



WATTS 2021-09

Year 91 + 09m

Monthly Newsletter of the Pretoria Amateur Radio Club
Maandelikse Nuusbrieff van die Pretoria Amateur Radio Klub

✉ PARC, PO Box 73696, Lynnwood Ridge 0040, RSA

🌐 <http://www.parc.org.za> zs6pta@zs6pta.org.za



Bulletins : 145.725 MHz : Sundays from 08h45 / Sondae vanaf 08h45

Relays: 1.840, 3.700, 7.066, 10.135, 14.235, 51.400, 438.825, 1297 MHz and Echolink. Activated frequencies are announced prior to bulletins

Swapshop : 2m and 7.066 MHz live on-air after bulletins

Bulletin repeats on Mondays / herhalings op Maandae : 2m 19h45



Tydens die afgelope snuffelmark van die Pretoria Amateur Radioklub op 28 Augustus 2021, het verskeie PARK lede, en lede van ander klubs die geleentheid bygewoon. Van links na regs is Danie Terblanche ZR6AGB, Pierre Smit ZS6PS, Corlie Smit ZS6CHS, Irene Myburgh ZS6IEA en Pieter Myburgh ZS6PAM. Hierdie uitgawe van Watts is vol gelaai met 9 bladsye fotos van gaste en verkopers. Meer op bladsye 6 - 14

In This Issue / In Hierdie Uitgawe

Birthdays/Verjaarsdae ; Joys & Sorrows/Lief en Leed	p 2
PARC 2021 AGM Announcement & Forms.....	P 2-3
PARC Bulletin Roster ; Club Fees	p 4
Fleamarket Dates 2021 / Snuffelmark Datums 2021.....	P 4
Dagboek van Gebeure / PARC Contest Participation.....	p 5
PARC Fleamarket / PARK Snuffelmark.....	p 6-14
Nico's Electronic Articles.....	p 15-16
The uncertain future of Ham Radio.....	p 17
Advertisements and HF Propagation.....	p 17

PARC Committee Meeting /
PARK Komitee Vergadering

Club Committee Meeting :

The date of the next Meeting for the 2021 PARC Committee will be announced on the Committee WhatsApp Group

Birthdays and Anniversaries / Verjaarsdae en Huweliks Herdenkings

Member's Birthdays September 2021 / Lede Verjaarsdae September 2021

02 Vernon Fryer ZS6AIG
11 Johan Lehman ZS6JPL
13 Zack Pienaar ZR6ZAK
20 Hugo Pretorius ZS6HP
21 Johan de Bruyn ZS6JHB
26 Pieter Malan ZS6OP

26 Jacques Snyman ZS6QS
26 Graham Reid ZS6GJR
27 Ryan Gibson ZS6GGR
28 Jakes Kruger ZS6JLK
28 Irene Myburgh ZS6IEA

Spouse's September 2021 / Gades September

16 Anelize, gade van De Jager Burger ZS6ZO
27 Liezel, gade van Sybie van der Spuy ZS6SY
28 Irene ZS6IEA, gade van Pieter Myburgh ZS6PAM

Anniversaries September 2021 / Herdenkings September 2021

02 Sarah and Elias Tibane ZR6TT
03 Selma and Joseph Katzman ZS6TB
03 Sanette en Dennis van Schalkwyk ZR6JET
20 Corrie en Johan de Bruyn ZS6JHB
25 Aida en Hugo Pretorius ZS6HP
27 Rika en Gideon van der Merwe ZS6GJV
28 Jessica en Benjamin Greyling ZS6YVC
28 Retha en Roy Newton ZS6XN
28 Erika en Jan Pienaar ZS6OB

Member's Birthdays October 2021 / Lede Verjaarsdae Oktober 2021

01 Evan Seligmann ZS6ELI
02 Andre van Tonder (Erelid) ZS6BRC
02 Hans-Peter Knoepfler ZS6AJS
06 Danny Lieberberg ZS6AW
09 Ed Willers ZS6UT
10 Roy Alexander ZS6MI

