

Mitchell Taylor's Hangar 45 in Yatesbury, Wiltshire, a 29-unit live/work proposal that reinvents the redundant with a whole new use, received planning in 2008.

As we protect the countryside from development, village life is dwindling and industrial buildings rot in the fields. Now Mitchell Taylor is turning **defunct aircraft hangars into live/work units**. It's sustainable, nurtures communities – and could well take off

AIR FIX MODEL

Words Jan Carlos Kucharek | Images Mitchell Taylor Workshop

BUILDING INSIDE old aircraft hangars? Why would you do that? Because they're there, they're big, and they're in the countryside. Remember, the onerous requirements of Planning Policy Statement 7 have a lot to answer for, making building in rural areas a difficult prospect for all but the most tenacious architects. And while not precluding rural development, PPS4 on sustainable economic development sets out strict guidance as to how they should be approached, all of which is backed up in local development frameworks and urban development plans. Change of use from agricultural to residential requires a sound argument, and the construction of new residential buildings in agricultural areas is next to impossible – unless it's of high architectural quality and sustainability as defined by PPS7's paragraph 11, or meets the exceptions defined in Annex A relating to intensive and high maintenance live agricultural uses. Which means if you can't get a proposal through on its design merits, the only hope is to persuade the client to take up alpaca rearing as a career and ensure your proposed residence is adjacent to the sheds you'll be having to build to house them.

I may be joking, but design times are hard for those living beyond the urban sprawl, and architects working there need to use all their ingenuity to realise the potential in the existing structures that surround them. For Mitchell Taylor Workshop, a design-focused practice in Bath, this sixth sense for sniffing out possibilities in the improbable has kept the practice in business. Bath's conservatism, which only recently saw off Owen Luder's 'hated' modernist Southgate Shopping Centre, only to replace it with a classical pastiche (*RIBA J* May 2010),



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→ EXISTING
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usually rings the death knell for any radical modern proposal in the city, as the problematic planning process for Eric Parry's Holburne Museum extension demonstrates. So to survive, firm director Piers Taylor admits they have looked to the hills for inspiration – and not only the natural, but the man-made. For the practice behind the slightly anarchic 'Studio in the Woods' and Piers Taylor's own award-winning house 'Moonshine' – built so far in the depths of the woods outside Bath that it could only be constructed with materials that could be physically carried there by hand – has found it has a bit of a penchant for getting planning permission developing nothing less than old aircraft hangars.

'It was clear the local communities around Hangar 45 in Yatesbury and Hangar 19 in Colerne had an active regard and affection for these prominent, alien industrial structures'

The live/work proposal for Yatesbury's Hangar 5 involved the modification and augmentation of the existing structure.

While the hangar typology might seem a blot on a quite beautiful rural landscape, from a Wiltshire planning policy angle, it is acknowledged that they maintain an importance from a historical and even psycho-geographical perspective. Taylor also says that during public consultation meetings it was clear the local communities around Hangar 45 in Yatesbury and Hangar 19 in Colerne had an

active regard and affection for these prominent, alien industrial structures, sitting on the edges of villages that otherwise present themselves as a bucolic and ancient Cotswold idyll. But while PPS4 would encourage bringing such buildings back into use for local

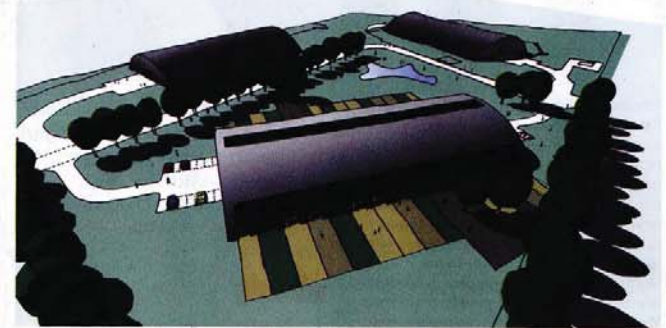
economic benefit, just as many PPS7 clauses would preclude change of use to residential purposes unless a significant policy argument could be brought to bear. For Mitchell Taylor Workshop, the problem was compounded by the fact that Yatesbury's WWI Hangar 45 was curtilage linked and in an Area of Outstanding National Beauty, and Colerne's Hangar 19 was bang on the boundary of a Site of Special

Scientific Interest. Their approach was not only to accept that from a planning angle the structures were 'worthy of retention', but to build a strong argument that they were also 'capable of conversion'.

Piers Taylor drew from his own experience. Having

moved to Bath from London to set up practice, and living in the sticks outside Colerne, he is fully aware of the issues around rural development and suspicious of any one-off speculative residential schemes, but was also aware that, just as he might live and work from home, this was potentially the aspiration of many other rural dwellers. Taylor felt that a live/work proposal on these sites was a relevant argument, as long as the scheme 'didn't force a re-reading of the existing landscape'. The firm's proposal was therefore to retain the existing structures virtually in their entirety and to insert prefabricated timber live/work 'cassettes' within them.

Taylor's argument came from a firm personal conviction, and from his understanding of the



implications of living in the country and working in the city. He feels that 'this way of living is fundamentally unsustainable, as a yearly car journey of 10,000 miles equates in carbon wastage to a poorly performing house' – a strong reason for not developing out of town centres. But it was this same traffic that formed the basis of the firm's live/work proposal.

