

BAE Systems Obsolescence Management Capabilities





Who We Are

- **Full Service Obsolescence Management Provider**
 - Obsolescence management plan development
 - Turn-key obsolescence management service
 - Customized products & services for each customer's unique requirements.
- **One of the original Diminishing Manufacturing and Material Shortages (DMSMS) tool providers**
 - Over 20 years of Obsolescence experience & expertise with a Proven Track Record
 - AS 9100/ISO 9001:2008 certified processes
- **An Industry Recognized Leader in DMS Products & Services**
 - DMSMS Industry Team & Individual Awards each year since 2007
- **BAE Systems discriminator is our People**
 - Approximately 140 U.S. Based Employees in AVCOM / Obsolescence Management Services
 - Program & Project Management
 - Production Engineering
 - Component Engineering
 - Quality Assurance
 - Logistics Engineering
 - Software Engineering

Sample of Our Customers



T6-A



AWACS



F-18



F-16



A-10



CH-47



F-15
A/B/C/D63/D70/E/SE



MC-130H/P



V-22



B-52



AC-130H/U



ARH-70



T-38



C-5



B-1B/SE



HH-60G



ICBM



P3 Orion



BAE - IRSP



Paladin



MMPV



MK-45 Naval Gun



Navy Ship Repair



BRADLEY



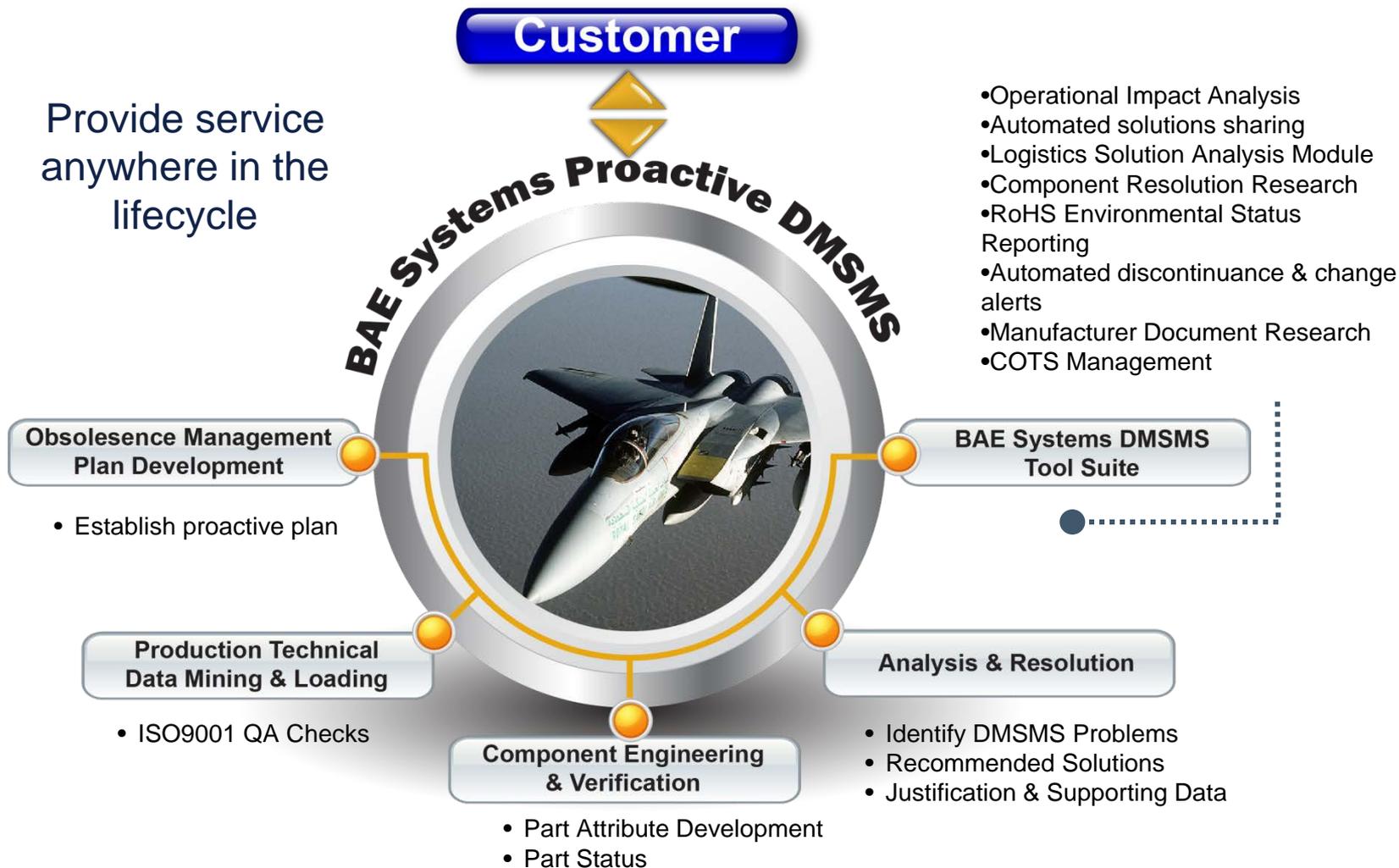
RG-33 MRAP





BAE Systems Role

Provide service anywhere in the lifecycle

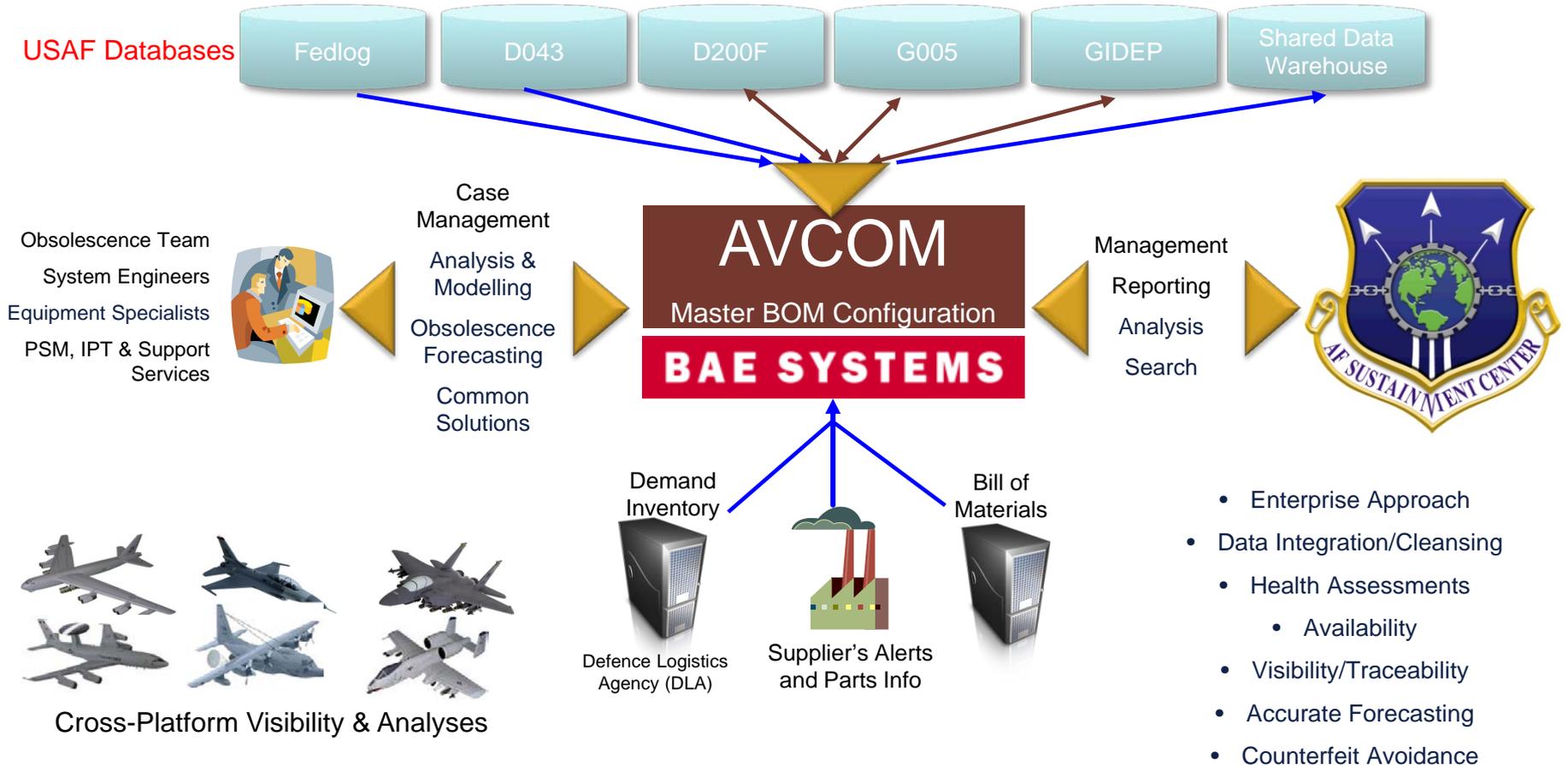


Sustainment Engineering General

USAF DMSMS Program – World Class Program



AVCOM Data Systems Integration



Maximising the sharing of Obsolescence knowledge/solutions and part information



Diminishing Risk to Your Supply Chain

Use AVCOM to...

Become aware
of upcoming
parts
obsolescence
issues

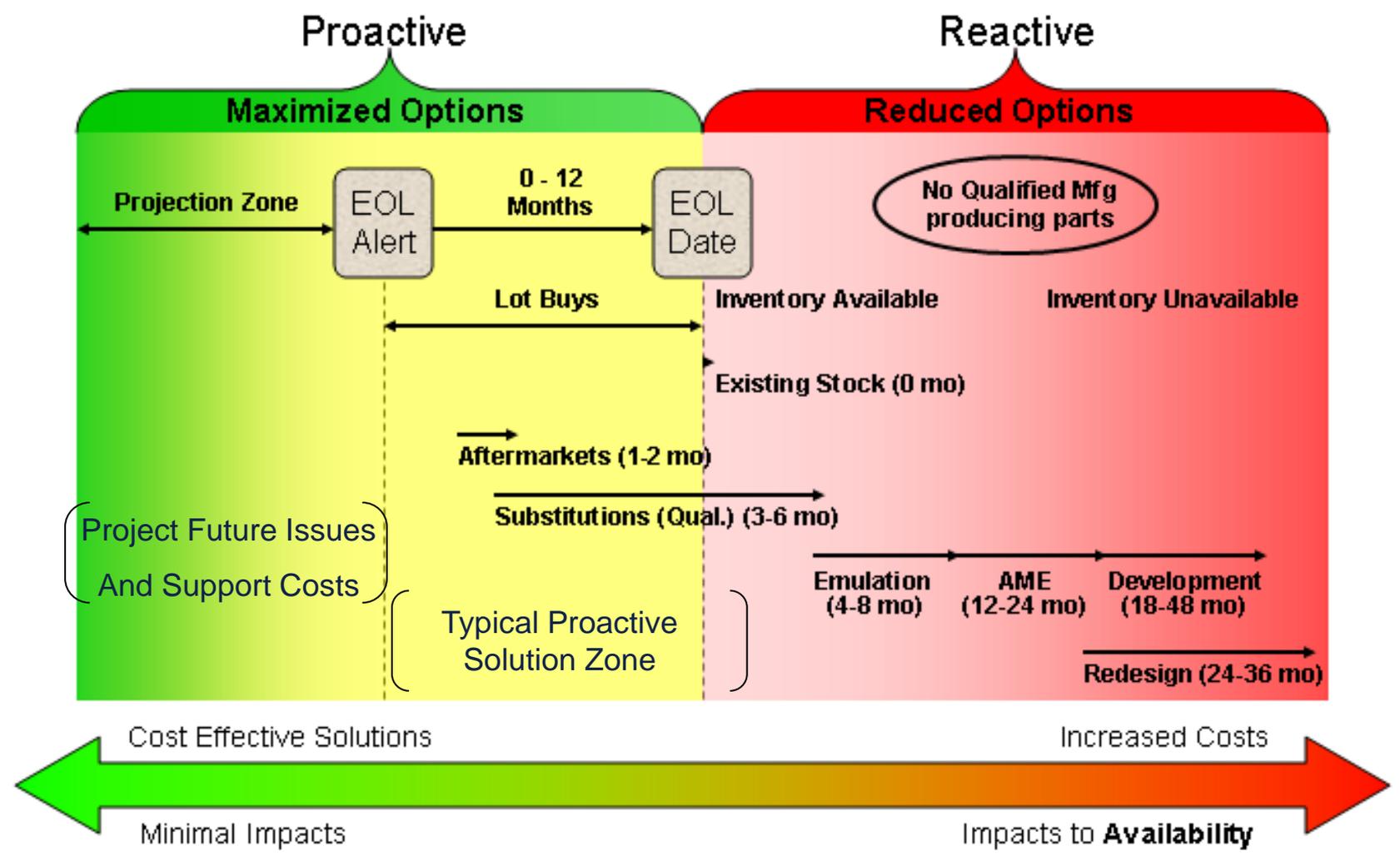
Increase
reaction time to
better analyze
alternatives

