cFE Requirements

ID	ReqID	Text
Task Allocation:		
1589	cES1000	cES1000 Upon receipt of a Command, the cFE shall generate a Software Bus message that includes the following items: - Number of Registered Applications - Number of Registered Child Tasks - Number of Registered Shared Libraries - Reset Type - Reset Subtype - Number of entries in System Log - Size of the System Log - Number of bytes used in the System Log - Current Exception and Reset Log Index - Number of Processor Resets - Maximum Number of Processor Resets before a Power-On Reset - Boot Source - ES Valid Command Counter - ES Invalid Command Counter
748	cES1001	cES1001 Upon receipt of a Command, the cFE shall generate a NO-OP event message.
750	cES1002	cES1002 Upon receipt of a valid Command, the cFE shall increment a valid Command counter.
752	cES1003	cES1003 Upon receipt of an invalid Command, the cFE shall increment the invalid Command counter and generate an event message.
754	cES1004	cES1004 Upon receipt of a Command, the cFE shall set to zero the valid Command counter and invalid Command counter
756	cES1005	cES1005 Upon receipt of a Command, the cFE shall create the Command specified Application by defining the Application in the System Resources Definition using information from the Command specified file , and beginning execution of the Application.
758	cES1005.1	cES1005.1 The Command shall include the following parameters: - Application Path/Filename - Application Entry Point - Application Name - Application Priority - Application Stack Size - Application Load Address - Exception Action (restart application or perform processor reset)
760	cES1005.2	cES1005.2 The Command specified cFE Application file shall be in any valid cFE file system including the volatile file system and the non-volatile file system.
762	cES1005.3	cES1005.3 If the Command specified Application is undefined then the cFE shall reject the Command, increment the invalid command counter and generate an event message.

ID	ReqID	Text
764	cES1005.4	cES1005.4 If the Command specified Application is already defined and executing, then the cFE shall reject the Command, increment the invalid Command counter and generate an event message.
766	cES1006	cES1006 Upon receipt of a Command, the cFE shall delete the Command specified Application including all child tasks.
768	cES1006.1	cES1006.1 If the specified Application is undefined then the cFE shall reject the Command, increment the invalid command counter and generate an event message.
770	cES1007	cES1007 Upon receipt of a Command, the cFE shall Restart the Command specified Application
772	cES1007.1	cES1007.1 If the Command specified Application is undefined then the cFE shall reject the Command, increment the invalid Command counter and generate an event message.
774	cES1007.2	cES1007.2 If the original cFE Application file is not found then the cFE shall reject the Command, increment the invalid Command counter, and generate an event message.
776	cES1007.3	cES1007.3 If the cFE Application Restart fails due to a non-parameter error, then the cFE shall delete the Application, increment the invalid Command counter, and generate an event message.
778	cES1008	cES1008 Upon receipt of a Command the cFE shall Reload the Command specified cFE Application from the Command specified cFE Application file.
780	cES1008.1	cES1008.1 If the specified Application is undefined then the cFE shall reject the Command, increment the invalid Command counter and generate an event message.
782	cES1008.2	cES1008.2 If the specified cFE Application file does not exist then the cFE shall reject the command, increment the invalid Command counter, and generate an event message.
784	cES1008.3	cES1008.3 If the cFE Application Reload fails due to a non-parameter error, then the cFE shall delete the Application, increment the invalid Command counter, and generate an event message.
786	cES1009	cES1009 Upon receipt of a Command, the cFE shall perform a Power On Reset of the Core Flight Executive.
788	cES1010	cES1010 Upon receipt of a Command, the cFE shall perform a Processor Reset of the Core Flight Executive.
790	cES1011	cES1011 Upon receipt of a Command, the cFE shall generate a message that contains a summary of the Command specified Application's properties and state as defined in the Systems Resources Definition including: - cFE Application Name - cFE Application Filename - cFE Application Entry Point - cFE Application Priority - cFE Application Stack Size - cFE Application Memory Start Address - cFE Application Memory Size - cFE Application Child Task Count
792	cES1012	cES1012 Upon receipt of a Command, the cFE shall generate a Command specified file that contains all properties and states of all cFE Applications that are defined in the Systems Resources Definition.
794	cES1012.1	cES1012.1 If a file is not specified, the cFE shall use the <PLATFORM_DEFINED> filename.
796	cES1013	cES1013 Upon receipt of a Command, the cFE shall submit to the operating system shell, the string supplied as a parameter
798	cES1013.1	cES1013.1 Upon execution of the operating system Command, the cFE shall generate one or more messages containing the ascii output generated by the operating system command.
800	cES1014	cES1014 The cFE shall maintain an Executive Services System Log which contains a series of

ID	ReqID	Text
		ASCII text strings describing significant events or errors
802	cES1014.1	cES1014.1 Each entry in the Executive Services System Log shall be time tagged with the time that the event happened.
804	cES1014.2	cES1014.2 The cFE shall calculate the number of bytes used and number of entries in Executive Services System Log
806	cES1014.2.1	cES1014.2.1 If the Executive Services System Log is full and the System Log Mode is set to OVERWRITE then the cFE shall write all new entries from the top of the log
808	cES1014.2.2	cES1014.2.2 If the Executive Services Syste Log is full and the System Log Mode is set to DISCARD then the cFE shall discard all new entries
810	cES1015	cES1015 Upon receipt of a Command, the cFE shall clear the Executive Services System Log.
812	cES1016	cES1016 Upon receipt of a Command, the cFE shall copy the information contained in the Executive Services System Log into a Command specified file.
814	cES1016.1	cES1016.1 If a file is not specified, the cFE shall use the <PLATFORM_DEFINED> filename.
816	cES1017	cES1017 The cFE shall maintain an Executive Services Exception and Reset Log which will log critical system data for exceptions and resets including: - A time stamp - Processor Context information - Critical system variables - ASCII string stating the reason for the reset
818	cES1018	cES1018 Upon receipt of a Command, the cFE shall clear the Executive Services Exception and Reset Log.
820	cES1019	cES1019 Upon receipt of a Command, the cFE shall copy the information contained in the Executive Services Exception and Reset Log Buffer into a Command specified file.
822	cES1019.1	cES1019.1 If a file is not specified, the cFE shall use the <PLATFORM_DEFINED> filename.
824	cES1021	cES1021 The cFE shall maintain an Executive Services Logic Analyzer Capture Log for capturing application specified timestamps and events for off-line performance analysis.
826	cES1022	cES1022 Upon receipt of a Request, the cFE shall record the specified Logic Analyzer Capture Tag in the Logic Analyzer Capture Log.
828	cES1022.1	cES1022.1 The cFE shall store a timestamp along with the specified Logic Analyzer Capture Tag.
830	cES1022.2	cES1022.2 If the Logic Analyzer Capture Log is full, then the cFE shall write all new entries from the top of the log.
832	cES1023	cES1023 Upon receipt of a Command, the cFE shall copy the information contained in the Logic Analyzer Capture Log into a Command Specified file
834	cES1023.1	cES1023.1 If a file is not specified, the cFE shall use the <PLATFORM_DEFINED> filename.
836	cES1024	cES1024 Upon receipt of a Command, the cFE shall set the Processor Resets counter to zero.
838	cES1025	cES1025 Upon receipt of a Command, the cFE shall set the Maximum Processor Resets counter to the Command Specified value.
840	cES1026	cES1026 Upon receipt of a Command, the cFE shall copy the following Critical Data Store information into the Command Specified file:a. Critical Data Store Nameb. Sizec. Data Integrity Value
842	cES1027	cES1027 Upon receipt of a Command, the cFE shall delete the Command Specified Critical Data Store
844	cES1028	cES1028 Upon receipt of Command, the cFE shall set the System Log Mode to the Command-

