

Joint Strike Fighter – Lightning II Monthly Assessment Report

Prepared for the Joint Strike Fighter Program Office
Prepared by DCMA Lockheed Martin Fort Worth



October 2009

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Program Summary

Flight Test: Execution of the Flight Test Schedule continues to be a significant Program concern. AF-1 continues to be in a maintenance period as of this report, progressing towards taxi tests and first flight. BF-1 has completed 21 flights as of 2 Oct 09 – ferry to Pax is currently planned for 27 Oct 09. BF-2 will continue finishes/seam validations over the next few weeks. BF-4 IPP/Engine runs are planned to begin month end October.

SDD/LRIP Production Status	(As of 11 Oct 09)
Forward Fuselage	11 – Assembly 16 – Mate/Sub-Systems/Final
Center Fuselage	15 – Assembly/On-Dock 15 – Mate/Sub-Systems/Final
Aft Fuselage	8 – Assembly/On-Dock 14 – Mate/Sub-Systems/Final
Wing	14 – Assembly 14 – Mate/Sub-Systems/Final
EMAS	5 – (AF-9, AF-8, AF-7, AF-6 & AF-4)
Moving Line/Final Assembly	9 – (AF-3, AF-2, CF-1, CJ-1, CG-1, BH-1, CF-2, CF-3 & BF-5)
Run Stations	5 – (BF-2, AF-1, BF-3, BF-4 & BF-1)
Labs	3 – (AG-1, AJ-1 & BG-1)
Deployed	3 – (AG-1, AJ-1, AA-1)

Schedule: A revised Master Schedule (MS 6.2) is now projected for early CY2010 as of this report. Integrated Product Team (IPT) efforts and maturation of an updated Flight Test plan (V16) continues. This will be the Program's sixth schedule revision.

DD-250 Deliveries: As of month end August 2009, the two LRIP 1 aircraft are averaging ~4.5 months behind schedule to their DD-250 delivery dates. AF-6's recent software mitigation efforts have improved aircraft rollout and DD-250 behind schedule conditions slightly, however; future schedule impact to AF-6 DD-250 delivery date as a result of using the aircraft for ISR SDD engine testing may occur. Specific direction has yet to occur as of this report, but the impact is projected to add at least two months to the DD-250 date. LRIP 2 aircraft overall are averaging ~4 months behind. Analysis of month-end August data indicates start and finish variance increases to the baseline in the last few LRIP 2 aircraft builds, particularly in the Forward Fuselage area. LRIP deliveries are not projected to be met until sometime in LRIP 3, and are largely dependent upon Wing-at-Mate overlap elimination, timely availability of tooling, change integration, part deliveries and alignment of EBOM, MBOM and As-Built data. The Maintain LRIP Aircraft Delivery section of this report provides more detail of LRIP build activities.

(Center): continues to work to Master Schedule 6.1 Issue5B and Shop Operating Plan (dated 31 Jul 09). AF-10 shipped to LM Aero on time to this schedule on 28 Sep 09. The

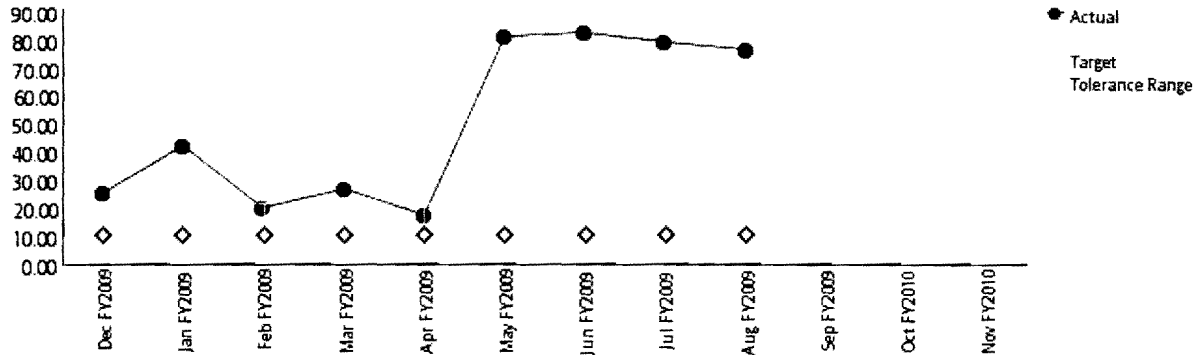
Report Scope

The Joint Strike Fighter – Lighting II Monthly Assessment Report (MAR) is focused on reporting the status of Customer Outcomes and associated Performance Indicators identified in the Memorandum of Agreement with the JSF Program Office. Interdisciplinary teaming between DCMA personnel is used to ensure customer outcomes are ascertained; risks to outcomes are identified and assessed.

Title	Performance Indicator	Metric Rating Criteria	Rating
Maintain LRIP Aircraft Delivery Rate	Maintain LRIP aircraft delivery to within 10 M-days of contract delivery date	Green: ≤10 M-day variance to delivery date Yellow: 11 – 21 M-day variance Red: >21 M-day variance to contract delivery date	
Maintain Cost and Schedule	Resource requirements are aligned in support of funding and budget allocations. IEAC data and projections match actual performance within + / - 10% of contractors budget at completion	Green: 1.0 to 0.95 variance (5%) Yellow: 0.95 to 0.90 variance (5% to 10%) Red: 0.90 or greater variance (>10%)	G
Reduce Schedule Variation	Reduce the average Wing touch labor variance "at move to mate" to within 10% by SDD completion	Green: < -10% Yellow: -10% to -15% Red: > -15%	Y
Non-Conformance Reduction	10% reduction in MRB discrepancies per year	Green: < the goal of 21 Yellow: within 10% of the goal Red: >10% above the goal of 21	G
Improve Software Productivity	[REDACTED]	[REDACTED]	G
Improve Minor Variance	Maintain at least a 95% correct classification rate of variances	Green: % of properly classified minor variances is ≥95% Yellow: 90% up to but not including 95% Red: <90%	G
Improve FCA/PCA	Ensure that at least 95% of systems reviewed in interim FCA/PCAs meet the design requirements	Green: % of parts meeting design requirements is ≥ 95% Yellow: 90-94% Red: <90%	G
Maintain Assist Audit Request Timing	Process contractor/PCO requests for domestic/international Assist Audits within 2 business days 85% of the time	Green: >84% Yellow: 75%-84% Red: <75%	G
Maintain FAR Requests for Contract Closeout	Maintain 94% contract closeout actions within the Federal Acquisition Regulation (FAR) mandated timeframes	Green: >93% Yellow: 85%-93% Red: <85%	G
Reduce Cancelling Funds	90% of canceling funds will be billed and/or de-obligated before the end of the fiscal year	Green: >89% Yellow: 80%-89% Red: <80%	

Maintain LRIP Aircraft Delivery Rate

NSF198AJ17: Description: Maintain LRIP aircraft delivery to within 10 M-days of contract delivery date. The Maintain LRIP Delivery Rate is an Integrated Master Schedule (IMS) based metric of the monthly average (+/-) float manufacturing days (M-days) of all reported LRIP aircraft to their contract delivery schedule (DD-250). Goal is to maintain delivery of LRIP aircraft to within 10 M-days of contract delivery date. **Note: Float M-days are entered as positive values, but represent behind schedule status.** Monthly IMS LRIP CDRL data is directly used as data source. Data shall be updated NLT the 20th of each month. Total Float of all reported aircraft that have passed their baseline start date will be averaged monthly for metric. Green: ≤10 M-day variance to delivery date, Yellow: 11 – 21 M-day variance, Red: >21 M-day variance to contract delivery date.



