

AeroStats



**The Monthly Newsletter of the
Willamette Aerostat Society**

March 2017

Volume 19, Number 3

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**HAPPY
BIRTHDAY!**

<i>Michael Shrum</i>	<i>3/4</i>
<i>Gerald Bales</i>	<i>3/5</i>
<i>Justin Luber</i>	<i>3/6</i>
<i>Garry Hastie</i>	<i>3/10</i>
<i>Tim Gale</i>	<i>3/12</i>
<i>Mary Heath</i>	<i>3/12</i>
<i>Jeannine O'Brien</i>	<i>3/13</i>
<i>Kelley Haverkate</i>	<i>3/15</i>
<i>Jack Whitney</i>	<i>3/31</i>

**Make it a
point
to renew your
WAS
membership
in 2017**



You will find an application on page 11

2017 WAS Officers

President:

Michelle Gouldsmith
mgouldsmith@gmail.com

Vice President:

Justin Luber
pjluber@gmail.com

Secretary/Treasurer:

Dale Justice
outerlimits41@aol.com

Others

Newsletter Editor:
Shari Gale
sharigaleOR@gmail.com

Activities Director:
Pasha Luber
pjluber@gmail.com

WAS website:
<http://www.wasballoon.info>



Willamette Aerostat Society Secretary/Treasurer's Report

Willamette Aerostat Society General Meeting

Saturday, February 18, 2017

Present:

Michelle Gouldsmith, President
Justin Lubber, Vice President
Dale Justice, Secretary-Treasurer
Shari Gale, Newsletter Editor
Pasha Lubber, Activities Director
plus 15 additional members and
two guests (Dave Sweeney & Barb Iverson)

1. Call to order at 2:03 p.m. by Michelle at Aurora State Airport Jet Center.

Barb Iverson presented a very informative, one hour program about crops in the Willamette Valley and other parts of Oregon.

2. Minutes of the December 10, 2016 meeting were moved by Tammy Moore and seconded by Edie Stoaks to be approved as printed in the January, 2017 Aerostats newsletter. Motion passed.

3. Treasurer's report— from Dale, as of February 17, 2017

2017 Members	38
Checking	\$1156.36
Saving	105.00
Cash	<u>7.00</u>
Total	\$ 1268.36

Expenses in December: \$160.36 for the annual party.

Dues received at the meeting were \$35.00.

4. Regulatory—new regulations for propane tanks may require stickers on some propane tanks used for hot air balloons.

5. Events—Laura volunteered to be the balloonmeister for Tigard Festival of Balloons this year. The plan is to have the launch field across the street from the festival activities to allow better control of traffic and crowds. The dates are June 23-25. Crew school will be on the previous Saturday.

Bob Raper reported that plans are underway for an event in the Grants Pass area. A small number of balloons will be invited.

Winthrop will be March 3-5. Several club members are planning to attend.

On March 19, 2017 the Pacific NW safety seminar is in Albany. Tim Gale stated that one activity will be a mock NTSB investigation into an accident.

6. New business—Shari moved and Carmen Blakely seconded to have the WAS club sponsor Aija Elder, who is 13, and is from Corvallis, as an attendee to the BFA High Sierra Balloon Camp in the Reno area by appropriating \$325.00. Motion passed.

7. Next regular meeting is on Saturday, March 18, 2017 at 2:00 p.m. at Aurora Airport Jet Center, and will not be a potluck. The April meeting will be on Saturday, April 8, 2017 at 2:00 p.m. at Aurora Airport Jet Center. There will be no meetings in May through September.

8. Moved by Shari and seconded by Tim to adjourn. Passed. The meeting was adjourned at 4:05 p.m.

*Respectfully submitted,
Dale Justice, Secretary-Treasurer*



Happenings

in the Pacific Northwest and beyond



Event information in this newsletter is not to be considered as an endorsement by WAS, its officers, or its members.

