



# NEWSLETTER

## November 2020



### FROM THE EDITOR

Oh dear, once again we find ourselves in Lockdown ( which apparently is the word of the year according to Collins dictionary!) Here’s hoping it works this time and that Christmas will be able to go ahead! If you come up to the Hangar please make sure you abide by our Covid 19 Regulations: we have plenty of sanitiser!! A couple of interesting articles to read through and some advertising .....

If anyone would like to contribute an article to the Newsletter just send it through to me and in the meantime take care and stay safe.

Don't miss the first Club Event!



Ever so hopeful we will be entertaining you in April 21.....

we will have a new “ Normal” and lots to CatCh up on



Molly ready for work!



#### *Molly’s joke:*

**You ever hear about the canine pilot from WWI?**

He got into a dog fight but thankfully he shook his tail.

**Investigator to trainee helicopter pilot: "So you survived the crash. How did it happen?" Pilot: "Flying too high. I was shivering. Too cold." "Then what?"**

"Then (pointing to the rotor) I switched off the fan."

If you have any interesting articles or news items, please email them to

**“info@ebghelicopters.co.uk”**



## SHARES FOR SALE

### Your Chance to get involved at EBG – Helicopter Ownership

Be a part of EBG's future plans, in order to expand our fleet and offer you, our club members, more varied flying we are planning for next year and hopefully leaving the Covid-19 problems behind us.



We are dividing the ownership of R44 Clipper 2, G-PGGY into three shares, EBG will own one share, one share has already been requested by one club member therefore one share is for sale, A share of one of our helicopters offers you, the owner, discounted rates on all our aircraft as well as the ownership of the helicopter. Get yourself an early Christmas present, speak to Ken for more details.



Our lovely G2 helicopters are also owned by three shareholders, two club members and EBG own a third each of both helicopters. One of the ownership group is in the process of moving up north and will only be able to make occasional visits to Redhill. He has asked for his share of the group to be offered to club members so if you would like to explore this opportunity further, please talk to Ken.





### IN OTHER NEWS

The coming year will see a fully refurbished EC120 G-DLUX being put back into service. She will have a completely new interior, auto-pilot and glass cockpit (see mock-up below). EC120 G-LTZY is also having some major work carried out whilst her engine is being inspected. Finally, we are currently in negotiation to have the use of a AS350 Squirrel so plenty to look forward to.



G MEEP/G PAMY has now been sold and has a new home in Jersey



And just to fill the page up G LTZY in bits in Maintenance and hopefully back in the air by end of December!



Tino's travels





Which helicopter did you come across as a kid? Most likely it was a Bell 47. It has inspired many illustrations and featured on early TV series.

In March 2020, I finally managed to get on the controls of this iconic whirlybird.

Following very friendly email exchanges, I arrived at San Antonio, TX, to meet Michael Bisek from Helicopter Experts in Bulverde, just a few miles north of SAT airport.

After a warm welcome, we started ground school on limitation and conducted a thorough pre-flight check on his 1956 Bell 47 G2 helicopter. Unlike modern helicopters, all parts are visible and accessible, including the control wires running to the tail rotor.

Now it was time to fly. I sat in the left PIC seat, and immediately noticed the incredible visibility in almost any direction. After a straight forward start-up it was time to lift and prepare for the first take off. As only the cyclic has hydraulic support, the collective felt notably heavy. There is no governor, adjusting the throttle manually at lift was not problem through. The tail rotor has great authority and it was relatively easy to hover and take off. With my experience in Robinsons, I felt at home very fast



After take off, I enjoyed the view even more. If you think a R44 or G2 has great visibility, you will be stunned looking out of this machine. Moreover, you will have plenty of time to do so. This G2 model has a six-cylinder Lycoming engine with 200 hp (de-rated from 270) and a VNE of 90 kts. Lots of time to enjoy the view while cruising along.

After crossing San Antonio International airport, we executed a view traffic patterns at a small airfield nearby (KSSF). I got used to fly this helicopter fast. Hydraulics off felt like hard work, me probably overcorrecting too much. A practice autorotation was smooth with RPMs very stable. I got reminded however, how much a R44 floats. This Bell was coming down much much faster in the auto.

