



# 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.

**November 2011**  
**Volume 18 Issue 11**

## Barnyard Buzzards Model Airplane Club

AMA Chapter 2953  
Monroe, Washington

Next Club Meeting is **Tuesday, November 8, 2011, 6:30 PM** at Alf's Pizza at 19121 SR2 in Monroe.

**Program:** Balloon Festival presentation



### President's Message — Bryan Reightley

Last month I reported the progress being made on a potential new flying field.

This month I am pleased to report our new field has been secured with the signing of our new lease on October 29th. It is located between Fern Bluff Road and Hwy 2 about 4 miles East of Monroe. If you have not had a chance to see it

in person you can check it out on the Buzzard's website. At present, you will find a satellite photo of the property, an overlay showing the location of the runway and access road, and driving directions.

Creating a temporary runway will be the club's first priority. Jay Bell

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### September 13th Meeting Minutes — Vaughan Houser

This was the first meeting of the Fall at Alf'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
- Webmaster – Ron Rueter
- Field Manager – Jay Bell

No new visitors or guests attend-

*(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)*

and Ron Rueter will work to establish a basic layout this week ahead of our first work party on Saturday Nov. 5<sup>th</sup>. With participation from all club members we can meet our goal of having a temporary, but flyable, runway by the end of the month. Volunteers will also be needed to close-out the old field. Removal of the fencing and transporting the tables to the new field can happen most anytime. Please contact Jay Bell or one of the board members to learn more, if you're not able to make the upcoming weekend work party

I encourage everyone to attend the November 8<sup>th</sup> meeting at Alfy's. This will be your best chance to receive the latest details on the new flying field, get your questions answered, and catch up on other club information. We will have the 2012 officer nominations, our Annual Freeze-In on January 7th, and info about our upcoming Holiday Celebration meeting on De-

cember 13th.

See you at our new field,

Bryan



*(Continued from page 1)*

ed the meeting. 20 members were in attendance.

## Officers' Reports

**Secretary** – Secretary Vaughan stated the club currently has 59 members. Additionally, he asked for a motion to accept the September minutes as presented in the newsletter. A motion was made to accept the September meet-

ing minutes. The motion was seconded, voted on and approved

**Vice President** – Jim Reynolds was absent. Suffice to say that there are only a few weekends remaining to enjoy our current field. October 31 is the last day we can fly at the field.

**Treasurer** – Rick Hanners reported that financially we're in good shape. He added that the

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refund from Dale should be greater than a thousand dollars. He passed out the budget for 2012. After reviewing the proposed budget he recommended that dues remain the same for 2012. A motion was made to accept the 2012 budget as presented. The motion was seconded, voted on and approved.

**Safety Officer** – Vince Bell reminded everyone the importance of checking your airplane servo connectors periodically. Connectors can become corroded impacting your ability to control your airplane, which, most likely will result in a failure of some sort. Vince experienced this while test flying at a proposed new field. After a successful first flight the subsequent flight ended up in a crash due to a corroded servo connector.

**Field Manager** – Jay Bell was absent. There is nothing new to report on the field.

**Newsletter editor** – Ron Swift reminded all that hard copies of the newsletter are available. He also had fliers available for the 2012 Northwest Model Hobby Expo.

## Announcements

President Bryan Reightley reminded everyone, to continue to be courteous to neighbors and visitors. Always good to do wherever you are.

Ron Swift stated that Sandy had items for sale if anyone was interested.

### Events:

October 15<sup>th</sup> is the first annual “Frankin-plane” where members bring pieces, parts, and materials, when pooled together to create something that flies at the end of the day. This was a quick notice, but we’ll see what happens.

October 29<sup>th</sup> will be the BIG Buzzard finale to our time at Dale’s field. The day will be filled with fun, flying, fellowship, and food. Bring it. Start it. Fly it. Afterwards there will be an “Official lowering of the wind sock,” to seal the end and transition to the new beginning.

The NW Model Hobby Expo is scheduled for February 10, 11, and 12. <http://nwmhe.com/> Organizer John Foglesong has asked Ron Swift and Sandy DuVall to help organize and host the event. Of course, that translates into opportunities to volunteer. Ron requested that the club secure a booth as in the past. The present club members made a motion, seconded, and agreed to support the event. Ron will have a sign up schedule at our next meeting.

