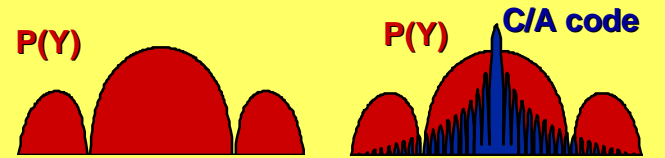
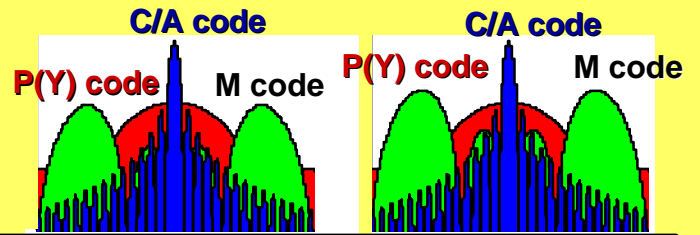


Modernized Signal Evolution

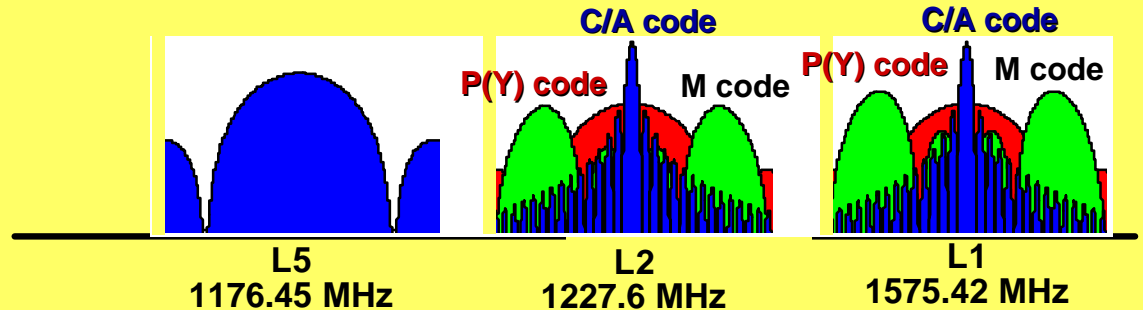
Present Signals



2nd Civil & New Military Signals

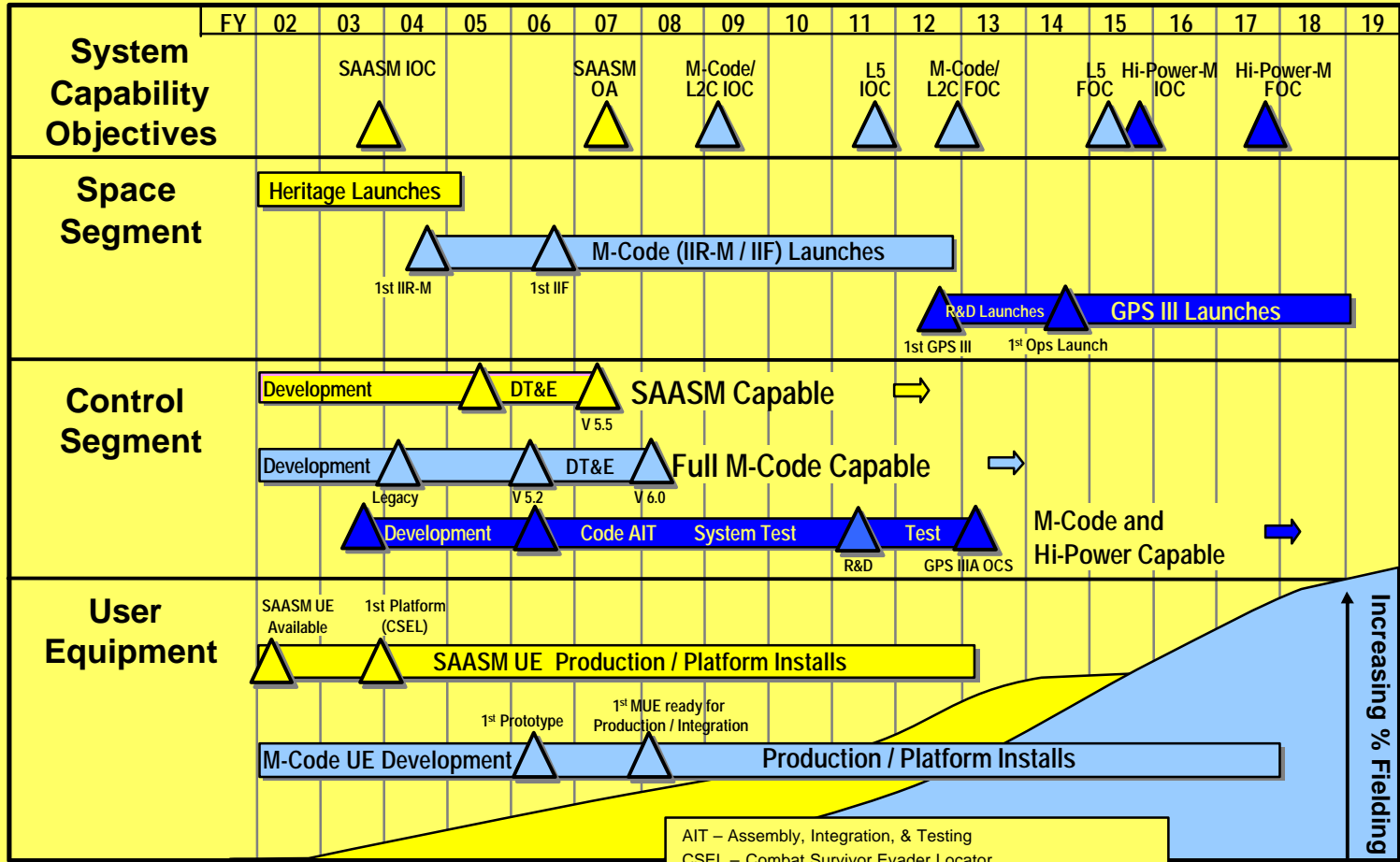


3rd Civil Signal



GPS

Enterprise Perspective Schedule



AIT – Assembly, Integration, & Testing
 CSEL – Combat Survivor Evader Locator
 MUE – M-code User Equipment
 SAASM – Selective Availability Anti-Spoofing Module

GPS IIA, IIR, IIR-M Description

Pre Modernization

- Heritage Signals