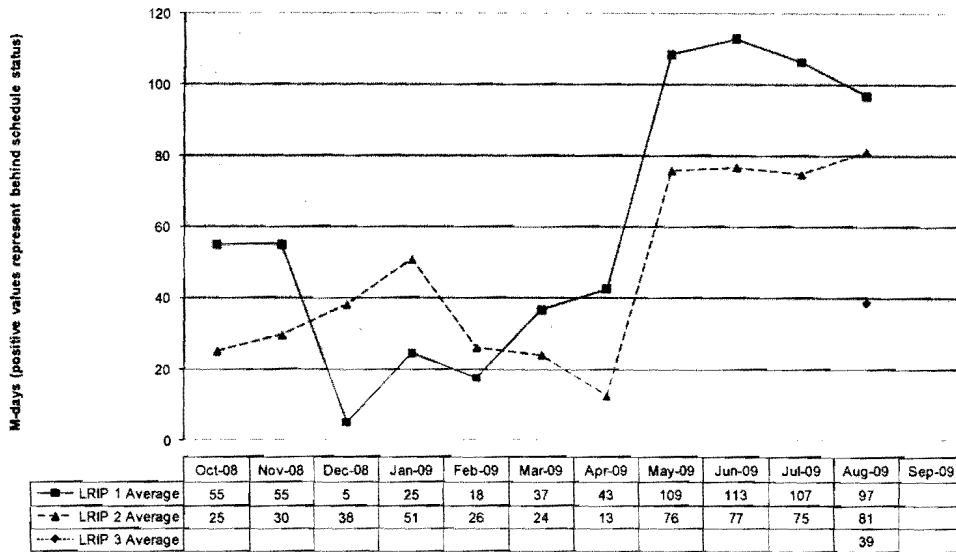
Metric Status: Red

Trend: No appreciable trend since last report.

Summary of Metric Status: Metric is -76 Mdays for month end August. This month's average consists of all LRIP 1 and 2 aircraft, and three LRIP 3 aircraft.

Root Causes: LRIP 1 – Month end August AF-6 driver is J834-1 assembly jig available from SDD (CJ-1 unload). AF-7 driver is [REDACTED] structural mate. The most recent LRIP 1 Schedule Risk Assessment (SRA) indicates AF-6 has a 50% probability of being 85 Mdays late to DD250 date, while AF-7 has a 50% probability of being 116 Mdays late. AF-6's projected Mate finish did improve from the June SRA prediction, and recent software mitigation efforts have improved aircraft rollout and DD-250 behind schedule conditions slightly. Future schedule impact to AF-6 DD-250 delivery date as a result of using the aircraft for ISR SDD engine testing may occur. Specific direction has yet to occur as of this report. LRIP 2 – As of month end August, all LRIP 2 Forward Fuselage's, Center Fuselage's and Wing's are in work. [REDACTED] has the first nine LRIP 2 Aft Fuselages in work and are currently on track to be back on MS 6.1 schedule by AF-13. The most recent LRIP 2 SRA indicates the primary drivers impacting the LRIP 2 schedule have been EMAS availability and continued part shortages. The first two LRIP 2 aircraft are loaded in the EMAS, with the third (AF-10), scheduled to load in the EMAS once the last SDD aircraft moves out. Analysis of month-end August data indicates start and finish variance increases to the baseline in the last few LRIP 2 aircraft builds, particularly in the Forward Fuselage area. Major suppliers identified in the LRIP 2 IBR have been added to the IMS and are showing up as schedule drivers in some aircraft. LM Aero reports that the added visibility of shortages in the IMS has proven helpful and late supplier deliveries are being mitigated as soon as they become apparent.

LRIP Breakdown - DD-250 Performance (M-Days)
2009 CDRLs



█ The Aft Fuselage for AF-12 shipped on 30 Sep 09. AF-13 Aft is projected to ship the last week of October as of this report.

█ LRIP 2 – LM Aero has directed █ to delay delivery of Center Fuselages in an effort to align with Mate activities – risk to █ delivery schedule is assessed as low. There has been an increase in the amount of laser shots required in all SWBS's, and █ continue to be a watch item in final assembly. While many parts are on the critical list, none are causing any significant delays to shipping dates. LRIP 3 – AF-15 loaded on 19 Aug 09. Risk to schedule for LRIP 3 is low in this early phase. █ anticipates parts availability for LRIP 3 will be drastically improved compared with earlier LRIP builds, with LRIP 3 expected to be on schedule. No parts are in the critical category at this time for LRIP 3.

Contractor Actions: LM Aero – Mitigation activities such as the use of overtime, span adjustments, and out of station installations for late parts continues. Another revised Program schedule (currently called MS 6.2) will occur. This will be the sixth schedule revision since Program inception. █ is working to mature the LRIP variance process with LM Aero. For AF-10, 33 major variances were submitted to LM Aero for approval.

DCMA Actions: DCMA LMFW P/SI, █ Production and █ D&I Team members continue to mature performance indicator metrics to assess key build event progress on LRIP aircraft. These metrics utilize data from the IMS and various shop floor systems. DCMA █ is reviewing approved change requests and the █ technical issues database for potential variance conditions. DCMA █ will reconcile this list with █ to ensure all variances have been documented for each LRIP aircraft.

Estimate when metric will achieve goal: LRIP deliveries are not projected to be met until sometime in LRIP 3, and are largely dependent upon Wing-at-Mate overlap elimination, timely availability of tooling, change integration, part deliveries and alignment of EBOM, MBOM and As-Built data.

The table below includes the total SCOPs planned for LRIP aircraft, the number of SCOPs completed as of the reporting period, the percentage of SCOPs completed relating to the total planned for the specific test article and the percentage of testing completed prior to test article rollout from the factory to the flight line (Rollout).

SCOP testing starts at the trailing end of SWBS 240. The current IMS baseline finish dates for AF-6 through AF-13 are annotated below. New effectivities will be added once planning against those aircraft is formally released.

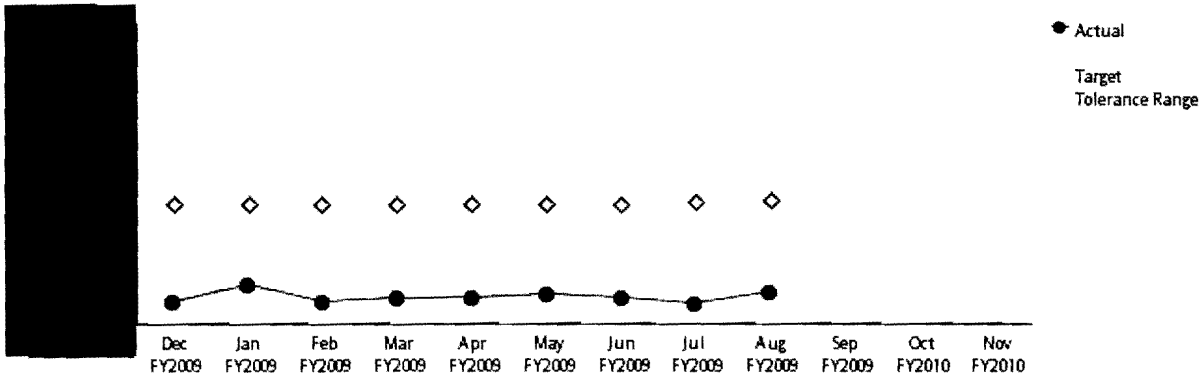
SCOP Completions per Aircraft (A/C)

Aircraft Effectivity	Baseline Finish Date (SWBS 240)	Total SCOPs Planned	Planning Formally Released	SCOP Completed	%Complete (Total A/C)	% Complete prior to Rollout
AF-6		96	40	14	14.58%	
AF-7		96	40	7	7.29%	27 Oct 09
AF-8		96	40	4	4.17%	24 Nov 09
AF-9		96	40	5	5.21%	4 Jan 10
AF-10		96	28	5	5.21%	1 Feb 10
AF-11		96	27	-	-	1 Mar 10
AF-12		96	27	-	-	29 Mar 10
AF-13		96	5	-	-	26 Apr 10

Currently 105 SCOPs and 33 AEI's (Aerospace Equipment Instructions) are formally released against above aircraft.

Maintain Cost and Schedule

NSF198AJ08: Description: Resource requirements are aligned in support of funding and budget allocations. IEAC data and projections match actual performance within +/- 10% of contractors budget at completion. DCMA Independent EAC is measured against the prime contractor's BAC. DCMA includes risk, pressures, cost and schedule variances as compared to LM Aero BAC. The source of EV data comes from the monthly JSF SDD Cost Performance Report which lags by 1 month. Metric is updated in Metrics Manager as soon as data is received from contractor (approximately 45-60 days after end-of-month). This is represented as the contractor's BAC as the Numerator divided by DCMA's IEAC as the Denominator - with a 10 percent tolerance band. Green: 1.0 to 0.95 variance (5%), Yellow: 0.95 to 0.90 variance (5% to 10%), Red: 0.90 or greater variance (>10%).



Metric Status: Green

Trend: No appreciable trend since last report.

