



Buzzard Droppings



Gold Leader Club

Promoting the building and operation of radio controlled models, and the public acceptance and good will towards the sport/hobby. Our main goal is to have fun and enjoy the challenge of safely flying radio control models.

December 2011
Volume 18 Issue 12

Barnyard Buzzards Model Airplane Club

AMA Chapter 2953
Monroe, Washington

Next Club Meeting is **Tuesday, December 13, 2011, 6:30 PM** at Alfy's Pizza at 19121 SR2 in Monroe ([Map on Page 9](#)).

Program: Holiday Fiesta and Officer Railroading



Happy Holidays from all of us!

President's Message — Bryan Reightley

Buzzards and Friends,

Work is complete closing out our old flying field. Planning and progress continues on our new one. Our insurance is in place so it's time to fly again although not without a few challenges. If you are up for it, please remember the access road is a bit sloppy as we have not added gravel to help firm

it up yet. Also, it's best to bring airplanes you can hand launch and belly land as the runway shows evidence of exploratory work, but has not been fully graded.

I want to take this opportunity to thank the many club members who have assisted me in my first year

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November 8th Meeting Minutes — Vaughan Houser

We held our monthly club meeting at Alfy's Pizza in Monroe. President Bryan Reightley called the meeting to order at 6:38 P.M. He introduced the club's officers:

- President – Bryan Reightley
- Vice President – Jim Reynolds
- Treasure – Rick Hanners
- Secretary – Vaughan Houser

- Field Safety Officer – Vince Bell
 - Newsletter Editor – Ron Swift
 - Field Manager – Jay Bell
 - Webmaster – Ron Rueter
- Several visitors and guests attended the meeting including former members Richard Bizier and Doug Hoff. Additionally, Brad Heinitz Pres-

(Continued on page 2)



Club Officers and Contacts

President: Bryan Reightley (206) 940-0638

Vice President: Jim Reynolds (360) 435-9662

Secretary: Vaughan Houser (425) 788-8616

Treasurer: Rick Hanners (360) 668-1312

Safety Officer: Vince Bell (425) 788-2456

Newsletter: Ron Swift (425) 788-6045

Field Manager: Jay Bell (425) 788-4831

Website: Ron Rueter (425) 210-3911



(President's Message continued from page 1)

as the BBMAC President. There have certainly been plenty of challenges. Losing our flying field in July was certainly the low point. Signing the lease on the new field was obviously the high point.

Along the way the board has kept me on track and continues to do so as we work through the many challenges of developing the field. Among the general membership there are also many individuals who work tirelessly to make our club what it is. To everyone who has helped out over the last year I say thank you for all you do and please keep up the good work.

Make sure to come to our Buzzards Holiday meeting this coming Tuesday and bring your relatives, neighbors and friends. The pizza, salad, and soft drinks are provided by the club, as always. A "white elephant" gift of \$10.00 or less to share would be nice, too!

Happy Holidays
Bryan

Head's up regarding the Christmas gift giving at the December meeting. Several of the Buzzards' ladies have organized this event!

There will be 2 Special tables at our Holiday Meeting:

One for the ladies and their gifts.

One for the gents and their gifts.

Ladies please select a Christmas ornament as a gift and bring it.

Gents please select something from your used airplane parts bench, or purchase a gift **not** to exceed \$10 and bring it.

Kids—be creative!

After the business meeting there will be a gift exchange.



Also, ladies, we will carry on the tradition of filling dessert table. So, if you would, please think of a dessert to bring and share that would be terrific. I know everyone is in for a real treat again. (You know that there is not just one calorie in any dessert...funny how the taste buds don't care.)

(Continued from page 1)

ident of the Arlington Eagles RC Fliers Club was present. Brad had a couple of reasons for attending. The first was to extend a lifetime membership to Bob Martin for his selfless voluntary work at the Eagles flying field. Secondly, Brad was there to say he had learned we had lost our field and extended an offer to the members of BBMAC to fly at the Eagles field at no charge through 2012. Those in attendance applauded Brad and the Eagles for extending their helping hands. Here is the Arlington Eagles website:

<http://arlingtoneaglesrcflyers.org/index.html>

22 members were in attendance.

