

Animate CC Chapter 4 Airplane Propeller

A. Open your "airplane path" file.

Step 1. Open your airplane path file.

B. Move Propeller Off Fuselage.

Step 1. Click **Edit Symbols**  at the left end of the Timeline, then click **Airplane (Ctrl-E)**.

Step 2. **Show All (Ctrl-3)**.

Step 3. Click the **Selection Tool**  (V) in the toolbar.

Step 4. Hold down **Shift** key on keyboard and "Shift click" all parts of the Prop, **Fig 1**.

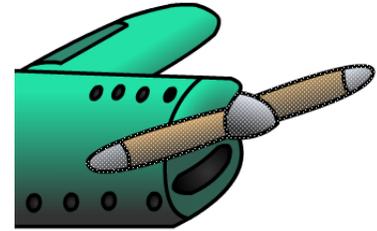


Fig. 1

Step 5. Use **right arrow** key to move Prop to the right off of fuselage, **Fig. 2**.

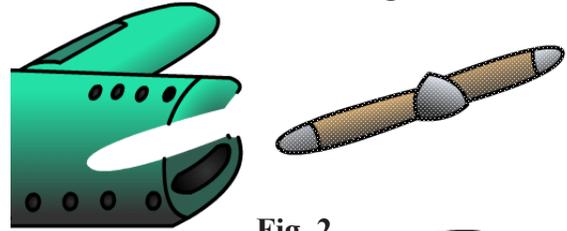


Fig. 2

C. Save File As 'airplane propeller'.

Step 1. Click File Menu > Save As.

Step 2. Key-in **airplane propeller** for the filename and press ENTER.

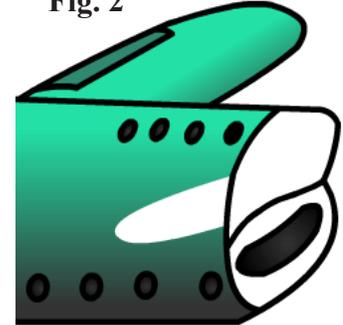


Fig. 3

D. Repair Fuselage.

Step 1. Use **Pencil Tool** , **Line Tool**  and **Selection Tool**  to repair the lines, **Fig. 3**.

Step 2. Use **Dropper Tool**  and **Paint Bucket Tool**  to repair the fuselage color, **Fig. 4**.

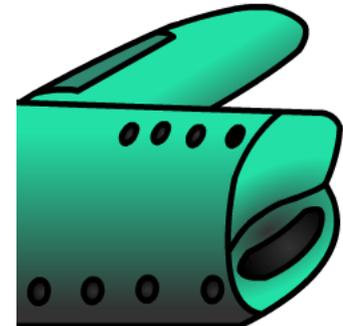


Fig. 4

E. Create Prop Symbol.

Step 1. Use the **Selection Tool**  (V) and make a selection around the Prop, **Fig 5**.

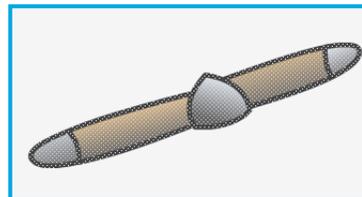


Fig. 5

Step 2. Click Modify Menu > Convert to Symbol (F8).

Step 3. In Convert to Symbol dialog box, **Fig 6**.
 Name key-in **Prop**
 Type **Graphic**
 Registration **center grid**
 click OK.

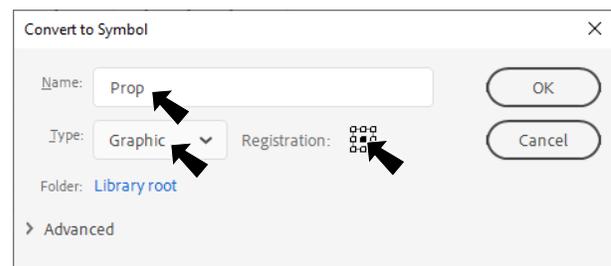


Fig. 6

Step 4. Save (Ctrl-S).

F. Delete One Prop Blade.

Step 1. Click **Edit Symbols**  at the left end of the Timeline, then click **Prop**, **Fig 7**.

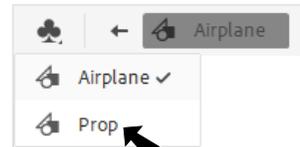


Fig. 7

Step 2. **Show All (Ctrl-3)**.

Step 3. Delete one of the Prop blades, **Fig 8**.

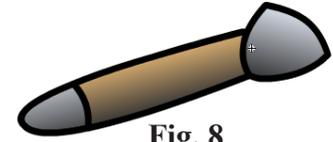


Fig. 8

G. Move Hub to New Hub Layer.

Step 1. **Double click Layer 1** name in the Timeline and key-in **Blades** for the new layer name, **Fig 9**.