Lockheed Martin is now reporting to an Over Target Baseline of [redacted] reported in the August 2009 Cost Performance Report (CPR). DCMA IEAC is [redacted] for the SDD contract. This DCMA IEAC is based upon the August 2009 CPR report. This increase of [redacted] comes mainly from Production Operations [redacted] and cost growth at [redacted].

The increased IEAC in [redacted] Production Operations is attributable to decreased performance (SPI from 0.966 to 0.924 and CPI from 0.933 to 0.886). The cost growth at [redacted] is due to increase of Threats and Pressures as well as Major B Changes [redacted].

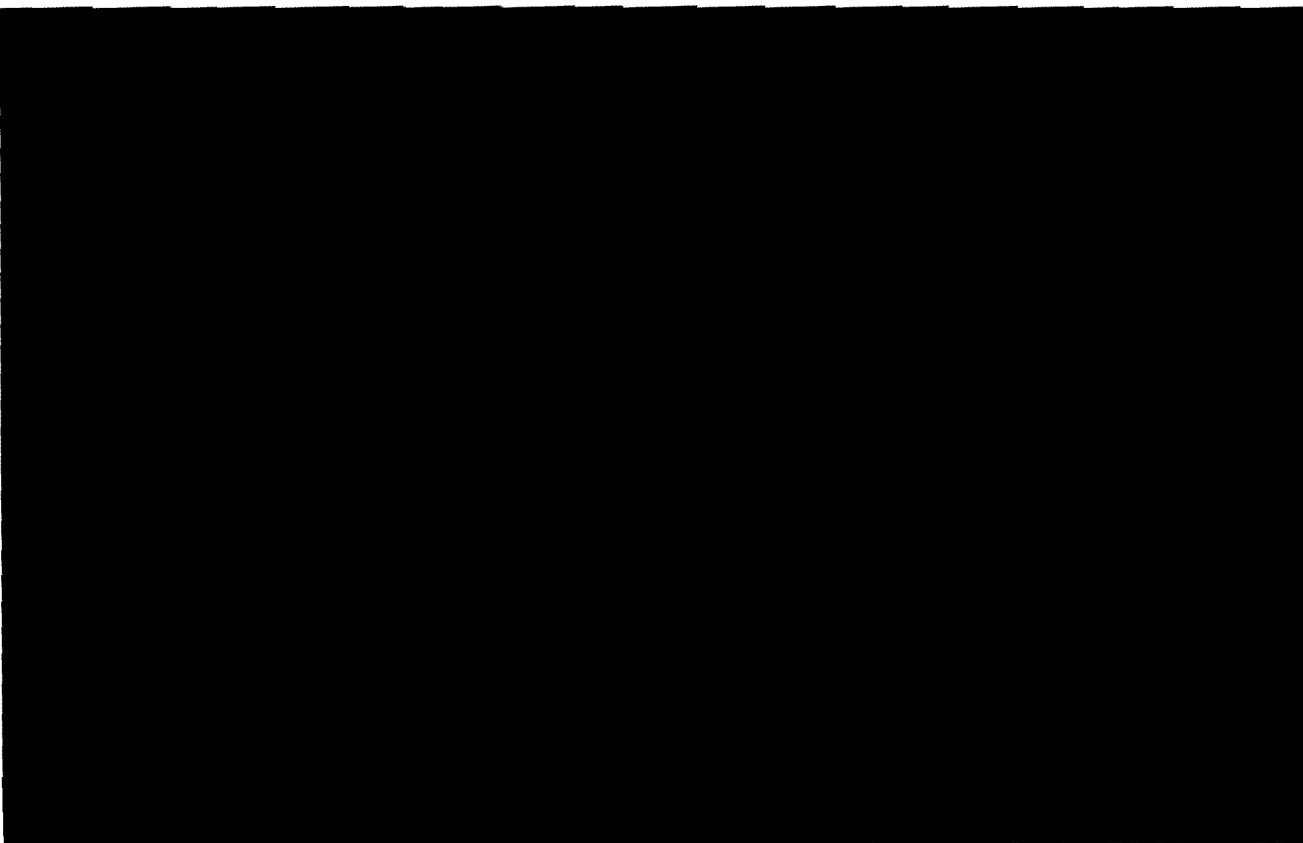
LM Aero has expended an average of [REDACTED] per month over the last six months. Assuming a continuance of this expenditure rate, DCMA projects the existing SDD budget with OTB will be depleted in FY2011, [REDACTED]

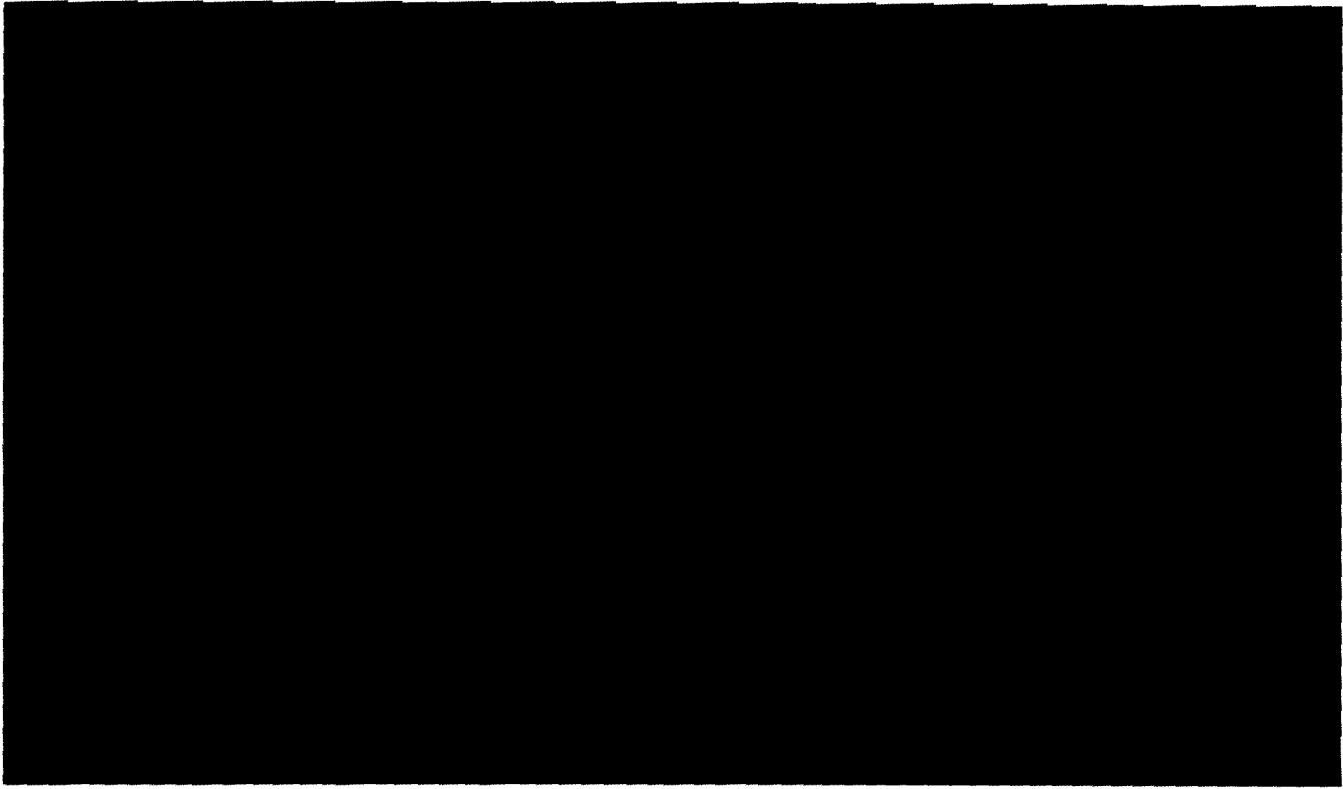
LM Aero has prepared EAC8 Cycle 1 incorporating DCROM base of potential threats and pressures in the July 09 CPR report. The EAC8 has no MR remaining, further straining the financial management of the Program. The EAC8 is under DCMA review to verify that potential suppliers' cost growth, future TCRs, etc., are considered in the DCROM. The LM Aero's EAC8 projected MR is zero and therefore will be unavailable to offset any risks remaining in flight testing and software coding. Without that reserve, and assuming the same efficiencies, the Program is likely to require additional funding for completion of the SDD contract.

