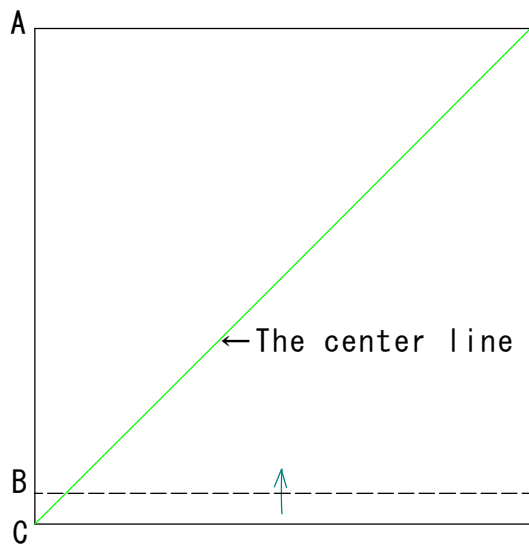


# Submarine

by KOMINAMI Hiroshi

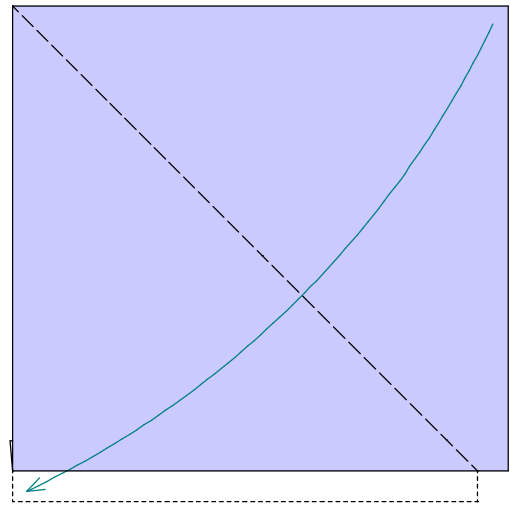


[1] The paper should be a square.

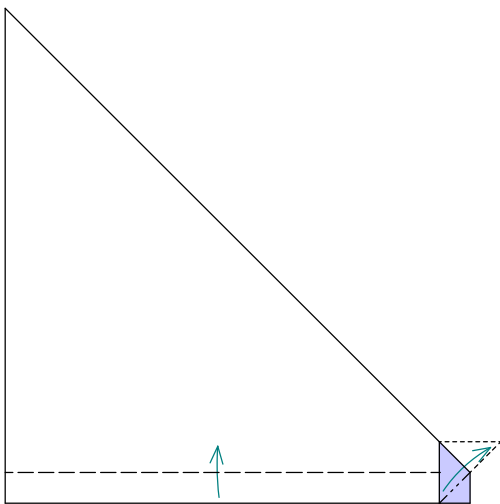
Dark gray or black paper is favorable.

