

President's Letter



Carroll Sizemore founded Cascade Southern Saw co.

His strategy was to sell a high quality product at a fair price. When regulations made it harder to use silver solder with cadmium Carroll refused to change because he "just wasn't going to make anything but the very best saw he could."

He would call me regularly and ask what was new and point out that the industry really needed a better Cad free alloy. He was very polite but he kept calling. Finally we found our Hi Impact braze alloy which was very good indeed. Cascade Southern used it exclusively with great results.

Two things bring this to mind. First the American Welding Society now recognizes that alloy, our Hi impact, as being the best for carbide. See P. 2

Carroll was also responsible for our getting into filter systems because he wanted a safe, clean workplace for his employees.

Now Rob Rzasa of Equipment Ltd has done the same thing for us. Rob sells our filter systems with his machines. For years he has pointed out that we should develop a filter system for straight oil. He was very polite but he kept asking. Finally we have a filter system that handles straight oil. See P. 2

Rob reminded me of Carroll's insistence on excellence and how much the industry needs more of it.

See also Warren Bird P. 3

Carbide Processors, Inc.

Northwest Research Institute, Inc.

Newsletter February, 2007

3847 S. Union Ave. Tacoma, WA. 98409 (800) 346-8274
sales@carbideprocessors.com www.carbideprocessors.com

Cermet II Blades

This is the ad we are using on the blades we are having made.



Sawfiler Brand

World's Best Saw Blades®

Cermet II saw tips make this an extremely smooth cutting, long lasting saw blade for commercial or professional use.

If you had the finest technology, the finest equipment and thirty years worth of experience and, if you made and used saw blades for a living this is what you would make and use.

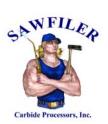
We sell the blades for: 10" x 40 \$76.00 and 10 x 60 \$99.71. These may seem expensive but they are real bargains because they stay sharper much longer.

Cermet II is a designation for a class of materials we developed much like carbide is designation for a class of materials. These grades are giving excellent performance in many applications. We are still working others out. You have been reading about how much we helped Potter lumber on green hardwoods. We also have a big win on Chinese plywood. It is better on Corian, up to 3x the life.

We sell the tips but we have had requests for blades so we had a customer make some up for us.

We suggest you charge a lot for the blades you make because they are worth it. Also they need maybe half the sharpening so you have to recover that lost revenue as well. Figure that Cermet II tips of this size are about \$0.58 each.

We Sell Advanced Grade Saw Tips in Cermet II & Super C





See the big article in **Timber Processing** Jan / Feb 07

Great Filter Units

For Straight oil, Synthetic and Water - based coolants.

Really popular – We're selling a bunch of them





Great prices, pay for themselves readily, cleaner shops, less labor and longer diamond wheel life with better, faster grinds.

Now accepting Visa & MasterCard Call Us at 800 346-8274 or Equipment Ltd at 800-533-2006

We are really good at hard to find carbide on short notice.

Call this poor girl and make \$5. This is my youngest daughter, Jackie, who just started here and no one is



calling her. Just call Jackie at 800 346-8274 to buy anything and I will send the first 20 a \$5 bill each. A father just hates to see his daughter sit home with no calls.

Warren Bird

California Knife and Saw

I have been privileged to hear Warren Bird speak many times. Usually it is all excellent technical information. Just once I heard him add some comments to the effect that many major changes are made by one man with a hunch.

Warren is such a man. He has been preaching the value of stainless steel saw plate for years with great success but not the success I think it deserves.

The Saw and Tool industry is very heavily mechanically oriented. It is much less aware of the tremendous advances in materials and what they can mean to tool performance.

Bashful Burl Swiger

Rebuilds machines.

Burl worked for Cascade Southern for many years rebuilding machines and still does it as Triple S while he also works as filer.

Burl has an excellent reputation for the quality of his work (and for the quality of the stories he tells.) We never thought of him as bashful but we asked him for a story and a picture and never got either one. He does stay busy working full time as a filer and part time rebuilding and repairing machines because he is very good.

If you needed machine parts or a rebuilt machine or a machine rebuilt Burl would be a pretty good place to start.

