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History or Hogwash?

A re-examination of claims that Gustave Whitehead flew an aeroplane before the Wright Brothers by Mick Oakey, Managing Editor

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The Aviation Historian, PO Box 962, Horsham RH12 9PP, United Kingdom

www.theaviationhistorian.com

HISTORY or HOGWASH?

In March 2013 claims re-emerged that experimenter Gustave Whitehead flew before the Wright Brothers — and this time the controversy even reached the newspapers, TV and the Connecticut Senate. So is there anything in it? **MICK OAKEY** reports on the affair, and on how it highlights the question of what we accept as historical fact . . .

ERE WE GO again, I thought earlier this year, when for the umpteenth time the shoots of one of aviation history's persistent perennial weeds started unfurling. Time for the park-keepers to reach for the glyphosate and, with luck, kill it off once and for all.

Within days, however, that "weed" — the contention that the Wright Brothers had been preceded by German-born, USAbased experimenter Gustave Whitehead (RIGHT) in achieving powered aeroplane flight — was spreading its burgeoning tendrils across the world and rapidly becoming ineradicable. This had never happened before, despite the best efforts of its proponents to cultivate it, so why the sudden spurt? Had some new growth factor emerged, some new piece of evidence that would allow it to outcompete the Wrights for the sunlight of recognition?

THE USUAL SUSPECTS

Before seeking answers to these questions, we need to look at the back-story. Despite the overwhelming consensus among aviation historians that 110 years ago, in 1903, Wilbur and Orville Wright were the first to achieve powered, sustained and controlled heavier-than-air manned flight, there have been rival claims on behalf of other pioneers. Russia's Alexander Mozhaiskii, France's Clément Ader and New Zealand's Richard Pearse, among others (including Whitehead), have all been the subjects of such claims, generally for reasons of blinkered nationalism or vested interest. All have been tested in the court of specialist peer-review and found wanting.

In Whitehead's case, his supporters claim that he flew (a) for half a mile in a steam-engined aeroplane in Pitts-

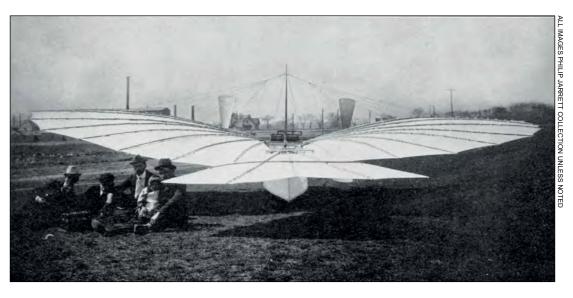
burgh, Pennsylvania, in spring 1899; (b) for at least half a mile (and possibly 1½ miles, and up to four times) in his acetyleneor steam-engined "No 21" monoplane at Bridgeport, Connecticut, in August 1901; and (c) for two and seven miles respectively in two separate flights of his kerosene-engined "No 22" monoplane over Long Island Sound in January 1902.

If he really achieved all these flights, why has he remained so obscure until now? There are several reasons.

First, evidence, or rather the lack thereof: there has simply been no conclusive, reliable record.

Secondly, likelihood: although Whitehead built numerous models and full-sized aircraft, and demonstrated glider-flying successfully in 1904-10, none of his powered aeroplanes appears to have been practical. There is no surviving picture of his No 22 of 1902, but each successive aircraft up to and including his final and unsuccessful proiect, a 60-rotor helicopter of 1911–12, seems to have differed radically from its predecessor, strongly suggesting that he never found the "magic formula" for flight. As Wright historian and replicabuilder Nick Engler says, "[Whitehead] tells us he is getting wonderful results from each new airplane and engine; then he discards them, never flying them again". This contrasts sharply with the Wrights, whose steady, incremental, consistent progress through gliders to their powered 1903 Flyer and beyond is clearly documented.

