

MAKE YOUR IDEAS HAPPEN



- Do you have an idea that might **improve a process, a technology, a supply chain**?
- If you had some funding & a little support do you think you could **improve, invent or develop something** that would help your business & the aerospace industry?
- Do you think that if you had some funding that you could **introduce a change or an improvement to one of your existing products or processes** that might make you a market leader?
- Do you find yourself thinking "If only I could get some support & funding I could **create a new, better or quicker way** of doing something that would make me better than my competition"?
- Do you have an idea to **combine existing technologies into one product** that would create something better than its constituent parts?



... then NATEP may be able to help!

You don't need an R&D department or a dedicated technology development programme, **NATEP is fully supported from application to project close out.**

Call 4 for funding is now open – you have until 15th December to submit an outline application. Talk to us about how to apply & we can provide advice on the best way to present your ideas.

**To find out more, please contact Sam Clarke on 07727 678798
or sam.clarke@midlandsaerospace.org.uk**



FOUR IDEAS IN ACTION

Xenon pulse technology in fibre placement

Partners: Heraeus Noblelight, Hexcel Composites
End-user: Rolls-Royce

The Xenon Flash technology of Heraeus Noblelight offers potential cost and performance advantages in the processing of composite materials for aerospace applications

This research under this 18-month, £145,000 NATEP grant, will result in a fully operational demonstrator at the National Composites Centre.



▲ Visual management software tool

Partners: ConsultAvila (lead), CANDAs Systems
End-user: RLC Engineering Group

MAA member ConsultAvila Ltd and its development partner CANDAs Systems, producer of the XACTIO supply chain portal, received funding to develop a visual management software tool (VIOS) to optimise inventory for end-user RLC Engineering Group.

VIOS is a multi-echelon software tool enabling data visualisation and active and dynamic inventory planning and control – incorporating best practices in inventory management, e.g. segmentation, mapping, trend analysis, alerting, root-cause analysis and forecasting. The solution will be delivered by ‘cloud’ technology.

“Our approach is designed to change the way of working and create a new way of thinking – ‘Inventory is a symptom and not the disease’,” said ConsultAvila chief executive Jose Guzman-Bello. “The NATEP team has been very supportive throughout the process.”

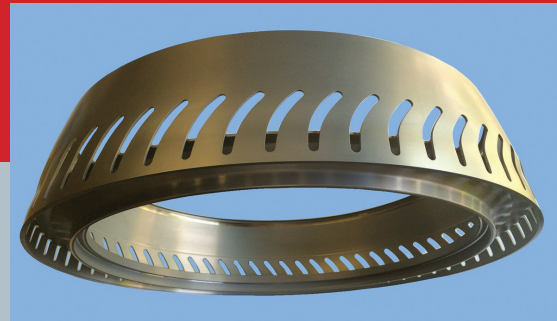
Lightweight pipe end-fittings

Partners: Sigma Precision Components, 3T RPD
End-user: Rolls-Royce

The objective of this 12-month project, led by MAA member Sigma Precision Components, is to reduce aircraft weight by developing a new process to design and manufacture lightweight, cost-effective pipe end-fittings.

The work under the £143,000 NATEP grant involves redesigning a selection of typical end-fittings to suit metal additive manufacture with the objective of minimising weight and cost.

The partners will manufacture samples in an approved material, develop quality control procedures, and validate the process through a combination of analysis, rig testing and development engine testing.



▲ Process optimisation for aerospace alloys

Partners: ANT Industries, Arrowsmith, Technoset
End-users: ITP, Pattonair

Three MAA members became the first SME cluster to link with a Catapult centre to gain NATEP funding when they teamed up with the Manufacturing Technology Centre (MTC) for their Call 1 project to optimise the processing of aerospace alloys.

The three – ANT Industries, Arrowsmith and Technoset – are also members of the Coventry and Warwickshire Aerospace Form (CWAFF). They are working with the MTC to develop and optimise manufacturing methods to a degree that by themselves they would have been unable to achieve.

Arrowsmith’s Jason Aldridge said NATEP was “hugely helpful” in opening a door to independent in-depth process and metallurgical research. “We’re now producing parts onsite which before we couldn’t.”