

# ROTORUA MODEL AIRCRAFT CLUB (INC)

## OCTOBER 2022 NEWSLETTER

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**AOTEAROA  
GAMING  
TRUST**



**Rotorua Trust**  
MŌ TĀTAU KATOA



## Welcome to the September 2022 newsletter

Your scribe has escaped to Brisbane for five weeks to miss Rotorua's weather. From what I hear it's not been that flash. Last month I had a weekend in Hamilton and joined the local club for a fly.



A Few pix of the pits







It was great to catch up with our Cambridge resident flier. He had his camera out and captured these shots of some glider towing. Thanks Brian.



## **Another Arduino Project Completed**

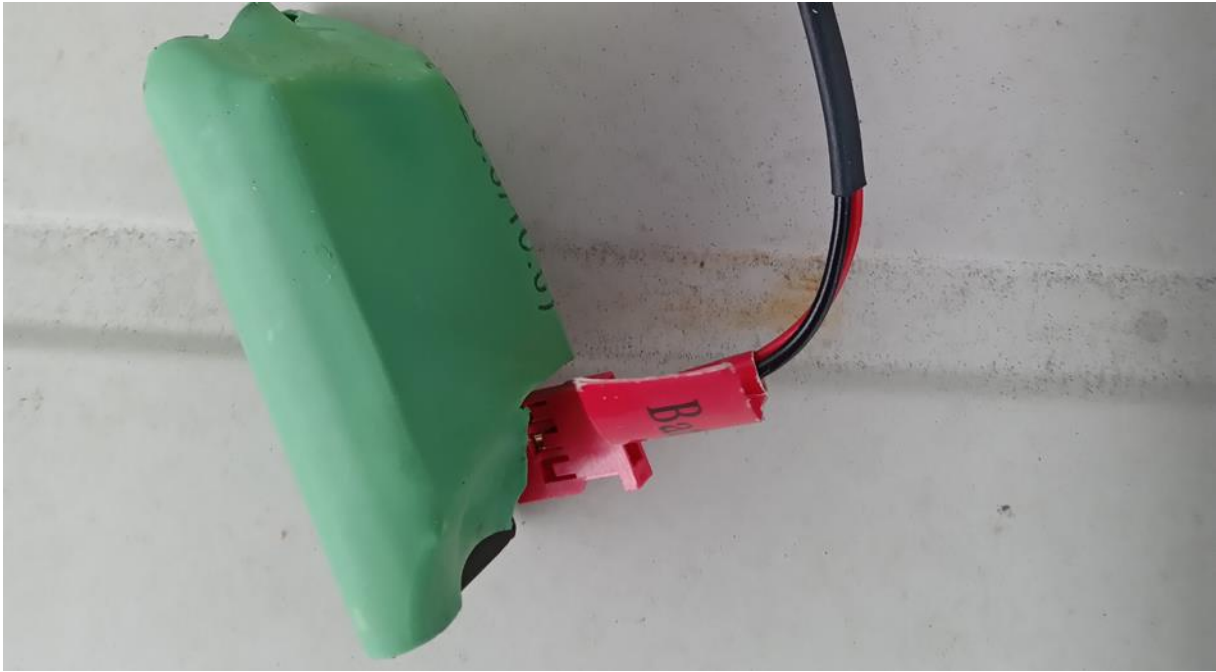
We finally got our Arduino altitude transmitter and receiver completed and trialed. It works by recording the air pressure when turned on then every two seconds measures the air pressure again and compares this with the initial reading and converts this to height above or below the initial reading. This is then transmitted back to the receiver and displayed on the screen. The transmitter is powered off the receiver battery in the model. As it works on 2.4Ghz we initially tried it in a model with a 40Mhz radio. After a series of checks to make sure the 2.4 tx unit wasn't going to play silly buggers with the model receiver it was time to fly. It all went well with no interference however the basic NRF24 transmitter without a power amp has rather limited range and at times the display was not updating. This was not totally unexpected and enough information was received to give us a pretty good idea of our height. Next up we tried it in Dave L's Little Stick with his 2.4 radio and after more checking it all worked again without any interference.

For those interested in the technical details the airborne unit consists of a BMP 280 temperature and pressure sensor connected to an Arduino Nano RF processor.

