Airscrew

Facts, opinions, pictures and fun

August 2020

https://northreppsmfc.com/

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Model of the month: DJI Phantom 3 advanced drone

A club member, who shall remain anonymous (as agreed - Bob), put his Bixler down in the wheat field. A lengthy search on foot didn't find it. Next day Mick Hallam turned up with his DJI Phantom 3 drone to see if he could find it. And he did, and hovered over it until I could reach it on foot. So said drone becomes the well-deserved model, or maybe hero, of the month.

Pillock of the month

Our new club colleague Alex Steele has joined the illustrious company of Pillock Of The Month. We've all been in it, me more than most. On Sunday 19 July Alex lost the canopy for his glider. Had it blown away in the brisk wind? Had he put it in his car for safety? Where was it? After a lengthy search it turned up, in his pocket! Join the POTM club Alex.

Bob's Tales: Portsmouth

We operated services with DC3s at that time to the Channel Islands and one aircraft and the crew would spend a week down at Portsmouth, which is now some kind of housing estate. It was an all-over grass field in those days and we used to operate the DC3 out of there which could be hairy if you were taking off towards the gasometer at the edge of the field.

During the summer it was very busy operating out of Portsmouth. Jersey and Guernsey were very popular holiday destinations for the British in those days so we were busy doing that all day. We'd do that for five days then come back up to base at Southend and do the services to Paris, Amsterdam, Rotterdam and Ostend and somebody else would go down and do the weekend. The beauty of it was with the DC3 unpressurised so you could have the windows open on a nice warm day. During the summer, if we had a bit of a break during a turn round at Portsmouth, we used to send the hostess in the crew bus to buy Chicken in a Basket for her, myself, and the co-pilot.

We didn't really have time to sit and eat it so we used to eat it on the way to Jersey. If the weather was good we'd go maybe a thousand, fifteen hundred feet so we could round the Isle of Wight by Sandown and wave at the people on the beach. We'd be sitting there eating the chicken legs and throwing the bones out of the window into the English Channel. Not something you would find going on in the airlines these days I don't think.

This was the best airline flying I ever did but unfortunately all good things come to an end and they decided that they would get rid of the DC3s. I had also checked out on our one DC4, which was a lovely aeroplane, powered by four Pratt and Whitneys and carried eighty people. A nose wheel made it easy to fly but like the DC3, it required a certain amount of muscle to fly with the cable and pulley system. It was an aircraft developed during the war by Douglas and its specifications were that it could fly long distances across the Pacific carrying fully armed troops, that was the original concept of it. But of course when the war finished it became the backbone of many of the American airlines along with the DC3. Lovely aeroplane. If your not familiar with it, watch the John Wayne movie The High and the Mighty next time it`s on the TV. I do all the time! I do notice that JW does not have oil and leaking fuel dripping on his uniform, as he does the external walk around checks, in the same way that we did!

I flew both the DC3 and the DC4 until I got dragged off it kicking and screaming and I had to go on to the twin engined Hawker Siddley 748, a turboprop and also the four-engined Vickers Viscount with four Rolls-Royce Dart engines. With a turboprop aircraft you can't have the windows open because its too damn noisy, plus you can't open them once you're pressurised. The other big disadvantage with them was that as soon as the engines were started you could in theory take off immediately. You don't have to wait for any temperatures and pressures to get up as with old piston-engined aeroplanes. Oil temperatures, cylinder head temperatures and so on.

It was a rush from the minute you started the engines. You could taxi virtually straight away. With the DC3 and DC4 we used to sit on the apron sometimes in the winter when it was really cold before we could put on enough power to taxi. Then when you got to the end of the runway you had to do your run up and power checks, exercise the propellors and feathering pumps. Sometimes you could sit on the end of the runway or the holding point and read the paper while we were waiting for the temperatures to come up. With the turboprops, as with the pure jets, as soon as you're off the blocks you are chasing off up the taxiway. As soon as you get the end of the runway, if cleared by ATC, you can take off. It was a rush to get airborne and as soon as you landed there was no nice slowly taxiing in. It was dashing at high speed onto the apron, with a quick turn round and off again.

Life became much more of a rush and tear once you got on to the turboprops as against the old piston-engined aeroplanes which was a fairly leisurely operation. I did not like taxiing fast as our DC3s and DC4 and all old aircraft had less than perfect brakes. I never taxied as fast as most did on these new types. The company tried using the 748s out of Portsmouth [still all over grass]. We could not carry full loads especially when taking off towards the gasometers!