## Old Business

Bryan then called for old business:

Potential new flying field: President Bryan brought the group up-to-date on the potential new flying field. The location is close to 4 miles east of Monroe. We have a tentative agreement with the new landlord, who is enthusiastic about the prospect of the club being there.

This prospective field has a large space with which to fly and accommodate the club’s needs in terms of field, parking, storage, etc. Bryan described the layout of the land. A couple of club members tested out flying at the field. Aircraft noise was barely noticeable and in many ways drowned out by the highway noise from Highway 2. The field has a lot of potential to make it a nice place to fly.

Since we are in the process of losing our current field at the end of the month, we will most likely experience an overlap. Therefore we have a need to store some of our assets: tables, fencing, shed contents, etc.

A concern was mentioned regarding safety; the proximity of the new field to Highway 2. A group of individuals (residents along Highway 2) have formed a safety coalition. How will we manage this concern?

Ron Rueter reminded us that even though we have a good possibility for a new home that we should still always keep an eye out for other field opportunities. It is kind of a just-in-case contingency plan. He wasn’t suggesting that we lock in another field, but just keep aware of other options.

*(Continued on page 4)*



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Chet commented on a prospective field in Everett: Community Garden. It too, apparently has good potential for the club.

## New Business

2012 Club Officers' nomination so far:

- President: Bryan Reightley
- Vice President: Jim Reynolds
- Secretary: Vaughan Houger
- Treasurer: Rick Hanners
- Safety Officer: Vince Bell
- Special Service Award: Jay Bell

## Program

Re-builders' Contest. There were two entries: Bryan Reightley and Ron Swift both

successfully rebuilt airplanes crashed during the summer. Bryan was grateful for Ron entering his airplane as Bryan brought the prizes. The prizes were shared by both Ron and Bryan. Hopefully there will be more participation next year!

The meeting adjourned at around 8:30 P.M. The next meeting is Tuesday, November 8, 2011, at Alfy's Pizza in Monroe at 6:30 P.M.

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

Respectfully submitted, Vaughan Houger, BBMAC Secretary

# One Field Closes . . .



I think I may be the last person to fly at our field; although not really intentional. I arrived at around 5pm, and another flyer was just packing up after having flown through his batteries. It was slightly breezy, cool, and the sky was dramatic, with numerous clouds and the beginnings of sunset. **[Actually John Rennert, Ron Swift and Rick Hanners flew that afternoon also—A Halloween extravaganza with stiff swirling winds...]**

I brought 4 planes, flew 3. The first plane I flew was a "Mercury Galahad" with an old MRC (Enya) glow engine. Next I flew my electric Kyo-sho Zero. Short flight, as it was getting darker and I had problems with orientation. I brought her down before I got into trouble!

The last plane I flew is a "Super Sniffer" from a BMJR Models kit. I landed the Super Sniffer at 6:15 pm. Too dark to fly anymore. With planes cleaned up and stored in the Jeep, I drove out the gates after my final flights there and locked up. It is a beautiful location and I will miss it.

And, no planes were harmed during the making of this evening's flights.

Mark Lockman





# A123 Receiver Battery Packs (Part II)

By Rick Hanners

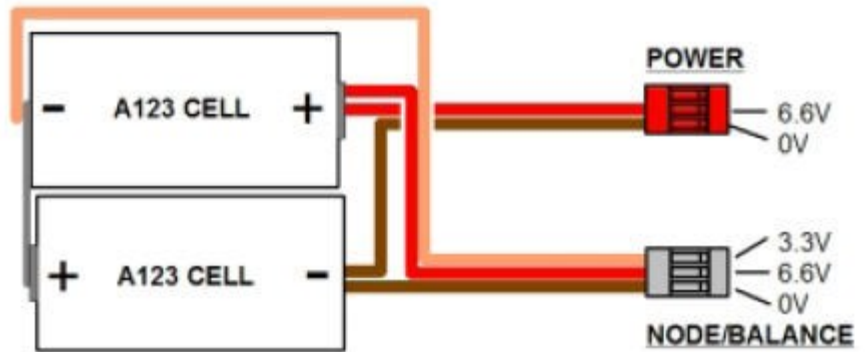
## The Battery

This picture shows a comparison between a 2300ma 2 cell A123 pack and a 2100ma 3 cell LiPo battery pack. Note in both instances that there are two leads coming out of each battery pack. One lead is the power lead, the other is the cell balance lead. For the LiPo pack the balance connector is a typical white Polyquest type of connector on a short lead. Typically LiPo packs are removed from the aircraft for recharging and balancing, however, when using a lithium A123 pack it would be preferable to leave the battery in place for charging, checking cell voltage and for balancing as necessary, just as we do with NiCad packs. The A123 pack was purchased from Radical RC. I've been buying my battery packs from them for years. What is nice is that you can specify what type of leads/connectors you want on your packs. I could have ordered the pack with a similar white balance connector as is on the LiPo pack, but instead I ordered what is called a JR node connector for the balance connector. Note that the wire size for both the power lead and the balance node lead are the same.



