MEOSAR Update and Plans for Initial Operational Capability (IOC)

Beacon Manufacturers Workshop

2020

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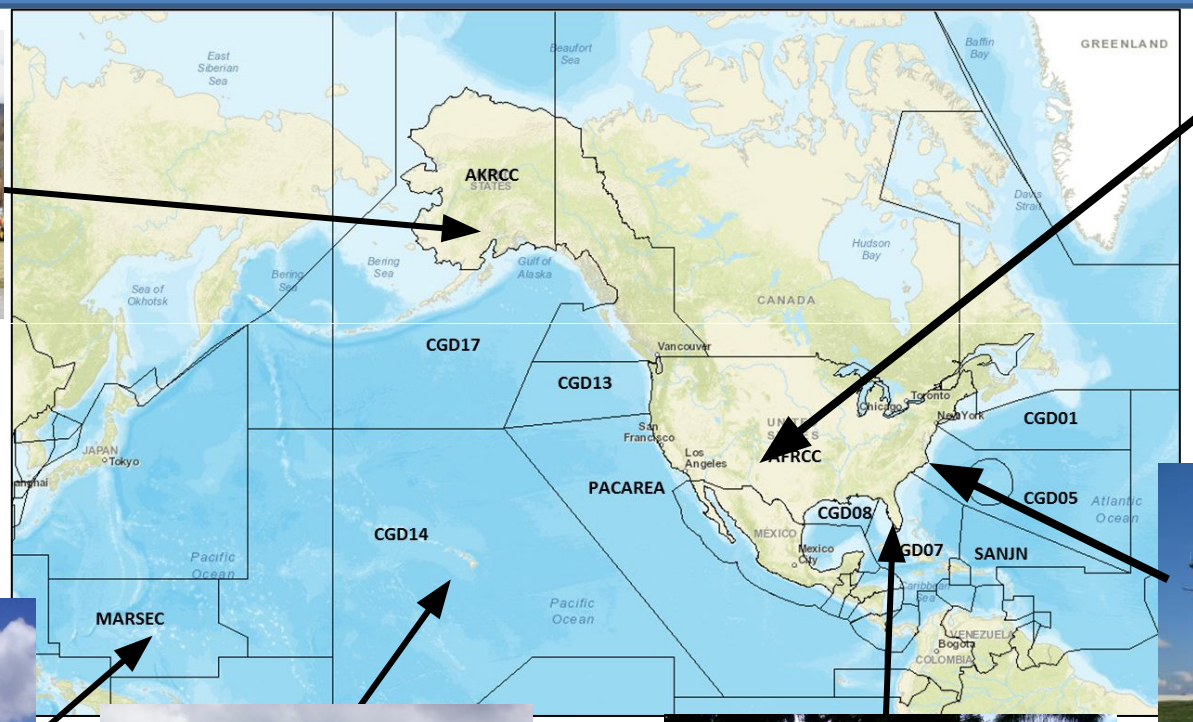
USMCC Chief

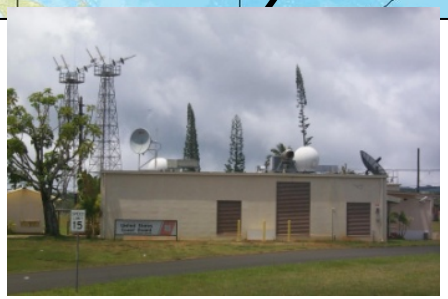
US SARSAT Ground Segment

Alaska
NOAA Fairbanks, Alaska
Command and Data
Acquisition Station (FCDA)
2 LEOLUTs replaced by
2 LEO/MEOLUTs late 2020



New Mexico
SUSA MEOLUT
2 phased array's
under development

Guam
Andersen AFB
2 LEOLUTs replaced by
2 LEO/MEOLUTs in 2021



Hawaii
2 LEOLUTs replaced by
2 LEO/MEOLUTs in 2019
&
6 antenna MEOLUT

Miami
2 LEOLUTs replaced by
2 LEO/MEOLUTs in 2019
&
6 antenna MEOLUT

Maryland
US Mission Control Center
Maryland has 2 GEOLUTs & 1
test GEOLUT
&
1 Test LEOLUT
1 Test LEO/MEOLUT
1 planned Test Phased Array

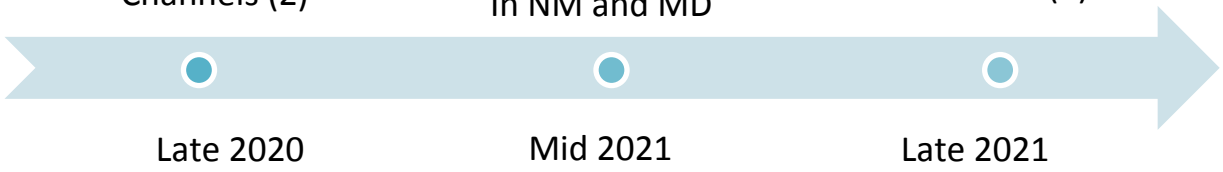
USA LEO/MEOLUT Plans

- Hybrid LEO/MEO LUTs
  - 4 more LEO/MEO planned (Alaska and Guam)
    - The 4th Generation LEOLUTs track MEOSAR when no LEOSAR satellites are in view.
    - The MEO data provided will be used as additional channels to existing MEOLUTs.
    - Alaska, Guam will feed MEO data to HI MEOLUT
  - LEO/MEOLUTs will bridge the transition from LEOSAR to MEOSAR

- MEOLUT
  - New Mexico - Phased-Array MEOLUT planned (SUSA)
  - Maryland - Test Phased-Array MEOLUT planned (L-band only)(TPAM)

Currently Operational:

LEO/MEO Channels:
- Florida (2)
- Hawaii (2)
- Maryland (1)



USA LGM MCC
Commissioning schedule

- Commissioned
  - 2018 AUMCC went operational July 2019
  - 2019 JAMCC went operational April 2020
- 2020 In progress
  - CHMCC (expect IOC Oct 2020)
  - CMCC
- 2021 Planned
  - ARMCC, BRMCC, PEMCC

LGM Initial Operational Capability (IOC)

Challenges from the US perspective:

- Expected Horizontal Error (EHE)
- Slow-moving beacon location accuracy
- Suspect alerts
- QMS requirements

QUESTIONS?