16 Nico Michael ZS6BVR
18 Marcel van Wyk ZS6MRM
22 Johannes Strydom ZS6ZZZ
25 Gawie Marais ZS6GJM
30 Andre Coetzee ZS6GCA
31 Pieter Myburgh ZS6PAM

Spouse's October 2021 / Oktober 2021

01 Geraldine, gade van Jurie Ferreira ZS6JFE
04 Lukas, gade van Rita Schroder ZS6SLR
12 Juanita, gade van Ryan Gibson ZS6GGR
14 Wilma, gade van Nic Louw ZS6NWL
21 Louisa, gade van Alméro Du Pisani ZS6LDP
28 Sanette, gade, van Des van Schalkwyk, ZR6JET
30 Cindy, gade van Marcel van Wyk ZS6MRM

Anniversaries October 2021 / Herdenkings Oktober 2021

09 Annatjie en Pieter Fourie ZS6CN
13 Wilma en Nicolaas Louw ZS6NWL
15 Annalize en De Jager Burger ZS6ZO
29 Nicolene en Cornelius Heydenrich ZS4CFH



PRETORIA AMATEUR RADIO CLUB
91ST ANNUAL GENERAL MEETING
Saturday, 25th September 2021
From 13h00 at the Pretoria Old Motor Club

PRETORIA AMATEUR RADIO KLUB
91^{STE} ALGEMENE JAARVERGADERING
Saterdag, 25^{ste} September 2021
Vanaf 13h00 by die Pretoria Ou Motor Klub



PARC AGM: PROXY & NOMINATION FORMS PARK AJV: VOLMAG EN NOMINASIEVORMS



91st ANNUAL GENERAL MEETING 91^{ste} ALGEMENE JAARVERGADERING Pretoria Amateur Radio Club



**Pretoria Old Motor Club
Keuning Str. Silverton**

Venue

**Saturday 25 September 2021
Time : 13h00
Agenda : To be published**

Plek

**Saterdag 25 September 2021
Tyd : 13h00
Agenda : Sal gepubliseer word**

NB

Nominations awaited. Latest acceptance by 12h30 on 25 September 2021
Nominasies word afgewag. Laatste indiening teen 12h30 op 25 September 2021

PROXY Form (cut out) || VOLMAG Vorm (knip uit)

Only paid-up members may submit proxies || Slegs opbetaalde lede mag volmagte indien

I/Ekbeing ZS/R/U..... give/geeZS/R/U.....

Proxy to vote on my behalf at the 2021 PARC AGM

Volmag om namens my te stem tydens die 2021 PARK AJV Geteken/Signed.....

NOMINATION Form (cut out) || NOMINASIE Vorm (knip uit)

Committee Nominations must be in writing and signed by both the Proposer and Nominee and be handed in on **25 September 2021 at 12h30 at the latest**. Use the Nomination Form below. The Proposer and Nominee must both be paid-up members.

Komitee Nominasies moet skriftelik wees en deur beide die Voorsteller en Voorgestelde geteken word en moet **op laaste teen 12h30 op 25 September 2021** ingehandig word. Gebruik die Nominasievorm hieronder. Beide Voorsteller en Voorgestelde moet opbetaalde lede wees.

Proposer: ZS Signature:
Voorsteller:.....ZR..... Handtekening:.....
ZU

NOMINEE GENOMINEERDE	CALLSIGN ROEPSEIN	NOMINATION ACCEPTED NOMINASIE AANVAAR
1		
2		
3		
4		

PARC Bulletin Roster / PARK Bulletin Rooster

PARC Bulletins are presented on Sunday mornings at approximately 08h45, after the SARL Bulletins in English and Afrikaans, from 08h15. The Bulletin Presenters for the following two months are presented below. Please do contact the applicable presenter beforehand if you wish to make a contribution to the Bulletin. PARC Bulletins are broadcast on the 2-meter repeater on 145.725 MHz, and 70 cm on 438.825 and 439.025 MHz. Relays are done on 7.060 MHz by Hans Kappetijn ZS6KR and on Echolink by Johan Lehman ZS6JPL. A re-broadcast of the Bulletin is done the following Monday evening at 19h45 by Hans ZS6KR.