Burl Swiger Triple S Hillsboro, OR 97124 (503)286-5372 cell 503 803 6838 kbswiger@earthlink.net

Cliff Gordon, Cal Saw Canada Used equipment

Also helps folks find machines. It is not what Cal Saw does; it is just Cliff helping out his customers. Many sales people help folks do this. Some are just a lot better than others. Cliff makes a point of keeping track.

503-580-3253 cell

A Great Web Site

Tim Cook started an Internet discussion for tools. Some business goes on online and a lot of business gets done off line because of it.

http://finance.groups.yahoo.com/group/ IndustrialToolSharpening/

Here is one of Tim's posts

Hello everyone. I just found a new website that you may find interesting. The site offers both new and used equipment for our industry for sale. The address is http://www.sharpquip.com. There is not much on it now, but it could turn into a really good resource for us to buy and sell used equipment. Tim

Sharpquip is run by Tim Reif, who a lot of folks know and like. Here are his comments.

Thanks for your interest in SharpQuip.com. The idea was born out of necessity. Every day I have someone ask about buying or selling equipment in our industry. Since I regularly talk to owners from Maine to California, I figured why not make it a business venture. While I certainly would like to make a profit, the bigger picture is the service of providing a wider view for used equipment. Most shops know no one outside their local area.

As you know, I have been in this business since 1982. Ran Daily Saw for nearly 20 years, went to European Tooling and now run Tim Rief and Associates as a manufacturer's rep firm to the Sharpening Industry

I appreciate any help you can give me and offer the same. Let me know if you ever need help in research as we once did through West Coast Saws with some spiral bits in Canada.

Thanks again, Tim Rancho Santa Margarita, CA 92688 tcrief@aol.com

tim@comsurge.com tel: 949 459-2187 fax: 949 459-2142 mobile: 714 329-9843



Straight Oil Filtration Unit

We did it and it is very, very good



CP 2020 for oil full unit \$2423.00 Wall Mount \$1060.00

You can keep your straight oil coolant clean for weeks or maybe longer for as little \$1060.



22nd Annual WMI Workshop on Design, Operation and Maintenance of Circular and Band Saws

This is Dr. Szymani's workshop. It is highly regarded and is limited to a very small attendance so register now. . Wood Machining Institute P.O. Box 476, Berkeley, CA 94701 Tel: 925-943-5240 Fax: 925-945-0947 szymani@woodmachining.com www.woodmachining.com March 29-30, 2007 Seattle, WA,

Grinding Information and Training

Email from the Grinding Doc

This is the guy who writes the column in Cutting Tool Engineering. I have a lot of respect for him as most folks seem to.

"I'm planning on giving a training course in grinding this May 29, 30, 31 in Austin. It will be three days at the Radisson, a general course on grinding going from fundamentals and getting into burr, burn, wheel selection, cycletime reduction, etc. More details can be found at www.TheGrindingDoc.com.

Jeffrey A. Badger, Ph.D. specialist in grinding Austin, TX 78704 USA (+1) 512-934-1857 www.TheGrindingDoc.com badgerjeffrey@hotmail.com"

If you do any grinding or machining get Cutting Tool Engineering magazine. It is both free and really good especially for grinding. To subscribe go to: http://www.ctemag.com/

If you don't have Internet or don't like it then call us and we'll subscribe for you.



Timber Processing is running a 2 page article on our new saw tip technologies.

That is nice of them and I am pretty excited, especially since I have a high regard for the magazine.

Tim Shaddick, Timber Processing magazine, called a few months ago and wanted to know if I wanted to do an article on filing room technology. We had some research going on so I missed that issue but the article is due to run shortly.

Anyway what brought this up is that I like Tim and his magazines. Tim is a nice guy, who knows his product and has always been very good about helping me find advertising I can (almost) afford.

I like the magazines because they have real article about real people by mill name and person name and equipment name. .

I asked Tim for a short description of his magazines and he gave me one over the phone

"Good day Tom:

Thanks for calling to give us an opportunity to send this "profile" on Timber Processing.

Timber Processing is the largest and most widely circulated source of new product/technology for sawmills in North America. Seven full time, roaming staff editors provide content from full length ,on-site mill operations features, to filing room profiles and woodyard/fiber supply stories that have made it the sawmillers best read since 1975.BPA (Business Publication Audit) audit proven circulation is currently around 21,000 mill operations personnel in every forest industry region of the country.