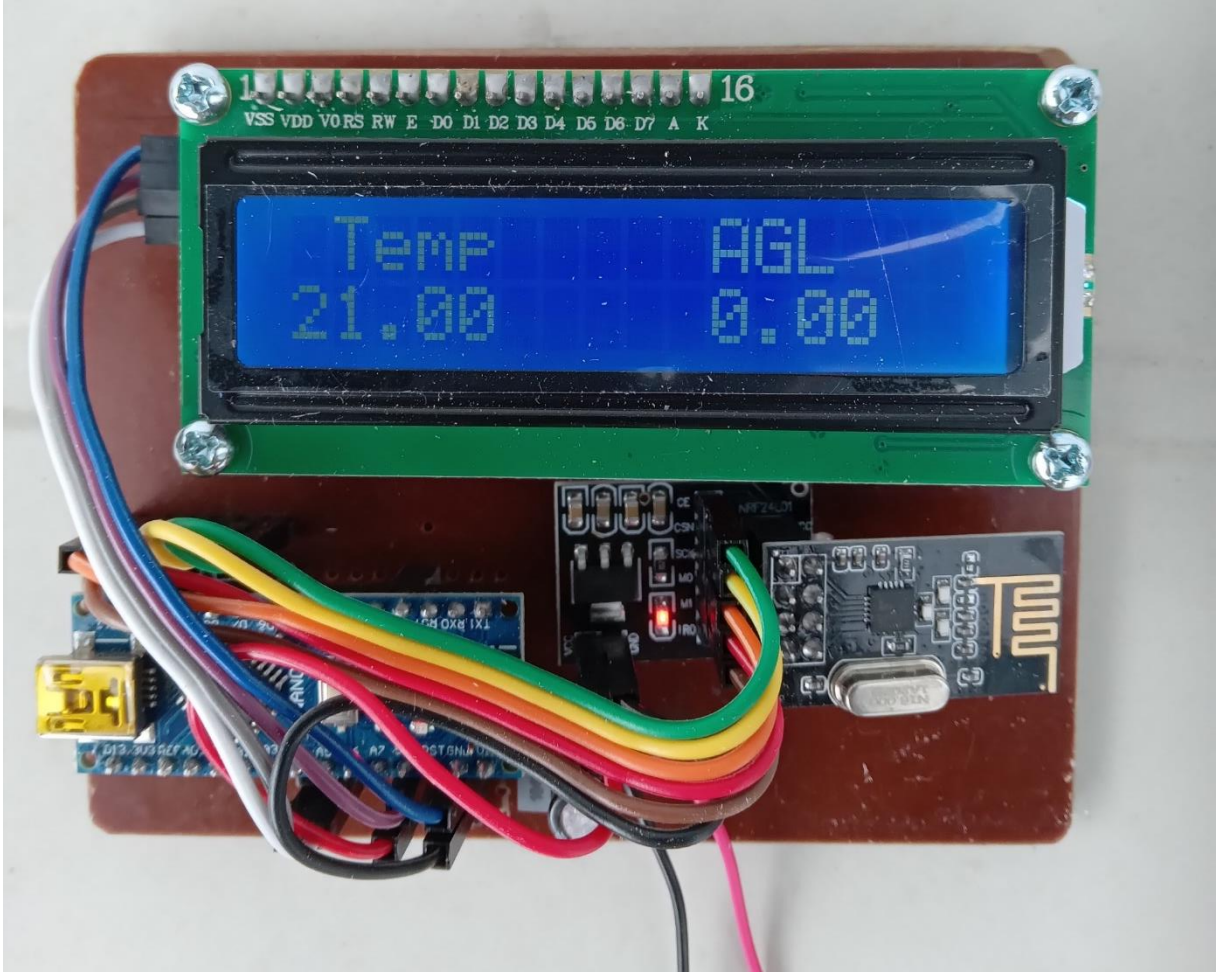
The receiver runs a standard Arduino Nano driving a I2C display. The receiver is a NRF24L01 . We could have used an RF Nano for a simpler physical layout but I didn't have one on hand.

At this stage we are only running one RF channel so this might explain the slow up date at times. The next stage might be to set up some frequency hopping and see if that improves things as we may be getting interference from near by transmitters. On reflection this probably won't work as the Arduinos have a unique ID so shouldn't be interfered with by othet transmitters. May be a grunter tx module might be the answer. Any how its something for me to ponder.