Using the Standard formula based on cumulative SPI and CPI (since replan) yields an SDD increase of [REDACTED] over current LM Aero BAC. With the addition of risk factors such as, Suppliers' cost growth, Late-to-Need parts, Schedule Impacts, Production Delays, etc DCMA's EAC is [REDACTED] against LM Aero BAC of [REDACTED]. Thus the DCMA's IEAC is [REDACTED] than LM Aero's BAC or [REDACTED] higher than LM Aero's EAC. The DCMA's IEAC includes the threats and pressures at [REDACTED]

[REDACTED] The repair/replacement costs have been determined to be close to [REDACTED]

The graphs below illustrate the DCMA's past projections of IEAC against LM Aero's BAC and LRE.





The August 2009 SDD/LRIP cost summary and Program status is as follows:

SDD	BAC	LM EAC CPR	DCMA IEAC
Performance Measurement Baseline (PMB)	[REDACTED]	[REDACTED]	[REDACTED]
Management Reserve (MR)	[REDACTED]	[REDACTED]	[REDACTED]
Total:	[REDACTED]	[REDACTED]	[REDACTED]

LRIP 1	BAC	LM EAC CPR	DCMA IEAC
Performance Measurement Baseline (PMB)	[REDACTED]	[REDACTED]	[REDACTED]
Management Reserve (MR)	[REDACTED]	[REDACTED]	[REDACTED]
Total:	[REDACTED]	[REDACTED]	[REDACTED]

LRIP 2	BAC	LM EAC CPR	DCMA IEAC
Performance Measurement Baseline (PMB)	[REDACTED]	[REDACTED]	[REDACTED]
Management Reserve (MR)	[REDACTED]	[REDACTED]	[REDACTED]
Total:	[REDACTED]	[REDACTED]	[REDACTED]

LRIP 3	BAC	LM EAC CPR	DCMA IEAC
Performance Measurement Baseline (PMB)			
Management Reserve (MR)			
Total:			

Budget Baseline and EAC Summaries

Contract Data	KT 1	KT 2	KT 3	KT 4
Contract #	N00019-02-C-3002	N00019-06-C-0291	N00019-07-C-0097	N00019-08-C-0028
Name	JSF SDD	LRIP 1	LRIP 2	LRIP 3
Contract Type	Cost Plus Award Fee	Cost Plus Award Fee	Cost Plus Award Fee	Cost Plus Award Fee
Obligated Amount				
ULO				
Performance Start/End	Oct 2001/Oct 2014	May 2007/Feb2010	Apr 2010/Feb 2011	Mar 2011/Dec 2011

Primary Trip Wires				Secondary Trip Wires				
System Indicator	Baseline Indicator	Cum BEI	SPI	Cum CPLI	CPI	CPI/TCPI 10%	Contract Mods 10%	Baseline Revs 5%
			0.973	0.92	0.951	8.4%		N/A

Primary Trip Wires –

- (a) System Indicator: Please see EV section of report.
- (b) Baseline Indicators: A baseline assessment shows the contractors BAC and EAC to be optimistic. To complete the contract within the CBB, the contractor needs to be about 8.4 percent more efficient. The BAC has increased by 40% since the start up in Oct of 2001. The cost growth is likely to increase due to inherent engineering risks in the first versions of STOVL and CV aircraft.

Secondary Trip Wires –

- SDD Baseline Execution Index (BEI): Cumulative tasks from October 2001 thru September 2009: Cum BEI = 144,267 Completed Tasks/147,970 Planned Tasks = 0.97
- SDD Monthly (September 2009) Tasks: 338 Completed Tasks vs. 869 Baselined to Complete Tasks
- SPI (since replan) = BCWP/BCWS= 0.973
- SDD CPLI= (1263 + (106)/1263 = 0.92 (Time Now = 27 Sep 09)
- CPI (since replan) = BCWP/ACWP= 0.951
- CPI/TCPI= 0.951/1.038=.916
- Contracts Mods – (BAC now)/original BAC 10/01= [redacted] =1.40

The DCMA Risk Rating for EVMS at the total Program level is rated green using the agreed to parameter of VAC (-4.072%).

Similarly, the TCPI_{EAC} is different when using the DCMA IEAC versus the contractor’s EAC:

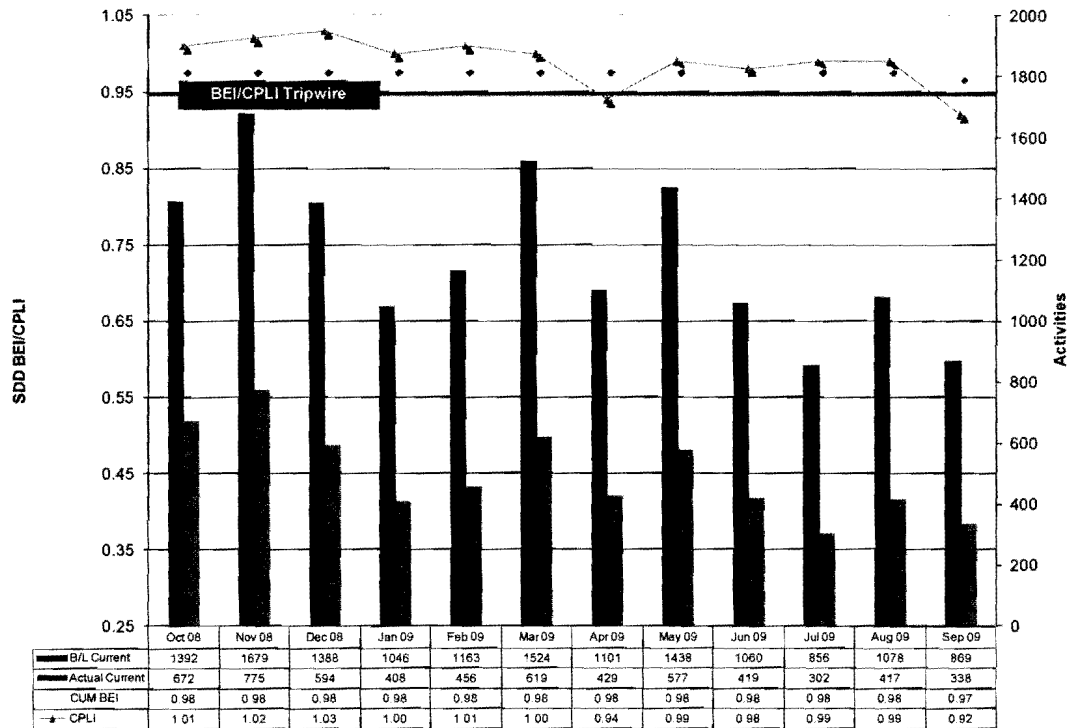
$$TCPI_{DCMA\ IEAC} = 0.894$$

$$TCPI_{LM\ EAC} = 1.038$$

NSF198AJ08 Sub-Metrics: Description: The SDD Baseline Execution Index (BEI) metric is an Integrated Master Schedule (IMS) based metric that calculates the efficiency with which actual work has been accomplished when measured against the baseline. The BEI provides insight into the realism of Program cost, resource, and schedule estimates. For BEI, an index of <.95 is used as a warning indication of schedule execution underperformance. Goal is to achieve BEI values .95. Cumulative BEI equals actual tasks/activities completed divided by the baseline total tasks/activities.