The following diagram shows you what the connections for each of the leads on the A123 battery pack are.

As you can see what is normally the signal line on a JR connector (orange wire) is connected to the center tap of the battery pack so that each individual cell voltage can be read. I'll explain how we take advantage of this when I get to the installation of an A123 battery pack in a model.



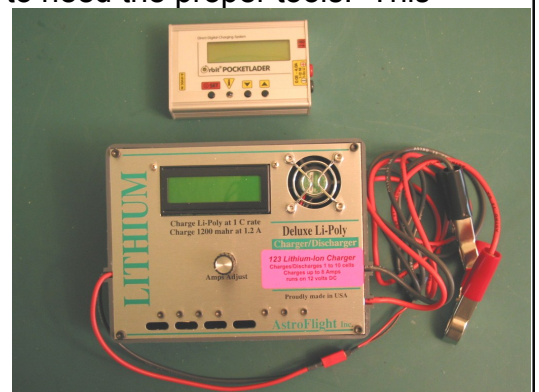
There are any number of places where LiFe battery packs can be purchased. Two reputable suppliers of genuine A123 packs are Radical RC and ElectroDynamics. Radical RC's prices are a bit better, plus there is the advantage of specifying what sort of leads and connectors you want. However, I'd have no qualms about buying A123 battery packs from ElectroDynamics either. I imagine that there are other battery suppliers of A123 packs, but as I've been happy with these 2 places, I haven't really looked further. Tower Hobbies, of course, supplies a version of LiFe battery packs, but as far as I know, they are not made from genuine A123 cells so I'm not familiar with any possible limitations they might have vs. genuine A123 cells.

## The Tools

If you are going to be using A123 battery packs, you are going to need the proper tools. This means Chargers, Balancers and a Battery Pack Tester.

In order to properly charge LiFe battery packs, a charger needs to use the same Constant Current/Constant Voltage algorithm used for LiPo battery packs, but rather than charging the cells to the 4.2v per cell that LiPo cells are charged to, the charger need to charge LiFe battery packs cells to a 3.6v per cell level.

Shown are the two chargers I currently use to charge A123 battery packs. The top charger is an Orbit Pocketlader. It is a multi-chemistry charger, so it can handle any battery pack out



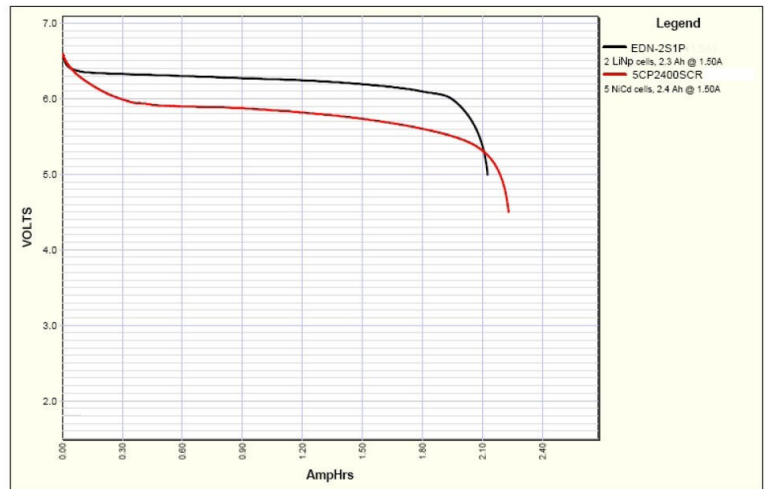


there. Originally this charger would not charge A123 battery packs; however, this charger has the ability to have its firmware updated. So several years ago Orbit Electronics released new firmware that fixed that situation. This is a quality German product that I purchased from Radical RC many years ago and is a fixture in my flight box.