$AC : BC \doteq 16 : 1$

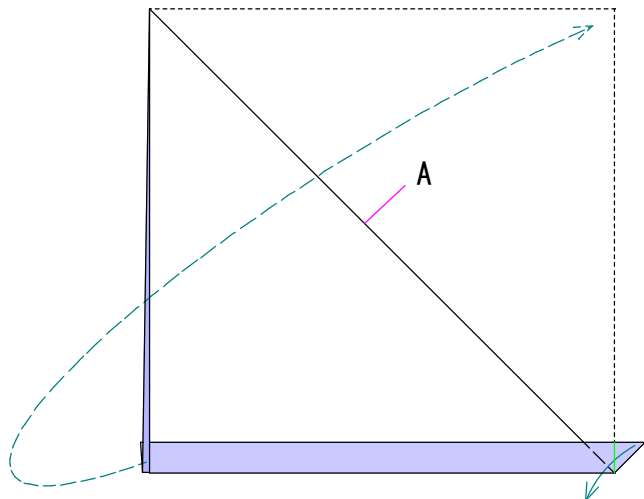
Turn over



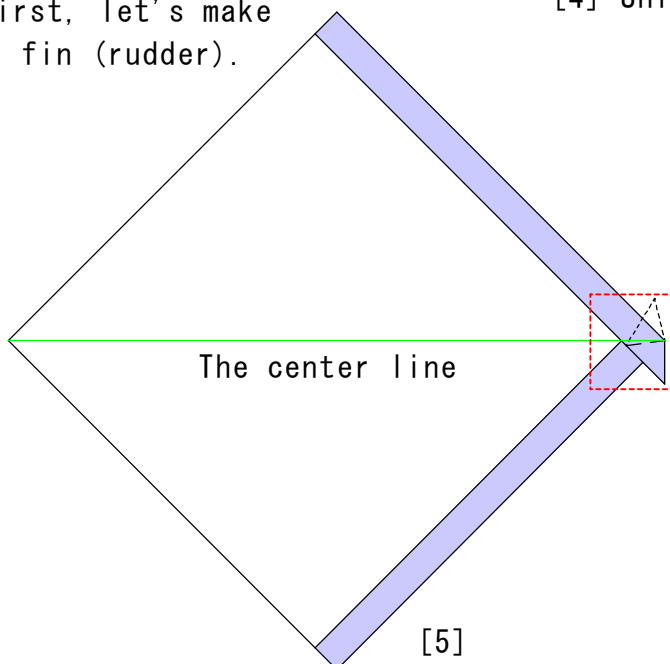
[2]



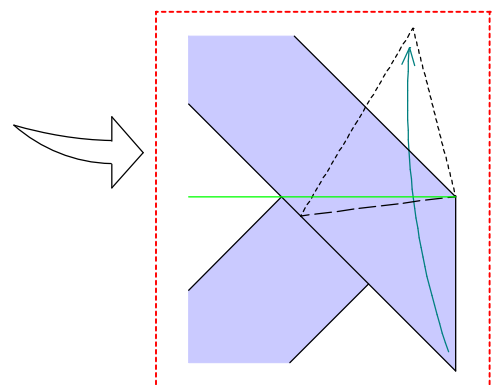
[3] At first, let's make a tail fin (rudder).



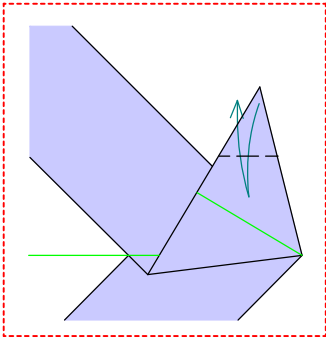
[4] Unfold line A (= the center line).



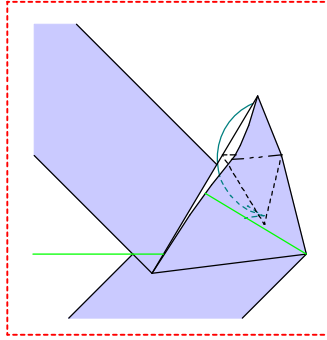
[5]



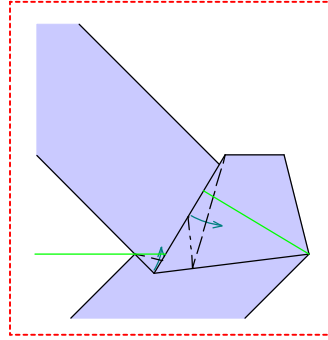
[6]



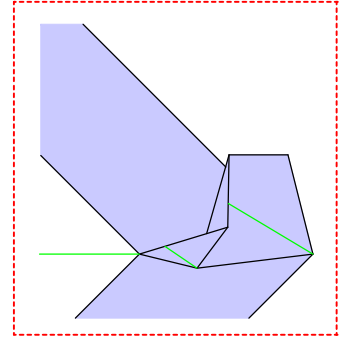
[7]