Make Informed
decisions about
Unknown Risks
to your Supply
Chain

*Explore and
implement best
value budget
solutions*



Proactive vs Reactive Strategy





Full Indentured Bill of Materials Analysis

AVCOM enterprise -- Version: (6.1.5.0) | Snapshot: (Next Day Delivery - Most Recent QA'd Configuration) | Configuration: (AVCOM_DEMO) | Email: (henry.scott@baesystems.com) | Web Farm: (Primary Production Serv...

File Edit Analysis Modules Research Tools Help

Dashboard Search Switchboard P/N Filters Editable Attributes Reset Columns

Structure Tree Pane

- 690R935G01 - [Receiver Assembly]
- 691R748G01 - [Low Noise Assembly]
- 758R063G01 - [Adapter Assembly, High F
- 758R444G01 - [Chassis Wiring Assembly]
- 758R444G02 - [Chassis Wiring Assembly]
- 758R570G01 - [Reference Oscillator Asse
- 758R689G01 - [Chassis Wiring Assembly]
- 765R076G01 - [HRM Adaptor High Resol
- 782R650G01 - [Power Supply Assembly v
- 817R266G01 - [Low Noise Assembly]
- 825R818G01 - [Low Noise Assembly]
- 12604334-1 - [RF Multiplier]
- 12604334-2 - [RF Multiplier]
- 12604334-3 - [RF Multiplier]
- 12604334-4 - [RF Multiplier]
- 580R142H09 - [Dummy Load, Coaxial]
- 583R580H66 - [Screw, Captive]
- 583R580J40 - [Screw, Captive]
- MS24693-C273 - [Screw, Machine]
- 427R854H09 - [Label, Mylar]
- 583R778H55 - [Nameplate]
- 586R743H14 - [Label, Reference Design
- 586R746H11 - [Label, Weight]
- 586R747H01 - [Label, Warning]
- 586R303H03 - [Cover, EMI/Environment
- Programmable Signal Processors - [Programmable
- 758R875G01 - [Programmable Signal Process
- 688R604G01 - [Board Assembly, A**
- 688R609G01 - [32K RAM Digital Module
- 688R639G01 - [MICM/MICC Digital Modu
- 688R642G01 - [Digital Module Assembly]
- 694R158G01 - [Digital Module Assembly]
- 694R730G01 - [Digital Module Assembly]
- 694R740G01 - [Digital Module Assembly]
- 694R942G01 - [Digital Module Assembly]
- 750R415G01 - [Digital Module Assembly]
- 750R418G02 - [Digital Module Assembly]
- 750R491G01 - [Digital Module Assembly]
- 750R491G01 - [Digital Module Assembly]
- 750R502G01 - [Digital Module Assembly]

Path To Assembly Pane

P/N	OEM Cage	Description	NSN	Source Document	WUC	Reference ...	Type	Designation
AVCOM DEMO		AVCOM DEMO		AVCOM DEMO				
AVCOM DEMO SYSTEM 1	1Z126	AVCOM DEMO SYSTEM ONE	No FSC Reference	Standard CDM DEMO				
Programmable Signal Pro...	97942	Programmable Signal Processors	No FSC Reference	AVCOM-Demo				
758R875G01	97942	Programmable Signal Processor	1270-01-231-9800	11F101-5-4	74AQ0			
688R604G01	97942	Board Assembly, Auxiliary	5998-01-132-5763	11F101-5-4	74AQB	A2		