 - L1, C/A
 - L1, L2 P(Y)
- Design Life
 - 10 Years
- 3 Rubidium Clocks
- IIR Satellites 1-13



Post Modernization

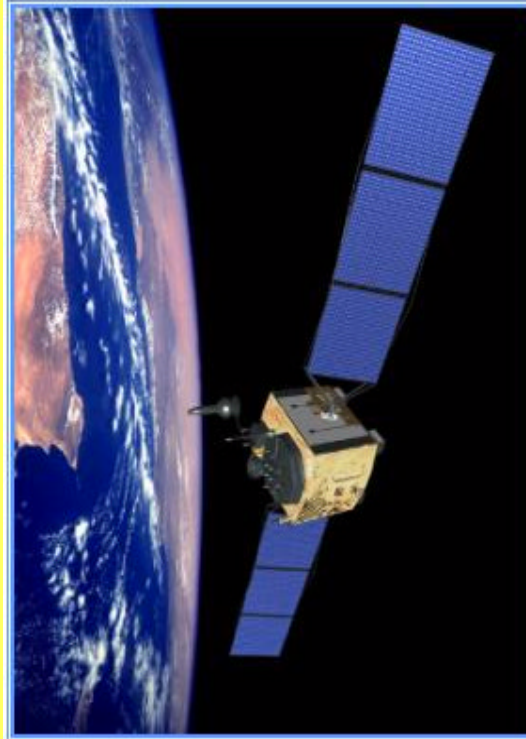
- Modernized Signals
 - L1 C/A, L2C,
 - L1, L2 P(Y)
 - L1, L2 M-Code
 - Flex Power
- Design Life
 - 10 Years
- 3 Rubidium Clocks
- IIR-M Satellites 14-21

EARLY IMPROVED SECURITY & ANTI-JAM

GPS IIF Description

Pre Modernization

- Heritage Signals
 - L1, L2 C/A
 - L1, L2 P(Y)
- Design Life
 - 15 Years
- 1 Rubidium and 3 Cesium Clocks
- 33 Satellite Production Run

