



2nd Cavalry Regiment Lethality Upgrade Update to NDIA

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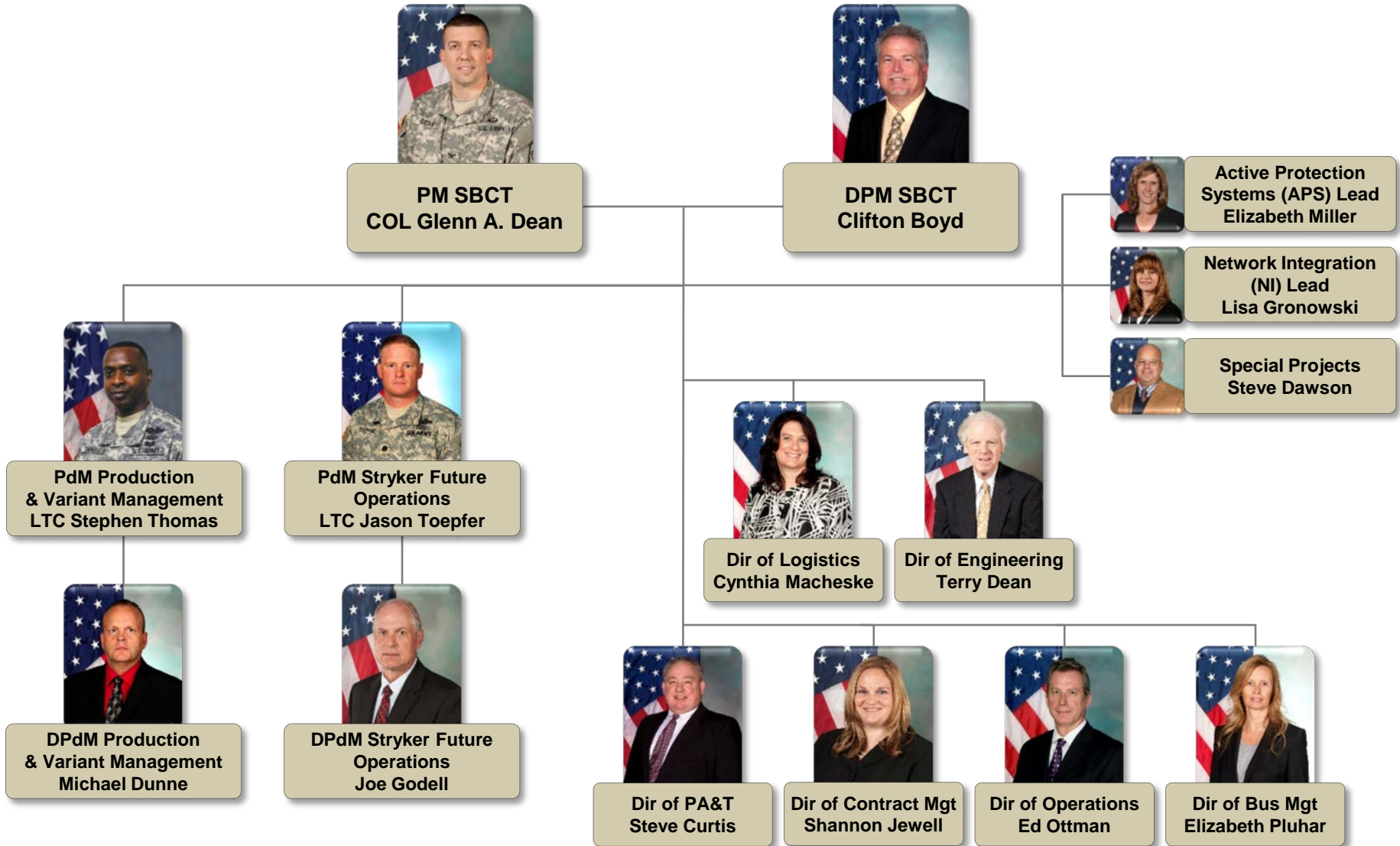
Agenda



- PM SBCT Organization
- Recent Key Events
- Background
- Design Overview
- Program Schedule
- Upcoming Key Events
- What Is Next For Stryker Lethality



PM SBCT O-6 & Senior Leadership





Recent Key Events



MAR 15 – 2nd Cavalry Regiment Submits an Operational Needs Statement for increased lethality capability against light and medium armored threats

