



INDUSTRY DAY



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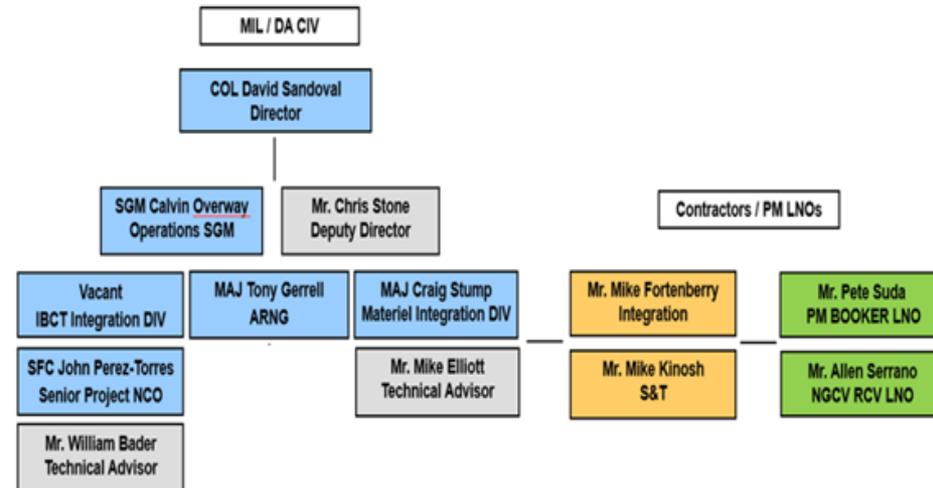
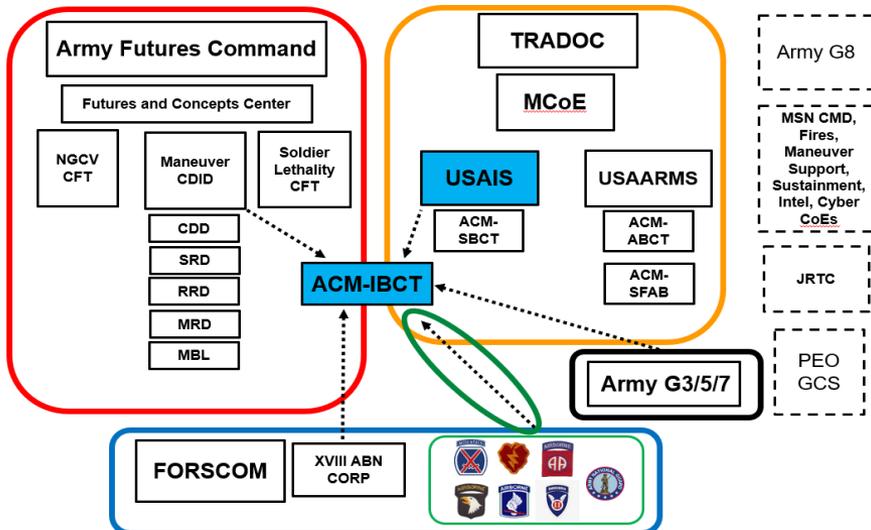
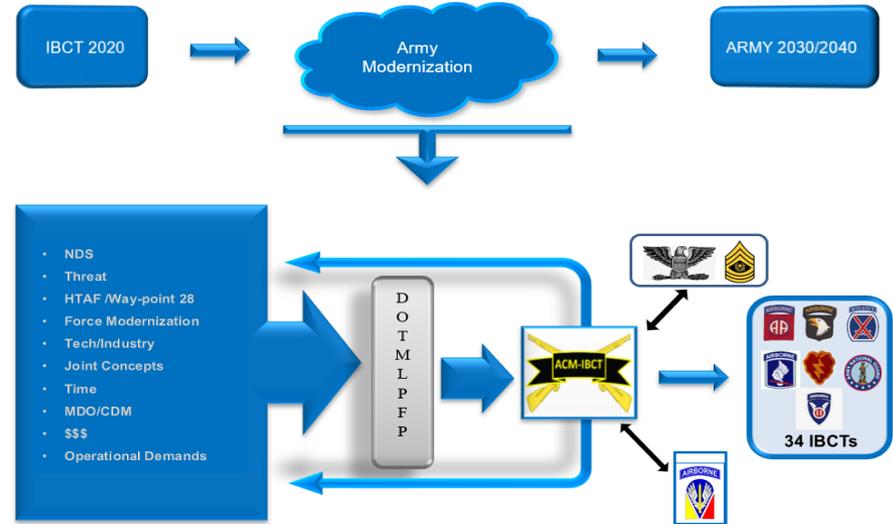
ACM-IBCT – Who we are and what we do



