Merlin Engine Activity

The Rolls-Royce Merlin engine was used in many of the famous fighter aircraft during the Second World War – most notably, the Supermarine Spitfire and Hawker Hurricane.

The early Merlin engines had issues with the carburettor – this resulted in the engines cutting out during combat which could prove a real issue for even the most skilled of pilots. However, an engineer by the name of Beatrice Shilling invented a restrictor that prevented the engines from stalling, and as such, improved the engine. Used throughout the Battle of Britain, this feat of engineering meant that the RAF's fighter aircraft could continue to fight off the German Luftwaffe.

Put your engineering skills to the test and print out the templates and follow the instructions to build a replica of a Merlin engine!

You will need:

- Printed templates
- Scissors
- Glue stick

Note: ask for an adults help when using scissors.

Share your finished Merlin engine with us on social media!

@rafmuseum

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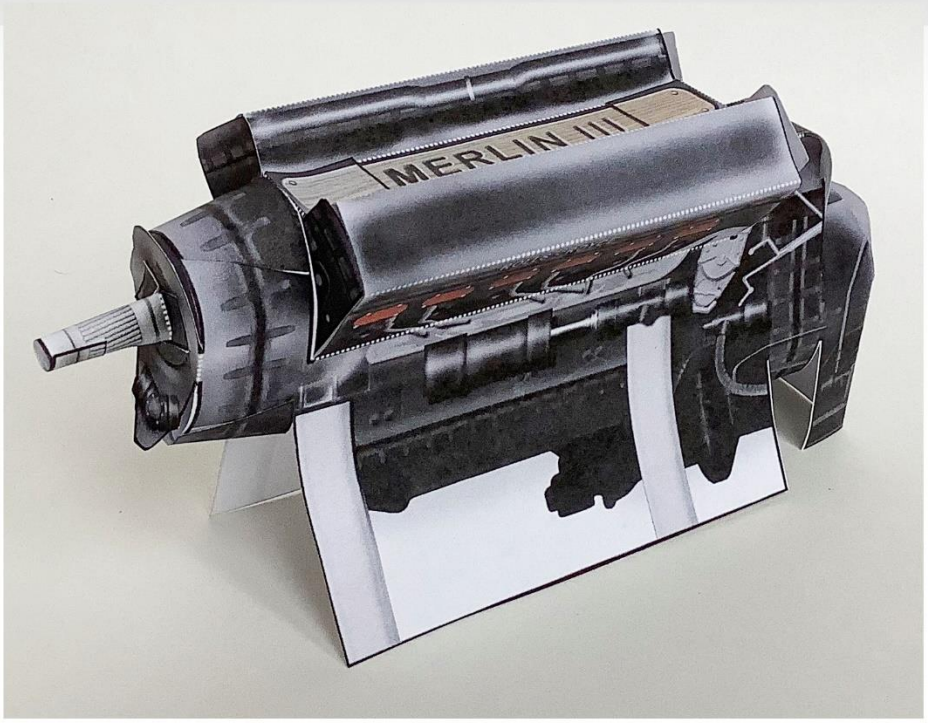
MERLIN III ENGINE

MERLINS WERE NOT ONLY USED IN ALL SPITFIRES DURING THE SECOND WORLD WAR, BUT ALSO HURRICANES, MOSQUITOES AND MANY OTHER AIRCRAFT, INCLUDING THE AMERICAN MUSTANG.

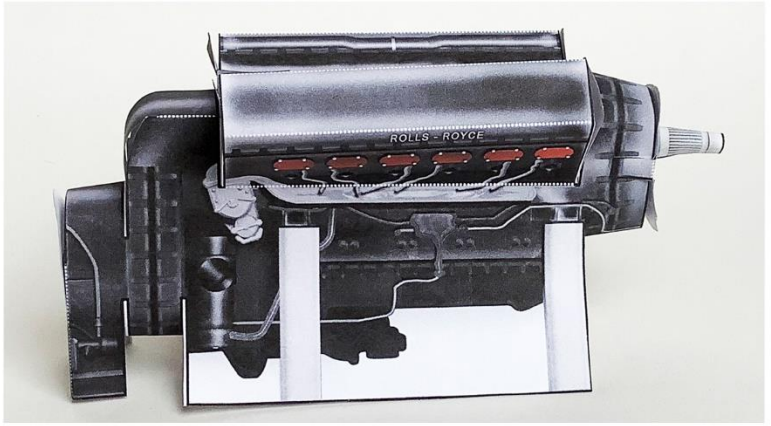
THE MERLIN AND SPITFIRE PROVED A DEADLY COMBINATION THAT HELPED WIN THE BATTLE OF BRITAIN AND, PERHAPS, EVEN THE SECOND WORLD WAR. THE MERLIN III WAS FITTED TO THE SPITFIRE MARK I.



HOW DO I MAKE IT?

Folding this model might be a bit challenging in the middle, so if you need help ask an adult.