Thirdly, what horseracing aficionados and



policemen call "form": Whitehead himself made extravagant claims about what he had supposedly achieved, but subsequently changed his story or pleaded misunderstanding when challenged. That on its own does not mean he did not achieve powered flight — plenty of people who scored other notable firsts did so despite lying, or manipulating, or being impossible to work with, or self-promoting beyond the bounds of honesty — but when added to the other factors the case for his primacy collapses. Certainly any suggestion that he flew on any of the dates noted above, other than inside his own head, is at odds with the following item from the first issue of *The Aeronautical World* (Vol 1 No 1, August 1, 1902, page 21):

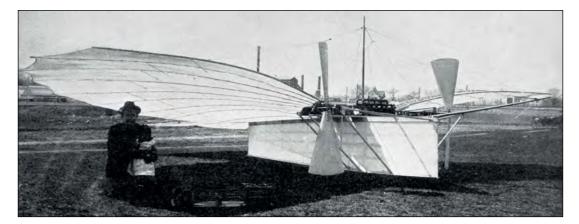
"Aerial Machines for \$2,000 Each

"A man in Connecticut named Weiskopf [sic], under the firm conviction that he has theoretically solved the problem of flight, is preparing to accept orders for machines. An aerial machine to carry six persons he estimates he can manufacture and sell for \$2,000. The machines, which are to be furnished with immense wings, are to be propelled by steam. He claims to have a good financial backing and that his model travelled at the speed of 45 miles an hour. It appears that Mr Weiskopf has Anglicized his name to Whitehead."

Note especially the words "theoretically" and "model". So why has Whitehead come back to prominence, and why is *The Aviation Historian* devoting space to him in its pages?

NEW EVIDENCE?

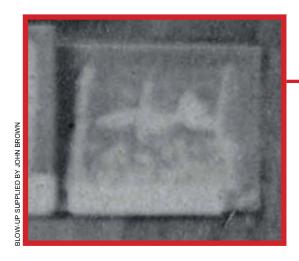
It is partly because hitherto little-known Australian researcher John Brown, a project manager for a company developing a "roadable" aircraft in Germany, has put forward what he believes is new evidence showing that Whitehead did indeed make the claimed flights in 1901. His argument, expounded on his website at www.gustave-whitehead.com, revolves around his theory that a



TOP & ABOVE Rear and front views respectively of Whitehead's bat-winged No 21 monoplane of 1901, in which it is claimed he flew on August 14, 1901. A plan-view drawing of the aircraft, by Björn Karlström, is incorporated in this article's heading on the opposite page. The original of the view ABOVE, in which Whitehead poses with his small daughter Rose, was retouched at some point to remove a tree in the background behind the port wing.

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RIGHT A detail from the image on the opposite page, with ABOVE the massively enlarged photograph-within-a-photograph which, according to John Brown, depicts Whitehead's aeroplane in flight in 1901. Brown offers an analysis of the picture on his website.

photographic print pictured among other images on a wall in an Aero Club of America (ACA) exhibit in New York in early 1906 shows the Whitehead No 21 aircraft in full flight in 1901. This is not all; Brown also cites an original eyewitness report and "more than 100 contemporary news reports".

An impressive body of evidence, then? Well, no. The ACA photograph-within-a-photograph has been massively enlarged and its contrast has been increased. We reproduce it **ABOVE**; we do not have the space to repeat Brown's detailed analysis of it, which is freely available on his website. Brown tells TAH, "The photo I found purports to show Whitehead in sustained, powered flight in 1901. However, it had to be enlarged more than 3,000 per cent because it was a photo of a collection of Whitehead pictures at an aviation exhibition and is too blurred to identify many details. It is proffered because three contemporary journalists saw it up close and stated it showed Whitehead in flight in his 1901 machine. But Wright biographers alleged all the reporters were 'lying'. It appeared to be a high-wing monoplane with a central mast, flying at the height stated in the reports [20ft]."

We urge readers to decide for themselves whether that is indeed what the photograph shows, and whether the analysis is sound. Meanwhile it should be pointed out that, despite Brown's assertion that three journalists said the image "showed Whitehead in flight in his 1901 machine", what the source article (in *Scientific American*) actually says is that the image depicts "a large bird-like machine powered by compressed air" — it does not say that it was manned, and the use of compressed air suggests it was a model.



Regarding the 100-plus press reports, Brown tells *TAH*, "Yes, I found more than 100 contemporary news reports about Whitehead's pre-Wright flights. But only the original report has probative value because it is by an eyewitness. I cite the others because Orville Wright had argued the previous lack of known news articles somehow 'proved' Whitehead didn't fly."