Each year Timber Processing sponsors the peer-chosen "American Sawmiller of the Year Award" and the 2007 recipient is Robert "Bob" Jordan III, President/Owner ,Jordan Lumber Group,Mt.Gilead,SC the honor signifying an individual who has contributed greatly to his community and brought distinction to our industry through a lifetime of work.

In recognition of its leadership - Timber Processing magazine - is chosen annually to be the official show guide of the leading sawmill shows around the nation e.g. Portland,OR - Wood Technology Show & Clinics; the Southern Forest Products Expo Atlanta; and the Wood Industry Forum & Woodworking Fair,Las Vegas.

I hope that gives you enough to go with for your newsletter.

Thanks again.
Regards
Tim Shaddick,
Western Manager, Vancouver
604-266-1826 home/office
Cell direct 604-512-9794
Email tootall1@shaw.ca"

Make Sure You Get These Magazines

If you are reading this you probably qualify to get them free and they are good magazines.

North American Forest Industry Magazine Group is the leading magazines for every sector of the forest industry covering over 115,000 BPA audit proven key buyers throughout North America.

Timber Processing www.timberprocessing.com Panel World www.panelworldmag.com Southern Lumberman www.southernlumberman.com Canadian Wood Products www.forestcommunications.com **Operations Forestieres Timber Harvesting** www.timberharvesting.com Southern Loggin' Times www.southernloggintimes.com CanadianForestIndustrieswww.forestco mmunications.com (Pulp)Paper Industry North America www.paperindustrymag.com

Three great TV show CD's about primary and secondary wood plus a music CD about logging

The TV shows are from The History Channel and are really good. I really like them because they explain what we do and how important it is. They even balance interviews with the Sierra Club and similar environmental list and have the environmentalist talking about how the world needs paper and lumber.

Great Shows from the History Channel

The Lumberyard \$24.95

At the center of the American Dream is the home--and at the center of its creation or renovation is the lumberyard. MODERN MARVELS® takes stock of everything wood, from the humble 2-by-4 to engineered lumber and the new wave of renewable materials. See how plywood and pressed woods are made, trace the path of exotic hardwoods from forest to market, visit a special lumberyard that deals in recycled and antique woods, and go on underwater expeditions with divers who locate ancient logs buried in the Great Lakes and New Zealand.

Logging Tech DVD \$24.95

It's an industry Paul Bunyan could have never imagined. Today's logging technology is, in the most literal sense, cutting-edge. Armed with behemoth harvesters and the laser precision of modern sawmills, loggers are feeding the world's ravenous appetite for wood.

MODERN MARVELS® goes to the heart of a business where each cry of "timber" evokes the past and fuels debate about the future. Follow the journey of a single tree from forest to sawmill to consumer, and see how unlikely products like aspirin, film and toothpaste take their toll on the world's woodlands. Trace the evolution of logging from frontier days, when the technology was crude and the wood seemed inexhaustible, to today, when

the reverse is true. And see what options we may have for preserving the industry, and the ecology, for future generations.

Timber! DVD \$24.95

America is a nation defined by natural resources. The image of the inexhaustible bounty of the land has survived to the present day, despite countless examples of our dwindling natural wealth. Perhaps more than any other industry, logging embodies this dichotomy.

TIMBER! is a definitive portrait of one of America's longest lasting industries. Sawmills were among the very first industrial buildings built in America, and today we process millions of board feet a day. Yet there is a price for this bounty; the seemingly endless forests are threatened, and controversy has sprung up around the ongoing practice of old growth logging. Here, industry insiders detail how they are responding to the challenges they now face, from advanced use of previously scrapped materials to aggressive re-planting that will ensure the survival of logging into the next millennium. And explore the stories of pioneers like Frederick Weyerhaeuser and Owen Cheatham, as well as legendary characters like Paul Bunyan.

Filled with rare footage and expert interviews, TIMBER! is a riveting look at one of the nation's oldest industries and how it is preparing for the future.

Sourcing Silver Solder & Carbide

If you need carbide or silver solder give us a call. We regularly deal with deal with silver solder & carbide suppliers all over the world. Many of our customers carry extensive inventories.

Superior price and quality from the carbide brazing experts.

If you use under \$100,000 a year in braze alloy we can probably save you money. If you have any brazing problems or if you want stronger joints we can almost certainly help.