PARK Bulletins word op Sondag oggende aangebied om 08h45, na die SARL Bulletins in Engels en Afrikaans, vanaf 08h15. The Bulletin aanbieders vir die volgende twee maande word onder aangedui. Kontak gerus die toepaslike Bulletin leser indien u 'n bydrae tot die Bulletin wil maak. PARK Bulletins word uitgesaai op die 2-meter herhaler op 145.725 MHz, en 70cm op 438.825 en 439.025 MHz. Herleidings word gedoen op 7.060 MHz deur Hans Kappetijn ZS6KR, en op Echolink deur Johan Lehman ZS6JPL. 'n Heruitsending van die Bulletin geskied die opvolgende Maandag aand om 19h45, en word behartig deur Hans ZS6KR.

PARC Bulletin Presenters : August 2021 - December 2021			
Date	Presenter	Date	Presenter
5 September 2021	Alméro Du Pisani ZS6LDP	24 October 2021	Albert Schreuder ZS6SE
12 September 2021	Johan de Bruyn ZS6JHB	31 October 2021	Alméro Du Pisani ZS6LDP
19 September 2021	Louis de Wet ZS6SK	7 November 2021	Johan de Bruyn ZS6JHB
26 September 2021	Albert Schreuder ZS6SE	14 November 2021	Louis de Wet ZS6SK
3 October 2021	Alméro Du Pisani ZS6LDP	21 November 2021	Albert Schreuder ZS6SE
10 October 2021	Johan de Bruyn ZS6JHB	28 November 2021	Alméro Du Pisani ZS6LDP
17 October 2021	Louis de Wet ZS6SK	5 December 2021	Johan de Bruyn ZS6JHB

PARC Membership Fees / PARK Ledegelde

For the 2020-2021 year, there will be no increases in Club Membership fees.

Club Fees therefore remain at R160 for Ordinary Members, and R60 for Pensioners and Spouse. Vir die 2020-2021 jaar sal daar geen toenames in die Klub Lidmaatskap gelde wees nie. Dus bly die gelde op R160 vir Gewone Lede, en R60 vir Pensionarisse en Gade.

PARC SUBS : PARK LEDEGELD : FROM / VANAF : 2020-10-31			
Bank	First National Bank	Ordinary Members / Gewone Lede : R160 Spouses / Pensioners : R60	Your call sign must appear as statement text!
Branch Code	25 20 45		
Account No	546 000 426 73		
Please remit your subs in time to our Treasurer, or pay per transfer into the PARC account Betaal asb. u ledegelde betyds aan ons Tesourier, of betaal per oorpasing in die PARC rekening			

Please Note : If your Club fees are not paid up to date, birthday details cannot be displayed in Watts

