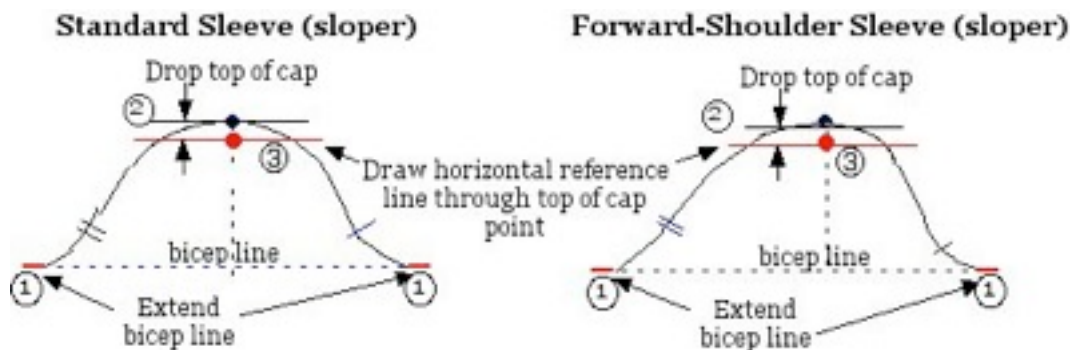


## Sleeve Block

These instructions can be used for any sleeve alteration, but I've used my shirt block sleeve for this example. That is, starting with the sleeve for my bodice sloper, then modifying it for my shirt block.

1. Widen the bicep line at each end by the same amount you dropped the armhole at the underarm (compared with the bodice block);
2. Lower the cap height by the same amount you extended the shoulder line (compared with the bodice block).
3. Draw horizontal reference line through the top of the cap point. When you draw the cap curve, it will be tangent to this line at the top of the cap.

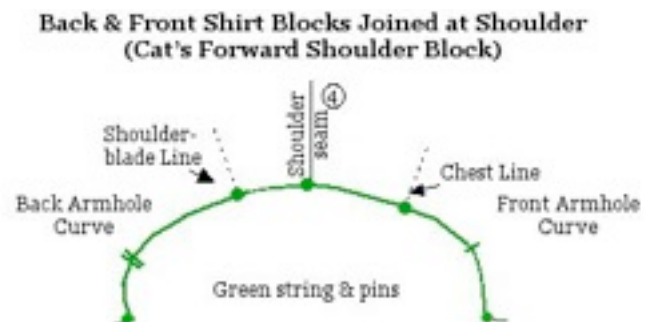
Redraw cap curves to accommodate these changes. In general, the back curve becomes less curvy (S- or Z-shaped); the front curve more so. As you extend the shoulder, the the cap height shortens; as you widen the bicep line, the cap curves straighten out.



### Redraw cap curve:

Inspiration for using cord is from [The Curious Frau: Drafting a Basic Fitted Sleeve \(2\)](#).

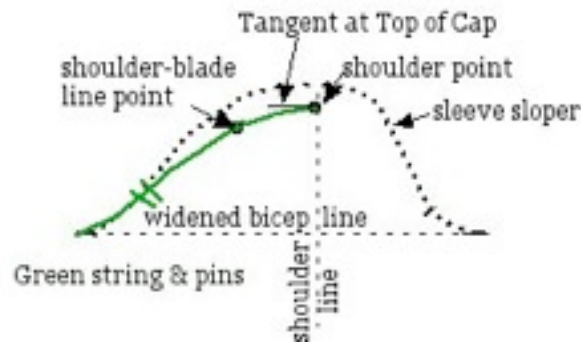
4. Working on a surface into which you can stick pins, pin front & back blocks together along the shoulder line, to work with the entire armhole curve.
5. Using a length of non-stretchy string (like drapery cord), lay it exactly along the armhole curve, marking the following points from B to F with a pin through the cord:
  - back side seam point,
  - back double notches,
  - shoulder blade line (on back),
  - shoulder seam point
  - chest line (on front),
  - front single notch,
  - front side seam point,



Then carefully remove the cord from the blocks, keeping the pins in the cord.