Officers' Reports

Secretary – Secretary Vaughan stated the club currently has 59 members. He commented on the post card mailing to communicate information regarding the October 29th official closing

of the field; that this form of communication seemed to be a success.

Vice President – Jim Reynolds followed up on the October 29th day with a report that a lot of people showed up and there was plenty of food. All-in-all it was very good day: Good weather, good flying, good fellowship. Jim also provided a recap of the first ever re-builder's contest.

The next club meeting is December 13th at Alfy's. This is our annual Holiday meeting. So, family and friends are welcome to come.

Treasurer – Rick Hanners reported that financially we're in good shape with \$5,615.92 in the bank, not including a refund check from Dale.

Safety Officer – Vince Bell stated that everything is going good.

Field Manager – Jay Bell was absent. President Bryan Reightley reported on the Saturday November 5th work party at the new field location. Arleen, the land owner, still had not viewed everything we did, but was excited about what

(Continued on page 3)



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we were doing. Later on in the meeting Ron Rueter shared a plethora of pictures of the work that was accomplished.

There is another work party planned for Saturday, November 12th. The sani-cans have been pumped and still need to be moved to the new field. The intent is to move tables and other items from the old field to the new one. The suggestion was made to contact Jay Bell if you have questions.

Newsletter Editor – Ron Swift thanked Rick Hanners for writing up articles pertaining to battery packs. You can see those in our monthly newsletter. Thanks again, Rick for your contribution! Ron continually looks for photos for the newsletter. So if you have some, send them to Ron.

Webmaster - Ron Rueter - Be sure to check the website as things change frequently and new items are always being added. If you have any building project with photos, please create a write up and send that and the photos to Ron Rueter to be added to the Members Projects area of the website.

Announcements

President Bryan Reightley reminded everyone that since we will not have insurance for the new field until the first of December that flying will not be allowed until then. Also, the old field is closed, so no flying there as well.

Ron Swift told of the passing of John Foglesong. As such Ron, Sandy, and John's son, Justin, will host the 2012 Northwest Model Hobby Expo. There should be little change for the Buzzards at this event regarding the club booth and swap tables.

The NW Model Hobby Expo is scheduled for February 10, 11, and 12. <http://www.nwmhe.com/> Ron will have a schedule sign up in the near future.

Freeze-In 2012: Location the new field. Date: January 7, 2012

Meeting location: Ron Rueter offered to investigate other possible venues for our monthly meetings. It seems we have a challenge when our meetings coincide with an election night and Ron R. makes a presentation. More to come from Ron's investigation in the month's ahead.

Old Business

Bryan then called for old business:

New flying field: President Bryan stated a lease was signed with Arleen, the land owner, of the new flying field. It is a two stage lease. The first stage is a six

month trial period to learn if there any emerging issues or concerns. Pending no show stoppers, the second stage, beginning May 1, 2012, starts a 5 year lease with Arleen.

Nominations for 2012 Club Officers President Bryan asked Vaughan to read the current nominees:

2012 Club Officers' nominations:

President: Bryan Reightley

Vice President: Jim Reynolds

Secretary: Vaughan Houger

Treasurer: Rick Hanners

Safety Officer: Vince Bell

Special Service Award: Jay Bell

A motion was made to close the nominations. This was seconded, passed, thus closing the nominations for club officers for 2012.

New Business

None

Program

Ron Rueter presented his experience at the 40th Annual Balloon Festival at Albuquerque. Included in his presentation were some amazing facts like 550 hot air balloons in the air at the same time; and the unique flight box pilots navigate in. Ron captured and shared some incredible pictures. Thanks Ron for putting your presentation together and sharing it with us. If you would like more information you can go to the Albuquerque Balloon Fiesta web site: <http://www.balloonfiesta.com/event-info>.

The meeting adjourned at around 7:36 P.M. The next meeting is Tuesday, December 13, 2011, at Alf's Pizza in Monroe at 6:30 P.M.

The club newsletter is available on-line at <http://www.bbmac.net/>. If you still want to receive a "hard" copy, please, contact Ron Swift (425) 788-6045.

