

Running fix with course change using StarPilot.

Example Problem 15, Hawaii by Sextant

DR at moon sight

Moon LL—July 15, 1982

DR 30° 05' N, 139° 40' W 0728 WT C= 260, S= 7.5

0832 change course to 240, S=7.5

Sun LL—July 15, 1982

DR 30° 00' N, 139° 54' W 0917 C =240, S=7.5

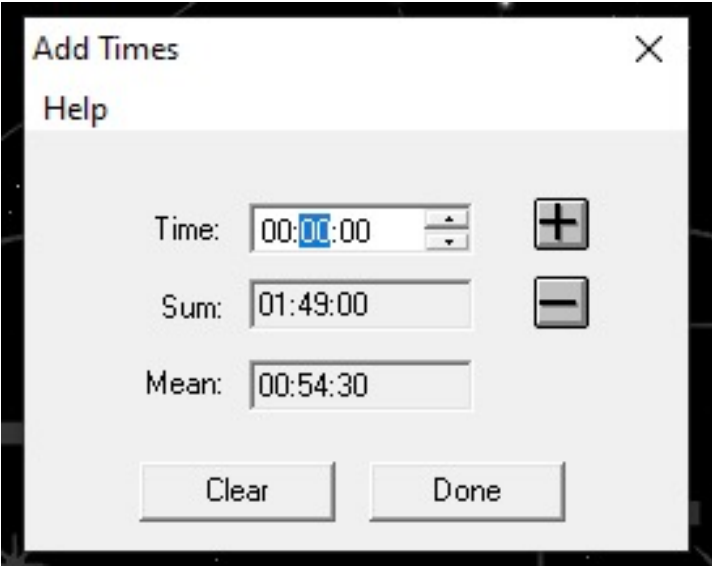
Figure distance made good and CMG = 13.1 nmi at 247.7T

The screenshot shows a software window titled "Rhumb Line" with a "Help" button. It contains two columns of input fields. The first column has "DR Lat:" (30.050), "DR Lon:" (-139.400), "Dest Lat:" (30.000), and "Dest Lon:" (-139.540). The second column has "RL Course:" (247.7°T), "RL Dist(nm):" (13.17), "GC Course:" (247.6°T), and "GC Dist(nm):" (13.11). At the bottom are three buttons: "Compute", "Clear", and "Done".

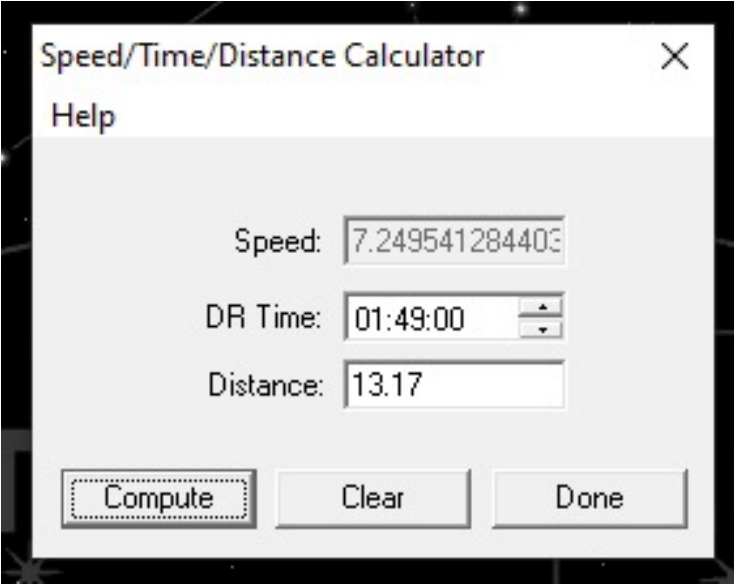
DR Lat:	30.050	RL Course:	247.7°T
DR Lon:	-139.400	RL Dist(nm):	13.17
Dest Lat:	30.000	GC Course:	247.6°T
Dest Lon:	-139.540	GC Dist(nm):	13.11