ID	ReqID	Text
		specified mode, either overwrite or discard
846	cES1300	cES1300 Upon receipt of a Request, the cFE shall register the calling cFE Application with the system.
848	cES1301	cES1301 Upon receipt of a Request, the cFE shall provide the type of last reset performed by the processor.
850	cES1301.1	cES1301.1 The reset types include: Power On Reset Processor Reset
852	cES1302	cES1302 Upon receipt of a Request, the cFE shall provide the Processor ID on which the Request was made.
854	cES1303	cES1303 Upon receipt of a Request, the cFE shall provide the Spacecraft ID on which the Request was made.
856	cES1304	cES1304 Upon receipt of a Request, the cFE shall provide the cFE Application ID of the calling cFE Application.
858	cES1305	cES1305 Upon receipt of a Request, the cFE shall provide the cFE Task Name and cFE Application Name which corresponds to the specified cFE Task ID.
860	cES1306	cES1306 Upon receipt of a Request, the cFE shall provide the cFE Application ID which corresponds to the specified cFE Application Name.
862	cES1307	cES1307 Upon receipt of a Request, the cFE shall provide the cFE Application Name which corresponds to the specified cFE Application ID
864	cES1309	cES1309 Upon receipt of a Request, the cFE shall delete the specified Application including all child tasks.
866	cES1309.1	cES1309.1 If the specified Application is undefined then the cFE shall record the error in the System Log, and return an error code.
868	cES1310	cES1310 Upon receipt of a Request the, cFE shall Restart the specified Application.
870	cES1310.1	cES1310.1 If the specified Application is undefined then the cFE shall record the error in the System Log, and return an error code.
872	cES1310.2	cES1310.2 If the original cFE Application file is not found then the cFE shall record the error in the System Log, and return an error code.
874	cES1310.3	cES1310.3 If the cFE Application Restart fails due to a non-parameter error, then the cFE shall record the error in the System Log, and return an error code.
876	cES1311	cES1311 Upon receipt of a Request, the cFE shall create the specified cFE Child Task within the cFE Application that owns the task and begin execution of the task.
878	cES1311.1	cES1311.1 In the event that the cFE Child Task cannot be created, the cFE shall record the error in the System Log, and return an error code.
880	cES1311.2	cES1311.2 In the event a child task attempts to create another child task, the cFE shall record the error in the System Log, and return an error code.
882	cES1312	cES1312 Upon receipt of a Request, the cFE shall delete the specified cFE Child Task within the cFE Application that owns the task.
884	cES1312.1	cES1312.1 If the specified task is the cFE Application Main Task, the request shall record the error in the System Log, and return an error code.
886	cES1313	cES1313 Upon receipt of a Request, the cFE shall register the calling cFE Child Task with the system.

ID	ReqID	Text
888	cES1314	cES1314 Upon receipt of a Request, the cFE shall end execution of the calling cFE Child Task.
890	cES1314.1	cES1314.1 If the calling task is the cFE Application Main Task, the cFE shall record the error in the System Log, and return an error code.
892	cES1315	cES1315 Upon receipt of a Request, the cFE shall reserve the Request specified amount of memory in the Critical Data Store for the cFE Application using the Request specified name .
894	cES1315.1	cES1315.1 If a Critical Data Store exists for the Request specified name but has a different size than what is specified in the Request, the cFE shall remove the existing Critical Data Store and create a new one using the Request specified name and size.
896	cES1315.2	cES1315.2 If a Critical Data Store exists for the Request specified name but the Data Integrity value is invalid, the cFE shall remove the existing Critical Data Store and create a new one using the Request specified name and size
898	cES1316	cES1316 Upon receipt of a Request, the cFE shall copy the contents from the Request specified Critical Data Store to the Request specified address .
900	cES1316.1	cES1316.1 If the Data Integrity Value is invalid then the data shall not be copied from the Critical Data Store.
902	cES1316.2	cES1316.2 If the Request Specified Critical Data Store does not exist then the data shall not be copied.
904	cES1317	cES1317 Upon receipt of a Request, the cFE shall perform a Power On Reset of the Core Flight Executive.
906	cES1318	cES1318 Upon receipt of a Request, the cFE shall perform a Processor Reset of the Core Flight Executive.
908	cES1319	cES1319 Upon receipt of a Request, the cFE shall exit the calling cFE Application and delete the Applications' resources.
910	cES1320	cES1320 Upon receipt of a Request, the cFE shall prepare a Memory Pool for runtime memory allocation/de-allocation.
912	cES1320.1	cES1320.1 If the specified size is not an integral multiple of 32 bit words, the size shall be rounded down to an integral number of 32 bit words.
914	cES1320.2	cES1320.2 If the specified address is not aligned on a 32 bit memory boundary, the request shall return an error.
916	cES1321	cES1321 Upon receipt of a Request the cFE shall allocate a block of memory of the specified size from the specified Memory Pool.
918	cES1321.1	cES1321.1 If the specified size is not an integral multiple of 32 bit words, the size shall be rounded up to an integral of 32 bit words.
920	cES1321.2	cES1321.2 If the specified Memory Pool identifier is invalid then the cFE shall record the error in the System Log, and return an error code.
922	cES1321.3	cES1321.3 If the specified size is too large for the specified Memory Pool, the cFE shall record the error in the System Log, and return an error code.
924	cES1322	cES1322 Upon receipt of a Request the cFE shall de-allocate the specified block of memory from the specified Memory Pool.
926	cES1322.1	cES1322.1 If the specified Memory Pool identifier is invalid, then the cFE shall record the error in the System Log, and return an error code.
928	cES1323	cES1323 Upon receipt of a Request, the cFE shall calculate a Data Integrity value over the given range of memory using the specified algorithm. The algorithm shall be one of the following:XOR - Exclusive ORCRC16 - 16 Bit Cyclic Redundancy CheckCRC32 - 32 Bit Cyclic Redundancy Check