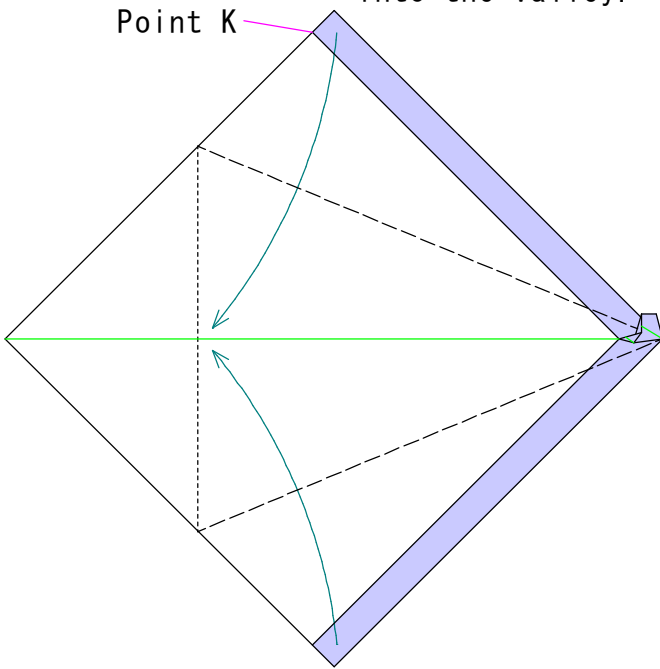
[8] To shorten the fin, insert the top into the valley.



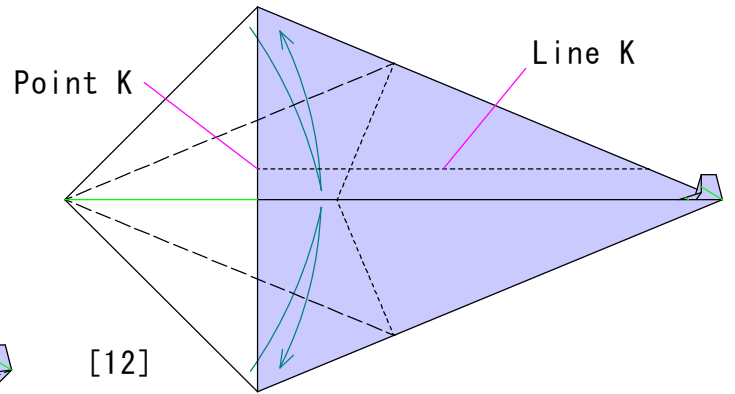
[9]



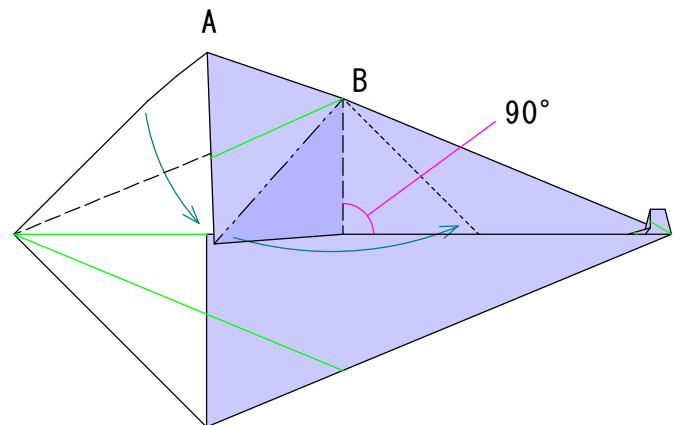
[10]



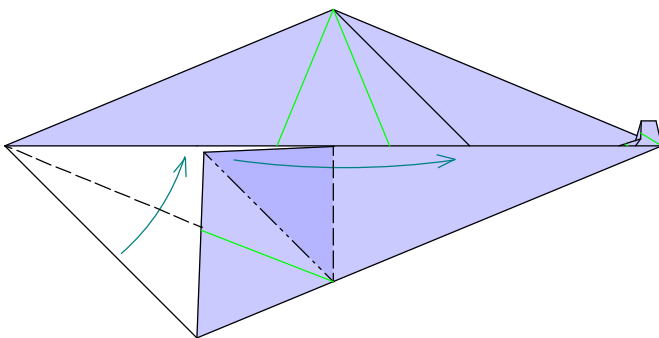
[11] Then we make the body and the sail.



