



Air Force Life Cycle Management Center (AFLCMC)

Standard Process

For

Logistics Health Assessment (LHA)

Process Owner: AFLCMC/LG

Date: 13 December 2016

Version: 1.7

Record of Changes		
Version	Effective Date	Summary
1.0	21 Mar 2013	Basic document. Approved by S&P Board on 21 Mar 2013.
1.1	16 May 2013	Added/incorporated clarification comments from EN and PK. Approved by S&P Board on 16 May 2013.
1.2	1 July 2013	Incorporated LHA Business Rules Attachment. Updated links.
1.3	17 October 2013	Changed SMART to Acquisition Workbench. Update language to reflect life cycle considerations.
1.4	27 December 2013	LHA Compliance Decision Model
1.5	27 July 2015	LHA data will now be pulled 2 nd business day after the due date, time metric clarified, added AFMC Council Metric, training now conducted by AFLCMC/LG, Cost/Schedule category added, AFI 63-101/20-101, AFLCMC Memorandum updated, LHAs now to be performed twice a year vice quarterly (March and September), LHA Business Rules (Attachment 2), and comments are now required on all questions.
1.6	21 December 2015	Adjusted the LHA Business Rules (Atch 2) to align with the changes in the LHA SP.
1.7	13 December 2016	Updated Standard Process to add new LHA Compliance and Quality metric approved by S&P Board and to align Business Rules to updated LHA scoring methodology (Atch 2).

Logistics Health Assessment (LHA) Process

1.0 Description

- 1.1** The Logistics Health Assessment (LHA) provides the Life Cycle community a standard, tailorable, user friendly tool to report on and ensure long-term sustainment and availability considerations that can be identified and integrated into early program/system decisions and re-evaluated throughout the life cycle of the program/system. This assessment enhances the potential for systems to be fielded and managed with a product support structure in place and optimizes the warfighter’s ability to meet mission performance requirements. The LHA, which contains question sets addressing the 12 Integrated Product Support Elements (PSEs), a cost/schedule category focused on product support, and a non-graded demographic question set is incorporated into Acquisition App Store (formerly known as the Acquisition Workbench). It covers all program phases from Materiel Solution Analysis (MSA) through Operations & Support (O&S). Additionally, by identifying potential risks, the LHA becomes a predictive tool. The Product Support Manager (PSM) shall ensure all questions, regardless of the response option selected, have an explanation in the comment/issue section to provide a historical record and verification of status. Explanations should reference the program/system’s Acquisition Strategy, Statement of Work (SOW)/contract, or other acquisition documents, i.e. Life Cycle Sustainment Plan (LCSP), Systems Engineering Plan (SEP), Test and Evaluation Master Plan (TEMP), etc.
- 1.2** In accordance with AFI 63-101/20-101 and AFLCMC Memorandums identified in paragraph 10.6-8, all AFLCMC ACAT programs on the Acquisition Master Listing (AML) and Weapon System Enterprise Review (WSER) reporting legacy flying platforms will complete an LHA twice a year. Many programs exist that are not on the AML. Those programs are not required to complete an LHA, but may complete one if they so choose to assess the program product support health. LHAs can be accomplished at every phase of the lifecycle to include the O&S phase. Performing LHAs across all phases of programs will enable leadership to have a lifecycle (cradle to grave) view of individual systems and ultimately an enterprise product support view across center programs. The Program Manager (PM) and Product Support Manager (PSM) are the review and approval authorities for individual LHAs with oversight and guidance from the Logistics Organizational Senior Functional (OSF) in the PEO Directorate in which the program resides.
- 1.3** LHA data will be pulled by AFLCMC/LG on the 2nd business day following the LHA completion. LHAs will need to be completed, reviewed and approved prior to this date when the data pull will take place. See data pull schedule below, **Table 1**.