The bottom charger is an AstroFlight Lithium charger. Originally AstroFlight released this charger for LiPo battery packs. Once A123 flight and receiver battery packs started to be used, they re-issued the same charger geared only for A123 battery packs. The only difference between the original LiPo charger and the A123 charger was once again firmware. AstroFlight made available the A123 firmware in the form of an IC chip. All one had to do if you had the LiPo charger was to open it up, remove the chip and replace it with the new one. Bingo, you now had an A123 charger. Rather than buying the AstroFlight A123 charger, I went up to several of the electric forums For Sale sections and found a new in box AstroFlight 109 LiPo charger for \$60 and then purchased the A123 firmware chip. This saved me about a third the cost of a new charger and it works like a charm. The AstroFlight will charge 1 - 10 cells up to 8 amps. It is certainly easy to use. Plug in the battery, adjust the charge level with the single knob and that's it. The charger will let you know when it is finished.

You also need a Battery Pack Tester so you can determine if the battery pack needs to be recharged or not. Above is a discharge graph of an A123 battery pack vs. an equivalent NiCad battery pack:

The A123 curve is on top. Note how flat the discharge curve is, which is good actually but it makes it difficult if not impossible to tell where on that discharge curve you are with a standard ESV (expanded scale voltmeter).



However, not to fear, Electrodynamics came up with an A123 Battery Tester, their EDR-207, that will give you a GO/NO GO battery voltage level that is equivalent to having about 30% charge left in the battery. Here you can see the battery tester with its supplied adapter that will plug directly into the JR node balance connector.

The nice thing about this device is it will not only give you GO/NO GO information but can balance an A123 battery pack or discharge one down to a storage level. So how does it work? After you plug it in, you will see the battery voltage for each of the cells in the battery pack. This tester can be used on A123 Battery packs of up to 6 cells.

Once the battery pack is plugged in all you do is hit the discharge button. This will put a 300ma discharge on the battery pack. For our 2 cell receiver battery pack, the NO GO level is—if after 10 seconds of discharge, any of the cell voltages are equal or below 3.29v – RECHARGE. Above 3.29v per cell – GO FLY. Here is what the 2300ma 2 cell battery pack looks like under the discharge load:

In operation, the light bulb icons next to each cell voltage, blinks when in the discharge mode. As you can see in the picture, each cell is definitely above the 3.29v GO/NO GO level. At the bottom

you can also see what the overall voltage of the battery pack is. This is actually how I received the battery pack in the mail. In actual use out at the field, I typically plug the tester in every couple of flights

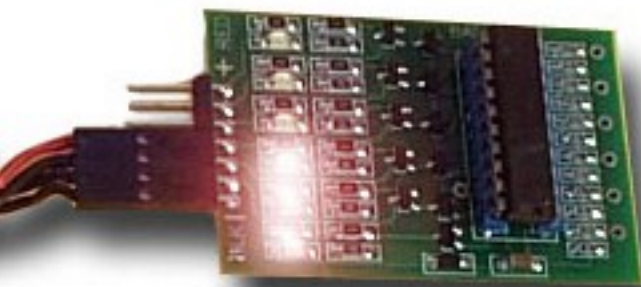




and check the battery condition, just as I do with a standard ESV when I check my models that still have nickel based receiver batteries in them. If charging is needed, the pack is typically ready to go again in 5 – 10 minutes max.

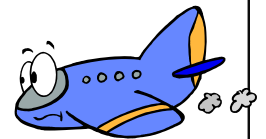
Lastly we come to a balancer. As I've pointed out, the EDR-207 from Electrodynamics can balance A123 cells but a standalone balancer might be more your style. I also have such a balancer, the AstroFlight A123 Blinky.

AstroFlight has been producing this contraption for years now for use with LiPo cells. As with their 109 Lithium charger, the Blinky has been modified for use with A123 cells. It can balance up to a 6 cell A123 battery pack and it quite easy to use. Basically plug it in and watch the blinking lights till they stop. It is designed to be used with the typical WHITE balance connectors, so if you are using the JR Node Balance connector, you will need to use the adaptor cable that came with the EDR-207 tester or make one up.

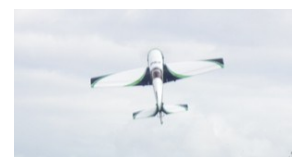


Well, this article came out a bit longer than I thought it would, so next time I'll go through the actual installation and use of the A123 2 cell receiver battery pack. Hopefully everyone hasn't fallen asleep!

---- Rick Hanners



### Buzzard Bash - Last Event





# Safety Corner

Last October 31 was the last day that we had an opportunity to fly at the old field. I hope that some of you took advantage of the weather and did just that.

