

ASTER-15 Missile



ASTER missiles form the cornerstone of Europe's naval and land-based air defence programmes.

The ASTER missile family comprises ASTER 15 for short to medium range and ASTER 30 for short to long range. There is extensive commonality between the two variants with both missiles featuring the same terminal dart.

ASTER's terminal dart is a lightweight, highly manoeuvring and agile missile equipped with a high-performance active RF seeker. Thanks to the unique combination of aerodynamic control and direct thrust vector control (PIF-PAF), the missile is capable of high g manoeuvres. Together, these features give ASTER an unmatched hit-to-kill capability.

ASTER missiles provide ships with an all-round anti-missile and anti-air capability to ensure self-defence and consort protection. In addition, ASTER 30 also provides long range interception capability for area defence. For extended air defence with ATBM protection, the family also includes ASTER 30 B1 and ASTER 30 B1 NT.

Both the ASTER 15 and the ASTER 30 missiles are vertically launched and autonomously guided to provide the best means of coping with saturating attacks. Due to very short missile preparation time and very high speed, the ASTER weapon system has a very quick engagement capability.

ASTER missiles are in service on the latest vessels brought into service by three of Europe's major navies: Italy, France and the United Kingdom. The shorter range ASTER 15 missiles are integrated with different types of multi-function radars and C2 in the SAAM system (the Charles De Gaulle and Conte Di Cavour aircraft carriers).

Naval air defence systems deploying ASTER missiles are also in service with several other navies around the world.

Aster 30 is capable of reaching speeds of Mach 4.5 while reaching altitudes of 20 km and is capable of performing aerial manoeuvres greater than 60 Gs giving it a very high degree of manoeuvrability.

Block 1 is used in the Eurosam SAMP/T system operated by the French Air Force and the Italian Army. As of 2014, the development of Block 1NT is being funded by France and Italy.

Block 2 would not be delivered until after 2020.

In 2016, the United Kingdom showed interest in acquiring the Block 1NT version for its Type 45 Destroyers.

ASTER 15:

Weight: 310 kg

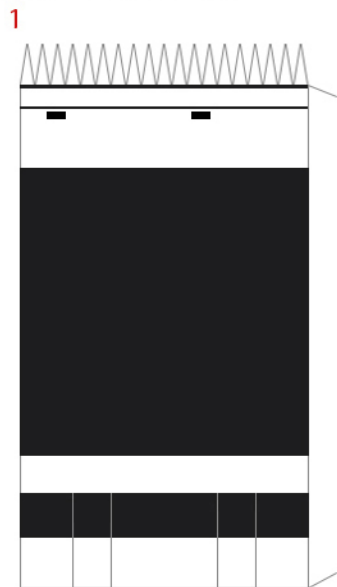
Length: 4.2 m

Diameter: 180 mm

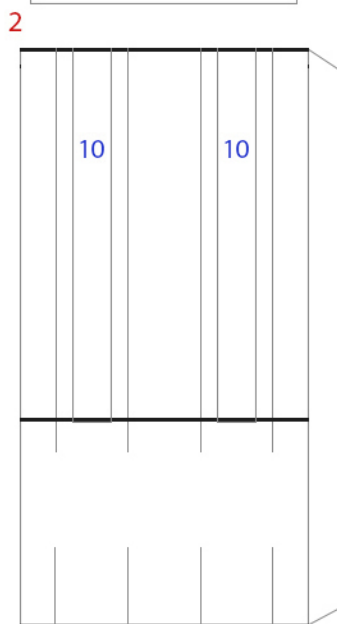
Range: In excess of 30 km

Maximum speed: Mach 3

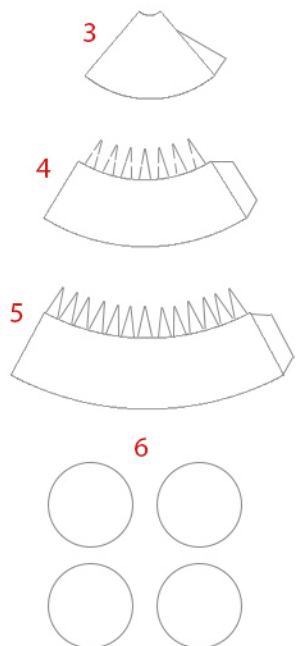
ASTER-15 Missile



1 to 2 connector



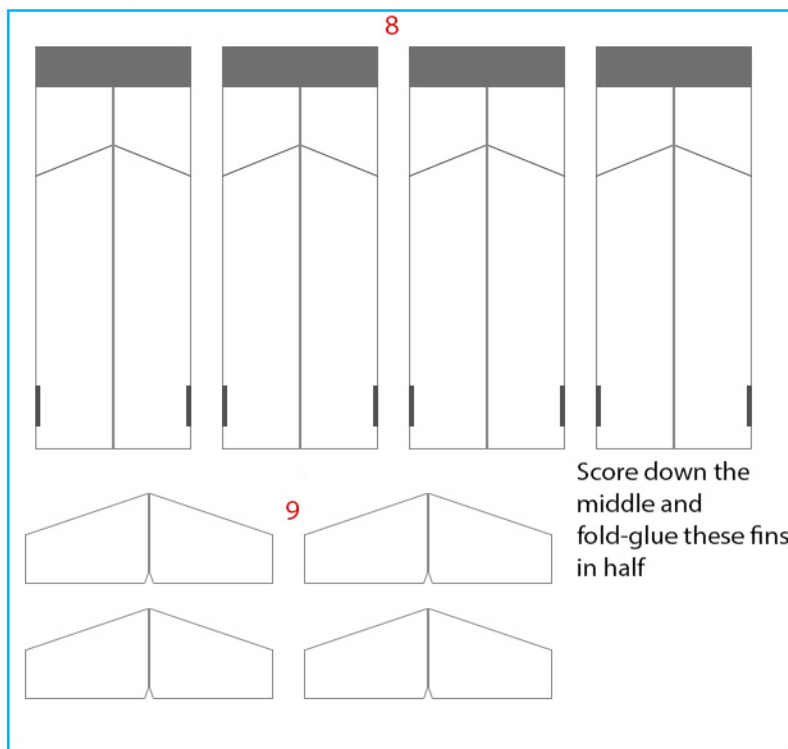
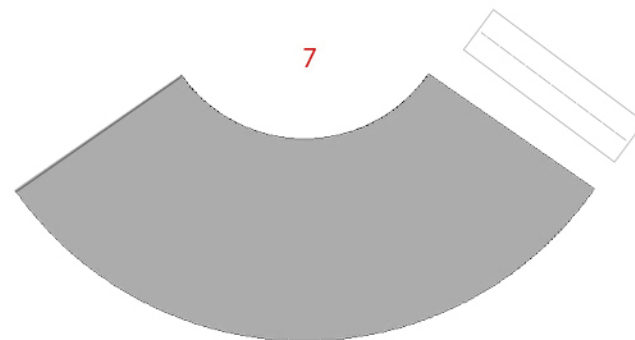
2 to 7 connector



Formers, glue to cardstock



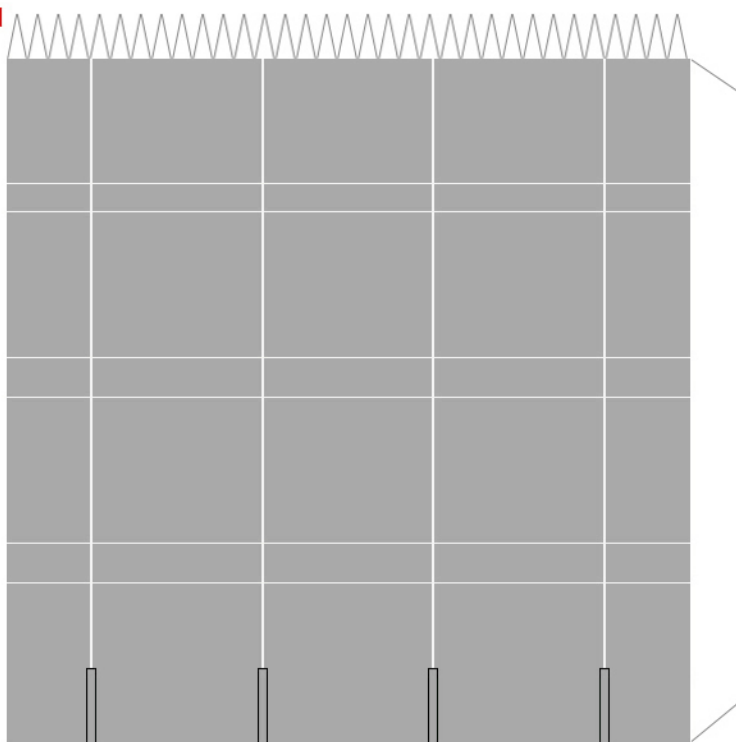
Glue these to two (2) layers of cardstock



