CAD/PAD Health Assessment Guide

Rev 05.22.18

Health Assessment

	Current data		Projected - lose largest lot							
DODICs with Trace Data	No SLEs	Params applied	No SLEs	Params applied	Production Risk	Technical Risk	Overall Risk	OA Scheduled	Next Est. Delivery Date	TMS
ZZ01	Red	Red	Red	Red	No History	1-3 Months	Critical	FY20	6/30/2019	EA-18G, FA-18A, FA-18B, FA-18C, FA-18D, FA-18E, FA-18F, NEA-18G , T-45C
ZZ03	Green	Green	Red	Yellow	3-6 Months	0-1 Months	Med. Risk	FY20	12/3/2018	AV-8B , EA-18G, FA-18A, FA-18B, FA-18C, FA-18D, FA-18E, FA-18F, NAV-8B, NEA-18G , NFA-18C , NFA-18D , T-45C , TAV-8B
ZZ04	Green	Green	Red	Red	0-1 Months	0-1 Months	Med. Risk	FY18	NONE	EA-18G, FA-18A, FA-18B, FA-18C, FA-18D, FA-18E, FA-18F, NEA-18G , NFA-18C , NFA-18D , S-3B, T-45C , TAV-8B
ZZ17	Green	Green	Red	Red	6+ Months	1-3 Months	Med. Risk	FY18	8/31/2018	EA-18G, FA-18B, FA-18D, FA-18F, NEA-18G , NFA-18D , T-45C
ZZ22	Green	Green	Green	Green	6+ Months	1-3 Months	No Risk	FY19	5/29/2018	EA-18G, FA-18A, FA-18B, FA-18C, FA-18D, FA-18E, FA-18F, NEA-18G , T-45C
ZZ23	Red	Yellow	Red	Red	6+ Months	0-1 Months	High Risk	FY20	6/8/2018	EA-18G, FA-18A, FA-18B, FA-18C, FA-18D, FA-18E, FA-18F, NEA-18G , T-45C
ZZ24	Green	Green	Red	Red	No History	0-1 Months	Med. Risk	FY18	6/30/2018	EA-18G, FA-18A, FA-18B, FA-18C, FA-18D, FA-18E, FA-18F, NEA-18G , T-45C
ZZ72	Green	Green	Red	Yellow	1-3 Months	0-1 Months	Med. Risk	FY18	12/24/2018	EA-18G, FA-18A, FA-18B, FA-18C, FA-18D, FA-18E, FA-18F, NEA-18G , T-45C
ZZ88	Green	Green	Green	Green	3-6 Months	1-3 Months	No Risk	FY18	6/29/2018	EA-18G, FA-18A, FA-18B, FA-18C, FA-18D, FA-18E, FA-18F, NEA-18G , T-45C
ZZ89	Green	Green	Red	Red	3-6 Months	0-1 Months	Med. Risk	FY18	7/31/2018	EA-18G, FA-18A, FA-18B, FA-18C, FA-18D, FA-18E, FA-18F, NEA-18G , T-45C
ZZ94	Green	Green	Green	Green	6+ Months	0-1 Months	No Risk	FY18	6/29/2018	EA-18G, FA-18A, FA-18B, FA-18C, FA-18D, FA-18E, FA-18F, NEA-18G , NFA-18C , NFA-18D , T-45C

Note: The data represented in the above chart and in the following graphics is fictitious and has been created for instructional purposes only.

Health Assessment Explanation

	A	B	C	D			E			
	Current data		Projected - lose largest lot							
DODICs with Trace Data	No SLEs	Params applied	No SLEs	Params applied	Production Risk	Technical Risk	Overall Risk	OA Scheduled	Next Est. Delivery Date	TMS
ZZ88	Green	Green	Green	Green	3-6 Months	1-3 Months	No Risk	FY18	6/29/2018	EA-18G, FA-18A, FA-18B, FA-18C, FA-18D, FA-18E, FA-18F, NEA-18G , T-45C

- Run INVENTORY FORECAST 4 times:
  - A. Current model – Assesses based on TRACE installs and OIS stock only
  - B. Apply PARAMS SLEs to Current Model
  - C. Removing largest lot from Current Model
  - D. Combination of Removing largest current lot and Applying SLEs

E.

