The Grumman F-14 Tomcat was a fighter plane used in the Navy from 1974-2006. The Tomcat's wings, when fully extended, give the plane more drag to fly at slower speeds, for instance when landing on an aircraft carrier. When the wings are swept backwards into a triangular shape, it can go up to 1544 miles per hour!

Fold your own origami model of the Grumman F-14 Tomcat with these step-by-step instructions! (If using the template, select "Fill Entire Page" when printing.)


1. With the paper held horizontally (printed side facing the table with Intrepid logo on the left side if you are using the template), fold the bottom left corner up to the top edge of the paper so that the edges meet. This will form a triangle with a slight flap left over to the right. Crease.
2. Open the paper, then repeat with the top left corner, folding down to the bottom edge of the paper. Crease. Open the paper - there will now be an X across the paper.

3. Fold the bottom edge of the paper up to the top edge to fold in half longways. Crease.
4. Turn the paper over and rotate so that the $X$ is closest to you. Fold the bottom edge of the paper up to the top of the creased $X$ and crease (as shown in picture 4). This fold should go horizontally through the center of the $X$. Open the paper again.


## FOLD YOUR OWN ORIGAMI F-14 TOMCAT


5. Turn the paper over and rotate so that the $X$ is away from you and fold in the left and right sides of the $X$. The paper should collapse in on itself forming a triangle with the extra flap beneath it. Crease.
6. Fold bottom edge up to meet the bottom of the triangle, crease.

7. Flip the paper over. Fold the bottom edge up over the triangle so that it's bottom edge lines up with the bottom of the triangle. Crease. (It should looks like a hat!)
8. Stabilizers: Fold down the top right corner of the rectangular flap so that it meets with the bottom edge. The fold will line up with the larger triangular edge (a). Crease.

Open it back up, then separate the top two layers of paper slightly. Using the fold you just made as a guide, push the top right corner of the rectangular flap inside of itself into the pocket, reversing the fold you just made. Press from the left side to form a triangular flap at a right angle (b).


Press this flap down to the left, flush with the edge of the larger triangle and crease. Repeat on the left side (c).

9. Flip the right side layer with the stabilizers that you just folded to the left as though you are turning the page of a book (a).


Fold its top, outer edge in to the right so that it lines up with the center crease. It should form a crisp point on top and the edge with the small triangular flap should overhang on the bottom (b).

Turn that whole folded "page" back to the right (c).


Repeat with the other "page" on the left: turn it to the right (d), then fold its outer edge inward to the left so that it lines up along the center crease and the stabilizer overhangs on the bottom (e).

10. Fold the bottom stabilizer corner layer (overlapping on the bottom) up and over the fold you just made so that its creased edge is about $1 / 3$ of the way from the back end of the stabilizer crease (see "Reverse" image, below) and is just far enough over the fold so that the stabilizer flap can still open around it.

Repeat on other side, using the first fold you just made as a reference (still ensuring the stabilizer flap can open.)


## FOLD YOUR OWN ORIGAMI F-14 TOMCAT

11. Wings: Flip paper over (it should look like a large, solid triangle - a). Turn the "page" on the left to the right.

Fold its rightmost tip to the left so that the amount of overhanging on the left is the same as the stabilizer overhang and is just wider than parallel to its back edge (b). Crease.

Fold the crease you just made to the left and crease again (c).

12. Repeat on the left side: fold the top layer to the left (a) and repeat by folding over to the right to create the wing on the other side (b). Use the fold you just made as a reference for where to make your first crease.


Fold top layer to the right so that it is flat ( c - this top layer will be the main body of the plane with the front at the top).

Rotate the whole paper so that the "front" of the plane is facing to the left (d).


FOLD YOUR OWN ORIGAMI F-14 TOMCAT



Repeat on the bottom side by flipping the bottom flap up and folding the top left corner down (c).

Fold flap down again (d).

Flip the whole paper over, keeping the front tip of the plane facing to the left (e).

14. Fold the whole paper in half: the bottom half up to meet the top half, making sure that all of the points meet. Then fold that top layer in half back down to make the left wing, just as though you were making a normal paper airplane, and flatten everything. Repeat on the other side.


## FOLD YOUR OWN ORIGAMI F-14 TOMCAT


15. Fold the bottom half of the wings and tail back up slightly from the underside (a). Repeat on the other side (b).
16. Make final adjustments! Flip up the stabilizers in the back on both sides and (optionally) fold the very tips of wings up. You can also add a paperclip on the back end to keep the body of the plane tighter together for display.

Have fun!