JUL 15 – HQDA G3 Issues a Directed Requirement for Increased Stryker Lethality

JUL 15 – AAE holds an ASARC; generates an ADM granting PEO GCS authority to proceed with a lethality upgrade to the Stryker

SEP 15 – SES Work Directive to GDLS initiates development

JAN 16 – NRE UCA awarded to GDLS

JAN 16 – GDLS selects a Kongsberg turret with XM813 cannon through competition

MAR 16 – System PDR



Background



- Urgent ONS effort addresses both the unit's and MACOM's operational needs
 - 30 mm cannon in unmanned / remote turret
 - Uses 30 x 173mm rounds already in US inventory
 - Stryker ICV Flat Bottom Hull (FBH) chassis with 5.5 suspension upgrade
 - MUST still carry a 9-man squad
 - Deliver single BCT in FY18
- Acquisition Strategy
 - Engineering Change Proposal to integrate 30mm on FBH Stryker ICVs
 - Will field under Urgent Materiel Release
 - OEM conducted turret competition; weighted mature / off the shelf technology
 - Leverage OEM expertise and Anniston Army Depot experience with other Stryker efforts
 - 91 total vehicles to be built
 - 8 prototypes for test
 - 83 platforms to be fielded to 2CR, including 2 Operational Readiness Floats



Design Overview



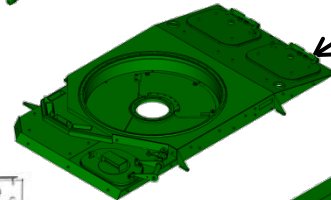
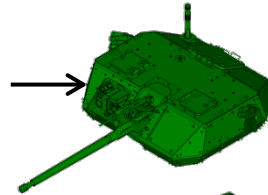


Design Overview (cont)



Lethality Upgrade

- Kongsberg MCT-30 Weapon System
- Unmanned, stabilized turret operated remotely from ICV CMDR station
- XM813 primary weapon
- M240 coax weapon
- M6 smoke launchers

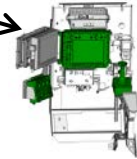


Hull Riser

- Weapon System mechanical interfaces
- Armor & Spall Liner
- Weapon System Access Hatch
- Squad Leader's Observation Hatch
- Air Guard Hatches
- Commander's Periscopes

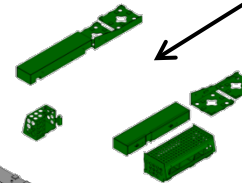
Commander's Station

- Integration of User interface for MCT-30 Weapon System
 - System Panel
 - Fire Control Unit
 - Control Grip
 - Safety Switch



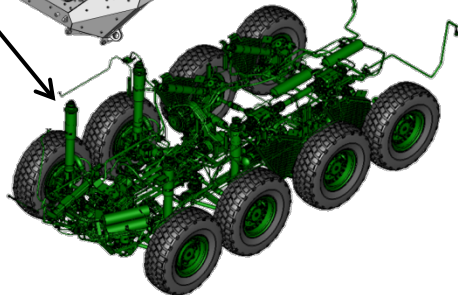
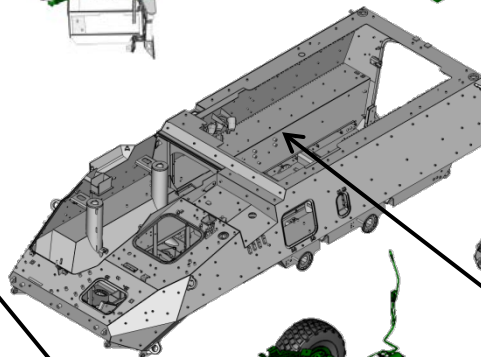
Stowage

- Re-location of ICV rooftop stowage items
- Addition of 30mm ammo and gun tools/equipment



5.5 Mobility System Upgrade

- Upgrade Gen 3.5 → 5.5
- Driveline, Suspension, Brakes, Steering
- Wider 365/85R20 XZL tires and rims for stability and soft soil mobility