Bill of Materials Pane

P/N	OEM Cage	Description	Alt	QTY	NSN	Source Document	SD Revision	Figure	Index	Reference Designator	Type
JANTX2N3811	81349	Transistor		1	7690-01-000-0000	11F101-5-4	15	27	4	Q1, Q2, Q3, Q4	
M38510/10402BCX	81349	Line Receiver		2	5962-00-543-1920	11F101-5-4	15	27	5	U25, U26	
M38510/30401BCX	81349	AOI		1	5962-01-267-3707	11F101-5-4	15	27	6	U17	
M38510/32301BCX	81349	Buffer/Driver		1	5962-01-262-7137	11F101-5-4	15	27	7	U18	
583R361H03	97942	Flip Flop	A	1	5962-01-078-1806	11F101-5-4	15	27	8	U9	
M38510/34102BEX	81349	Flip Flop		1	5962-01-272-6295	11F101-5-4	15	27	8	U9	
M38510/10404BEX	81349	Line Receiver		1	5962-00-584-3996	11F101-5-4	15	27	9	U10	
M38510/31504BEX	81349	Counter		7	5962-01-275-6254	11F101-5-4	15	27	10	U13, U19, U21, U27...	
M38510/10902BCX	81349	Timer		1	5962-01-263-9083	11F101-5-4	15	27	11	U11	
581R500J85	97942	Inverter	A	2	No FSC Reference	11F101-5-4	15	27	12	U3, U4	
M38510/07003BCX	81349	Inverter		2	5962-01-292-8853	11F101-5-4	15	27	12	U3, U4	
M38510/07001BCX	81349	NAND		1	5962-01-021-5875	11F101-5-4	15	27	13	U20	
M38510/30501BCX	81349	OR		1	5962-01-171-2152	11F101-5-4	15	27	14	U12	
581R500L72	97942	Flip Flop	A	1	5962-01-300-2095	11F101-5-4	15	27	15	U5	
M38510/30107BEX	81349	Flip Flop		1	5962-01-264-8166	11F101-5-4	15	27	15	U5	
M8340102M1001JB	81349	Resistor Network		1	5905-01-051-1744	11F101-5-4	15	27	16	U29	
M8340102M1001JA	81349	Resistor Network		1	5905-01-035-8165	11F101-5-4	15	27	17	U22	
594R107H01	97942	Crystal Oscillator		1	5955-01-079-9176	11F101-5-4	15	27	18	U1	

Approved Sources Pane

Manufacturer	Manufacturer Cage	MFG P/N	Status	LOT	Material Content	Lead Time	Generic	Package
Lansdale Semi	0C1V7	M38510/30107BEX	Active		RoHS Exempt		54LS175	DIP
QP Semi	0C1V7	M38510/30107BEX	Active		RoHS Exempt		54LS175	DIP
Texas Instruments	01295	M38510/30107BEX	Active		RoHS Exempt		54LS175	DIP
Texas Instruments	01295	SNJ54LS175J	Active		Non-Compli...		54LS175	DIP
National Semi	27014	M38510/30107BEX	Discontin...	12/6/2005	RoHS Exempt		54LS175	DIP
Motorola Semi	04713	M38510/30107BEX	Historical	6/30/1995	RoHS Exempt		54LS175	DIP
Philips Semi	18324	M38510/30107BEX	Historical		RoHS Exempt		54LS175	DIP



Component Health Projection and Analysis Functions

- Forecasted part status for electronic and non-electronic components, Receive Alert Notifications, Advanced Impact analysis, and many more analysis functions available

The screenshot displays the 'Electronic Health Analysis' software interface. It includes several key components:

- PN vs Flag Summary:** A table showing the total count for various component flags:

Flag	Total
Two or More	9,257
Obsolete	6,188
Logistics	0
Unknown	4,741
Proprietary	0
Total	29,715
- Alert History & Analysis:** A window with filters and options for 'Refresh', 'Filters', 'Impact Analysis', 'Export', 'Print', and 'Close'. It includes 'General Filters' and 'Preferred System(s)'.
 - Bound To:**
 - Bound To: System: 76D00 AN/ALE-40 Chaff/Flare Disp
 - Preferred System(s)
 - Bound to Configuration: USAF_Composite
 - Any & All Alerts - Not bound to Configuration
 - Start:** Tuesday, September 01, 2009
 - Stop:** Thursday, February 25, 2010
 - Manufacturer:** ALL
 - Limit To OEM P/Ns That Do Not Have Cases
 - Include Non-Components (i.e. - All Assembly Types)
 - P/N Type Filter Override:** [Dropdown]
 - Flags:** [Dropdown]
- Manufacturer Table:**

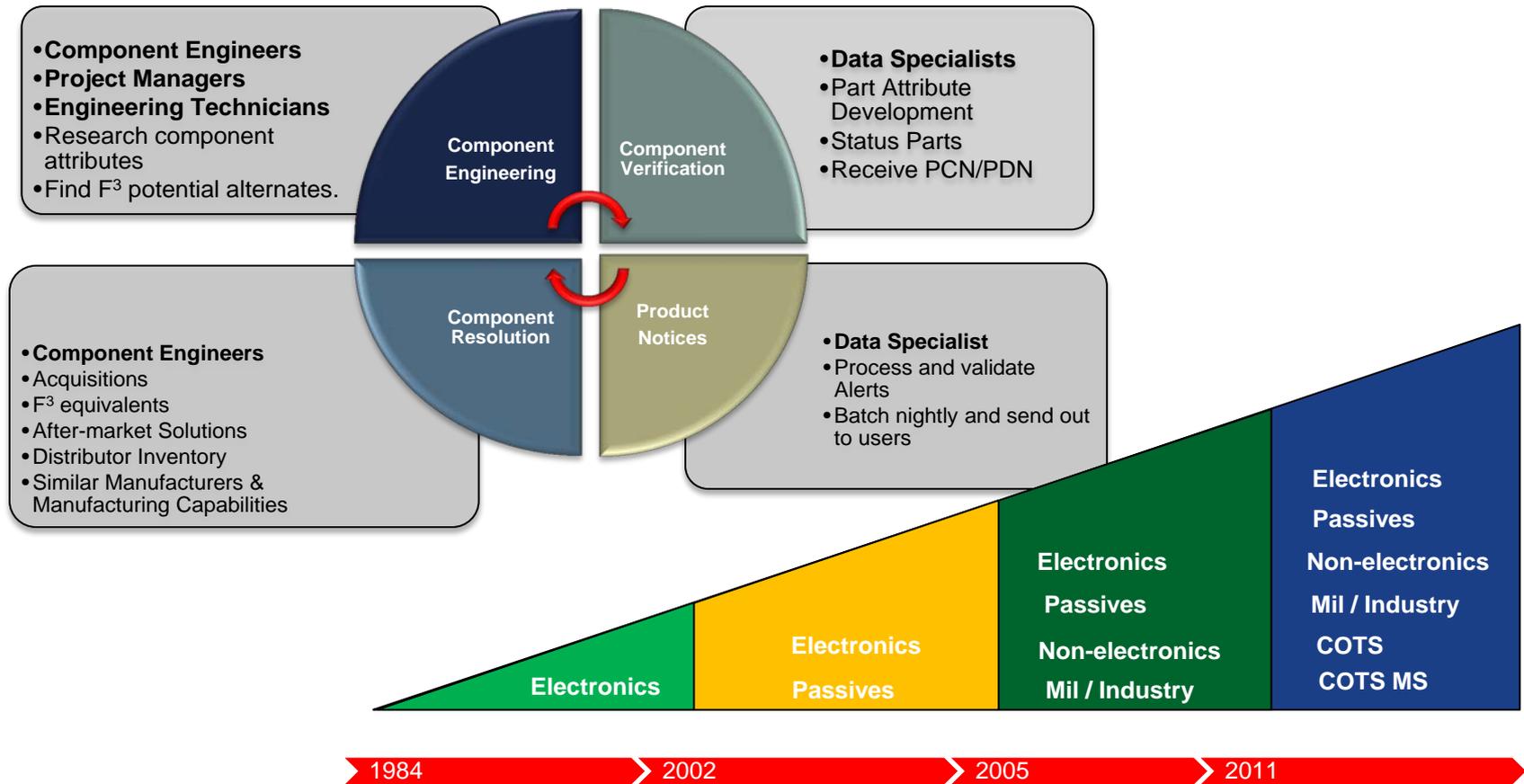
Manufacturer	MFG P/N	Cage	Status	LOT
National Semi	5962-8771001PX	27014	Discontinued	12/1/2009
National Semi	M38510/11201BCX	27014	Discontinued	12/1/2009
ON Semiconductor	MJ11033	1MQ07	Active	7/21/2010
- Show All Paths To - Electronic: 5962-7802301MEX (Cage: 67268):** A tree view showing component paths and a table of associated parts.