Buttons: Compute, Clear, Done

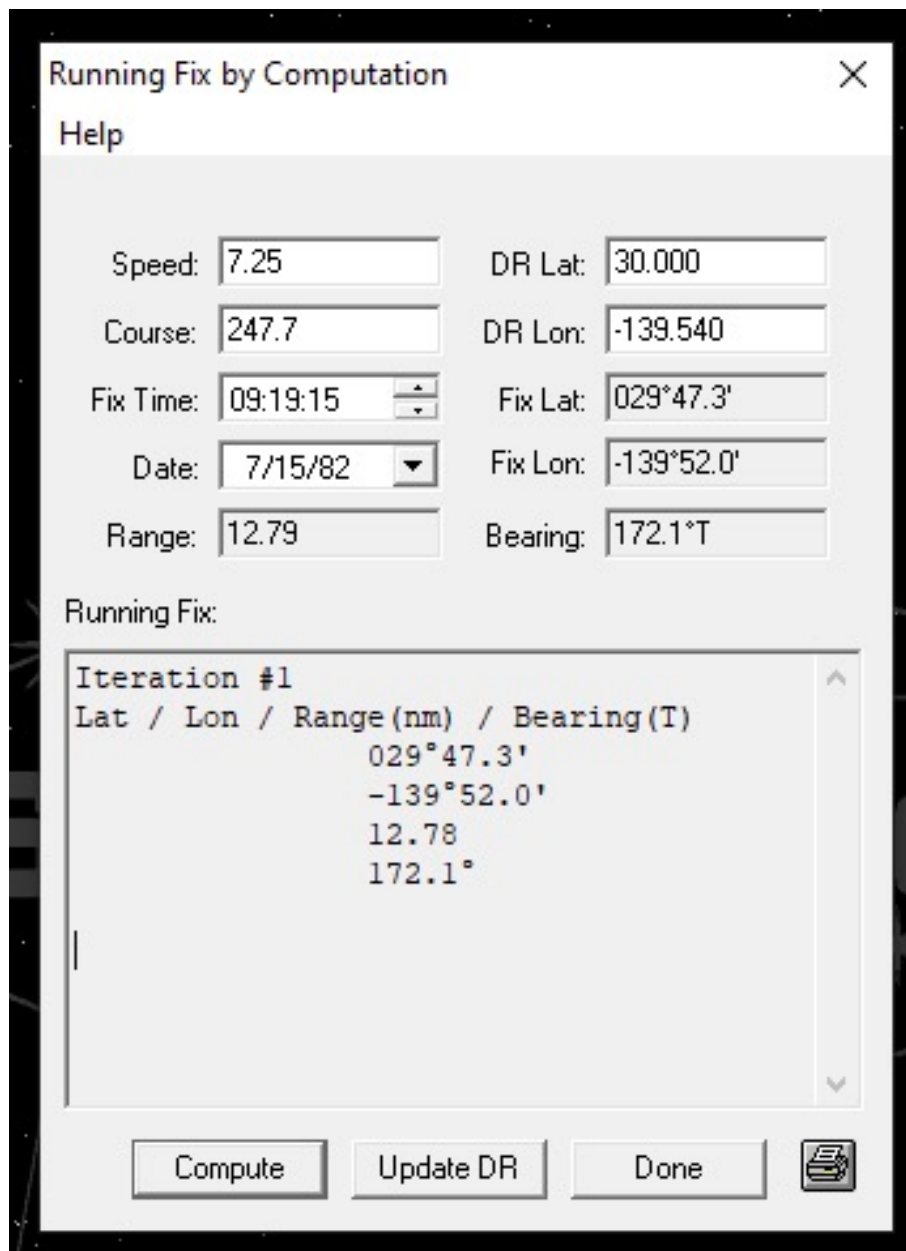
Compute time between sights 1h 49m



Use time and distance to compute SMG = 7.25 kts



Compute fix at time of last set of sights 0919. Be sure to use then the DR for that location to get proper range and bearing