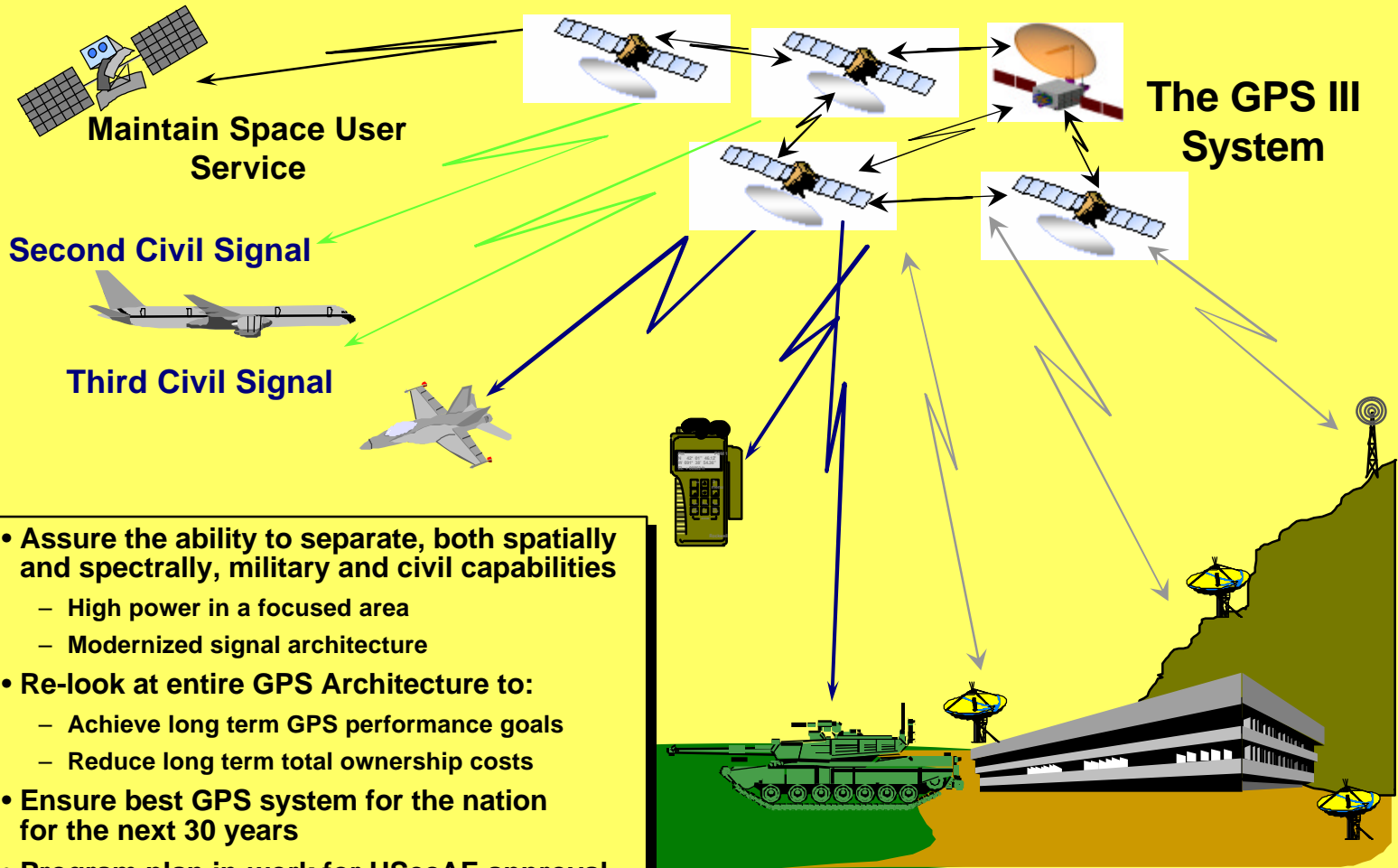


Post Modernization

- Modernized Signals
 - L1 C/A, L2C
 - L1, L2 P(Y)
 - L1, L2 M-Code
 - L5 New Civil Signal
 - Flex Power
- Design Life
 - 12 Years
- 2 Rubidium and 1 Cesium Clocks
- 12-16 Satellite Production Run

IMPROVED ACCURACY, SECURITY & ANTI-JAM

GPS III Description



- **Assure the ability to separate, both spatially and spectrally, military and civil capabilities**
 - High power in a focused area
 - Modernized signal architecture
- **Re-look at entire GPS Architecture to:**
 - Achieve long term GPS performance goals
 - Reduce long term total ownership costs
- **Ensure best GPS system for the nation for the next 30 years**
- **Program plan in-work for USecAF approval**