One day I was flying back to Southend from Paris when I heard on the company radio that two of our four 748s had landed on the wet grass and failed to stop, one crashing through the hedge onto the Portsmouth road and the other through another hedge into a field. This all took place within one hour. Fortunately no one was seriously hurt. Wet grass and no wind, landing distance required increases. The second aircraft should have diverted. We could not use Portsmouth anymore and it closed some time later.

The aircraft that Bob flew

DC3

DC4

Bob's Tales: the answer to the July emu puzzle

The birds' wings push the birds' weights in air downwards – that's how they fly. When the air hits the floor it pushes down on the floor with the same weight as the birds. So the springs should break anyway.

Techie corner: ToolkitRC ST8 servo tester

I bought this just-released, ToolkitRC device from AliExpress for $US46. It took 17 calendar (not 'working') days to arrive from China. It is well made and fairly robust but I think it would be sensible to keep it in its very solid box if taking it to the field.

The manual in the box is useless. It is important to download the full manual from the company's website at https://www.toolkitrc.com/st8. The full one isn't wonderful but is better. I used to tell my adult students that a manual (computer in

that case) is like sex. When it's good it's wonderful, but when it's bad it's better than nothing. Click **Downloads** to find the latest manual (V1.0 at the time of writing). This is part one of the review. It covers the basic and most important functions. In part two I will cover the more advanced functions.

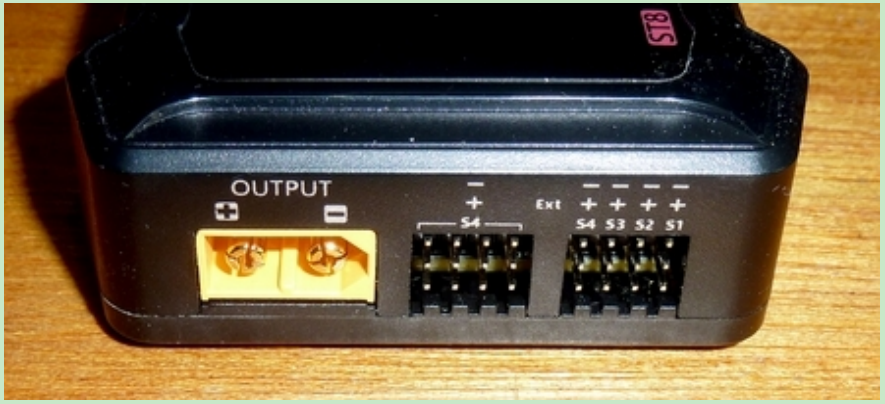
What it can do

- Test all servos up to 8.4 V and 2 A as standard, and others at higher voltages and currents using a special lead.
- Measure the current drawn by servos under different conditions.
- Find the safe movement for a servo.
- Match servos for critical situations.
- Set a central point on a servo exactly.
- Find out the signal lengths required for a particular maximum and minimum deflection.
- Measure the time a servo takes to reach maximum deflection.
- Test servos at the field, using a standard XT60 lipo flight battery.
- Run a long test on a possibly faulty servo.
- Take receiver signals from a standard pulse width modulation (PWM) channel or from S.BUS or PPM.

The tester can handle up to eight servos. There are four separately controllable channels **S1** to **S4** and four more that are just paralleled with **S4**. It can also take external PWM, PPM and S.BUS signals from receivers and other devices such as an arduino.

There are three controls. The first, called **P1**, is a silver rotating knob used to operate the servos that are plugged in. The second is labelled **OK**. This has a central button used to select or open something and a part you turn to move between options or to change a value. The third is labelled **EXIT** which speaks for itself.

Left end



Right end

More extreme servos

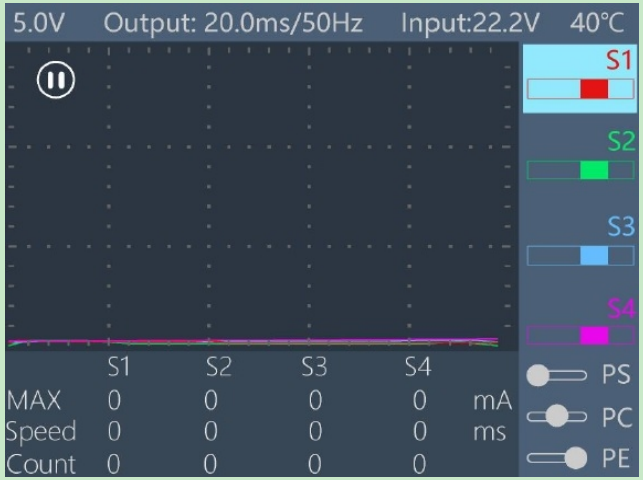
A high torque, digital or coreless servo might take more than 2 A. If so, you must power it from the XT60 OUTPUT port and make up a special lead. However no picture or specification is given for this lead, so I had to guess what was needed. Higher voltage servos can be tested, up to 28 V. This will be covered in part two.