FLEA MARKET DATES / SNUFFELMARK DATUMS

PARC / PARK: 4 December

East Rand: 30 October

West Rand: 27 November

For more information contact Alméro Du Pisani: 083-938-8955

Diary of Contests & Events / Dagboek van Kompetisies en Gebeure

Contests and Events - September 2021 / Kompetisies en Gebeure - September 2021 (UTC Times)	
04	CWops CW Open Contest: 00h00Z - 23h59Z
04 - 05	Region 1 Field Day SSB
11 - 12	SARL National Field Day
11 - 12	WAE DX Contest, SSB: 00h00Z - 23h59Z
12	North American Sprint, CW: 00h00Z - 04h00Z
18	SARL VHF/UHF Digital Contest (6m): 05h00Z - 07h00Z
18	SARL VHF/UHF Digital Contest (2m): 07h00Z - 09h00Z
18	SARL VHF/UHF Digital Contest (70cm): 09h00Z - 11h00Z
19	SARL VHF/UHF Digital Contest (6m): 05h00Z - 07h00Z
19	SARL VHF/UHF Digital Contest (2m): 07h00Z - 09h00Z
19	SARL VHF/UHF Digital Contest (70cm): 09h00Z - 11h00Z
18 - 19	Scandinavian Activity Contest, CW: 12h00Z - 12h00Z
18 - 19	SRT HF Contest SSB: 13h00Z - 13h00Z
24	ZS SOTA Spring Activity Day / Heritage Day / National Braai Day
25	PARC ANNUAL GENERAL MEETING: From 13h00
25	PARK ALGEMENE JAARVERGADERING: Vanaf 13h00
25 - 26	CQ Worldwide DX Contest, RTTY
Contests and Events - October 2021 / Kompetisies en Gebeure - Oktober 2021 (UTC Times)	
02 - 03	Antique Wireless Association: QSO Party
02 - 03	Oceana DX Contest, Phone: 08h00Z - 08h00Z
03	German Telegraphy Contest: 07h00Z - 09h59Z
07	SARL 80m QSO Party: 17h00Z - 20h00Z
09 - 10	Oceania DX Contest, CW: 08h00Z - 08h00Z
09 - 10	Scandinavian Activity Contes, SSB: 12h00Z - 12h00Z
10	10-10 International Day Sprint: 00h01Z - 23h59Z
16	CQ Hou Koers
16 - 17	JOTA
16 - 17	10-10 International Fall Contest, CW: 00h01Z - 23h59Z
16 - 17	Worked all Germany Contest: 15h00Z - 14h59Z
23	October Radio Amateur Examination
23	SARL 40m Grid Square Sprint
23 - 24	ARRL EME Contest: 00h00Z - 23h59Z
23 - 24	UK/EI DX Contest, SSB: 12h00Z - 12h00Z
24	North American SSB Sprint Contest: 00h00Z - 04h00Z
30 - 31	CQ Worldwide DX Contest, SSB: 00h00Z - 24h00Z
The Pretoria Amateur Radio Club does not accept responsibility for the accuracy of contest details listed above. For verification and more information, please visit the SARL website, www.sarl.org.za , as well as the WA7BNM international contest calendar at the following website: http://hornucopia.com	

Other eventful days in October 2021	
01	Every year on the first Friday of October the world celebrates the World Smile Day . The possibility of World Smile Day was authored and started by Harvey Ball who was a business craftsman from Worcester in Massachusetts. He is known to have made the Smiley Face in the year 1963. In 1999 the first World Smile Day was held and had become the tradition every year since.
04	The United Nations has designated the first Monday of October of every year as World Habitat Day . The purpose of World Habitat Day is to reflect on the state of our towns and cities, and on the basic right of all to adequate shelter. It is also intended to remind the world that we all have the power and the responsibility to shape the future of our cities and towns. World Habitat Day was established in 1985 by the United Nations General Assembly through Resolution 40/202, and was first celebrated in 1986. Each year, World Habitat Day takes on a new theme to bring attention to UN-Habitat's mandate to promote sustainable development policies that ensure adequate shelter for all. This World Habitat Day will focus on promoting all levels of government and all relevant stakeholders to reflect on how to implement concrete initiatives to ensure adequate and affordable housing in the context of the implementation of the New Urban Agenda at all levels, as well as the achievement of the Sustainable Development Goals.

PARK Snuffelmark / PARC Fleamarket

Die Pretoria Amateur Radioklub het die lente snuffelmark op die 28ste Augustus by die gebruiklike Pretoria ou Motorklub gehou. Die opkoms was baie goed, met 85 besoekers. PARK wil graag vir Alméro Du Pisani ZS6LDP bedank vir die reëlings van die geleentheid, Johan ZS6JHB en Corrie de Bruyn vir die voorberei en verkope van worsrolle, en Louis de Wet ZS6SK vir die covid monitering van ons gaste. Die volgende 10 bladsye is vol gepak met fotos!