March 3-5, 2017

Winthrop Balloon Festival

Winthrop, WA

<http://www.winthropwashington.com/event/winthrop-balloon-festival>

March 18, 2017, 2:00 PM

WAS Meeting

Aurora Jet Center, 14357 Keil Rd NE,
Aurora, Oregon (in a new building)

March 19, 2017

Pacific Northwest Safety Seminar

Phoenix Inn

Albany, OR

Contact: Terri Schofield

tmschofield814@outlook.com

Saturday, April 1, 2017

2017 BFA Online Seminar

Live Broadcast, 10:30 AM – 7:00
PM Pacific Time

To Register:

<https://bfa.net/index.php/education-training/2017-online-seminar/register-for-2017-seminar>

April 8, 2017, 2:00 PM

WAS Meeting

Aurora Jet Center, 14357 Keil Rd NE,
Aurora, Oregon (in a new building)

June 23-25, 2017

Tigard Festival of Balloons

Tigard, OR

<http://www.tigardballoon.org/#about>

June 30- July 2, 2017

3rd Annual Freedom Aloft Balloon Rally

Prineville, OR

Contact: Greg Miller

503-510-7835

July 2-5, 2017

Teton Valley Balloon Rally

Driggs, ID

Margaret Rose Breffeilh

margaret@tetonvalleyballoonrally.com

July 21-23, 2017

Balloons Over Bend Children's Festival

Bend, OR

<http://balloonsoverbend.com/schedule/>

August 16-23, 2017

Big Summit Ranch Rally

Prineville, OR

Contact: Greg Miller, 503-510-7835

August 16-22, 2017

Oregon Solar Fest

Madras, OR

Contact: Greg Miller, 503-510-7835

August 25-27, 2017

Northwest Art & Air Festival

Albany, OR

<http://nwartandair.org>

August 30 - September 3, 2017

Spirit of Boise Balloon Classic

Boise, ID

For more information

<http://spiritofboise.com>

This is a "By Invitation Only" rally

September 8-10, 2017

The Great Reno Balloon Race

Reno, NV

For more information:

<http://www.renoballoon.com>

September 22-24, 2017

The Great Prosser Balloon Rally

Prosser, WA

For more information:

<http://www.prosserballoonrally.org>

Montague Balloon Fair

September 22-24, 2017

Montague, CA

Check out their Facebook page for
more information

October 18-22, 2017

Walla Walla Balloon Stampede

Walla Walla, WA

For more information:

<http://www.wallawallaballoonstampede.com>

**It's Time To Renew Your
WAS Membership.**

It's March!

Don't Let 2017 Slip Away!



You will find an application
on page 11.

Tulip Flights Are Hopefully In Our Future!

By Shari Gale

Are you ready for spring? I know I am!
Are you ready for a flight over Oregon's tulip fields? I certainly am!

All we need is for Mother Nature to cooperate, because the Iverson family, who own and operate the Wooden Shoe Bulb Company, have once again invited us to launch from their fields during the tulip festival. The dates of the festival are **March 24th through April 30th**.

We are welcome to use the grass seed fields located near the tulip fields as a launch site. Just do not drive on to the field unless absolutely necessary. Remember, if the ground is wet you might get your vehicle stuck. If the ground is really wet, like it is now, it is almost guaranteed you will regret driving out onto the grass. The Iverson family is great about helping us out of a jam, but you really don't want to leave a lasting impression.

Just stay off the grass. It is a crop after all. We do not want to damage it.

Be a welcome guest:

- Drive slowly on the farm roads. There's foot traffic everywhere – especially when we are returning to the launch field. Be courteous.
- If the ground is damp do not drive on the launch field. Leaving ruts or crushing the young grass is not appreciated. (Yes, I said it before, because this is important.)
- Serving alcohol is discouraged. If you include alcohol in your post flight ceremony, please be discrete. Avoid calling attention to your tailgate party.
- **Carry out all your trash.** The trash barrels provided by the farm are for their customers, not for us.

Remember, this is a non-sponsored event. Fly when you want each day of the festival.

The Iverson's are always very generous to the ballooning community. *If you see a family member or one of their employees, take a moment to say thank you.*

WAS is not a sponsor of these flights in any way, directly or implied. We are simply posting this information as a courtesy to our members.