The SDD Critical Path Length Index (CPLI) indicates whether or not the Program schedule can be completed on time. This is an Integrated Master Schedule (IMS) based metric that utilizes the critical path methodology definition being: the longest, continuous sequence of tasks through the network schedule with the least amount of float, from contract start to contract completion. After contract start, the critical path is always measured from "time now" until contract completion. For CPLI, an index of <.95 is used as a warning indication that the Program will not complete on time. Goal is to maintain CPLI values .95. Critical Path Length Index (CPLI) equals the Critical Path Length (CPL) plus or minus the Total Float (TF) divided by the Critical Path Length (CPL). The target efficiency ratio for both metrics is 1.00. An index greater than 1.00 is favorable, and an index less than 1.00 is unfavorable. .95 = Green .90 to <.95 = Yellow <.90 = Red

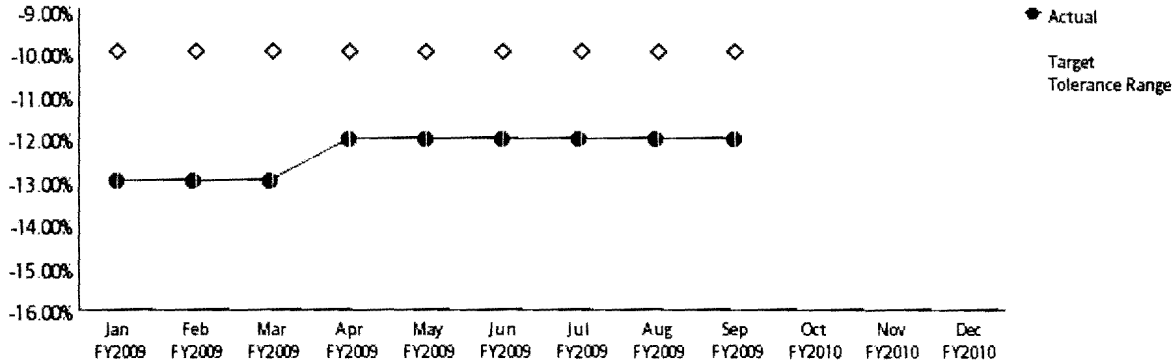
SDD Baseline Current vs. Actual Current Finishes/Month
Program Cum BEI / CPLI Trend



Cumulative SDD Program BEI is rated Green at 0.97, while Cum CPLI is Yellow at .92 for month end September 2009. The CPLI value has deteriorated as a result of increased duration in Block 2 software development due to lack of resources. The software development team is evaluating Block 2 schedule mitigation opportunities. Monthly planned versus actual performance continues to average an approximate 40% completion rate. MS 6.1 baseline replan dates were incorporated into the IMS month-end May 2008. A new Master Schedule (MS 6.2) is currently projected for early CY2010.

Reduce Schedule Variation

NSF198AJ05: Description: Reduce the average Wing touch labor variance "at move to Mate" to within 10% by SDD completion. In addition to monthly performance indicators, linear trend lines are used to project out subsequent Wing builds that have not moved to mate yet – projection is used to access current and predict future Wing variance performance. Metric will be updated NLT the 20th of the following month. Green: <-10% variance, Yellow: -10% and -15% variance, Red: >-15% variance.



Metric Status: Yellow – Performance Indicator is rated Yellow this period with a current overall Wing average touch labor variance to schedule at -12%.

Trend: No Change

Chart 1 (below) is a breakout of the Wings which build up the -12% variation average metric. All SDD aircraft Wings have made it through the Wing build cycle. The Wing has reduced their out of station tasks travelled to Mate. The last SDD aircraft Wing (AF-4) moved to Mate at 92% complete even though it stayed in Wing build longer. This is very important since history has shown that Mate and Final Assembly performance has been significantly affected by the condition (maturity) and timing of the Wing delivery. This has contributed to the overall average schedule variance reduction. No additions have been incorporated into the chart this month due to data being unavailable at the time of this report.

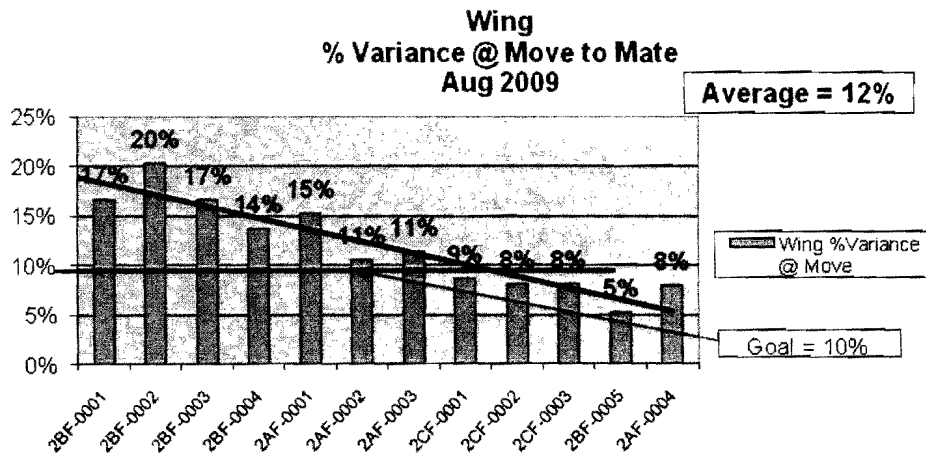


Chart 1

Chart 2 (sub-metric) below is a breakout of some of the aircraft that have either gone through or are in Mate and Final Assembly along with their associated % variance to schedule. Mate thru Delivery build performances continue to be under pressure to meet schedule requirements.

Mate's cost and schedule variances continue to be impacted by critical part shortages, high change traffic, difficult/inefficient work (out-of-station/out-of-sequence, part and tool locating via Metrology, integration

of flight test instrumentation) BOM accuracy, late and/or constant rework of planning and tooling issues/availability. Some data adapted from Program Format 5 CPR (July 2009) report.

Both our charts use SPI data for variance projections on Wings/aircraft that have not moved to Mate/Flight Line. Per Lockheed Martin, "The data used in the charts is from shop floor systems and is not auditable data or official EV data. It is for status purposes only."

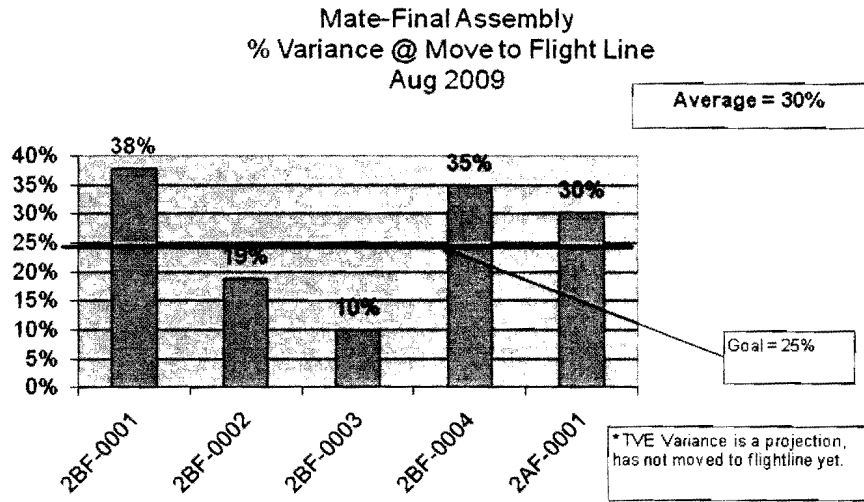


Chart 2

Root Causes: Schedule continues to be impacted by unplanned work caused by out of station tasks. The shortage of [redacted] tubes is driving schedule and inefficient build process. These shortages do not support the in-station work plan and will cause an increase of out-of-station work and cost. DCMA continues to be concerned with the amount of out-of-station tasks traveling to Mate and the flight line. In order to have a positive impact on overall throughput, LM Aero must find a way to simultaneously continue to reduce out-of-station tasks and improve their ability to start and finish on plan.

Contractor Actions: The WAM (Wing at Mate) Team is working with the Mate team to mitigate the planned out of station work schedule impact to Mate through communication of the impacts to the daily assigned tasks and being able to capture these in crew boards for Wing sequence issues. Also LM Aero's plans to recover schedule include improving on-time component starts, decrease out-of-station inefficiencies by driving increased completion at move and the elimination of the wing/mate overlap tasks.

DCMA Actions: Regular interface with LM Aero project teams to: assess progress on recovery initiatives look for process review or corrective action opportunities, monitor impacts on Mate, update metrics and report progress in monthly report to customers.

Estimate when PC will achieve goal: LM Aero has a plan in place to eliminate Wing at Mate overlap by LRIP 3 (BF-13 target).

The following table depicts the SCOP completions per test article/aircraft. The table includes the total SCOPs planned per aircraft, the number of SCOPs completed as of this reporting period (6 Oct 09), the percentage of SCOPs completed relating to the total planned for the specific test article and the percentage of testing completed prior to test article rollout from the factory to the Fuel Barn. No aircraft have moved from the factory during this reporting period.

