

Object Identifier	Main	Reqmt	TDD Block
C-HARM-295	<b>1 HARM introduction</b>		
C-HARM-296	The High Speed Anti-Radiation Missile (HARM) Mission Planning Module (MPM) is used to plan a mission which may include a variety of HARM shots and modified ELINT data for handoff to the missile.		
C-HARM-297	The HARM MPM is composed of nine unique options:		
C-HARM-298	HARM Shots	Requirement	3.2.1.2
C-HARM-299	MME Data (Manually Modified ELINT)	Requirement	2.1.3
C-HARM-300	MNT Data (Manual New Threat)	Requirement	2.1.3
C-HARM-301	UTC Mission (User-defined TOO Class)	Requirement	2.1.3
C-HARM-302	Import / Export HARM Data	Requirement	2.1.1.1, 3.10.1
C-HARM-303	HARM ELINT Browser	Requirement	2.1.1
C-HARM-304	Build HARM MU File	Requirement	2.1.3.3.1
C-HARM-305	HARM Kneeboard Cards	Requirement	3.10.1.1.1
C-HARM-306	HARM Reports	Requirement	6.3.1.1
C-HARM-307	These options are used to perform HARM shot planning, manage manual threat ELINT data, and produce hardcopy and digital output (aircraft MU load) for briefing and cockpit use.		
C-HARM-308	<b>1. 1.1 HARM MPM FUNCTIONALITY</b>		
C-HARM-309	The mission name is the identifier for the active mission, selected from the existing entries in the HARM Missions database. The mission name should be unique for the current planner logged in to the TAMPS workstation. The mission is the basic planning unit in the HARM MPM.		
C-HARM-310	<b>2. 1.2 Import / Export HARM Data</b>		
C-HARM-311	Import / Export HARM Data provides for backup of planner selected HARM Mission data, UTC mission data, MME data and MNT data. This provides for protection against destruction from machine failure or inadvertent modification. This is also a way to move previously planned mission files from one TAMPS machine to another. The cascading menus gives the planner a choice between Export HARM Data or Import	Requirement	2.1.1.1, 2.1.3, 3.10.1

	HARM Data.		
C-HARM-312	<b>2 harm shot planning</b>		
C-HARM-313	The HARM MPM allows for planning and evaluating the five shot modes of HARM employed via the F/A-18 Command Launch Computer (CLC). These modes are Pre-briefed (PB), Pre-briefed Equations of Motion (PB EOM), Target of Opportunity (TOO), TOO EOM, and Self Protect (SP).	Requirement	3.2.1.2
C-HARM-314	<b>1. 2.1 HARM Shots Window</b>		
C-HARM-315	The HARM Shots option for the HARM MPM is used to plan a new HARM shot (launch) or to manage an existing HARM shot for the currently active mission. Each mission can contain multiple shots against different targets. A directory of the existing shots in the currently active mission is displayed on the HARM Shots window.	Requirement	3.2.1.2
C-HARM-316	<b>1.1 2.1.1 Common Launch Record Fields</b>		
C-HARM-317	Fields on the Launch Record window available for editing include:	Requirement	3.2.1.2

C-HARM-318	<p><b>Target Information</b> data pertaining to</p> <p><b>Name</b> name of the target</p> <p><b>Select</b> used to select the</p> <p><b>Ref No</b> reference number which is obtained from ELINT theater work Mission was created</p> <p><b>Select</b> Selects the appropriate the shot.</p> <p><b>Latitude / Longitude</b> latitude / longitude</p> <p><b>Elevation</b> elevation of the target (Digital Terrain Model) planner.</p> <p><b>Aimpoint Latitude/Longitude</b> latitude / longitude MPM calculates aimpoint location values default to possible to change</p> <p><b>Aimpoint Elevation</b> elevation of the target DTED (Digital Terrain Model) by the planner.</p> <p><b>Required HARM TOT</b> the planner enters TOT allows HARM</p> <p><b>Aircraft Information</b> data pertaining to</p> <p><b>Latitude / Longitude</b> latitude / longitude launching the missile</p> <p><b>Altitude</b> altitude of the missile</p> <p><b>Mach</b> speed of the missile</p> <p><b>TAS</b> derived from entered</p>	Requirement	3.2.1.2
C-HARM-319	1.2 2.1.2 HARM Shots Calculated Results		
C-HARM-320	Data provided to the planner after all of the required information has been entered includes:	Requirement	3.2.1.2

