

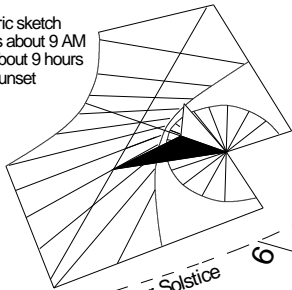
### ASOP SUNDIAL (A Sheet Of Paper Sundial)

Carefully cut out and folded, this sundial shows the time, as well as the hours remaining until sunset. Assembled, there are two sets of lines; a small circle of hour lines giving solar time corrected for longitude, and a group of lines, bounded by solstice curves, which show hours until sunset. The shadow from the sloping edge of the triangular gnomon shows the time, while the tip of the gnomon's shadow indicates hours to sunset. A equation of time chart tells how many minutes to add to the dial's time to get standard time. If daylight saving time is in effect, add one hour.

#### INSTALLATION:

Properly installed, this indoor sundial is horizontal, with its gnomon vertical. The arrow must aim at true north.

Generic sketch shows about 9 AM and about 9 hours until sunset



To use an accurate watch to orient this dial, subtract from watch time the minutes shown in the chart at right, and set the inner (time) dial to read the result. Remember, subtracting -6 is the same as adding 6. If the watch reads daylight time, subtract one hour.

#### ASSEMBLY INSTRUCTIONS:

- 1) Cut very carefully along all dotted lines. Save the instructions.
- 2) Carefully make a peak fold and two valley folds where shown to form the gnomon. Refer to the sketch.
- 3) Apply tape to hold the dial together. Use a bit of tape or glue to keep the gnomon's northern edges close together.

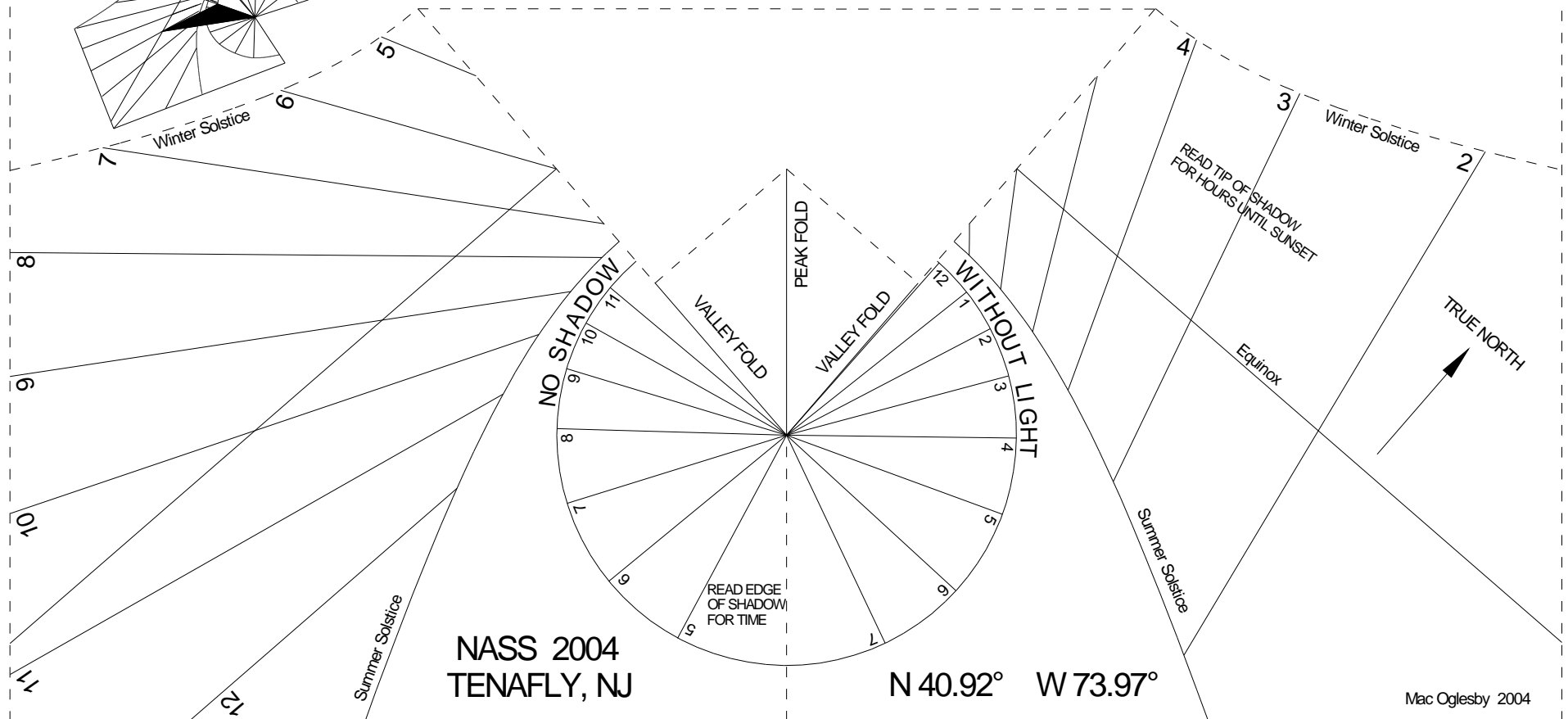
#### USE THIS CHART TO CONVERT DIAL TIME TO STANDARD TIME

day	minutes to add to dial time for standard time												day
1	4	14	12	4	-3	-2	4	6	0	-10	-16	-11	1
10	8	14	10	1	-4	0	5	5	-3	-13	-16	-7	10
19	11	14	8	-1	-4	1	6	4	-6	-15	-15	-3	19
28	13	13	5	-2	-3	3	6	1	-9	-16	-12	1	28

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

For example, on Jan 19 add 11 minutes to dial time for standard time.

On May 15 add -4 minutes, then add one hour for daylight saving time.



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