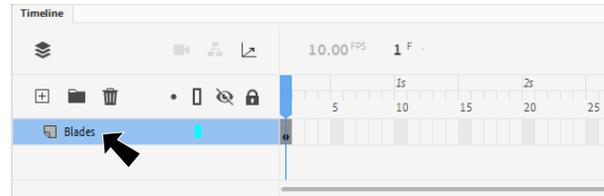


Fig. 9

Step 2. Click **Insert Layer**  above layer name, **Fig 10**.

Step 3. **Double click Layer 2's** name key-in **Hub** new layer name, **Fig 10**.

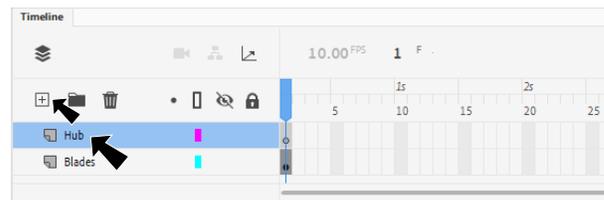


Fig. 10

Step 4. Click the **Selection Tool (V)** in the toolbar.

Step 5. **Shift click** all part of the hub to select it, **Fig 11**.

Step 6. Click **Edit Menu > Cut (Ctrl-X)**.

Step 7. Click the **Hub layer** to make the layer active, **Fig 12**.

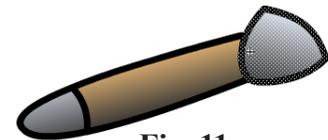


Fig. 11

Step 8. Click **Edit Menu > Paste in Place (Ctrl-Shift-V)**. The hub is now on its own layer.

Step 9. **Hide**  **Hub layer**, **Fig. 12**.

Step 10. **Save (Ctrl-S)**.

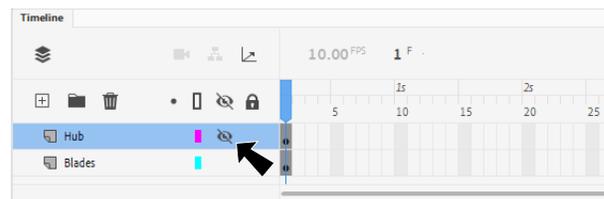


Fig. 12

H. Copy/Paste Matching Blades.

Step 1. Click the **Selection Tool** (V) in the toolbar.

Step 2. Make a selection around the blade, **Fig. 13**.

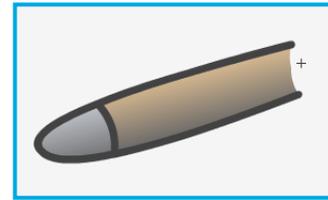


Fig. 13

Step 3. Click Edit Menu > Copy (**Ctrl-C**).

Step 4. Click Edit Menu > Paste in Place (**Ctrl-Shift-V**).

Step 5. Display the Transform panel (**Ctrl-T**).
Key-in **180** for Rotate, **Fig. 14**
press ENTER.

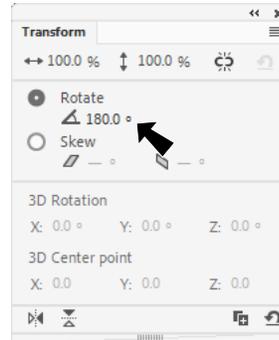


Fig. 14

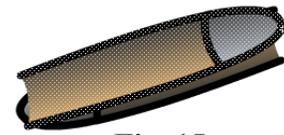


Fig. 15

Step 6. Use the **Selection Tool** and align the ends of the two blades. Make sure the + symbol is in the center of the blades, **Fig. 16**.

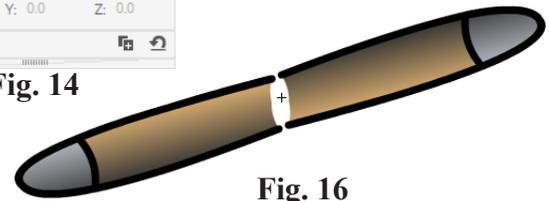


Fig. 16

I. Create Blades Symbol.

Step 1. Click Edit Menu > Select All (**Ctrl-A**).

Step 2. Click Modify Menu > Convert to Symbol (**F8**).

Step 3. In the Convert to Symbol dialog box, **Fig 17**.

Name key-in **Blades**
Type **Graphic**
Registration **center grid**
click OK.

