



# MARINE CORPS SYSTEMS COMMAND

HOME OF THE MARINE CORPS ACQUISITION PROFESSIONAL



PROGRAM  
MANAGER  
AMMUNITION



## Munitions Executive Summit USMC Munitions Readiness

30 Mar 16

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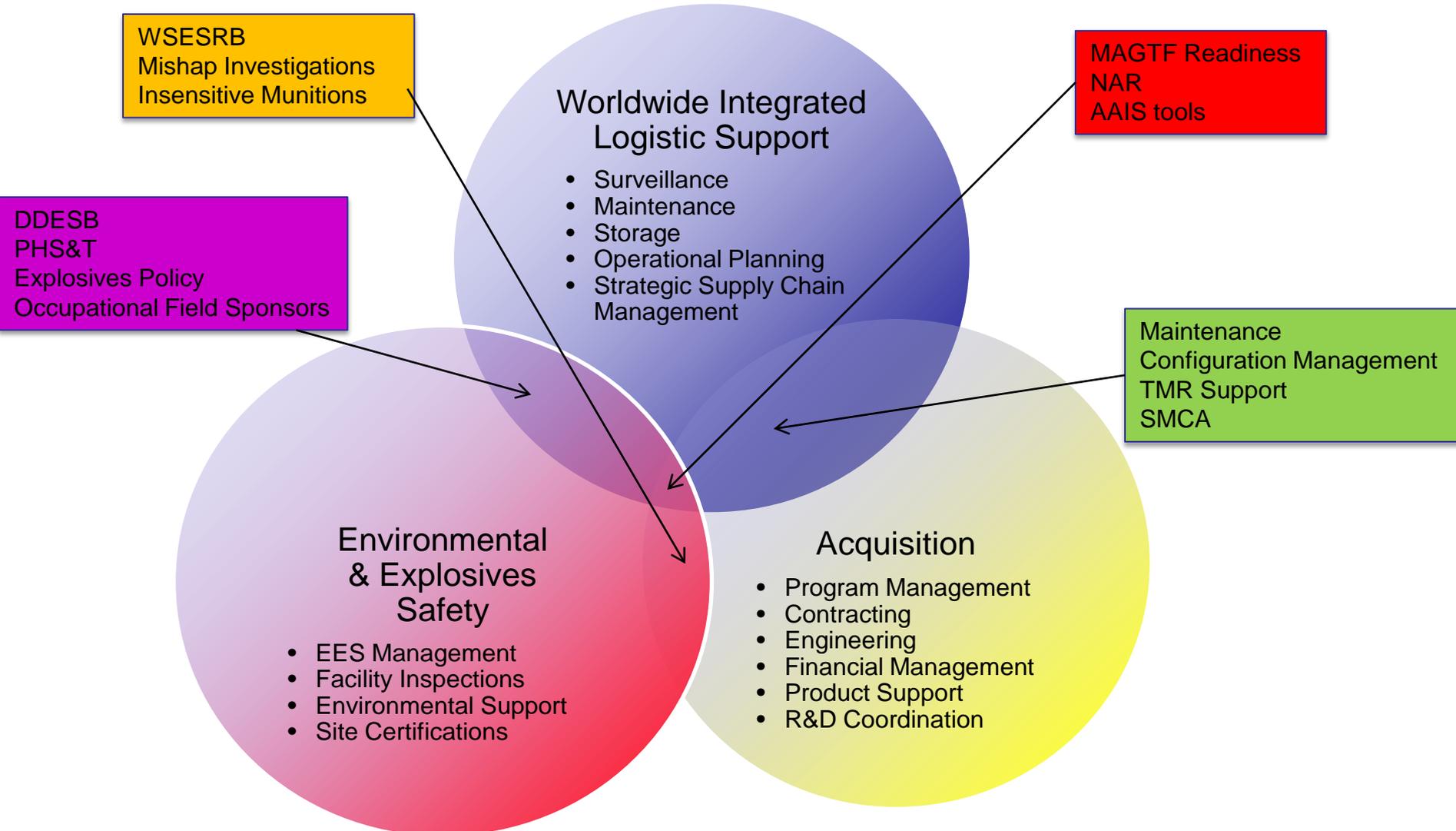
## PROGRAM MANAGER AMMUNITION

### Agenda:

- PM Ammo Overview
- Training Expenditures
- Budget Trends
- Planned Procurements
- Inventory Visualization
- Strategic Plan Update



### Program Manager for Ammunition – Delegated Responsibilities





## Annual Training Expenditures

- Marine Corps expends between \$500M to \$600M annually for ground ammunition live fire training
- Healthy inventories in some items preclude short-term production requirements
- Top FY15 Capability Training Expenditures (replacement cost):

– 155mm HE Projectile	\$206M
– 81mm HE Mortar	\$56M
– 83mm Assault Rocket (SMAW)	\$45M
– 60mm HE Mortar	\$38M
– 5.56mm Ball	\$26M
– TOW-2 Guided Missiles	\$23M
– CTG, 84mm & LNCHR	\$17M
– MLRS Rocket	\$16M
– 40mm Practice Grenade	\$16M
– 155mm M232 (MACS) Propelling Charge	\$14M
– 40mm HEDP Grenade	\$14M
– 120mm Tank Training Cartridge	\$11M

**\$482M**

**>80% of training  
expenditures**



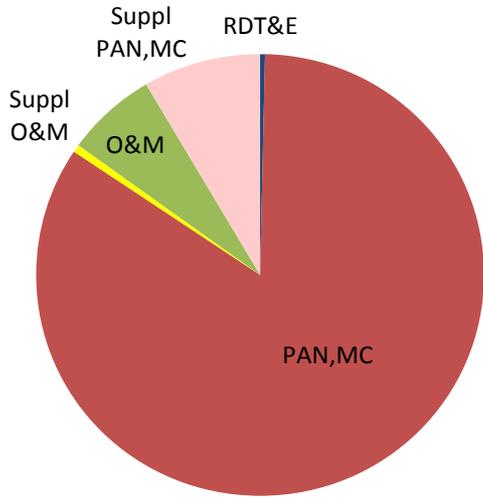
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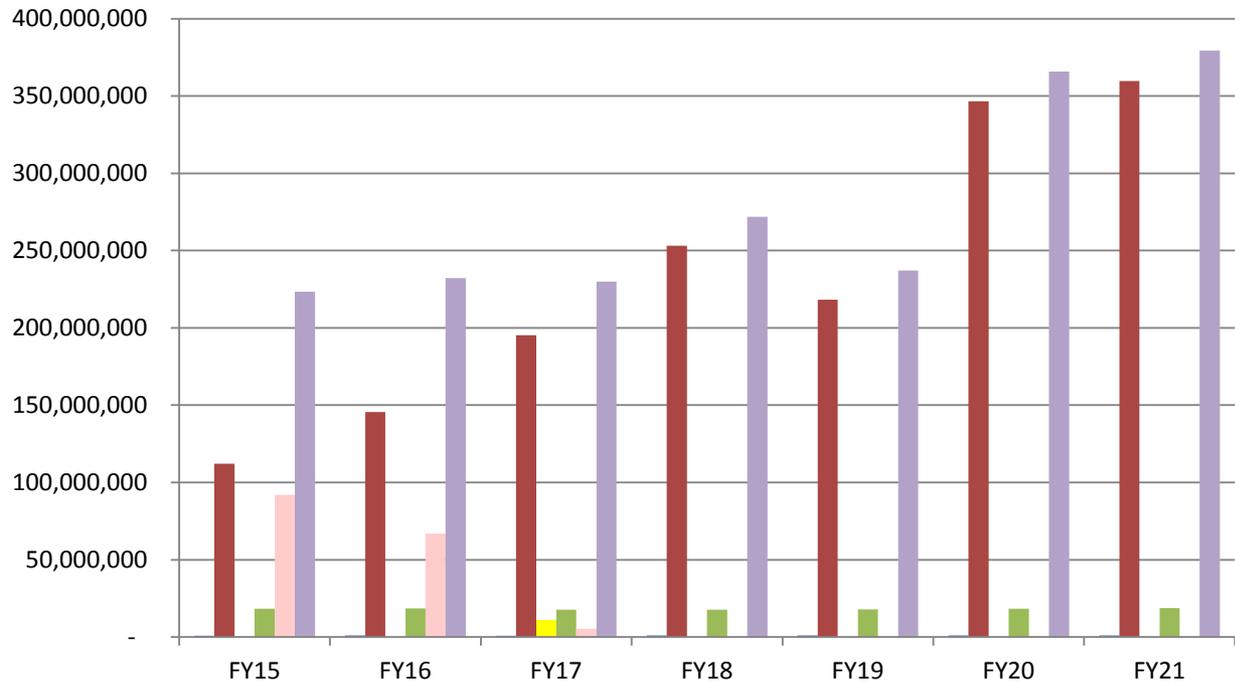
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MANAGER  
AMMUNITION**

## President's Budget 2017 Information



Total Portfolio FYDP by Appropriation

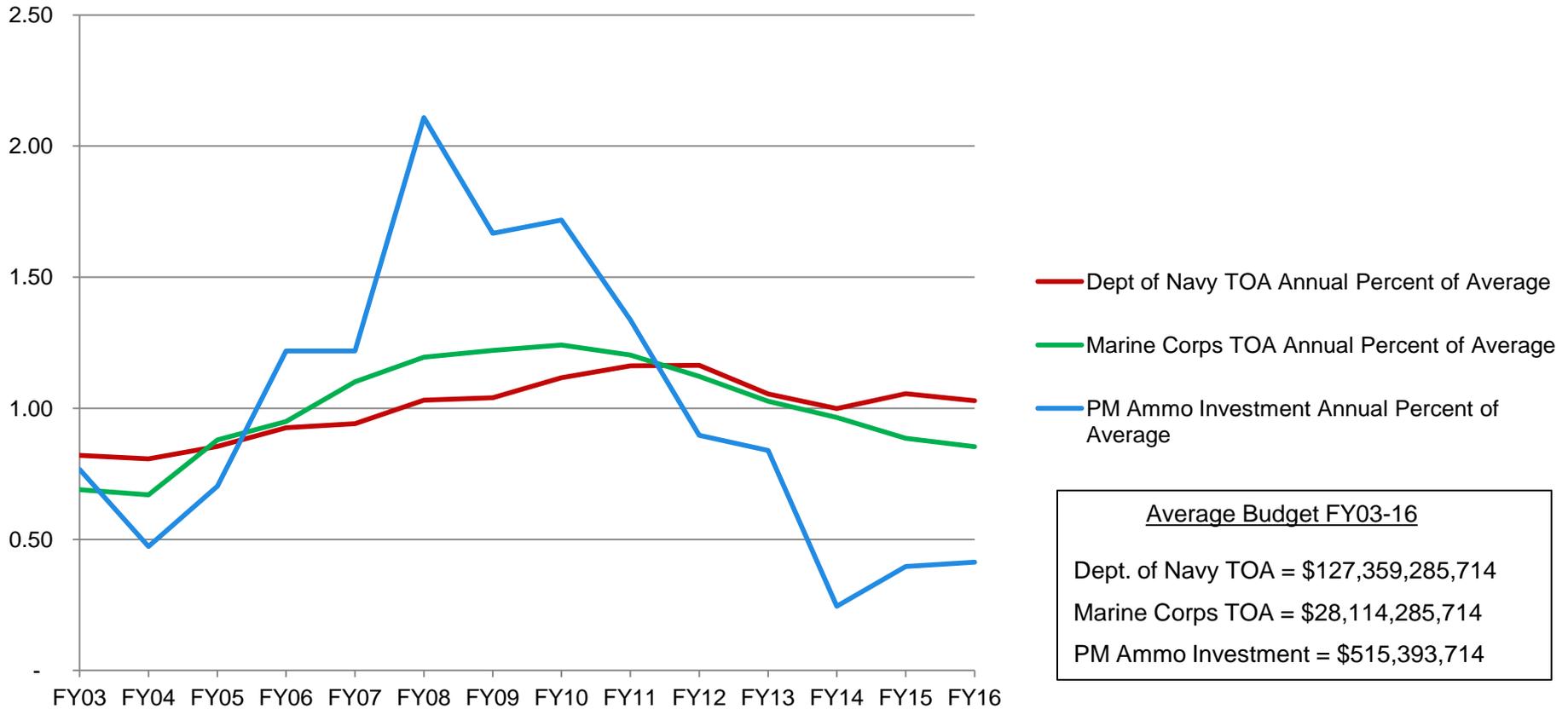
RDT&E	6,928,000
PAN,MC	1,630,638,000
O&M	127,090,000
Suppl PAN,MC	164,341,000
Suppl O&M	11,000,000
<b>Totals</b>	<b>1,939,997,000</b>