Meet the new “kid” on the block!

by Shari Gale

Years ago Vic and Mandy Johnson from the Seattle area went to a balloon rally. Vic spotted one particular balloon that he instantly wanted to own. He just loved the design. A poster featuring this balloon has hung in the Johnson’s shop for years. During that time they ran a balloon repair business while working “regular” jobs and raising a family. They have owned many balloons over the years, but they had never built one from scratch. Even though they both had repaired many balloons they found they had a bit of a learning curve on this first project.

Mandy will take the story from here:

*Well, interesting thing about building this balloon is we spent a **lot** more time than the average builder. Greg Winker said he could build a balloon in 175 to 200 hours. However, we have over 425 hours of build time in on this one, and that number doesn’t include some of the ‘advice’ time Vic spent interviewing some people.*

The extra time can be contributed to several things that is not what I would consider part of a ‘normal’ home build...

1) We did a more complicated pattern that included the black



This poster hung in the Johnson’s shop for years. Vic was inspired to build a balloon that looked like the one on the lower left. It took a while, but they did it. The balloon is now a reality.

overlay to offset the colors. It essentially was 9 inch wide pieces of black scraps we pulled out of bins from years of repair at the repair station. We put them together and sewed them onto every seam where the white and the color came together.

2) We also did a lot of diagonal cuts, which take longer not only to figure out, but also, to put together and then get all the ‘points’ to line up.

3) One of the colors was also made out of repair station scraps, which had to be put together before cutting out the pattern. The rest of the colors came in full normal width fabric.

*4) We put a full set of bi-directional rotators in the balloon. That took me a **long** time to really figure out and get right. I spent more than 40 hours on that part alone.*

We used a standard lower end, although Vic designed and made his own seat and tank covers out of leather and manufactured his tank straps.

Vic started talking about this project in 2007. He got pretty serious about it in 2008 - 2009 during which time he procured all the material, finished the design and cut out all of the panels, and got most of the black overlay on the individual pieces. He was ready to start sewing it into full panels and gores in early 2010 when our jobs went away; our daughter, Shara, went in the hospital; our son, Andrew, went to Afghanistan; and we pretty much put the whole thing on hold.

When Vic started bringing home antique truck parts and said he wanted to rebuild a truck in our shop I pretty

much told him to finish the project he had started in the shop because it was taking up so much space. That project was the balloon. I volunteered to help (I want the shelf space back too for my own projects).

We took the week off after Christmas (2016), and pulled everything back out. We have been on a building rampage every spare weekend/evening/moment since then with the goal to be ready to fly it in Winthrop. Whew!

The weather cooperated with Vic and Mandy. They were able to cold pack the balloon while they fitted all the lines/cables inside, and later they added heat for the first time. A day or two later they were able to inflate it once more so the local FAA representative could take a look at their work. He gave them the certification they need in order to fly the balloon in Winthrop this next weekend.

(More photos on page 7)



Mandy and Vic proudly standing in front of their new “baby.”

Photo by Dawne Rushkarski

The First Inflation



Vic and Mandy were joined by a lot of family and friends for the first inflation. They easily had three times as many people as needed, but no one wanted to miss out on this important moment.

Before the inflation could happen they had to attach all the lines.



Vic was delighted to see the finished project. All those long hours were worth it!