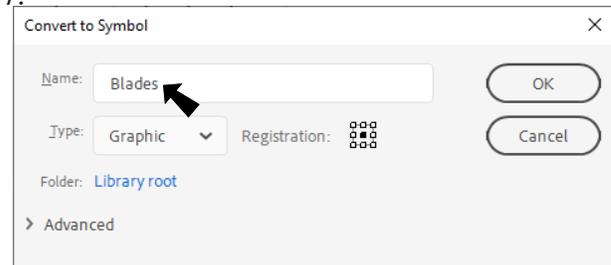


Fig. 17

Step 4. Save (**Ctrl-S**).

J. Tween 9 Frames.

Step 1. Right click frame 9 of the Blades layer and click Insert Keyframe (F6), Fig. 18.

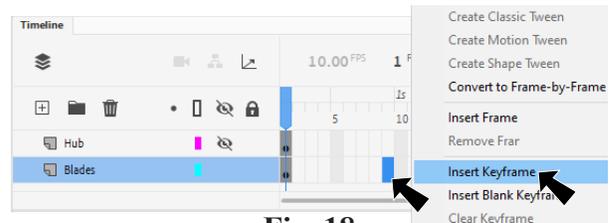


Fig. 18

Step 2. Right click frame 3 of the Blades layer and click Create Classic Tween, Fig. 19.

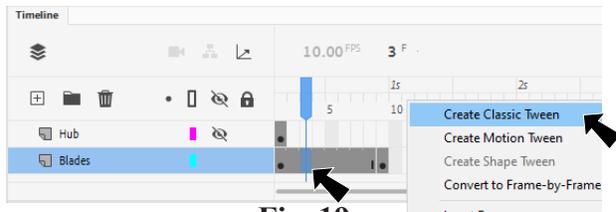


Fig. 19

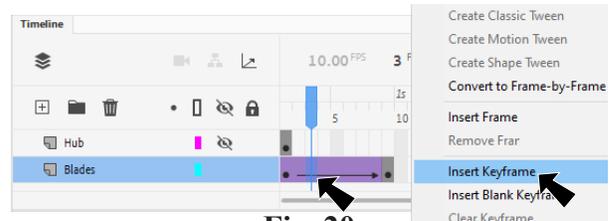


Fig. 20

Step 3. Right click frame 3 of the Blades layer and click Insert Keyframe (F6), Fig. 20.

Step 4. In the Transform panel (Ctrl-T).
Key-in 120 for Rotate, Fig. 21
press ENTER.

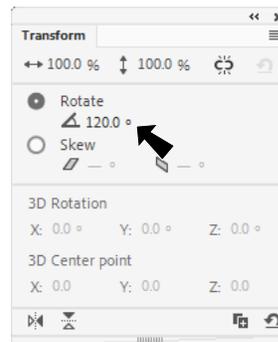


Fig. 21

Step 5. Right click frame 6 of the Blades layer and click Insert Keyframe (F6), Fig. 23.

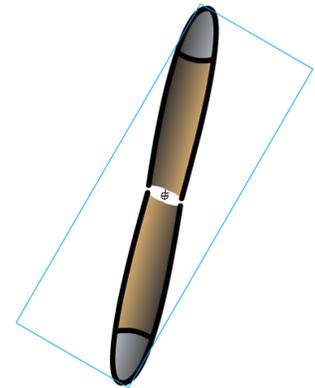


Fig. 22

Step 6. In the Transform panel (Ctrl-T).
Key-in 240 for Rotate, Fig. 24
press ENTER.

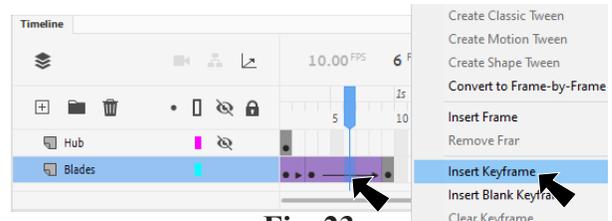


Fig. 23

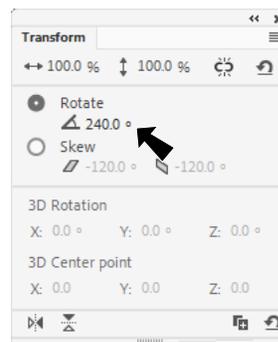


Fig. 24

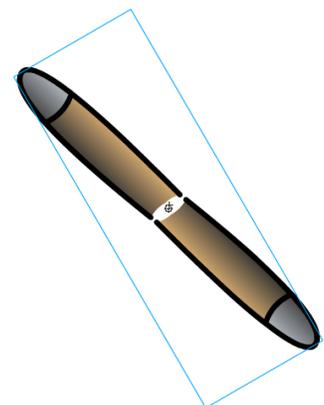


Fig. 25

K. Remove Delay in Rotation.

Step 1. Click **Loop Playback**  in the Timeline header.