Table 1. Data Pull Schedule

FY Quarter	Date Due	AFLCMC/LG Data Pull
2	31 March	2nd Business Day in Apr
4	30 September	2nd Business Day in Oct

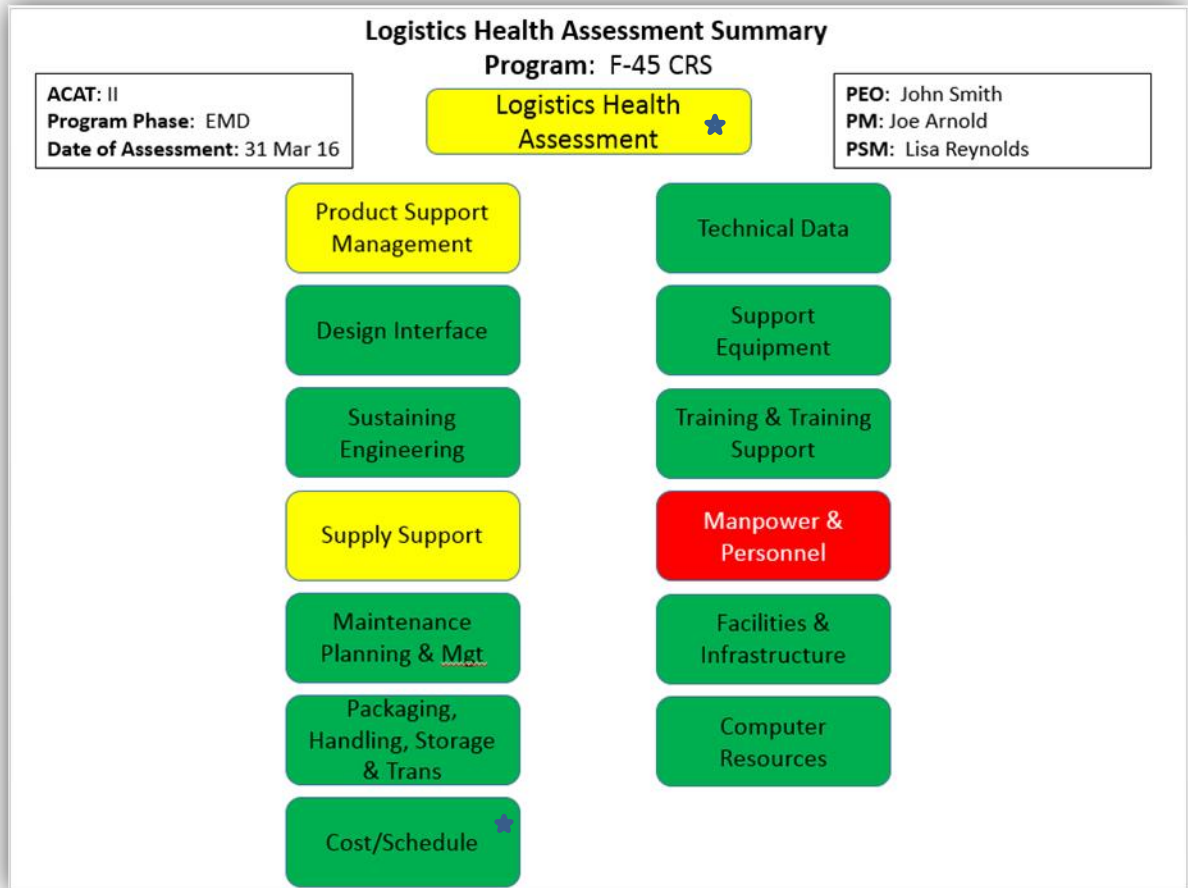
2.0 Purpose / Scope

- 2.1 Purpose.** The LHA is designed to ensure supportability considerations are addressed and managed effectively throughout the entire life cycle of the program/system. The LHA score and rating is the basis for a program's Product Support Strategy planning, implementation, execution, and recommendations across all program life cycle phases. The LHA will inform AFLCMC leadership and Program Executive Officers (PEOs)/Milestone Decision Authorities (MDAs) of the supportability "health" of a program.
- 2.2 Scope.** This standard process applies to AFLCMC and does not replace or supersede any existing laws, regulations, directives, policies, or instructions.
- 2.3** The LHA supports strategic planning (mission, vision, and objectives), i.e. ;
 - 2.3.1** Enterprise Logistics Flight Plan (ELFP) and the Life Cycle Sustainment Strategy.
 - 2.3.2** Air Force Materiel Command (AFMC) Value 2, *Continuous Process Improvement*.
 - 2.3.3** AFLCMC Goal 1, *Deliver timely, agile, and cost effective systems and solutions*.