Appropriation	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Total
RDT&E	926,000	1,000,000	789,000	1,110,000	1,067,000	1,007,000	1,029,000	6,928,000
PAN,MC	112,036,000	145,654,000	195,296,000	253,139,000	218,210,000	346,619,000	359,684,000	1,630,638,000
O&M	18,336,000	18,573,000	17,617,000	17,621,000	17,932,000	18,303,000	18,708,000	127,090,000
Suppl PAN,MC	92,055,000	66,960,000	5,326,000	-	-	-	-	164,341,000
Suppl O&M	-	-	11,000,000	-	-	-	-	11,000,000
<b>Totals</b>	<b>223,353,000</b>	<b>232,187,000</b>	<b>230,028,000</b>	<b>271,870,000</b>	<b>237,209,000</b>	<b>365,929,000</b>	<b>379,421,000</b>	<b>1,939,997,000</b>



### Year-to-Year Budget Profile Comparison FY03-16





## Class V(W) Ammunition (521 DODICs in current inventory)

### Conventional Ground Ammunition President's Budget 17 Funded Ammunition Production

- Small Arms- 5.56mm Ball, 5.56mm SESAMS, 9mm Blank, .50 Cal Reduced Range
- Line Charges- None
- 40mm- Mk281 HV Day/Night Trainer
- 60mm- Full Range Trainer
- 81mm- None
- 120mm- EFSS WP, PERM
- 25mm- None
- Grenades- None
- Rockets- SMAW Practice
- Artillery- 155mm HE (IMX/TNT)
- Demolition- .166in & .333in Demo Sheet
- Fuzes- PGK

### Ammunition Life Cycle Management

- Ammunition Automated Information System(s) (AAIS) Operation and Maintenance
- Inventory Control Point (ICP)
  - Supply Chain Management
  - Inventory Management
  - Operational and Sustainment Planning
  - Support to Deployed Forces
  - Inventory Accuracy Oversight
- Maintenance
- Service Life Accelerated Age Testing (SLAAT)
- Environmental and Explosives Safety Management
- Quality Assurance
- Technical Support



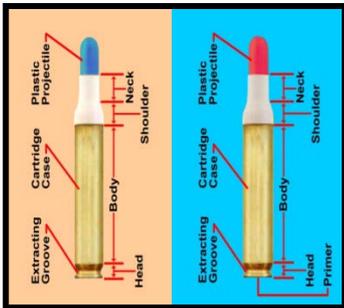
### Program

### Strategy



- (2) Cartridge (CTG), .50 Cal Reduced Range (RR) (1000 Yards): AB64 and AB65
  - CTG, Linked 4API & 1APTI-T (RR)
  - CTG, Linked Ball (RR)

- FY18-
  - Full and Open
  - NSWC Crane CTO
  - Eventual transition to SMCA



- (2) CTG, 5.56mm Special Effects Small Arms Marking System (SESAMS): AB05 and AB06
  - CTG, 5.56mm SESAMS Blue f/M4/M16
  - CTG, 5.56mm SESAMS Red f/M4/M16

- FY16-
  - Sole Source & Competitive
  - MCSC CTO



- CTG, 9mm Blank: AXX3
  - New to the inventory to support Military Working dog training

- FY16-
  - Full and Open
  - MCSC Crane CTO
  - Eventual transition to SMCA



- CTG, 5.56mm Ball: A059
  - Will be used for training until USMC decision on increased lethality round of the future determination

- Ongoing production
  - SMCA CTO



### Program

### Strategy



40mm Day/ Night Marker  
(Target Practice, High Velocity),  
MK281 MOD3: BA21

Procurements FY17-?  
MCSC CTO  
Full and Open  
Will eventually transition to SMCA  
managed Day/Night/Thermal Marker



60mm Full Range Practice:  
M769: BA15

Procurements FY17-  
SMCA CTO  
Full and Open



### Program

### Strategy



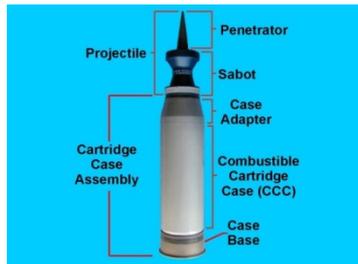
(3) Cartridge, 120mm Mortar EFSS  
WP, M1103: CA49

FY17  
MCSC CTO  
Sole Source



Projectile, 120mm Mortar  
Precision Extended Range Munition:  
PERM

In Production  
MCSC CTO  
Full and Open  
Contract Awarded



Cartridge, 120mm Tank Training  
(TPCSDS-T M865): C785

FY17-19  
SMCA CTO  
Maintenance Project



### Program

### Strategy



Rocket, 83mm HEAA Practice,  
MK7 Mod 0 (SMAW): HX07

Procurements FY17-FY21  
SMCA CTO  
Full and Open Contract Awarded



(3) Projectile, 155mm HE  
(IM, Practice TNT, TNT Legacy):  
DA54, DA51, D529

Procurements FY17-21  
SMCA CTO  
USMC adopted new  
training strategy



## Program

## Strategy



(2) Charge, Demolition Sheet,  
.166in, .333in: M982, M986

Procurement FY17  
SMCA CTO  
Full and Open



Fuze, Precision Guidance Kit  
M1156 (PGK): NA29

Procurements FY17-21  
SMCA CTO  
Full and Open Contract Awarded



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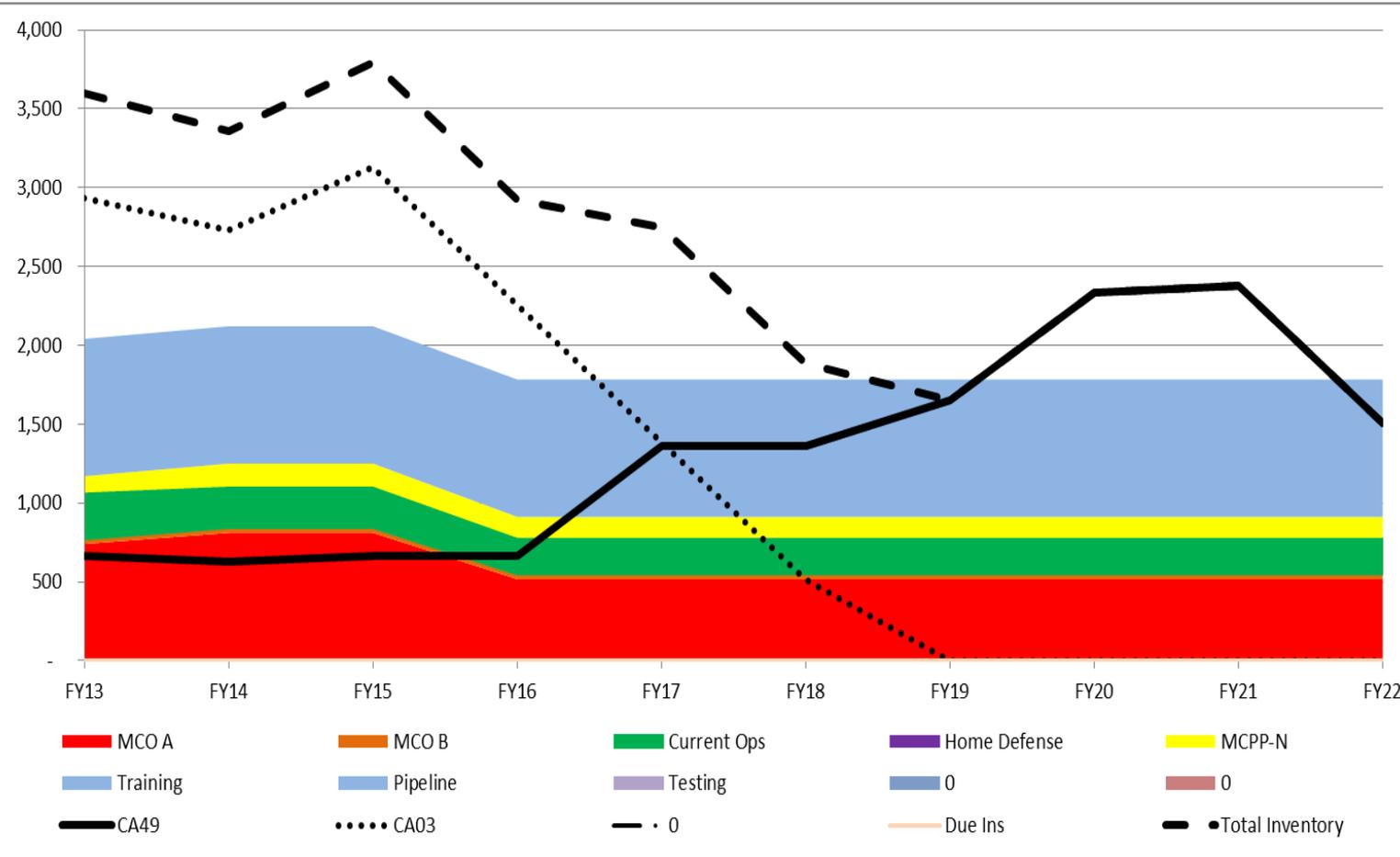
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CA49  
Sandchart



PROGRAM  
MANAGER  
AMMUNITION

Units



Item Data:

Cartridge,  
120mm Mortar WP  
M1103

Interchangeable = **CA03**,  
(120mm Smoke WP  
M929A1 w/MOF M734A1  
Fuze)

Production:

Lead Time = 18 mos.  
Open Line = No  
\*\* Unit Price = \$7,173

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\*\* Unit Price is based on current FY15 Procurement/Replacement Cost Estimate unless specific Army pricing has been provided.