No Risk	Run C shows full 15 months of availability > 0
Low Risk	Run A shows full 15 months of availability > 0, and Run D shows full 15 months of availability > 0
Medium Risk	Run A shows at least 6 months (but < full 15) of availability, and Run B shows full 15 months of availability > 0. and Run D shows availability through next expected delivery month
High Risk	Run A shows limited availability (<0) during next 15 months, and Run B shows at least 6 months of availability > 0
Critical	Run B shows less than 6 months of availability > 0

Weighted by Production Risk and Technical Risk

FA-18 Trouble Item Summary

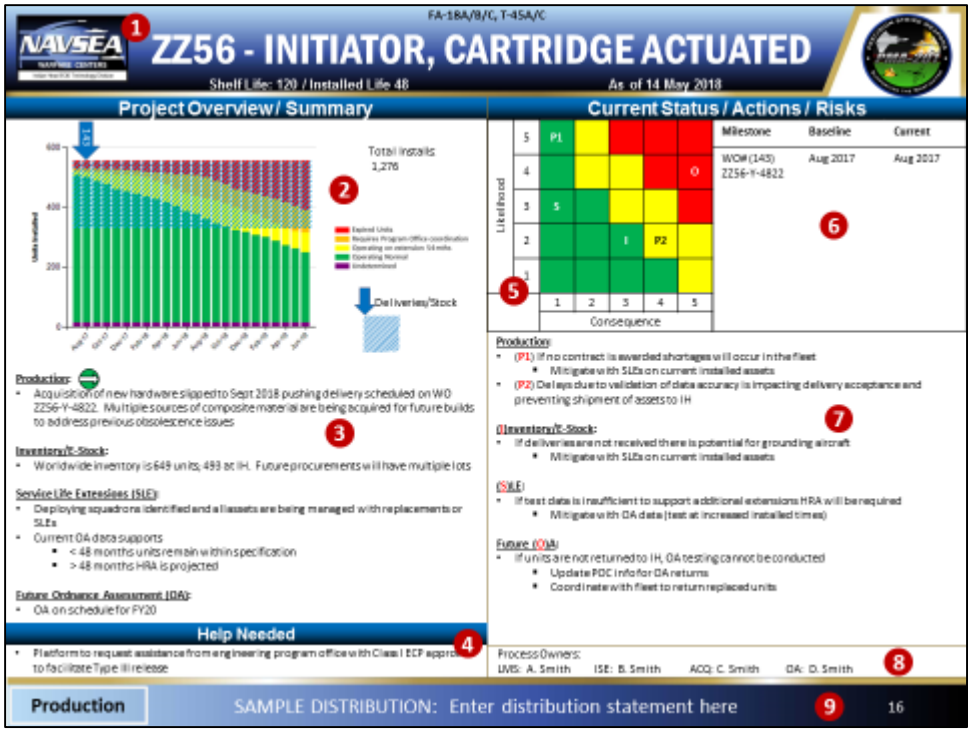
DODIC	Name	Issue	Current Mitigation	Get Well Date	Future Mitigation
ZZ08	Cartridge Actuated Initiator	**Lot Failure** • LAT test failure still not resolved • Poor propellant performance • Other service item configuration not usable in USN aircraft • Previous design had multiple no-fires in 2012	• Seeking to expedite failure investigation • Investigate item rework to make configuration usable in USN aircraft	• June 2019	• Second source effort (Other service currently uses another source)
ZZ36	Flexible Linear Shape Charge (FLSC)	**Production** • Production line experienced a test failure on another program in July 2017 which has delayed delivery • Several items competing for priority from a single production line • Early change-outs driven by deployments resulting in depleted stock	• SLE to mitigate shortages • Prioritize deliveries	• February 2019	• Alternatives to current FLSC being investigated to reduce burden on contractor, allowing them to make other configurations
ZZ62	Donor Assembly	**Obsolescence** • Obsolescence issues hindering new procurement. There is currently no contract in place • Working with Program Office to get units from their contract • Qualification required on replacement component	• PR being routed in advance of Type III release	• Approximately July 2020 (this is based on the FY18 contract award)	• Procure new environmentally friendly donor assembly
ZZ66	Underseat Rocket Motor (USRM)	**Transportation** • International shipping and DCMA approvals delaying delivery of assets	• Work with contractor and DCMA to address any issues • Closely managing the issuing of stock • Service Life Extensions (SLE) where applicable	• November 2018	• Resolve standing shipping delay issues, or allow more time to receive assets in requirements planning