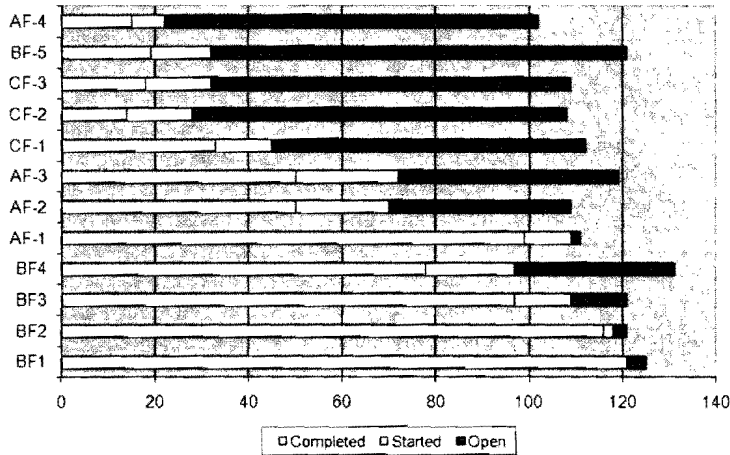
SCOP Completions per Test Article / Aircraft (A/C)

Test Article	Total SCOPs Planned	SCOP Completed	%Complete (Total A/C)	% Complete prior to Rollout
BF-1	125	121	96.80%	28.0% (18 Dec 07)
BF-2	121 ⁽¹⁾	116	95.87%	51.6% (16 Aug 08)
BF-3	121	97	80.17%	61.98%(2 July 09)
BF-4	131 ⁽²⁾	78	59.54%	30.8% (21 Jan 09)
AF-1	111 ⁽²⁾	99	89.19%	38.1% (5 Feb 09)
AF-2	109	50	45.87%	
AF-3	119	50	42.02%	
CF-1	112 ⁽¹⁾	33	29.46%	
CF-2	108	14	12.96%	
CF-3	109 ⁽¹⁾	18	16.51%	
BF-5	121 ⁽¹⁾	19	15.70%	
AF-4	102	15	14.71%	

¹ Newly released SCOPs added to effectivity during this reporting period
² SCOPs removed from the effectivity during this reporting period

This chart depicts the current SCOP completion status for all flight test articles in SDD. List is organized by current firing order as depicted in Master Schedule 6.1.

SDD SCOP Completions - Aircraft



The following table is provided to track Wing specific SCOP testing prior to move to mate and percentage of testing completed prior to test article moving from the Factory Floor to the Fuel Barn.

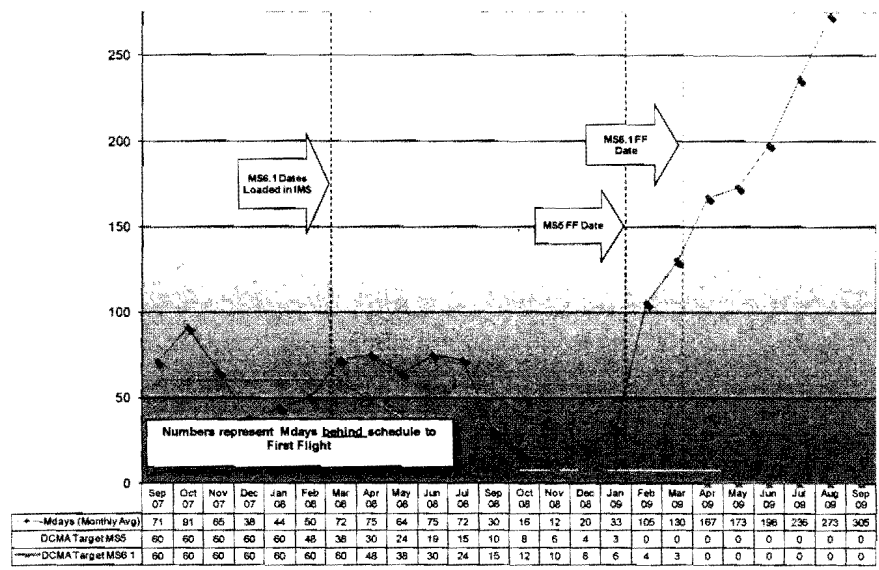
SCOP Completions on Wing Assemblies

Test Article	Total SCOPs Planned to Date	%Complete (No. SCOPs Completed)	% Complete Prior to Rollout	Avg Days Behind MS 6.1 (for Completed Tests)
BF-1	15	100% (15)	40% (6)	-170
BF-2	18	100%(18)	83.3% (15)	-216
BF-3	18	100%(18)	83.3%(15)	-314
BF-4	19	73.7%(14)	42.1% (8)	-235
AF-1	14	100.0%(14)	68.8% (11)	-217
AF-2	14	92.9%(13)	-	-260
AF-3	16	81.3%(13)	-	-170
CF-1	18	66.7%(12)	-	-184
CF-2	17	23.5%(4)	-	-102*
CF-3	18	27.8%(5)	-	-139*
BF-5	18	27.8%(5)	-	-144*
AF-4	17	29.4%(5)	-	-90*

¹ New wing specific SCOPs added this reporting period
 * Wing testing is still in-work. Travel work from [redacted] will be in effect until LRIP 2?. Value is not final until all testing is completed.

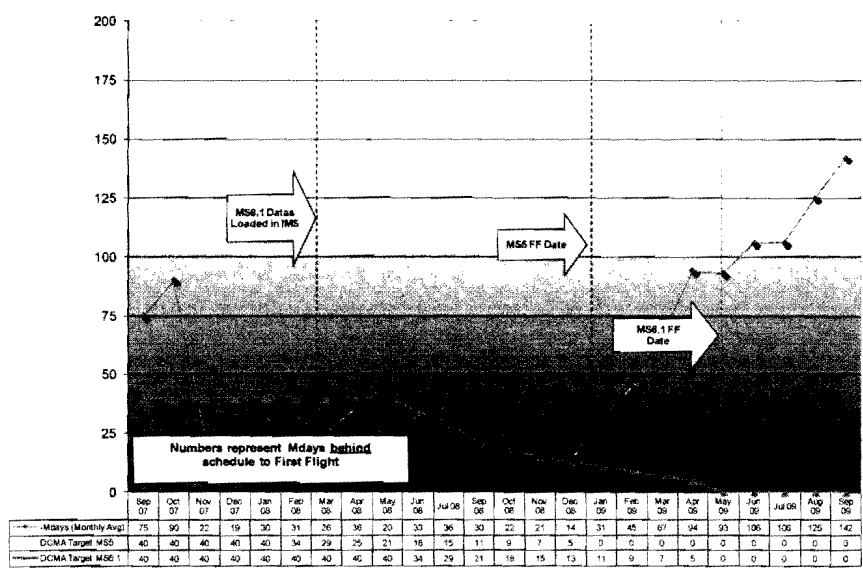
NSF198AJ05 Sub-Metric: Description: Reduce monthly average of negative float manufacturing days (Mdays) of key variant First Flight dates over baseline aircraft's (AA-1) delayed (~80Mdays) First Flight date. BF-4 (STOVL - Mission Systems Article) targets a 50% reduction in negative float over baseline, incorporating a 20% reduction each month in negative float Mdays, AF-1 (CTOL - Optimized vs. AA-1) targets a 50% reduction in negative float over baseline, incorporating a 15% reduction each month in negative float Mdays, 12 months out from Master Schedule First Flight date. (Note: Mdays are displayed as positive values, but represent behind schedule status).

BF-4 First Flight (24 March 09 - MS6.1) Total Slack Trend
MS6.1 dates in IMS 9 Mar 08



BF-4 sub-metric is rated Red, with a September average of 304 Mdays late calculated to MS 6.1 first flight date of 24 Mar 09. Projected first flight is January 2010 as of 11 Oct 09.