Great Music (well, I like it) Where There Walks a Logger There Walks a Man / A Loggers Reward - Buzz Martin

I think it is great because I am an old logger and he sings about people I knew and know. If you are an old logger you will like it. If you know an old logger or someone who drove a log truck it will make a great gift.



- 1 Used Log Truck
- 2 Whistle Punk Pete
- 3 Where There Walks a Logger
- There Walks a Man
- 4 Sick of Setting Chokers
- 5 Fire Danger
- 6 Unemployment Compensation
- 7 Hoot Owling Again
- 8 Loggers Home Brew
- 9 Loggers Annual Party
- 10 Little Ole Model A
- 11 A Loggers Reward
- 12 The Road Inspector
- 13 Cat Skinning Gypo Logger
- 14 Goin Home
- 15 Different Kind of Breed of a Truck Driving Man
- 16 Since they Repossessed My Used Log Truck
- 17 A Language I Don't Understand
- 18 Message from Home
- 19 Too High On the Stump
- 20 Strong Winds and Widow Makers

https://www.cdbaby.com cdbaby@cdbaby.com CD Baby Price: \$20.00 **Two advanced grades of saw tips**. Peerless is now successfully selling their LT grade and we are selling our Super "C" grade. Some people like one better and some like the other. Both grades have similar exceptional properties because both are made with state of the art technology. **Pretty well everyone gets much better results with these than any standard carbide grade.** We have both here and we suggest that you try some of each and see which one you like best.



To make the best tools you need the best components. The Peerless Saw

LT Grade Saw Tip

offers the <u>impact resistance of a C-1</u> tip and <u>wear resistance better than a C-3 tip</u>. How? By combining the submicron grain size of a standard C-4 tip with binder content comparable to a C-1 tip.

LT Tip Specifications: Hardness (HRA) 92.3 Special Binder Content 10% Transverse Rupture Strength (psi) 537,000

You do not need to sacrifice tip life for impact resistance. These tips will handle abusive applications and still hold a sharper edge than standard grades, such as C-1 or C-2. The TRS of the Peerless LT tip can handle the abuse, and the submicron grade allows for longer edge life. A specially made binder makes this the best tip on the market.

Call your Peerless rep today for prices and availability.

Home office: 800-973-3753

Theo Trefz for VA, NC, SC, TN, GA, & AL. Mobile: 336-918-3317 Home: 336-973-3765

Paul DuClos for WA, OR, MT, CA, & BC Canada

Mobile: 503-753-5302 Home: 503-513-5384

Super "C" Carbide Grade

Tougher than C1 - Better wear than C3

What Makes Super C Tips Truly Superior

- 1. Superior Abrasion Resistance Abrasion or straight wear is countered by smaller, better grain size.

 2 & 3. Superior Adhesion and Diffusion Resistance (corrosion and chemical attack) Super C grade of carbide has an extremely fine structure so there is very little binder presented to the material being cut. This, combined with the special metallurgical formulation the Super C binder (hint it's not just plain Cobalt) creates an extremely wear and corrosion material for use in wood, plastic or non-ferrous metals.
- 4. Superior Fatigue Resistance

And People Really Like Them - Call Today To Try Them - Most Sizes Readily Available

Super C	Hardness (HRA)	T.R.S. (psi)
	92.2 - 92.4	530.000 +

Typical C2 values

	Hardness (HRA)	T.R.S. (psi)
C2	92.1	334,000
C2	91.8	334,000
C2	91.5	377,000
C2	90.4	435,000

Typical C Values

	Hardness	T.R.S. (psi)
C1	89 - 92.4	350,000 - 360,000
C2	91.2 - 92.9	250,000 - 400,000
C3	91.4 - 93.6	270,000 - 350,000
C4	89.6 - 93	260,000 - 450,000

Sawmill Grade Tips

Transverse rupture strength well above 500,000 psi.

Rockwell A hardness above 92

Alloy binder for corrosion resistance

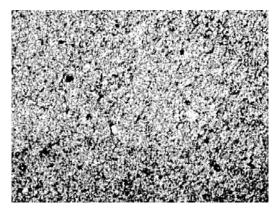
Grain structure to inhibit both crack initiation and crack propagation

Micro grain or mixed grain for superior wear

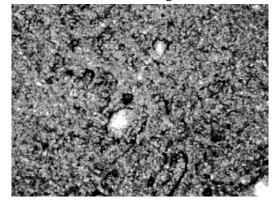
Carbide Processors, Inc. 3847 South Union Avenue Tacoma, WA 98409 800 346-8274



Purified Flux
30% To 100% Better Braze Joints



Purified flux at 50x magnification



Standard flux at 50x magnification Smooth, even and consistent Large grains of foreign material

You can see and feel the difference immediately.

