

MILLIMETER WAVE CAPABLE RESM SYSTEM



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Presenter: PD Clarke

THE THREAT



NEW MMW MISSILE THREAT:NASR-1 (C-704)



Upgraded C-704:

- Extended range of 38 km
- Heavier warhead of 130kg.
- Modular (Mission dependant):
 - TV Guided
 - Imaging Infrared
 - or Active Radar.



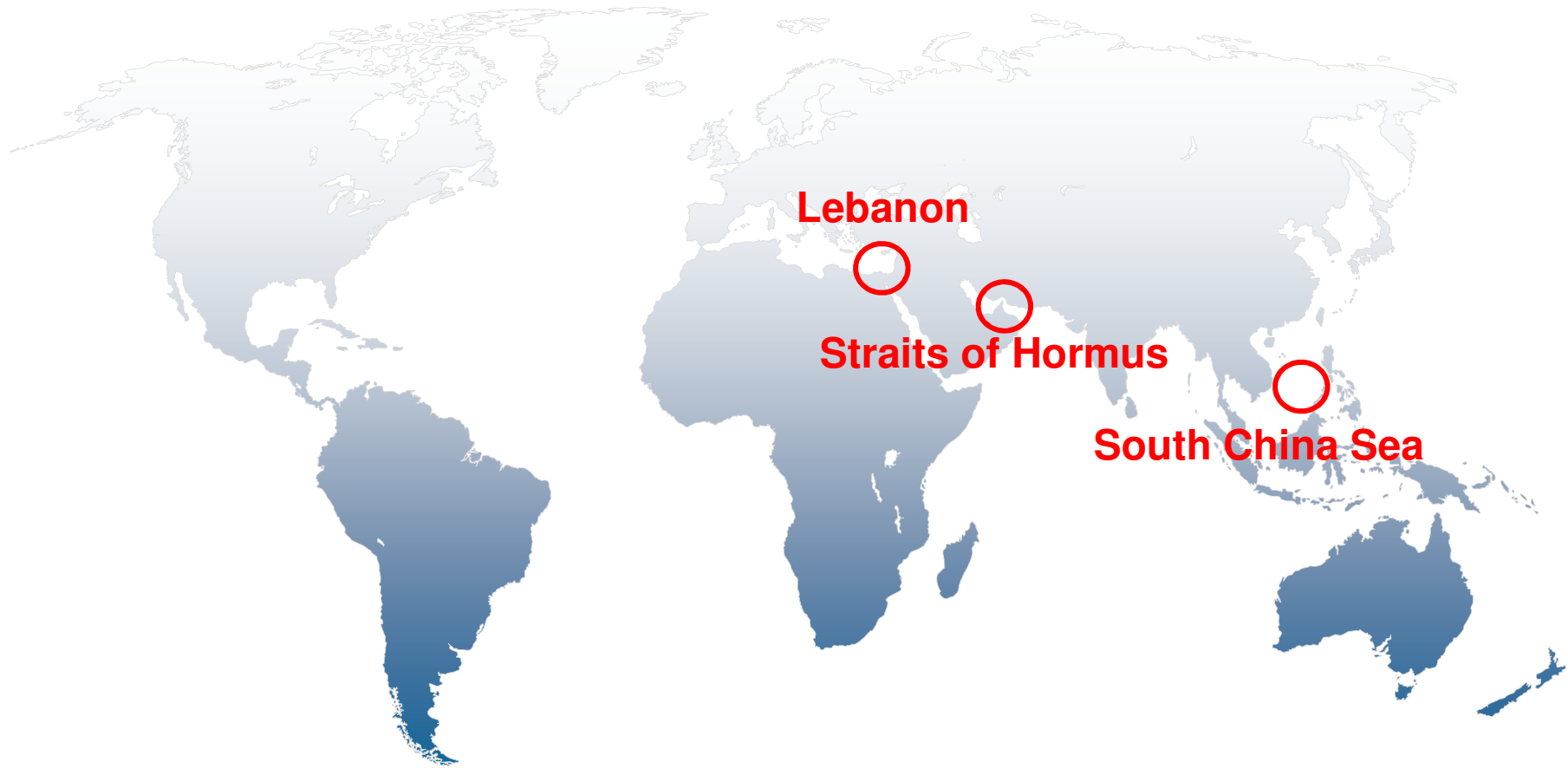
Above C-704 cruise missile with active radar seeker (images © 2009, Zhenguan Studio).

The C-701 and C-704 missiles are analogues to the French Exocet family of missiles, available with a range of active radar and electro-optical terminal seekers.