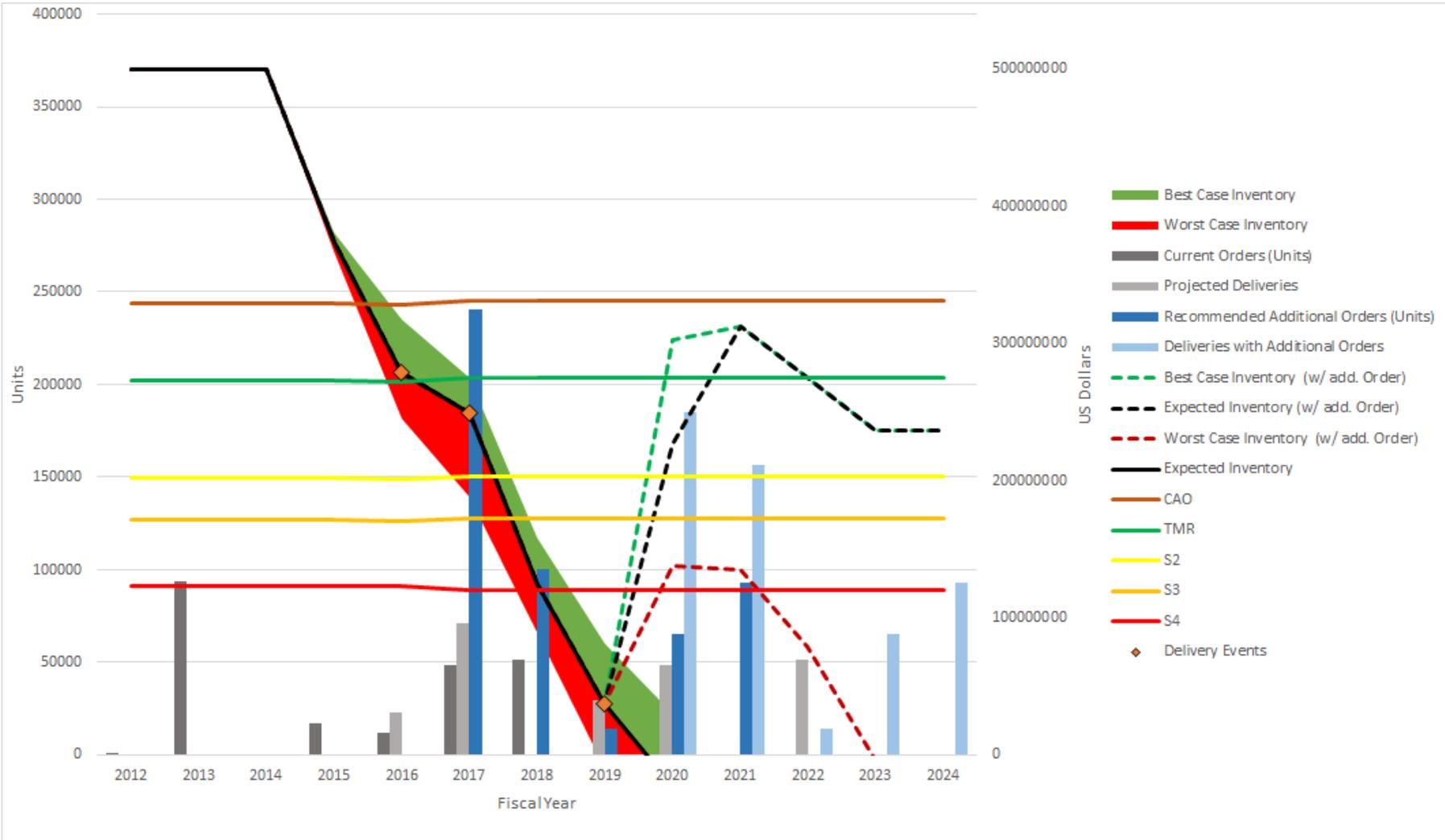
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## Improved Inventory Visualization



## PROGRAM MANAGER AMMUNITION





## Published PM Ammunition 2015-2018 Strategic Plan

- **Goals**
  - Provide Marines the highest quality, most cost effective ammunition.
  - Optimize processes, tools and resources of the USMC Ammunition enterprise.
  - Continuously improve our professional credibility.
- **Select Objectives**
  - Ensure maximum availability of safe and effective ammunition inventory to satisfy the TMR within allocated funding.
  - Optimize USMC Class V(W) supply chain management.
  - Optimize IT tools and knowledge engineering to support our mission and business practices.
  - Engage partners in other Services and Industries to accomplish the mission, vision and goals of this strategic plan.



## Published PM Ammunition 2015-2018 Strategic Plan

- **Select Complete Actions**
  - Develop an integrated strategy that balances ammunition inventory shortfalls with the optimal means to achieve addressing them.
  - Develop a competition goal.
  - Document phasing plan review and approval process.
- **Select In-Process Actions**
  - Develop a plan for resource investment in and exploitation of munitions safety improvement technologies.
  - Review “as-is” business processes to identify supply chain process gaps and implement improvements.
  - Review Ammunition Automated Information Systems (AAIS) management, maintenance and usage practices for effectiveness and efficiency, and create an AAIS optimization roadmap.
  - Perform a stakeholder analysis.
  - Develop a strategic communications plan.
  - Reinvigorate the PM Ammunition roadshow.
  - Identify key business performance metrics.



# Sand charts



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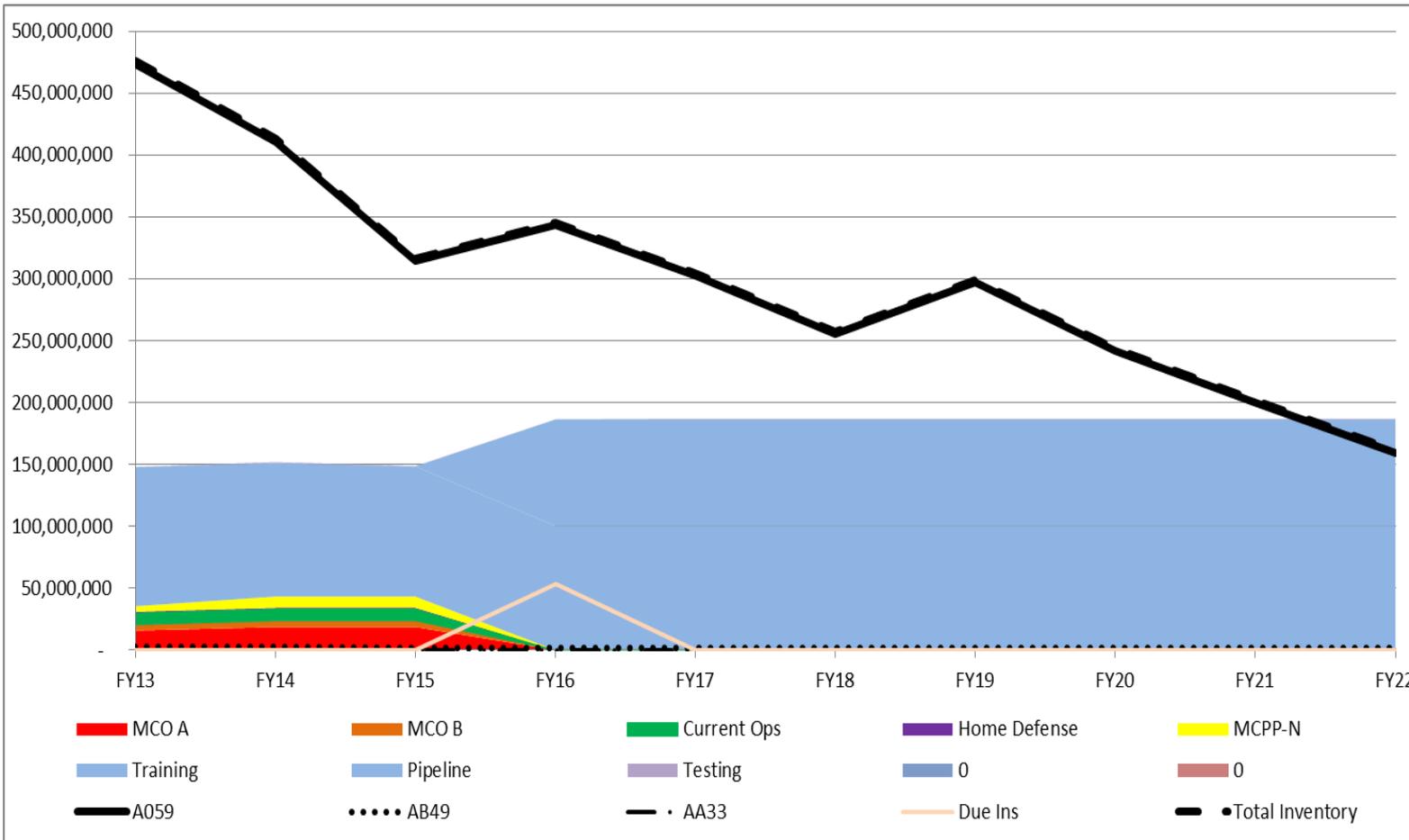
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# A059



**PROGRAM  
MANAGER  
AMMUNITION**

Units



Item Data:  
Cartridge,  
**5.56mm Ball**  
M855 10/Clip

Interchangeable = **AB49**  
(5.56mm Ball Carbine  
Barrier), **AA33** (Ctg,  
5.56mm Ball M855  
(commercial pk))

Production:  
Lead Time = 13 mos  
Open Line = Yes  
\*\* Unit Price = \$0.25

\* FY13-15 ending inventories are actual 30 Sep balances. FY16 and beyond inventory balances are derived by adding projected due-ins, projected procurements PB-17, and subtracting POM-18 TMR training and testing requirements.

\*\* Unit Price is based on current FY15 Procurement/Replacement Cost Estimate unless specific Army pricing has been provided.