3.0 Potential Entry/Exit Criteria and Inputs/Outputs

- 3.1 Entry Criteria.** A new or existing ACAT program listed on the AML and platforms reported on the WSER will perform an LHA. Once the initial LHA has been performed, this process will continue at least twice a year to reflect updates in Product Support status. The required LHA completion dates are 31 March and 30 September as listed in Table 1 above in para 1.3. Programs may choose to conduct an LHA(s) more often if they so choose.
- 3.2 Exit Criteria.** A new or updated LHA will be completed, reviewed and approved by the PSM, PM, and OSF. Final exit of the LHA process is when the program is no longer on the AML or the weapon system is no longer reported in the WSER.
- 3.3 Inputs.** The PSM or program logistician will be the primary functional POC of the LHA and performs the assessment (with inputs from other functionals as required).
- 3.4 Outputs.** A completed, reviewed, and approved LHA program (Example LHA below, **Figure 1**).

Figure 1. Example LHA Windshield Summary



***Note:** The tile for “Cost & Schedule” *does not* currently appear via the Windshield Chart tool, but will be added with a future software update. Additionally, the Windshield Chart *does not* currently apply the Product Support Element color rule (see embedded LHA Business Rules) and the chart produced via Acquisition App Store must be manually edited until a software change is implemented.

4.0 Process Workflow and Activities

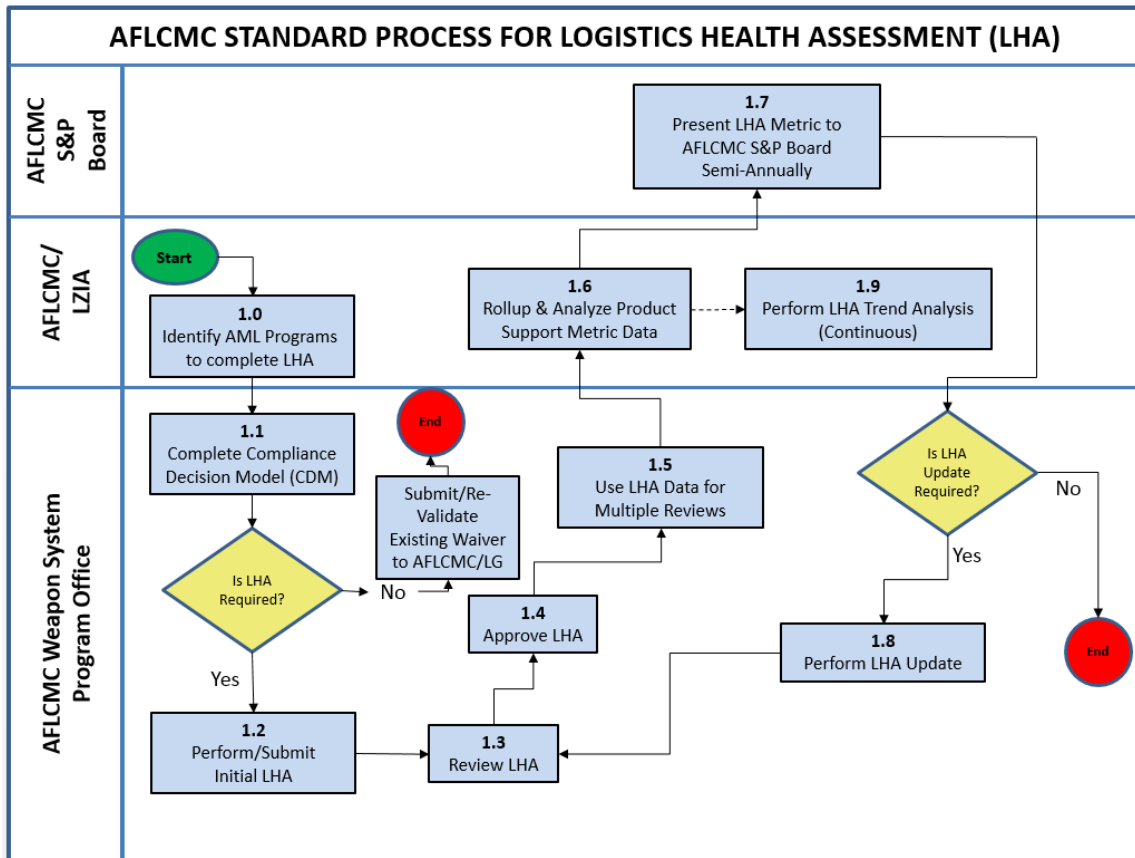
4.1 Process SIPOC, Table 2.