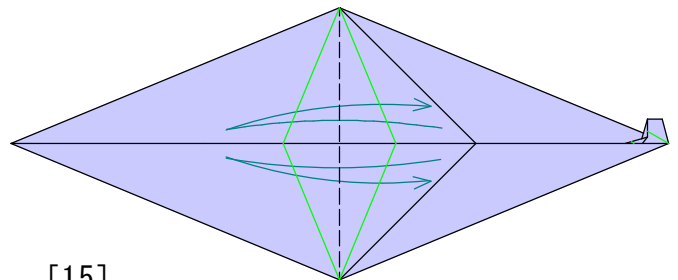
[12]



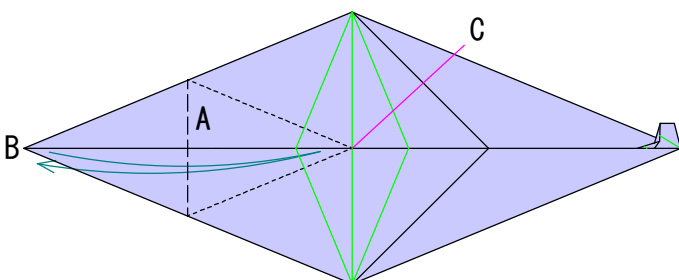
[13] Unfold line AB.



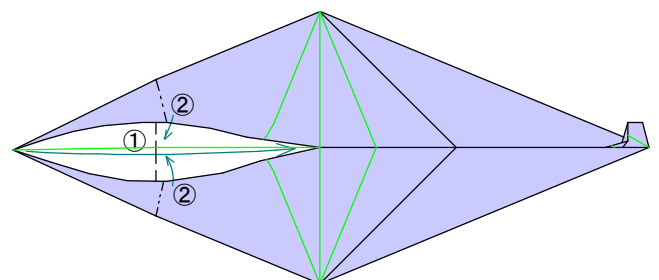
[14]



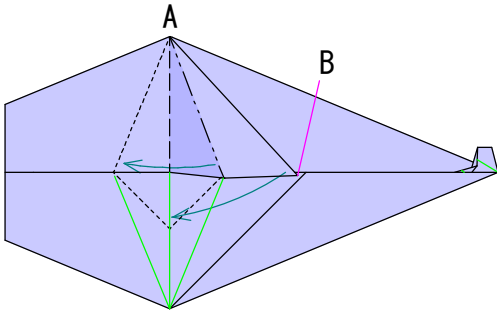
[15]



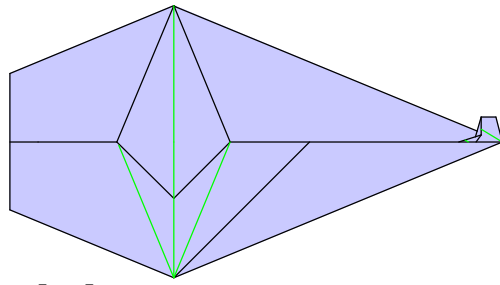
[16] Fold line A so that B meets C, then unfold.



[17] Shorten the head.

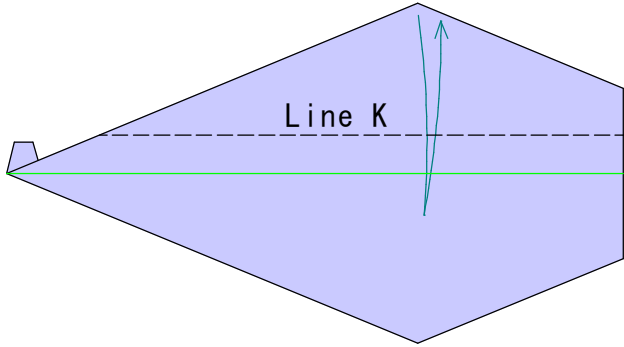


[18] Unfold line AB.