6. **Back Armhole Curve:** Starting with the back side seam pin, insert it at the far left end of the bicep line. Then arrange the cord up toward the top of the cap, carefully keeping the pins (still in the cord) on their side while I do this, until you like the shape of the curve, which is:
  - mostly straight on the bias from the sideseam to the double notches,
  - continues with little curvature to the shoulder blade pin, then
  - begins to curve to horizontal as it approaches the top of cap.
7. Insert the pins to secure the curve in place as follows:
  - double-notch pins, so that the cord is taught from side seam pin to notch pins (no ease);
  - shoulder blade-line pin so that there is slight ease ( $\frac{1}{8}$ " or so) between it and the notch pins;
  - shoulder point pin wherever it lies, hopefully within  $\frac{3}{8}$ " of the top of the cap shoulder point. The distance it falls short is ease in this section.

Forward-Shoulder Shirt Block Sleeve Cap



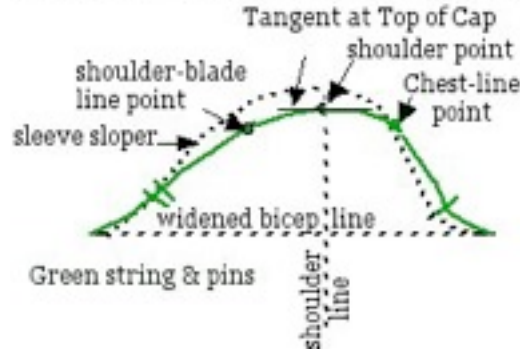
8. Draw the curve directly under the cord, marking the position of each pin. Then carefully remove the pins from the board (but still in the cord), so you can lay the cord to form the front side of the cap.
9. **Front Armhole Curve:** Set the front side seam pin in place at the far right end of the bicep line, then arrange the cord up toward the top of the cap, carefully keeping the pins (still in the cord) on their side while you do this, until you like the shape of the curve, which is:
  - at first low and flat, barely rising above the bicep line, then beginning a slight upward curve to the notch,
  - continues on a steeper curve to just before the chest-line pin, then
  - curving towards horizontal as it approaches the top of cap.

If you have forward shoulder as I do, the front curve will have a definite Z-shape in order to get the length of cord to fit between the side seam and the top of cap.

10. Just as for the back, insert the pins to secure the curve as follows:

- single-notch pin so that the cord is taught between it and the side seam pin (no ease);
- chest-line pin so that there is slight ease ( $\frac{1}{8}$ " or so) between it and the notch pins;
- shoulder point pin wherever it lies, hopefully within  $\frac{3}{8}$ " of the top of the cap shoulder point. The distance it falls short is ease in this section.

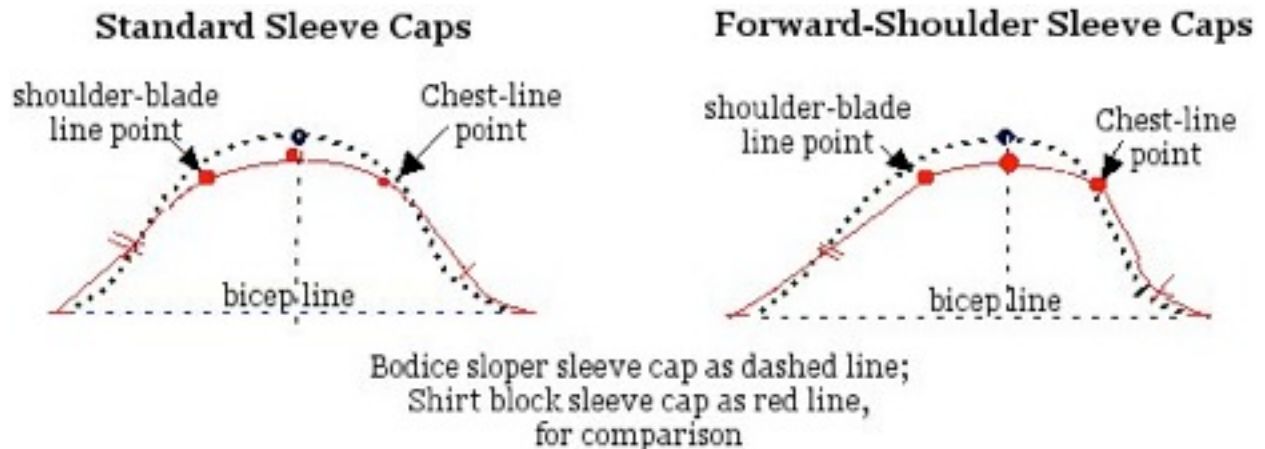
**Forward-Shoulder Shirt Block Sleeve Cap**