Figure	Index	SD Number	SD Date	SD Revision	Qty	Alt
		Standard COM DEMO	03/30/2004	0	1	
		AVCOM-Demo	01/01/2007	0	1	
		11F45-2-17-4	04/15/2002	1	1	
1	18	11F45-2-17-4	04/15/2002	1	1	Yes
19	13	11F45-2-17-4	04/15/2002	1	4	
1	19	11F45-2-17-4	04/15/2002	1	1	Yes
21	27	11F45-2-17-4	04/15/2002	1	3	
1	17	11F45-2-17-4	04/15/2002	1	1	Yes
18	12	11F45-2-17-4	04/15/2002	1	1	
18	58	11F45-2-17-4	04/15/2002	1	1	
1	19	11F45-2-17-4	04/15/2002	1	1	Yes
20	27	11F45-2-17-4	04/15/2002	1	3	
20	32	11F45-2-17-4	04/15/2002	1	5	
		AVCOM-Demo	01/01/2007	0	1	
		11F45-2-16-4	04/15/2002	2	1	
1	38	11F45-2-16-4	04/15/2002	2	1	Yes
11	37	11F45-2-16-4	04/15/2002	2	1	
1	38	11F45-2-16-4	04/15/2002	2	1	Yes
9	37	11F45-2-16-4	04/15/2002	2	1	
1	38	11F45-2-16-4	04/15/2002	2	1	
10	37	11F45-2-16-4	04/15/2002	2	1	
- Projection Values:** A bar chart showing component counts from 2008 to 2017, with bars color-coded by flag (red, yellow, green).

Documentation Available for PCN, PDN, Datasheet, GIDEP



Component Management Group



AVCOM personnel not only manage the data, they understand it!



Parts Forecasting for Non-electronic Components

- ◆ Non-electronic components, such as, mechanical parts and assemblies, bearings, gears, hydraulics, etc. can also be loaded and statused in AVCOM.
- ◆ Non-electronic items are monitored in two ways: active manufacturers and lead time for delivery (ARO)
 - In many cases with mechanical parts, it is not a case of whether the manufacturer still makes the parts but whether he can deliver to the customer's schedule requirements

Many systems have non-electronic parts that require DMSMS Management



Non-Electronics Lead Time

Lead Time - Critical Items				
Local P/N	Manufacturer	MFG P/N	Weeks	
181-7604	Automatic Switch Co	HS-X8262-C7	24	
5-131-06-045-002	Standard Xchange	5-131-06-045-002	24	
5-131-08-060-003	Standard Xchange	5-131-08-060-003	24	
23933-3	RDF Corp	23933-3	16	
925305-00-174-4058	RDF Corp	925305-00-174-4058	16	
925310-00-272-5700	RDF Corp	925310-00-272-5700	16	
925310-01-101-2024	RDF Corp	925310-01-101-2024	16	
925330-01-338-7823	RDF Corp	925330-01-338-7823	16	
925330-01-338-7836	RDF Corp	925330-01-338-7836	16	
925330-01-338-7910	RDF Corp	925330-01-338-7910	16	
925331-00-194-1675	RDF Corp	925331-00-194-1675	16	
2-122-1-00-902-05	Xylem Inc	2-122-1-00-902-05	12	
2-122-2-00-904-05	Xylem Inc	2-122-2-00-904-05	12	
222-10-NA-1-2221776	Detroit Switch Inc	222-10-NA-1-2221776	8	
222-10-NB-4-2221775	Detroit Switch Inc	222-10-NB-4-2221775	8	
222-10-NB19-2221810	Detroit Switch Inc	222-10-NB19-2221810	8	
3-378-5-01-901-02	Xylem Inc	3378-501-901-02	6	
3-378-5-01-901-06	Xylem Inc	3-378-5-01-901-06	6	
4-590-5-01-902-004	Xylem Inc	4-590-5-01-902-004	6	
3-298-8-06-211-19	Xylem Inc	3-298-8-06-211-19	5	
3-298-8-06-211-20	Standard Xchange	3-298-8-06-211-20	5	
3-299-8-00-932-08	Xylem Inc	3-299-8-00-932-08	5	
3-355-8-00-901-02	Xylem Inc	3-355-8-00-901-02	5	
3-355-8-00-903-04	Xylem Inc	3-355-8-00-903-04	5	
3-355-8-00-903-06	Xylem Inc	3-355-8-00-903-06	5	
3-355-8-08-101-16	Xylem Inc	3-355-8-08-101-16	5	
06844-11	3M Purification Inc	06844-11	4	
22120-39	3M Purification Inc	22120-39	4	
29653-02	3M Purification Inc	29653-02	4	
29653-10	3M Purification Inc	29653-10	4	
880018-1	Elliott Company	880018-1	4	
880060-1	Elliott Company	880060-1	4	
880094-1	Elliott Company	880094-1	4	
8Y0312-1	Elliott Company	8Y0312-1	4	
P1562L355	Elliott Company	P1562L355	4	
P1562L357	Elliott Company	P1562L357	4	
P28A15	Elliott Company	P28A15	4	
P28A17	Elliott Company	P28A17	4	
P28A20	Elliott Company	P28A20	4	