Time to play

The first thing I did was to connect the ST8 to my computer using a micro USB lead. My computer recognised the ST8 but I wasn't ready to update the software so left that for the time being. There is always the danger of 'bricking' the device if you don't know exactly what you are doing. As it is so new there is unlikely to be an update.

I connected a 3S lipo to the **INPUT** socket. The screen lit up and the tester beeped. You need to find or make an XT60 extension lead for the battery, as shown below, or it is awkward to pick up the tester.

Pressing **EXIT** moved to an oscilloscope type screen. The internal noise signal displayed at the bottom. Down the right hand side of the screen are the four servo channels S1 to S4. Each is colour coded. Each connects to one of the JR-style channel sockets on the side.



Then I plugged an old servo into S1. Turning the **P1** knob on the side made the servo move, and the PWM signals being sent to it displayed as a red, vertical bar chart rapidly moving across the screen. The height showed the current drawn. Slow movement produced spaced out bars and rapid ones made them closer packed and taller. The current for S1 was shown at the bottom of the screen, as MAX mA.

I pressed **OK** and got a screen similar to this. This showed that the input signal being sent to the servo was coming from P1. It also showed the length of the PWM pulse currently being sent and the maximum and minimum values. Note that microseconds are shown on the screen in the simpler to display **us** unit format rather than the more correct **µs**.

Along the top of my screen it said:
5.0V Out: 20.0ms/50Hz Input:12.1V 36ºC
So it defaults to 5 V outputs and the standard PWM signal cycle time.

By burning out a servo, I had discovered a while back that cheap testers output the same voltage as you power them with. Not this one. The output voltage can be changed as you will see later.

As it appeared safe, I then connected four different 9 g micro servos into channels S1 to S4.
Each of these channels has a different colour.
When the pulses are displayed on the screen they have the same different colours.
The screen becomes a simple oscilloscope. Not a very useful one, as you see later.

Turning **P1**, made the servos move.

The red bar showed the PWM pulse length in µs.
At the bottom, the display showed the current draw, which I found surprisingly high for 9 g servos at up to 1.6 A. The faster I turned the knob and the faster the servos moved, the higher the current. Gentle movements such as you use in normal flying showed lower readings.

Here are the data from the four servos. The last value stays on the screen for a couple of seconds after you stop moving P1.

			Fast mA	Normal mA
S1	Hobby King	HK15178 (analogue)	950	200
S2	Tower Pro	MG90S (digital)	1000	600
S3	Corona	CS-929MG (digital)	1600	600
S4	Tower Pro	SG90 (analogue)	500	150

It is important to know what maximum current the servo draws under normal use at high speed, and stalled, perhaps caused by a stuck control surface. You can then decide if you need to use a power box to avoid the currents overloading the battery eliminator circuit (BEC) or the receiver.

Changing the signal

I then wondered what the large knob labelled **OK** was for. I decided it was now wise to remove all but one disposable servo.
I pressed **OK**.

I turned **OK** and found that I scrolled around the **Input** and the **Output** PWM signal timings.

There were two boxes under **Output**, one for the low pulse and the other for the high.
This allows us to set the servo range of movement.

I scrolled to the 1000 µs box and pressed **OK**.
By turning **OK** I changed it to 1300 µs.
I pressed **EXIT** and scrolled to high and changed it to1700 µs. As you would expect, the servo movement was a lot less when I turned the P1 knob.

With P1 fully turned clockwise I then increased the maximum pulse to 2200 µs. The servo of course moved further but didn't buzz. This would be a good way to check the maximum safe range of servo travel.

Increasing the signal to 2400 µs gave nearly 90º deflection but the servo started buzzing so I stopped there and went back to 1000 to 2000.

Having got so far using the classic suck it and see principle, I then needed to RTFM. In other words Read The Friendly Manual. At least I think that's what the F means. I continued to pl… er investigate.