MAJOR EVENTS: 15th March 2011 Six NASR-1 (C-704) onboard M/V “VICTORIA” destined for Middle east



NASR-1 / C-704 Distribution



Chinese simple Seaborne Launching Platform C-802/C-704

(NOOR-1/NASR-1)



Borna
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SAA



UNVEILING OF C704



SAA

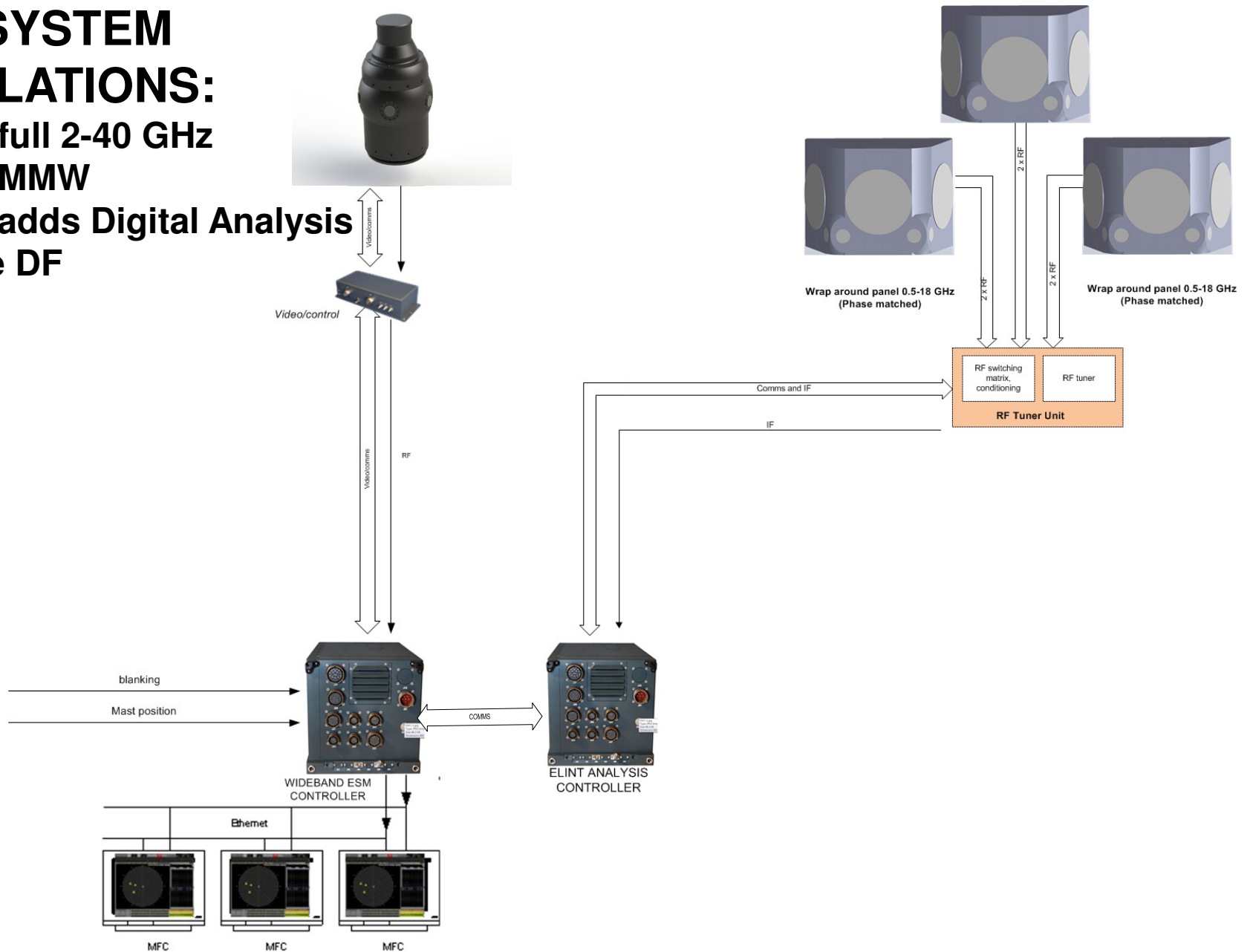


SAAB MMW RESM SOLUTION

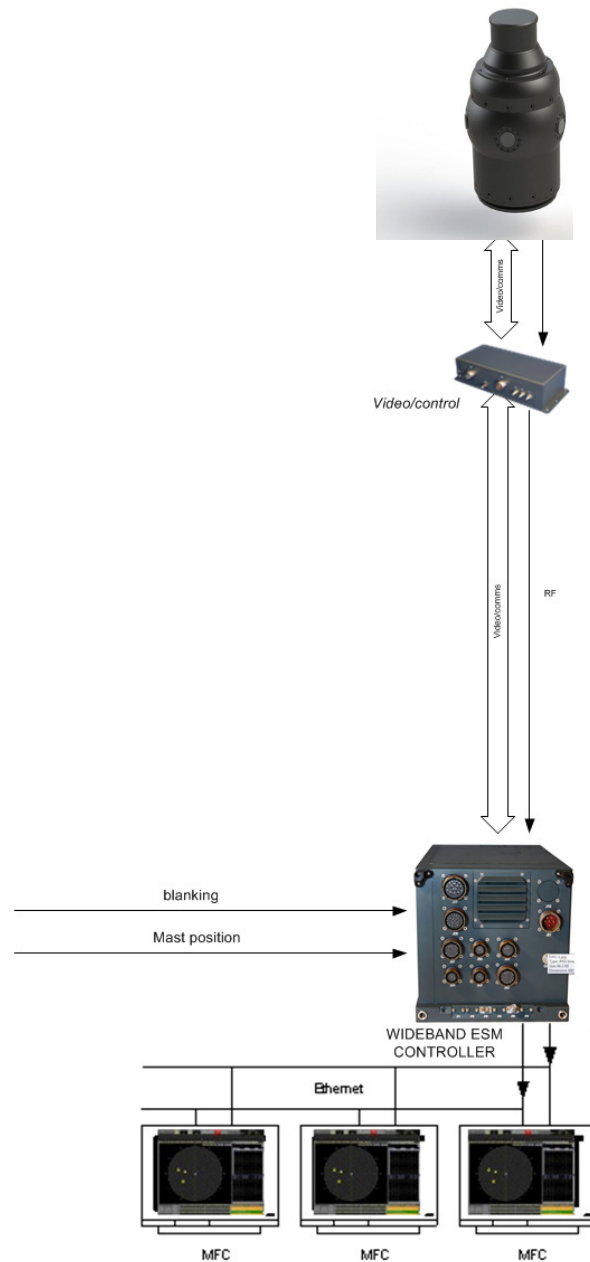


USME SYSTEM INSTALLATIONS:

- SME-150 full 2-40 GHz
- SME-150 MMW
- SME-250 adds Digital Analysis and Phase DF