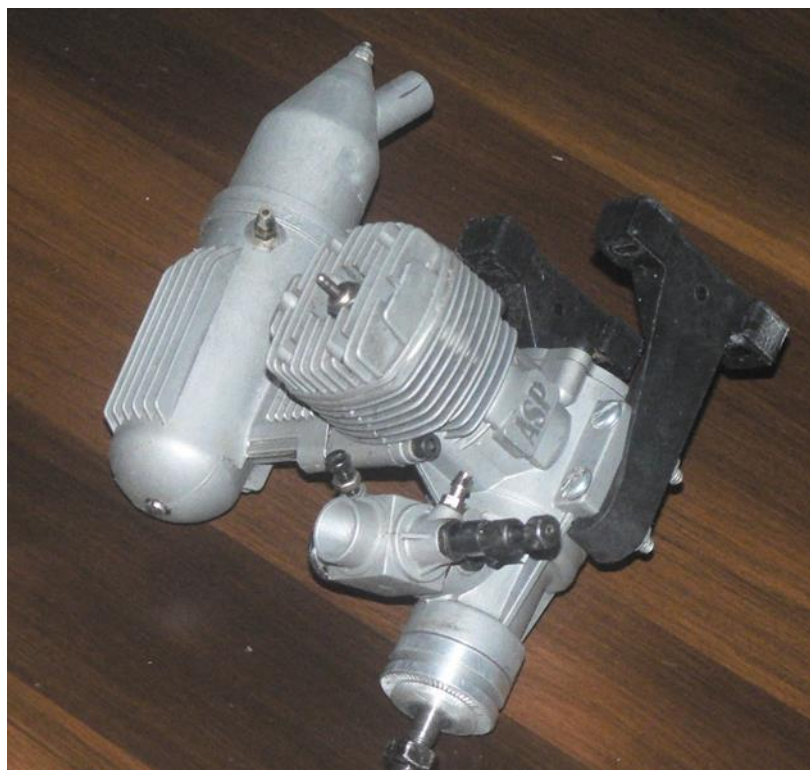


The Pressure sensor and transmitter unit



The ground unit. A bit of a wiring bird's nest however it works.

Last month we showed these pictures of the ex Mike Mc Millan Sky Raider undergoing restoration.



It has now been completed and test flown by Dave L and John R last month.



We can report it flew very well and is now ready for sale complete with all servos and near new ASP 46 engine. Just install your receiver and battery pack and go flying.

Contact Dave Little 027 784 8773



The Restored **SKY RAIDER** ready for a new owner.



## Northern North Island Vintage RC Rally dates

The following dates have been set for Vintage Rallies. The format is to be a one-day event on a Saturday in which all or any classes may be flown. NDC events for that month are in italics. NDC events for 2023 are based on this year's schedule (tbc).

In the event of unfavourable flying conditions on the first date, a decision will be made on the Thursday evening before and an email notice of postponement to the alternate date will be sent out.

Flying from 9am – 3:30pm. Registration fee of just \$5.00

Sept 10th JR Airsail, Native Rd. Pukekawa alternate Sept 17 th  
NDC: *Vint ½ A Tex., Vint A Tex., Sport Cabin IC and E Tex.*

Oct 8th Tuakau MAC, Anderson Redoubt Rd Tuakau  
alternate Oct 15 th  
*Vint. Open Tex., Class. ½ E Tex., Class. E Tex.*

Nov 5 th Ngatea Blackfeet alternate Nov 12 th  
*Vint. ½ E Tex., Vint. E Rubber Tex., Class. IC Duration*

Dec No rallies this month

Jan 2-6 th 2023 Nationals at Carterton (dates tbc)

*Class. ½ E Tex., Class. E Tex., Class. Precision*

Feb 4 th Ngatea Blackfeet Flyers alternate Feb 11th  
*Vint. ½ A Tex., Vint. E Rubber Tex., Class. IC Duration*

March 4 th JR Airsail Native Rd Pukekawa alternate March 11 th  
*Vint. IC Duration, Vint. E Duration, Class. E Duration*

April 8 th Tuakau MAC alternate April 15 th

*Vint. ½ E Tex., Vint. A Tex., Vint. E Tex.*

May 6 th NSMAC, Green Rd Dairy Flat alternate May 13 th  
*Scale Texaco, Vint. Open Tex.*

Contact: Don Mossop (274940854) or Wayne Cartwright (0221534679)

## **A WORD FROM THE PRESIDENT**

My report for this month is I would have to say pretty much a mirror image of last month's. With the extremely variable weather, and regularity of strong westerly winds, not a lot of flying has been done. The westerlies don't bode well for enjoyable training sessions either with the turbulence coming off the western hills, so those guys have not missed much, and I know they are keenly looking forward to better times! However if it is too rumpy to fly we can always do the mowing, as many of you with lawns would know the growth is starting to ramp up.

The coffee sessions are good for a “default” catchup on Wednesdays anyway. Some flying that did happen....



John giving Mike's restored Skyraider the final engine run up and controls check before takeoff.