Fort Moore, Home of the MCoE

ACM - IBCT integrates and synchronizes requirements across the dimensions of Doctrine, Organization, Training, Materiel, Leadership and education, Personnel, Facilities and Policy for 34 Infantry Brigades, both Active Component and National Guard, to ensure success on the battlefield.

We are the voice of the Warfighter. We advocate and advise ASL as the 'user representative'



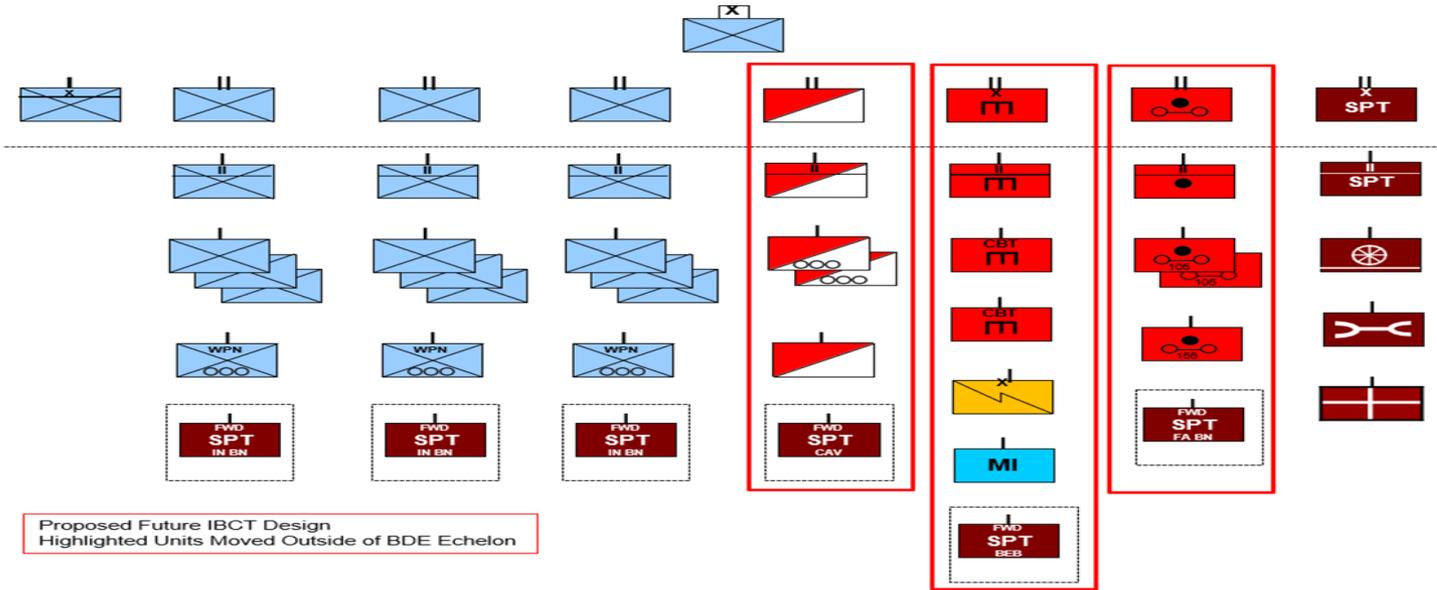


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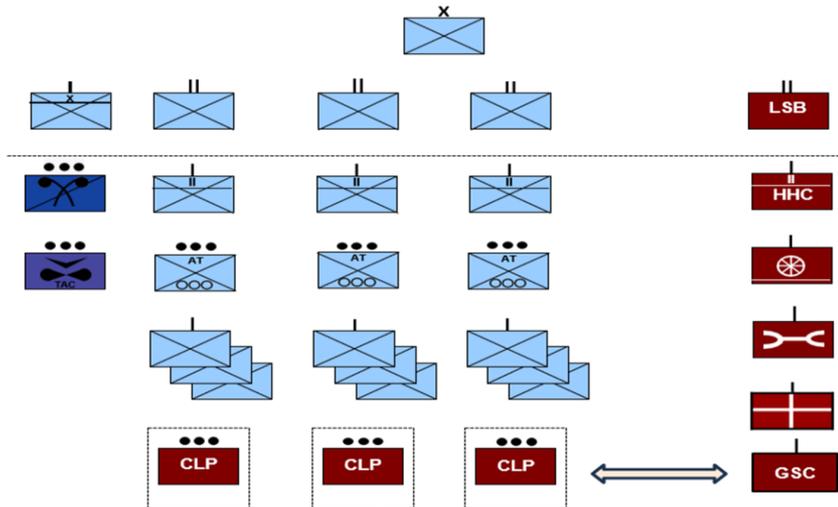
IBCT Force Design



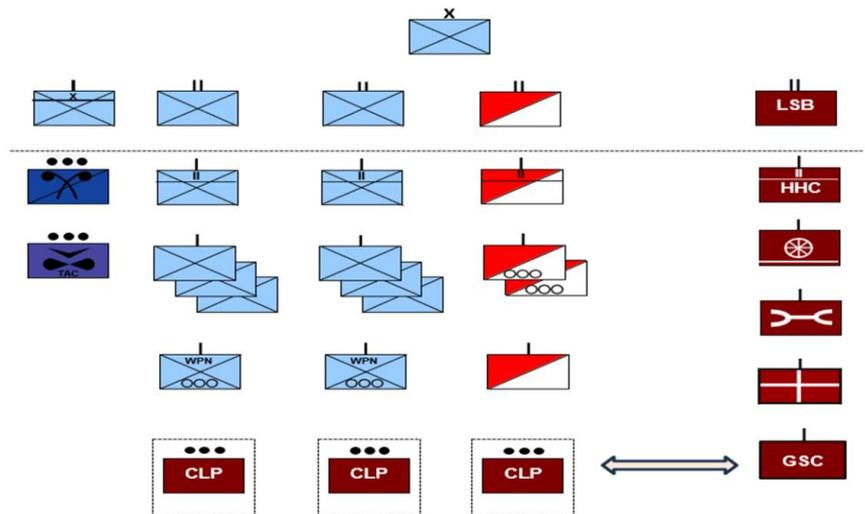
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ARSTRUC Informed IBCT



OCONUS IBCT



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IBCTs – 2030 / 2040

CUJ



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In order to meet threats and operational challenges in 2030 and beyond, the Light Infantry formation must continue to be the most strategically deployable formation, increase tactical and operational mobility, and possess enhanced lethality to decisively and repetitively win battles and engagements to deter, destroy, and defeat enemy forces in all environments and a variety of complex terrain.

- The purpose of the BCT is to win the close tactical fight
- The BCT fight remains centered on Combined Arms Maneuver across multiple domains
- The BCT must bring together capabilities in all domains to win the close fight
- Required capabilities designed to enhance the BCT in LSCO includes:
 - Airspace Defense (Counter-UAS)
 - Lethality: Direct, Indirect, Beyond-Line-of-Sight (BLOS) munitions
 - Multi-Domain Sensing (Data) – Increase situational awareness and understanding across all echelons
 - Survivable & Reliable C2 – Dismounted / Mounted Mission Command, Extended Range, Trained Experts
 - Robotic Enabled Maneuver at the tactical edge – Ground & Air
 - Reduced Soldier Load / Power Generation = Endurance

IBCT's must be able to sense more broadly and deeper (data centric) , deliver precision and suppression lethality from the ground and air (mass) out beyond line-of-sight, and protect itself from immediate threats

