

## Wow! Never been so active?

Members of Thurrock Acorns receive helpful email reminders of all the activities we have planned. The diary of events is on the website but these timely emails help nudge members to take part. Many thanks to Gordon, M0WJL, for setting up these reminders. If you are not already on the mailing list then join Acorns to get on the mailing list and not miss any of the reminders to take part in club events.



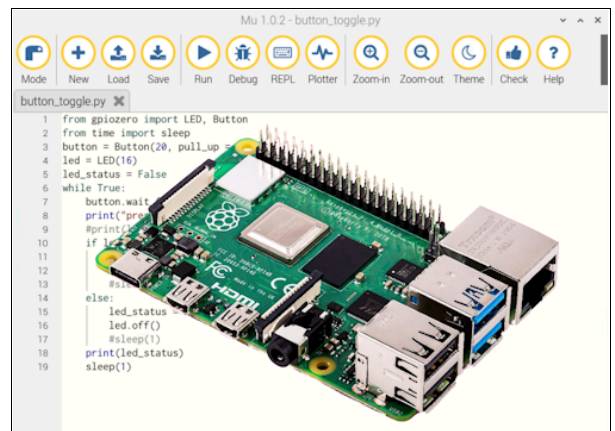
Talking of which, **Sunday 18<sup>th</sup> of April** is the World Amateur Radio Day and Acorns will be using the special event call sign, GB6ARD – so please call in or to put your name on the list of controllers contact Nick G4HCK.

## Knowledge Transfer Group

Not to be confused with the regular Webinars where we have a presentation and guest speaker, the KTGs are an extra zoom session which helps with a practical demonstration on a range of amateur radio related topics.

The current series is covering a hands-on approach to the evolving use of micro-computers and some of their many applications. Eddie, G0BKL, is leading this current series reports:- We are currently running a Raspberry Pi mini computer programming workshop, by the time you read this we will be past our third week, our numbers have grown to 12 “crazy fools” who are finding out that “a slice of pi is not a piece of cake”!

The workshops are not about “getting it right”, but more about getting it wrong and laughing about it (hopefully). Everybody is learning something every week and albeit slow we are moving forwards. The challenge for the group in the coming weeks will be to try to write a simple program on their own. For something 60mm x 90mm the Pi is really powerful and will be a useful tool for the future.



4	<b>Input parameters</b>		
5	Transmitter power (EIRP)	=	116 Watts
6	Operating frequency	=	144 MHz
7			
8	<b>Reference levels from ICNIRP 1998 Guidelines</b>		
10	Reactive near-field zone	=	0.33 m
11	Referencel level for power density	=	2 W/m <sup>2</sup>
12			
13	<b>Calculated result</b>		
14	Separation distance R	=	3.44 m

## Making Difficult Numbers Easy

David de La Haye, M0MBD will be our guest speaker on **Thursday 29<sup>th</sup> April at 7.30pm**. He will delve into the world of estimating the EMF from an antenna.

To work out your EMF you'll need to know 5 things:-

- (1) the power you use (eg 100W),
- (2) power lost in feeder (eg coax loss per 100m),
- (3) antenna gain (eg white stick v. yagi),
- (4) duration you transmit (eg 50% Tx, 50% Rx),
- (5) Frequency (eg 144MHz), and
- (6) mode (eg SSB).

Plug all that into the spreadsheet and Ping! out comes the minimum safe distance. David will show you which spreadsheet to use and that, despite the hype, calculations are much easier than you might think.