Table 2. SIPOC

Supplier	Inputs	Process	Outputs	Customer
PSMs, Program Logisticians, PM, AFLCMC/LG Other Functionals	Program information (AFLCMC, AFSC, AFNWC, etc.), SMART, Acquisition App Store (Workbench), new/revised policy	Provides the program lifecycle communities a standard, tailorable, user friendly tool to report on and ensure long-term sustainment and availability considerations that can be identified and integrated into early program decisions.	LHA documented, reviewed & approved in Acquisition App Store (Workbench)	HHQ, Center Senior Leadership PEOs, OSFs, PMs, PSMs, AFLCMC/LG, Process users Other Functionals

4.2 Process Flowchart. The high level process flowchart below, **Figure 2**, depicts the LHA process.

Figure 2. Process Flowchart.



4.3 Work Breakdown Structure (WBS). The WBS, **Table 3**, gives the detail for process flowchart activities. The full MS Excel version of the WBS is provided at **Attachment 1**.

Table 3. WBS

Lvl	WBS	Activity	Description	OPR	Time (Hours/Days)
1	1.0	Logistics Health Assessment (LHA)	Programs identified on the Acquisition Master List (AML), kept by SAF/AQ, and WSER reporting platforms/systems are required to complete an LHA	Owner: AFLCMC/LG	
2	1.1	Determine if an LHA is needed	Programs can complete the Compliance Decision Model (Waiver Request)	PSM/Program Logistician	1 hour

			(Fig. 5) to determine if they need to complete an LHA or to re-validate existing waiver.		
2	1.2	Perform & submit initial LHA	Log into the Acquisition App Store (Workbench). Find your program/system and begin the initial assessment by answering the product support questions and cost/schedule category. Once all questions have been complete, leadership will review via workflow.	PSM/Program Logistician	15 Hours
2	1.3	Review LHA	Program Manager (PM) or Product Support Manager (PSM) will review and Submit the LHA for approval via workflow.	PM/PSM	1 Hour
2	1.4	Approve LHA	Approve within the Acquisition App Store online tool via workflow.	PM/PSM	1 Hour
2	1.5	Use LHA data for multiple reviews	Provide LHA data to applicable Review in required format.(e.g. WSER, PSR)	PSM/Program Logistician	Continuous
2	1.6	Roll-up & analyze product support metric data	Utilize roll-up reports out of Acquisition App Store	AFLCMC/LG	20 Days

			(Workbench), investigate for any trends and issues causing red Product Support (PS) Elements and cost/schedule category over multiple programs. Provide feedback to Logistics OSFs during OSF Crosstalks.		
2	1.7	Present LHA Quality/Compliance metric to AFLCMC S&P Board	AFLCMC S&P Board members review and LHA metrics.	AFLCMC S&P Board	2 hours
2	1.8	Perform LHA update	LHA update is an AFLCMC Process Metric, so it must be collected and reported.	PSM/Program Logistician	6 Hours
2	1.9	Performs trend analysis	Pull reports of all LHAs completed under AFLCMC. Perform a rollup of product support health metrics and analyze to identify trends and major issues across the Center.	AFLCMC/LG	Continuous

4.4 Additional work tables, figures, or checklists. N/A

5.0 Measurement.

5.1 Process Results: Measure ACAT programs and WSER reporting platforms completing LHA in Acquisition App Store (Workbench).

