



NAVSEA

WARFARE CENTERS

Indian Head EOD Technology Division

NAVAL SURFACE WARFARE CENTER

INDIAN HEAD EXPLOSIVE ORDNANCE DISPOSAL TECHNOLOGY DIVISION

CAD/PAD International Logistics Meeting (2018 ILM) CAD/PAD Health Metric F-5



F-5 Health Metric



DODICs with Trace Data	Current data		Projected - lose largest lot		Production Risk	Technical Risk	Overall Risk	OA Scheduled	Next Est. Delivery Date	TMS
	No SLEs	Params applied	No SLEs	Params applied						
JL96	Green	Green	Red	Red	No History	1-3 Months	Med. Risk	FY18	NONE	F-5E, F-5F, F-5N, T-38N
M700	Green	Green	Red	Red	6+ Months	1-3 Months	Med. Risk	FY18	NONE	F-5E, F-5F, F-5N, T-38C, T-38N
M703	Green	Green	Red	Red	6+ Months	0-1 Months	Med. Risk	FY20	7/30/2018	F-5F, T-38C, T-38N
M710	Green	Green	Red	Red	No History	1-3 Months	Med. Risk	FY18	8/14/2018	F-5E, F-5F, F-5N
M897	Red	Red	Red	Red	6+ Months	0-1 Months	Critical	USAF	10/2/2018	F-5E, F-5F, F-5N, T-38C, T-38N
MD53	Yellow	Yellow	Red	Red	No History	0-1 Months	High Risk	FY19	10/31/2018	F-5E, F-5F, F-5N
MF68	Red	Red	Red	Red	0-1 Months	0-1 Months	Critical	monitor	10/31/2018	F-5F
MF69	Green	Green	Red	Red	No History	0-1 Months	Med. Risk	FY20	NONE	F-5F
MF70	Red	Red	Red	Red	0-1 Months	0-1 Months	Critical	monitor	10/31/2018	F-5F
MF71	Green	Green	Red	Red	No History	0-1 Months	Med. Risk	monitor	NONE	F-5F
MG47	Red	Red	Red	Red	No History	0-1 Months	Critical	FY19	NONE	F-5E, F-5F, F-5N
MH59	Green	Green	Green	Green	0-1 Months	0-1 Months	No Risk	USAF	NONE	F-16A, F-16B, F-5E, F-5F, F-5N, WB-57F
MT84	Red	Red	Red	Red	0-1 Months	0-1 Months	Critical	monitor	10/31/2018	F-5E, F-5F, F-5N
SP94	Red	Red	Red	Red	No History	0-1 Months	Critical	monitor	3/31/2020	F-5E, F-5F, F-5N

F-5 Trouble Item Summary



DoDIC	Name	Issue	Current Mitigation	Get Well Date	Future Mitigation
M897	Thruster, Cartridge Actuated	Primer dusting Primers had a dusting issue which delayed release of manufactured units	<ul style="list-style-type: none"> - SLEs - Process waiver to release lot 	Oct 2018	Correct primer production to eliminate dusting
MF68	Delay, Cartridge Actuated Initiator	Limited use item Small requirement has made procurement difficult	<ul style="list-style-type: none"> - Monitor contract status, ensure timely delivery - SLEs if deliveries are delayed 	Oct 2018	Item will be removed from configuration with seat change
MF70	Cartridge Actuated Initiator	Limited use item Small requirement has made procurement difficult	<ul style="list-style-type: none"> - SLEs 	Oct 2018	Item will be removed from configuration with seat change
MT84	Cartridge Actuated Initiator	Late Contract Award Delays in funding transfers led to delayed contract award	<ul style="list-style-type: none"> - Generated a Risk Analysis, routing through appropriate chain 	Oct 2018	N/A. Scheduled delivery should easily fill need through seat changeover
SP94	Rotary Actuator	Limited use item Small requirement has made procurement difficult	<ul style="list-style-type: none"> - SLEs using like item data 	Mar 2020	Item will be removed from configuration with seat change
MD53	Assembly, parachute ejector	A few large lots in service If an issue arises with one of the lots in service, extensions would be needed to keep aircraft operational	<ul style="list-style-type: none"> - Monitor inventory with Ordnance Assessments 	Oct 2018	Item will be removed from configuration with seat change
MG47	Delay, Cartridge actuated	A few large lots in service If an issue arises with one of the lots in service, extensions would be needed to keep aircraft operational	<ul style="list-style-type: none"> - Monitor inventory with Ordnance Assessments 	Mar 2020	Item will be removed from configuration with seat change