Supportability Summary Chart

CHART DESCRIPTION:

The Supportability Summary Chart has been broken into 9 primary sections:

1. Header
2. Inventory Posture/Health
3. Status Description
4. Help Needed
5. Risk Cube
6. Critical Milestones
7. Risk/Mitigation
8. Process Owners
9. Footer



Header

Department of Defense Identification Code (DODIC): Four-digit code used by the Department of Defense (DoD) to identify explosives and ammunition.

Nomenclature: A description of the associated component.

Aircraft platform(s) associated with this item.

Shelf Life: The period of time, in months, from the date of manufacture that an item can remain in its environmentally sealed container and still be serviceable.

Installed Life: The period of time, in months, from the date the environmentally sealed container has been opened that an item is allowed to be used.

Note: The installed life expiration date will never exceed the shelf life expiration date.

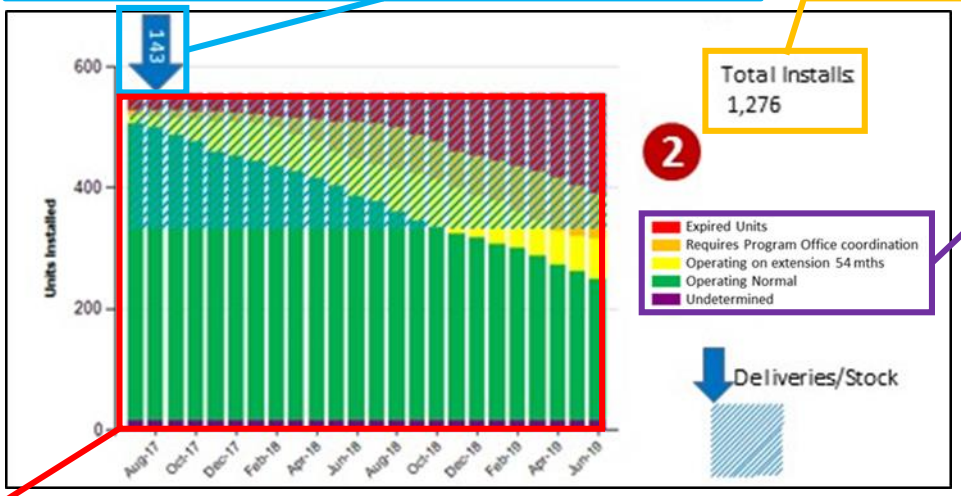
Date of latest chart revision.

Supportability Summary Chart

Inventory Posture/Health

Indicates the month and quantity of product delivery.

Total number of the associated DODIC currently installed on the briefed platform(s).



Key which briefly describes each of the associated colors identified on the graph.

For a more detailed description of the colors, see slide 15.

Depicts the actual and projected inventory posture and health for the associated DODIC.

Solid colors represent the actual and projected installed population's health. The progression through the colors is what would occur with the current installed population, if no change-outs were accomplished. Hashed blue color represent the projected install health resulting from product delivery and availability for installation ("blue" = "green").

In the above example, the delivery of 143 units in Aug-17 provides enough assets to keep this DODIC healthy until Nov-18 where the health moves slightly into the yellow.

Status Description

Identifies the current production trend for this DODIC. The various trend options can be found on slide 14.

Contains a succinct description of the current DODIC status.

This section captures the issues and plans in process which need to be addressed.

Production:
- Acquisition for new hardware slipped to Sept 2018 pushing delivery scheduled on WO ZZ56-Y-4822. Multiple sources of composite material are being acquired for future builds to address previous obsolescence issues

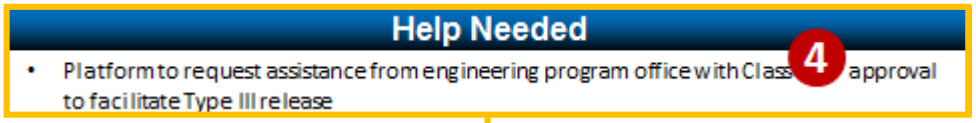
3

Inventory/E-Stock:
- Worldwide inventory is 649 units; 493 at IH. Future procurements will have multiple lots