Corrie en Johan ZS6JHB druk besig om worsrolle voor te berei



Alméro Du Pisani ZS6LDP by sy verkooptafel



Pierre Holtzhausen ZS6PJH en Theo Bresler ZS6TVB, ou vriende kuier lekker saam



Vernon Fryer ZS6AIG en seun Peter



Thobile Koni ZS6TKO and Nico Michael ZS6BVR



Richard Peer ZS6UK browsing through the tables



Hans Kappetijn ZS6KR by sy gebruiklike tafel druk besig met verkope



Johan Lehmann ZS6JPL by sy tafel met 'n groot verskeidenheid instrumente en kables



Linda Lessing ZS6LMC met 'n wye verskeidenheid antennas en draagbare senders



Magda ZS6MVW en Pieter ZS6PVW van Wyk met hul gebruiklike antennas te koop



AJ Jacobs ZS6AJ se tafel met 'n wye verskeidenheid elektronika projekte te koop
Onder volg 'n reeks fotos van verskeie verkopers:





Jaco Nieuwenhuis ZS6JLN en kinders, Mario Mangiagalli ZS6TAN en JJ Snyders ZS6JSJ en gade





Old friends Nico Michael ZS6BVR and Louis de Wet ZS6SK

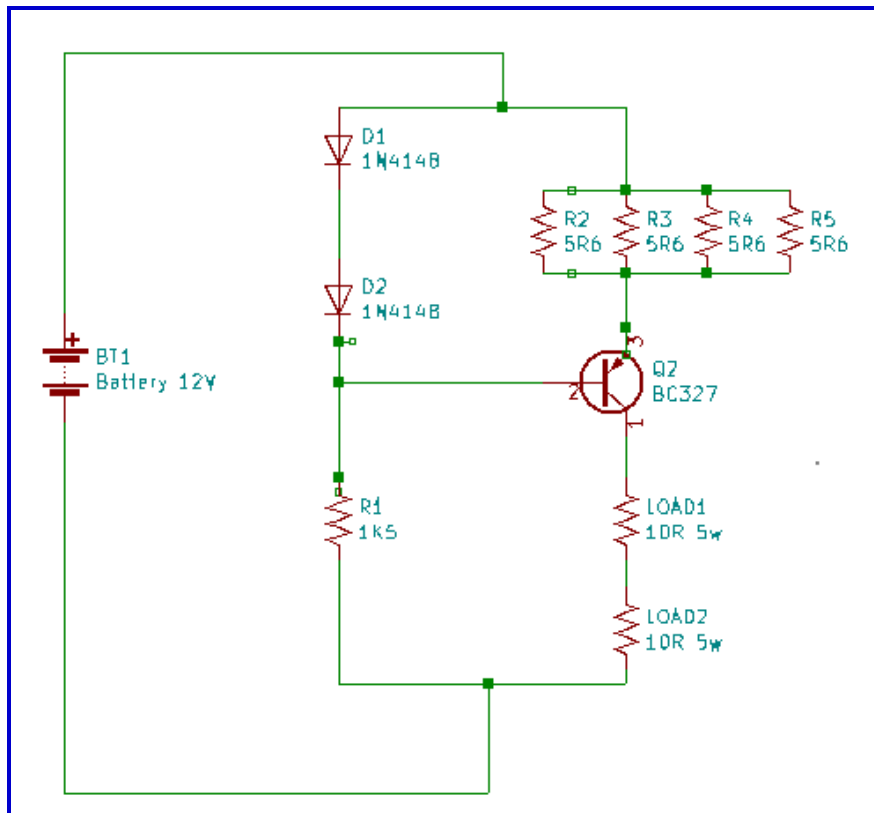


Nico Michael ZS6BVR with Louis and Theresa de Wet in 1982 holding the Yagi of Louis de Wet ZR6AA, late father of Louis ZS6SK. We are getting old...