Photos on this page by Dawne Rushkarski and Connie Henke

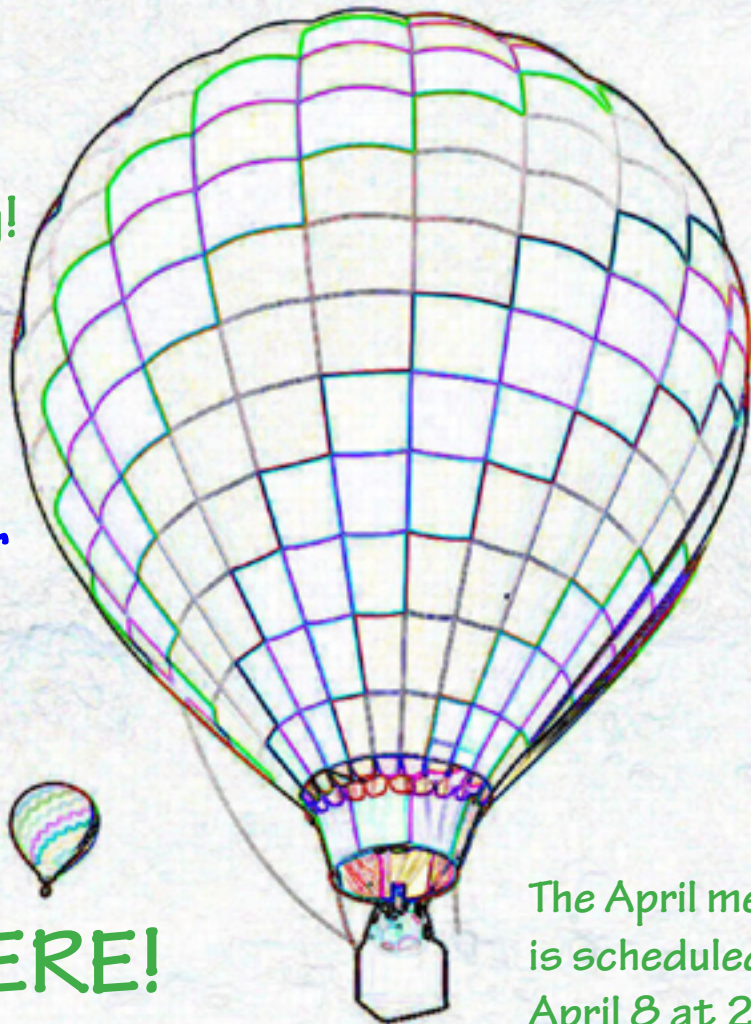
A Moment Of Pure Joy — “It Passed!”

After the first inflation the new balloon still needed to pass an FAA inspection. Vic and Mandy’s daughter, Shara, captured the celebratory moment when they heard the inspection results. (Photo at right.) Mandy made sure she documented the moment another way, (Photo on the left.)



Be sure to plan
on attending the
March WAS Meeting!

March 18, 2017
2:00 PM
Aurora Jet Center
14357 Keil Road NE, Aurora, OR



SEE YOU THERE!

The April meeting
is scheduled for
April 8 at 2 PM.

The following article is being reprinted from *Balloon Life Magazine* with publisher Tom Hamilton's permission, as well as the permission of the author, Alan Sanderson. Alan as you probably know is a WAS member and runs an active repair station in Albany, Oregon. A huge thank you goes to both Tom and Alan.

Pilot Induced Damage

by Alan Sanderson

Balloon Life, April 1998 • Reprinted with permission

Some balloon systems that are brought in for repair have suffered more than normal wear and tear. Much of this excess wear or damage is preventable if the pilot is aware of the potential causes. I will provide some examples of damage that we have seen or other repair stations have reported.

The throat area is a common site for both burn and structural damage.

Burn Damage

Burn damage usually causes fabric to disappear or discolor, but it can also be less noticeable if it happens over time. The less noticeable burn damage is caused by improper inflation techniques some pilots have developed. Normally the damage is confined to the first and second row of panels above the throat. The fabric becomes crisp or brittle, and may develop visible cracks. Sometimes even part of the structure can suffer heat damage. The most common cause of this damage is an inflation where the pilot turns off the inflator fan before starting the hot inflation. With this procedure, the envelope is filled with cold air that is pressurized by the weight of the envelope fabric. Without the air pressure from the fan, the cold air rushes out of the throat, blowing the burner flame back onto the fabric. The fabric eventually becomes crisp or brittle from repeated exposures to the burner heat.

A second method used to inflict heat damage on the throat involves a rushed inflation. The pilot packs the envelope half full of cold air and

proceeds to start the hot inflation. The envelope is not packed enough to keep the throat open, so the flame has to go through a narrow opening surrounded by fabric. The radiant heat from the flame cooks the fabric.

Other throat area damage is caused by a pilot keeping his hand on the burner as the basket touches down, opening the blast valve while aiming the burner into the fabric. A pilot that has used this method seldom repeats it because it usually causes considerable damage.

