s any pilot who's seen Star Wars producer George Lucas's new film *Red Tails* will agree, the real stars are not the highly-paid talent whose names appear on top of the credits but the beautiful warplanes whose action sequences make the film memorable. Most aviators will be familiar with the story of the Tuskegee Airmen, the black American pilots who fought for their country in World War Two when they

It'll never get off the ground...

Dedicated replica builders have ambitious plans to make real aeroplanes, as **Pat Malone** reports weren't even allowed to sit in the same restaurant or train carriage as their white countrymen and had to step off the pavement if a white man wished to pass. Red Tails is a dramatised version of the events that surrounded those men, a handful of whom are still alive, but while the cinemagoer may thrill to their exploits his heart will surely sink as those beautiful Mustangs and Warhawks are blown to pieces in the interests of the box office.

One group who viewed the destruction with a particularly jaundiced eye was Dave Hobson's crew at Gateguards (UK) Ltd, who lavished care and attention on creating these replicas, which are so good that until you rapped a knuckle on the wing you'd swear they were the real thing.

> Main photo: **Replica** maker Dave Hobson with the Tuskegee Museum's P-51 Below: Let's hear it for CGI – a sight you'll never see Bottom: Some of the cast of **Red Tails with** phantom Mustangs

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General Aviation August 2012

The three Mustangs and three Curtiss P-40 Warhawks Gateguards created for the film are the latest in a series of stunningly realistic replicas the company has made for all sorts of customers, domestic and foreign. As the name suggests, the company's work adorns plinths outside military bases up and down the country they're currently refurbishing the Spitfire and Hurricane that stand outside RAF Bentley Priory. If you saw P-51 Sexy Sally at the Goodwood Festival of Speed, she was one of theirs, made for an American dealer in Mustang cars. They've bent a replica Spitfire for a crash scene in a French D-Day museum. When the BBC wanted to make the world's largest Airfix model Spitfire for a James May special, they turned to Gateguards, and they hired a replica Spitfire for the TV film of Geoffrey Wellum's fabulous book First Light. But here's a secret - the company now harbours ambitions to move one step beyond the replica market and build a fullscale flying replica of a de Havilland Mosquito. (See separate story alongside).

There's more to this replica caper than knocking up a few moulds and cranking out panels. Each aircraft is correct down to the smallest detail, from the rivet heads to the serial numbers on the guns, and at a distance of five yards it will be indistinguishable from the real thing, even to the anorak. As important as the correct materials is the correct attitude meticulous attention must be paid to getting everything absolutely right. Dave Hobson, a pilot himself, says: "There are people out there who can tell you the tiniest and most insignificant detail of manufacture. They'll come up and say, 'you've got twelve rivets on the left side of that panel when there should be eleven'. So you've got to know more than they do; you simply can't afford to get anything wrong."

Gateguards' hardened aircraft shelter at Newquay Airport in Cornwall is a treasure trove of historic aircraft bits, panels,

Right from the top: open sesame – Gateguards Aladdin's Cave at Newquay airport The Bentley Priory Hurricane replica awaiting care and attention Random aircraft components on the floor of the Gateguards' hangar









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Below: another project awaits – an Me-109 replica restoration for a film company Right: the Me-109 cockpit – every piece a hand-made fake Bottom: craftsmen discuss points of meticulous detail on the Mustang's fuselage





weaponry, instruments, almost all of them fake. In the HAS at time of writing they have a fake Me-109, a real Chipmunk, the two Bentley Priory aircraft and a P-51 Mustang of which they are particularly proud because it will hang in the Tuskegee Airmen Museum in Alabama, which stands as a memorial to the men who broke the racist mould in the US Army Air Corps.

Dave, from Birmingham, was originally a carpenter and joiner who always wanted to build aeroplanes. "We lived close to Castle Bromwich after the war, and I saw many, many Spitfires being scrapped," he says. "For me they represented the pinnacle of aviation engineering at the time, and now they represent the heroism and sacrifice of young men whom we should never forget."

Some 12,000 Spitfires were built at Castle Bromwich, and the celebrated test pilot Alex Henshaw flew about half of them. "My dad used to tell me a story about working up the power station chimneys close to Castle Bromwich during the war when a pilot flew a knife-edge pass between them, and they waved at him and he waved back," Dave said. "I don't think I ever believed him, until I read Alex Henshaw's book *Sigh for a Merlin*, where he tells the story of how he used to



It might get off the ground...

Like the old puppet-maker who wanted his wooden doll Pinocchio to be a real boy, Dave Hobson and the team are planning to make one of their replica warbirds fly. They intend to create a fully airworthy de Havilland Mosquito, the rarest warbird in the world; of the 7,700 built none are flying today, and you can't get rarer than that. They already have one of the aircraft's Merlin engines, and they know where to get the other. They have all the plans they need. They've talked to the CAA – there may be some issues there, as they say, but if mountains must be moved, the must be moved. Nobody said it would be easy.