Record 0 of 72



COTS Vendor Health Analysis

- Based on results from the Vendor Health Analysis, BAE Systems is able to associate an obsolescence Risk Level for each critical item.

- Results are based on:

- Demand
- Technology
- Criticality
- Substitutability

Supplier	Part Number	Description	5 Year Risk Assessment	10 Year Risk Assessment	15 Year Risk Assessment	Comment
Corbin Instruments	071-22-55-AFB	Control Head	High	High	High	Per Supplier: Availability (<5yrs); High
ABC Electronics	20376-56	Computer	Moderate	High	High	Availability projection (approx. 5yrs); High Technology; Low Demand
ABC Electronics	20376-61	Data Transfer Unit	Moderate	High	High	Per Supplier: Availability (at least 7 yrs); High Technology; Moderate Demand
Avionics Systems	ASV-5698	Attitude Indicator	Moderate	High	High	Per Supplier: Availability (5-10yrs); Moderate Technology; No Demand
Avionics Systems	ASV-6363	Trim Aid Computer	Moderate	High	High	Availability projection (<10yrs); BoM shows obsolescence concerns
Aviation Company	969687-X	Integrated Data Acquisition	Moderate	High	High	Per Supplier: Availability (5-10yrs); High Technology; No Demand
Missile Launch Systems Inc	9660T-RW1	Standby Turn and Slip Indica	Low	Moderate	High	Per Supplier: Availability (5-10yrs); Moderate Technology; No Demand
Missile Launch Systems Inc	9660T-RW2	Strap Module	Low	Moderate	High	Per Supplier: Availability (10-15 yrs); Moderate Technology; Low Demand
Missile Launch Systems Inc	9660T-RW3	Mode S Transponder	Low	Moderate	High	Per Supplier: Availability (10-15 yrs); High Technology; Low Demand
COTS Supplier Intl	085-TT-TR54	Configuration Module	Low	Moderate	High	Availability projection (approx. 10yrs); Moderate Technology; Low Demand
COTS Supplier Intl	452-6565	Emergency Locator Transmit	Low	Low	Moderate	Availability projection (<15yrs); Moderate Technology; Moderate Demand
COTS Supplier Intl	452-9869	Data Transfer Module	Low	Low	Moderate	Per Supplier: Availability (5-10yrs); Moderate Technology; Low Demand
Brown Electronics	400-5000-GT1	Distance Measuring Equipme	Low	Low	Moderate	Availability projection (<15yrs); High
Brown Electronics	400-5000-GT2	VHF Communications Contr	Low	Low	Moderate	Availability projection (<15yrs); High
Corbin Instruments	COR-5645	Angle of Attack (AoA) Indica	Low	Low	Low	
Corbin Instruments	COR-5689	Triple Trim Indicator	Low	Low	Low	



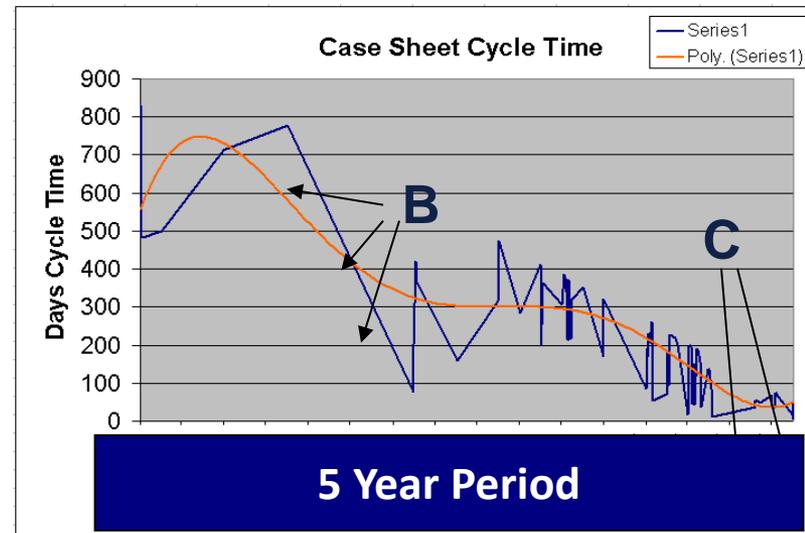
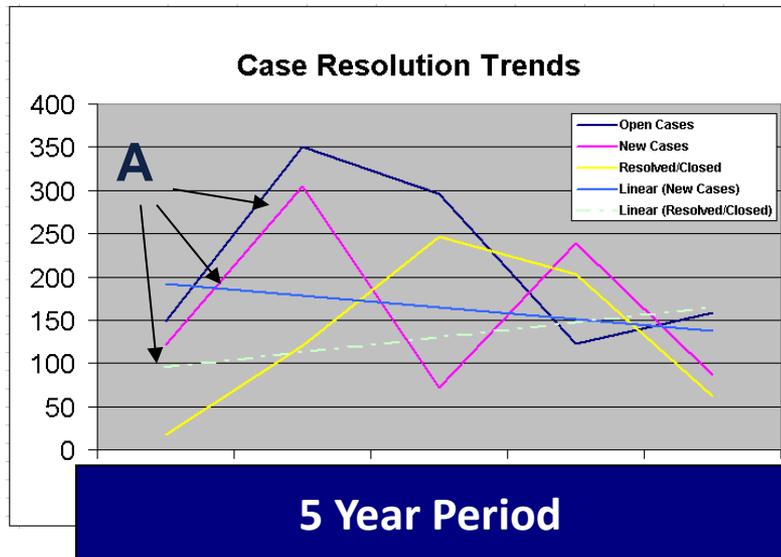
COTS Success Story (T-6A, T-6B CLS Program)

