

Cospas-Sarsat
Homing and On-scene Locating
Correspondence Working Group



NOAA Beacon Manufacturers Workshop
RTCM Annual Meeting
Annapolis, MD
8 May 2015



Background



- Developing new Second-Generation Beacons
 - Wideband (Spread-spectrum) Signal
 - 250 mW 121.5 MHz Homing Signal
 - No narrow-band 406 MHz signal to DF
- Competing DF/Locating Protocols
 - Automatic Identification System (AIS)
 - Digital Selective Calling
 - 406 MHz Direction Finding
 - 121.5 MHz Direction Finding



Homing CWG



- CSC-51 established a Correspondence Working Group (CWG) to define/validate C/S G.008 Homing Requirements
- Cospas-Sarsat Joint Committee (JC-28) asked the Homing CWG to continue work for defining performance requirements for potential 406 MHz homing signal

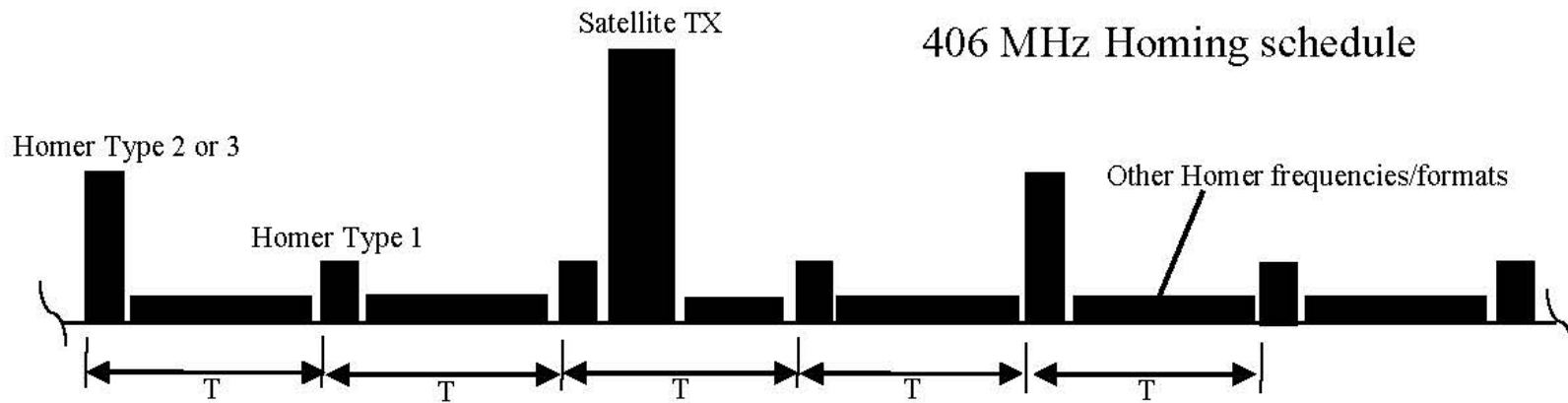


Progress



- Presentation of conceptual Interleaved Homing Signal Schema at JC-28 (June 2014)
- Results of JC-28 reviewed at CSC-53; Homing CWG to continue efforts to define interleaved schema
- Homing CWG developed draft interleaved homing signal schema & performance specification

Interleaved Concept



Homer Type 1 – Low power 406 MHz

Homer Type 2 – High power 406 MHz

Other Homing frequencies/formats:

- 121.5 MHz
- 243.0 MHz
- AIS
- DSC



Current Status



- TG-1/2015 held from 23 – 27 FEB 2015
 - 3 Papers submitted and discussed:
 - Summary of Homing CWG activities since JC-28 (JUN 2014)
 - Testing proposal for a 121.5 MHz homing signal at 33% duty-cycle
 - Draft language defining a 406 MHz homing signal
 - Homing and Intelligent Transmit Schedule Working Groups merged
 - Inter-dependencies (battery endurance, transmission schedules)
 - Synergy of work



Planned Activities



Work activities planned:

- 121.5 MHz Test Plan
- 121.5 MHz Test Activities
- 121.5 MHz Test Results Review, Analysis, and Conclusions
- Document assumptions for Interleaved Homing
- Interleaved Homing Implementation Proposal
- Draft Interleaved Homing Specification for T.018
- Define Intelligent Transmit Schedule for 30 + minutes
- Battery Capacity Endurance Analysis to meet all requirements
- Prepare papers for submission to JC-29 and JWG-SAR (121.5 Test Results)



Meetings



Schedule of future meetings:

#10	JUN 03
#11	JUN 24
#12	JUL 15
#13	JUL 29
#14	AUG 19
#15	SEP 02

To join the group, send an e-mail to:
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HITS Working Group



Questions ?