We will be moving to a new field shortly after many work parties. In the beginning we will not have all the safety barriers up that we now have. **Common sense and courtesy shall be the rule of the day.**

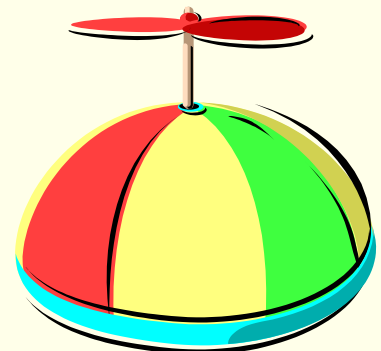
As with the old field flying behind the pits is a no-no. But at the new field it will be an absolute no-no to fly behind the pits. We will now have one of the busiest highways in the State to our backs. If a car or truck has to brake because you fly across the highway in front of them and causes an accident, or heaven forbid that a wayward airplane hits a car, and this causes an accident, I don't even want to speculate what the consequences will be. Enough said for now on this subject.

At the work parties people will be using many tools. The sharp and dangerous types, like chainsaws and weed whackers and such. Just be aware and don't do anything stupid when around people operating them, or if you are the operator be aware where other people are. Remember we talked about situational awareness this is really a good time to hone your skills.

On the lighter side: (copied from an instruction manual)

You gotta love it!

- Don't near to propeller when engine is working.
- Must pay attention to the electric quantity the charge, the electric excessively is low not to fly.
- Do not fly in the crowd top of head.
- Do not use the propeller and spinner already damaged.



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

## Photos for Fun

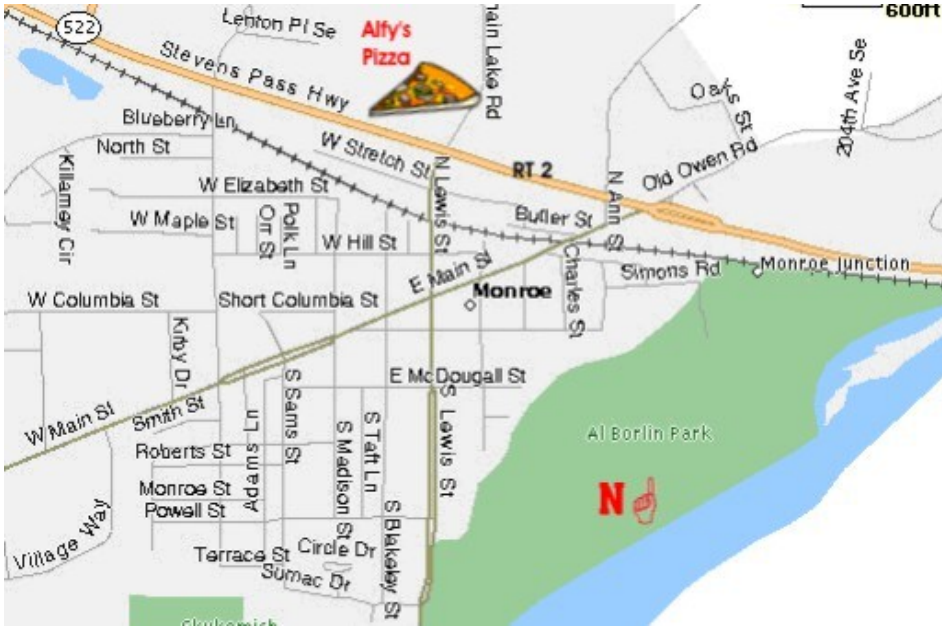


**First Annual Rebuilder's Competition**



Bryan and Ron are this year's winners. Common guys—we're not the only ones with rebuilt planes! We know who you are!!!





# 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 Alf'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.

The map to our new flying field coming soon – the December issue for sure! Check our website <http://www.bbmac.net> for the most current info and directions.

## 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**

November 8	Alf's Pizza
December 13	Alf's Pizza
January 10	Alf's Pizza
February 14	Alf's Pizza
March 12	Alf's Pizza
April 10	Afy's Pizza
May 8	<b>VE Day Club Field</b>

### Our Flying Field

The field is located in Monroe on 168th St SE, just north of Ben Howard Rd along Route 203. 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, November 8, 6:30 PM** at our Alfy's Pizza in Monroe on SR 2 (see page 9).

Program: **Balloon Festival presentation**



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