Setting up the servo output channels

You can control the servo(s) under test using P1. You can also put signals into S5 on the right from a receiver, or other sources such as an Arduino. These can be PWM, PPM or S.BUS. There are built-in (internal) signal sources for testing as well. You can select which source goes to which output channel. Each channel may be set up totally differently.

The first thing to do is select which servo channel, S1 to S4, to set up.
Let's start with S1.

Start from scratch by restarting the tester.

Press **EXIT**.
S1 should be selected. If not turn **OK** until it is.
Press **OK** to select the **Input/Output** panel.
Press **OK**.
P1 is already selected.
Press **OK** again and the characters P1 are highlighted for edit.
Turn **OK** and you scroll round to:

- **Key** to use values from buttons PS/PC/PE (part 2).
- **Internal.** You can scroll to options for Linear and Stage used for soak testing (next).
- **S5** which allows you select PWM/ PPM and channel/ SBUS and channel for the S5 port (part 2).

Press **EXIT** to accept the value and leave the setup.

S1 has four options available: P1, Key, Internal, S5.
S2, S3 and S4 have an additional option - to be the same as S1.
The four channels to the left of S4 are parallels to, and set the same as, S4.

System setup

Hold down the **OK** button until you enter the Setup screen. There are nine things to change of which probably five are of interest:

- **VoltageOutput**: This defaults to OFF but can be set to a voltage higher than 5 V and must be set if using the XT60 main port for high current servos.
- **CycleCount**: This is for soak testing and is 5000 by default. You can change it.
- **Lowest Input**: This determines what voltage the supply battery can go down to before the tester switches off. Set it according to the safe minimum for the battery you are using, for example 11.3 V for a 3S lipo.

- **Safe temperature**: This is used when the main port is used. It switches off the tester when the temperature gets too high. It defaults to 70°C but can be changed.
- **CycleCountClear**: This sets the CycleCount back to zero.

Soak testing

This is the nerdish name for running a device or component continuously, and possibly under stress, for an extended time to see if it works properly or fails. It is particularly useful for checking old, suspect or crashed servos.

Set the **Input** to **Internal**.
It is probably in **Linear** mode.
The servo moves continuously and the Count at the bottom of the screen goes up by one for each cycle.
Press **OK** and scroll to **Stage**.
The servo now jumps from one extreme to the other, again being counted.
To leave an option choice press **EXIT**.
You could leave it running for hours but that would be more than a lifetime's flying so hardly a worthwhile test. You can set the number that the testing stops at. This was described under **System setup**.
To set the count back to zero for a new test hold down **OK** and select **CycleCountClear.**

Move back to **Linear**.
Turn **OK**.
The number next to **STEP** is highlighted.
You can now set the length of time of each step.
Turn **OK** in steps up to 10 and watch how the movement speeds up.
Press **OK** and turn **OK** to get to **SPEED.**
Again press **OK** and turn **OK** to change the value.
As you move up to 10 you see the speed go down.
Press **EXIT** to quit.
Clearly if you want to hammer a servo under test setting STEP high will do it.
Don't ask me what the numbers mean. I just know what happens. Maybe I'll cover it in part two.

Tests on a range of servos

I then tested several servos, large and small, at high speed, for current draw in mA. Compare these data with those for the 9 g servos listed above.

Turnigy TGY-778MG	700	(slim wing servo)
AeroStar ASI-621MG (coreless)	2050	
Tower Pro MG958	3500	
Turnigy 555MG	1050	
Futaba S3003	950	(ancient analogue servo)
Corona DS-238MG	1300	
Turnigy TGY-4409MD	2200	

I was cautious when testing the large servos in case I blew up the tester. It seems that you can safely do very brief tests at currents higher than the specified 2000 mA maximum on the S1 to S4 ports. The tester didn't get warm. In any case its temperature is displayed on the screen and it switches off if it rises too high. I think it wise only to connect one large servo at a time. Doing it this way is at your own risk of course. I certainly wouldn't do a soak test. I'd use the Output power XT60 port which will be described in part two.

Current draw is a reasonable guide when matching servos, though timing might be more important for some 3D flyers (part two).

Using the screen

In the manual you see pictures of the screen with enlarged signal traces. I have failed completely to find out how to do that. The manual doesn't mention it and I have given up trying to do it by pla… experimenting.

Summary

This is a useful and reasonably priced piece of kit with a few rough edges in its software. The manual could be a lot better and you will have to make up at least one special lead. The key question is whether it is too complex to be of use to someone who just wants to do simple tests on ordinary servos. My answer is 'no', it's fine.

I will cover some more advanced features in part two. You saw it here first!

