

GPS Overview



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Boeing GPS History 40 Year Mission Partner



Block I
 First Launch on 22 Feb 1978
 11 Vehicles (Average life 2x specified)



Block II/IIA
 First Launch on 14 Feb 1989 (FOC/1995)
 28 Vehicles (Average life 2.75x spec.)



Block IIF
 First Launch on 27 May 2010
 12 of 12 Vehicles launched



Block III+
 SV11+ Solution
 AFRL Technologies



System Definition 1997-2004



Ground System Deployed 2007

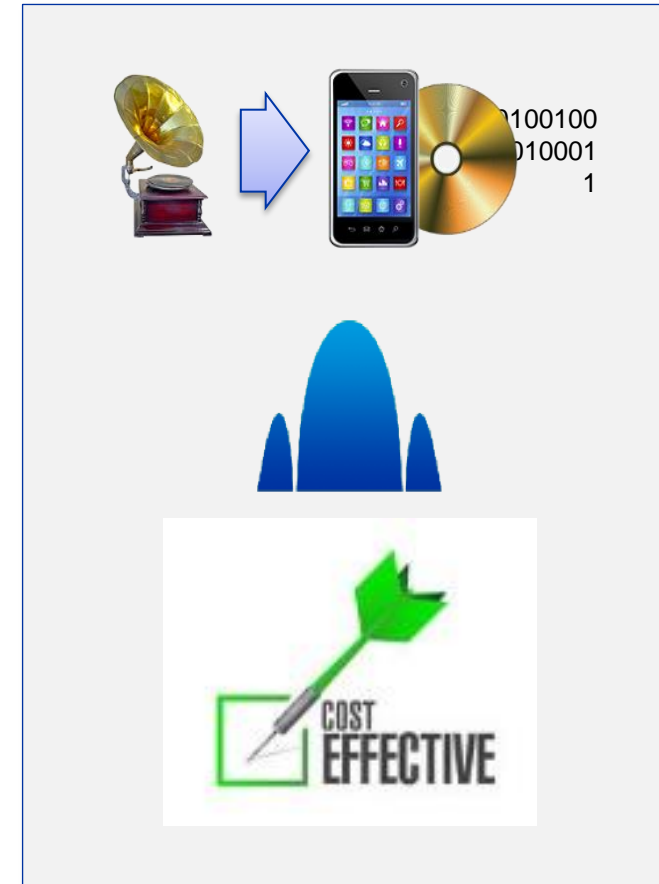


Boeing Current Content Delivered

Boeing GPS Mission Capabilities Span GPS Enterprise

Modern GPS Digital Payload – Significant Benefits

- **Improves producibility**
- **Lower cost, Lower SWaP**
- **Improves performance**
- **Flexible to respond to evolving mission needs/ adapt to threats**



Digital Payload - enabler for modern space segment at a lower cost

Focus Areas

- **Ensuring GPS Gold Standard**
 - Mission Assurance emphasis
 - Meet or exceed performance requirements
- **Resiliency**
 - On-board, off-board protection, cyber
 - Increased mission agility/ adaptability
- **Affordable GPS Architecture**
 - Advancements in low cost spacecraft and payload product-lines
 - Emerging space solutions complement Assured PNT



Summary



- Boeing is using adaptations of proven product line to meet customer unique missions
- Digital Payload enables valuable program and mission advantages
- Significant progress on low cost, low risk GPS capabilities