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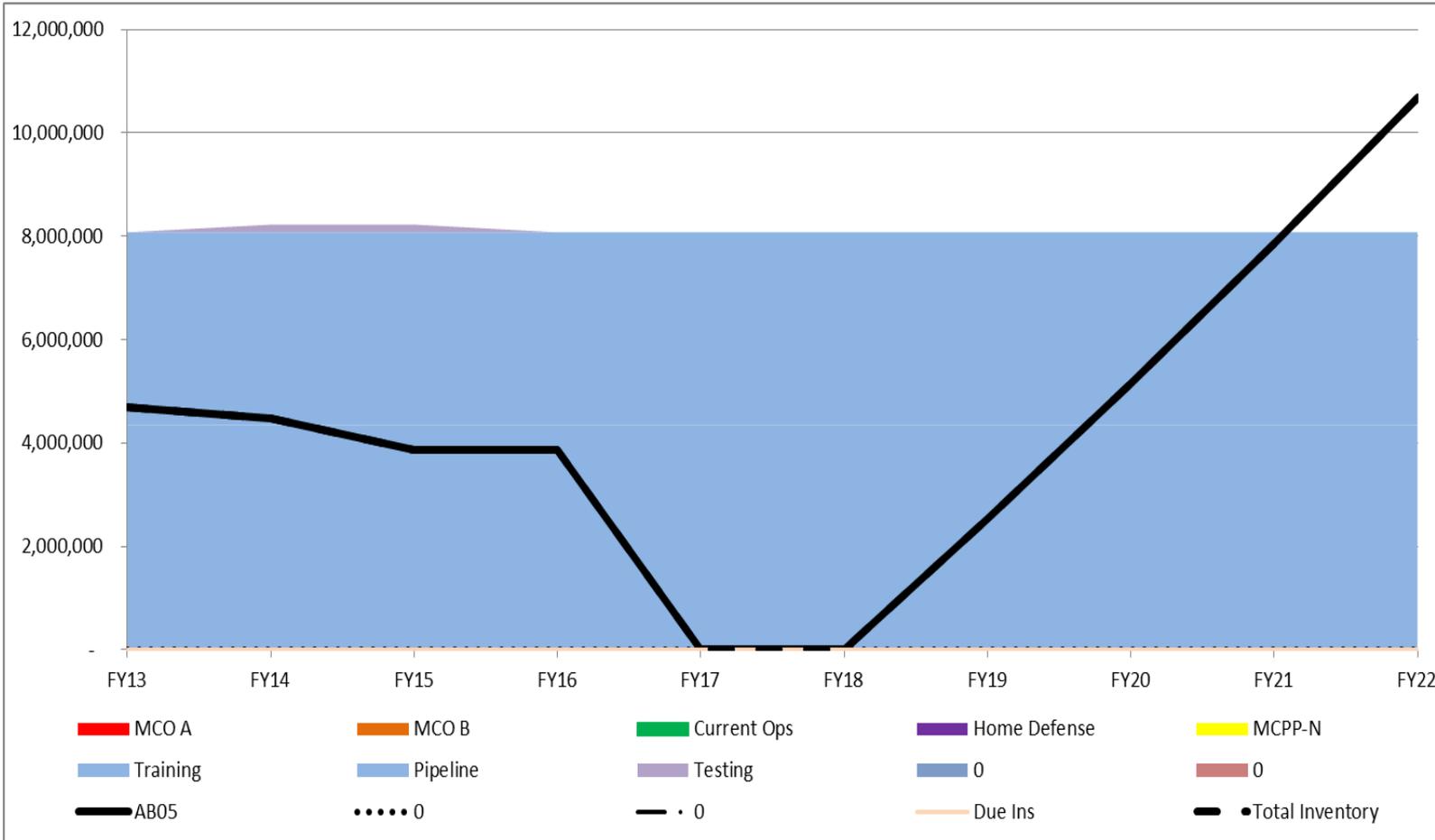
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# AB05



**PROGRAM  
MANAGER  
AMMUNITION**

Units



Item Data:

Cartridge,  
**5.56mm Clipped**  
FX Blue Marking  
MK302 Mod 0

Interchangeable = NA

Production:

Lead Time = 13 mos.

Open Line = Yes

\*\* Unit Price = \$0.55

\* FY13-15 ending inventories are actual 30 Sep balances. FY16 and beyond inventory balances are derived by adding projected due-ins, projected procurements PB-17, and subtracting POM-18 TMR training and testing requirements.

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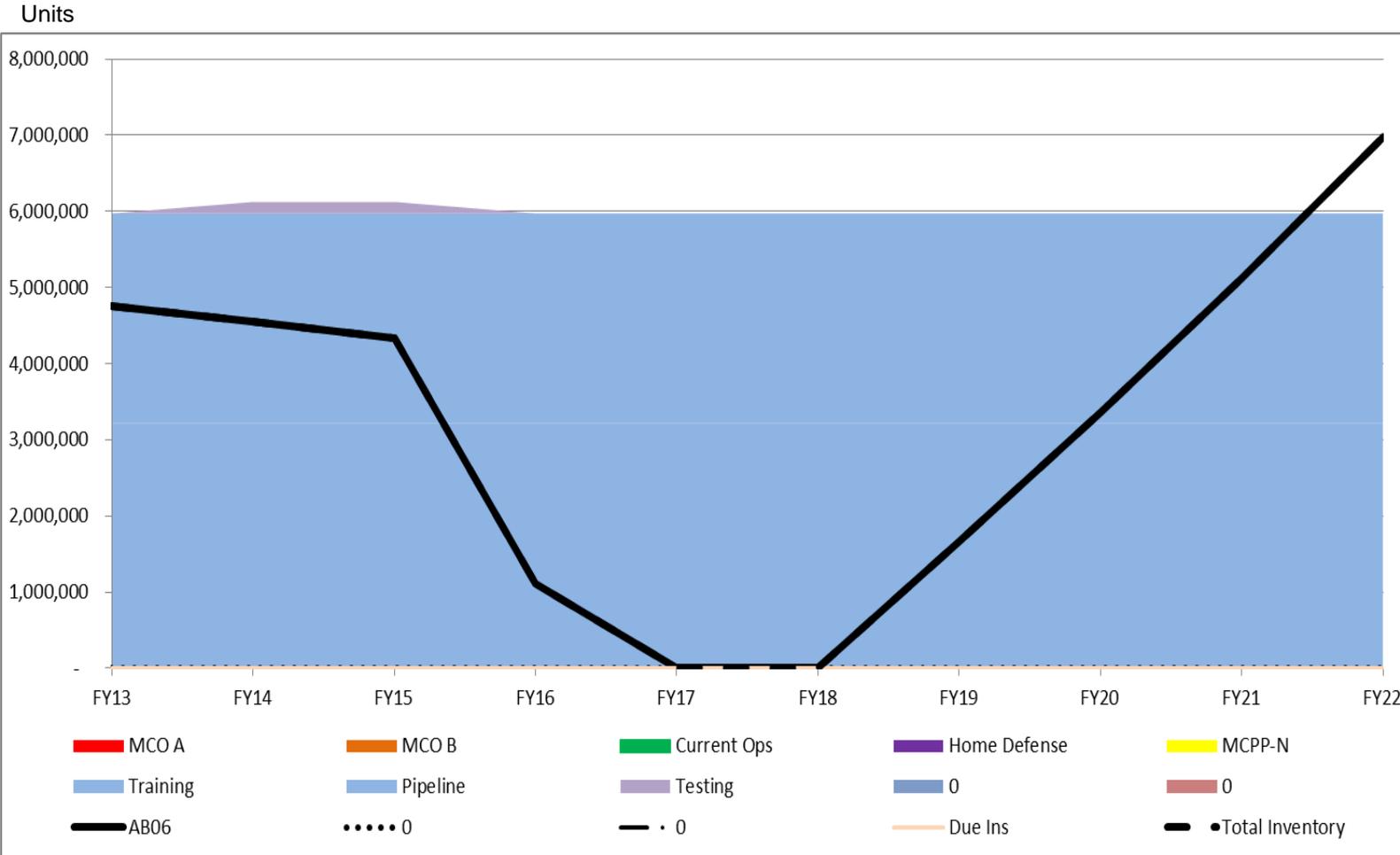
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# AB06



**PROGRAM  
MANAGER  
AMMUNITION**



Item Data:  
 Cartridge,  
**5.56mm Clipped**  
 FX Red Marking  
 MK303 Mod 0

Interchangeable = NA

Production:  
 Lead Time = 13 mos.  
 Open Line = Yes  
 \*\* Unit Price = \$0.55

\* FY13-15 ending inventories are actual 30 Sep balances. FY16 and beyond inventory balances are derived by adding projected due-ins, projected procurements PB-17, and subtracting POM-18 TMR training and testing requirements.

\*\* Unit Price is based on current FY15 Procurement/Replacement Cost Estimate unless specific Army pricing has been provided.



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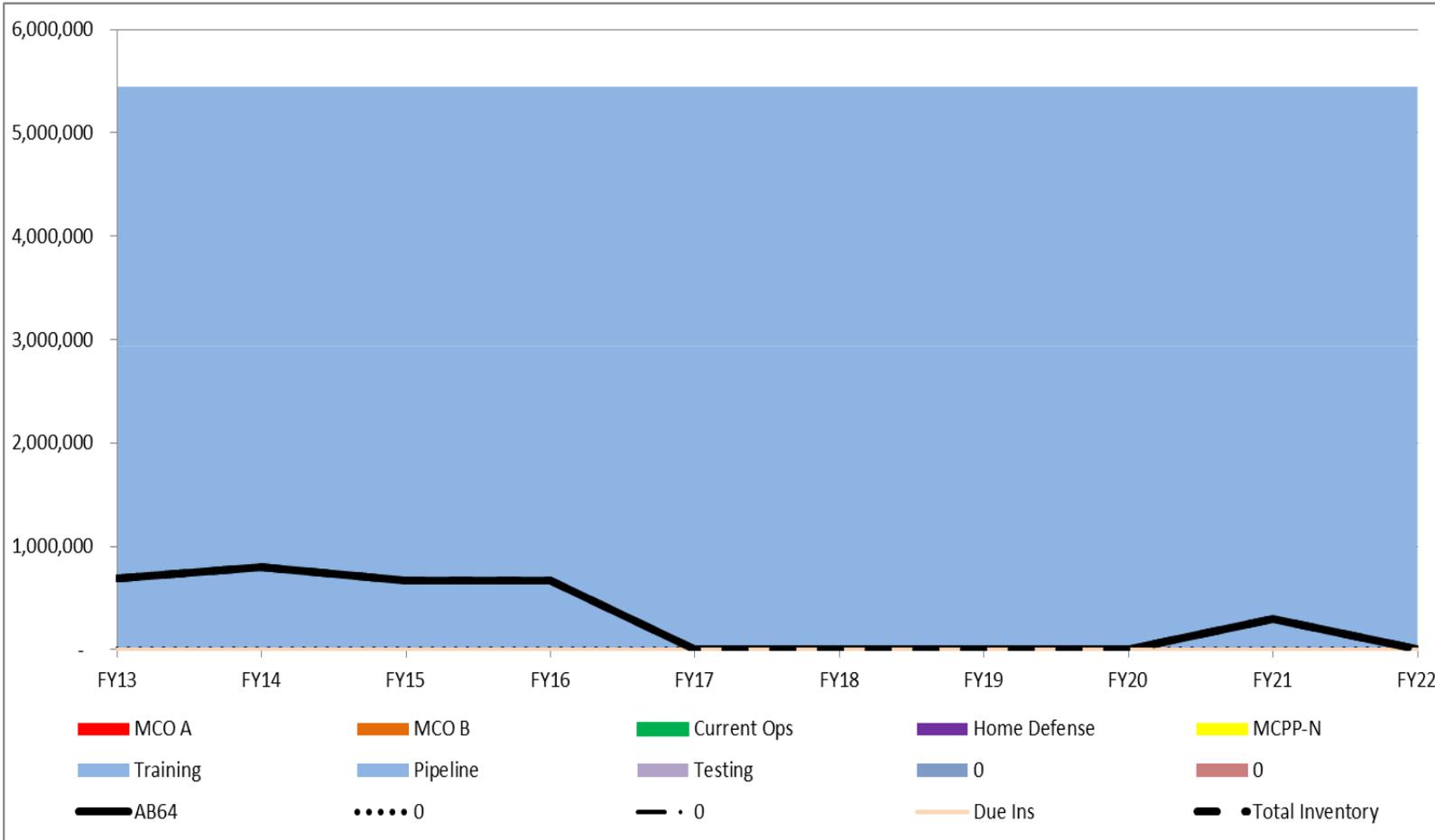
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# AB64



**PROGRAM  
MANAGER  
AMMUNITION**

Units



Item Data:  
 Cartridge,  
**Caliber .50 4 Ball**  
 MK322/1 Tracer  
 MK3221 Linked

Interchangeable = NA

Production:

Lead Time = 13 mos.