5.2 Compliance and Quality Metric. Figure 3 depicts the SMART attributes for the LHA Compliance and Quality metric and Figure 4 depicts the LHA Compliance and Quality metric that is shown semi-annually to the S&P Board

Figure 3. LHA Compliance and Quality Metric SMART Attributes



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P01–Logistics Health Assessment (LHA) Compliance & Quality

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	Metric Attribute	Description
A	APD Ref No	P01
	Process Name	Logistics Health Assessment (LHA)
	Process Lead	Mr. Dave Kieselhorst
	Metric POC	Mr. Dave Kieselhorst
	Date Completed	8 March 2016
S	Metric Name / Description	Logistics Health Assessment (LHA) Compliance & Quality Description: The measure LHA Compliance is the percentage of programs that completed the LHA. Based on evaluation of statistically significant sample size of LHA reportable programs, evaluate the whether or not comments were provided within the LHA questions.
	Calculation	Compliance: Percentage of LHA eligible programs that completed the LHA Quality: Statistically significant sample size and programs randomly selected for review based upon AFLCMC/OZA provided program/calculator. AFLCMC/LZIA review of responses to questions from selected programs for comment verification.
M	Business Rules	Please see "Attachment 2: LHA Business Rules" within the LHA Standard Process
	Data Source	Acquisition Workbench https://af-aqweb.deps.mil/Pages/Default.aspx
A	Process Owner	AFLCMC/LZIA
	Decision Maker	AFLCMC/LG
	Review Forum / Governance Body	S&P Council
	Target	100% LHA Compliance and Comments associated with 100% of LHA questions Current: No R/Y/G thresholds with this iteration, just a snapshot of compliance and quality.
	Thresholds (R/Y/G)	Future Iteration once criteria is socialized: Green: LHA comments to question provided with references to artifact or source document (100% - 90%) Yellow: LHA comments to question provided with no references to artifact or source document (89% - 80%) Red: No LHA comments or references to artifacts or source documents provided (79% - 0%)
R	Baseline Performance	March 2016 Assessment
R	Enterprise Impact / Process Purpose	Provide leadership a snapshot of the LHA compliance and percentage of LHA questions answered with comments included that will provide a program source document of compliance.
	LCMC Obj	Objective 2.1
T	Baseline Date	March 2016
	Review Frequency	Semi-Annually
	Update Frequency	Semi-Annually

1

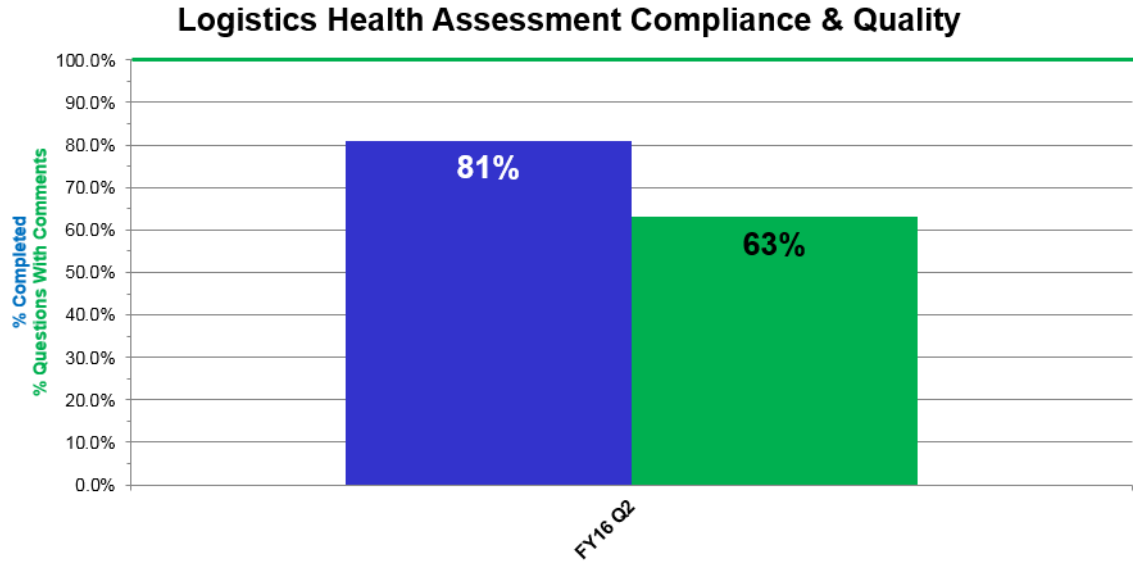
Figure 4. Compliance and Quality Metric Shown Semiannually to S&P Board

