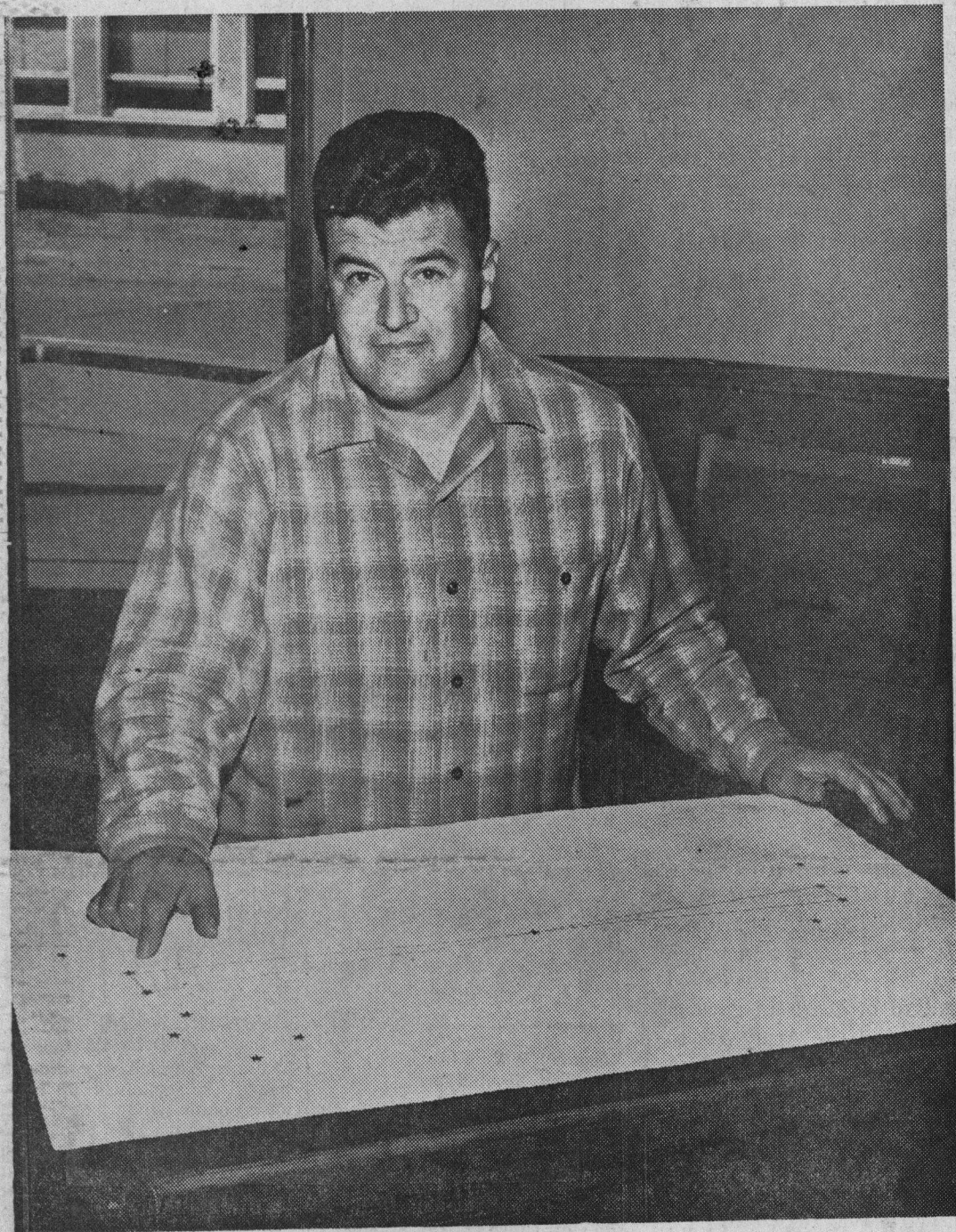## Telling Time By The Stars

John J. Trautner, former air force navigator, says he had discovered a God-made clock in the northern heavens that he can read at a glance and be constantly correct within five minutes. The celestial time- ◇ ◇ ◇ piece involves the constellation Big Dipper and Cassiopeiae, with the north star (Polaris) as the hub.

Former Air Force Navigator Finds Errorless Timepiece Amid The Stars

By Wally Trabing

John T. Trautner of 118 First street, says he can look up at the stars at night and tell you the time within five minutes.

The stars and constellations he uses have long been known, but he believes he has discovered the combination that form a God-made errorless timepiece.

Trautner is a former air force navigator and has gazed plenty at the stars. As a captain he commanded a squadron of navigators within a group of bombers, but he says with all this star gazing he did not make his full analysis of the clock phenomenon until last April.

His clock is composed of two constellations and a star which, with a bit of imagination, **makes two hour hands always opposite each other.**

The positioning of top of the hour hand tells you the time.

He uses the two central stars in the handle of the Big Dipper as the end of one hour hand, the North Star, or Polaris, as the hub of the clock, and then the line of sight continues on out to the two middle stars of the constellation Cassiopeiae for the end of the second hour hand.

He says they move counter clockwise around Polaris. The viewer must furnish the numbers on the "clock face."

There are a few irregularities that the clock watcher must take into consideration.

For example, in each 24 hours there is a 3:56 second lag.

One must either keep tabs on the lag totals in his head, or use a chart which lists the months and corrected position of the hour hands on a particular date.

"But," says the 43-year-old Trautner, "once you get the hang of the nightly changes, you can glance up at the sky, make some quick mental calculations, and you'll have the time."

He has worked out a circular chart that clues in the star position differentials.

But if you like to toy with in-volved mathematics, here is the way you can obtain the vertical time—the time it will be when the hour hands are vertical, so that you can look in the sky, spot the hands and get your time relative to their vertical positions.

1. Take the number of days until April 8 or October 8, and decrease by 1½ per cent (to change days to degrees).

2. Add west longitude.

3. Divide by 15 (to change degrees to hours).

4. Subtract the difference (whole hours) between local time and Greenwitch Mean time.

5. Convert fractions to minutes (for example: 6 4/15 hours equals 6:16 minutes).

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