ICV Hull Modifications

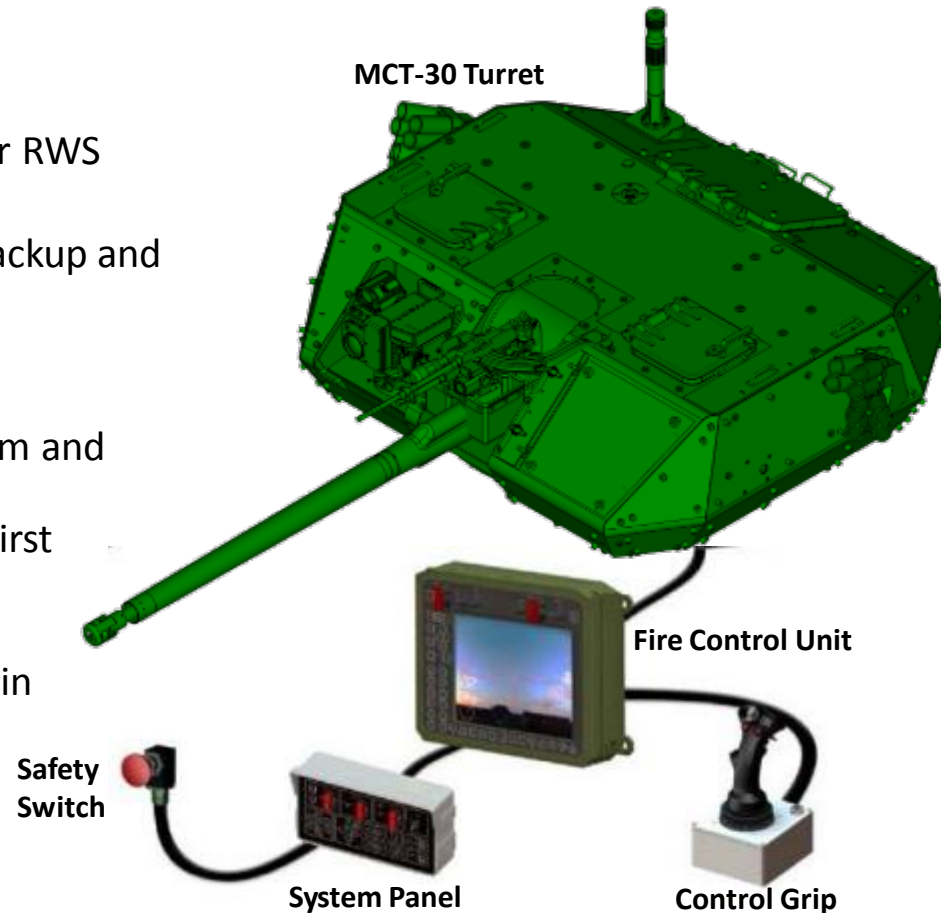
- Roof Modifications (cutout)
- 5.5 Mobility System interfaces



Design Overview (cont)



- **Unmanned, stabilized turret operated remotely from ICV CMDR station**
 - Similar User interface to current Stryker RWS
 - Combat override capability
 - Degraded mode capabilities (battery backup and manual operation)
- **XM-813 primary weapon**
 - Fires complete family of 30x173mm ammunition, including ability to program and fire Mk310 Air Burst Munition
 - Linkless, dual feed ammo handling w/ first round select capability
 - 156 ready rounds of 30mm (78 / side)
 - Single shot, and burst fire to 200 rds/min
 - Integral mount, dual recoil
- **M240 coax weapon**
 - 400 ready rounds of 7.62
- **M6 smoke launchers**



Precision, Medium Caliber Direct-Fire Weapon System; Ensures Effective Mounted and Dismounted Combined Arms Operations