Manoeuvre of the month: Half Cuban Eight

A turnaround maneuver

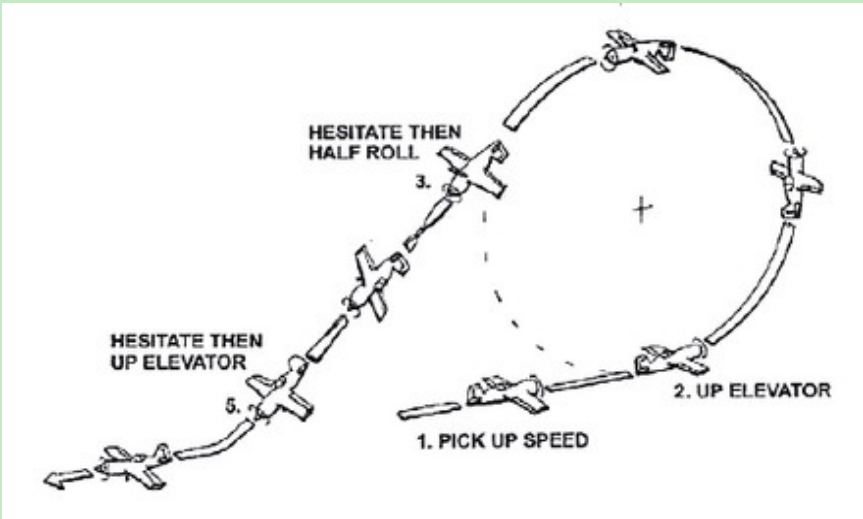
There is a whole bunch of very useful maneuvers in the family of Cubans. As two halves make a whole, let's begin with the Half Cuban Eight.

As you will see, the Half Cuban Eight is part loop and part roll, both of which you now know, so this should be quite easy for you to fly. Here it is:

The model picks up speed and starts the Half Cuban Eight straight and level, pulls up into five eighths of a loop, hesitates, flies inverted 15 degrees down followed by a half roll right side up, hesitates, then pulls up to level flight. For the Half Cuban Eight, you need only enough airspeed to get over the top of the loop.

From then on, you're home free and, once you begin to nose down, you will have plenty of airspeed to complete the rest of the maneuver. This is one of the best and easiest of the turnaround maneuvers.

If this description confuses you, go to the diagram. As they say, 'a picture is worth a thousand words'. [With current, fashionable verbal diarrhoea perhaps that should be five thousand? ed]



From RCSD December 1997 with permission

Bob’s quips part 3

One liners…

-Airline captain: "If only I made as much money as people think I make, had as much time off as my neighbours think I have and had as much fun on stopovers as my wife thinks I have".

-Sign seen at refueling point: WARNING Do not operate any radio transmitter within 100 metres of the pumps. If your life is not worth anything the fuel is!

-Any attempt to stretch fuel is guaranteed to increase headwinds.

-A thunderstorm is nature's way of saying "Up yours!"

-Keep looking around, there’s always something you missed.

-Remember, you're always a student in an airplane.

-Any pilot who does not at least privately consider himself the best in the business is in the wrong business.

-It's best to keep the pointed end going forward as much as possible.

-Hovering is for pilots who love to fly but have no place to go.

-The only thing worse than a captain who never flew copilot is a copilot who was once a captain. [For the truth of this listen to Cabin Pressure.]

-A terminal forecast is a horoscope with numbers.

-The first thing every pilot does after making a gear up landing is to put the gear handle DOWN

Covid newsletter

We eventually got suitable weather for running the club competitions. The rules I put together to ensure covid-19 safety, and that I emailed to you all, worked well so we will stick with them until there is no danger from covid any more (2025?).

Data are good tools for dealing with diseases. King’s College London has an investigative team, called Zoe, led by Prof Tim Spector. Over four million people send daily data about their wellness or otherwise. Daily reports take each person about 30 seconds.The summaries then go to the NHS, the public and government. The more people who send data the more reliable it is, so if you are willing to take part load **zoe app** onto your phone. Its icon looks like this:

Don’t forget Sgt Esterhaus’ words in Hill Street Blues, ‘**Let’s be careful out there**’.

Competition corner

Climb and Glide rules update

I have checked up on the spec for the Bixler model series. It lists a 3S battery. In view of the obvious climbing advantage given by a 4S I have added a bit to rule 1 which now reads ‘Any Bixler glider can be used from Bixlers 1, 2 and 3 with changes allowed only as shown in the notes at the end. **A 3S (three-cell) battery must be used**.’ As the competitors who used 4S in July were within the rules at the time, the July results stand. August will be under the new rule.