- ◆ The T-6 aircraft trainer platform, including support equipment, has 995 Suppliers
- ◆ Worked with Customer to identify 26 Critical Suppliers who supply a total of 118 critical COTS items.
 - The DMSMS T-6 OWG members have traveled to each critical supplier primary place of business (domestic and foreign) to brief the DMSMS program goal.
 - Team has received all 118 supplier completed COTS Market Surveys
 - Have received 52 supplier Bills of Material for the COTS items.
 - 2K+ Proactive Alerts
 - 72 Case Sheets
 - 54 Health Analysis Reports
- ◆ COTS obsolescence initiatives have resulted in \$5.0M in Cost Avoidance over 2.5 years.
- ◆ T-6 Program awarded DoD Team Achievement Award in 2009 for Outstanding Obsolescence Management
- ◆ Has improved communications and relationships.
- ◆ Has proved to be a win-win for all parties.

BAE Systems Helped Boeing Drive Significant V-22 Productivity Improvements...



- ◆ Over a 5 year period, BAE Systems has been providing Obsolescence Management services, solutions and options on the V-22 Team
 - **A** - 2004 to 2005; helped Boeing recognize the “true” number of high risk items
 - **A** - Increase of “real issues” awareness rose to ~350 “at risk” items
 - **B** - Automated processes developed to not only identify issues; but drive closure
 - **C** - Resolution cycle times reduced from ~800 days to < than 50 days
 - **C** - Improvements Continue
 - **Redesigns for obsolescence virtually eliminated**