Hi there:

This is Nico Michael ZS6BVR, I will be contributing a series of articles on Electronics. I have an Electronics course that I give my customers however I have published the Labs online with Experiments for my students to do. From this I will take two labs every month one at a lower level for beginners and a more advanced one. Louis de Wet ZS6SK will be choosing the labs to publish here.

The 0.5A Current Limiter



This is a simple circuit we are biasing a PNP transistor with 1.4 Volt and have a 1.4 Ohm Emitter resistor this will limit the Collector Current travelling through the 50hm Load Resistance

The High Current Limiter 6A

Here Transistor Q1 provides negative feedback to Transistor Q2 limiting the current

The value of R2 emitter resistor (2OHM) will determine the current by setting the amount of negative feedback.

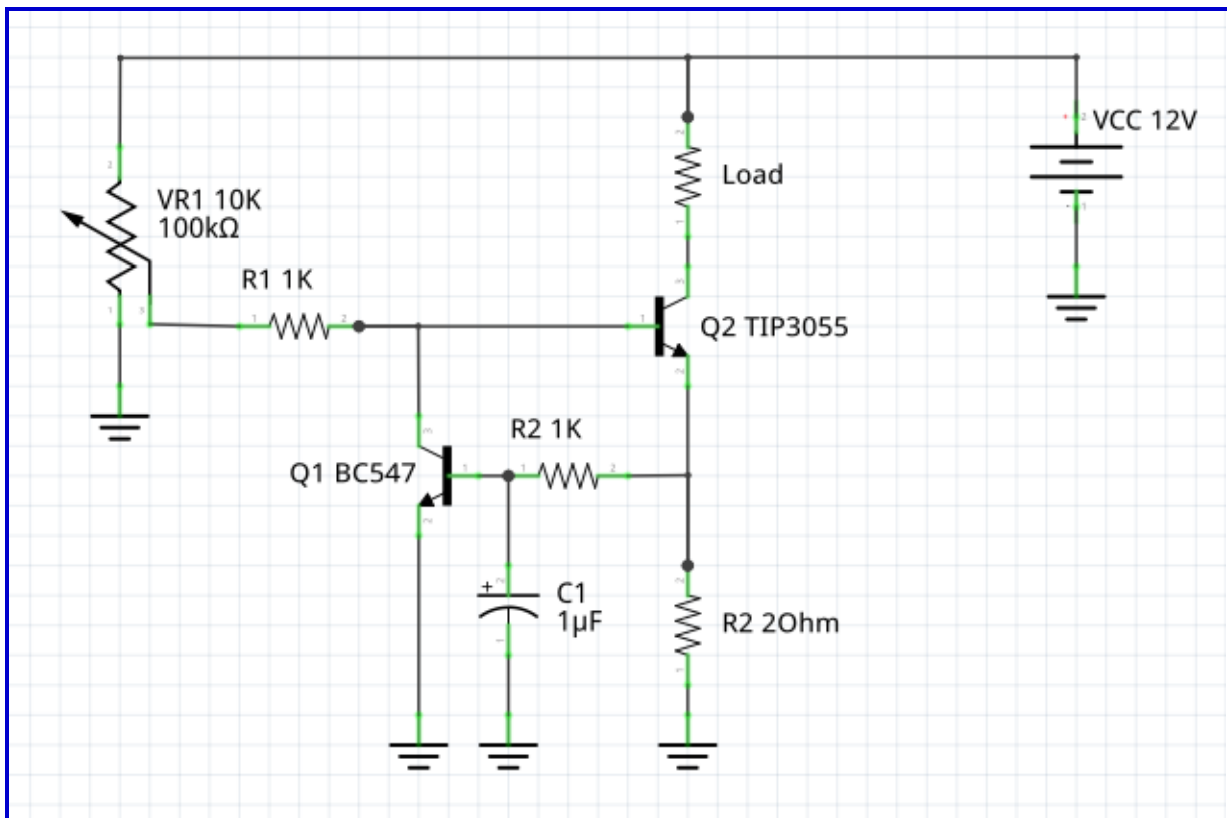
$$R2=0.6V/0.3A=2 \text{ Ohm}$$

$$R2=0.6V/0.6A=1 \text{ Ohm}$$

$$R2=0.6V/3A=0.2 \text{ Ohm}$$

$$R2=0.6V/6A=0.1 \text{ Ohm}$$

You can replace the 1K resistor in series with the base of transistor Q1 with a smaller one and a variable resistor this will allow you to vary the current limit.

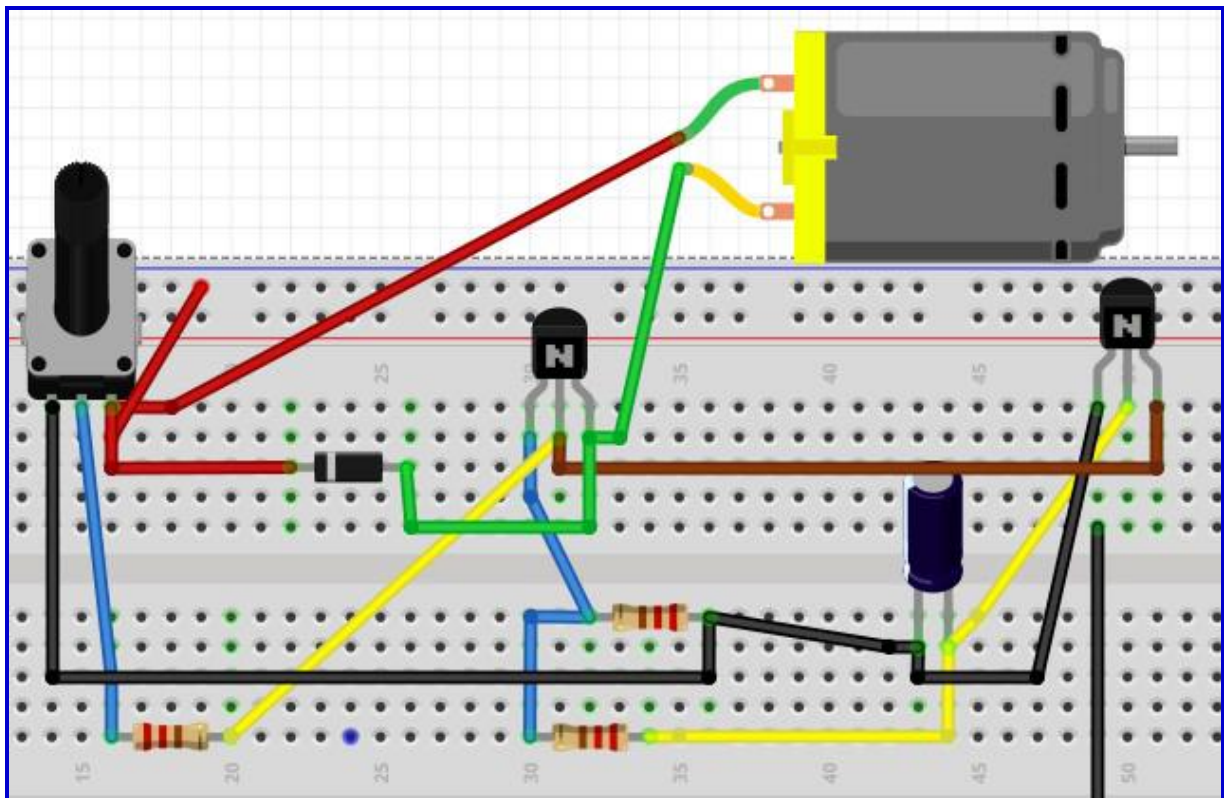


Breadboarding this circuit with smaller components to control a small 6V motor

By using BC547 transistors for transistors Q1 and Q2

Your current limit will be 300mA

You do need to put a reversed biased diode across the motor to protect Q2 from the back EMF of the motor



In next Month's Watts: The uncertain future of Ham Radio.