After lunch at a Texas BBQ, I had the chance to do another scenic flight, finding our way around heavy rain showers.

Michael has been very happy to share his knowledge and has been in the helicopter business for more than 30 years. He currently operates two Bell 47s. The G4 model was in maintenance on the day I visited. It has the same engine as the R44 and a slightly larger cabin. I will certainly try to go back and fly that machine next time.

Stay safe flying the world!

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## Did you know?....

- The first person to be rescued at sea by a helicopter was in 1944. It is estimated that the use of helicopters has saved more than 3 million lives in war and peace times around the world since then



- The first working helicopter is believed to have been the Focke-Wulf Fw 61, first flown in 1936. The layout of the modern helicopter with a large main rotor and smaller rear tail rotor was first used in the VS-300, designed in 1939 by Russian-American Igor Sikorsky. The R-4, also designed by Igor Sikorsky in 1942 was the first mass produced helicopter.
- **1100** Chinese invented a flying toy that had some of the same principles as the helicopter.

Captain Tim Piper  
CFI





Congratulations to Tim on becoming our Chief Flying Instructor

Tim has taken to his new position with a flying start and has started implementing new procedures, interacting with the CAA, all from his new office!

# PILOT NOTICEBOARD

## GREETINGS FROM TIM

I hope you are all staying safe and well during this lockdown period, hopefully this will be a lot shorter than the last one and you can all get back to flying again very soon.

Thank you for all having a good go at the new SFH form, I know it's another bit of paper work to fill out, but if you just have it as your planning aid then I'm hoping it shouldn't really take up any more time than your normal flight planning.

On the form there is a section at the bottom to fill in after your flight, please use this section if there was anything that was out of the ordinary, ranging from a technical problem to ATC issue or anything you felt could be talked about, any information to us means we can help you. That is our goal to look after you and to ensure you have a good time.

After the last lockdown we had a few interactions with NATS and the CAA due to airspace busts and alike, most we knew about and because of this we were able to take proactive actions, and deal with the matter. This may not always be the case but this may prevent some from having to go on the mandatory airspace awareness course.

We shall be introducing a 30 minute pre flight brief to all SFH over the next couple of months, this will happen annually. It will be just to have a chat and to ensure you are happy with flying related items, this could include a check on the aircraft or airspace, joining procedure etc. The date attended will then be added on to the form under the Date of Last SFH Briefing box, please feel free to ask for more time if you want to go anything else and we can either do it at the same time or book you in for another session.

All the instructors are here to help, please do not feel like you can't ask us a question regarding the flight you are about to take, there are NO stupid questions, I do ask however that if you do need help, I.E. planning a join at an airfield or something that may take time for the instructor to help you, then you pre warn us so we can allocate this time, we can go from having nothing to do to all hands on deck. If we are with another student then we may not be able to assist straight away. Remember prior planning prevents poor performance.

<https://airspacesafety.com/> please have a look at this link, with a cup of tea and biscuit. I have also added some attachments to assist you.

Safe Flying

**TIM PIPER**



# PILOT NOTICEBOARD

## SAFETY SENSE

# Avoiding airspace infringements using Threat & Error Management

Airmanship is the art of applying your skill and knowledge to flying. A practical and easy way of doing this is by using Threat and Error Management (TEM) to manage ALL hazards likely to be encountered on the ground and in the air. In this card we look at how TEM can be used to prevent airspace infringements. TEM is the practice of thinking ahead to predict/identify and avoid errors and threats and manage any that occur. Understanding TEM will enable a pilot to think and plan, in advance, for the eventualities that can lead to an airspace infringement. By spending time on the ground, pre-flight, to consider these factors you will be better prepared for many of the things that can wrong in the air.