Purified flux is black flux that has had extra processing steps. These

processing steps take the black article out and leave the flux a rich, creamy brown color. If you take a little of each flux and rub it between your fingers you can feel that Purified Flux is not only smoother but the particles are smaller and there are no extra large particles.

Flux is made to prevent oxygen from getting to the parts as they are heated. Steel and especially tungsten carbide oxidize at room temperature. The hotter they get the more they oxidize. Above 1,000 F tungsten carbide oxidizes extremely rapidly and forms an unbrazeable surface. Purified flux is good for more time at higher temperatures, up to 1,700 F.

The original idea with flux was that it was to be applied on top of the braze area. No special effort was made to purify the flux because it worked well and they wanted to keep the cost down.

However the critical part of saw and tool brazing is what goes on inside the braze joint. Ordinary flux is inexpensively made and has up to 10% odd size particles and non-active minerals in it. These odd size particles and non-active minerals get lodged in the braze area and can seriously effect the strength of the braze joint.

Purified flux is cleaner, smoother, creamier and much more effective.

5 # jars Case (6 jars @ 5#) \$ 464.31 Single jar \$ 87.39

Flux and Cleaning

From the AWS Handbook

Fluxes are not designed or intended for the primary removal of oxides, coatings, oil, grease, dirt, or other foreign materials from the parts to be brazed.

And 2 paragraphs later. Oxides are the principal source of surface contamination. The dissolution and removal of oxides during brazing are the most common functions of a flux.

AWS Brazing Handbook 4th edition FLUXES AND ATMOSPHERES

The purpose of a brazing flux' is to promote the formation of a brazed joint by protecting the base metal and filler metal from oxidation. The brazing flux may also serve to remove surface oxides and therefore reduce surface tension to promote freer flow of filler metal.

When metals are exposed to air, chemical reactions occur. The rate of these reactions generally is accelerated as the temperature increases. The most prevalent reaction leads to formation of oxides, though nitrides and even carbides are formed in some instances. The rate of oxide formation varies with each metal composition and the nature of the oxide. Oxide tenacity, structure, thickness, and resistance to removal or further oxidation are all factors that need consideration. Oxide formation in air on some metals such as aluminum occurs instantaneously, even at, or below, room temperature. In almost all conditions, such surface oxides or other compounds create barriers to the formation of brazed joints.

FLUXES

Fluxes are not designed or intended for the primary removal of oxides, coatings, oil, grease, dirt, or other foreign materials from the parts to be brazed. All parts prior to brazing must be subjected to appropriate cleaning operations as dictated by the particular metals (Chapter 7).

In making a braze, the flux is often needed to combine with, remove, or dissolve those unwanted residual compounds or products of the brazing operation which would otherwise impair filler metal flow.

Oxides are the principal source of surface contamination. The dissolution and removal of oxides during brazing are the most common functions of a flux. So as not to impair metal flow, the flux must also be fluid and displaced readily by the molten brazing filler metal. Wetting ability and viscosity of a flux at brazing temperature, therefore, are important properties.

Under some circumstances, flux also may suppress volatilization of high vapor pressure constituents and the formation of oxide fume condensate in a filler metal.

Brazing by Mel Schwartz ASM International

One of the functions of a flux is to remove the oxide layer on the joint area and expose clean base metal.

ASM Vol. 6 Welding. Brazing and Soldering 1993

Definitions

Flux - Material used to prevent, dissolve or facilitate removal of oxides and other undesirable surface substances.

ASM Vol. 6 Welding. Brazing and Soldering 1993

Selection Criteria for Brazing and Soldering Consumables by A. Rabinkin, AlliedSignal Amorphous Metals

Cleaning the base-material components being joined and protecting them from oxidation during heating are essential in both brazing and soldering processes. Chemically active substances, called fluxes, are commonly used to provide such cleaning and shielding. The use of nonmetallic agents in fluxes is generally undesirable, because of the increased propensity for their entrapment and the resultant formation of voids in the finished joint. However, the use of certain active elements that can be added to filler-metal alloys to act as a flux can be advantageous. However, this concept usually only works with brazing filler metals. For solders, working temperatures are generally too low for the reduction reactions to take place with adequate speed, although in some cases these reactions do indeed occur.