M897 M25A1 THRUSTER, CARTRIDGE

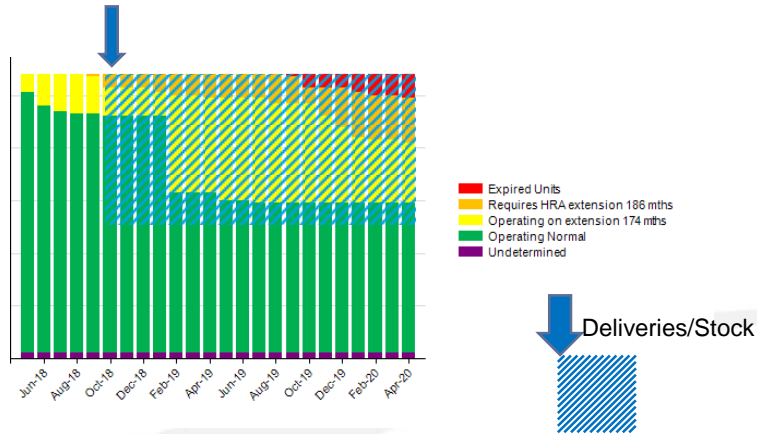
Shelf Life 192 / Installed Life 168

As of 2 May 2018



Project Overview / Summary

Current Status / Actions / Risks



		Milestone	Baseline	Current		
Likelihood	5					
	4	M897-N-3126	Dec 2016	Oct 2018		
	3	M897-N-4069	Oct 2018	Oct 2018		
	2					
	1					
		1	2	3	4	5
		Consequence				

Production:



- Primer dusting was found during X-ray review.
- Primer dusting assessment showed low risk due to previous dusting found on fleet returns and successful testing
- Subcomponent has an approved waiver and was released to be incorporated in the M897 on 12 Apr 2018

Service Life Extensions (SLE):

- No installed time data available
- Total shelf life analysis shows positive performance for some time
- RA will be initiated Jul 2018

Future Ordnance Assessment (OA):

- Planned for 2019, but will depend on asset availability

(P)roduction

- If primer dusting issue persists, additional analysis and paperwork would be required to release lot, slipping deliveries to the right
- Mitigation: Correct manufacturing processes to eliminate dusting
- Mitigation: Investigate acceptability of dusting and issue waiver if acceptable

(I)nventory/E-Stock:

- If an installed unit is damaged, aircraft would be grounded until new material is produced
- Mitigation: Prepare Replacement In Kind (RIK) request for emergency stock

(S)LE:

- If additional extensions are required, lack of install time data may prevent extensions

Future (O)A:

- If units are not returned for OA testing, no OA test will be conducted

Help Needed

- Assist in getting installed units returned for OA testing

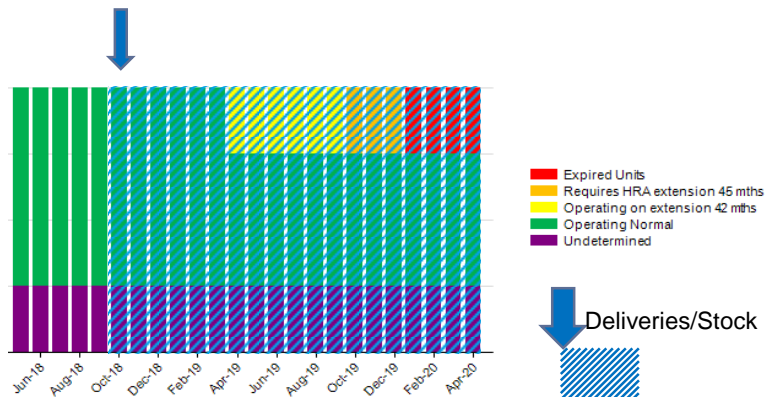
MF68 Delay Cartridge Actuated Initiator

Shelf Life 60 / Installed Life 36

As of 2 May 2018



Project Overview / Summary



Production:
 • No issues at this time

Inventory/E-Stock:
 • Zero in Wholesale Inventory

Service Life Extensions (SLE):
 • Only short extensions may be viable based on data
 • No installed time data available