Service Life Extensions (SLE):
- Deploying squadrons identified and all assets are being managed with replacements or SLEs
- Current OA data supports
  - < 48 months units remain within specification
  - > 48 months HRA is projected

Future Ordnance Assessment (OA):
- OA on schedule for FY20

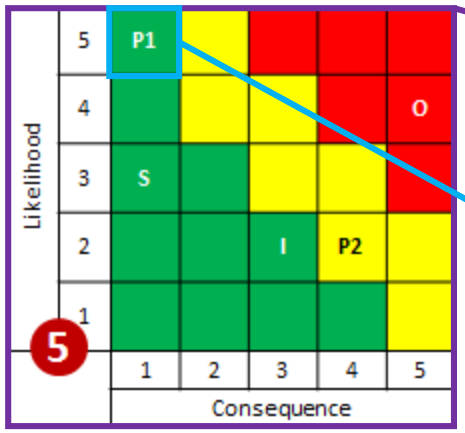
Help Needed



This section is used to identify the help needed from the platform program office or above.

An example may be a request for assistance in obtaining data.

Risk Cube & Risk/Mitigation



Standard risk cube providing a graphical representation of the risks identified in section 7

The risks identified in section 7 correlate directly to a likelihood and consequence on the risk cube.

The risk evaluation criteria can be found on slide 14.

Production:

- (P1) If no contract is awarded shortages will occur in the fleet
  - Mitigate with SLEs on current installed assets
- (P2) Delays due to validation of data accuracy is impacting delivery acceptance and preventing shipment of assets to IH

7

(I)nventory/E-Stock:

- If deliveries are not received there is potential for grounding aircraft
  - Mitigate with SLEs on current installed assets

(S)LE:

- If test data is insufficient to support additional extensions HRA will be required
  - Mitigate with OA data (test at increased installed times)

Future (O)A:

- If units are not returned to IH, OA testing cannot be conducted
  - Update POC info for OA returns
  - Coordinate with fleet to return replaced units

Identified risk and associated mitigations are listed in this section.

If there are multiple risks identified in a specific category a numerical qualifier will be provided (e.g. P1, P2).

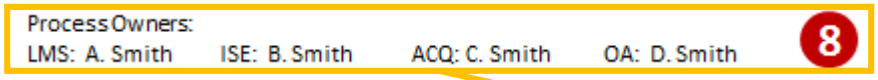
Critical Milestones

This section is used to capture and identify critical DODIC milestones and may contain information from sections ❷, ❸, and ❼.

Milestone	Baseline	Current
WO# (143) ZZ56-Y-4822	Aug 2017	Aug 2017

❻

Process Owners & Footer



Identifies the member, and their associated field, responsible for maintaining the accuracy of the chart.

Page number.

A one-word summary used to describe the largest contributing factor to the overall risk.

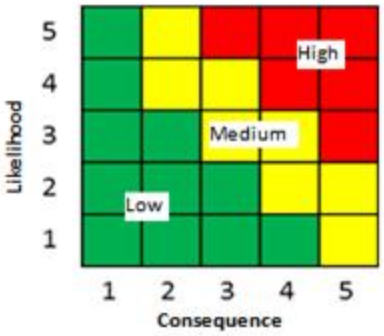
Distribution statement will be identified here.

Reference Material

Risk Evaluation Criteria

Level	Likelihood	Probability of Occurrence
1	Not Likely	~10%; Will effectively avoid or mitigate this risk based on standard practices
2	Low Likelihood	~30%; Have usually mitigated this type of risk with minimal oversight in similar cases
3	Likely	~50%; May mitigate this risk, but workarounds will be required
4	Highly Likely	~70%; Cannot mitigate this risk, but a different approach might
5	Near Certainty	~90%; Cannot mitigate this risk, No known processes or workarounds are available