ID	ReqID	Text
930	cES1324	cES1324 Upon receipt of a Request, the cFE shall load and initialize a hardware device driver and connect it with the specified hardware handshaking and device processing code.
932	cES1325	cES1325 Upon receipt of a Request, the cFE shall unload a specified hardware device driver and de-allocate all previously allocated resources used by the driver.
934	cES1326	cES1326 Upon receipt of a Request, the cFE shall disable a specified hardware device driver.
936	cES1326.1	cES1326.1 If the specified hardware device driver is not loaded, then the cFE shall record the error in the System Log, and return an error code.
938	cES1327	cES1327 Upon receipt of a Request, the cFE shall re-enable a specified hardware device driver.
940	cES1327.1	cES1327.1 If the specified hardware device driver is not loaded, then the cFE shall record the error in the System Log, and return an error code.
942	cES1328	cES1328 Upon receipt of a Request, the cFE shall copy the data starting at the Request specified address to the Request specified Critical Data Store.
944	cES1328.1	cES1328.1 The cFE shall calculate a Data Integrity Value for the Request specified Critical Data Store and store it.
946	cES1328.2	cES1328.2 If the Request Specified Critical Data Store does not exist then the data shall not be copied.
948	cES1500	cES1500 Upon a Power-on Reset, the cFE shall identify the <PLATFORM_DEFINED> Power On reset sub-type.
950	cES1501	cES1501 Upon a Power-On Reset, the cFE shall clear the Executive Services System Log.
952	cES1502	cES1502 Upon a Power-On Reset, the cFE shall clear the Executive Services Exception and Reset Log.
954	cES1503	cES1503 Upon a Power-On Reset, the cFE shall clear the Volatile File system.
956	cES1504	cES1504 Upon a Power-On Reset, the cFE shall clear the contents of the Critical Data Store.
958	cES1505	cES1505 Upon a Power-on Reset, the cFE shall create all operating system objects required by the cFE.
960	cES1506	cES1506 Upon a Power-on Reset, the cFE shall mount the non-volatile file system.
962	cES1507	cES1507 Upon a Power-on Reset, the cFE shall create, format and mount the volatile file system.
964	cES1508	cES1508 Upon a Power-on Reset, the cFE shall process all entries in the cFE Startup File located in the non-volatile file system.
966	cES1508.1	cES1508.1 The cFE shall create and start cFE Applications according to the entry in the cFE Startup File.
968	cES1508.2	cES1508.2 The cFE shall create and initialize cFE Shared Libraries according to the entry in the cFE Startup File.
970	cES1508.3	cES1508.3 The cFE shall create and initialize cFE Device Drivers according to the entry in the cFE Startup File.
972	cES1509	cES1509 Upon a Power On Reset, the cFE shall make an entry in the Executive Services Exception and Reset Log, recording the Power On Reset.
974	cES1510	cES1510 Upon a Processor Reset, the cFE shall identify the <PLATFORM_DEFINED> Processor reset sub-type.
976	cES1511	cES1511 Upon a Processor Reset, the cFE shall preserve the Executive Services System Log.
978	cES1512	cES1512 Upon a Processor Reset, the cFE shall preserve the Executive Services Exception and Reset Log.

ID	ReqID	Text
980	cES1513	cES1513 Upon a Processor Reset, the cFE shall preserve the Volatile File system.
982	cES1514	cES1514 Upon a Processor Reset, the cFE shall preserve the contents of the Critical Data Store.
984	cES1515	cES1515 Upon a Processor Reset, the cFE shall create all operating system objects required by the cFE.
986	cES1515.1	cES1515.1 If the creation of the operating system object fails, the cFE shall perform a power on reset.
988	cES1516	cES1516 Upon a Processor Reset, the cFE shall mount the non-volatile file system.
990	cES1517	cES1517 Upon a Processor Reset, the cFE shall check and mount the volatile file system.
992	cES1517.1	cES1517.1 If the volatile file system check fails, the cFE shall format the volatile file system and create a system log entry.
994	cES1518	cES1518 Upon a Processor Reset, the cFE shall process all entries in the cFE Startup File located in the volatile file system.
996	cES1518.1	cES1518.1 The cFE shall create and start cFE Applications according to the entry in the cFE Startup File.
998	cES1518.2	cES1518.2 The cFE shall create and initialize Shared Libraries according to the entry in the cFE Startup File.
1000	cES1519	cES1519 If the system startup file is not present in the volatile file system then the cFE shall process all entries in the cFE Startup File located in the non-volatile file system.
1002	cES1519.1	cES1519.1 The cFE shall create and start cFE Applications according to the entry in the cFE Startup File.
1004	cES1519.2	cES1519.2 The cFE shall create and initialize Shared Libraries according to the entry in the cFE Startup File.
1006	cES1520	cES1520 Upon a Processor Reset, the cFE shall make an entry in the Executive Services Exception and Reset Log recording the Processor Reset..
1008	cES1521	cES1521 Upon a Processor Reset, the cFE shall preserve the following: - Boot Source - Reset Type - Reset Subtype - Reset Reason - Number of Processor Resets - Maximum Processor Resets - Number of entries in System Log - Size of System Log - Number of bytes used in the System Log
1010	cES1522	cES1522 Upon a Processor Reset, the cFE shall set the System Log Mode to discard
1012	cES1700	cES1700 The cFE shall support a maximum <PLATFORM_DEFINED,TBD> cFE Applications.
1014	cES1702	cES1702 The cFE shall detect all unmasked CPU exceptions.
1016	cES1702.1	cES1702.1 Upon detection of a CPU exception, the cFE shall add an entry in the Executive Services Exception And Reset Log.
1018	cES1702.2	cES1702.2 If the CPU exception was caused by a cFE Application and the Exception Action indicates that the Application can be started individually, the cFE shall restart the cFE Application that caused the exception.
1020	cES1702.3	cES1702.3 If the CPU exception was caused by the Operating System or cFE Core then the cFE shall initiate a <PLATFORM_DEFINED> response.