CUJ



ACM IBCT Modernization Efforts



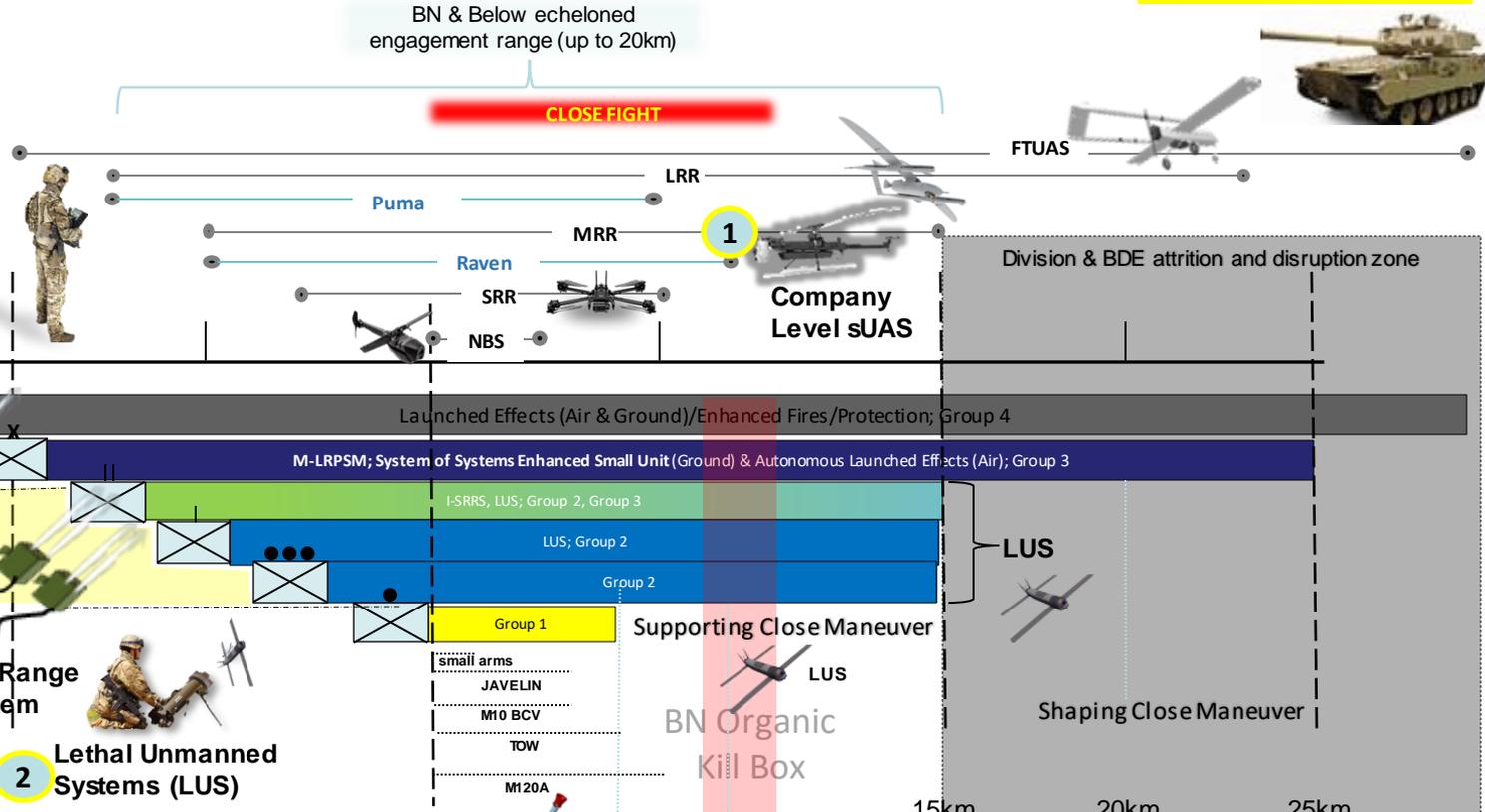
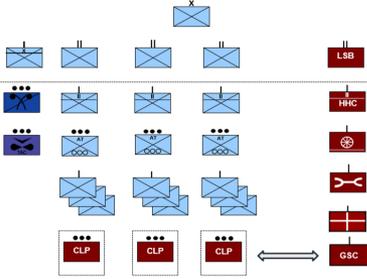
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M10 Booker – IOT&E / FUE