Respectfully submitted by Vaughan Houger, Ph.D
BBMAC Secretary

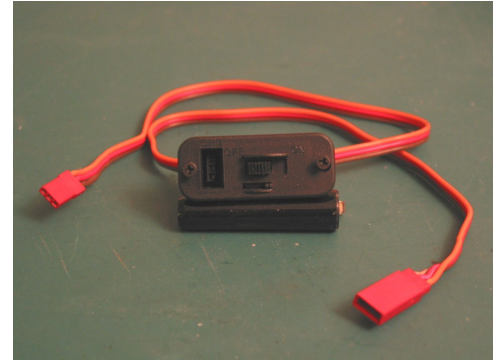




A123 Receiver Battery Packs (Part 3)

To start the installation of an A123 battery pack into a model requires that you acquire a switch that has a three wire lead going into and out of the switch plus have a built in charge interface. In a normal radio system why would you need such a switch you might ask? I can't comment on Futaba systems, but in a JR radio system the 3rd wire (the orange signal wire) going to the battery goes no where as there is no lead associated with that wire at a normal NiCad battery pack connector. The orange wire going into the receiver, however, has a DSC (Direct Servo Control) function. Basically you can plug a DSC cable into the trainer port of a JR transmitter, the other end into the charge interface and when you turn on the switch, the transmitter can control the servos in the model WITHOUT a radio signal being transmitted because plugging into the trainer port disconnects the transmitters RF section. However, control of the servos still happens through that orange signal wire. The caveat of course, is that the transmitter and receiver have to be capable of the DSC function.

I've looked at a lot of switches that look the same but the one with the best construction in my opinion is once again from ElectroDynamics and is their Ultra Switch 2 (EDC-77). You can clearly see the 2 three lead connections and the built in Charge interface, which has a built in slide that can cover and protect the interface.



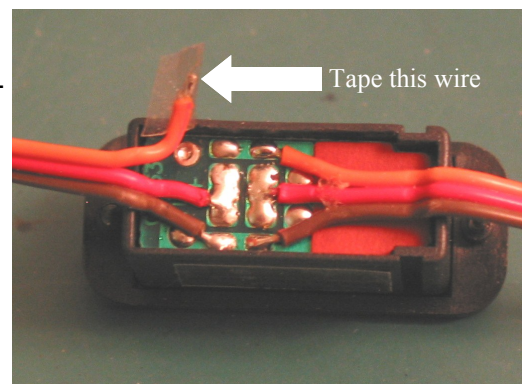
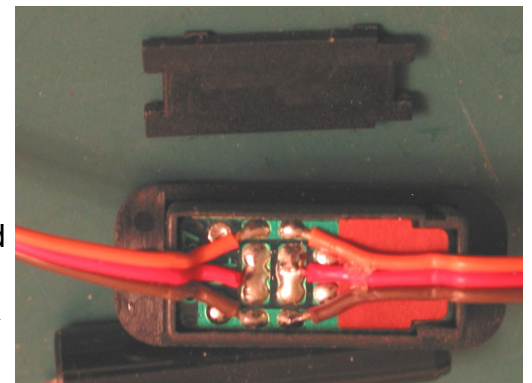
Prior to installation we need to modify the lead which plugs into the RECEIVER. The lead for the battery we want to leave intact so the center tap information from the battery pack will be available at the charge interface. The simplest way to modify the RECEIVER lead is to clip or pull the pin out of the connector shell as shown.



I personally don't like to do it this way as I feel the three wires provide a better strain relief at the receiver so I do the modification internally to the switch. The back cover of the switch is very secure but it is easy to spread apart the plastic housing to release the tabs of the cover. When you do, the switch looks like this:

In this orientation the RECEIVER lead is going to the left. At this point I unsolder the left orange lead and then insulate with a small piece of tape. I could just cut the wire but I want to leave everything pretty much intact in case I want to restore the switch to its original configuration. Once unsoldered you will get something like shown in the photos.

At this point it is just a matter of snapping the cover back into place, installing the switch into the model and plugging the 3 wire balance connector from the A123 pack into the input power lead from the switch. I'll refer you to my second part of this article which shows pictures of a typical A123 battery pack with leads and the schematic showing what voltages are available. Once plugged into the switch, you are ready to charge, balance, and discharge through the built in switch charge interface.