ID	ReqID	Text
1022	cES1703	cES1703 The cFE shall detect all unmasked processor Floating Point Exceptions.
1024	cES1703.1	cES1703.1 Upon detection of an unmasked Floating Point exception, the cFE shall add an entry in the Executive Services Exception and Reset Log.
1026	cES1703.2	cES1703.2 If the Floating Point exception was caused by a cFE Application and the Exception Action indicates that the Application can be started individually, the cFE shall restart the cFE Application that caused the exception.
1028	cES1703.3	cES1703.3 If the Floating Point exception was caused by the OS or cFE Core then the cFE shall initiate a <PLATFORM_DEFINED> response.
1030	cES1704	cES1704 The cFE shall support a <PLATFORM_DEFINED,TBD> byte volatile file system.
1032	cES1705	cES1705 The cFE shall support a <PLATFORM_DEFINED,TBD> byte non-volatile file system.
1034	cES1706	cES1706 The cFE shall support a <PLATFORM_DEFINED,TBD> byte Executive Services System Log.
1036	cES1707	cES1707 The cFE shall support a <PLATFORM_DEFINED,TBD> byte Executive Services Exception And Reset Log.
1038	cES1708	cES1708 The cFE shall support a <PLATFORM_DEFINED,TBD> byte Critical Data Store.
1040	cES1709	cES1709 If the cFE Core goes through <PLATFORM_DEFINED_TBD> Maximum Processor Resets, the cFE shall initiate a Power-On Reset of the cFE
1042	cEVS3000	cEVS3000 Upon receipt of Command the cFE shall enable/disable, as specified in the Command, the future generation of Event Messages for the Command-specified Event Type.
1044	cEVS3001	cEVS3001 Upon receipt of Command, the cFE shall set the SB Event Format Mode to the command specified value, either Long or Short.
1046	cEVS3002	cEVS3002 Upon receipt of Command the cFE shall generate a NO-OP event message.
1048	cEVS3003	cEVS3003 Upon receipt of Command the cFE shall set the following counters to zero in Event Services telemetry. - Valid Command Counter - Invalid Command Counter - Event Message Sent Counter - Event Message Truncation Counter - Unregistered Application Send Counter
1050	cEVS3004	cEVS3004 Upon receipt of Command, the cFE shall write the following information to the Command specified cFE EVS Application Data file for each registered Application: - Application Event Message Sent Counter - Application Event Service Enable Status - Application Event Type Enable Statuses (one for each Event Type) - Application Event IDs (for events to be filtered) - Application Binary Filter Masks (one per registered Event ID) - Application Binary Filter Counters (one per registered Event ID)
1052	cEVS3004.1	cEVS3004.1 If a file is not specified, the cFE shall use the <PLATFORM_DEFINED> filename.
1054	cEVS3005	cEVS3005 Upon receipt of valid command, the cFE shall increment the valid command counter.
1056	cEVS3006	cEVS3006 Upon receipt of an invalid command, the cFE shall in increment the invalid command counter.
1058	cEVS3007	cEVS3007 Upon receipt of Command the cFE shall enable/disable, as specified in the Command, the future generation of Event Messages for the Command-specified Application and Event Type.
1060	cEVS3008	cEVS3008 Upon receipt of Command the cFE shall enable/disable, as specified in the Command, the

ID	ReqID	Text
		future generation of Event Messages for the Command-specified Application.
1062	cEVS3009	cEVS3009 Upon receipt of Command, the cFE shall set the Command-specified Application's Event Message Sent Counter to zero.
1064	cEVS3010	cEVS3010 Upon receipt of Command, the cFE shall set an Application's Binary Filter Counter to zero for the Command-specified Event ID.
1066	cEVS3011	cEVS3011 Upon receipt of Command, the cFE shall set all of an Application's Binary Filter Counters to zero.
1068	cEVS3012	cEVS3012 Upon receipt of Command the cFE shall set an Application's Binary Filter Mask to the Command-specified Event Filter for the given Application Event ID.
1070	cEVS3013	cEVS3013 <OPTIONAL> Upon receipt of Command, the cFE shall clear the Local Event Log.
1072	cEVS3014	cEVS3014 <OPTIONAL> Upon receipt of Command, the cFE shall set the Event Logging Mode to the Command-specified mode, either overwrite or discard.
1074	cEVS3015	cEVS3015 <OPTIONAL> Upon receipt of Command, the cFE shall write the contents of the Local Event Log to the Command specified file.
1076	cEVS3015.1	cEVS3015.1 If a file is not specified, the cFE shall use the <PLATFORM_DEFINED> filename.
1078	cEVS3016	cEVS3016 <OPTIONAL> The cFE shall write each Event Message from the earliest logged message to the most recently logged message.
1080	cEVS3017	cEVS3017 Upon receipt of Command the cFE shall enable/disable, as specified in the Command, the routing of all future Event Messages to the Command-specified Event Message Port.
1082	cEVS3018	cEVS3018 The cFE shall provide the following Event Service data items in telemetry (SB Messages): - Valid Command CounterInvalid Command Counter - SB Event Format ModeEvent Message Sent Counter - Event Message Truncation Counter - Unregistered Application Send Counter - Event Message Output Port Enable Statuses - <OPTIONAL> Local Event Log Full Flag - <OPTIONAL> Local Event Log Overflow Counter - <OPTIONAL> Logging ModeFor each registered - Application:Application Event Message Sent Counter - Application Event Service Enable Status
1084	cEVS3019	cEVS3019 Upon receipt of Command the cFE shall add the specified Event Filter for the specified cFE Application and Event ID
1086	cEVS3019.1	cEVS3019.1 If the Event ID is already registered for filtering, the cFE shall reject the command and generate an event message.
1088	cEVS3019.2	cEVS3019.2 If the maximum number of Event IDs have been registered for the specified Application then the cFE shall reject the command and generate an event message.
1090	cEVS3020	cEVS3020 Upon receipt of Command the cFE shall delete the specified Event Filter for the specified cFE Appliction and Event ID
1092	cEVS3020.1	cEVS3020.1 If the Event ID is not registered for filtering then the cFE shall reject the command and generate an event message
1094	cEVS3100	cEVS3100 Upon receipt of Request, the cFE shall register an Application for event service, enabling the Application Event Service Enable Status and storing the following request specified Application data: Application Event IDs (for events to be filtered)

