

# IN THE GREEN

*The official newsletter of Thurston Helicopters*

ISSUE 3 SUMMER 2004

## *Take Torque...*

It's that time again... It seems such a short time since I last sat down and wrote to you all. Since then Rachel has left us and returned from whence she came i.e. Cambridge. She left a big hole when she left and I had to step into her shoes and found I'd completely forgotten how to do the job! Being Operations Manager for a small helicopter company does require you be able to juggle quite a few balls in the air at once especially as you are virtually on your own, trying to control unruly pilots, answer the incessant telephone, work out charter quotes etc etc. I had two and-a-bit years of not having to worry about that at all and when Rachel left it was all a bit of a shock. However, her position has now been taken over by my daughter Amy who, I think, really enjoys the job. Although she lacks the considerable Aviation experience that Rachel has, Amy has taken the reins very capably and I'm sure will prove to

be a great asset to the company. As parents we were delighted when she announced to us that she had achieved a 2:1 pass at her degree in Cambridge so now I expect even more of her!

As some of you may have heard we have had a mechanical 'incident' with G-THLA last month. Whilst Ashley was flying with a student, carrying out autorotations he experienced a severe vibration on the recovery. Ashley immediately took the controls re-entered autorotation and took the machine down to a hover 3 foot above the surface, and was ready to land it there and then. Instead he elected to hover a bit longer and then returned to the airfield. For the next 14 hours the machine showed no ill effects whatsoever until an eagle-eyed student noticed that there was rather a lot of oil over the upper bulkhead. I did not like the look of this and we immediately took the machine to Redhill where the engineers discovered that

the exhaust valve on No. 4 cylinder (pilot side front) had obviously seized which caused its push rod and tube to become bent. As the tubes are mounted on the outside of the engine it lost its seal and hence all the mess on the upper bulkhead. What does this tell us? Well, for one how good those Lycoming engines are to even keep going after an event like that and also the importance of a thorough pre-flight check. (Well done Stu!) It also tells you how important it is to get yourself to a safe situation as soon as you sense there might be a problem. Ashley immediately got himself and his student to a situation where an engine failure was a mere triviality. (Well done Ashley!) So how many of you have done any engine-offs from the hover recently (dual of-course?) Not many, I know. So come on ask one of us to give you regular check rides and we

can re-visit this one.  
Enjoy the summer and fly safely.  
*James*



## *Events Calendar*

We are considering a visit to the Robinson factory in LA sometime later this year (or early next year).

'The Flight Safety Course' conducted by RHC is a three and a half day course, which includes two and a half days of classroom instruction and one day devoted to maintenance, pre-flight inspections, and flying with an experienced RHC pilot. The cost is \$350 and includes up to one and a half hours flying in a brand new machine!

Flights to LA will be approximately £350. There will also be a course fee payable to Thurston which will depend upon the numbers attending but will be in the region of £200 pp. Accommodation is in addition to these costs. With our past experience we suggest you also bring along a good chunk of spending money for the visit to Las Vegas after the course! If enough people express interest then we will try and arrange a trip but we will need to book soon. Please get in touch ASAP.

## Rates

Type	Dual rate per hour	5-10 hour rate
R22	£215	£199
R22 SFH	£155	£145
R44	£360	£345
R44 SFH	£295	£285

NB G-EMMI, being a Clipper II, is an additional £10 per hour

*Please note that all the above prices include circuits and landing fees at Headcorn.*

*All prices are exclusive of VAT*

# Laying down the air law: weather minima

It seems strange that while basking in the sun on a glorious July afternoon in typical CAVOK conditions, I should be writing about weather limitations. However, as we all know the weather in this country is so unpredictable that even a few hours can mean the difference between a gentle afternoon bumble and a hair raising, pelvic floor excising challenge. Such are the joys of living on a temperate island with the vastness of the Atlantic Ocean conjuring up its next trick.

As helicopter pilots there are several things we must consider with respect to the weather. Firstly, we have to look at the privileges of our licence; then we must look at the ANO and consider what the VFR minima are. The self-fly hirers among us then have to look at the limitations as stipulated in the Thurston Helicopters Flying Order Book. These clearly lay down the weather minima for self-fly hire with respect to wind, visibility and cloud base. The

limits in the Flying Order Book are based on those found in the Helicopters' Operating Handbooks. Lastly, we have to consider our own limitations; these of course depend upon your experience and your familiarity with the area that you are going to fly over.