Suspension cable damage usually happens during inflation. Often some of the upper suspension cables are allowed to go slack and hang down into the path of the burner flame. When the pilot or crew member fails to hold the slack cables, they may droop into the flame. A steel cable that becomes discolored and stiff enough that it will kink instead of flexing has lost much of its strength and must be replaced. If a Kevlar cable is burned enough to melt or stiffen the covering, the damage covering must be carefully removed to allow inspection of the Kevlar fibers. If the normally yellow Kevlar has turned brown, the cable must be replaced. Otherwise, all of the melted covering, including small beads, must be removed. The Kevlar must then be covered with a protective shrink tubing approved by the balloon manufacturer.



Structural Damage

Structural damage is most frequently found near the throat. Depending on the envelope construction, you may see problems in the bottom girdle, the suspension attachment point, or the stitching between the fabric and the load tapes. When the envelope is standing up and buoyant, the bottom girdle should look level from a reasonable distance. If it has peaks or valleys from one gore to the next, it may have suffered structural damage. This damage is often caused by heavy shock loading, which can result from a hard landing and a rebound sufficient to re-launch the balloon. A heavily loaded balloon is more susceptible to this type of damage. Close inspection can reveal torn fabric, separated stitching, or separation between vertical load tapes and the bottom girdle. There is considerable excess strength built into the envelope design, but this margin can be compromised by repeated stress damage without proper repairs.

Fuel System Damage

The most frequent cause of fuel system damage is what we call “gorilla grip.” The person is

Continued on page 10

Pilot Induced Damage

continued from page 9

not satisfied to turn the valve off, but must see how far past the “off” position they can turn it. This can cause two different types of damage to the valve, and the potential to create a cloud of propane.

The service valves normally found on propane cylinders have a brass body and seat, a plunger or sealing element, a threaded bonnet nut, and a matching threaded stem. The sealing element has a plastic cone on one end and a brass button on the other. The threaded stem has an “O” ring seal to keep propane from getting to or past the threads. A fiber washer around the stem serves as an emergency seal in case the “O” ring fails. The washer provides a seal if the threads are intact and the valve is backed open against its stop.

The “gorilla grip” can cause two problems. When the valve is initially over tightened, a groove or depression is formed in the plastic

cone. After that, more force is required to cause the valve to seal, causing the groove to deepen. After repeated cycles, the threads on the stem also begin to wear or deform, until they no longer match the threads in the bonnet nut. Eventually the threads totally strip, keeping the valve from being opened or closed. By this time, brass shavings may be embedded in the “O” ring, allowing liquid propane to seep past the valve stem. This creates a life-threatening propane cloud.

Do not use excessive force to operate any of the propane valves. If they require much force, or have a rough or grinding feel, they should be serviced or replaced.

Improper fuel hose installation and cause hose damage, fitting damage, or fitting breakage in the event of a hard landing. Fuel hoses must be routed so they do not rub against any sharp edges, including the openings in the fuel cylinder collar. They must be routed where no force or stress can be applied to

any rigid fittings. In a hard landing, a fitting may break if it is mounted where leverage can be applied to it.

A hose that rubs against a sharp edge can be abraded or worn through by vibration while it is being transported. A hose that is cut or abraded through its outer covering must be replaced.

Improper Storage

Envelope damage can be caused by exposure to moisture. The coating can deteriorate from mold and mildew, causing the envelope to become porous and increase fuel consumption. Baskets stored outside or in moist areas can develop rot, or the plywood floor can delaminate. Once the floor delaminates, or the basket rots, major repair will be required. Store the basket and envelope in a clean, dry area on slatted pallets to raise them above the floor and allow air circulation.

It's Time To Play In The Snow! First Rally Of The Season.

For 20 years the ballooning season has kicked off with the Annual Winthrop Balloon Festival in Winthrop, Washington. This year the balloonists are gathering in this quaint little town and hope to fly on Friday, March 3 through Sunday, March 5.

Winthrop is located in the beautiful Methow Valley in the Northern Cascade Mountain Range. The valley is about 60 miles long with the Methow River running right through the middle. The town of Winthrop looks like an old western town complete with wooden sidewalks. The town itself is a photographer's dream. Then you add hot air balloons flying with the snow-covered mountains in the background and you have near perfection. This year

the area is reporting a three-foot snow cover. The photos should be spectacular.