Surely an evewitness report is always reliable? Again, no. In this particular case, published in the Bridgeport Herald of August 18, 1901, and attributed to the paper's managing editor, Richard Howell, the article's headline includes a depiction of four witches manœuvring their broomsticks through the word "flying", which suggests editorial mischief and a spoof story (see panel on page 86). Howell names two other eyewitnesses beside himself, but later one of them (James Dickie) claimed not to have been present and that he believed the entire story "was imaginary, and grew out of the comments of Whitehead in discussing what he hoped to get from his 'plane". As for the many other press reports, the newspapers have always picked up and repeated stories from other papers, without always being too scrupulous about their veracity — so 100 reports are no more believable than one report; they are merely more numerous.

ENTER JANE'S ALL THE WORLD'S AIRCRAFT

If you are still with me, then congratulations; and I expect you are asking why on earth *TAH* is devoting several pages to the highly questionable theory that Mr Brown is promoting.

The sole reason is that, extraordinarily, Paul Jackson, the editor of the Development & Production



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THE BRIDGEPORT HERALD — A RELIABLE SOURCE?

WHEN CONSIDERING primary source material, it can be vital to examine it in context, not just in isolation. In the case of the Bridgeport Sunday Herald, such an approach is illuminating. The story ABOVE, referred to in this article, appeared on page 5 of the August 18, 1901 edition. Research in the paper's archives shows that the "page 5 story" was often sensational and, as early-aviation historian Nick Engler says, "walked the line between fact and fancy". Five weeks earlier the page 5 slot was home to The Dog Man of Windham, BELOW, a story about a Yeti or Bigfoot seen in Connecticut's woods. Other stories that summer described The Great White Shark of the Lexington Wreck, which attacked divers searching for treasure in a sunken ship, and, just a week after the Flying story, The Woodbury Kleptomania, about a woman who stole rare plants and chickens.



component of Jane's All The World's Aircraft (JAWA) — that long-established bible of aviation reference (albeit not aviation history reference) — chose, in March this year, in the foreword to its milestone 100th edition, to place his reputation and that of Jane's on the line by (a) summarising Brown's research, (b) describing it as "meticulous", and (c) accepting it as fact, concluding with the snappy slogan "The Wrights were right, but Whitehead was ahead". This endorsement of bad pseudohistory in a normally highly-respected aviation publication simply must not, in TAH's view, be allowed to go unchallenged.

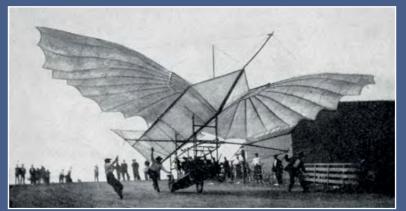
In fairness to Mr Jackson, we all make mistakes. I speak from experience, as an aviation-history journalist and editor of 30 years' standing. Sometimes, those of us who write or edit will end up committing those mistakes (through error or misjudgment) to print, where they squat indelibly upon the page forever. From this unassailable position they glare at us balefully, making us squirm every time they catch our mind's eye. This usually makes us very keen indeed to avoid making further such mistakes.

In this instance the editor of *JAWA* appears to have fallen, hook, line and sinker, for Brown's hypothesis — perhaps in a weak moment, given the occasion of the "100th foreword". It seems to be a classic case of an editor, looking for the chance to say something eyecatching and sensational on a momentous occasion, falling victim to someone with an axe to grind and coming a cropper.

Journalists need to be sceptical. And if they are not when they start, they soon learn to be, because it is all too easy to find oneself manipulated. As philosopher Denis Diderot (1713–1784) said, "What has not been examined impartially has not been well examined. Scepticism is therefore the first step toward truth". One way of being sceptical is, when confronted with an argument presented on a plausible-looking website, to wonder whether it really merits the overturning of many decades of well-informed scholarship.

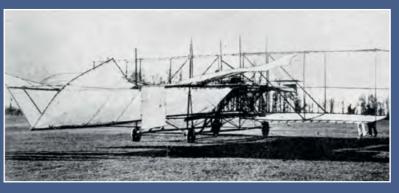
It is all about being as accurate and careful as possible. In his book *What is History?* (London; Macmillan, 1961), Professor E.H. Carr — once a journalist himself, serving as assistant editor of *The Times* during 1941–46 — quotes Housman's remark that "accuracy is a duty, not a virtue".