[Continued from Page 4](#)

I installed my modified switch into a Hanger 9 Ultra Stick 40. Here you can see the ElectroDynamics EDR-207 Battery Tester plugged into the Charge interface and testing the GO/NO GO status of the battery pack:

The battery has an overall charge of 6.74v with the 2 cells measuring 3.36 and 3.38 respectively. Basically I am all set to go. ElectroDynamics literature recommends the following:



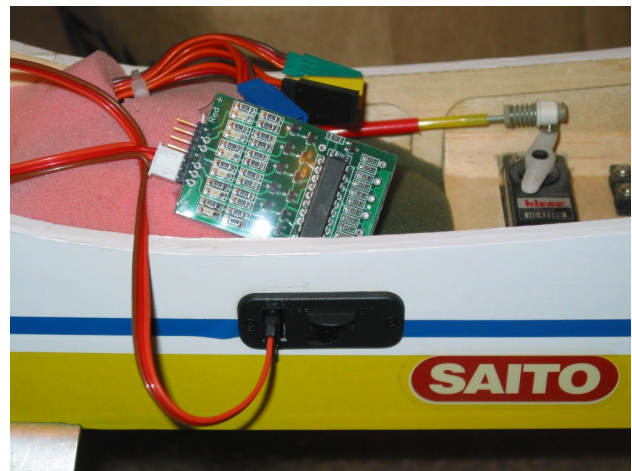
For Safety, we recommend the "Go-Fly" minimum:

EVERY cell is at least 3.30V

while the pack being loaded (discharged) on the EDR-207 NanoTest.

At 3.29V under a 300mA load, A123 cells have approx. 20% - 30% charge ("fuel") left, the pack should be recharged.

For those interested, the picture above was taken shortly after I received the A123 battery pack and you can see that there is a .02 voltage difference between the cells. After balancing them, they either show a .00 voltage difference or a .01 volt difference occasionally. Again A123 cells are pretty tolerant of any imbalance. I usually do a cell balance on the pack once a month and it only takes 5 – 10 minutes to do. Below you can see balancing the A123 pack through the Charge interface using either the EDR-207 or the AstroFlight A123 Blinky (using the EDR-207 cable).



Charging, of course, is also done through the Charge interface using the appropriate A123 charger. At this point the Ultra Stick 40 is set to be put into service with its new A123 battery pack and all the benefits associated with it, including leaving the battery in place for charging, checking cell voltages and for balancing as necessary, just as we do with NiCad packs. Due to the extra power from the servos, when flying the Ultra Stick 40, the planes response feels crisper to me and I've flown this plane a lot with a standard 4 cell NiCad battery pack over the years.

I'm extremely happy with the new battery technology and have started to slowly convert old and new models over to the new A123 2 cell Receiver battery packs. It does require an investment in some new equipment. But over all, in my opinion, converting is well worth it. Clear skies and soft landings to you!

----- **Rick Hanners**



BUZZARDS FREEZE-IN 2012

By Ron Swift

Our 4th annual Freeze-In is scheduled for Saturday, January 7, 2012 from 11:00 AM until 2:00 PM. We will have a couple of patio heaters at the field and Sandy will be bringing the New Year Pizza and beverages at 11:30 AM.

We will have coffee and donuts for all of the early attendees starting at around 10:00 AM so we can wait out any possible fog conditions...

Yep, you still have time to customize a model and test it before the event!

What does the creative modeler do to get ready one might ask!

Model Madness:

- Yep, if there is deep snow, you will likely need either a snow blower/shovel/broom to clear the snow and you can install skis or floats to keep the model on top of things...
- You might want to bring some lighter fluid to start the engines (works great on electrics). Naptha has a lower vapor pressure and squirting some into the carb or into the fuel line will help start the wet engines.
- Sometimes the cooling fins on the engine cylinder need to be covered to keep the heat in the engine. Old baby socks, etc. have been used for this.
- Brush to clean snow from the tables.
- Courtesy. If your model stops somewhere on the runway, walk around the runway and get the model using the fewest steps on the runway surface. Footprints put deep holes, etc. on the snow and can cause the runway to be unusable.
- Electronics—electric models—the cold affects the batteries and they don't last as long. Make sure to fully charge the batteries and check them often.
- Share your flying with fellow modelers. Some may not be able to get their engines/models to fly. If you can, share the fun—buddy box or XMTR swap.