The "Hunter-Killer" Relationship in IBCTs

BN & Below echeloned engagement range (up to 20km)

IBCT Force Design – FDU's / Transformation in Contact



5

Family of Counter UAS (FoCUS)

3 Mobile-Long Range Precision Strike Missile

4 IBCT Short Range Rocket System

2 Lethal Unmanned Systems (LUS)

Other Lethality Efforts:

- M10 Booker Combat Vehicle
- E81 Mortar System and Family of Munitions
- Light Weight Command Launched Unit (LWCLU)
- Next Gen Squad Weapon and Automatic Weapon
- Precision Grenadier System (PGS)
- Individual Assault Munition – AT4/BDM replacement
- IVAS & ENVG-B – enhanced situational awareness.

- small arms
- JAVELIN
- M10 BCV
- TOW
- M120A
- E81mm

Enhanced 81mm & FOM

*8-10km optimal engagement range



IBCT Tactical Mobility

Critical Components:

- Human Machine Integration at Echelon
- Build Landing Spots - Prevent Overloading
- Reliable & Resilient Network
- Power Generation and Storage Forward
- Training and Sustaining Proficiency
- Develop Tactical and Technical Expertise
- Policies & Procedures for Employment
- Light Weight, High Performing, Attributable

Human Machine Integration – Infantry



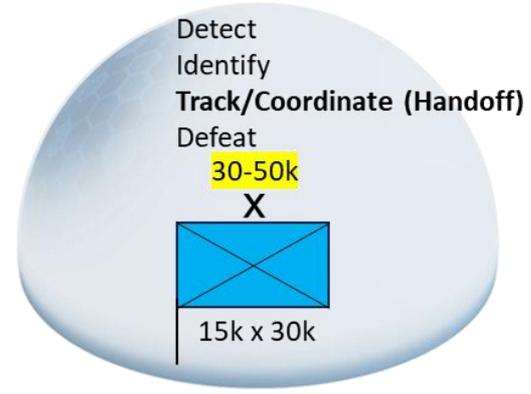
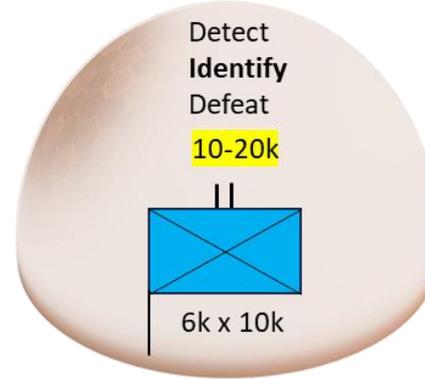
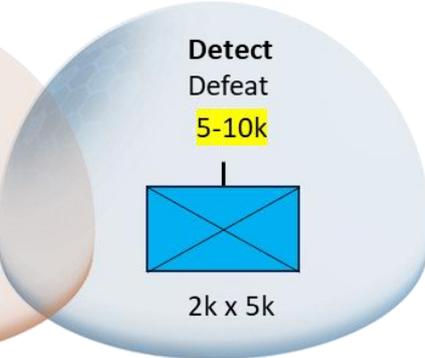
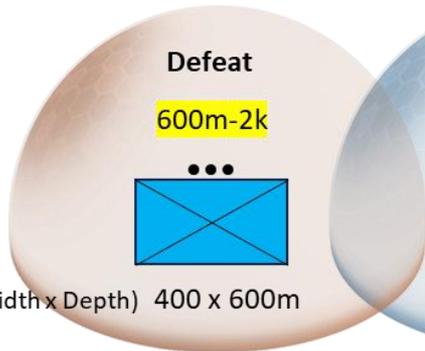