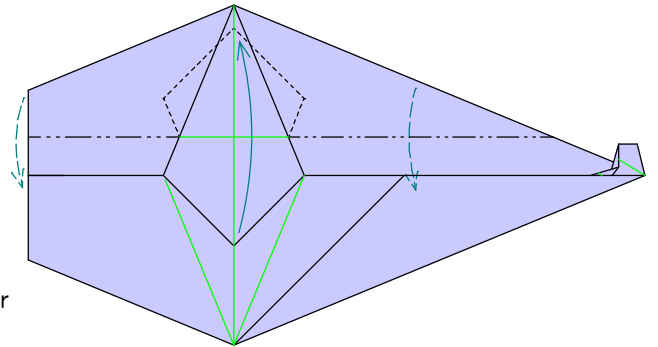
Turn over

[19] The following pictures are enlarged 1.25 times.

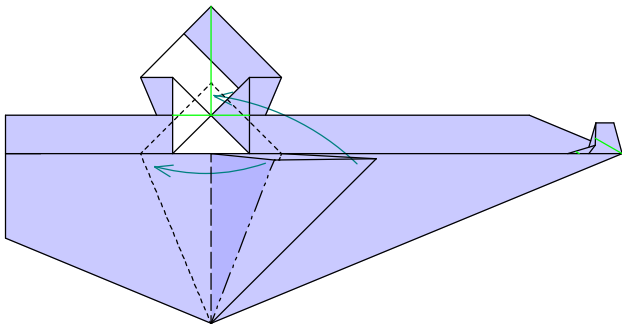


Turn over

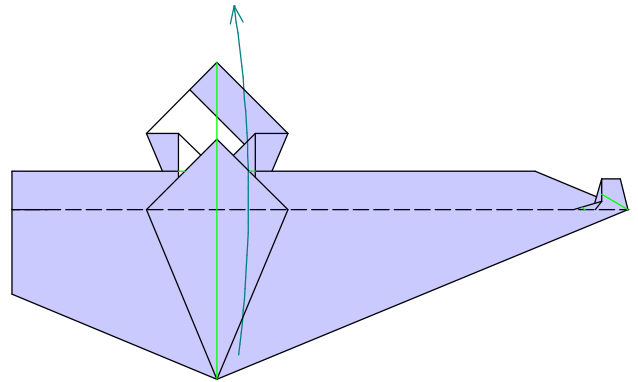
[20] Fold along Line K (ref. [12]), and unfold.



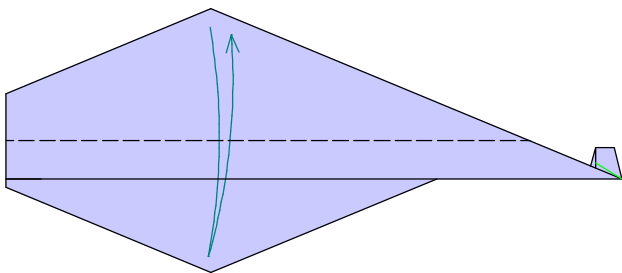
[21]



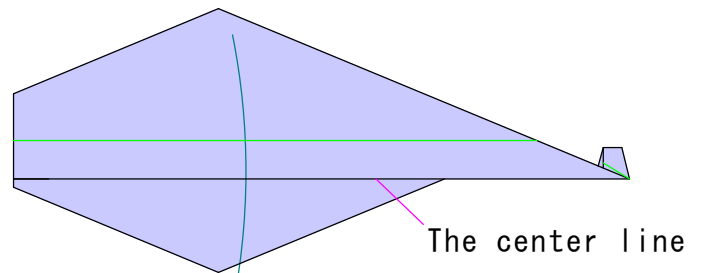
[22]



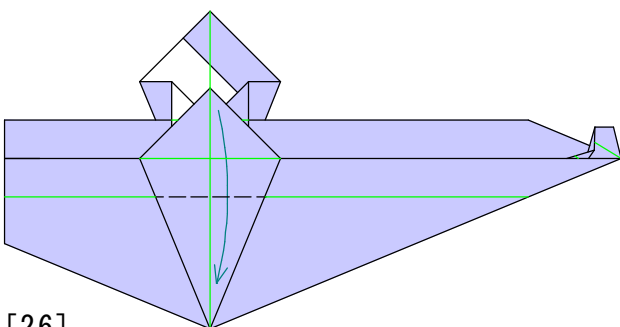
[23]