11. Again, just as for the back, draw the curve directly under the cord, marking the position of each pin. Then carefully remove the pins from the board (but still in the cord). I keep the pins in the cord in case I need to make future adjustments, until the block fits.

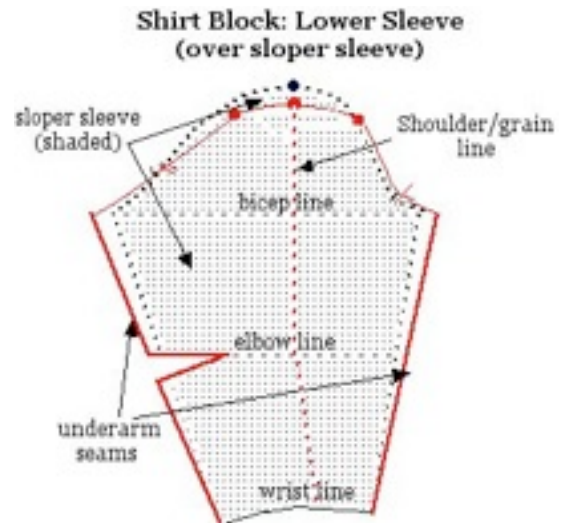
12. Refine the hand-drawn curves using a French curve to create smooth transitions. Place dots at the shoulder-blade and chest lines, and a circle at the shoulder point; mark double-notches on back curve and single notch on front curve, all per pin positions

Here's sketches for a standard sleeve cap and a forward shoulder sleeve cap, for both the bodice sloper and the shirt block for comparison:



### **Redraw lower sleeve:**

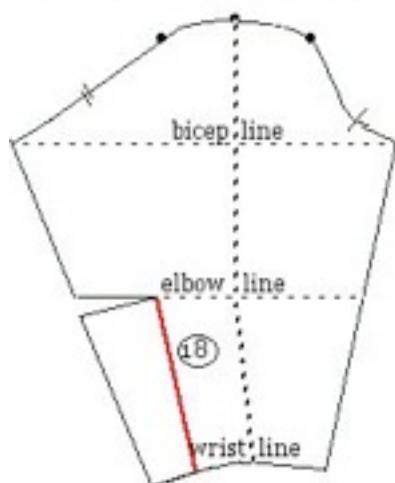
13. Lay your shirt block sleeve cap over your bodice sleeve sloper, aligning the shoulder line from top of cap to wrist line.
14. Draw underarm seam lines from lower end of the back cap curve to the wrist, adjusting as necessary at the elbow dart. You may need to adjust the elbow dart legs to meet the new underarm seam, and to ensure they are of equal length.
15. Draw underarm seam line from the lower end of the front cap to the wrist.
16. Extend the shoulder line to the wrist. This line serves as the grain line.
17. There are two different ways you can do the lower sleeve:
  - The **elbow dart** is used if you want a closer-fitting sleeve from elbow to wrist;
  - The **wrist dart** is used if you want pleats or gathers into a band at the wrist, or a cuff with a buttoned opening.