ID	ReqID	Text
		Application Binary Filter Masks (one per registered Event ID)
1096	cEVS3100.1	cEVS3100.1 Upon receipt of Request to register an Application for event service, the cFE shall create one Application Binary Filter Counter per registered Event ID.
1098	cEVS3100.2	cEVS3100.2 Upon receipt of Request to register an Application for event service, the cFE shall create an Application Event Message Sent Counter
1100	cEVS3100.3	cEVS3100.3 Upon receipt of Request to register an Application for event service, the cFE shall use the <PLATFORM_DEFINED> Application Event Type Enable Statuses for each event.
1102	cEVS3101	cEVS3101 Upon receipt of Request, the cFE shall un-register an Application from using event services, deleting the following Application data: Application Event Message Sent Counter Application Event Service Enable Status Application Event Type Enable Statuses (one for each Event Type) Application Filtered Event IDs Application Binary Filter Masks (one per registered Event ID) Application Binary Filter Counters (one per registered Event ID)
1104	cEVS3102	cEVS3102 The cFE shall support the following Event Message Types: Debug Informational Error Critical
1106	cEVS3103	cEVS3103 Upon receipt of a Request to send an Event Message, the cFE shall create a Short or Long Event Message, as specified by the SB Event Format Mode, ONLY if the following cFE conditions are met: The requesting ApplicationÃ¢â‚¬â„¢s Event Service Enable Status is Enabled. The requesting ApplicationÃ¢â‚¬â„¢s registered message filtering algorithm indicates the message should be sent. The requesting ApplicationÃ¢â‚¬â„¢s Event Type Enable Status is Enabled for the Event Type of the request-specified Event Message.
1108	cEVS3103.1	cEVS3103.1 If the requesting Application has been determined to be unregistered the cFE shall increment the Unregistered Application Send Counter and send an event message.
1110	cEVS3103.2	cEVS3103.2 The cFE shall support the following data types within an applicationÃ¢â‚¬â„¢s Request specified Event Data: Signed Character Unsigned Character Short Integer Unsigned Short Integer Long Integer Unsigned Long Integer
1112	cEVS3103.3	cEVS3103.3 If the request specified Event ID has been registered for binary event filtering, the cFE shall increment the request specified Application's Binary Filter Counter for the request-specified Event ID.
1114	cEVS3103.3.1	cEVS3103.3.1 If the Binary Filter Counter has reached its maximum value of 2^16 - 1, the cFE shall retain the maximum value (i.e. do not rollover to zero).
1116	cEVS3103.4	cEVS3103.4 If the SB Format Mode is set to Long, the cFE shall generate an SB Event Message formatted as specified in the cFE User's Guide containing the Spacecraft Time, Processor ID, Application ID, Event ID, Event Type, and the Request-specified Event Data.

ID	ReqID	Text
1118	cEVS3103.4.1	cEVS3103.4.1 If the Event Data is greater than the <MISSION_DEFINED> maximum Event Data, the cFE shall truncate the Event Message with a string-termination character and increment the Message Truncation Counter.
1120	cEVS3103.5	cEVS3103.5 If the SB Format Mode is set to Short, the cFE shall generate an SB Event Message formatted as specified in the cFE User's Guide containing the spacecraft time, Processor ID, Application ID, Event ID, and Event Type.
1122	cEVS3103.6	cEVS3103.6 The requester shall be able to specify the Application ID to be used in the Event Message
1124	cEVS3103.7	cEVS3103.7 The requester shall be able to specify the time to be used in the Event Message.
1126	cEVS3104	cEVS3104 For each created Event Message, the cFE shall increment the Application Event Message Sent Counter for the request-specified Application.
1128	cEVS3104.1	cEVS3104.1 If the Application Event Message Sent Counter has reached its maximum value of 2^16 - 1, the cFE shall retain the maximum value (i.e. do not rollover to zero).
1130	cEVS3105	cEVS3105 For each created Event Message, the cFE shall increment the Event Message Sent Counter.
1132	cEVS3105.1	cEVS3105.1 If the Event Message Sent Counter has reached its maximum value of 2^16 - 1 the cFE shall retain the maximum value (i.e. do not rollover to zero).
1134	cEVS3106	cEVS3106 Upon receipt of a request, the cFE shall set an Application's Binary Filter Counter to zero for the Application request-specified Event ID.
1136	cEVS3107	cEVS3107 Upon receipt of a request, the cFE shall set all of an Application's Binary Filter Counters to zero for the request-specified Application.
1138	cEVS3108	cEVS3108 <OPTIONAL> For each created Event Message, the cFE shall store the Event Message in the Local Event Log in the Long Event Message Format.
1140	cEVS3108.1	cEVS3108.1 <OPTIONAL> If the Local Event Log becomes full, the cFE shall set the Local Event Log Full Flag to true.
1142	cEVS3108.2	cEVS3108.2 <OPTIONAL> If the Local Event Log is full, the cFE shall increment the Local Event Log Overflow counter.
1144	cEVS3108.3	cEVS3108.3 <OPTIONAL> If the Local Event Log is full, the cFE shall either (1) overwrite the oldest Event Message if the Event Logging Mode is overwrite, or (2) discard the Event Message if the Event Logging Mode is discard.
1146	cEVS3109	cEVS3109 For each created Event Message, the cFE shall route the Event Message, formatted as an ASCII text string, to each enabled Event Message Output Port.
1148	cEVS3110	cEVS3110 Upon receipt of Request the cFE shall free resources allocation for the specified Application
1150	cEVS3200	cEVS3200 Upon a Power-on Reset, the cFE shall set the <PLATFORM_DEFINED> Event Message Output Ports to their <PLATFORM_DEFINED> default state: Port Number 1: <PLATFORM_DEFINED, Enabled > Port Number 2: <PLATFORM_DEFINED, Disabled > Port Number 3: <PLATFORM_DEFINED, Disabled > Port Number 4: <PLATFORM_DEFINED, Disabled >
1152	cEVS3201	cEVS3201 Upon a Power-on Reset, the cFE shall set SB Event Format Mode to Long.
1154	cEVS3202	cEVS3202 <OPTIONAL> Upon a Power-on Reset, the cFE shall set the Local Event Log Full Flag to false.
1156	cEVS3203	cEVS3203 <OPTIONAL> Upon a Power-on Reset, the cFE shall set the Event Logging Mode to