Like Whitehead, Jane's has form: in 1982 New Zealand newspapers reported that J.W.R. Taylor, the then editor of *JAWA*, was to give "official recognition" that their local hero Richard Pearse "was the first man to fly an aircraft", and was to publish this in a *Jane's History of Flight* to mark the 75th anniversary of *JAWA*. As renowned early-aviation historian and *TAH* Editorial Board member Philip Jarrett says, "It appears that



This page features a selection of Whitehead types:

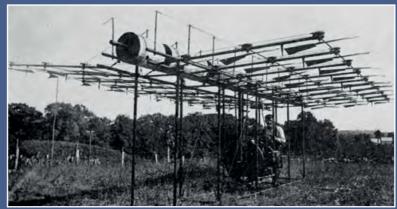
LEFT His large glider of 1902–05, often referred to as the "Large Albatross" (there was also a smaller version), being tested at Stratford, Connecticut, in about 1904. It had foldable wings and could be towed into the air behind a car. In 1905 Whitehead filed a patent for this design which was granted in 1908 (No 881,837).



LEFT The Whitehead-Beach aeroplane of 1908, constructed at Tunxis Hill, had flatplate-section biplane main wings supplemented by batlike monoplane wings at mid-fuselage. White Japanese silk was used in the wings. A lever controlled the rudder and elevated the batlike wings.

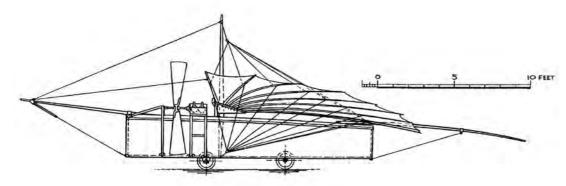


LEFT Another incarnation of the Whitehead-Beach biplane, built for Stanley Yale Beach, son of the editor of Scientific American, with shallow camber on the wings and without the supplementary mid-fuselage wings. Note the belt drive from the lower chassismounted engine to the twin propellers.



LEFT Whitehead at the wheel of his 60-rotor helicopter of 1911–12, his last aircraft design. It was built for Lee S. Burridge, the founder and president of the Aeronautical Society of America. Contemporary reports stated that a 75 h.p. engine powered the rotating drum which ran the length of the machine, the rotors being driven by the drum via a pulley system.

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ABOVE A side-elevation drawing of Whitehead's No 21 aircraft by Björn Karlström, showing the engine position and the bowsprit-and-kingpost bracing system. Note the complete lack of fixed or movable vertical tail surfaces.

something peculiar comes over *JAWA* editors when anniversaries occur".

History depends for its basis on sources which the historian believes to be reliable. Brown apparently believes his sources are reliable, as, presumably, do any supporters he may have; but the rest of the informed aviation-history world does not.

Sadly *Jane's* is not the only prominent body to have fallen for the "new evidence". In early June 2013 Brown's "revelations" prompted the Senate of Bridgeport's home state of Connecticut to pass a bill to honour Whitehead instead of the Wright brothers on the state's "Powered Flight Day". As business historian John Steele Gordon says, "Among the prices we pay for democracy are legislatures doing silly things".

Brown claims he has no axe to grind, saying that he happened upon his "evidence" while researching roadable aircraft. But for someone with no ulterior motive, he is very selective in his choice of which facts to use and which to dismiss. Carr again: "Facts . . . are like fish swimming about in a vast and sometimes inaccessible ocean; and what the historian catches will depend, partly on chance, but mainly on what part of the ocean he chooses to fish in and what tackle he chooses to use — these two factors being, of course, determined by the kind of fish he wants to catch".

The check-and-balance which moderates historic fact-fishing is peer review: any new historical postulation is open to scrutiny by other historians before it becomes accepted. And this is exactly what has happened with Brown's Whitehead hypothesis, even though *Jane's* has not (at time of writing) chosen to change or add a footnote to its 100th foreword as published on its website.