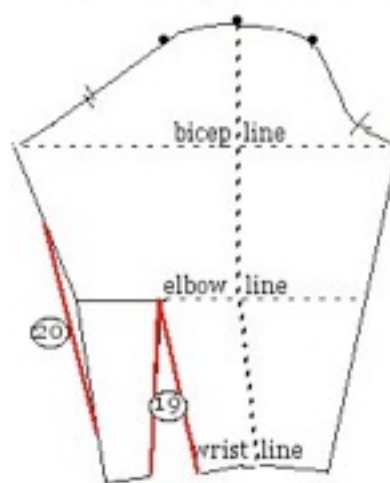
### **Convert to a Wrist Dart**

18. Draw a line from the point of the elbow dart to the wrist line, midway between the underarm seam and the shoulder/grain line. Cut along this line but leave a bit of paper at the dart point for a pivot.
19. Pivot to close the elbow dart, thus opening the wrist dart.
20. Smooth-out the underarm seam as necessary for a smooth transition; I use my French curve for this purpose.

Draw & cut wrist dart position

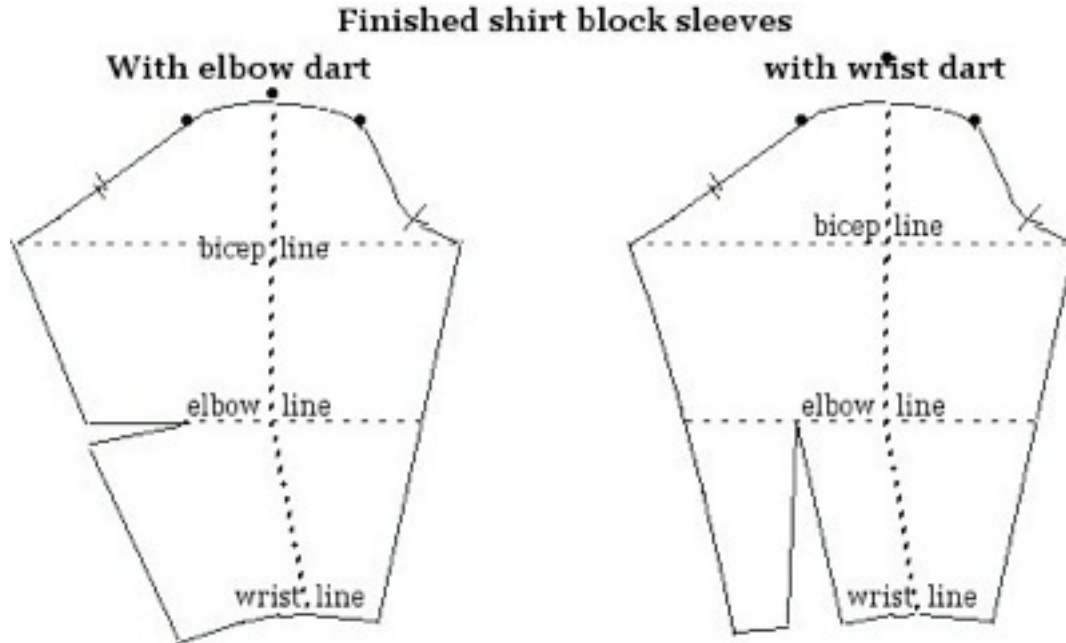


Pivot to open wrist dart



## ***Finished Sleeve Blocks for Shirt Block***

Since this is a shirt block, I use the wrist dart, as I almost always have a cuff. However, I show both finished options below.



## **References**

1. *Designing Patterns, A Fresh Approach to Pattern Cutting*, by Hilary Campbell, published by Stanley Thornes (Publishers) Inc.
2. *The Curious Frau: Drafting a Basic Fitted Sleeve* ([www.curiousfrau.com/patterns/pattern-drafting/126-drafting-a-basic-fitted-sleeve](http://www.curiousfrau.com/patterns/pattern-drafting/126-drafting-a-basic-fitted-sleeve))
3. *Threads Magazine*, Volume 137, July 2008: *From Sloper to Shirt*; and Volume 138, August 2008: *Use your Sloper to Finish Your Shirt*, both by Kathleen Cheetham