

DPRG RBNV Chat Record – 8/9/2022

~7:40 pm - general discussion of upcoming events - also Doug mentioning that he'll have 'free stuff and equipment' for our meeting on 27 Aug

Doug Dodgen

7:47 PM

<https://digilent.com/shop/dc-motor-gearbox-1-53-gear-ratio-custom-6v-motor-designed-for-digilent-robot-kits/>

https://digilent.com/reference/media/motor_gearbox/290-008_iq220053x00085r_ds.pdf

Carl Ott

7:49 PM

~7:44 pm - Questions around a bulk purchase of 6v motor parts... Forward questions/ interest to Doug P. Reference the chat record from last week's RBNV and the entry above. If there's enough interest to get to 10 or more and meet in person a bulk order could make sense...

Carl Ott

7:51 PM

Doug D we muted you - you'll need to unmute

Carl Ott

7:58 PM

Here is the open-microphone queue we have so far: Ray Pat Doug D Harold Reminder – please keep the discussion rolling – I have to step aside for an hour or so, back soon... Could somebody please jump in and add notes to the chat, to document time/person/topic? That helps when we post the video and chat to the DPRG web site... about battle bot boats...

<https://www.google.com/search?q=rc+battleship&oq=rc+battleship&aqs=chrome..69i57j0i512l7j0i457i512j0i512.4250j0j7&sourceid=chrome&ie=UTF-8>

Carl Ott

8:00 PM

<https://www.youtube.com/watch?v=dUjaNUDTAiM>

<https://rcwarshipcombat.com/>

RC Warship Combat

Paul Bouchier

8:07 PM

8:04: Ray showing his small robot achieving waypoints in back yard

Carl Ott

8:07 PM

GOLD STAR FOR RAY!

Doug Paradis

8:08 PM

to search RBNV chat records use Google Search (search terms: DPRG RBNV Chat Record <term of interest>)

Paul Bouchier

8:09 PM

Ray showed WT32-SC01 3.5" box he uses as a handheld - it has an ESP32 and a display in it - he uses it as a portable telemetry display

Available from Seed studio. It has a touch screen too. Costs a few tens of \$\$

Doug Paradis

8:12 PM

Ray showed his rover moving between waypoints using BNO055 w/ compass and discusses how he is using BNO055 and the GPS (Ublox M8 neo)

Doug Paradis

8:15 PM

Ray showed a nice touch display he is using with his ep32 WT32-SC01 3.5 from BangGood

Paul Bouchier

8:21 PM

8:19 Pat Caron demo'd his small GPS module talking to an Adafruit Trinket M0.

Doug Paradis

8:23 PM

Pat showed his new GPS and using LED on his microprocessor to flash the number of sat

Paul Bouchier

8:28 PM

8:28 Paul showing rviz-satellite

https://github.com/nobleo/rviz_satellite

Doug Paradis

8:29 PM

Pat showed his new gps attached to his microprocessor, he is using an LED to flash the number of satellites
ed mart

8:35 PM

We can hear u paul

Carl Ott

8:43 PM

Raj showed his FlySky radio giving good options - inexpensive - great range (at least for drones in the sky)

Carl Ott

8:44 PM

Uses ibus for communication - gives great options - e.g. can connect to Arduino ...

Carl Ott

8:46 PM

gives many benefits (e.g., much more robust and range and better joysticks, etc..) vs. the PS2 X controller e.g. like
Carl uses (LynxMotion V4...)

also feeds values of each of 10 channels over ibus into Arduino (or whatever - there are libraries for many
microcontroller libraries for FlySky)

Pat Caron

8:52 PM

I have an update on displaying a GPS track on Google Earth using Karim's KML file

Doug Paradis

8:52 PM

Raj showed his FlySky 10 channel controller that he uses to drive his rover when it isn't in autonomous mode. It uses
IBus a communication protocol often used on drones Plan to use to transfer rover data to home base.

Doug Paradis

8:55 PM

Discussion on radio channels

Raj Prabhakar

8:57 PM

this is my radio https://www.amazon.com/dp/B07Z9YNP7S?psc=1&ref=ppx_yo2ov_dt_b_product_details if anyone is
interested

Carl Ott

9:08 PM

Doug D gave a demo of his Telepresence Robot -> GOLD STAR FOR DOUG D!!!

Doug Paradis

9:09 PM

Doug D. show his telepresence robot that he plans to show at SRS on Aug 27.

Pat Caron

9:12 PM

Does Raj get a gold star?

Carl Ott

9:18 PM

Raj -> DID GET A GOLD STAR! Robot Rolling on the ground!

Pat Caron

9:20 PM

https://developers.google.com/kml/documentation/kml_tut

Doug Paradis

9:21 PM

Pat showed a KML file and how to modify it for a data file.

Doug Paradis

9:30 PM

Raj, you might look at this YouTube video talks about LoRa, WiFi, Cellular bandwidths, and range.

Doug Paradis

9:34 PM

https://www.youtube.com/watch?v=ip_2qwBrQc8

Karim Virani

9:34 PM

https://www.amazon.com/gp/product/B089PTX8S9/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1

No longer available tho

Carl Ott

9:37 PM

Several minutes of discussion of how to get video & telemetry working on a race course over the range of a mile or
more...

Doug Paradis

9:43 PM

Harold showed his ball robot and some servo testing he has in progress.

Carl Ott

9:50 PM

~9:48 pm - discussion on 3D printing options & techniques / temperatures

Raj Prabhakar

9:51 PM

Ender 3 pro for \$100 at Microcenter

<https://www.microcenter.com/site/content/specialoffer3dprinter.aspx>

Harold Pulcher

10:02 PM

<https://youtu.be/o1zXYwglPLY>

https://www.youtube.com/redirect?event=video_description&redir_token=QUFFLUhqbk9ybmp4T2JrMi10enZVem9tWmtLaktkLXY3d3xBQ3Jtc0trcUpPQ3Q2WEVKMjdpemNDQmpZLWILUWtkNFFic1BWUIRwY0xnMXB5VWcxUUxd2k4eUJyXzdMMkJXWWtfVHhoTmJyaXg1b2U4MWJUcE00SzVZcUUydXh5WlpgeTlscDlXXzNlaVRRT3ltLUx2ZXVNTQ&q=https%3A%2F%2Fgithub.com%2Fjyers%2Fmarlin%2Freleases%2F&v=o1zXYwglPLY

Carl Ott

10:03 PM

Thnx Harold - for sharing those links for better firmware for the Ender-3 V2: first video: JyersUI: AWESOME FIRMWARE for Ender-3 V2! Easy Install, New Features!

Pat Caron

10:12 PM

Have a good night, guys. See you next week

Carl Ott

10:18 PM

~10:14pm Paul gave an update on his RTK issue - as noted from last week had trouble getting RTK between RTK fixed and float modes. Believes that EMI in R-Pi is interfering with the low noise amplifier in the RTK. RTK Fixed is 2cm (high precision), float is much lower accuracy. So Fixed mode seems more susceptible to EMC. Now Paul's concern is this - he's moved the RTK antenna away from the electronics box. But now it's closer to his mower's blade motors- will it work when those turn on?

Karim Virani

10:18 PM

Gnite guys

Carl Ott

10:19 PM

Pirate Paul's Compass: <https://media.giphy.com/media/WRvCa3rZISf0waGlx8/giphy.gif>