ID	ReqID	Text
		<PLATFORM_DEFINED, overwrite>.
1158	cEVS3207	cEVS3207 <OPTIONAL> Upon a Processor Reset, the cFE shall preserve or overwrite the contents of the Local Event Log based on the setting of the Event Logging Mode configuration parameter. Note: The contents of the Local Event Log will be preserved if the Event Logging Mode is configured to Discard (1). The contents of the Local Event Log may be overwritten (depending on the size and contents of the log prior to the reset) if the Event Logging Mode is configured to Overwrite (0).
1160	cEVS3208	cEVS3208 OPTIONAL> Upon a Processor Reset, the cFE shall preserve the Local Event Log Full state.
1162	cEVS3209	cEVS3209 <OPTIONAL> Upon a Processor Reset, the cFE shall set the Event Logging Mode to the <PLATFORM_DEFINED> value.
1164	cEVS3210	cEVS3210 <OPTIONAL> Upon a Processor Reset, the cFE shall preserve the Local Event Log Overflow Counter.
1166	cEVS3300	cEVS3300 The cFE shall support <PLATFORM_DEFINED, 4> Event Message Ports.
1168	cEVS3301	cEVS3301 <OPTIONAL> The cFE shall define a Local Event Log with a capacity of <PLATFORM_DEFINED, 20> Event Messages.
1170	cEVS3302	cEVS3302 The cFE shall support <PLATFORM_DEFINED, 8> Event Message Filters per cFE Application
1174	cSB4000	cSB4000 Upon receipt of a NOOP command, the cFE shall increment the command counter.
1176	cSB4001	cSB4001 Upon receipt of Command the cFE shall set to zero the following counters in housekeeping telemetry: - Valid command counter - Invalid command counter - No subscriptions counter - Message send error counter - Message receive error counter - Create Pipe error counter - Subscribe error counter - Pipe Overflow error counter - MsdID-to-pipe limit error counter.
1178	cSB4002	cSB4002 Upon receipt of a Command, the cFE shall send an SB Message containing the SB statistics.
1180	cSB4003	cSB4003 Upon receipt of a Command, the cFE shall save the SB routing information to the Command specified file.
1182	cSB4003.1	cSB4003.1 If a file is not specified, the cFE shall use the <PLATFORM_DEFINED> filename
1184	cSB4004	cSB4004 Upon receipt of a Command, the cFE shall enable or disable routing the command specified message to the command specified pipe.
1186	cSB4005	cSB4005 The cFE shall send an SB Message containing the following housekeeping telemetry items: - Valid command counter - Invalid command counter - No subscriptions counter - Message send error counter

ID	ReqID	Text
		- Message receive error counter - Pipe overflow error counter - MsgId-to-pipe limit error counter
1188	cSB4007	cSB4007 Upon receipt of a Command, the cFE shall save the Pipe information to the Command specified a file.
1190	cSB4007.1	cSB4007.1 If a file is not specified, the cFE shall use the <PLATFORM_DEFINED> filename
1192	cSB4008	cSB4008 Upon receipt of a Command, the cFE shall save the message map information to the Command specified a file.
1194	cSB4008.1	cSB4008.1 If a file is not specified, the cFE shall use the <PLATFORM_DEFINED> filename
1196	cSB4300	cSB4300 The cFE shall provide a zero-copy message transfer mode for intra-processor communication.
1198	cSB4301	cSB4301 Upon receipt of a Request to create a Pipe, the cFE shall create a Pipe with the Request-specified Pipe Depth and the Request-specified name.
1200	cSB4302	cSB4302 Upon receipt of a Request to delete a Pipe, the cFE shall Unsubscribe all messages to the Request-specified Pipe, then remove the Pipe from the Routing Information.
1202	cSB4303	cSB4303 Upon receipt of a Request to Subscribe to an SB message, the cFE shall establish a route using the Request-specified Message ID, the Request-specified Pipe ID, the Request-specified MsgId-to-Pipe limit and the Request-specified QoS.
1204	cSB4303.1	cSB4303.1 If the Subscription is a duplicate of a previous subscription then the cFE shall issue and event message.
1206	cSB4304	cSB4304 Upon receipt of a Request to Unsubscribe to an SB Message, the cFE shall remove the route corresponding to the Request-specified Message Id and the Request-specified Pipe Id from the Routing Information.
1208	cSB4305	cSB4305 Upon receipt of a Request to send an SB Message, the cFE shall route the SB Message to the Pipes of all Applications that have Subscribed to the SB Message.
1210	cSB4305.1	cSB4305.1 The cFE shall limit the number of messages of a particular Message ID that can be sent to an Application's Pipe.
1212	cSB4305.3	cSB4305.3 If routing a Message to an Application's Pipe results in a Pipe Overflow, the cFE shall abort the send to that pipe, issue an event, and continue sending to the remaining pipes.
1214	cSB4305.4	cSB4305.4 If routing a Message to an Application's Pipe would exceed the MsgId-to-Pipe Limit, the cFE shall abort the send to that pipe, issue an event, and continue sending to the remaining pipes.
1216	cSB4305.5	cSB4305.5 Upon receipt of a Request to send a Message, if no Application's have Subscribed to the Message, the cFE shall increment the No Subscriber's Counter and send an event that displays the Message ID.
1218	cSB4305.6	cSB4305.6 If the SB Message is greater than the <MISSION_DEFINED,32767> bytes then the cFE shall not send the message, issue and event message and increment the message send error counter.
1220	cSB4306	cSB4306 Upon receipt of a Request to receive a SB Message from a Pipe without a timeout, the cFE shall remove the next SB Message from the Pipe and provide the message to the Application.
1222	cSB4307	cSB4307 Upon receipt of a Request to receive a SB Message from a Pipe with a pending timeout, the cFE shall suspend execution of the Application until a SB Message is present on the Pipe or the timeout has expired.
1224	cSB4308	cSB4308 Upon receipt of a Request to receive a SB Message from a Pipe with an infinite timeout, the cFE shall suspend execution of the Application until a SB Message is present on the Pipe.
1226	cSB4309	cSB4309 Upon receipt of a Request, the cFE shall provide sender information for the last message