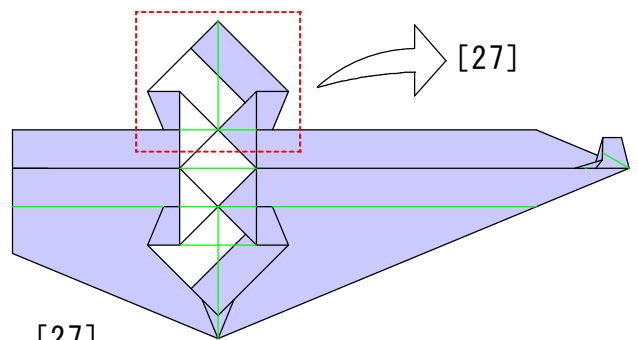
[24]



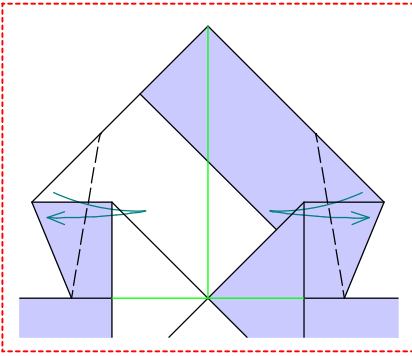
[25] Unfold the center line.



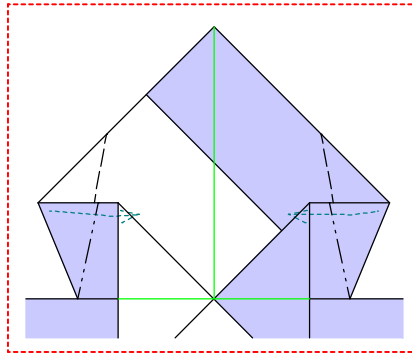
[26]



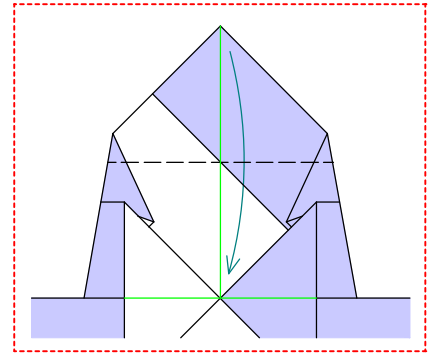
[27]



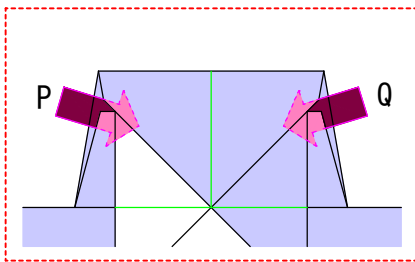
[28]



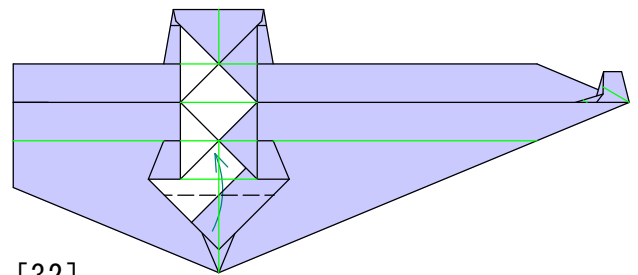
[29]



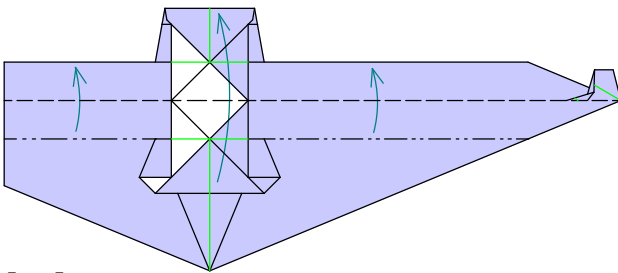
[30]



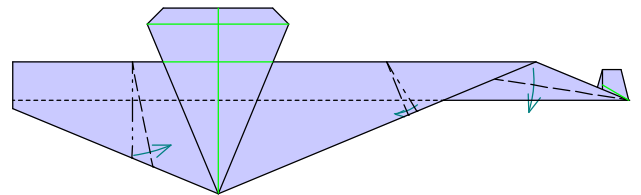
[31] Notice that we have made two pockets: pocket P and pocket Q.