- 2nd model just in case
- Non-freezing cleaner for castor oil and snow

Flightbox goodies:

- Already mentioned is the lighter fluid
- Charge your flight box battery—starter battery. The cold effects these, too.
- Fresh fuel. Stuff that has been exposed to moisture will be really hard to use.
- Plastic sheeting or trash bag for kneeling in the snow.
- Lock defreeze—to get into the field and shed

Apparel:

Caution! Be extra careful with loose clothing around spinning propellers and ducted fan inlets!

- Gloves
- Hat
- Scarf
- Sunglasses (snow blindness isn't fun!)
- Boots
- Change of dry clothes

Comfy things:

- Thermos of a warm beverage
- Cups to share the above beverage
- A chair
- Tent with side panels
- Camera to prove you did it!
- Hand warmers
- Blanket
- Cell phone





Photos for Fun



New Field - In the Works



Thank you to all who helped out with the tasks at both the old and new fields to help with the Buzzards Migration to our new field. There are many more photos on our website if you want to see more. <http://>



Safety Corner

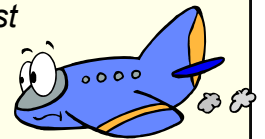
Have a Merry Christmas and Happy and Safe New Year

The new field is now open, well technically it is, as you can fly there if you have something that does not need a runway for takeoff or landing. The tables are not out so be extra careful. Also the road across the field going to the Field is problematic. Getting stuck in the mud is no fun!

There is a thing called Wind Chill. You say "I don't fly in winter with the wind blowing because it is too cold that may be true, however there is a chart called Wind Chill Chart (WCC)--Funny how that works. The WCC tells us if it 35°F and the wind is blowing 10mph it will feel like 27°F. OK that's not too bad, however your fingers will get really cold in a 10 minute flight assuming no protection (gloves). I personally find it hard to fly while wearing gloves. Thin silk gloves work very well and you can get them at an army surplus store or at least you could a few years back. The Air Force issued them as glove liners. Maybe there is something available at REI or ski shops. You guys tell me if you know of something that you have tried and like. OK back to the Wind Chill Chart.

Let's say it is real cold, but a nice clear day, of course, you have to go flying. Let's say its 10° F and you reach back to adjust the high speed needle valve and wind from the prop is 60 MPH. This is going to be down right uncomfortable the WCC indicates -19°F and you have about 10 minutes before frostbite.

Remember to dress in layers, wear gloves, wear a hat, a lot of body heat is lost from your head, and wear shoes that will keep your feet warm and most importantly dry.