1. Cut-out all the 4 pieces.
   (Do not forget the cuts into the **ENGINE**!).
2. Fold all the dotted lines, to match the pictures of the finished model.
3. Glue **A** over **B**.
4. Glue **C** over **D**.
5. Glue **E** over **F**.
6. Glue **G** over **H**.
7. Glue **I** over **J**.
8. Glue **K** over **L**.
9. Glue **M** over **N**.
10. Bend **O** down into **C**.
11. Glue **P** over **Q** and bend it down into **G**.
12. Glue **R** over **S** and bend it down into **E**.
13. Bend the **SHAFT** in half and glue **T** over **U**.
14. Glue **V** over **W**.
15. Glue **X** over **Y**.



CUT ····· FOLD GLUE

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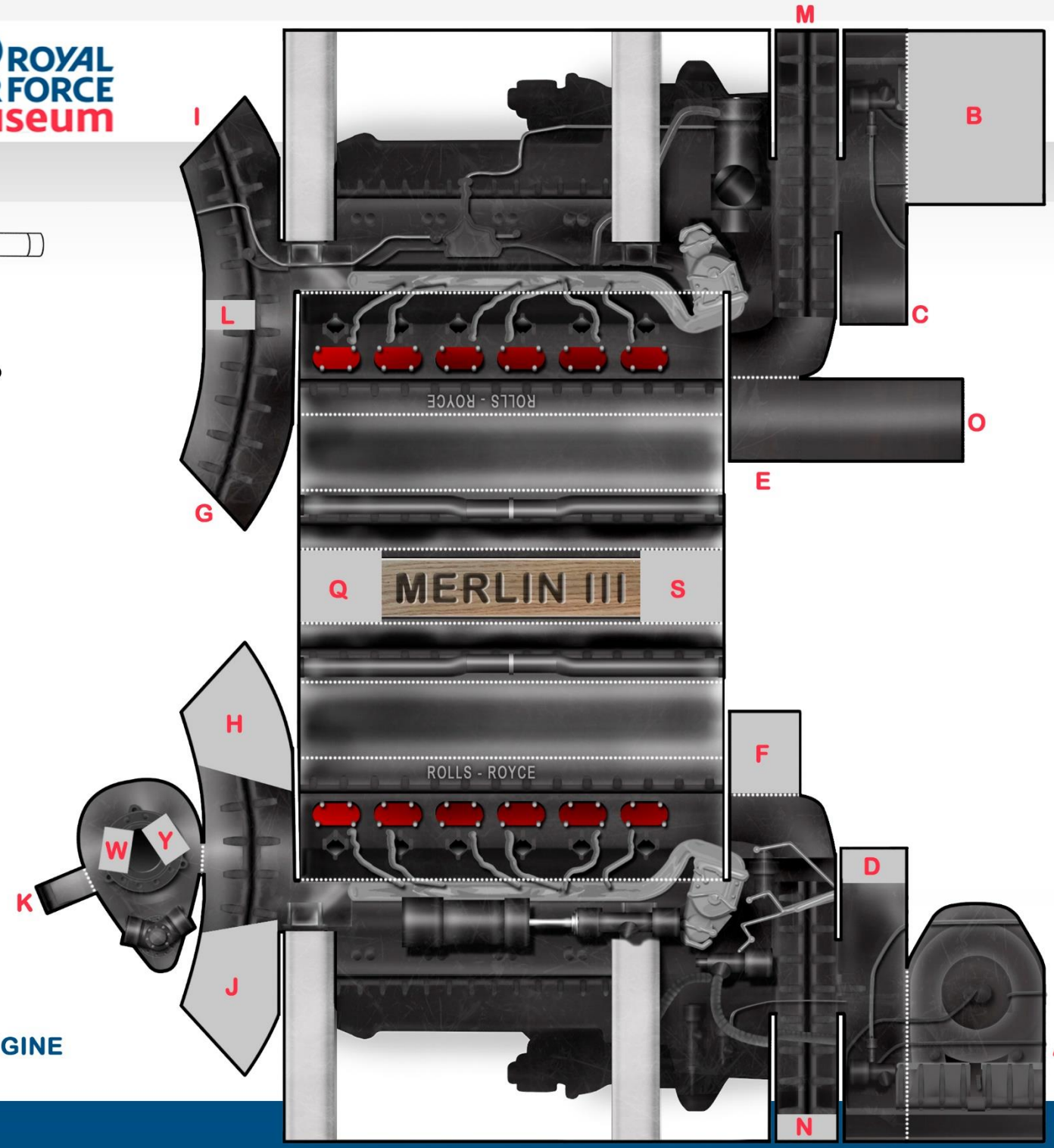
MERLIN III ENGINE

CUT

FOLD

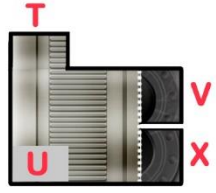
GLUE



FRONT

BACK

SHAFT



ENGINE