'We knew that there was no way we were going to get permission if we were creating traffic in an unsustainable location', he recalls, 'and that the consent would succeed or fail on the traffic strategy; we could only succeed if we could offset this against an existing use in planning terms to reduce the amount of traffic from the existing levels on the site'. It was serendipitous that Yatesbury's sawtooth-roofed Hangar 45 had an existing use as a distribution depot, which resulted in lorries regularly rumbling through the village, and the barrel-arched Hangar 19 in Colerne had industrial consent, which therefore had the potential for much of the same. The crux of the firm's Change of Use argument to the community and planners was that the live/work scenario

'The crux of the firm's Change of Use argument was that the live/work scenario with a car pool would actually lessen the environmental impact of the site'

TOP LEFT: The internal street of Yatesbury's Hangar 45 acts as both access and parking.
TOP RIGHT: There is a long term view that, although they are on the edge of an SSSI, the two neighbouring hangars to Colerne's Hangar 19 should be developed in a similar vein.
BOTTOM: Section of Hangar 19, which won permission in November 2010, showing the central street and vehicular access. The live/work pods are structurally independent of the hangar's barrel-arched structure.

with a car pool would actually lessen the environmental impact of the site, remove large areas of hard standing, earmarked to be developed by landscaper Gillespies, and provide a shop and crèche for the village. Reduced traffic movements, combined with high performance Qerto prefabricated housing pods, the potential for increased local employment from the B1 'work' spaces and the generally sympathetic approach to developing the hangars, meant that Wiltshire planners recommended approval with conditions in both cases.

Despite the different structures, the basic design concept is similar for both, involving reflecting live/work units axially along their length, either side of a central vehicular access road. Their generous dimensions (the Colerne hangar is 92m long, 25m wide and 12m high) meant it could hold 26 units, and Yatesbury's hangar incorporated 20. Parking is off this central route, meaning it's invisible from outside. Engineer Hadrock Structures 1 was happy with the general state of the structure as well as the architects' pod proposal, but a certain level of remediation will be required on the hangars to deal with corrosion to the

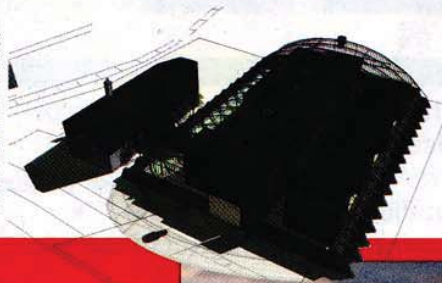
structure, and the opening up of a huge roof light above the central axis road. Colerne is an arched concrete shell roof supported on triangular steel trusses, and because the central portion has been peeled away, presents a bigger structural challenge than Yatesbury's lattice structure. It is proposed that the bottom of these arches will be encapsulated in concrete to form new thrust blocks to the arches themselves. Any structure not replaced due to corrosion will require heavy paint protection. Yatesbury will have raking columns inserted along the middle of the access road to ensure that the pods need support no more than their own weight. Buro Happold was consulted to build up the ground source heating and sustainable drainage strategy, making the insertions 'exemplar' for the area. And with the hangar frames retained, the costs seem to add up too. The less-challenging Yatesbury, Taylor says, is projected to come in at £1000/m² – 'less than a Code 5 new build', with Colerne at around £1300-1400/m², due to its more difficult structure and programmatic considerations. Either way, the base build costs still make for characterful working homes that will remain competitive in this more expensive local housing market.

Whether these two developments serve as a dangerous planning precedent remains to be seen, and Wiltshire Area Planning Office's development manager Brian Taylor remains

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BELOW: Jamie Fobert's sketch design for a hangar in the Romney Marshes proposes an 'eco-village of holiday homes' – highly sustainable, and with the client as developer and contractor. BOTTOM: ETFE roofs and wind turbines will make up part of the hangar's sustainability argument.

JAMIE FOBERT ARCHITECTS (2)



vigilant. 'When we receive such live/work applications for the conversion of existing structures there's always the fear that they may merely be a 'Trojan Horse' to secure a residential Change of Use in cases where it would not normally receive such a consent', he comments. 'As a council we must be rigid on the enforcement of conditions and ensure that the internal live/work arrangements are built and maintained as such'.

But there is also a sense from Brian Taylor that times in the countryside are changing, and that proposals that augment small local communities with additional facilities and make use of redundant buildings, agricultural or otherwise, should be considered on the strength of the development argument and their individual merit. 'There are concerns with any development', he says, 'but there is a feeling that the hangars at Colerne for instance have become part of the local community and landscape, and that their preservation and re-use should be encouraged.'

And with Mitchell Taylor recently having received permission for the conversion of nearby Trowle Manor Court farm's huge but dilapidated steel framed blockwork and corrugated steel barn structure into a luxurious and modern blockwork and corrugated steel live/work unit with not an Alpaca in sight, Piers Taylor would undoubtedly agree with his namesake's sentiments. ■

HOLIDAYS IN THE HANGAR

Architect Jamie Fobert has also been putting his mind to the reinvention of the hangar form, for client MDM Props, which builds the sculptures and installations for some of the UK's most famous artists, and which he previously commissioned, when the shoe was on the other foot, for the Frieze Art Fair and his recent Selfridges shoe department refit. The client came to him with a hangar it had bought on the edge of the Romney Marshes and asked for ideas to take forward for pre-planning consultation

meetings for the creation of a holiday-let eco-village.

'It was a strong basic concept from a client which, from a cost effectiveness and skills point of view, is interested in building the whole thing itself', says Fobert. The firm's initial proposal is to remove the barrel-vaulted roof and expose the hangar's concrete ribs. Over this would be an ETFE skin that allows the wind to pass through the development – there is an intention to build wind turbines into the proposal. Facing and accessed by the road



are the communal areas, with the private side facing south with views over the countryside. An existing brick building would be renovated to be a caretakers house.

'The bit I'm enjoying is the conversations with MDM, which

will have a major role in creating the interstitial timber prefabricated structure for the houses that will be built below and between the ribs', says Fobert. 'They've created some amazing installations, and I'm convinced this would be another'.