Getting details of the project is difficult. The warbird world plays its cards so close to its chest that it makes the Magic Circle seem verbally incontinent. If you hang around long enough you'll hear stories – the warehouse full of Spitfires, still in their crates, amassed by a shrewd dealer in the 1950s; the guy with 50 Merlin engines on his shelves, the bloke who has two Lancaster fuselages – but as to details, they're not about to tell you, mate.



Dave is happy to show you around his hangar and to talk about those things which are plain to see, but when you start asking probing questions he gives you the thousand-yard stare and changes the subject.

But he opens up a little about the Mosquito because the frustrating thing is that while they're got everything they need for the project – plans, parts and materials, engines, a complete electrical system, all the necessary skills and talents, properly-licensed aerodynamicists, stress engineers and so forth – they're a bit short on the readies, and they can't get started until they can afford to make space in the calendar. They need a dust-free hangar very different from the one in which they build their replicas, but none of these difficulties cannot be overcome. So if you've got a brown bag under the mattress and you want your own Mosquito, you know where to go.

In fact, if they can get started they'll make two. "Once you've got the moulds and the jigs made up, you're more than halfway there," Dave says. "The Mosquito was of course largely timber-built and we're in the fortunate position of having access to much better technology than the original builders – more modern construction methods, better glues and so forth – but the end result will be visually identical to the original.

"I'm especially keen to create a Mosquito because no young man today has ever seen one fly. We have a responsibility to keep alive the memory of the men who flew them in war, because without their sacrifices the world would be a very different place today." line up on the runway at Castle Bromwich by flying between the chimneys in fog, then he could count himself down to the threshold in near-zero visibility.

Dave drifted into the replica-building business almost by accident, making his first Spitfire out of parts scrounged from dozens of different sources, and along the way he's gathered around him a shifting cast of like-minded individuals who bring specialist skills and qualifications to their work. So far they've made a dozen replicas, from Spitfires to V1 flying bombs, and although they've had some serious enquiries about bigger work, the financial climate has stalled some projects before they got to first base. Gateguards had talks with representatives of Peter Jackson's production company over full-sized replica Lancasters for his much-touted remake of The Dam Busters, but eventually the work went to China.

"They can't be called cheap," Dave says. "But nobody does what we do – we are manufacturing replicas to aircraft-build quality. The amount of work that goes into one of these replicas is extraordinary – perhaps 3,000 man-hours. It's got to be a labour of love, a real passion."

Watching the team at work reinforces the impression that it's all in the detail. When they mould the panels, they can't simply include the rivet heads in the mould because the end result never looks right. So after they've made the panel they drill the rivet holes individually, then apply rivet heads one at a time.

Historical exactitude is equally vital. The Bentley Priory aircraft haven't been right for 30 years. "The Spitfire is a Mk IX but it should be a Mk IIA for Bentley Priory," Dave says. "The replicas have been on their plinths for 30 years and are very weather-worn, so apart from the refurbishment the Spitfire will be remade as a Mk IIA."

James May's attempt to build the world's largest Airfix model, a life-sized Spitfire, made entertaining TV but was not



Inside the hardened shelter occupied by Gateguards at Newquay Below: Dave Hobson shows visitors copies of original P-51 plans



P-51D replicas made for George Lucas, who blew them up



Remembering Cornwall's war in the air

One of Dave Hobson's many dreams is to turn a corner of Newquay Airport into a museum commemorating the unique contribution of Cornwall and its people to the defence of the country. Newquay lies at the centre of a network of World War Two airfields – almost all now vanished – from which Coastal Command mounted Atlantic patrols. Virtually contiguous, they included Davidstow, St Merryn, St Eval, Trebelzue, St Mawgan, Perranporth and Portreath. Perranporth is now a GA airfield and St Mawgan has become Newquay Airport, leaving RNAS Culdrose as the only active military airfield in Cornwall. The memories remain – but for how much longer?

"There's very little in Cornwall to commemorate what was done here," says Dave. "There's a good little museum at Davidstow but we could do so much more here," Dave says. "It ought to be an integral part of the tourism industry, but there's little appetite for it at Newquay. We could have had an airworthy Nimrod here – the Maritime OUT was based here in the sixties – but the airport wanted a monthly fee to park it, so that rules it out. St Mawgan still has a Shackleton as a gate guardian but it needs to be got under cover.

"We know where to source the exhibits, both replicas and originals, and there's no shortage of volunteers to help. But we'd need a lease on a corner of the airfield and we'd have to move a section of the security fence, and at the moment there's not much appetite for it at Newquay." representative of Gateguard's meticulous work; they made the panels, kit-style, at the BBC's request knowing that it would not hang together without internal bracing, as indeed turned out to be the case. But it was good knockabout fun and certainly raised the profile of the company. Marketing such a business is quite a challenge; customers are so disparate that you have to rely on them to find you.

But work that requires such passion goes far beyond making a living. "It's about preserving a memory," Dave says. "Almost every day the *Times* and the *Telegraph* obituary columns record the passing of another World War Two fighter pilot, even though they were terribly young; Soon there won't be any left and all we'll have to remind us of what we owed to them is these aircraft."