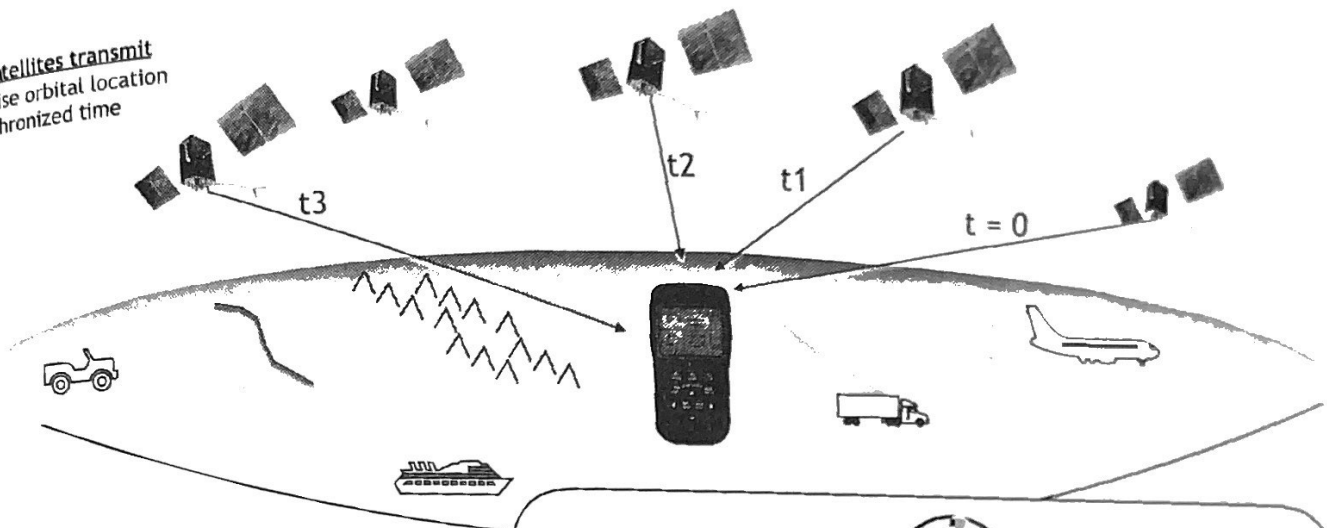


**GPS satellites transmit**  
 • Precise orbital location  
 • Synchronized time



**GPS receiver**

- Obtains Precise Time & Sets Clock to  $t = 0$
- Determines Time Delays correcting for atmospheric effects from 3 Satellites,  $t_1, t_2, t_3$
- Computes geo-location using orbital parameters

The Command Center with the global distribution of tracking stations monitors the orbital position of each GPS Satellite, the navigation signals, and the atmospheric information providing timely updates of the orbital parameters and on-board atomic clock synchronizing of the Constellation to enable accurate position location everywhere on the Earth.

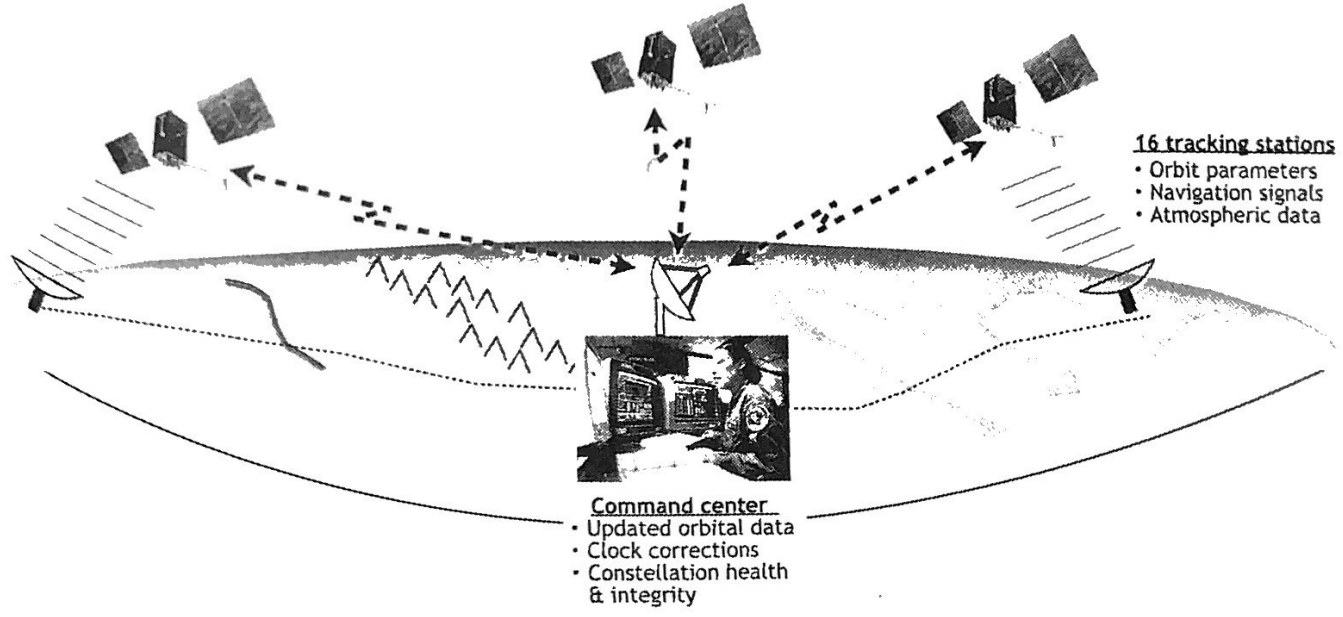


Figure 14 How GPS works.