The balloons launch from a large lot behind the Winthrop Inn, which is at the south end of town. There will be a small nightglow in the downtown area on Saturday night.

Quite a few balloonists from Oregon are planning on attending this year. Yes, it's a long drive, but they keep going back year after year. There's just something about this event that generates loyalty. Once you go, you will want to repeat the experience over and over.

For more information go to: <http://winthropwashington.com/event/winthrop-balloon-festival>



WAS Membership Application



Name: _____

Pilot Crew Newsletter Subscription Only

Birthday: Month _____ Day _____

Address: _____

City: _____ State: _____ Zip: _____

Date Submitted: _____

Home Phone #: (____) _____

Cell Phone #: (____) _____

E-Mail Address: _____ @ _____

BFA Membership #: _____

Pilot/Crew Achievement Awards

BFA Crew Level: _____ BFA Pilot Level: _____

FAA Wings Level: _____ Other: _____

Family Member Information

Name: _____ Birthday: _____ Pilot Crew

Name: _____ Birthday: _____ Pilot Crew

Name: _____ Birthday: _____ Pilot Crew

Name: _____ Birthday: _____ Pilot Crew

Name: _____ Birthday: _____ Pilot Crew

Membership Type

Charter (includes family) (\$15) Individual (\$15) Family (\$20)

Membership

The Willamette Aerostat Society publishes an annual membership directory, acknowledges member's birthdays in the club newsletter, and communicates via e-mail and the website. We recognize and respect our member's privacy. If you do not wish personal information about you published, please indicate below. Information published on our website is public domain and subject to retrieval via Internet connection. Unless otherwise indicated below, it is assumed it is OK to publish this data in our annual directory:

- Do Not publish name
- Do Not publish address
- Do Not publish phone number
- Do Not publish cell phone number
- Do Not publish e-mail
- Do Not publish birthday

Please use a 2nd page if there are two pilots in the family, or if you have family members with additional information such as cell phone # and/or BFA #'s.

Mail completed form with fees to:
Willamette Aerostat Society
c/o Dale Justice
2902 E. 2nd St. Unit 76
Newberg, OR 97132



Willamette Aerostat Society

Willamette Aerostat Society Mission Statement

- ➔ To promote the sport of Hot Air Ballooning
- ➔ To educate new balloonists and the public
- ➔ To embody safety in all aspects of Ballooning
- ➔ To do all we can to support and encourage land owner relations
- ➔ To support our fellow balloonists and crews personally and in our sport

To obtain Member Contact information, send an e-mail to the Secretary/Treasurer.

For Privacy reasons, *AeroStats* will not publish member contact information without their express permission.

Contact and Submissions

Submissions of articles and photographs are encouraged and welcome! The editorial staff reserves the right to determine the suitability of a submission for inclusion in the newsletter.

Please email your pictures, articles, and comments to:

sharigaleOR@gmail.com

Advertising Policy

Club member's ballooning related or event information is published on a space available basis at no charge.

Business Advertising by Club members is considered Commercial Advertising, subject to fees shown below.

Material must be submitted in computer word processing format with pictures in JPG format.

AeroStats reserves the right to decline publishing submitted information.

Commercial Advertisement Space Rates

Full Page — \$30	1/2 Page — \$20
1/4 Page — \$15	Business Card — \$10

Ads will be published for 3 consecutive months, or until withdrawn, for the fee shown above.

The publishing of advertising in *AeroStats* does not imply an endorsement of the ad or its contents.

Text and images will be printed as submitted by advertisers.

Front Cover Photo:

Dawne Rushkarski took this photo of the first inflation of Vic and Mandy Johnson's new home built balloon. Read the story to learn more about this balloon.

Waiver

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Material to be considered for publication should be mailed or e-mailed to the Newsletter Editor at sharigaleOR@gmail.com

Publication deadline is the 2nd Saturday of each month.

AeroStats reserves the right to deny publication of submitted material for any reason.

Material published in AeroStats does not imply endorsement by WAS, its officers, newsletter editor, or its members of an event. Nor does it imply agreement with opinions, comments, or endorsement of any product.