ID	ReqID	Text
		received on an Application's Pipe.
1228	cSB4310	cSB4310 Upon receipt of Request the cFE shall free resources allocation for the specified Application
1234	cSB4500	cSB4500 Upon a Power-on Reset the cFE shall initialize the Routing Information and clear all error counters.
1236	cSB4501	cSB4501 Upon a Processor Reset the cFE shall initialize the Routing Information and clear all error counters.
1238	cSB4700	cSB4700 The cFE shall support a maximum of <PLATFORM_DEFINED, 1024> Message ID's
1240	cSB4701	cSB4701 The cFE shall support a < MISSION_DEFINED, 32768> bytes maximum system packet size.
1242	cSB4704	cSB4704 The cFE shall support a maximum of < PLATFORM_DEFINED, 64> Destinations for a Message ID.
1244	cSB4705	cSB4705 The cFE shall support a maximum of < PLATFORM_DEFINED, 255> Pipes per processor.
1246	cSB4706	cSB4706 The cFE shall support a maximum Pipe depth of < PLATFORM_DEFINED, 65535> SB Messages.
196	cTBL6000	cTBL6000 Upon receipt of Command the cFE shall load an Inactive Table Image with the contents of the Command specified File.
202	cTBL6000.1	cTBL6000.1 If the Command specified file's header indicates that the file contains only a portion of the Table, the cFE shall first load an Inactive Table Image with the contents of the Active Table Image and then load the contents of the Command specified File.
204	cTBL6000.2	cTBL6000.2 If the number of data bytes contained in the file is greater than the maximum size of the table then the load shall be aborted and an event message shall be generated
206	cTBL6000.3	cTBL6000.3 If the number of bytes specified in the file's header is not equal to the number of data bytes contained in the file then the load shall be aborted and an event message be generated
208	cTBL6000.4	cTBL6000.4 The Inactive Table Image shall only be loaded with the contents of the Active Table if the Inactive Table Image has not been initialized.
210	cTBL6000.5	cTBL6000.5 If the specified table is defined as Dump Only then the command shall be rejected and an event message be generated.
212	cTBL6001	cTBL6001 Upon receipt of Command the cFE shall dump the Command specified Active or Inactive Table contents to a Command specified File.
216	cTBL6002	cTBL6002 Upon receipt of Command the cFE shall determine the validity of the contents of either the Active or Inactive Table Image of the Command specified Table.
218	cTBL6002.1	cTBL6002.1 The cFE shall compute a Data Integrity Check Value on the contents of either the Active or Inactive Table Image of the Command specified Table and report the result in telemetry.
220	cTBL6002.2	cTBL6002.2 The cFE shall Request an Application to validate the contents of either the Active or Inactive Table Image of the Command specified Table and report the result in telemetry.
222	cTBL6003	cTBL6003 Upon receipt of Command the cFE shall make an Inactive Table Image of the Command specified Table the Active Table Image.
224	cTBL6003.1	cTBL6003.1 If a Table Validation Function exists for the specified Table, the Inactive Table Image shall be validated.
226	cTBL6003.1.1	cTBL6003.1.1 If the Inactive Table Image fails validation then the Inactive Table Image shall not be loaded into the Active Table Image

ID	ReqID	Text
228	cTBL6003.1.2	cTBL6003.1.2 If a Table Validation Function does not exist for the specified Table, the Table shall be considered valid
230	cTBL6005	cTBL6005 Upon receipt of Command the cFE shall write the contents of the Table Registry to a file.
232	cTBL6005.1	cTBL6005.1 If a file is not specified, the cFE shall use the <PLATFORM_DEFINED> filename.
234	cTBL6006	cTBL6006 Upon receipt of Command the cFE shall telemeter the contents of the Table Registry associated with a Command specified Table.
236	cTBL6007	cTBL6007 Upon receipt of Command the cFE shall generate a NO-OP event message.
238	cTBL6008	cTBL6008 Upon receipt of Command the cFE shall set the following counters reported in telemetry to zero: - Valid Command Counter - Invalid Command Counter - Number of Validation Requests - Number of successful Table Validations - Number of Unsuccessful Validations - Number of Completed Validations
240	cTBL6009	cTBL6009 Upon receipt of valid command, the cFE shall increment the valid command counter.
242	cTBL6010	cTBL6010 Upon receipt of an invalid command, the cFE shall in increment the invalid command counter.
244	cTBL6011	cTBL6011 The cFE shall provide the following Table Service data items in telemetry (SB Messages): - Valid Command Counter - Invalid Command Counter - Number of Tables Currently Registered - Table Identifier of Last Table Modified - Time of Last Table Modification - Source Filename of Last Table Load - Destination Filename of Last Table Dump - Table Identifier of Commanded Data Integrity Check - Commanded Data Integrity Check Value - Commanded Table Verification Function Result - Number of unused Shared Buffers - Table Name of Last Table Load
246	cTBL6012	cTBL6012 Upon receipt of Command the cFE shall abort the loading of the specified Table.
248	cTBL6012.1	cTBL6012.1 If the Table buffering characteristics for the specified Table indicate that it is a Single-buffered Table, then the allocated shared buffer shall be released.
250	cTBL6012.2	cTBL6012.2 If the Table buffering characteristics for the specified Table indicate that it is a Double-buffered table, then the inactive buffer shall be marked as uninitalized
252	cTBL6012.3	cTBL6012.3 The Table Registry shall indicate that there are no loads pending for the specified Table.
254	cTBL6300	cTBL6300 Upon receipt of Request, the cFE shall create a zero filled Table Image with the Request specified name, size, buffering characteristics (single or double-buffer), dump-only characteristics, and criticality and Table Validation Function address.
256	cTBL6300.1	cTBL6300.1 The cFE shall allow an Application to specify an address as the one and only buffer for a dump-only Table.
258	cTBL6301	cTBL6301 Upon receipt of Request, the cFE shall free the resources associated the Request specified