## What is a THREAT?

Events or things that occur outside your control which require your attention if safety is to be maintained. Threats are beyond the influence of you as the pilot and they increase the complexity of the flight. Examples of Threats that may lead to airspace infringements include: • Distraction caused by task or passengers • Airspace including NOTAM'd activity • Weather inc. thermal activity • Fatigue / Stress • In-flight malfunctions • Lack of recent experience (skill fade) or Complacency

## What is an ERROR?

Actions or inactions that lead to the unwanted or unsafe deviation from the plan, as with threats. Errors have the potential to reduce safety margins which could lead to additional errors or an airspace infringement. Examples of Errors that may lead to airspace infringements include: • Navigation errors leading to vertical, or lateral deviations • Mis-interpretation of chart • Incorrect altimeter setting • Missed calls / incorrect phraseology • Mis-interpretation of instructions or clearances • Unsynchronised Direction Indicator

## How do I MANAGE it?

Pilots must, in the interest of safety and normal pre-flight and in-flight activities, manage threats and errors to prevent airspace infringements. Examples of management techniques include full and comprehensive planning and adequate briefing, training, managing distractions and applying all available tools to prevent airspace infringements.

## MANAGEMENT

### Pre-Flight

**FAILING TO PLAN AMOUNTS TO PLANNING TO FAIL** Spend time on the ground anticipating possible threats associated with the flight. Detailed planning will provide the opportunity to develop mitigations (for example, action in the event of weather changes, the actual winds being different from the forecast). Complete a full **NOTAM** brief and understand what each NOTAM is telling you including the activity times if the NOTAM covers multiple days. If you are unsure, contact the sponsor; many NOTAM include a telephone contact number for further information. Understand what each NOTAM series refers to and the risk associated with it. NATS offers a free facility for NOTAM briefing at [www.nats-uk.ead-it.com](http://www.nats-uk.ead-it.com) Using a narrow route brief rather than an area brief will make the number of NOTAM more manageable. If you use a Moving Map to carry out your NOTAM brief, make sure you understand how and why activities are depicted as well as checking that current data has been downloaded. Pay particular attention to airspace structures and their boundaries in relation to the intended route and altitude and refer to the UK AIP and the Skyway Code ([www.caa.co.uk/skywaycode](http://www.caa.co.uk/skywaycode)) to ensure airspace requirements (for example, for ATZ, TMZ and RMZ) are fully understood. By thinking in 3-dimensions you will be able to plan climb and descent points; building into your plan the 'Take 2' and altimeter setting guidance, and you will reduce the probability of making a vertical infringement. Carry out a thorough meteorology self-brief and ensure that you have the complete forecast weather picture for the whole of your intended route and alternates as well as areas of turbulence and thermal activity. Check the Metforms 214 and 215 as part of your pre-flight briefing.



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## In-Flight

Use a **Moving Map** to increase situational awareness and obtain timely airspace alerts. If you are carrying out instruction or examination duties, the probability for distraction is greater. In recent analysis instructors were involved around 1 in 6 airspace infringements; the majority were not using a Moving Map and were either distracted or failed to appreciate their proximity to controlled airspace. When able, **Take 2** by remaining 2nm laterally or 200 feet vertically clear of the edge/base of controlled airspace to reduce the consequences of turbulence, distraction or external influences. Obtain an **Air Traffic Service** or use a **Frequency Monitoring Code** (also known as a Listening Squawk) rather than squawking 7000/2000 and operating autonomously. By doing so, any inadvertent airspace infringement can be resolved in a timely manner thereby reducing the safety risk to other air traffic inside notified airspace. **Self-brief** (including passengers or students) planned procedures prior to commencing each significant part of the flight (for example, turning points and the approach to an airfield). Use all available briefing material to increase situational awareness before you fly; the Airspace and Safety Initiative website ([airspacesafety.com](http://airspacesafety.com)) has a great deal of resource and guidance that will help identify Threats and possible Errors. **Prioritise** tasks and manage workload to avoid being **overloaded or distracted**. Using checklists and briefing passengers or students of impending cockpit tasks and increases in workload will manage the risk of errors through distraction

## Post-Flight

Reconsider what threats were encountered and what errors were made during the flight. Think about how well these were managed and what could have been done differently to improve the management of similar threats and errors during future flights

**REMEMBER: TAKE2**

Plan to stay 2nm from edge of Controlled Airspace

Plan to stay 200 ft above/below Controlled Airspace

CONTROLLED AIRSPACE

200 ft

2nm

**TAKE2**

Don't infringe Controlled Airspace  
Give yourself a safety margin

Logos: Airspace & Safety Initiative, MAG, LAA, GASCO, NATS

The infographic illustrates the 'TAKE2' safety margin. It shows a cross-section of the sky with a dashed line representing the edge of 'CONTROLLED AIRSPACE'. A blue airplane is shown flying above the ground. Two orange dashed arrows indicate the required safety margins: a horizontal arrow labeled '2nm' showing the lateral distance from the edge of controlled airspace, and a vertical arrow labeled '200 ft' showing the vertical clearance above or below the edge of controlled airspace. The background includes a stylized airport with a control tower and other aircraft.