Future Ordnance Assessment (OA):
 • Last test 2007
 • Next test TBD, may not test due to seat replacement

Seat Replacement:
 • Item will be obsolete once the seat conversion to the MK16 seat is complete

Help Needed

- Help ensure items removed are returned to NSWC IHEODTD for potential testing
- Communicate seat replacement schedule changes

Current Status / Actions / Risks

Likelihood	5	O					Milestone FA821317C0050	Baseline Dec 2017	Current Oct 2018
	4								
	3			S					
	2								
	1					I			
		1	2	3	4	5	Consequence		

- (I)Inventory/E-Stock:**
- If an installed unit is damaged, the aircraft would be grounded due to lack of replacement
 - Mitigation: Investigate if USAF has units that could be borrowed
- (S)LE:**
- If extensions are needed, an HRA would be required to keep aircraft operational
 - Mitigation: Investigate like item data to support extensions
- (O)rdnance Assessment:**
- If test sample is insufficient OA testing may be limited or impossible
 - Mitigation: Ensure all change-out units are returned to NSWC IHEODTD, and look into whether the Army is storing any in Demil accounts

MF70 Cartridge Actuated Initiator

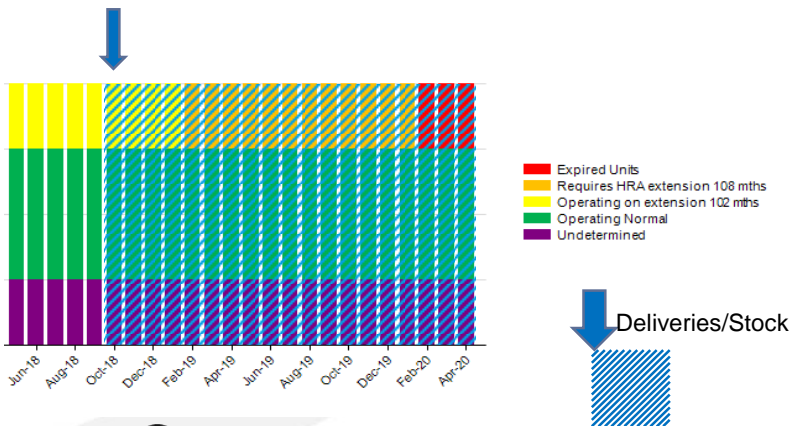
Shelf Life 132 / Installed Life 96

As of 2 May 2018



Project Overview / Summary

Current Status / Actions / Risks



Production:
 • No issues at this time

Service Life Extensions (SLE):
 • Only short extensions may be viable based on data

Future Ordnance Assessment (OA):
 • Next test TBD, may not test due to seat replacement

Seat Replacement:
 • Item will be obsolete once the seat conversion to the MK16 seat is complete

Likelihood	5	O					Milestone	Baseline	Current
	4						FA821317C0050	Oct 2017	Oct 2018
	3		S						
	2								
	1					I			
	1	2	3	4	5				
	Consequence								

(I)Inventory/E-Stock:

- If an installed unit is damaged, the aircraft would be grounded due to lack of replacement
- Mitigation: Investigate if USAF has units that could be borrowed

(S)LE:

- If extensions are needed, and HRA would be required to keep aircraft operational
- Mitigation: Investigate like item data to support extensions

(O)rdnance Assessment:

- If test sample is insufficient OA testing may be limited or impossible
- Mitigation: Ensure all change-out units are returned to NSWC IHEODTD, and look into whether the Army is storing any in Demil accounts

Help Needed

- Help ensure items removed are returned to NSWC IHEODTD for potential testing
- Communicate seat replacement schedule changes