C-HARM-321	<p><b>Airpoint Range</b> distance from the launch point to the airpoint.</p> <p><b>Airpoint Bearing</b> bearing from the launch point to the airpoint, either True or Mag depending upon Planner set preference.</p> <p><b>Time of Flight</b> total time of flight of the missile from launch to airpoint.</p> <p><b>Seeker Turn On</b> time interval between missile launch and when the missile seeker becomes active (turn-on).</p> <p><b>Seeker Range to Target</b> distance from the seeker turn on point to the airpoint.</p> <p><b>Required Launch Time</b> calculated launch time is provided if a Required HARM TOT is entered.</p> <p><b>A/C Pull-up Req</b> aircraft pull-up required (in degrees) at launch time.</p> <p><b>A/C Radar Horizon</b> radar horizon from the aircraft, based on aircraft altitude.</p> <p><b>Missile Max. Range</b> maximum 90% PCH missile range based upon the mission aircraft parameters provided.</p> <p><b>Missile Min. Range</b> minimum 90% PCH missile range based upon the mission aircraft parameters provided.</p> <p><b>Aircraft Heading</b> heading of the aircraft when the aircraft is pointed at the target at launch. Either True or Mag depending upon Planner set preference.</p>	Requirement	3.2.1.2
C-HARM-322	3 mme/mnt/utc		
C-HARM-323	The HARM MPM provides the means for creating various ELINT related files that can be downloaded to the F/A-18 Memory Unit (MU). After one or more of these files is created, they can be assembled into a single file for MU download. The actual download of the HARM MU file to the MU is accomplished via the F/A-18 MPM.	Requirement	2.1.3
C-HARM-324	The HARM MPM has the following options available based on the OFP selected when the currently opened mission file was created:  MME Data. MNT Data. UTC Missions.	Requirement	2.1.3
C-HARM-328	The MME/MNT Data option provides the capability to create new MME/MNTs and modify existing MME/MNTs. The currently active HARM mission will determine the current HARM ELINT theater in use. Only those MME/MNTs built for the current theater will be available, since MME/MNTs are ELINT dependent. Some of the available MME/MNTs may have been built for use by another mission, but they will be displayed if the currently active mission has an OFP that is appropriate for MME/MNTs and has the same HARM ELINT theater specified.	Requirement	2.1.3
C-HARM-329	1. 3.1 MME/MNT Data Entry		
C-HARM-330	The MME/MNT Data Entry provides the capability to manually modify the data associated with either a new or existing MME/MNT.	Requirement	2.1.3
C-HARM-331	2. 3.2 UTC Data Entry		
C-HARM-332	UTC Missions provides the capability to create a UTC (User-defined TOO Class) for downloading to an F/A-18 Memory Unit (MU).	Requirement	2.1.3
C-HARM-333	The HARM ELINT theater database resident in the F/A-18 cockpit HARM CLC contains threat data that is grouped into various pre-defined TOO classes. The planner is allowed to	Requirement	2.1.3

	define one additional TOO class for use during flight. A User-defined TOO Class (UTC) for the HARM ELINT can contain up to 75 threat reference number entries. The entries are divided into 5 groups of 15 numbers each - UT1, UT2, UT3, UT4, and UT5. In addition to the number, the planner can specify a link number to group the threats together and a code number to modify the threat's UTC symbol value. The UTC Mission contains the necessary fields and buttons to create / modify the UTC entries.		
C-HARM-334	The UTC missions option displays a list of pre-existing UTCs (User-Defined Threat Classes) and provides the capability to create new ones and modify existing UTCs. The currently active HARM mission will determine the current HARM ELINT theater in use. Only those UTCs built for the current theater will be displayed, since UTCs are ELINT dependent. Some of the displayed UTCs may have been built for use by another mission, but they will be displayed if the currently active mission has an OFP that is appropriate for UTCs and has the same HARM ELINT theater specified.	Requirement	2.1.3
C-HARM-335	The UTC Mission provides the capability to modify the data associated with either a new or existing UTC Mission. The Window is divided into two halves; the lower half contains the selected HARM ELINT theater threat information, the upper half contains the candidate threat reference numbers, MMEs and MNTs for inclusion into the UTC Mission.	Requirement	2.1.3
C-HARM-336	<b>4 HARM ELINT Browser</b>		
C-HARM-337	The HARM ELINT Browser option provides a means of viewing Reference Numbers and emitters of primary, secondary, and tertiary threat listings contained in the HARM ELINT theaters available for planning HARM mission.	Requirement	2.1.2
C-HARM-338	<b>5 HARM Output</b>		
C-HARM-339	The HARM MPM Output offers options used to build a data file for download to an F/A-18 Memory Unit (MU) and to create and print various kneeboard cards and reports related to shot planning, MME/MNT/UTC, and HARM ELINT. The F/A-18 MU is loaded from F/A-18 MPM, but the planner uses the HARM MPM to create the file that is passed to the F/A-18 MPM.	Requirement	3.10.1.2
C-HARM-340	HARM MPM unique options for Output include:	Requirement	3.10.1.2

C-HARM-341	<b>Build HARM MU File</b>	used to add the following pr MU weapons file:  ? MME Data ? MNT Data ? UTC Missions	Requirement	3.10.1.2
C-HARM-342	<b>HARM Kneeboard Cards</b>	used to create and print the  ? Mission Launch Data (H ? MME Data ? MNT Data	Requirement	3.10.1.2
C-HARM-343	<b>HARM Reports</b>	used to view an electronic v Reports that are contained in the fleet:  ? Alphabetical ? Pre-Briefed ? TOO ? Self-Protect ? Target Parameters ? TOO Ambiguity	Requirement	3.10.1.2