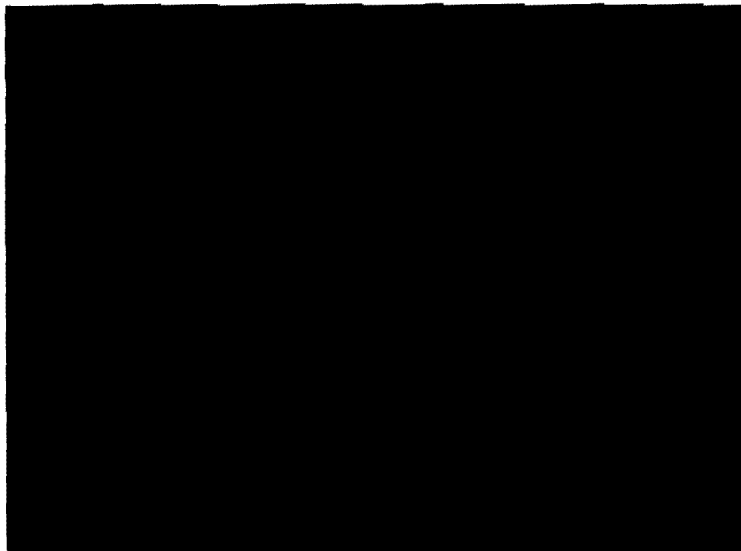
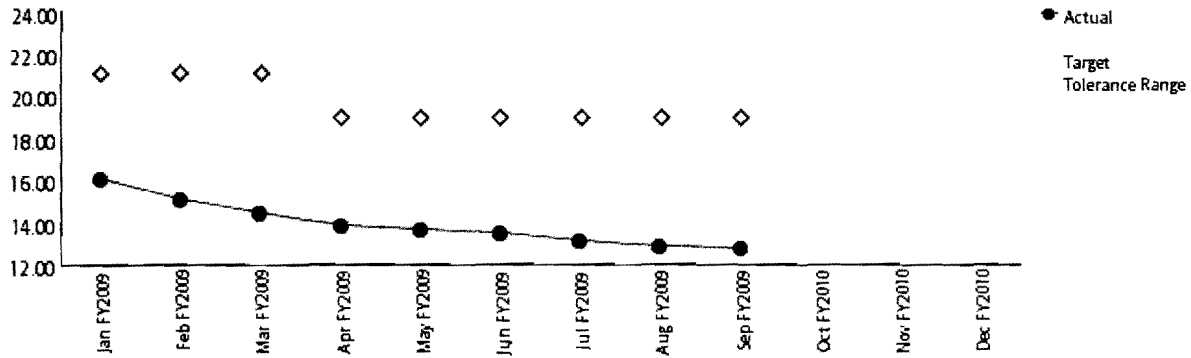
AF-1 First Flight (14 May 09 - MS6.1) Total Slack Trend
MS6.1 dates in IMS 9 Mar 08



AF-1 sub-metric is rated Red, with a September average of 142 Mdays late to first flight date of 14 May 09. Projected first flight is 28 Oct 09 as of 11 Oct 09.

Non-Conformance Reduction

NSF198AJ06: Description: 10% reduction in MRB discrepancies per year. Metric shows the average number of MR defects per 1000 actual manufacturing hours. The goal is to reduce MR defects per 1000 actual manufacturing hours by 10% per year. Metric is based on contractor provided data that is collected updated in metrics manager NLT the 20th of each month and averaged against all prior months to illustrate normalized trend. Green: <goal of 21, Yellow: within 10% of the goal, Red: >10% above the goal of 21.



Metric Status: Green

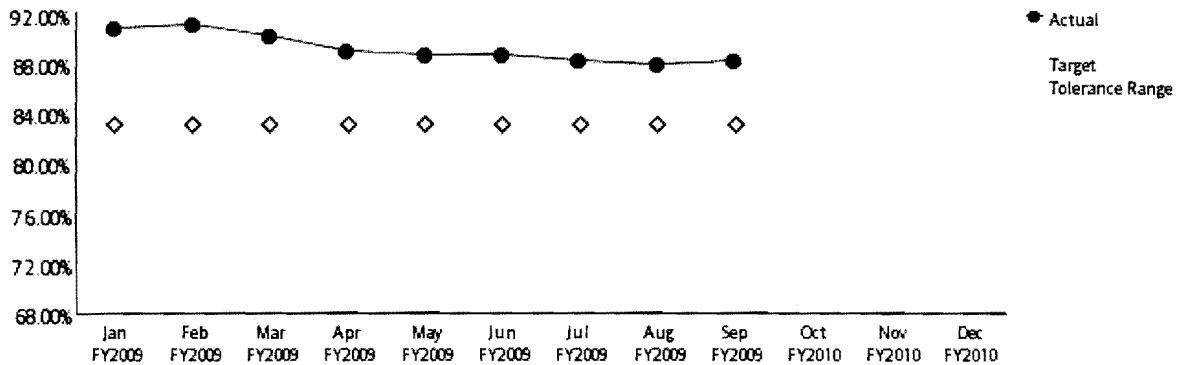
Trend: Improving with approximately [REDACTED]

Summary of Metric Status: Metric illustrates improving trend – maintained for the last 12 months.

Contractor Actions: LM Aero has reduced their goal for MR actions for 2009, meeting the goal so far this year.

DCMA Actions: Reducing the goal to reflect an effort to further reduce the amount of MRB actions for this year. DCMA is evaluating the new contractor goal to see if a more than 10% reduction in MRB actions is warranted.

Improve Software Productivity



Trend: No appreciable trend since last report.

Summary of Metric Status: Current performance is exceeding our target of 83%.

Root Causes: DCMA LMFV performed a risk assessment for this revised metric. Process areas of focus include Software Product Evaluation (SPE) and Interface Work Package (IWP) processes. Another focus area is improved communication through consistent use of developmental software configuration management practices.

Contractor Actions: The contractor's process includes process improvement activities (Kaizens, Tiger Team Efforts, Value Stream Mapping, Lean Events, etc).

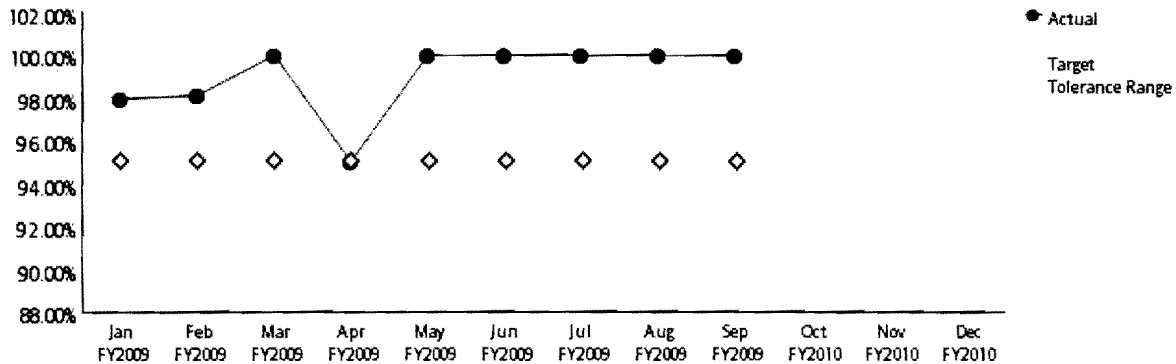
DCMA Actions: DCMA was able to witness an SDL/ADL. DCMA met internally to discuss scheduling of the first Software Joint Process Review (JPR). The exact focus area of the JPR remains undecided. Members will review potential process areas to familiarize themselves prior to the next meeting with the contractor.

DCMA [REDACTED] Prognostics and Health Management (PHM) Requirements [REDACTED] – DCMA has noted that the [REDACTED] staff has been reduced. Currently there are more RWPs to be worked than there are persons to work them (not including the associated SPARs and new efforts. The potential exists for a 10 month delay in PHM Software although efforts will be made to reduce this time by performing as many parallel activities as possible. An additional mitigation plan may come from LM Aero in the form of a 6.2 schedule plan which pushes delivery requirements slightly to the right.

DCMA [REDACTED] – External Communications Domain] – Block 2.0 phase III requirements reported to be behind schedule may impact Block 2 deliveries. This status has not changed in the last few weeks suggesting some delivery schedule impact is very likely.

Improve Minor Variance

NSF198AJ19: Description: Maintain at least a 95% correct classification rate of variances. Cumulative number of minor variances classified correctly divided by the cumulative number of minor variances reviewed. Metric should be updated at the end of each month but no later than the twentieth of the following month. Green: % of properly classified minor variances is $\geq 95\%$, Yellow: 90% up to but not including 95%, Red: $< 90\%$.



Metric Status: Green

Trend: No Change

Summary of Metric Status: The contractor had a correct classification rate of 100% this month.