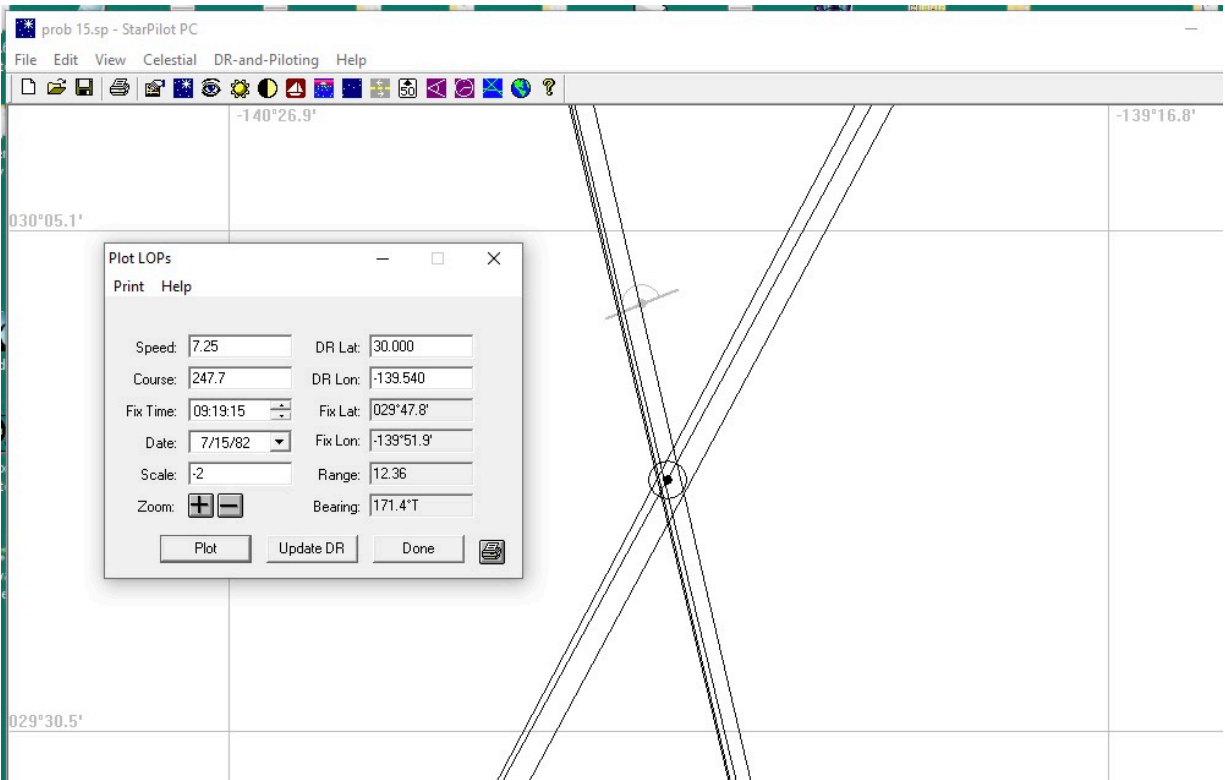


Now show the plotted solution... need to fix the DR again....

we used here all 7 sights for the fix. The answer in the book using just two sights is

► Problem 15. 0917 FIX using CMG250, SMG7.1  
29° 48.4'N, 139° 51.9'W (Fix had a course change.)

So it did not have the best course or speed. Lat is off by about 1 nmi.



If we use the book speed and course and time we get this below, but the above is a better solution.

# Running Fix by Computation



Help

Speed:

DR Lat:

Course:

DR Lon:

Fix Time:

Fix Lat:

Date:

Fix Lon:

Range:

Bearing:

Running Fix:

```
Iteration #1
Lat / Lon / Range (nm) / Bearing (T)
      029°47.8'
     -139°51.8'
      12.39
      171.0°
```