IBCT C-sUAS Fight



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Detect / Defeat is range is determined by the lead edge of the doctrinal distances by echelon



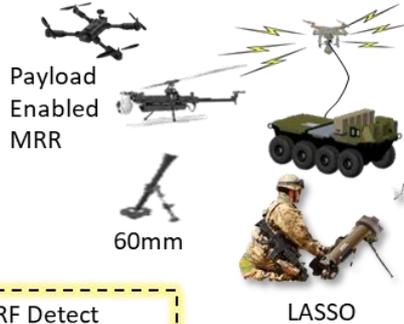
- + PL / PSG
- + Robust Human Lethality (99+ Human Sensors)
- + Dispersion / Camouflage
- Limited carry capacity (man-packable / carry)
- Minimal mobility
- DUST/SMET
- Localized PLI

- + Commander
- + Limited HQs element
- No Staff
- Limited Mobility / Platforms (SMET/DUST/ISVs)
- No Comprehensive Air Picture

- + Command Post
- + Staff
- + Specialty PLTs
- + Mobility / Platforms
- + AFATDs
- No ADM/BAE
- Limited Air Picture from BDE

- + Command Post
- + Experienced Staff
- + DIV Provided Assets (M-SHORAD, M-LIDS)
- + TUAS PLT (15 Series)
- + Mobility / Platforms
- + AFATDs
- + ADM/BAE
- + Sufficient Air Picture DIV/BDE

Payload Enabled SRR



Passive RF Detect
Hand-Held EW Detect



Smart Shooter
Drone Buster
Bal Chatri
Modi
DIV Sets



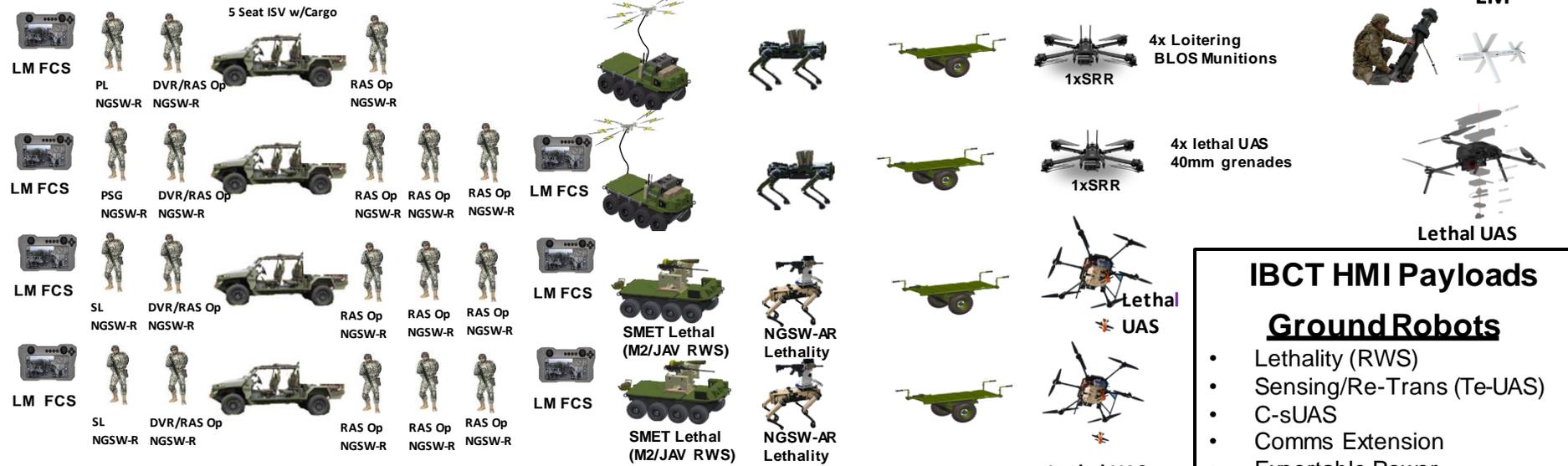
Light Infantry Battalion Robotics & Autonomous Systems – RAS (2030)