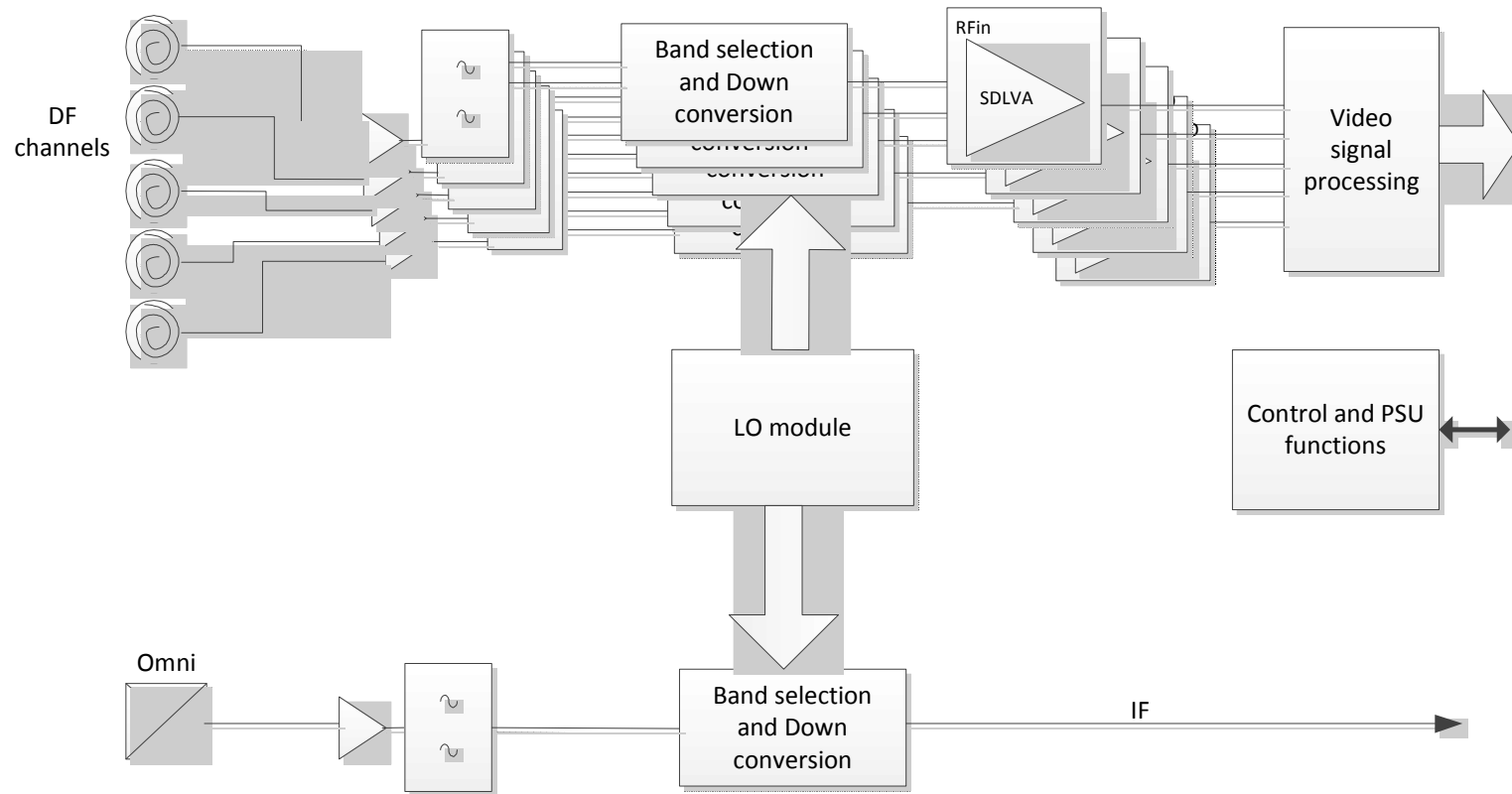


MMW Basic Interconnection Diagram

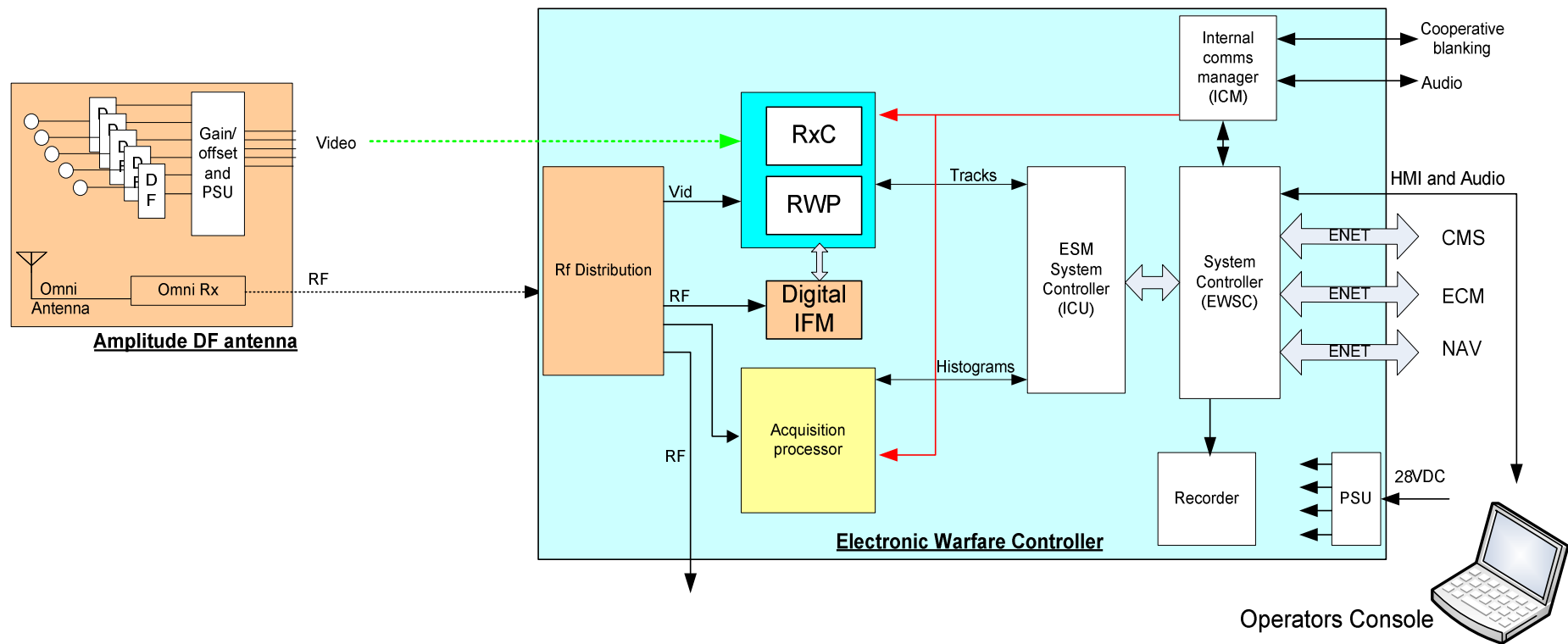


- Provides instant surface MMW Radar picture with instantaneous direction finding
- Simple installation, requires cable count
- Instantaneous full Radar analysis and classification
- MMW Sensor can be integrated into existing ESM system configurations in Parallel, or stacked
- Integrated to countermeasures system