Most of us have PPL(H) licences which in their basic form allow us to fly during the day, half an hour before sunrise to half an hour after sunset. It is necessary to remain clear of cloud and in sight of the surface during this time. Night flying is prohibited unless you hold a night rating. I should mention at this point that in order for your licence to be valid you need a current medical and LPC. If you have not flown for 28 days and you wish to self-fly hire an aircraft then the Flying Order Book requires you to fly with an instructor briefly to check all is well. Even a short time away from the controls can lead to you being a little bit rusty.

So what is exactly meant by clear of cloud and in sight

of the surface? Well, if you are flying below 3000' and you are not in breach of Rule 5 (low flying) you can remain VFR in a 600' cloud base with 2km visibility and a surface wind of up to 26kts. In this situation you would be within the privileges of your licence and compliant with the Pilots Operating Handbook. However, from a self-fly hirer's point of view, you would be in breach of the Company's Flying Order Book. In this the weather minima are set as 2000' cloud base, visibility in excess of 10km and a surface wind of not more than 15kts.

A low cloud base is one thing, but poor visibility is something else. Despite the cloudless skies we often experience during the summer, visibility can be appalling due to haze. Low level inversions cause dust to accumulate and without any major weather changes these conditions can last for weeks which is particularly frustrating for solo students.

Cumulonimbus is a word which puts fear into even the most hardened of pilots. With the onset of frontal weather, especially cold fronts, thunderstorms can appear from nowhere very quickly. These massive cells can cause extreme localised weather conditions and should be avoided at all costs. Remember, turbulence can be

felt up to 20 miles away. Your licence may allow you to remain in sight of the surface and clear of cloud but passing near, under or close by will lead to a very unpleasant experience. From a training point of view if CBs are mentioned anywhere in the forecast we do not allow any solo flight.

Wind is another problem. Gusty conditions and strong winds make for much more demanding piloting. There is nothing more annoying than having a beautiful sunny day only to find the wind will not settle down. Again, from a training point of view, days can be lost due to the wind which can be immensely frustrating for students.

Most of us are very sensible when it comes to weather but even the best planning in the world does not prevent the possibility of being caught out by the unexpected. Despite their good looks and confident air, some of our media forecasters make the occasional mistake. Therefore always have a diversion in mind and a 'there's always another day' attitude. People never seem to have problems on the way to somewhere, it's always on the way back!

However when the weather is good this is one of the best countries in the world to fly in. Enjoy your flying this summer.

T S X N M R T E L A T E M P Y S F A A  
O F P T E E T E R H I N G E Y V B S R  
I G S R T S W Q U J D Z K I U Q K H T  
U L P C A X N J V M O D L P C I A I I  
C F U Y V G A S K E T X B R D H W F F  
E Y T K S K C Y N D T O P S R S J I I  
Q P C S P V R L A B O X D K O F L J C  
B N D L B A J U U L C K S E O Y R V I  
H K L P I T O T A T Y V B W P N A A A  
P B A M T C T K D A C N M S S J R L L  
S E H P D Y P P N E L H A V T F H N H  
S L J K N B V N K A E K S V O D V X O  
H L K S C K R H L K L H J A P N T R R  
U C O L L E C T I V E T R U P L D I I  
H R K D S H E G R E H B I P E M S S Z  
N A G K B R V M S J K E J M L H B O O  
A N E N N B D U P P E R S H E A V E N  
A K X A F S J Z S G T J L E I O T O O F  
C V T H U D U R O T O R B L A D E S G  
N O H K A J L F G P U L M V S A W R K  
R D D I R E C T I O N A L G I R O W X

Hidden in this wordsearch are 16 words all relating to helicopter parts. See how many you can find – there are a few tricky ones thrown in!

## Contact List

<b>Amy Tuke</b> Operations Manager	01622 891158
<b>James Tuke</b> Head of Training	07970 743799
<b>Will Samuelson</b> Instructor/ Commercial Pilot	07768 842338
<b>Ashley Luffrum</b> Instructor	07941 266855