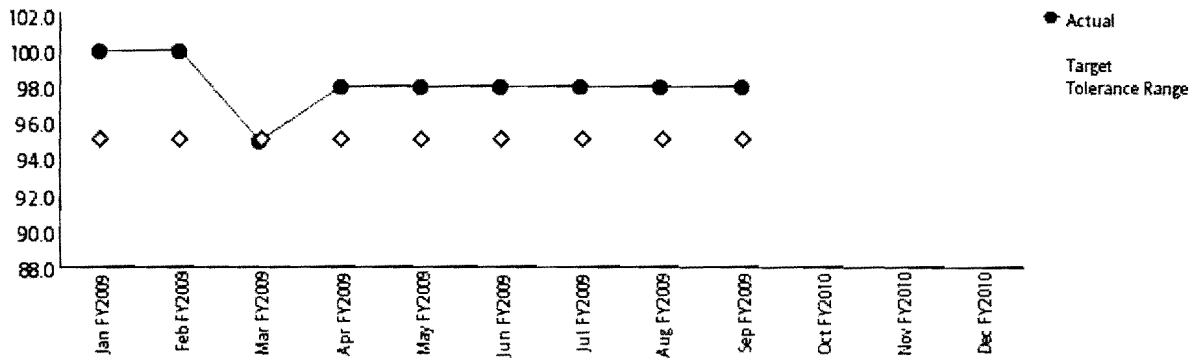
Root Causes: No root causes identified at this time.

Contractor Actions: No contractor actions required at this time.

DCMA Actions: None at this time other than to continue to review Minor Variances for correct classifications. Ensure the contractor takes the necessary corrective actions to preclude any incorrect classifications in the future.

Improve FCA/PCA

NSF198AJ20: Description: Ensure that at least 95% of systems reviewed in interim FCA/PCAs meet the design requirements. Technical Description: Verification of the F-35's physical configuration to the design requirements by performing PCAs (physical configuration audits). Percentage of part and assembly numbers reviewed in interim audits in accordance with engineering drawings divided by total population of parts and assemblies assessed. The data used to assess this comes from interim audits from suppliers. Green: % of parts meeting design requirements is $\geq 95\%$, Yellow: 90-94%, Red: $< 90\%$.



Metric Status: Green

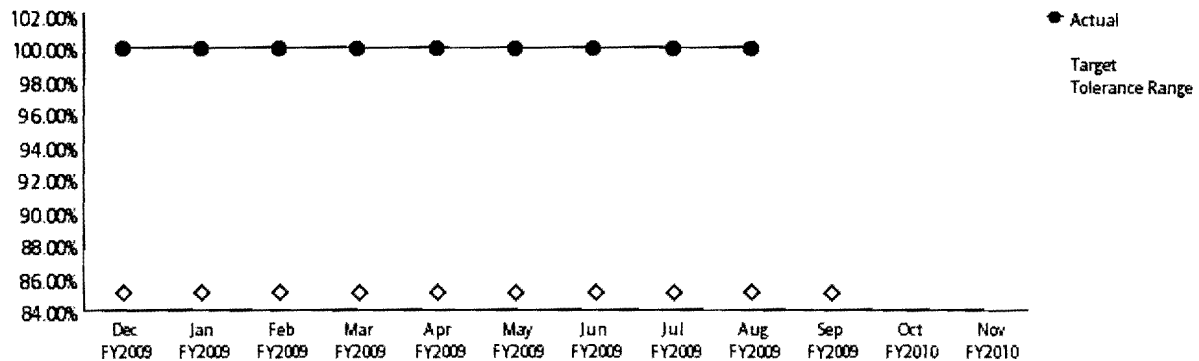
Trend: No Change

Contractor Actions: Meetings with DCMA personnel.

DCMA Actions: Review of contractor processes and reports. LMFV conducted a pre-planning meeting to discuss upcoming FCA/PCA on the Stick and Throttle Grip at [REDACTED]. There were no audits conducted in September. The one that had been scheduled was postponed. There were no updates to previous audits – no open critical action items were resolved.

Maintain Assist Audit Request Timing

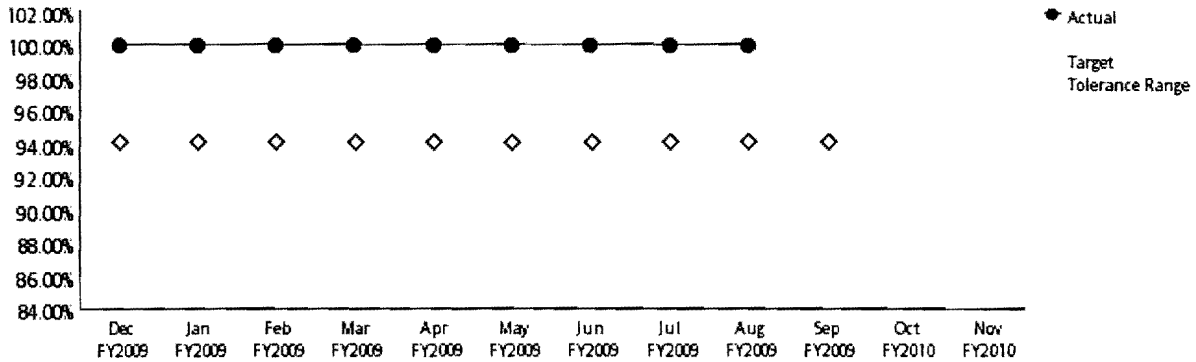
NSF198AJ13: Description: Process contractor/PCO requests for domestic/international Assist Audits within 2 business days 85% of the time. The percentage will be calculated by dividing the number of Assist Audits processed within 2 business days by the total number of Assist Audits requested. Source data will be obtained prior to the 15th of the following month and updated in Metrics Manager NLT the 20th of the following month. Green: $> 84\%$, Yellow: 75-84%, Red: $< 75\%$.



Metric Status: Green

Maintain FAR Requests for Contract Closeout

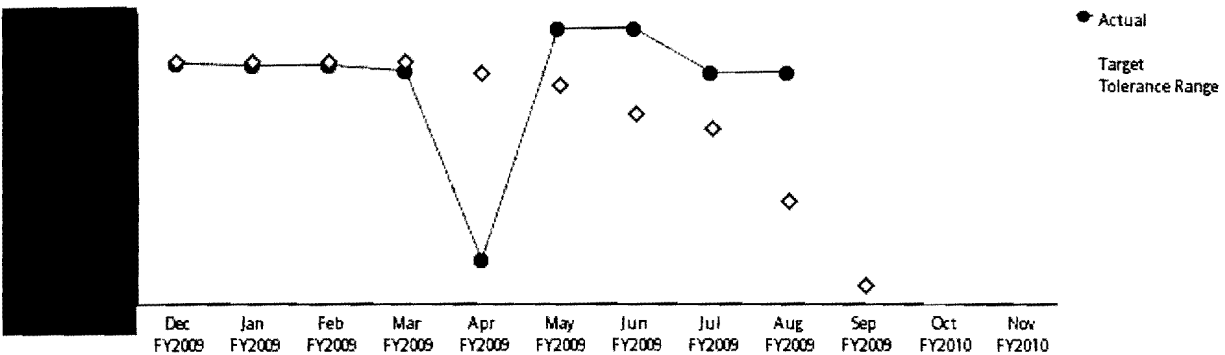
CDDAGYOC02: Description: Maintain 94% contract closeout actions within the Federal Acquisition Regulation (FAR) mandated timeframes. The percentage will be calculated by dividing the number of on time contracts closed by the total number of contracts closed. Source data will be obtained prior to the 15th of the following month, and updated in Metrics Manager NLT 20th of the following month. Green: >93%, Yellow: 85-93%, Red: <85%.



Metric Status: Green

Reduce Cancelling Funds

CDDAGYOC01: Description: 90% of canceling funds will be billed and/or de-obligated before the end of the fiscal year. Attainment of the goal will be calculated by dividing the total dollar amount of canceling funds billed and/or de-obligated by the total amount of canceling funds identified. Source data will be obtained prior to the 15th of the following month, and updated in Metrics Manager NLT the 20th of the following month. Green: >89%, Yellow: 80-89%, Red: <80% of the funds identified to cancel at year end.



Metric Status: Red


Trend: No Change

Root Causes: [REDACTED]



Appendix A – EV Assessment Criteria

Rating Criteria is based on the DCMA VAC% and when possible should include MR in the DCMA IEAC

- Green - VAC%>-5%
- Yellow - -10%<VAC%<-5%
-  - VAC%<-10%
- N/R - Not Rated or Not Reported