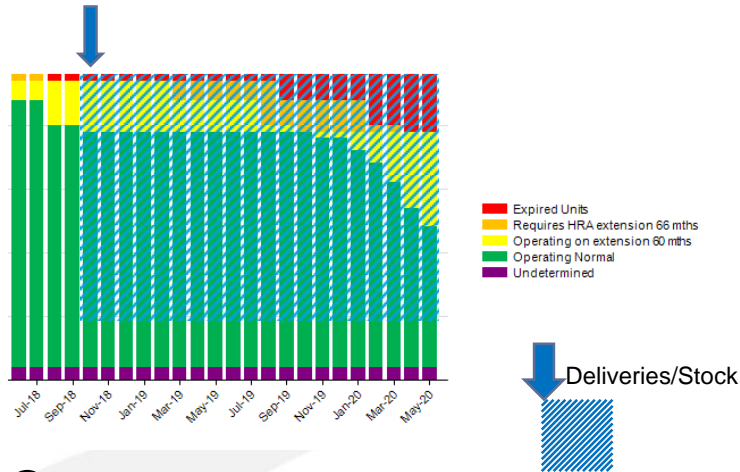
MT84 Cartridge Actuated Initiator


Shelf Life 72 / Installed Life 48

As of 2 May 2018



Project Overview / Summary



Production: 
 • No issues at this time

Service Life Extensions (SLE):
 • Risk Analysis (RA) completed, recommends extending to 66 months installed
 • Extensions beyond 66 months installed without additional test data are extremely unlikely

Future Ordnance Assessment (OA):
 • Next test scheduled 2020, but may not test due to seat replacement

Seat Replacement:
 • Item will be obsolete once the seat conversion to the MK16 seat is complete

Help Needed

- Help ensure items removed are returned to NSWC IHEODTD for OA testing
- Communicate seat replacement schedule changes

Current Status / Actions / Risks

Likelihood	5					S	Milestone FA821317C0050	Baseline Jun 2018	Current Oct 2018
	4								
	3								
	2								
	1			O		I			
		1	2	3	4	5	Consequence		

- (I)Inventory/E-Stock:**
- If an installed unit is damaged, the aircraft would be grounded due to lack of replacement
- (S)LE:**
- If HRA extension is not possible beyond 66 months installed, aircraft will be grounded Aug 2018
 - Mitigation: Investigating any potential RIKs or stock that is otherwise not accounted for
 - Mitigation: Investigating cannibalization from a hard down aircraft
- Future (O)A:**
- If units are not returned for testing then no testing will occur
 - Mitigation: If seat replacement is done to schedule, future OA testing would be irrelevant

SP94 Rotary Actuator

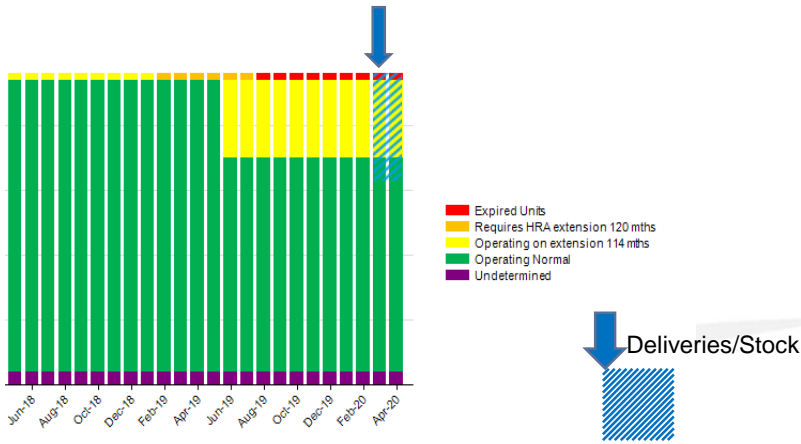
Shelf Life 108/ Installed Life 96

As of 2 May 2018



Project Overview / Summary

Current Status / Actions / Risks



Likelihood		Consequence					Milestone	Baseline	Current
		1	2	3	4	5			
5		Green	Yellow	Red	Red	Red	FY18 PR		
4		Green	Yellow	Yellow	Red	Red	Contract Award	Est June 2018	
3		Green	Green	Yellow	Yellow	Red	EAD		
2		Green	Green	S	Yellow	Yellow	Lot Delivery	Est Mar 2020	
1		Green	Green	Green	Green	I			

Production:

- No deliveries on contract at this time
- No issues with prior deliveries

SLE:

- No test history, all extensions would be based on like item data
- RA will be initiated Nov 2018

Seat Replacement:

- Item will be obsolete once the seat conversion to the MK16 seat is complete

Future Ordnance Assessment (OA):

- None scheduled

- (I)Inventory/E-Stock:**
- If an installed unit is damaged, the aircraft would be grounded due to lack of replacement
- (S)LE:**
- If like item data does not support extensions aircraft would be grounded starting Aug 2019
 - Mitigation: pursue OA testing, possibly including returning units from Army Demil

Help Needed

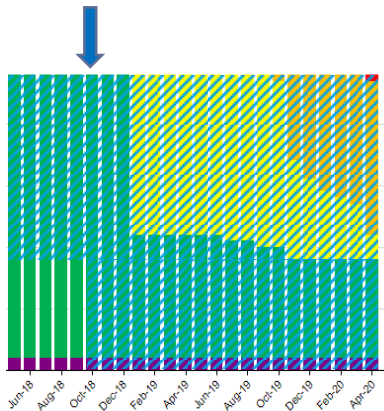
MD53 Assembly, Parachute Ejector

Shelf Life 84 / Installed Life 72

As of 2 May 2018



Project Overview / Summary



■ Expired Units
■ Requires HRA extension 84 mths
■ Operating on extension 78 mths
■ Operating Normal
■ Undetermined

Deliveries/Stock



Production:

- No issues at this time
- May have delays due to Ammo Data Card generation

Service Life Extensions (SLE):

- Data is favorable for extensions, but no installed time data available

Future Ordnance Assessment (OA):

- Last tested 2017
- Next test scheduled for FY 2019, but may not test due to seat replacement

Seat Replacement:

- Item will be obsolete once the seat conversion to the MK16 seat is complete

Current Status / Actions / Risks

Likelihood	Consequence	Milestone	Baseline	Current
		5	FA821317C0003	Dec 2017
4	FY18 PR EAD	Sep 2018		
3				
2				
1				

(I)Inventory/E-Stock:

- If one of the larger lots were to have issues, extensions would be required to maintain aircraft

Help Needed

MG47 DELAY, CARTRIDGE ACTUATED

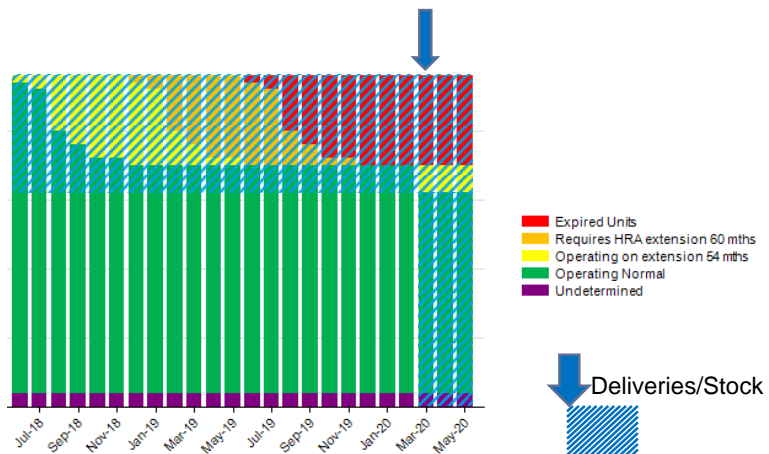
Shelf Life 72 / Installed Life 48

As of 2 May 2018



Project Overview / Summary

Current Status / Actions / Risks



Likelihood	Consequence					Milestone	Baseline	Current		
	1	2	3	4	5					
5	Green	Yellow	Red	Red	Red	FY18 PR (43)				
4	Green	Yellow	Yellow	Red	Red		Contract Award	Est June 2018		
3	Green	Green	Yellow	Yellow	Red		Lot Delivery	Est Mar 2020		
2	Green	Green	Green	Yellow	Yellow					
1	Green	Green	Green	Green	Yellow					

Production:

- Procured via MIPR through Hill AFB
- No known issues at this time

Service Life Extensions (SLE):

- Data is favorable for extensions, but no installed time data is available

Future Ordnance Assessment (OA):

- Last tested Jul 2015
- Next test TBD, currently scheduled for FY19

(I)Inventory/E-Stock:

- If one of the larger lots were to have issues, extensions would be required to maintain aircraft

Help Needed