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1x PLT Per Battalion

IBCT RAS Platoon Design



- 18 x 11B Soldiers (2 Squads, 1 Platoon Leader, 1 Platoon Sergeant, 2 Squad Leaders/ RAS Operators, 16 RAS Operators, 4 Drivers/RAS Operators)
- 4 x Infantry Squad Vehicles (ISV)
- 4 x SMET with MMP's: 2x Tethered UAS / 2x Lethal (RWS)
- 4 x DUST
- 2 x Sense / 2x Lethal
- 4 x Loitering / BLOS Munitions (LM 4x All Up Round in RAS PLT (2x AT; 2x AP))
- 4 x Lethal UAS w/ 40mm grenade
- 4x Quadraped (1x Robotic Arm; 1x AiTR : 2x NGSW-R Lethality)

IBCT HMI Payloads

Ground Robots

- Lethality (RWS)
- Sensing/Re-Trans (Te-UAS)
- C-sUAS
- Comms Extension
- Exportable Power
- *Autonomy*
- Obscuration

Air Robots

- Lethality (Drop/Drop-Glide-SRR/MRR)
- *Electronic Warfare*
- Sensing
- Comms Extension

**Aspirational – Requires Development*

LM FCS= x7
(Common Control)





Sensing – Lethality - Protection



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Airspace Defense

- Enhanced Understanding of the Airspace (25k)
- Detect, ID, track, and defeat sUAS through overmatch
- Confuse, Evade, and Deceive the Enemy
- Smaller Sensors with Greater Range (Dsmt/Mtd)
- Integrated Counter-UAS Capabilities at BCT and below
- Improve survivability by providing CDRs early warning decision air support and kinetic and non-kinetic solutions
- Integrate CsUAS Capability into Existing Systems
- Multi-Spectrum Camouflage
- DSMT UAS Detect and Defeat

All Domain Sensing

- Provide Commanders Decision Space
- See Yourself and see the Adversary in Depth
- Increase Situational Awareness beyond FLOT
- Incorporated Semi and Full Autonomous Capabilities
- Provide Timely Overmatch
- Provide CDRs greater awareness, protection and decision space at echelon tied to the ability to decisively shape the environment with precision and suppression lethality options

Lethality

- Ground and Air Delivery Systems – Increase Stowed and reach back killing capability
- Precision NLOS/BLOS Capability at BN Level and Below
- Concentrated Direct / Indirect Fire at Decisive Points
- Maximize Existing Systems
- Increase Organic Networked Sensor to Shooter Capabilities
- Leverage Cooperative Engagements - Target Handoff
- Lightweight man-portable (ABN, AASLT)
- Leverage Lethal Unmanned Systems (Ground & Air)

Survivable/ Reliable C2

- Responsive and Resilient Communication Architecture tied to Integrated Tactical Network (ITN) / SBU-E
- Networks Enabled by Over-the Air Management Functions
- Man-Packable Beyond Line Of Sight (BLOS) Expeditionary Mission Command Systems
- Man-Portable Lightweight Secure Voice, Data, and PLI Capable Radio w Extended Ranges
- Assured – Position, Navigation, and Timing
- Smaller, Agile Command Post at Echelon
- sUAS Modular Mission Payload Communication Extension (T-UAS)



Sensing – Lethality - Protection

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Robotic Enabled Maneuver

- Enhanced understanding of the airspace; confuse, evade, and deceive the enemy
- Incorporate an integrated and layered network of ground and air sensors and effectors
- Increase the decision space to employ organic or higher headquarters' Lethality
- Robotics Enabled Sustainment at all Echelons
- Intuitive Systems that are Non-MOS Specific

Soldier Endurance

- Ability to Operate over Greater Distances, and in all Environmental Conditions
- Robotic assisted Weight Distribution and Logistics (SMET, JTAARS, RCV)
- Organic Class I (H2O) Production Capability
- Limited Organic Mobility (ISV, JLTV)
- Lightweight Weapons Systems with Multi-Purpose Utility
- Small unit power generation (mounted/dismounted)

CUI



CUI



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Questions

CUI