A recent *link to an article received from Johan Lehmann ZS6JPL discusses how software defined radio and cheap hardware is potentially shaking up a hobby long associated with engineering. Watts will provide a condensed overview of this article written by Julianne Pepitone. Below follows a copy of the introduction of this article:

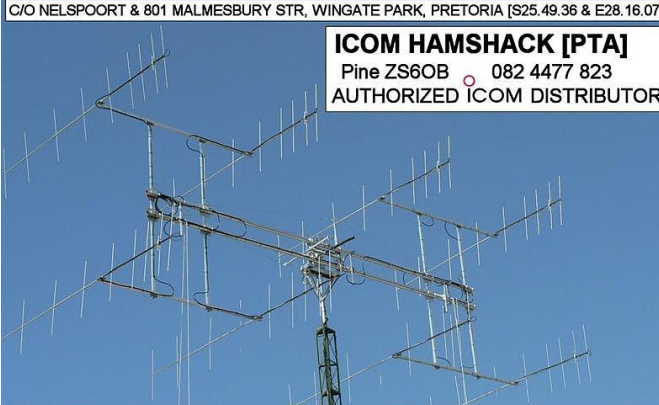
Will the amateur airwaves fall silent? Since the dawn of radio, amateur operators—hams—have transmitted on tenaciously guarded slices of spectrum. Electronic engineering has benefited tremendously from their activity, from the level of the individual engineer to the entire field. But the rise of the Internet in the 1990s, with its ability to easily connect billions of people, captured the attention of many potential hams. Now, with time taking its toll on the ranks of operators, new technologies offer opportunities to revitalize amateur radio, even if in a form that previous generations might not recognize.

The number of U.S. amateur licenses has held at an anemic 1 percent annual growth for the past few years, with about 7,000 new licensees added every year for a total of 755,430 in 2018. The U.S. Federal Communications Commission doesn't track demographic data of operators, but anecdotally, white men in their 60s and 70s make up much of the population. As these baby boomers age out, the fear is that there are too few young people to sustain the hobby.

*See: <https://spectrum.ieee.org/the-uncertain-future-of-ham-radio>

C/O NELSPOORT & 801 MALMESBURY STR, WINGATE PARK, PRETORIA [S25.49.36 & E28.16.07]

ICOM HAMSHACK [PTA]
Pine ZS6OB 082 4477 823
AUTHORIZED ICOM DISTRIBUTOR



FOR ALL YOUR ICOM PRODUCTS & ACCESSORIES
SPECIALLY MANUFACTURED VHF/UHF EX60B ANTENNA SYSTEMS FOR:
EME, TROPO, MS, REPEATER & SATELITE SYSTEMS

QRV Services offers the following expertise:

- General electronic measuring and industrial equipment repairs
- Small-scale design and manufacturing
- Precise frequency and power calibration
- Technical writing
- 3rd Party scrutiny of projects and documents
- MFJ 259/69 Analyzer repairs and calibration
- Ham radio and solid-state amplifier repairs
- Valuation of ham estates and their disposal.

Products:

- Legal limit 40m dipole traps
- Linear power supply O.V. protection kits
- 13,8V 45A DC switching supplies
- 30A DC Anderson Power Poles
- Connectors RF and Audio
- Plug-in triple sequential industrial timers

[Contact Hans at 012-333-2612](tel:012-333-2612) or [072-204-3991](tel:072-204-3991)