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## Avoiding airspace infringements

### Key tips and sources of information

#### **Apply Threat and Error Management (TEM) in your planning and flying.**

Identify the Threats such as airspace, weather and equipment. Consider the Errors you may make, such as in navigation. Address them early

. **Do not get airborne without a plan.** Study the airspace in advance in three-dimensions paying particular attention to vertical limits of controlled airspace. Within your plan remain 200' from the base of controlled airspace and/or 2nm from the edge. If you are inexperienced or training why not increase that buffer? Always have an alternative plan (Plan B).

**Use a Frequency Monitoring Code (FMC) / Listening Squawk.** If you do not want an air traffic service, rather than squawking 7000 use an FMC and listen out on the frequency.

**Use a Moving Map.** Ensure that the moving map is recently updated before you start planning. Plan your route carefully on the moving map, both horizontally and vertically, checking for vertical and lateral airspace, and, in planning to 'Take 2' (remaining 200' from the base of controlled airspace and/or and 2nm from edge of any airspace). Ensure that you carry a backup, whether a current paper chart with the route drawn on, or a second moving map display. In flight, remain on the magenta line at the planned altitude, have the moving map in your field of vision, showing airspace and with alerts enabled; don't cancel the alerts until you have mentally registered them and be aware of associated TEM.

#### **Think, plan, avoid and enjoy your flight** CAP1840

**Carry a Pilot Log (PLOG).** Print out a PLOG; include all radio frequencies including those for possible diversion aerodromes and any FMCs that may be applicable for both the flight and any diversion. Annotate the altitudes you plan to fly and where you plan to start your climb and descent.

**Understand the role of distraction before and during flight and how it can lead to inadvertent infringement of controlled airspace.** Pilots should consciously recognise distractions including those from passengers, unfamiliar equipment or its malfunction, aircraft problems or weather as well as personal problems or stress. Pilots should ensure they positively shift attention from them back to flying, operating and navigating the aircraft. If weather is becoming a factor, change your plans early and carefully.

**Enjoy the flight by looking outside the cockpit** with occasional confirmation checks on progress by viewing the moving map display. If it seems to be going wrong call D&D sooner rather than later on 121.500MHz or, if you are using an FMC, the unit you are listening to. If stress is increasing, move further from airspace, both vertically and horizontally.

#### **Sources of information** • NATS Airspace User Portal

<https://aup.nats.aero/> • NATS AIS: Use tabs for AIP, NOTAM [www.nats-uk.ead-it.com](http://www.nats-uk.ead-it.com)

• Met Office: [www.metoffice.gov.uk/services/transport/aviation/regulated/aviation-briefing-service-guidance](http://www.metoffice.gov.uk/services/transport/aviation/regulated/aviation-briefing-service-guidance) • The Skyway Code: Safety rules and advice [www.caa.co.uk/skywaycode](http://www.caa.co.uk/skywaycode) • SKYWISE: Tailored notifications and alerts from the CAA [skywise.caa.co](https://skywise.caa.co)

[skywise.caa.co](https://skywise.caa.co) [skywise.caa.co](https://skywise.caa.co)



