

# CSAR



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CAMBRIDGE SOCIETY FOR THE APPLICATION and  
APPRECIATION of RESEARCH

## The M-52; the world's first supersonic aircraft (forerunner of the Bell XS-1)

Rod Kirkby

Aeronautical Engineer, Aviation Artist and CSAR Member

*Monday, 21<sup>st</sup> November, 2005; 7.30 - 9.00 p.m.*  
*The Wolfson Lecture Theatre, Churchill College, Cambridge*

**Chair:** Professor Brian J Ford

CSAR Member of Council

**Vote of Thanks:**

to be announced

### About the lecture:

In 1943, an astonishingly far-sighted specification was produced for the design and construction of an aeroplane capable of reaching a speed of 1000mph.

The specification was breathtaking in its simplicity, and demonstrated insights which were prodigiously advanced for that time.

The contract for the project was awarded to the Miles aircraft company, then based at Woodley, near Reading.

This talk will discuss the specification, the reasons why the task was given to Miles, the amassing of a knowledge base in the very much 'grey' area of transonic and supersonic aerodynamics, and the design chosen for the resulting aircraft, designated 'M-52'.

With production of the first aircraft well under way, and with a first flight planned for the early summer of 1946, the project was abruptly cancelled.

Possible reasons for the cancellation will be discussed, along with some lessons that might be learned from the project and from its cancellation.

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## **About the speaker:**

Rod Kirkby, after gaining a B.Sc. in Physics, joined the Future Projects Department of Hawker Siddeley Dynamics.

He subsequently became an Aerodynamics Research/Project Feasibility Engineer in that department, which well suited his innate skills and outlook, and soon developed a reputation as the 'ideas and wood-for-the trees' man!

Although his career later moved into the less politically influenced area of Satellite Telecommunications Technical Development, he never lost his interest in, and enthusiasm for, aircraft.

When he came across the M-52 story in a book called 'Project Cancelled', he decided to investigate further, and shares with us his findings on this topic in tonight's talk.

With Art as a major interest from age 6 (and his best subject at school!), he now makes a partial living as an artist and tutor/demonstrator, with aircraft (surprise, surprise) being his favourite subjects.

His painting of the Miles M-52, in a 'what might have been' portrayal, was bought by Captain Eric Brown, who was to have been the designated test pilot for the project. This painting is now available as a 'Very Limited Edition Print' (only 50 copies), and the image will be one of the slides in the presentation.

## **The CSAAR Organising Secretary adds.....**

The above two pictures are lifted off Rod's website; they show the M-52 as it would have looked, had it been built in the UK. It looks remarkably like the Bell XS-1. See also the BBC website entry <http://www.bbc.co.uk/dna/h2g2/A882272>

There is another example to my knowledge of the US using its weight to terminate potentially threatening aerospace projects; the other the range of Concord.

This is only the second time that we have had the pleasure of a talk by one of our individual members, in my experience (I am discounting members of Council). Well done Rod!

**Coffee and biscuits** available before the lecture, as always. Once again, we shall be charging non-members a nominal sum for entry.

Richard Freeman

CSAAR Organising Secretary