## Weather to pay



Should you pay for your forecasts? Self-confessed tightwad **Pat Malone** finally puts his hand in his pocket and does the decent thing kay, I finally cracked. After years of holding out, I clicked on the 'upgrade' button when I launched the Met Office aviation website and forked out £55.20 for the subscription weather service. No, I haven't won the lottery – I went to visit the Met Office with the Helicopter Club, an AOPA corporate member, and I saw what I was missing.

Specifically, what made me decide to subscribe was the surface 'visibility forecast' map, which is similar to the rainfall radar map – but instead of just showing you where it's been, as the rainfall radar does, it shows you what you'll be seeing six hours ahead, in hourly jumps. Red splodges mean fog, less than 200 metres vis, then it goes up in 16 toured the Met Office in April paid for their weather.

The Met Office is a branch of the Ministry of Defence, but it's a profit-making one – a 'trading fund' in government parlance, and it charges its customers, covers its costs and pays a dividend to the MoD. Fifteen years ago Wx was disseminated to GA through premiumrate phone lines, which was a bit of a swindle, but the internet put paid to that; under ICAO rules each country must make its weather available freely to every other country, and the web made it impossible to keep charging for it at home while giving it away abroad. The basic TAFs and METARs are free, as are the Forms 214 and 215 and the 60-hour

synoptic, but all the really interesting stuff is kept under the counter.

So what do you get for your £48 plus VAT? Going into the secretsquirrel sections of the website for the first time is like opening Christmas presents. I've mentioned the visibility forecast map; I've been running it like a video game for four days now and it does a pretty good job, when I compare it with what I see out of the window. It would be nice to be able to zoom on it, but presumably they can't make the data any more accurate and any attempt to enlarge

data any more accurate and any attempt to enlarge the map would be unproductive. It says on the site that the visibility forecast is there on a trial basis, but the cognoscenti tell me it's been on a trial basis for six or seven years, so they should be making a decision any day. If they

dump it, bang goes my subscription. There's a caveat on the site that tells you not to rely on it for decision-making purposes, and I don't know whether that's to satisfy Met Office lawyers or because the information is unreliable. Seems pretty sound to me.

On the subscription side, the rainfall radar is animated and updated every 15 minutes, but it doesn't do forecasting. A separate map of lightning strikes covers the last two hours and also updates every 15 minutes to help you fly round the thunderstorms. The basic synoptic chart for the UK shows isobars and fronts and updates every hour. There are visible and infra-red

Right: no need to pay for this on the Met Office web site satellite images for Europe, and while they give you a good general picture I suspect you'd need quite a lot of practice to be able to interpret them accurately. The flight level wind and temperature charts might be useful because they start at FL050.

The three-day planner is extremely useful, although they could easily make it a lot better. Firstly, it's issued at 11am every day, which is a bit late. There's no reason why it shouldn't be issued at 6am. Most people will have made their dispositions by 11am, and the data is available earlier, so why not push it out? You have three choices - south of England, north of England, and Scotland. It gives you the synopsis, winds on the surface and at 2000 feet, visibility and cloud – although these are generally not very helpful because they cover such a wide area, and thus there seems often to be a full house of conditions. It would be good if they could have a stab at the cloudbases, too, although again, given the geographical area they're covering it might not mean much.

There's also (on a trial basis) something called the mesoscale cloud, pressure and precipitation forecast. I had this in the 'too hard' drawer for a while because it looked too much of an eyeful to unscramble, but it turns out to be quite simple and very useful. There are a few isobars on the chart, but the cloud is presented in different colours depending on height - blue for very high level, light grey for medium level, dark grey for low, and (naturally) brown for anything under 1000 feet. It uses a pattern of symbols to give an idea of what sort of precipitation is going on moderate rain, heavy showers, light snow and so on. Used in conjunction with the visibility forecast it gives a pretty good picture, but it is, of course, covered by the same caveat that tells you not to rely on it.

The Met Office is a fascinating place to visit; they employ about 1,700 people, 1,000 of them in their Exeter headquarters, and some of them still do traditional jobs like taking observations and letting off sonde balloons; you'll learn that while they have the second most powerful supercomputer in the country, an IBM system that can make 125 trillion calculations a second, ultimately the experience and instincts of the Chief Forecaster of the day affects the final picture.

Now if only the bloody weather would clear up I could go flying.

## F215, 2000 to 0500 UTC

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Left: the computers do the hard work, then the Chief Forecaster applies his experience Above: the Met Office in Exeter - it's MoD, but must make a profit

different colour schemes to sky blue +50 km. Some people say you should just extrapolate this information from the temperaturedewpoint spread, but it's far, far easier to have it presented in animated map form and to have an IBM supercomputer do the sums for you at a cost of £1 a week.

Now, you flying club and flight school chaps will know all this - you'll have the subscription service available to you on the terminals in the briefing room, I presume. But for us backwoodsmen it's a serious consideration. Down the years I have questioned a lot of people about the value of Met Office subscription services, and the general consensus seems to have been that for the day VFR pilot, the free service should suffice. I asked Steve Copeland, who attends Met Office briefings on behalf of AOPA, and he hummed and haa'd a bit and gave me a bit of on-theone-hand, on-the-other-hand, and on balance I kept my wallet shut. It's possible that, being a tightwad, I've been deaf to those who thought I should pay. Then I found that a majority of the Helicopter Club members who