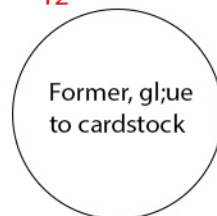
Score down the middle and fold-glue these fins in half

ASTER-15 Missile

11



12



14



Glue to cardstock, color edges the same color

13



Roll this with color INSIDE

18

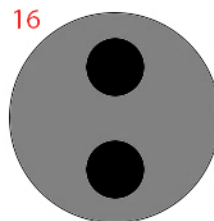


19

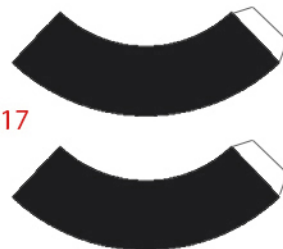


Glue to cardstock

16

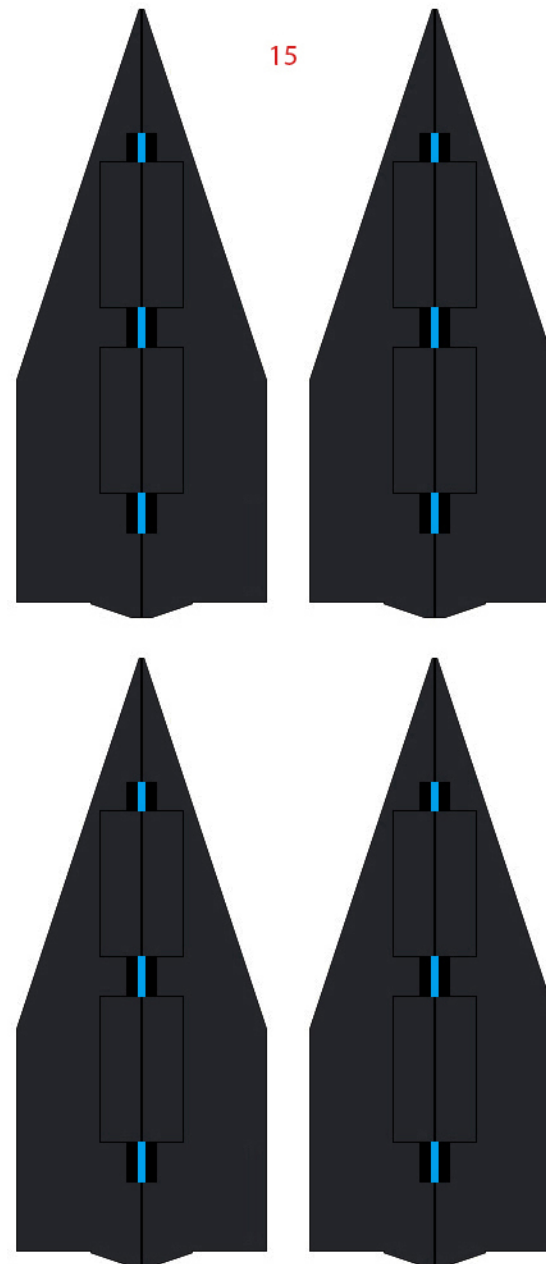


17



Color back grey or black

15



FINS

Cut out the blue rectangles, fold-glue at the middle