Climb and Glide future

The Climb and Glide competition is beginning to creak. We chose Bixlers originally because the performances of 1, 2 and 3 were very similar and so it was a tournament of flying skill. As later versions of Bixlers have emerged, some have much more powerful motors fitted. This can clearly be seen in the rates of climb. We will continue the competition as it is until the end of this season and then we need to think about what to do next year. I favour switching to a different, single model and then not allowing any alterations to the standard setup, such as batteries, propellors, painted go-faster teeth and so on. Dave suggested the cheapest Phoenix from Hobby King but we are open to any good ideas you might have. The key points are that it must be reasonably priced, come complete with a motor and propellor, be easily obtained and only available in one version. And we need to decide soon so people do not waster their money on models that won’t be usable.

Here are some Hobby King ones that I thought might suit:

- Phoenix 2000 £108
- Volantex 757-7 Ranger 1600mm FPV Glider £86.65
- Walrus Glider w/Flaps EPO 1400mm £82.31
- AXN Floater Jet 1280mm £76.63
- H-King EZIO 1500mm EP Glider £108.88

Or we could decide on one of the Bixlers, perhaps a 2020 Bix2 (£79.99).

A new competition

I was chatting to a visitor at the field the other day. He was from the Acle club and flies the red and yellow full-size lightweight. He suggested a fast and slow competition. You have two gates at the extreme ends of the runway each with a marshall. The gates will be 100 m or so apart. Each model flies twice between the two gates in the same downwind direction, once at its maximum speed and the other at its minimum. The marshalls time each flight and the two times are recorded. The winner is the one with the biggest difference. The competition will be open to all models except those that can hover like competition 3D ones, but only one model per competitor. No modifications may be made between flights. Flaps may be used. Anyone game for a try? Please let me know by email or at the field. Why downwind? There are ordinary models, such as the Bixler, that can be made to hover in a brisk head wind and we haven’t got all day. Going downwind is more of a challenge. I am sure one of us will come up with a clever way to make the timing accurate. My first thought is that the marshall at the first gate presses a button as the nose of the model goes through and a light at the end of a wire comes on at the second gate. The second marshall starts the watch then stops it as the model goes through the second gate. Simplest is usually best. Occam’s Razor.

UFO night

We are going to have a night flying session as soon as we can. Brian and I will be flying Flitework Shinys and Dave has a

homebrew. Why not get some lights and pop them onto a suitable model? With luck there will be Eastern Daily Press letters about UFOs. We'll let you know when the session is on but now is the time to prepare. Napoleon wanted trees planted down all of the main routes in France to shade his troops so they could march at mid-day. He was told they would take years to grow. 'There is no time to lose then', says Boney. If you have ever driven in France you'll know that many of them are still there.

Skype meeting 24 July

It was a good meeting. Dead easy to join so why not come to the next one? Dave will let us know when. We spent quite a lot of time playing with the skype software, which is almost a computer game. So many buttons to press, but no guns. We finished up having completed an advanced course in computing purely by play (the best way). Don't be put off though. It really is simple to join in. Just press the screen button on the member's home page. If it doesn't work you must install skype first. That's also easy.

Joke of the month

(not true this time)

A jet airliner takes off from Heathrow bound for New York. As it reaches cruise height the pilot's voice comes over the intercom. "Hello. This is your Captain speaking. You are now cruising at thirty three thousand feet. Actually I am not in the aircraft. I am sitting back in the aircrew lounge at Heathrow. This is the very latest modern aircraft and is being flown entirely by computer … by computer… by computer… by computer… by computer…"

And another (true)

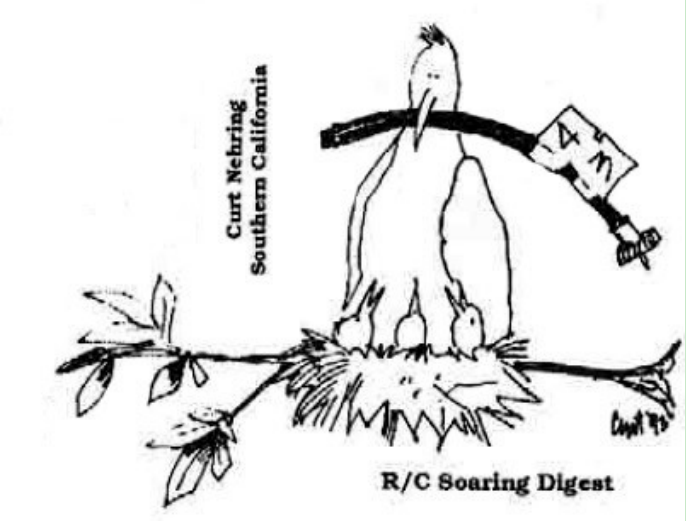
From a commentator of the Newcastle United and Manchester City Cup Tie on 28 June. "St James' Park [Newcastle ground] is magnificent. If you climb up high on the terraces you can see for miles. Probably see Barnard Castle if your eyesight is good enough." Remember?

