## First Class Orienteering F2

Using a compass, complete an orienteering course that covers at least one mile and requires measuring the height and/or width of designated items
(tree, tower, canyon, ditch, etc.)

F. John Solman<br>Troop 127<br>Lincoln, MA<br>10 January 2006

" It is better to be approximately correct than precisely wrong."
H. M Keynes(?)

## Outdoor/Indoor Practice Items Needed

- Ref: Handbook Pages 120-125
- 50' or 100' tape
- measure 100' pacing steps
- Stakes or cans to note end points
- Yardsticks/rulers - personal measurements
- " 5' Scout" for proportion measure (paint stir)
- Paper and pencils
- Troop Flags (2), 4 tables
- Compass for Compass method
- Set up 5 stations:
- Flag 1 \& Flag 2 (different heights)
- Table 1 \& 2
- Table 3 \& 4
- Salute area
- Personal Measurement - do as gathering activity:
- Outdoor course for 100' step count - as Scouts arrive?
- Indoor table with rules to do personal measurements - record in book pp123
- Helpers (3-5): 100' pace course; Flags; Salute; Table 1\&2, Table 3 \& 4


## Room setup



$$
\text { Street } \rightarrow
$$

50' or 100' Pacing Distance outdoors - mark with can at each end Do as Scouts arrive

## Personal Measurements (pp123) Name:

- Ft/Step = 100'/\# of steps =
- Height $=\ldots \quad$ Ft $+\ldots \quad$ inches
- Arm span = $\qquad$
- Arm Reach =
- Hand Span =
- Finger Length =
- Foot Length (in shoe or boot) = $\qquad$
- Ex:1 Smoot = 5' \& 7" (Oliver R. Smoot)
- Harvard Bridge is 364.4 Smoots = ft.
$-364.4 \times 5^{\prime}=\sim 1822.0^{\prime}$; Add $0.5 \times 364.4=182.2^{\prime}$ for better answer


## F2 Heights and Widths Scorecard

 Names: $\qquad$ , $\qquad$- Flag 1 $\qquad$ in " 5' Scout units " (direct: $\qquad$
- Flag 2 $\qquad$ in " 5 ' Scout units "
(direct:

- Salute Width; $\qquad$ in feet
(direct: $\qquad$
- Table 1, 2 Width of "stream" inches: $\qquad$ (direct: $\qquad$
- Table 3, 4 Width of "stream" inches: $\qquad$ (direct:

- Driveway width in ft: $\qquad$
- Spruce Height in ft: $\qquad$
(direct:

(direct: $\qquad$


## Use steps/paces to measure width of driveway in front of hall



## Measure Flag pole in meeting room Ref: pp 122 \& pp123

- Troop Flags near wall
- Use Stick Method
- Stand " 5' Scout" by flagpole
- Height in multiples of " 5' Scout"
- Use Felling Method
- Do not lay flag on floor!
- Use upright stick to sight
- Turn 90 degrees to horizontal
- Look at wall - have friend mark with object
- Measure with " 5' Scout "
- Answer In units of " 5 ' Scouts "


## Measure Spruce Tree in Front of

 Mason's Lodge- Use Stick Method and real Scout
- Use a real Scout's height
- Add up "height" with stick by sighting
- Use Felling Method and pace off on ground
- Compare results


## Widths

- Salute Method
- Stick Method
- Compass Method


## Salute Measure of room (Wall to center post) Ref pp124



Stand at X -in line With post

Do Salute Method to Sight on post

Turn to look towards Y and sight spot along Wall

Step off distance from $X$ to $Y$

Check with direct measure

Street $\rightarrow$

## Stick Method for Stream Set Tables about 2' apart Ref pp 125



Width of "stream"

- Sticks


## Compass Method Set tables about 4' apart Ref pp 125



## At Each Station

- Scouts do measurements in buddy pairs
- Write down on sheet of paper
- Do direct measure for comparison
- Compare results when all are done.