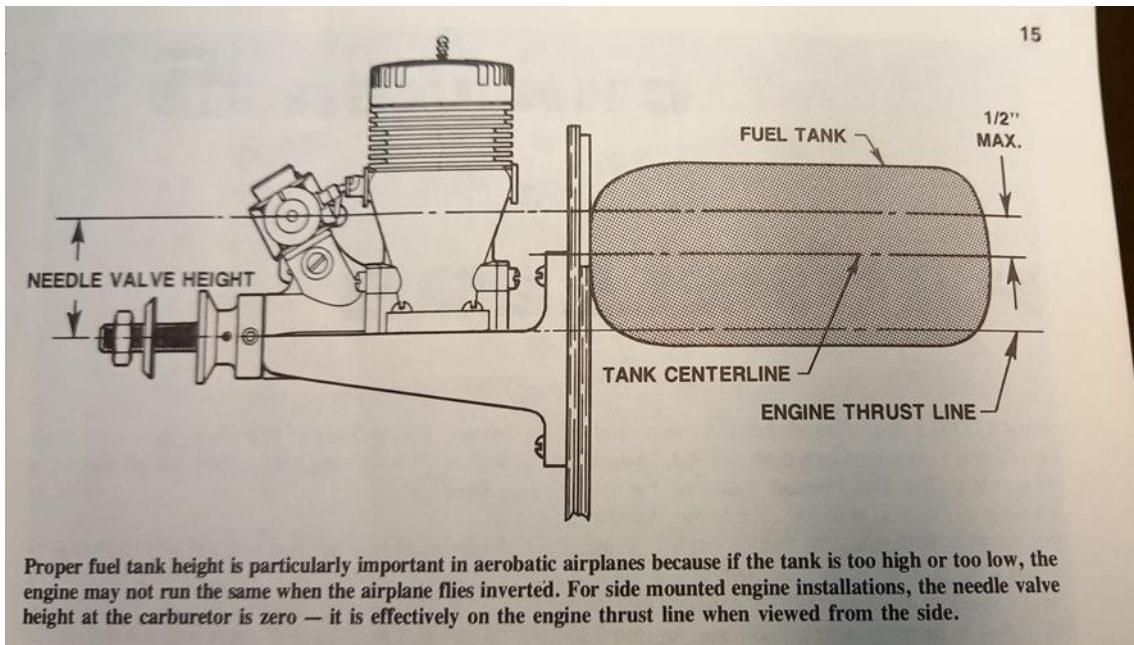


Once trimmed up she flew like a dream, the landing was perfect too!



Some recent flyers, back in one piece!  
Time for the random stuff that can sometimes come in handy.....

MODEL AIRPLANE ENGINE SIZE CONVERSION CHART			
.049 cu. in. = .8 cc	.61 cu. in. = 10.0 cc		
.09 cu. in. = 1.5 cc	.80 cu. in. = 13.0 cc		
.15 cu. in. = 2.5 cc	.91 cu. in. = 14.9 cc		
.19 cu. in. = 3.1 cc	1.20 cu. in. = 20.0 cc		
.21 cu. in. = 3.5 cc	1.50 cu. in. = 25.0 cc		
.25 cu. in. = 4.1 cc	1.60 cu. in. = 26.2 cc		
.29 cu. in. = 4.8 cc	1.80 cu. in. = 30.0 cc		
.35 cu. in. = 5.7 cc	2.00 cu. in. = 32.8 cc		
.40 cu. in. = 6.5 cc	2.40 cu. in. = 39.3 cc		
.46 cu. in. = 7.5 cc	2.70 cu. in. = 44.3 cc		
.50 cu. in. = 8.2 cc	3.00 cu. in. = 49.2 cc		
(conversion factors: 1 cu. in. = 16.3934 cc, or .061 cu. in. = 1 cc)			



That's all from me this month.

## FOR SALE

- 10 x 6 & 9 x 6 props
- 2 ¼ in spinner
- 5 cell 2300 Nimh battery
- Servos
- Battery charger
- Fr Sky 7ch Fasst receivers
- 5 cell LED battery monitor
- Glow plugs
- 4-40 threaded rods
- Ali tube







## **FIELD BOX**

Includes

- Starter
- Power panel
- Glow connector
- Fuel pump

For details of any of the above items contact  
Contact Dave Little 027 784 8773



**Subs for the  
2022/23  
year**

		<b>MFNZ</b>	<b>TOTAL</b>
<b>Senior</b>	<b>\$115</b>	<b>\$95</b>	<b>\$210</b>
<b>Junior</b>	<b>\$45</b>	<b>\$30</b>	<b>\$75</b>
<b>Associate</b>	<b>\$115</b>		<b>\$115</b>
<b>(Member of another club with current MFNZ membership)</b>			
<b>Social (non flying)</b>	<b>\$50</b>	<b>-</b>	<b>\$50</b>

**Payment can be made to ANZ account # 116102\_0913131\_11 Include your name in the details**

## **Coming Events**

October 16	Morrinsville indoor F/F and Scale event
October 15/16	R/C Scale Warbirds Waharoa
November 5	Ngatea Vintage Meeting
November 6	Combat & T/R Tauranga
January 28/29	Waikato C/L champs Mercer
February 4	Ngatea Vintage Meeting
February 11	Auckland F/F Gala Proctor Rd