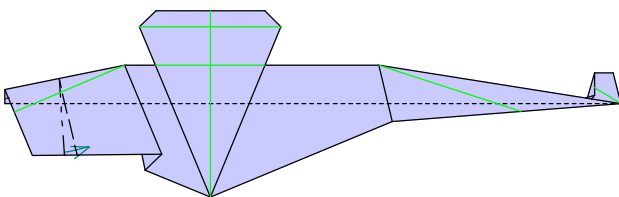
[32]



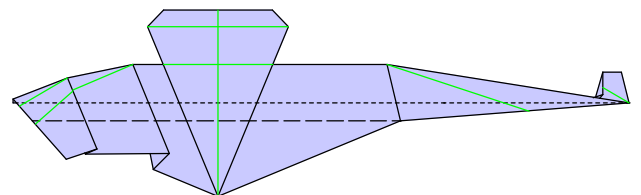
[33]



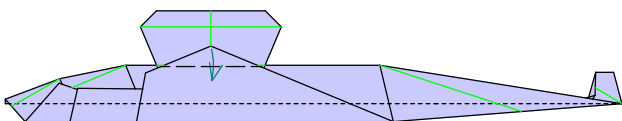
[34] Let's form the dorsal line.  
This step and the following steps should be taken symmetrically except step [43].



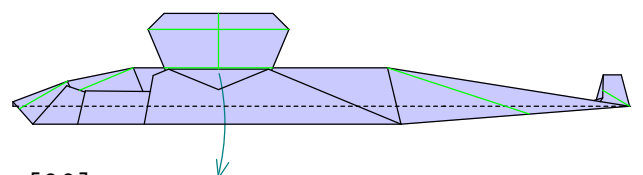
[35]



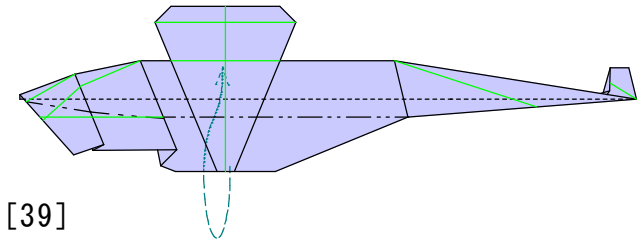
[36] Then we form the waterline.



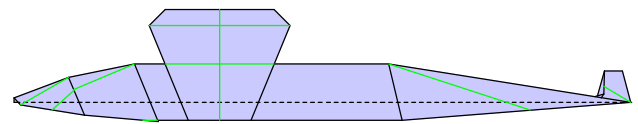
[37]



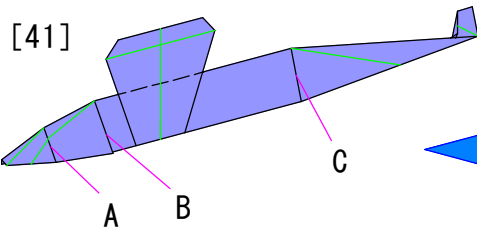
[38]



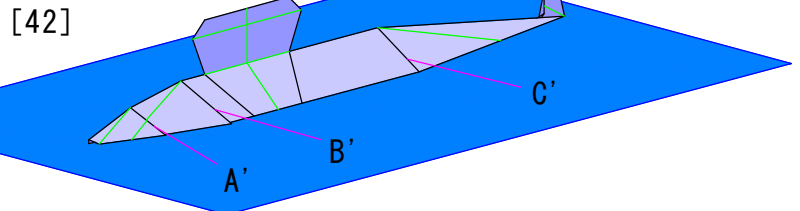
[39]



[40]