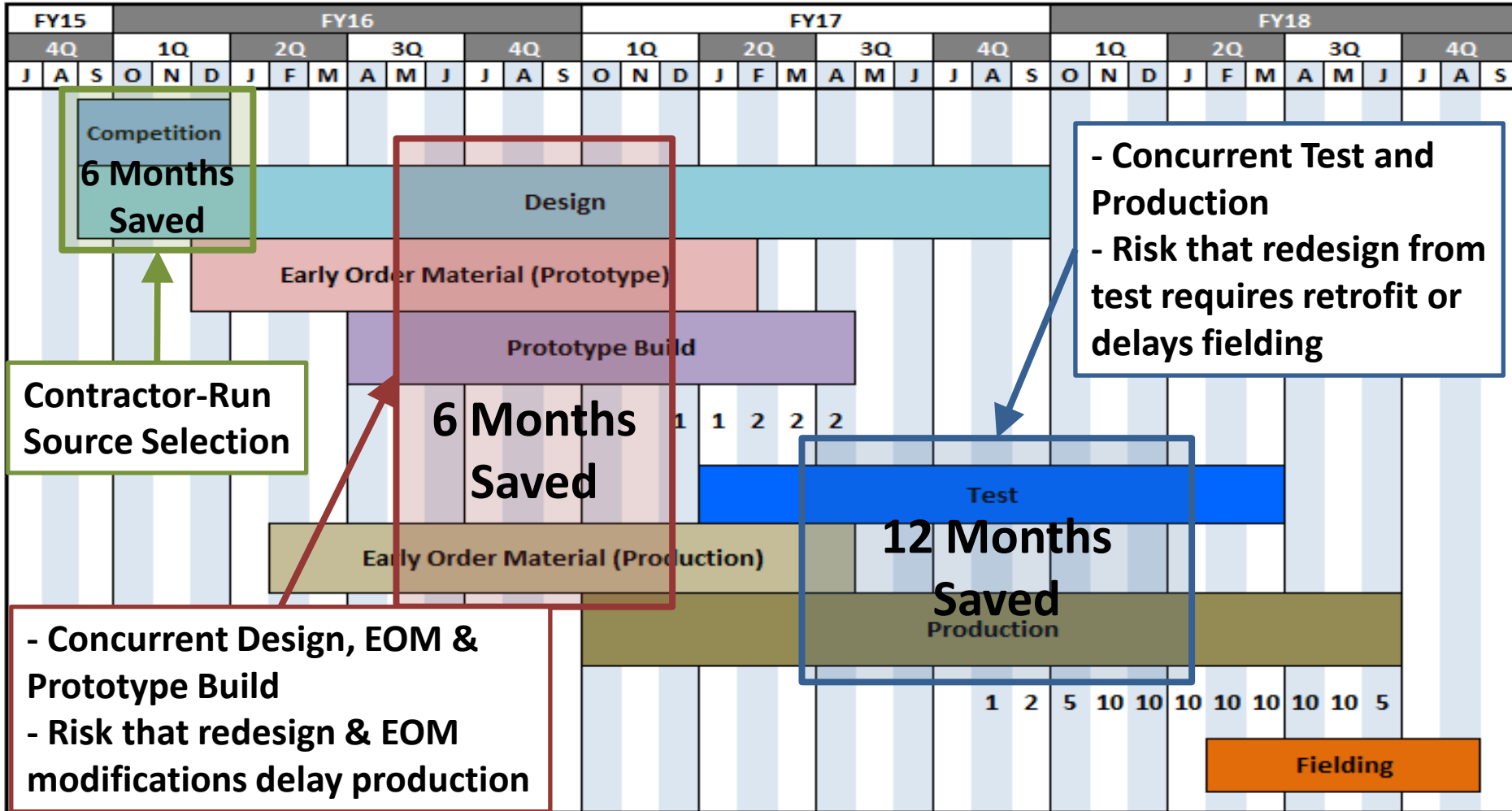
ONS Program Schedule



FY15			FY16					FY17					FY18																			
4Q			1Q		2Q		3Q		4Q		1Q		2Q		3Q		4Q															
J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S						
Competition																																
Design																																
Early Order Material (Prototype)																																
Prototype Build																																
											1		1	2		2		2														
															Test																	
Early Order Material (Production)																																
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															1		2		5		10		10		10		10		10		5	
																												Fielding				



ONS Program Schedule - Savings & Risk



Concurrency Risks Accepted to Accelerate Schedule



Upcoming Key Events



MAY 16 – System CDR

DEC 16 – First Prototype Delivered

APR 17 – Final Assembly Decision

JUL 17 – User Excursion with 2CR (APG)

OCT 17 – Safety Confirmation / CLR

JAN 18 – Early User Test & Evaluation with 2CR (Europe)

MAR 18 – Urgent Material Release

SEP 18 – Fielding Complete



What Is Next For Stryker Lethality



- Stryker was initially fielded as an interim capability; mission equipment packages (MEPs) are managed by the platform PM
- Over time, program managers for these MEPs have continued to improve their systems
- Stryker lethality improvements will focus on fleet-wide MEP improvement
- Activities that will have a significant influence on Stryker lethality improvements include:
 - Lessons learned from 2CR ONS effort
 - Information gleaned from PM SBCT market surveys
 - Insights from ARDEC Medium Caliber Armament System (MCAS) CRADA



Questions?