RNAV system

Figure 7-20. Typical RNAV display.
Overview

What is RNAV?
Why use RNAV?
VOR/DME RNAV
What is RNAV?

- RNAV-area navigation
- Method of navigation that allows aircraft operation on a course within coverage of navigation signals
- Includes capability for VOR/DME, LORAN, GPS, and inertial navigation systems (INS)
Why use RNAV?

- RNAV provides more lateral freedom
- Better use of airspace
- Route not tied to fly-over navigation
- Route structure can be organized to reduce flight distance, traffic separation
VOR/DME RNAV

- VOR RNAV is based on information generated by present VORTAC or VOR/DME systems to create a waypoint as long as aircraft is within reception range of both a nearby VOR and DME facility.

Figure 7-19. RNAV computation.
What is RNAV?
Why use RNAV?
VOR/DME RNAV
References

- http://www.allstar.fiu.edu/aero/RNAV.htm
- http://www.americanflyers.net/aviationlibrary/instrument_flying_handbook/chapter_7.htm