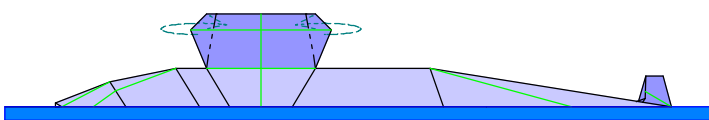


[41]

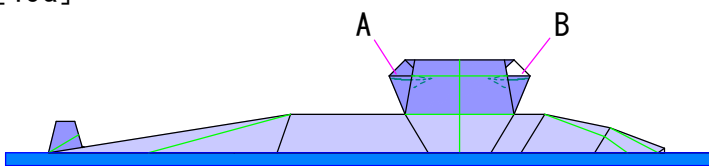


[42]

[41] - [42] Put the ship on a flat surface. Then slide tucks A, B, and C so that the lower edge (= waterline) of the ship will fit the surface.

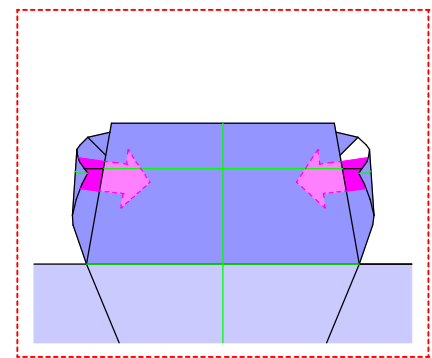


[43a]

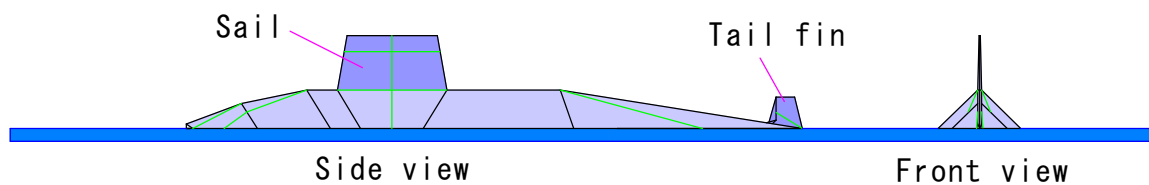


[43b] The back side of [43a].

Insert the tips A, B into the pockets Q, P (ref. [31]) respectively. This step prevents lateral separation of the sail.

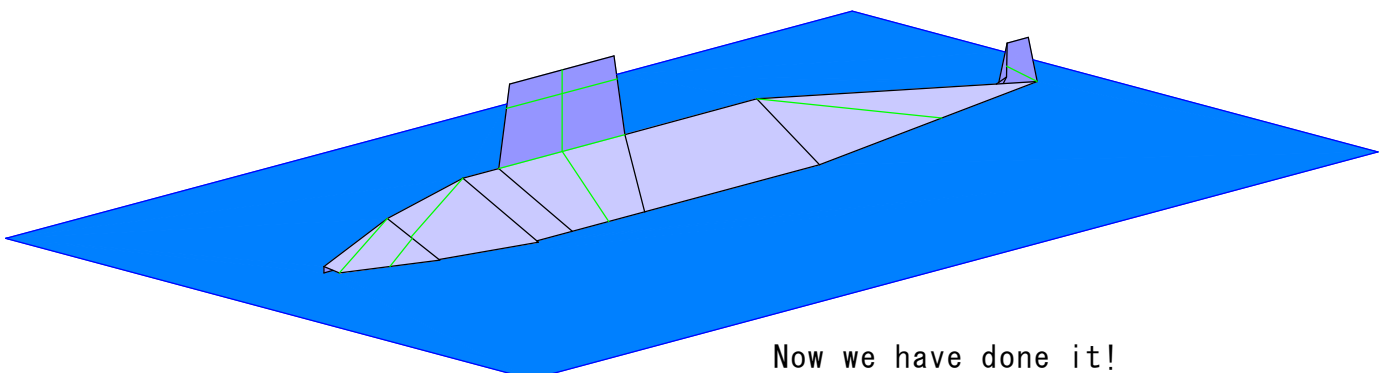


[43c]



Side view

Front view



Now we have done it!