UNTIL NEXT TIME, BE SAFE BE COURTEOUS
Vince Bell, Safety Officer



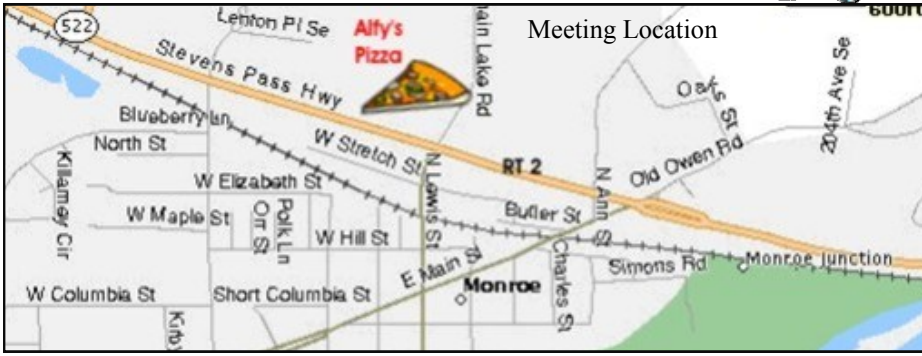
Wind Chill Chart



		Temperature (°F)																		
		Calm	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
Wind (mph)	5	36	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40	-46	-52	-57	-63	
	10	34	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41	-47	-53	-59	-66	-72	
	15	32	25	19	13	6	0	-7	-13	-19	-26	-32	-39	-45	-51	-58	-64	-71	-77	
	20	30	24	17	11	4	-2	-9	-15	-22	-29	-35	-42	-48	-55	-61	-68	-74	-81	
	25	29	23	16	9	3	-4	-11	-17	-24	-31	-37	-44	-51	-58	-64	-71	-78	-84	
	30	28	22	15	8	1	-5	-12	-19	-26	-33	-39	-46	-53	-60	-67	-73	-80	-87	
	35	28	21	14	7	0	-7	-14	-21	-27	-34	-41	-48	-55	-62	-69	-76	-82	-89	
	40	27	20	13	6	-1	-8	-15	-22	-29	-36	-43	-50	-57	-64	-71	-78	-84	-91	
	45	26	19	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86	-93	
	50	26	19	12	4	-3	-10	-17	-24	-31	-38	-45	-52	-60	-67	-74	-81	-88	-95	
	55	25	18	11	4	-3	-11	-18	-25	-32	-39	-46	-54	-61	-68	-75	-82	-89	-97	
60	25	17	10	3	-4	-11	-19	-26	-33	-40	-48	-55	-62	-69	-76	-84	-91	-98		

Frostbite Times 30 minutes 10 minutes 5 minutes

Wind Chill (°F) = 35.74 + 0.6215T - 35.75(V^{0.16}) + 0.4275T(V^{0.16})
Where, T= Air Temperature (°F) V= Wind Speed (mph) Effective 11/01/01



Barnyard Buzzard's Club Meeting

Our club meetings are open to the public. We meet at 6:30 PM on the **2nd Tuesday** of each month at Alfy's Pizza in the Staples Plaza on RT2, Monroe, WA. During the summer months (weather permitting), the club will meet at our flying field. See the schedule below for location... If you would like additional information, come out to a club meeting, or contact one of our club officers. Each meeting starts with an introduction of the club officers followed by a short business meeting. We will have a **program** about some aspect of the hobby/sport. Then, a **Show & Tell** and **raffle** conclude the meeting, which ends at around 8:30 P.M.



Map to our Flying Field (B)

On US-2 beginning at the intersection of Main/Old Owen Road drive 3.4 miles east to Fern Bluff Road - turn left (there is a left turn lane) - drive 1.4 miles on Fern Bluff Road to the entrance gate on the right. Visit <http://www.bbmac.net> for the most current Field info.

Barnyard Buzzards Pilot Training



Our club is dedicated to the safe pursuit and advancement of model aviation. We offer the newcomer free lessons to learn how to build models and to fly them. If you should have any questions about the club, flight instruction or membership requirements, call any of the club officers. We have a safety checklist available for those new to our flying field.

Use of a computer simulator is advisable. This allows you to practice safely and will end up saving you hundreds of dollars in the long run.

Still, in any case, the best way to learn to fly R/C planes is by finding an instructor to help. Learning on your own can be expensive and somewhat less safe.

We provide instruction for both building model aircraft as well as flying these models. In most cases, a buddy box system is used at the flying field. Experience has shown this to be the safest method to learn.

Those who want to enroll in the pilot training should contact Rick Hanners (phone number is on the list below) or our club secretary, Vaughn Houger at **425 788-8616**.

Pilots already enrolled in the training program are welcome to contact any of these club instructors to set up lessons.

Current Flight Instructors:

- Dean Appell 360 435-7803
- Vince Bell 425 788-2456
- Rick Hanners 360 668-1312
- Ron Swift 425 788-6045
- Brian Taylor 425 225-5247



Upcoming Meetings

Meetings begin at 6:30 PM	
2nd Tuesday	
December 13	Alfy's Pizza
January 10	Alfy's Pizza
February 14	Alfy's Pizza
March 12	Alfy's Pizza
April 10	Alfy's Pizza
May 8 VE Day	Club Field
June 12	Club Field

Our Flying Field

If the gate is unlocked, feel free to visit!
Our web [site \(http://www.bbmac.net\)](http://www.bbmac.net) has some of photos of our new field.



Next meeting, **Tuesday, December 13, 6:30 PM** at our Alfy's Pizza in Monroe on SR 2 (see page 9).
Program: **Holiday Fiesta and Officer Railroading**



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Visit Our "New"
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