Reporting Recommendations		
Level:	1.S&P	1.Semi-Annually

P01 Logistics Health Assessment Compliance & Quality



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LHA Compliance FY16 Q2: 241/296 (81%) Programs Completed LHAs
 FY16 Q2 Quality Review of 240 LHAs: 20,635/32,556 (63%) Questions Contained Comments

Data Source and Date	
Process Owner:	AFLCMC/LG
Data Source:	AFLCMC/LG
Data 'As Of' Date:	5 Apr16

Performance Threshold Key	
●	LHA Compliance / % of Programs That Completed LHAs
●	LHA Quality / % of LHA Questions Sampled with Comments Provided

5.3 Final business rules for the LHA Standard Process and this metric have been approved by the S&P Board (Attachment 2) as of 13 December 2016.

6.0 Roles and Responsibilities

6.1 AFLCMC/LG (Process Owner)

- 6.1.1** Maintain and coordinate any changes to this standard process, “AFLCMC Standard Process for LHA”.
- 6.1.2** Provide training to the AFLCMC workforce on how to complete the LHA during Focus Week, Journeyman Training and ad hoc as requested/required and to communicate any changes to the LHA process.
- 6.1.3** Perform analysis on LHA data for use at the AFLCMC level and presented during appropriate Logistics OSF Crosstalk forums.

6.2 Personnel Administrator (PA)

- 6.2.1** Assign, remove and manage assigned roles within Acquisition App Store (Acq Workbench)

6.3 Product Support Manager (PSM)

- 6.3.1** Ensure LHAs are performed for their assigned programs in accordance with center guidance.
- 6.3.2** Review and concur with LHAs as assigned.
- 6.3.3** Ensure input from other functionals as required.
- 6.3.4** Serve as program logistics authority for LHA execution.

6.4 Program Manager (PM). Approve LHAs as assigned unless delegated to PSM or PM Delegate for approval.

6.5 Organizational Senior Functional (OSF) for Logistics. Review LHAs as assigned and serve as advisor to the PEO/PSM on program LHAs.

6.6 AFLCMC Standards & Processes (S&P) Board: Approves the LHA standard process and all major revisions to the process.

7.0 Tools

- 7.1** Acquisition App Store (Workbench): Web application that provides program portfolio management and real-time data access. Acquisition App Store (Workbench) is located at the following link: <https://af-aqweb.deps.mil/Pages/Default.aspx>

8.0 Training

- 8.1** LHA Defense Collaboration Services (DCS) online course is offered by AFLCMC/LG to the logistics community. This training involves specific LHA tool use and how to input required information to produce a completed LHA.
- 8.2** AFLCMC/LG will provide and/or coordinate LHA training during AFLCMC Focus Weeks and during Journeyman Training. These classes will either be taught in a classroom or via DCS.
- 8.3** One-on-one assistance is available at any time from AFLCMC/LZIA.

9.0 Definitions, Guiding Principles or Ground Rules & Assumptions.

9.1 AFLCMC/LG LHA Compliance Decision Model

9.1.1 This model enables programs to step through four questions to determine if they are required to perform an LHA. (See Figure 5 below)

9.1.1.1 The first question of the model asks “Is program on AML?” The program will review a current AML to determine if they are/are not listed. If they are not on the AML and do not report thru WSER, they do not have to perform an LHA.

9.1.1.1.1 If the weapon system reports thru the WSER, then a platform-level LHA is required to be completed.

9.1.1.2 Question two asks, “Is program awaiting removal from AML?” If program answers “Yes”, they must have submitted an AML change request Revision 18 to SAF/AQ to qualify as awaiting removal. If a change request has been submitted, the program is not required to perform an LHA.

9.1.1.3 Question three asks, “Is the program funded?” If the answer is “No”, then program is not required to submit an LHA. Funding can be determined by looking at CCaR.

9.1.1.4 The final question asks, “Any program Product Support work scheduled?” If the answer is “No”, then an LHA is not required. Program examples for this question are low-cost mods or service bulletins which have infrequent workload requirements.