Open Line = No

\*\* Unit Price = \$3.82

\* FY13-15 ending inventories are actual 30 Sep balances. FY16 and beyond inventory balances are derived by adding projected due-ins, projected procurements PB-17, and subtracting POM-18 TMR training and testing requirements.

\*\* Unit Price is based on current FY15 Procurement/Replacement Cost Estimate unless specific Army pricing has been provided.



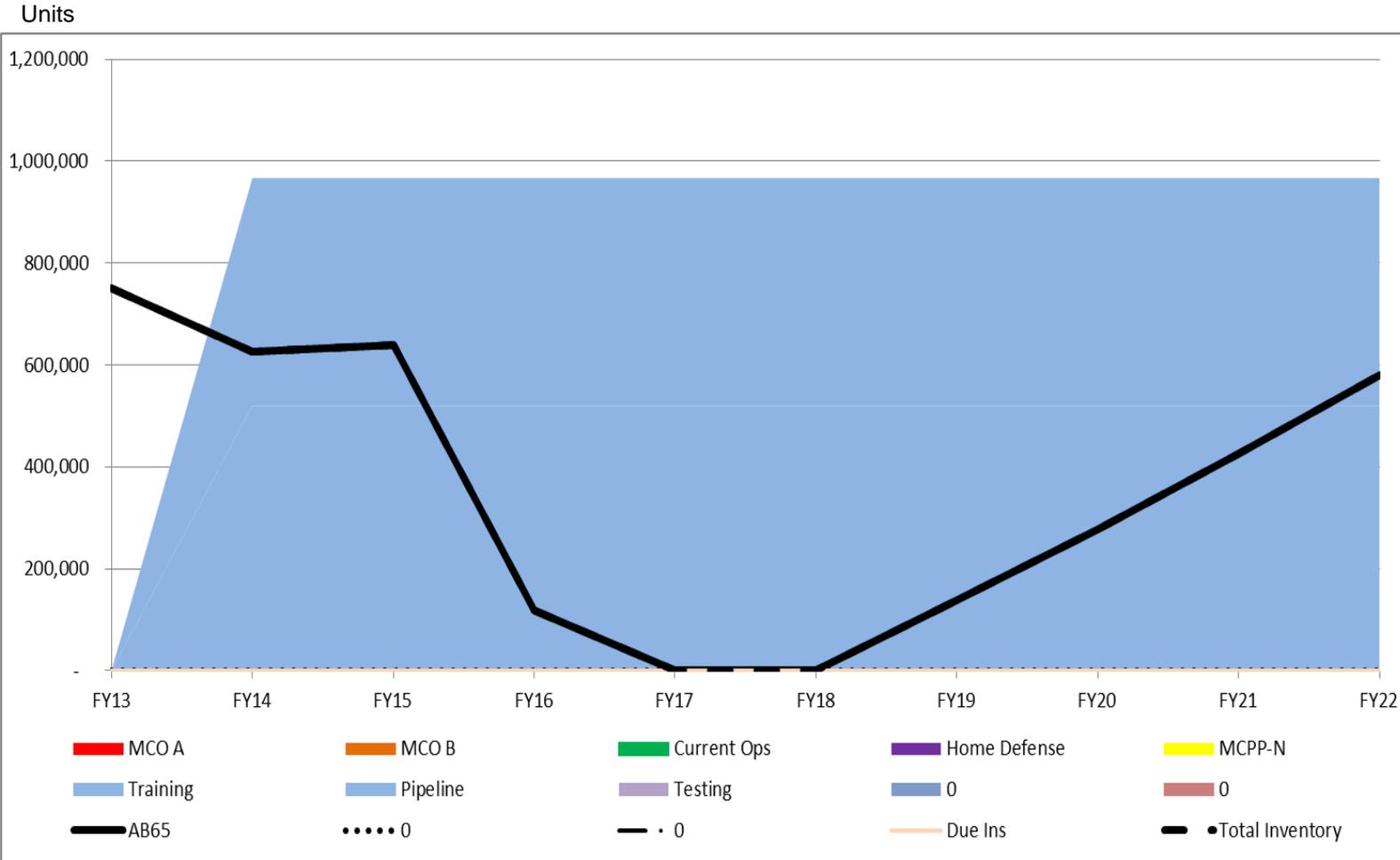
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# AB65



**PROGRAM  
MANAGER  
AMMUNITION**



Item Data:  
 Cartridge,  
**Caliber .50 4 Ball**  
 (MK322) Linked  
 Interchangeable = NA

Production:  
 Lead Time = 13 mos.  
 Open Line = Yes  
 \*\* Unit Price = \$4.14

\* FY13-15 ending inventories are actual 30 Sep balances. FY16 and beyond inventory balances are derived by adding projected due-ins, projected procurements PB-17, and subtracting POM-18 TMR training and testing requirements.

\*\* Unit Price is based on current FY15 Procurement/Replacement Cost Estimate unless specific Army pricing has been provided.



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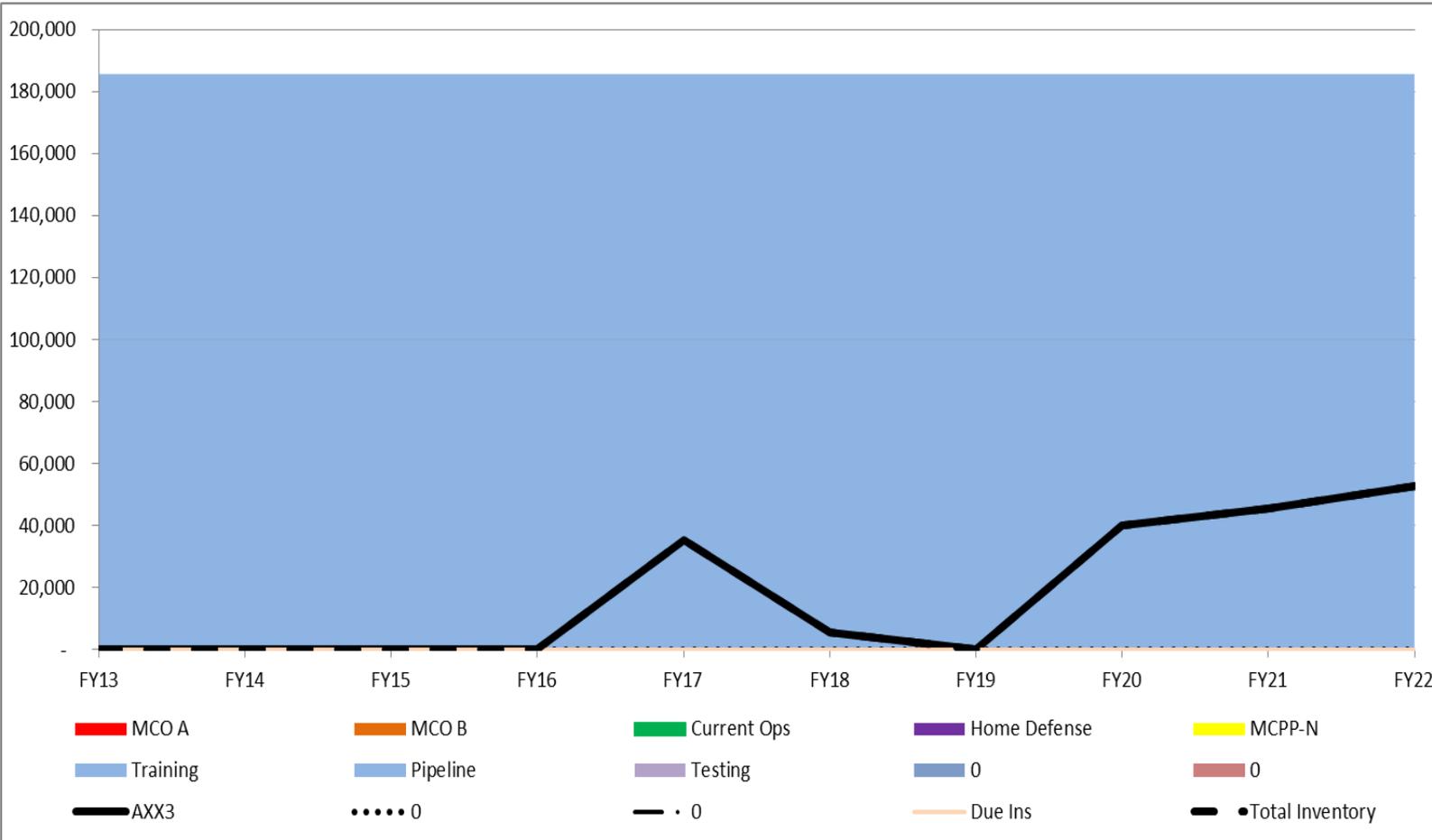
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# AXX3



**PROGRAM  
MANAGER  
AMMUNITION**

Units



Item Data:  
Cartridge,  
**9mm Blank Single**  
Round, New

Interchangeable = NA

Production:  
Lead Time = 13 mos.  
Open Line = Yes  
\*\* Unit Price = \$1.10

\* FY13-15 ending inventories are actual 30 Sep balances. FY16 and beyond inventory balances are derived by adding projected due-ins, projected procurements PB-17, and subtracting POM-18 TMR training and testing requirements.

\*\* Unit Price is based on current FY15 Procurement/Replacement Cost Estimate unless specific Army pricing has been provided.