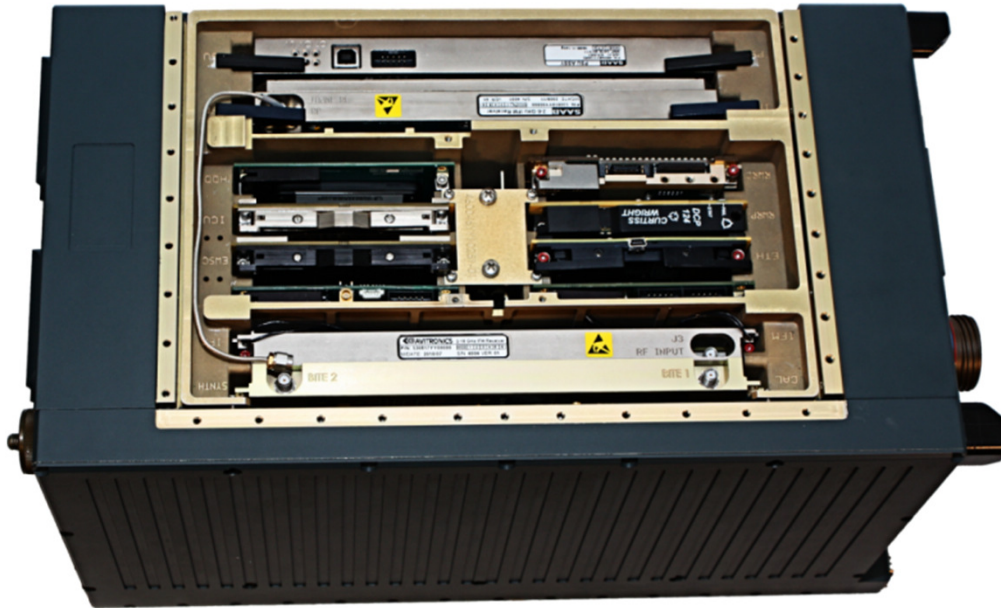
MMW Basic Front-end Block Diagram



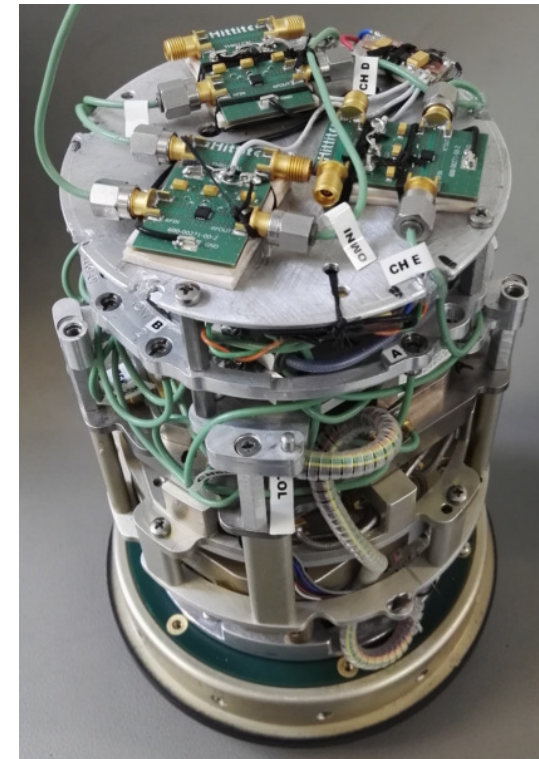
Wideband ESM System Block Diagram



MMW LRU Integration



- Highly integrated solution
- Can be used as MMW only or 2-40 GHz solution (stacked)
- Provides full performance high accuracy ESM
- Provides ELINT capability



RECENT SEA TRIAL EXPERIENCE



MMW SEA TRIAL

Procedure

- Trial conducted over two days, container mounted
- Test emitters generated from the ground station spanning the Millimeter frequency range
- Trial divided into the following categories:
 - a. Intercept capability (various simultaneous RF& freq + PRI agile)
 - b. Characterise and classify
 - c. Combinations, (more than one simultaneous)
 - d. Max range of interception





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