And Aggers (true)

This is fast becoming Sport Corner. In Test Match Special on Radio 4 on 11th July, with England playing the Windies, Jonathan Agnew ('Aggers') admitted to having his own light aircraft, a Socata 10. I think he said his wife called it 'Dignitas'. He was asked about his flying dogs. He said that one dog, Tino, had now logged one hundred hours of flying time and was a better pilot than he was. The dog sits, strapped in, in the back with ear defenders on. Of course there is no microphone. You certainly wouldn't want to hear

a dog barking over the intercom. Shades of Bob's emu but better behaved (the emu, not Bob). Aggers keeps up the fine tradition of being an excellent raconteur and deliverer of banter on TMS. He is often more interesting than the match. He certainly was when I was listening to the first test when England was desperately trying to stay in to avoid a hammering and was scoring mostly laboured singles. The second and final tests were good 'uns. It's great to have a sport in which there has never been a whiff of racism.

Cartoon



Spot the fault: battery life

Problem
This is a model with a fairly powerful 1200 kV electric motor. It was powered with a single 3S 5 Ah and is now powered by two 4S 4.5 Ah lipos in parallel. However the flight time is very limited, often as low as six minutes even when mostly flying at cruise throttle. This is no more than when using the single. What is the likely reason for this low life? kV will be covered in a future newsletter.

Spot the fault: July solution

Reasons
The first thought was that the propellor might be unbalanced. However it had not been crashed and was silent before. The next thought was that the motor might be coming loose but it wasn't. Thirdly was the motor faulty? Even though new perhaps a magnet had come loose or the bearings were failing. Turning it by hand showed that it was smooth. And then the penny dropped. Turning the model over to insert a battery, the wheels flopped on their shafts. A shake of the model made them rattle. Oh no! Could it be that simple and obvious? Clearly the vibration frequency at high throttle hit a resonance in the undercarriage.

Cure
The wheels were removed and they were indeed very loose on the shafts. Some standard grease was applied generously to the shafts and the wheels refitted with the locknuts tightened to the point where the wheels were slightly impeded. Cure!

The Plug Place

It won't have escaped your notice that I only include stuff about electric motors in the newsletters. That is because it's what I use, hence all I know about. Would any of those who internally combust like to add articles, either ad hoc or regular, about the mysteries of the IC engine? You know the sort of thing - hints, tips, inventions, tuned pipes, mistakes and so on. So here you are, liquid burners, this is your spot.

Mind you it does remind me about the days when I was young and sassy. You wouldn't believe that possible would you? I was at a uni lecture given by an automobile engineering luminary. "Any questions", he foolishly said at the end. "When will there be a real improvement in car design?", says I. "What do you mean?", says he. "Well de Dion and McPherson would recognise current suspension and Benz's and Diesel's engines are pretty much unchanged from nearly a century ago." (This was the 1960's though not much different now). No, I didn't get a decent answer apart from "Constant improvement". And now what do we have? Electric cars with sparkling, smooth performance. No gearbox. Electronic suspension. Can't wait to get one once they've sorted out the batteries. Yes Mick, range is the problem, just as flight time is for electric model aircraft.

Letters to the editor

(Selected from the hundreds that I have received)

Hi Peter

You may remember me saying I knew someone of that name [Keith Eldred] who has a former nuclear base in Thetford forest. I saw this video on the EDP web site and it shows his site with an introduction to it. It is where they serviced Blue Danube and Red Beard for the nuclear bombers that we first had. They needed fully dismantling and rebuilding each month due to the half life of one of the components. I found it fascinating. He is a very good speaker and the 3.5 hour tour I went on seemed to fly by. I don't know what is happening at the moment but he does the tours for free (pre-booked) during the English Heritage open week and I have no idea about timings or costs otherwise. I have wondered if he would do a club tour if there was enough interest.