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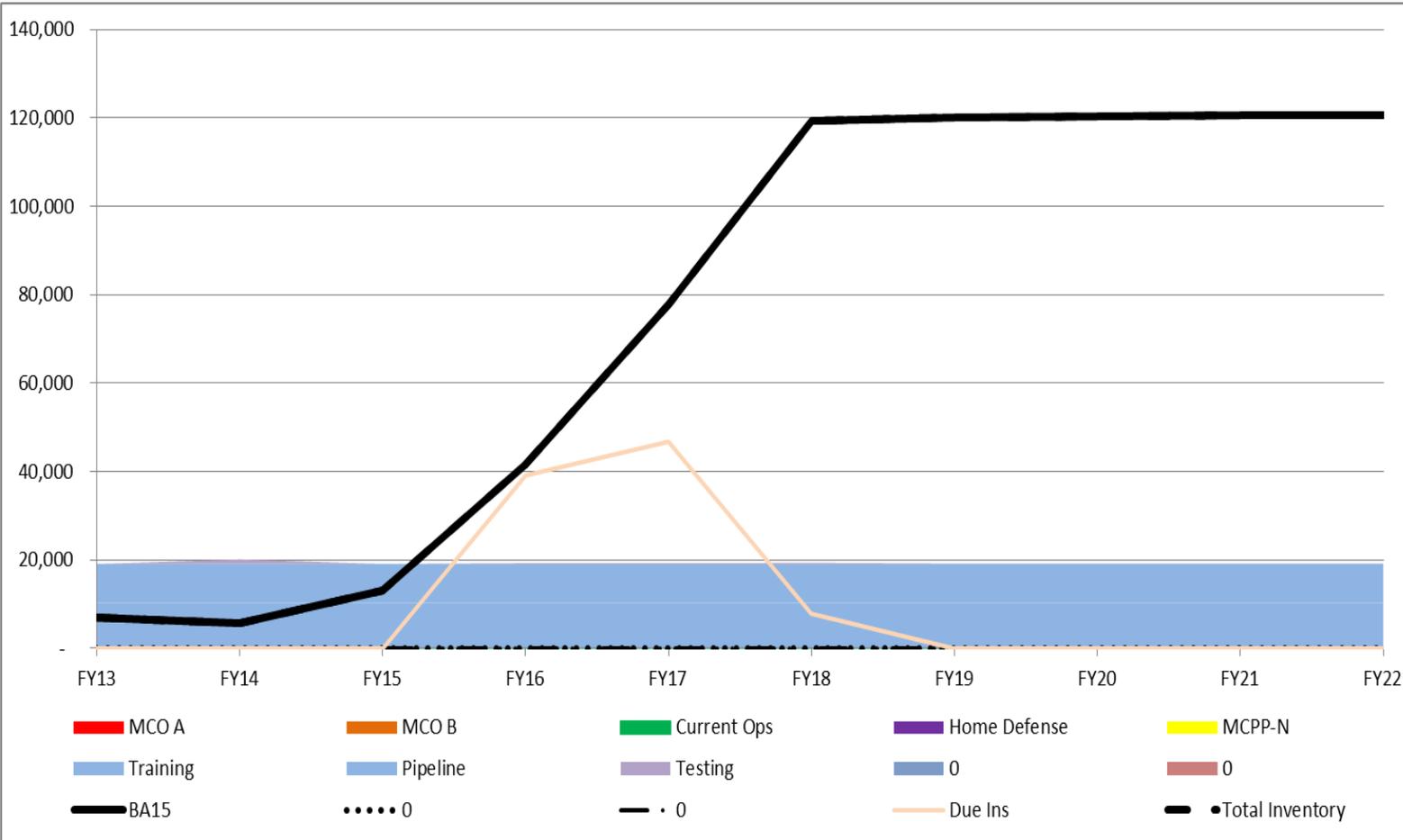
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# BA15



**PROGRAM  
MANAGER  
AMMUNITION**

Units



Item Data:  
Cartridge,  
**60mm Target Practice**

Interchangeable = NA

Production:  
Lead Time = 30 mos.  
Open Line = No  
\*\* Unit Price = \$185

\* FY13-15 ending inventories are actual 30 Sep balances. FY16 and beyond inventory balances are derived by adding projected due-ins, projected procurements PB-17, and subtracting POM-18 TMR training and testing requirements.

\*\* Unit Price is based on current FY15 Procurement/Replacement Cost Estimate unless specific Army pricing has been provided.



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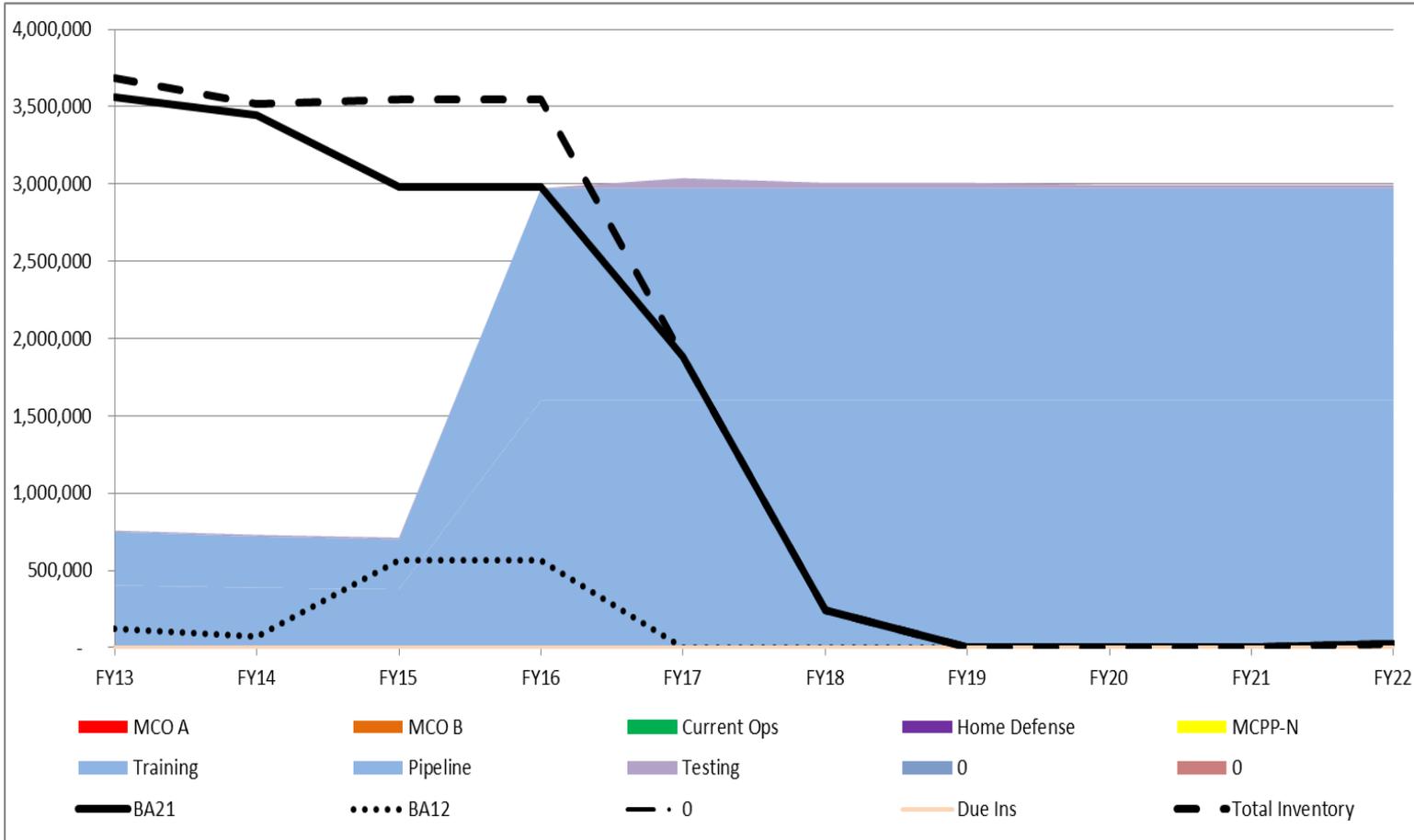
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# BA21



**PROGRAM  
MANAGER  
AMMUNITION**

Units



Item Data:  
 Cartridge,  
**40mm Practice**  
 (Day/Night)  
 MK281 MOD3 Linked

Interchangeable = **BA12**  
 (Ctg, 40mm Prac MK281  
 MOD 0 Linked)

Production:  
 Lead Time = 24 mos.  
 Open Line = No  
 \*\* Unit Price = \$35.50

\* FY13-15 ending inventories are actual 30 Sep balances. FY16 and beyond inventory balances are derived by adding projected due-ins, projected procurements PB-17, and subtracting POM-18 TMR training and testing requirements.

\*\* Unit Price is based on current FY15 Procurement/Replacement Cost Estimate unless specific Army pricing has been provided.



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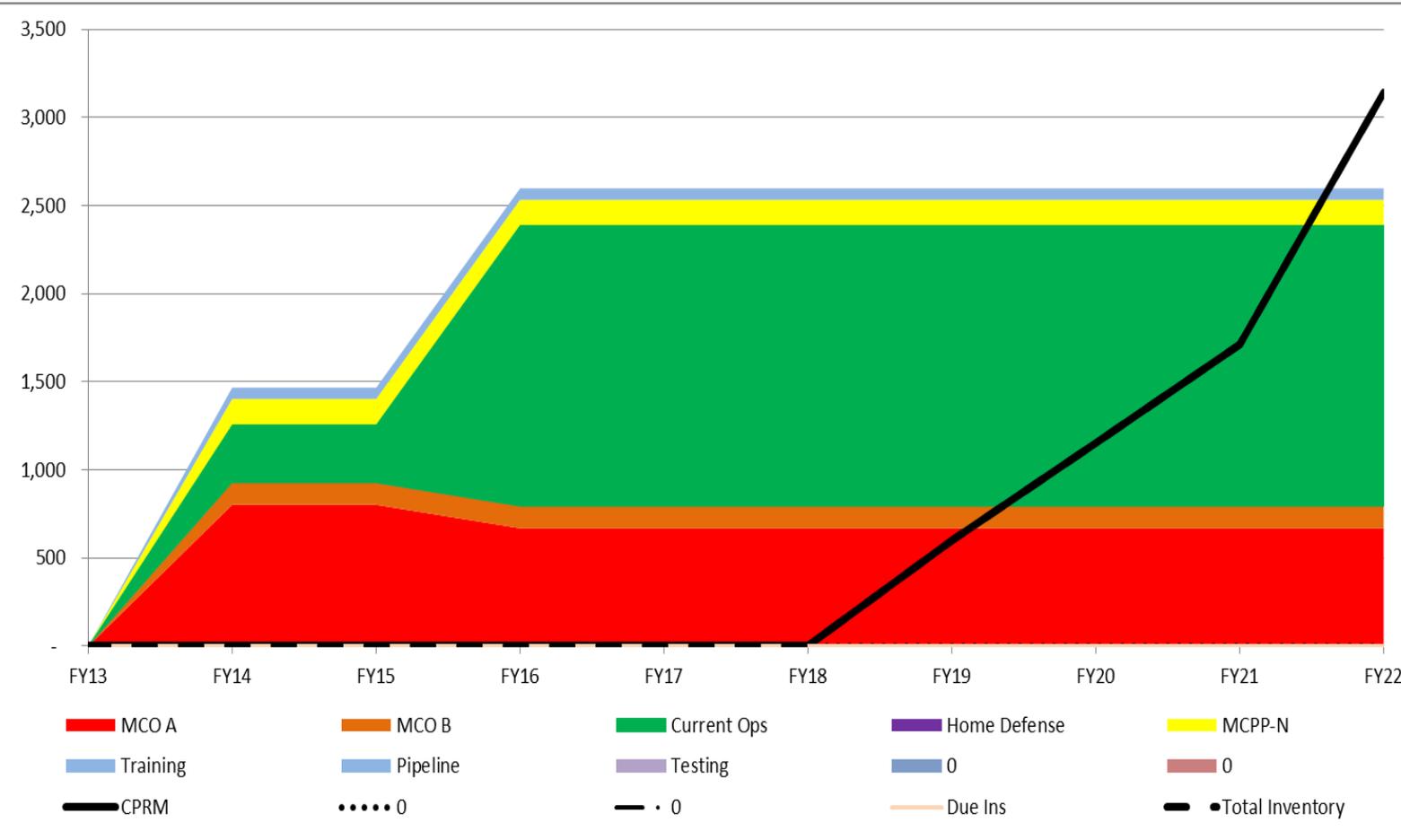
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# CPRM



## PROGRAM MANAGER AMMUNITION

Units



Item Data:  
Projectile,  
**120mm Mortar**  
**PERM**

Interchangeable = NA

Production:

Lead Time = 18 mos.