Step 2. Drag **Frame Selectors**  to select all **9 frames**, Fig. 26.

Step 3. Click **Play**  and click **Pause** .

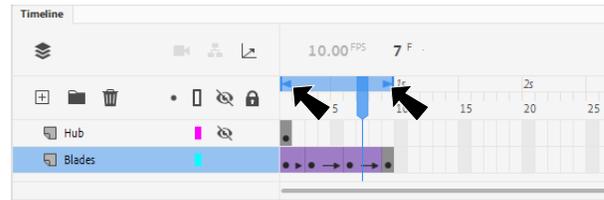


Fig. 26

L. Remove Delay in Rotation.

There's a delay at the beginning/end of the animation. That's because in both frame 1 and frame 9 the Prop is at the same position. Here's the fix. Remove frame 9 but first insert a Keyframe at frame 8.

Step 1. **Right click frame 8** of the **Blades layer** and click **Insert Keyframe (F6)**, Fig. 27.

Step 2. **Right click keyframe 9** of the **Blades layer** and click **Remove Frames** Fig. 28.

Step 3. **Show**  **Hub layer**, Fig. 29. The hub doesn't have any frames so it can't be seen beyond frame 1.

Step 4. **Right click frame 8** of the **Hub layer** and click **Insert Frame (F5)**, Fig. 29.

Step 5. Move the hub to center of blades, Fig. 30.

Step 6. Click **Play**  in the Timeline header.

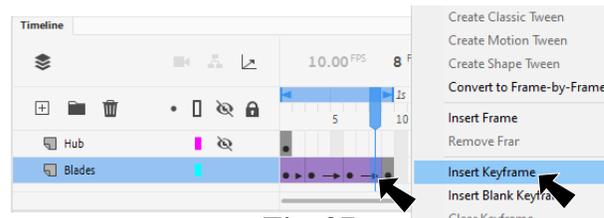


Fig. 27

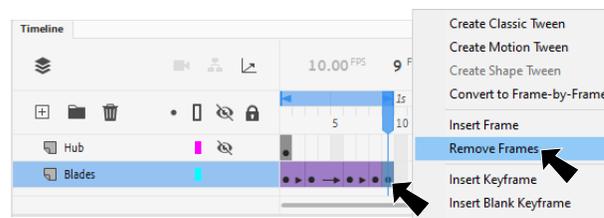


Fig. 28

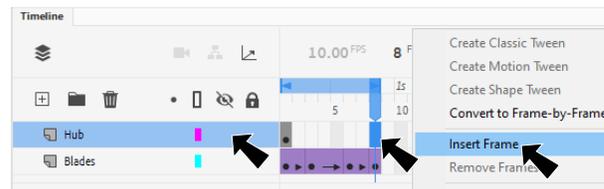


Fig. 29

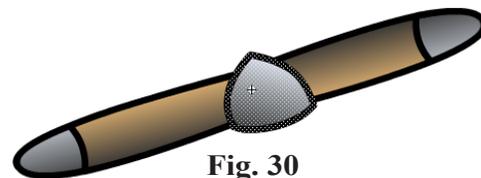


Fig. 30

M. Adjust Prop in Airplane Symbol.

Step 1. Click **Edit Symbols**  at left end of the Timeline, then click **Airplane**, Fig 31.

Step 2. **Show All** (Ctrl-3).

Step 3. Use the **Selection Tool**  (V) to move the Prop into position, Fig 32.

Step 4. **Right click frame 8** of layer 1 and click **Insert Frame** (F5), Fig. 33.

Step 5. Drag **Frame Selectors**  to select all frames and click **Play** .

Step 6. Click **Exit Edit Symbol**  at left end of Timeline to return to the scene. (Ctrl-E).

Step 7. Back in the scene **turn off Loop Playback**  in Timeline header.

Step 8. Save the file. Use Ctrl-S.

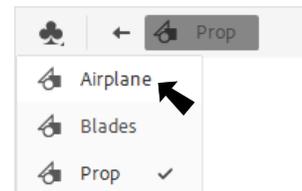


Fig. 31



Fig. 32

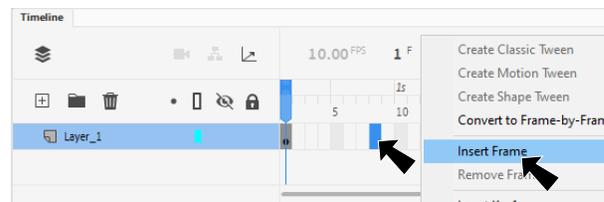


Fig. 33