9.1.2 If programs (AML or WSER Reporting Weapon System) are not required to submit an LHA, in accordance with the LHA Compliance Decision Model criteria, they need to e-mail LHA waiver request to AFLCMC/LZI Workflow at aflcmc.lgi@us.af.mil with the following information as captured in Figure 5:

9.1.2.1 Name of the program

9.1.2.2 Rationale why an LHA is not needed (identify questions above)



9.1.2.3 Identify product support personnel working logistics tasks

9.1.2.4 Name of recommending (PSM) and approving (PM) official

9.1.2.5 Point of contact for submittal

9.1.3 Programs that are not exempted from completing an LHA based on the Compliance Decision Model above are required to perform an LHA. AFLCMC/LZIA will follow-up annually to determine if the waiver is still valid.

Figure 5: AFLCMC/LG LHA Compliance Decision Model

 AFLCMC Logistics Health Assessment (LHA) Compliance Decision Model 			
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Question	Source	Answer	Example
1. Is Program on the AML?	Review current AML from SMART	No, LHA is <u>NOT</u> required Yes, LHA is required	A program not in the AML does not currently require an LHA (this will change as we add non-AML programs)
2. Is Program awaiting removal from AML?	SAF/AQX: Paperwork submitted from PEO to SAF/AQX	Yes, LHA is <u>NOT</u> required No, LHA is required	Programs have submitted "AML change request Rev 18" to SAF/AQ
3. Is the program Funded?	Program Office: CCAR	No, LHA is <u>NOT</u> required Yes, LHA is required	If the program is not funded, a LHA may not be required
4. Any program Product Support work scheduled?	PEO OSF(LG)	No, LHA is <u>NOT</u> required Yes, LHA is required	Low cost mods, or service bulletins, where work may not be planned this year, don't require an LHA until work is scheduled

If LHA is not required, please e-mail: AFLCMC/LZI Workflow (aflcmc.lgi@us.af.mil)

- a) Name of Program
- b) Rational why LHA is not needed (identify question above)
- c) Identify product support personnel working logistics tasks
- d) Name of recommending (PSM) and approving (PM) official
- e) Point of Contact

10.0 References to Law, Policy, Instructions or Guidance. Process standardization is required by both AFMC and AFLCMC Strategic Plans. References that relate to this process include the following:

- 10.1 DoD *Logistics Assessment Guidebook*, July 2011. Link: <https://acc.dau.mil/CommunityBrowser.aspx?id=452297>
- 10.2 DoD *Product Support Managers (PSM) Guidebook*, April 2016. Link: <https://acc.dau.mil/CommunityBrowser.aspx?id=440507>
- 10.3 DAU *Integrated Product Support Element Guidebook*, Dec 2011. Link: <https://acc.dau.mil/CommunityBrowser.aspx?id=452299>
- 10.4 AFI 63-101/20-101, *Integrated Life Cycle Management*, 29 September 2016. Link: http://static.e-publishing.af.mil/production/1/saf_aq/publication/afi63-101_20-101/afi63-101_20-101.pdf

- 10.5** AFPAM 63-128, *Integrated Life Cycle Management*, 10 July 2014. Link: http://static.e-publishing.af.mil/production/1/saf_aq/publication/afpam63-128/afpam63-128.pdf
- 10.6** AFLCMC Memorandum, “*Use of the LHA Process for AFLCMC Programs*”, 1 April 2015. Link: <https://cs4.eis.afmc.af.mil/sites/1534/Commanders%20Policies/LHA%20Process%20Memo.pdf> (superseded by 8 June 2015 memo)
- 10.7** AFLCMC Memorandum, “Use of the Logistics Health Assessment (LHA) Process for AFLCMC Programs” 8 June 2015. Link: https://cs4.eis.afmc.af.mil/sites/1334/EnterpriseMgt/Logistics_Health_Assessment_LHA/LHA%20MEMO%20to%20all%20programs_8Jun15.pdf
- 10.8** AFLCMC/LG Memorandum, “Logistics Health Assessment (LHA) Process for AFLCMC Programs” 11 February 2016. Link: https://cs4.eis.afmc.af.mil/sites/1334/EnterpriseMgt/Logistics_Health_Assessment_LHA/LHA%20Memo_LG-to-Prog_11Feb16.pdf

List of Attachments

<p>Attachment 1: MS Excel version of WBS</p>	<div style="text-align: center;">  Microsoft Office Excel Worksheet </div>
<p>Attachment 2: LHA Business Rules</p>	<div style="text-align: center;">  LHA Business Rules 15 Dec 16_Updates.c </div>