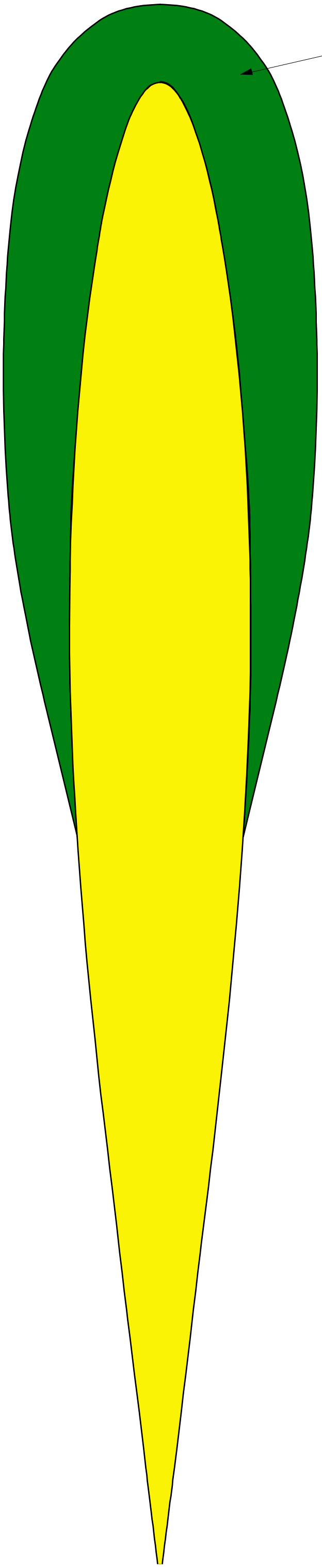
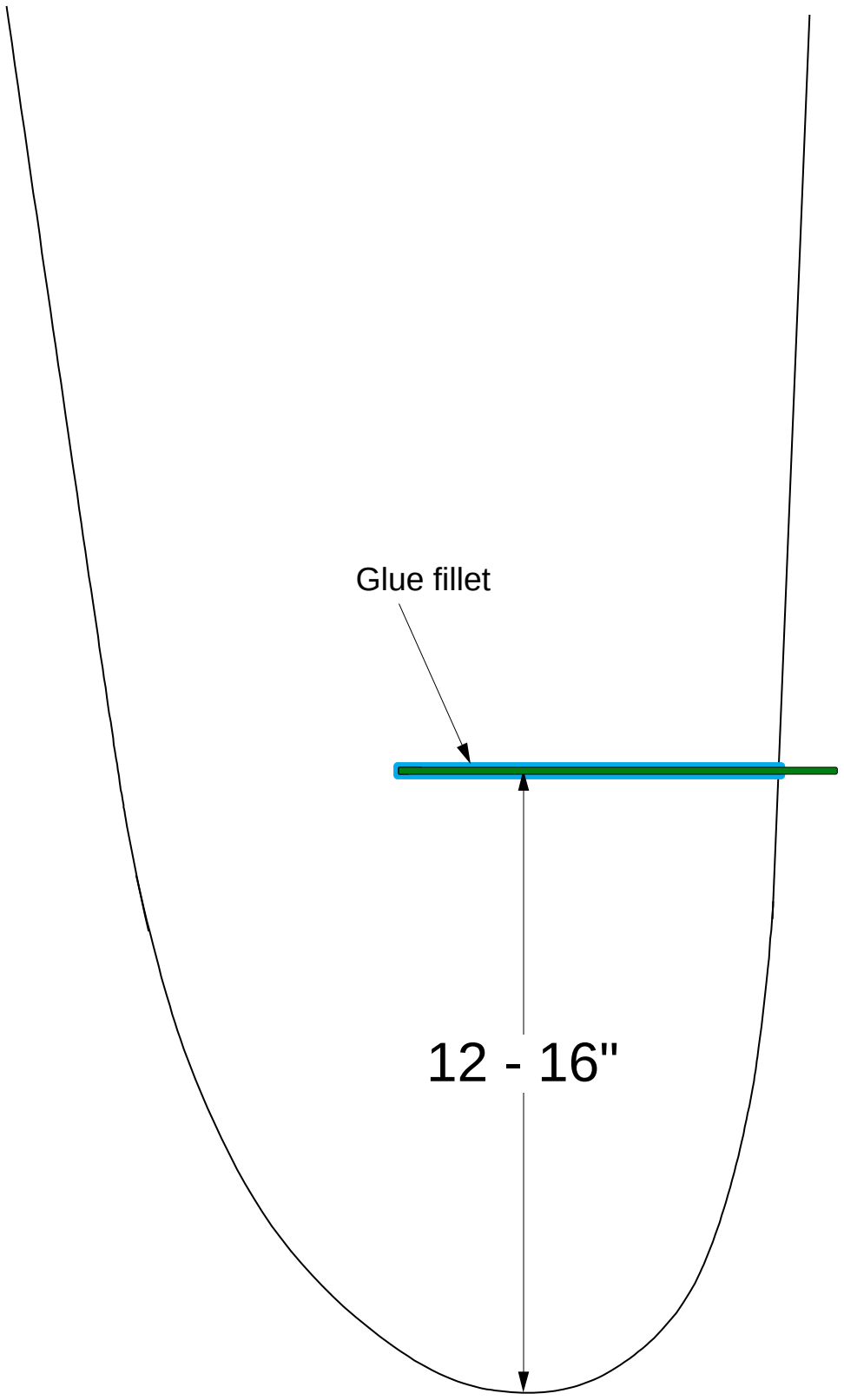


RUDDER FENCE
To prevent high speed ventilation. Can be made from a fiberglass or plastic sheet, 1/8" to 1/4" thick, shaped to fit around rudder and bonded in place. Should be parallel with waterline to minimize drag.



Many F-boats are now capable of speeds in excess of 20 knots, and rudder ventilation problems can arise at these speeds. Rudder ventilation is caused by waterflow being unable to stay attached to the blade when it is turned at high speed, with air then being sucked down the rudder blade. This will result in a loss of steerage control, and the usual obvious symptom is a 'whoop' noise from the rudder area, a large rooster tail, and the rudder immediately feeling mushy. Control can usually be restored by centering rudder blade and wiggling slightly to reattach water flow. However, at sustained high speeds, ventilation can become a major nuisance.

To minimize, always keep the leading edge of the rudder smooth and fair, and keep the boat balanced so that it sails straight, without needing much rudder input. If ventilation becomes a consistent problem then one cure is a horizontal 'fence' on the leading edge of the rudder about 12 to 16" up from the bottom. This places a horizontal barrier to any air travelling down the rudder blade past the fence, making it harder for the water flow to become detached, and allowing steerage control to remain at much higher speeds.

The F-28 appears to have less ventilation problems due to rudder configuration improvements and probably does not need a fence.