STB Standard Tooling Blanks - Great Prices 800 346-8274

We bought the scrap from this customer and he asked if we could do better on some solid bars. We would call these STB's for Standard Tool Blanks. They are also called carbide blanks and carbide knife stock. This is new material from the Ceratizit plant in Luxembourg so the quality is excellent. They work equally well for C-2 or C-3 applications.

We bought these to get the scrap. Its' not what we do and we'd rather have cash so call Jackie or Emily and make us an offer. 800 346-8274 sales@carbideprocessors.com



		Actual	Actual	Actual
	# pieces	thick	width	length
STB	1	0.14	1.25	6
STB	6	0.15	0.77	1.5
STB	1	0.155	1.7	6
STB	2	0.155	2	2.275
STB	16	0.155	2	2.8
STB	1	0.185	2.25	2.5
STB	14	0.26	1.7	4.15
STB	62	0.26	1.75	4.02
STB	4	0.29	2.03	6.2
STB	12	0.29	2.15	9
STB	4	0.29	2.2	6.1
STB	10	0.29	2.63	2.8
STB	14	0.295	2.4	2.53
STB	13	0.296	2.42	2.53
long knife	5	0.155	1.5	6
little square knife	49	0.185	1.14	1.18

If you are in a filer's group or similar we would be happy to run whatever information you care to provide us.

Free Candy – make sure you get vours

We are doing our customer appreciation promotion in February. We are sending out boxes of salt water taffy. Call Jackie (800 346-8274 and make sure we have your name and address right.

Free straw cowboy hats. Great for fishing with the kids.



We are also running a spring promotion. Call (800 346-8274) and we'll send you some free, cheap cowboy hats. We don't pay much for these but they are really good hats for how little they cost. Some guys get a summer out of them. Kids love them. We have the plain straw and the high crown with a red, white and blue hat band. Sizes are pretty iffy. They are sized but they sizes aren't marked. But they are straw and they stretch.

We go head to head with Peerless

We say our super "C" grade is better and they like their LT grade. Both are considerably better than any sawmill or general purpose grade (C1, C2 or C3).

In order to determine which is the best grade for you, the only place it counts, we will be happy to sell you some of each and you can make up your own mind. We have candy and free cowboy hats but don't let that influence you. Peerless has free autographed photos of Paul DuClos."

New address for Burton – NH Burton Saw & Supply 252 Stinson Lake Road P.O. Box 32 Rumney, NH 03266



Not only a pretty face but also great customer service

Here is Emily, who is always perky and always happy to help customers. Emily's job is to help people find carbide, silver solder, filter systems and everything else we sell. If we can't supply you but we know who can we will refer you. No matter what you want we will work really hard to find it.

We Would Really Like It If You Bought From Us



Call & sell scrap or just call her and make \$5, (1st 20 calls. 800 346-874-





Do you want \$3,008.50?

We are paying \$5.50 per pound for scrap carbide. We wrote a check in January for \$3,008.50 to a filer for scrap carbide. He called originally and he knew he had some. He had no idea he had that much carbide or that it was worth that much money.



This is good pretinning. It is ours and it is what you should be buying. Demand it (well, ask for it, anyway) wherever you buy carbide. If they won't ship to us we'll get it for you direct and save you time and money.



Help this poor girl, please?



This is Emily's younger sister, Jackie. Emily really, really wants to take good care of her customers and she doesn't think Jackie is ready to help. (Jackie says Emily is jealous because she, Jackie, is younger and cuter.) So Jackie needs customers of her own.

Thank You

This is what we editors call a filler. The holidays were tiring and January has been really busy. I'm just plain tired. Also working with two high, energy hot blondes is pretty exhausting for an old man.

Anyway, things are going well and we want to thank you for that. We will be sending out gifs (p.7) so make sure we have your address right. If you want extra, let us know. We really do appreciate your business.

Carbide Processors, Inc. Northwest Research Institute, Inc. 3847 S. Union Ave. Tacoma, WA. 98409