Likelihood



Level	Technical Performance	Schedule	Cost
1	Minimal or impact (inconvenience or annoyance)	Minimal or no impact	Minimal or no impact
2	Minor technical or supportability shortfall (No impact to KPP, OPEVAL or COIs)	Additional activities required, able to meet key dates Slip < 2* month(s)	Budget increase or unit production cost increase (1% of Budget) < $20K **
3	Moderate technical or supportability shortfall	Minor schedule / No impact to Key Milestones Slip < 3* months Subsystem slip > 1 month	Budget increase or unit production cost increase (5% of Budget) < $100K **
4	Major technical or supportability shortfall	Program critical path affected; All schedule float associated with key milestone exhausted Slip < 6* months	Budget increase or unit production cost increase (10% of Budget) < $200K **
5	Cannot meet KPP or Key technical or supportability threshold	Cannot meet key program milestones Slip > 6* months	Exceeds APBA threshold (10% of Budget) > $ 200K

Consequence

* Tailor for programs in month(s)
** Assumes a $2M project; Tailor for programs in whole dollars

Production Trend

	Improving	Stable	Getting worse
Good			
Issue/ Risk			
Poor			

Supportability Summary Chart

Inventory Posture Color Key

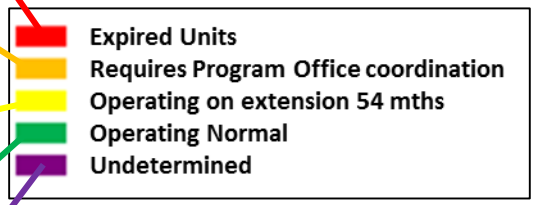
These units are beyond program office risk acceptance and either ground the aircraft or require higher level HRA acceptance to continue operations.

These units exceed established service life limits but are within platform limits; Program Office coordination is required to continue operations.

These units exceed established service life limits but performance is still within the unit's specification requirements.

Operating within established life limits.

There is no information in TRACE for this/these units.

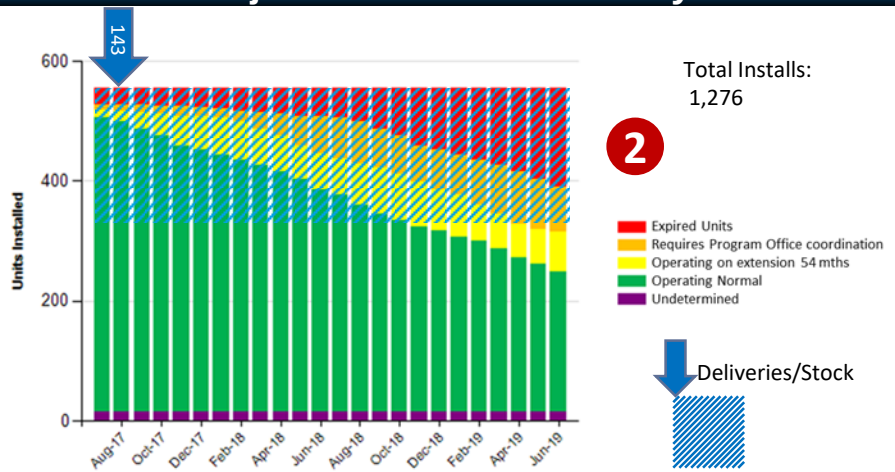


ZZ56 - INITIATOR, CARTRIDGE ACTUATED

Shelf Life: 120 / Installed Life 48

As of 14 May 2018

Project Overview / Summary



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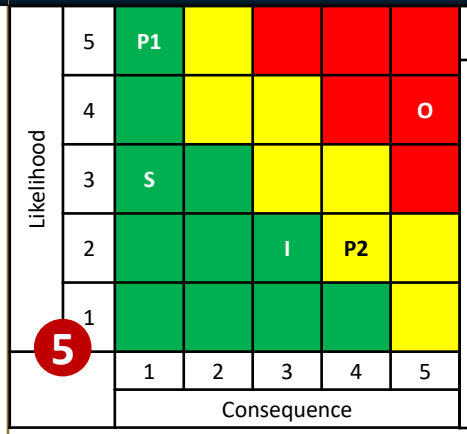
Help Needed

- Platform to request assistance from engineering program office with Class I ECP approv to facilitate Type III release

Current Status / Actions / Risks



Milestone	Baseline	Current
WO# (143) ZZ56-Y-4822	Aug 2017	Aug 2017

Production:

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Process Owners:
LMS: A. Smith ISE: B. Smith ACQ: C. Smith OA: D. Smith