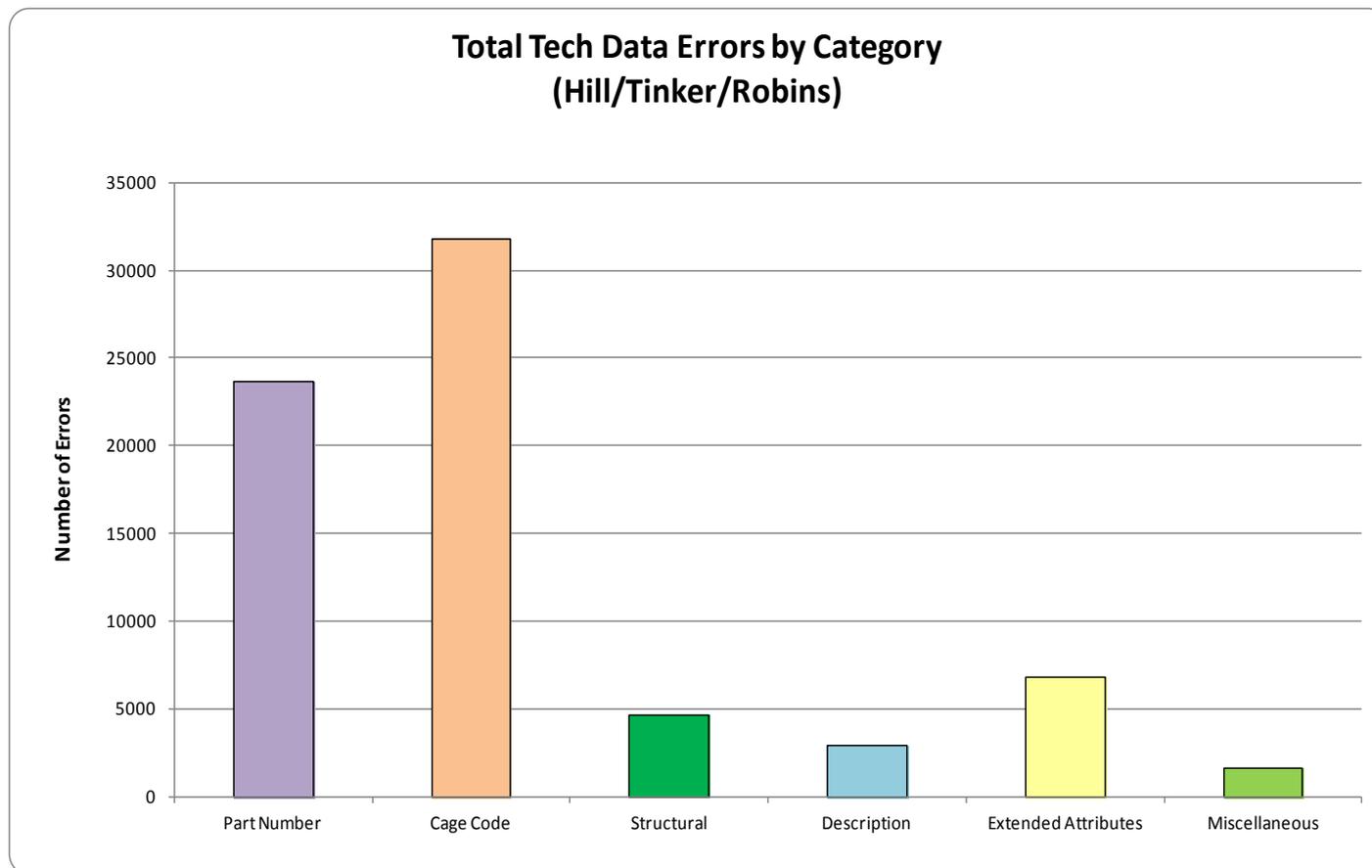


Obsolescence Case Resolutions mean avoidance of costly redesigns



USAF GLSC Program Metrics

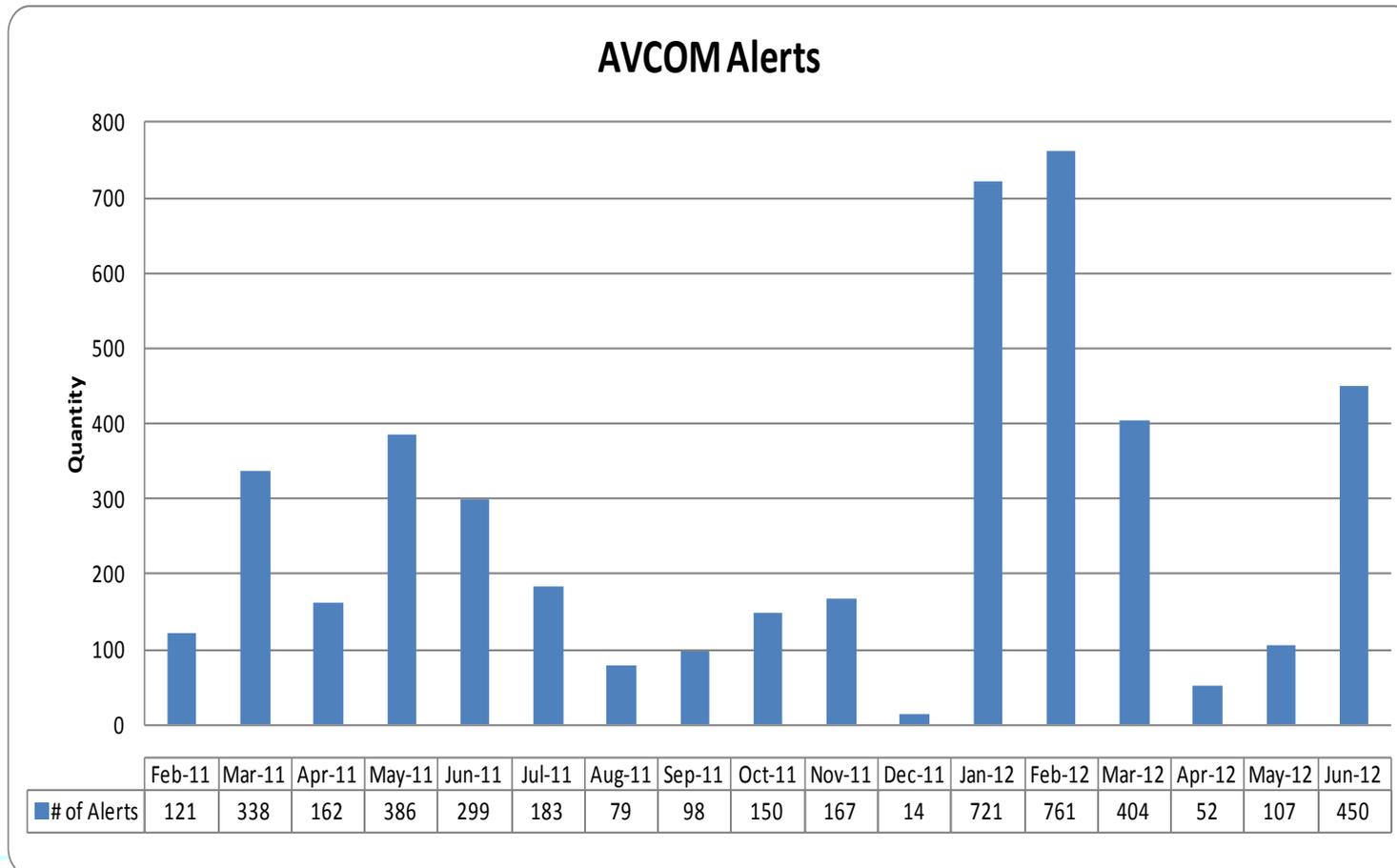
- ◆ BAE Systems reported a total of 71,408 Tech Data errors during the course of this contract





USAF GLSC Program Metrics

- ◆ BAE Systems reported a total of 4,492 part discontinue alerts during the course of this contract.





The AVCOM Advantage

- ◆ Data Quality
 - All data is qualified for accuracy by our ISO approved Quality procedures before being submitted to our database
 - No outsourcing of data from other countries
- ◆ AVCOM manages customers Bill of Materials
 - Goal of 100% coverage
 - Other solutions you “get what you get”
- ◆ Component Resolution Support
 - Supports urgent requests and analysis and resolution capabilities
- ◆ Customized tools to fit program requirements
- ◆ Manage all part types (electronic, mechanical and COTS)
- ◆ Collaborative sharing to support true corporate enterprise capability
- ◆ Case Sheets for tracking issues from identification to mitigation



Grow business with new and existing customers

Key Discriminator for *New Proposals* that Require DMSMS Program and Plan

- “Meets DoD SD-22 DMSMS Plan Requirements”
- Reduces Overall Program Costs
- Reduces Overall Program Risk
- *We will help you write to the Obsolescence requirements*

Customer Buy-In to Cost-Effective Approach

- Virtual Elimination of Re-Designs Due to Obsolescence
- Timely Identification and Resolution of All DMS Issues as They Arise
 - *A Typical Platform will have in Excess of 250 DMS Issues per Year*
- Give customer more “Bang for their Buck”

Provides an Effective Strategy for Performance Based Logistics programs

- Effective Obsolescence Management Over Entire Life Cycle
- Reduces Logistics Footprint
- Increases Availability of Parts > Assemblies > Systems > Platforms

Conserves Engineering Funds for Value Engineering Programs

- Value Engineering / Reliability
- Engineering / Technology Insertion Programs
- Free Engineers Time for Working Real Engineering Activities

Important piece to your business acquisition strategy

Contact Info

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