# PILOT NOTICEBOARD

## Reminder – change to Ground Exams

### Ground Exams

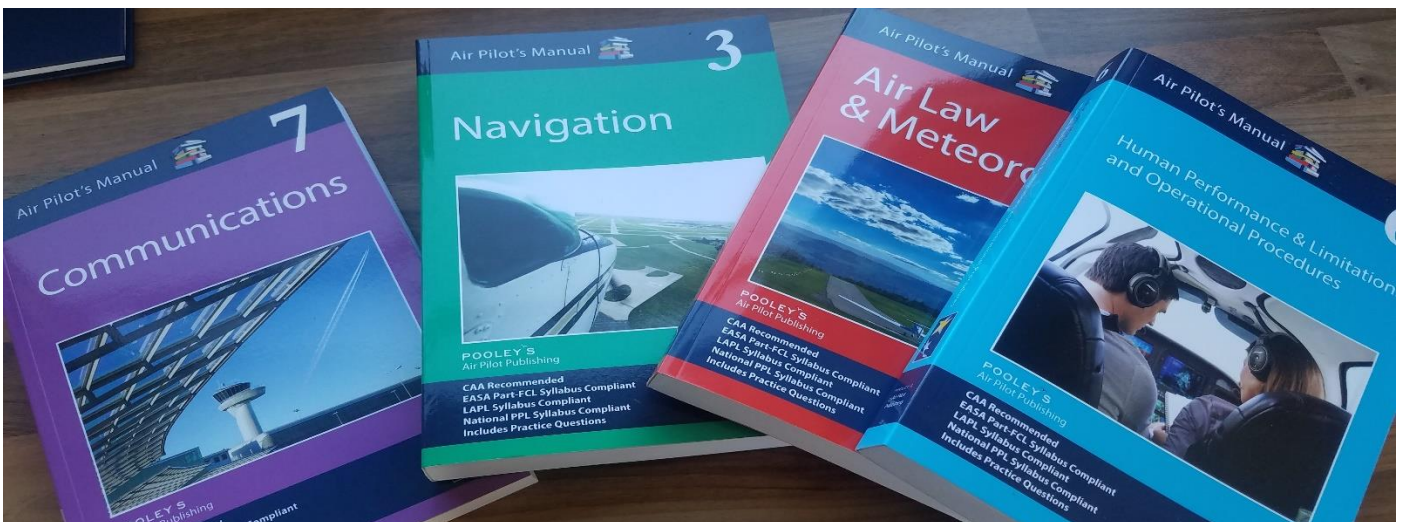
As of Monday 5<sup>th</sup> October 2020, all ground exams for the PPL(H) must be sat electronically at EBG using the CAA Tasman system. The exam charges are now £60.00 per exam. EBG is registered as a Ground Exam Centre and we have a portal address. You need to register for your own CAA portal in order to sit the Ground Exams.

<https://publicapps.caa.co.uk/docs/33/CAP1903A%20PPL%20Candidate%20Tasman%20Guide.pdf> = Full Student Instructions (CAP 1903A)

<https://publicapps.caa.co.uk/docs/33/CAP%201903G%20PPL%20Candidate%20Quick%20Guide.pdf> = Quick Guide for Students (CAP 1903G)

1. Student registers for their own CAA portal – NOTE this takes approximately 5 days
2. Student opens their portal and selects the “Private Pilot Theoretical Knowledge e-Exams” service.
3. Student specifies EBG as their training organisation and a membership request is sent by the software to EBG.
4. EBG receives the membership request and confirms membership.
5. Student receives a membership acceptance on their Portal.
6. Student asks EBG to book an exam by phone call or email to the office.
7. EBG books and pays for an exam with the CAA – the payment is only valid for 90 days.
8. Student sits the exam at EBG on the computer covered by an invigilator.
9. Student and EBG get the result of the exam.
10. Failed exams, EBG also get a “Knowledge Deficiency Report”

It looks complicated but 1 to 5 is only completed once and this becomes the students CAA portal for license applications etc going forward. The past paper exams are not recorded by the CAA or on the Tasman system. The same rules apply to the transition between the paper exams and the E-exams with regard to six sittings and completing them all within 18 months



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## AND Finally but most importantly

The students below have achieved the following passes:



*Dave Willmer  
Type Rating in G2*



*Dan Court  
1<sup>st</sup> Solo*



*Stefan Gavrilas  
Skills Test in G2*



*Paul Reid  
Type Rating EC120*



*Stuart Snow  
Cross Country Qualifier*



*Ben Drury  
R44 Type Rating*



*David Camre  
1<sup>st</sup> Solo R22*

Apologies if we have missed anyone, will include you in the next set of mugshots