Have a look at https://www.edp24.co.uk/news/politics/live-firing-days-norfolk-military-bases-july-1-6729191 and scroll down until you see three videos one with the caption Top Secret Cold War military base RAF Barnham and click on the link.Just found a slightly odd You Tube drone video of the place https://www.youtube.com/watch?v=4RFC6RbOQME
Additional information: https://www.edp24.co.uk/news/thetford-atomic-bomb-bunker-raf-barnham-military-base-1-5686834

Ian [Ruston]

Ed: So, anyone interested in a trip? Please let me know.

Health warning

Just when I was thinking that the pushers of sugar had seen the errors of their ways, another addictive comestible appears on the scene. And here it is – salted caramel ice cream from Carte D'Or. If anything it is the worst so far. "I'll just have a spoonful." Yes, but how big is the spoon? Be warned! This stuff is evil.Try it once and you won't be able to walk past the freezer cabinet in Sainsburys ever again. (Other supermarkets are available.)

Sources: Tilley Mashup

I have a very big head. No, that one's been done so many times before. I am size 8+ or XXXLarge. Normally I can't find a sun hat to fit. You will have seen the appalling straw hat that I wear at the field when the sun is strong. Definitely Huckleberry Finn style and perhaps 'wear' is the wrong word. Jam on somehow.

Then I came across the Tilley Hat. Made in Canada with 'Canadian Persnicketiness' it is washable, rain proof, wind proof and, what's most important, big enough. All sizes are available. It ain't cheap (see what I did there?) at £70 but they'll replace it if it ever wears out. So this is my titfer from now on. For the benefit of non-Londoners, that is cockney rhyming slang for a hat - titfer tat. So I can get out of me drum, come down the apples, put on me titfer and take a ball down the frog with me trouble. Translation services are available and will report next month. And yes, I was 'brought up' in Norf Landan.

It had its first outing on the 22nd of July. When I boasted a hat that actually fitted my bonce, Dave made a remark so cutting that I have erased it from memory.

Back numbers of the newsletter

For club members these are available on the club website. Non-members need to go to my website at peterscott.website/flying.

Sales

A very special one for club funds – Extra 230

The Club has very kindly been given a plan built Extra 230 model to dispose of to aid Club funds. The airframe is finished in red and orange. It has an OS46AX fitted with an in cowl exhaust, but could be easily converted to electric if that floats your boat. It has a cowl and two metal geared bearing'd wing servo's. It is in excellent condition.

So, the silent auction thingy. Simple really, email me your bid before the deadline. I will post the value of the highest bid in this space so you can decide if you wish to increase your offer or not. The highest bid received before the deadline will win. Any bids deemed as received after the deadline will be ignored. All proceeds will go into Club funds. Whole pound bids only pence will be ignored. Strictly Cash on Collection only. The winning bid will be deemed as a binding contract. The Closing Deadline is set to be: 18:00 hrs Saturday 1st August 2020. Current high bid: £17
Email your bid to dave@northreppsmfc.com

Futaba radio gear

Futaba 7C transmitter with four receivers. Two are known to be good and the other two are untested. All the receivers are FrSky. 3 are TFR6 and one is TFR6A. The transmitter has a rechargeable battery. Manual for the transmitter is included as is an instruction sheet for the receivers. £50 for a quick sale. A bargain. Contact: Ian Ruston 07867 695201.

Hog Bipe

I am still clearing out to make space for new projects so I am selling another one of my Hog Bipes. This is the airframe only but it does have the isolating switch and control cables. I have the plans and instructions also. I only want £50 it has to go. First to see it will want it.

And an OS61 MAX FX engine with an in-cowl exhaust and also a tuned pipe. Carb uses the rear mounted needle valve. A nice mid range engine. All in good condition and has had after run oil after every use. £60.

Contact: Paul McLeod 01263 722489

There are more items on the club website under General Sales.

And finally …

Just to make non-members envious of where we live and fly here is my Bix-pic. Yes, that's the sea in the background, and, though you can't see them in this picture, that's where the windmills are that power my planes.

Even more finally…

As I am sure you know I am a keen cyclist, though I've not been on the road since lockdown started. This is not a good time to have my first crash requiring hospitalisation. I found this on the BBC News app and could not resist passing it on. https://www.bbc.co.uk/news/uk-england-norfolk-53489076 It is very much in the spirit of the back garden air show in the May newsletter. Here's a sample showing the riders turning at the Arc de Triomphe at the top of the Champs-Elysées. Oh yes, Mark Cavendish won.