________________________________________________

_________________________________________________________________________________________________

_________________________________________________________________________________________________

_________________________________________________________________________________________________

_________________________________________________________________________________________________

_________________________________________________________________________________________________

_________________________________________________________________________________________________

_________________________________________________________________________________________________

SEND TO: CASL    P.O. BOX 2472  CHANDLER, AZ.   85244-2472

Please fill out this form when you send in your dues, do not just send in your dues. I need to have a copy for my files as I refer to it during the year for periodic reference. Just a reminder the club year is from June 1st – May 31st. Your Dues may now be paid at [www.Paypal.com](http://www.Paypal.com) just go to the link and use my email address as the reference point: chuck@wehofer.com
CENTRAL ARIZONA SOARING LEAGUE
MONTHLY CONTESTS

APR 08, 2001
RODEO PARK
RAY & VAL VISTA RD's in GILBERT
SUNDAY
PRECISION/DURATION
OPEN & 2 METER
TASK: 3 RNDs 8 Min Max
LANDING: Runway
START TIME 9:00 a.m.
ENTRY FEE: $3 FOR ONE $5 FOR BOTH
AMA '01 RULES APPLY
AMA CARD REQUIRED
LAUNCH DEVICES: 12V WINCHES
WITH "BIG WHEEL" RETRIEVERS
AWARDS 1st - 3rd
C.D.: Vern Poehls
PHONE: 480-945-1957

MAY 12, 2001
RODEO PARK
RAY & VAL VISTA RD's in GILBERT
SATURDAY
ADD-EM-UP
OPEN & 2 METER
TASK: 4 RNDs 23 Min 7 Min Max
LANDING: Tape
START TIME 8:00 a.m.
ENTRY FEE: $3 FOR ONE $5 FOR BOTH
AMA '01 RULES APPLY
AMA CARD REQUIRED
LAUNCH DEVICES: 12V WINCHES
WITH "BIG WHEEL" RETRIEVERS
AWARDS 1st - 3rd
C.D.: Iain Glithero
PHONE: 480-831-1905
Cutting Foam Wings
By Mike Glass – a Novice
Part 3 of 3

If you want to cut a lot of foam then it’s probably worth your time to build an automatic foam cutter. “Automatic” may be a bit of an overstatement. This is a simple device to pull both end of the cutting wire at the same rate (straight cut) or each end at a different rate (angled cut).

Rather than give you exact dimensions and supplies needed, I’ll describe how it works and leave the details up to you. Everyone does this a little bit differently but it’s all based on the same principle. I’ll describe the simplest version I can then describe some variations on the theme.

Materials
¾” plywood, 4 feet long by 2 ½ feet wide
(2) 4 foot long 1”x2” pine boards
4 screen door rollers
4 nuts and bolts to attach the rollers
Some heavy string (Mason’s line)
2 spring clamps

Construction
Attach a 1”x2” board under the front edge of your big piece of plywood (cutting board). Along the front edge of the cutting board, drill a series of holes down through the cutting board sized to fit the bolts and rollers. The holes should be about an inch apart and far enough from the front edge so that the rollers will just hang over the edge of the table. On the 1”x2” board under the front edge, drill a similar set of holes, offsetting them by a half inch. Screw one end of the other 1”x2” board to the front face of your board at the far left side. This will be your pulling arm. Make a wire hanger of some sort to hold the other end of the pulling arm. You may need a weight at the right end of the pulling arm depending on the weight of the bar. That’s really all there is to it. The materials listed are just to give you a rough idea. Use what you’ve got around. My pulling arm is a piece of aluminum bar stock I had from a previous project.

How do I use this thing?
Take a look at figure 2. This is the basic set up for cutting a straight piece of foam. It’s exaggerated for clarity (I hope) and just the cutting wire is shown. In practice, the cutting wire would be in the bow.

Setup the foam with the template as you normally would. Set the cutting wire on the leading edge ramp of the templates with the wire parallel to the foam. Put the right end of the pulling bar in its hanger. Place the horizontal rollers one on each side of the foam and close to the edge of the foam. The vertical rollers are placed near the middle of the foam. A string is attached to the cutting wire, run down to the horizontal roller, over to the vertical roller, then down to the pulling bar. The same thing is done on the other side of foam piece. Attach them to the pulling arm at the same location on the pulling bar with a spring clamp. The strings must have equal tension and the wire must be parallel to the foam.

Turn the power on, let it warm up and release the pulling bar. The wire should be smoothly pulled through the foam. As the wire comes through the trailing edge you’ll need to catch it. On mine I added a dowel to catch the wire.

This really works quite well. A couple of things to watch out for: First, before you let go of the arm, check to make sure the strings are in the rollers. They tend to jump out at the last minute, jam under a roller and stop the wire, ruining the piece of foam. Two, it kinda takes three hands to position the wire and release the bar smoothly at the same time. I hold the pulling bar with my knee. Third, it’s a good idea to guide the wire into the leading edge with your hands. You don’t want the wire to jump into the foam when you suddenly release the pulling bar.

![Figure 1](image1.png)

![Figure 2](image2.png)
What about angled cuts?
As I said last time, straight cut are probably easier to do manually. Angled cut are where this thing comes in handy.

Figure 3 shows the setup for an angled cut where the short side is on your left. This is just like a straight cut except the two pulling strings are attached to different places on the pulling bar. These attachment points are based on the ratio of the lengths of the sides of your foam. This will be easier to explain with an example. Let’s say your piece of foam is 5” on the left and 7” on the right. You therefore need to pull the wire 5” on the left and 7” on the right. Since the pulling bar describes an arc if you pick locations that are 5 units and 7 units away from the pivot point it will pull the strings in this 5 to 7 ratio. The units can be anything. As it turns out, since the pulling bar is a little more than a meter long, marking the bar every 10 cm from the pivot point works well.

Adjusting the exact pull positions and string lengths requires a little trial and error. Do a few dry runs until your satisfied. Once it’s set up, the cuts are very repeatable.

Cuts with the short side on the right are almost the same except the string goes from roller 1 to roller 3 and from roller 4 to roller 2 (see figure 4). Be especially careful to check that the strings are in the rollers when doing this kind of cut.

Conclusion
I hope this description has been clear. I apologize for the quality of the drawings (you wouldn’t believe how long it took me to do drawings this bad!). If you have any questions feel free to ask me. As I said, there are lots of variations of this basic design. Searching the web on “foam+cutting” will point you to several designs.

One problem with this design is that it’s big and hard to store. There’s no real reason you need to have a big cutting board (although it’s nice to be able to mark on it. You could build it out of a 1”x4” and a 1”x2” and clamp it to a work bench when needed. Also I’ve heard of people using sewing bobbins for rollers. They are deeper than screen door rollers and might hold on to the string better.

Next month I’ll pass along some miscellaneous tips I’ve picked up over the last few months.