Open Line = No

\*\* Unit Price = \$29,527

\* FY13-15 ending inventories are actual 30 Sep balances. FY16 and beyond inventory balances are derived by adding projected due-ins, projected procurements PB-17, and subtracting POM-18 TMR training and testing requirements.

\*\* Unit Price is based on current FY15 Procurement/Replacement Cost Estimate unless specific Army pricing has been provided.



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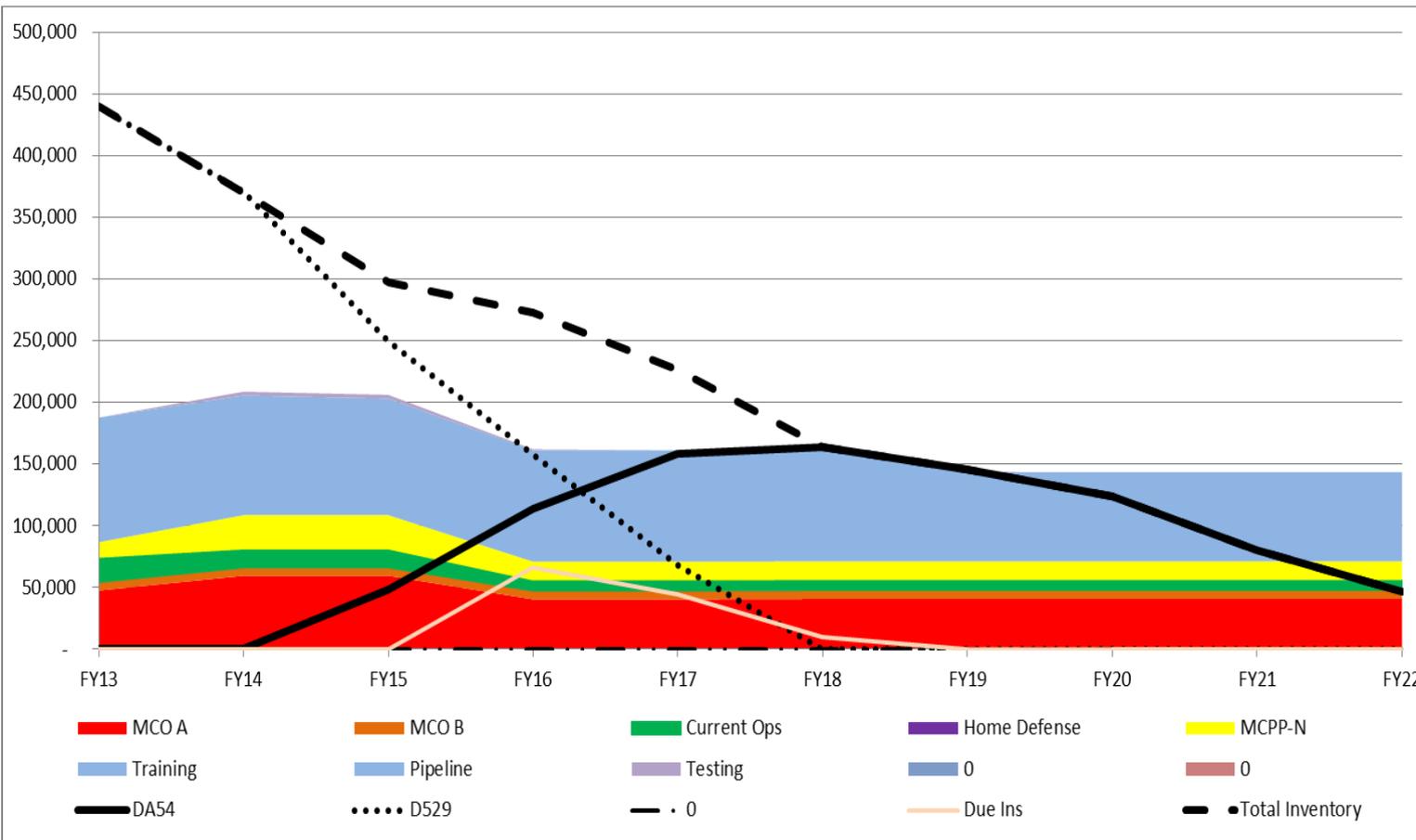
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# DA54



## PROGRAM MANAGER AMMUNITION

Units



Item Data:  
 Projectile,  
**155mm HE**  
 (IMX-101) w/Supp Charge

Interchangeable = **D529**  
 (Proj, 155mm Ext Rng  
 M795)

Production:  
 Lead Time = 30 mos.  
 Open Line = Yes  
 \*\* Unit Price = \$1,208

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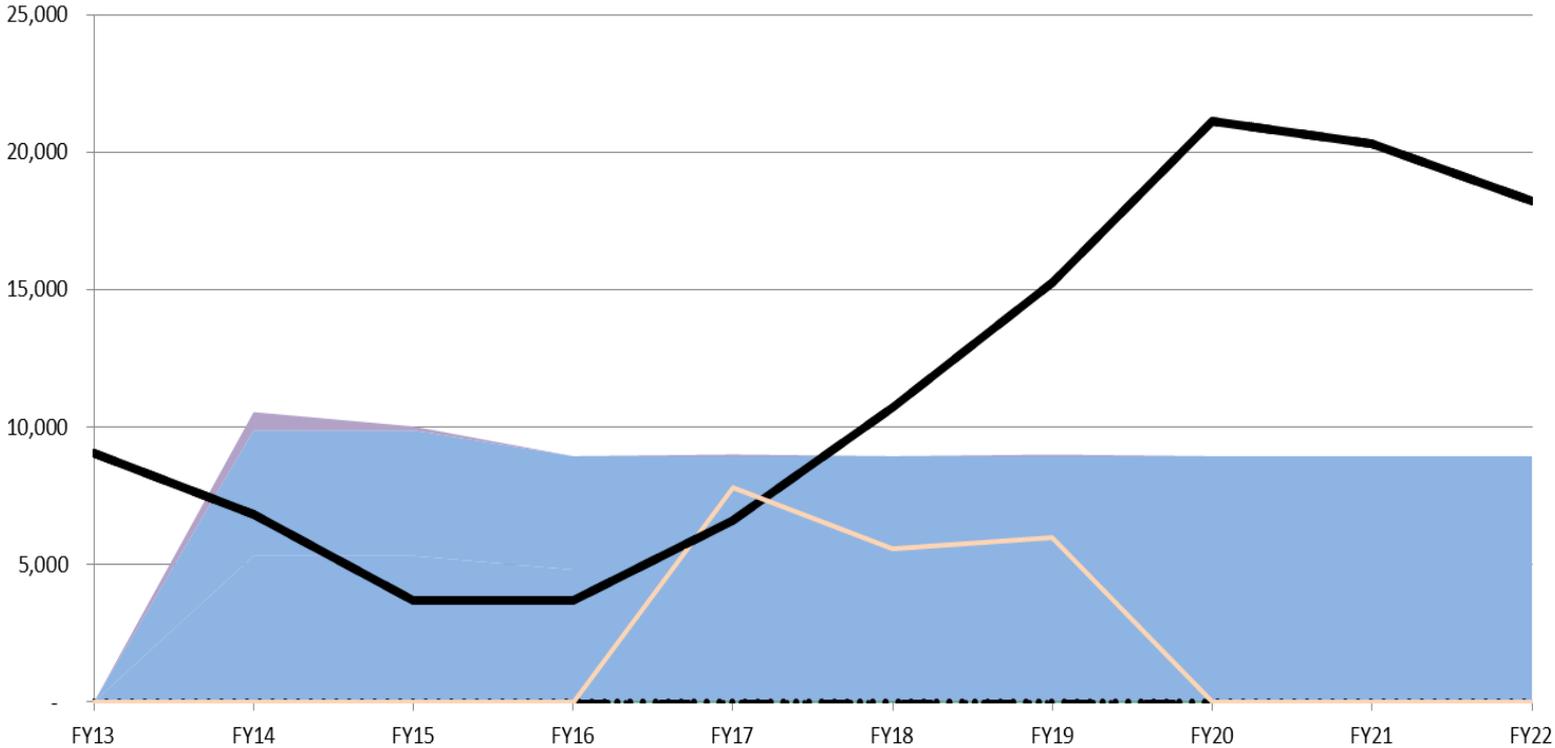
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# HX07



**PROGRAM  
MANAGER  
AMMUNITION**

Units



Item Data:

Rocket,  
**83mm HEAA Practice  
MK7 Mod 0 (SMAW)**

Interchangeable = NA

Production:

Lead Time = 24 mos.

Open Line = Yes

\*\* Unit Price = \$6,322

\* FY13-15 ending inventories are actual 30 Sep balances. FY16 and beyond inventory balances are derived by adding projected due-ins, projected procurements PB-17, and subtracting POM-18 TMR training and testing requirements.

\*\* Unit Price is based on current FY15 Procurement/Replacement Cost Estimate unless specific Army pricing has been provided.



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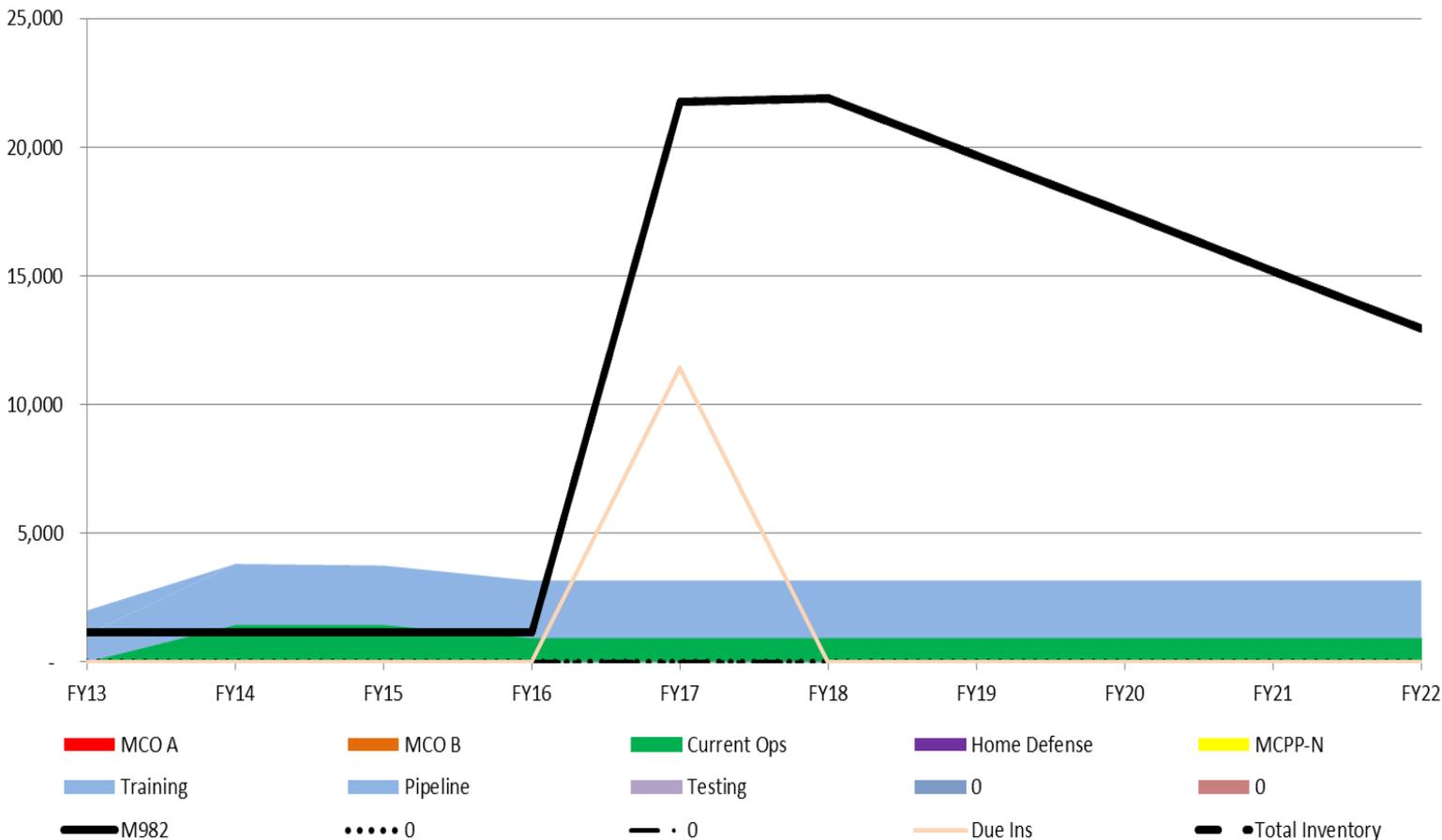
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# M982