THE HAZARDS OF ONLINE DISSEMINATION

All this highlights the very real threat that the internet poses to the promulgation of "wholesome" as opposed to "toxic" history. Anyone can set up a convincing-looking website, claiming whatever they want as fact, and the disinformation it contains is instantly accessible worldwide. It has never had to undergo the filter of the authoritative editor or publisher saying,

"hang on a minute, I don't think this is kosher". In journalism and research, one now accepts that the web-genie is out of the bottle; and one therefore tends to be very careful about what to take as gospel from online sources. The public is less cautious, not least because of the ubiquity of spin and dissembling among political and other leaders who should be trustworthy, and the rise of instant information-and-judgment through such channels as Twitter. As British commentator Giles Wood wrote recently, "Information wars are rife. The electronic age has incubated a new entity — not a consumer but a 'prosumer', someone who shops around for the information he prefers to believe, because he no longer respects what authority has to tell him". Brown takes exactly that "prosumer" approach, claiming: "These days, people don't rely on editors or historians. If they want to know what happened in 1901, they simply read 1901 papers online".

Ouch! That puts me and my colleagues in our place, then. But Brown seems to miss the fact that newspapers were no more reliable in 1901 than they are now. This is not to denigrate newspapers, which perform a vital function in any free society; but think about this: we aviation devotees often look at newspaper or TV reports of, for example, historic-aircraft crashes, and spot the phrase, "Eyewitnesses on the ground report seeing the pilot fighting with the controls to avoid crashing on a school/house/playground etc". No they didn't, in general: it's just a lazy cliché inserted to titillate people while comforting them in equal measure. And when newspapers get things wrong in areas about which we do know something, what are they getting wrong in stories about which we are less well-informed and therefore cannot challenge easily?

It should be noted at this point that, in addition to his Whitehead website, Brown was, in June 2013 as these pages went to press, in the process of setting up another website, www.wright-brothers.com. In a recent e-mail to Britain's leading authority on pre-World War One aviation, Philip Jarrett, Brown says "I'm not an expert on the Wrights", so it will be interesting to view that website's content when it becomes available and

see if it encourages visitors toward any particular point of view . . .

So, is history immutable? Will the Wrights always retain the crown as being the first to fly an aeroplane? No to the first question, and most likely yes to the second. History is not fixed; it evolves. As Prof H. Butterfield says in The Whig Interpretation of History (1931), "For the historian, the only absolute is change". Carr elaborates: history is "a constant process of interaction between the historian and his facts, an unending dialogue between the present and the past"; and "Our sense of direction, and our interpretation of the past, are subject to constant modification and evolution as we proceed". As to whether the Wrights will wear their crown in perpetuity: if compelling and irrefutable new evidence should emerge to show that anyone preceded their achievement, then aviation historians and The Aviation Historian will bow accordingly. But we are not holding our breath.

TAH is not alone in this. In the USA Tom Crouch, senior aeronautical curator at the Smithsonian Institution's National Air & Space Museum and a leading early-aviation historian, says, "Unlike the case of Gustave Whitehead, a careful investigation proved that Wilbur and Orville Wright had accomplished all that they claimed, and more". He adds, "the [Whitehead] decision must remain: not proved". Meanwhile historian and replicabuilder Nick Engler says of Whitehead's various claims, "a pattern emerges. Whitehead claims success; his boasts garner him contracts; but he is unable to deliver on his promises. Then the cycle repeats". In the UK, Philip Jarrett says Brown "has yet to address major questions regarding his assessments, assumptions, misleading statements and unreliable 'research'".

What all the above boils down to is this: we simply don't know what Brown's central photograph depicts; nor when it was taken (other than before 1906); nor where. Are we then to accept it,



ABOVE In this letter printed in The American Inventor of April 1, 1902, Whitehead claimed to have flown for two miles and seven miles in his "No 22" monoplane, of which no image is known (the No 21 is shown here).

along with his other arguments, as evidence that Whitehead flew before the Wrights? The answer clearly has to be no. Thus the weed gets stamped on again — but, as long as there are people around the world who prefer the tempting juice of conspiracy theory to what they see as the dry dust of plain old history, doubtless it will be back.

ACKNOWLEDGMENTS

The author wishes to thank Nick Engler, Philip Jarrett, Tom Crouch and John Brown for their assistance in the preparation of this article



ABOVE In the 1980s–90s two flying "replicas" of the Whitehead No 21 were built, one in Germany and this one, designated "No 21A", in the USA. Although both were flown, structural and aerodynamic differences, plus the use of modern powerplants, mean that they cannot be regarded as proof that the original aircraft was capable of flight.

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