**PROGRAM  
MANAGER  
AMMUNITION**

Feet



Item Data:

Charge,  
**Demolition Sheet**  
0.166 Inch Thick

Interchangeable = NA

Production:

Lead Time = 20 mos.  
Open Line = Yes  
\*\* Unit Price = \$110

Note:

M980 is being used to cover the short-term inventory shortfall

\* FY13-15 ending inventories are actual 30 Sep balances. FY16 and beyond inventory balances are derived by adding projected due-ins, projected procurements PB-17, and subtracting POM-18 TMR training and testing requirements.

\*\* Unit Price is based on current FY15 Procurement/Replacement Cost Estimate unless specific Army pricing has been provided.



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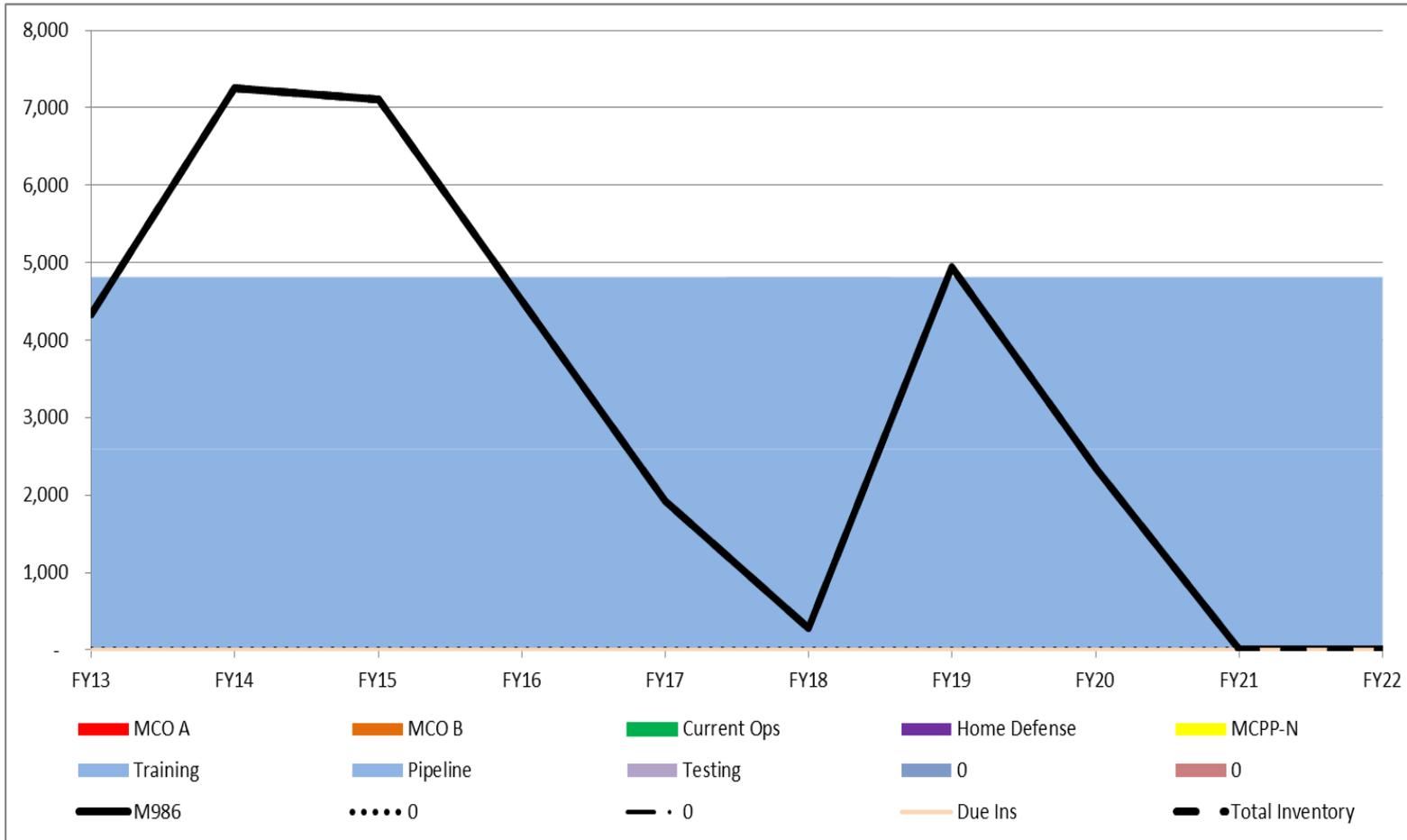
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# M986



**PROGRAM  
MANAGER  
AMMUNITION**

Units



Item Data:  
Charge,  
**Demolition Sheet**  
0.333 Inch Thick

Interchangeable = NA

Production:  
Lead Time = 18 mos.  
Open Line = Yes  
\*\* Unit Price = \$270

\* FY13-15 ending inventories are actual 30 Sep balances. FY16 and beyond inventory balances are derived by adding projected due-ins, projected procurements PB-17, and subtracting POM-18 TMR training and testing requirements.

\*\* Unit Price is based on current FY15 Procurement/Replacement Cost Estimate unless specific Army pricing has been provided.



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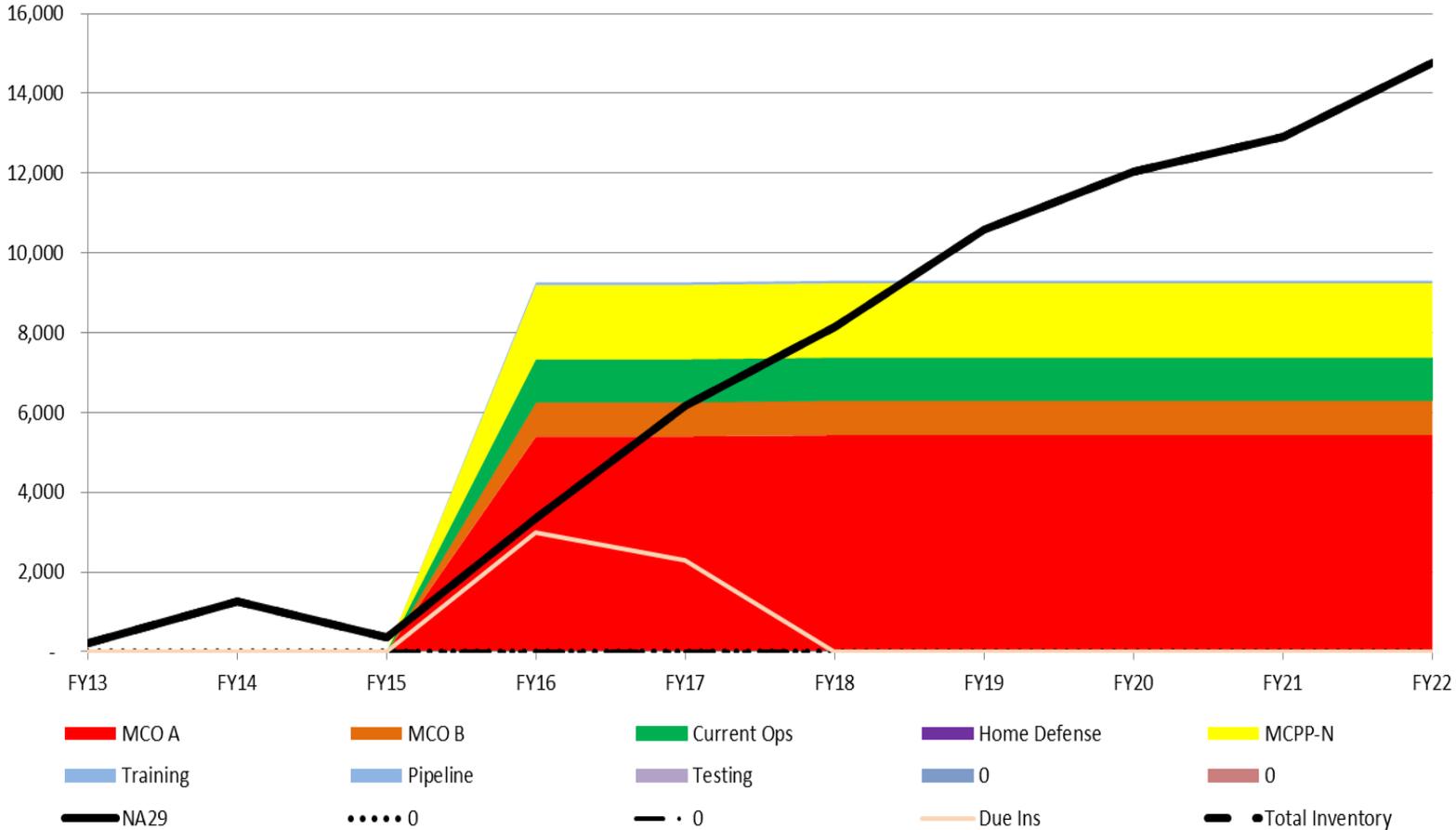
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# NA29



**PROGRAM  
MANAGER  
AMMUNITION**

Units



Item Data:  
Fuze,  
**Precision Guidance**  
Kit M1156

Interchangeable = NA

Production:  
Lead Time = 13 mos.  
Open Line = Yes  
\*\* Unit Price = \$10,017

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\*\* Unit Price is based on current FY15 Procurement/Replacement Cost Estimate unless specific Army pricing has been provided.