ID	ReqID	Text
		Application.
260	cTBL6302	cTBL6302 Upon receipt of Request, the cFE shall initialize the contents of the Request specified Table Image with the contents of the Request specified File.
262	cTBL6302.1	cTBL6302.1 If the Request specified File contains more data than the size of the Request specified Table, the Table Image will not be initialized and an Event Message shall be generated.
264	cTBL6302.2	cTBL6302.2 If the Request specified File contains less data than the size of the Request specified Table, the first portion of the Table Image will be initialized with the contents of the File and an Event Message shall be generated.
266	cTBL6303	cTBL6303 Upon receipt of Request, the cFE shall provide the calling Application with a unique identifier of an existing Table Image.
268	cTBL6304	cTBL6304 Upon receipt of Request, the cFE shall free resources allocated for the Request specified Table.
270	cTBL6305	cTBL6305 Upon receipt of Request, the cFE shall provide the calling Application with the address of the Request specified Table data.
272	cTBL6305.1	cTBL6305.1 Upon providing a calling Application with the address of a Table's data, the cFE shall lock the contents of the Table to prevent modification.
274	cTBL6305.2	cTBL6305.2 If a Table has been modified since the last Table address request, the cFE shall notify the calling Application that the Table has been modified.
276	cTBL6306	cTBL6306 Upon receipt of Request, the cFE shall unlock the contents of the Request specified Table.
278	cTBL6308	cTBL6308 Upon receipt of Request, the cFE shall update the request specified Table if a load is pending and it is unlocked.
280	cTBL6308.1	cTBL6308.1 If a Table is locked when an update Request is made, an appropriate error code shall be returned to the calling Application and the update shall not occur.
282	cTBL6309	cTBL6309 Upon receipt of Request, the cFE shall provide the following information to the calling Application for the specified Table: - Size of the table - Number of Users the access to the table (sharing) - Filename of the last file used to modify the table - File creation time of last file used to modify the table - Time of last modificationFlag indicating if the Table has been initialized - Flag indicating if the Table is dump only - Flag indicating if the Table has a dedicated buffer - Flag indicating if the table is maintained in the Critical Data Store
284	cTBL6310	cTBL6310 Upon receipt of Request the cFE shall indicate if the specified table has a validation, update, or dump pending.
286	cTBL6311	cTBL6311 Upon receipt of Request, the cFE shall provide the calling Application with the addresses of the data for the tables requested if more than one table is needed
288	cTBL6311.1	cTBL6311.1 Upon providing a calling Application with the addresses of a Tables' data, the cFE shall lock the contents of the Tables to prevent modification.
290	cTBL6311.2	cTBL6311.2 If at least one Table has been modified since the last Table addresses request, the cFE shall notify the calling Application that a Table has been modified.
292	cTBL6312	cTBL6312 Upon receipt of Request, the cFE shall unlock the contents of the Request specified Tables

ID	ReqID	Text
294	cTBL6500	cTBL6500 Upon a Power-on Reset all Table resources will be freed.
296	cTBL6501	cTBL6501 Upon a Processor Reset all Table resources will be freed.
298	cTBL6501.1	cTBL6501.1 If the Table is a critical table then the contents of the Table shall be preserved
300	cTBL6700	cTBL6700 The cFE shall support <PLATFORM_DEFINED, 128> Tables.
302	cTBL6701	cTBL6701 The cFE shall support <PLATFORM_DEFINED, 4> Single-Buffer Table Loads and Application-Defined-Address-Table dumps simultaneously.
118	cTIME2000	cTIME2000 Upon receipt of Command the cFE shall generate a Software Bus message that includes the following items: Time StatusMETSTCFLeap SecondsSTCF continuous adjustment value
120	cTIME2001	cTIME2001 Upon receipt of Command the cFE shall generate a NO-OP event message. (Time Server and Time Client)
122	cTIME2002	cTIME2002 Upon receipt of Command the cFE shall set to zero all counters reported in Time Services telemetry. (Time Server and Time Client)
124	cTIME2003	cTIME2003 Upon receipt of valid command, the cFE shall increment the valid command counter.
126	cTIME2004	cTIME2004 Upon receipt of an invalid command, the cFE shall in increment the invalid command counter.
128	cTIME2005	cTIME2005 Upon receipt of Command the cFE shall set the number of Leap Seconds to the Command-specified value.
130	cTIME2006	cTIME2006 Upon receipt of Command the cFE shall set the STCF to the Command-specified value.
132	cTIME2007	cTIME2007 Upon receipt of Command the cFE shall compute a new value for STCF using the Command-specified value as current time.
134	cTIME2008	cTIME2008 Upon receipt of Command the cFE shall make a one time delta adjustment to the STCF by the Command-specified value.
136	cTIME2009	cTIME2009 Upon receipt of Command the cFE shall make a continuous 1Hz delta adjustment to the STCF by the Command-specified value.
138	cTIME2010	cTIME2010 <MISSION_DEFINED> Upon receipt of Command the cFE shall switch to the Command-specified hardware clock source.
140	cTIME2011	cTIME2011 Upon receipt of Command the cFE shall generate a Software Bus message that includes time diagnostic information.
142	cTIME2012	cTIME2012 Upon receipt of Command the cFE Time Services shall enter the Flywheel state.
144	cTIME2012.1	cTIME2012.1 The cFE shall ignore Time Updates while in Flywheel state.
146	cTIME2013	cTIME2013 Upon receipt of Command the cFE shall adjust the spacecraft time by adding the Command specified value (seconds and subseconds) to spacecraft time
148	cTIME2014	cTIME2014 SR1306 Upon receipt of Command the cFE shall adjust the spacecraft time by subtracting the Command specified value (seconds and subseconds) from spacecraft time
150	cTIME2300	cTIME2300 Upon receipt of a Request for the current time computed as TAI, the cFE shall provide the TAI to the requester using the format specified in the cFE Application Developer's Guide.
152	cTIME2301	cTIME2301 Upon receipt of a Request for the current time computed as UTC, the cFE shall provide the UTC to the requester using the format specified in the cFE Application Developer's Guide.
154	cTIME2302	cTIME2302 Upon receipt of a Request for the current time computed in the default format, the cFE shall provide the current time computed in the default selection of UTC or TAI to the requester using the format specified in the cFE Application Developer's Guide.
156	cTIME2303	cTIME2303 Upon receipt of a Request for the current MET, the cFE shall provide the MET to the requester using the format specified in the cFE Application Developer's Guide.

ID	ReqID	Text
158	cTIME2304	cTIME2304 Upon receipt of a Request for the current MET seconds, the cFE shall provide the MET seconds to the requester using the format specified in the cFE Application Developer's Guide.
160	cTIME2305	cTIME2305 Upon receipt of a Request for the current MET sub-seconds, the cFE shall provide the MET sub-seconds to the requester using the format specified in the cFE Application Developer's Guide.
162	cTIME2306	cTIME2306 Upon receipt of a Request for the current STCF, the cFE shall provide the STCF to the requester using the format specified in the cFE Application Developer's Guide.
164	cTIME2307	cTIME2307 Upon receipt of a Request for the current Leap Seconds, the cFE shall provide the Leap Seconds to the requester using the format specified in the cFE Application Developer's Guide.
166	cTIME2308	cTIME2308 Upon receipt of a Request for the current Clock State, the cFE shall provide the Clock State to the requester using the format specified in the cFE Application Developer's Guide.
168	cTIME2309	cTIME2309 Upon receipt of a Request to add two time values, the cFE shall provide the result to the requester using the format specified in the cFE Application Developer's Guide.
170	cTIME2310	cTIME2310 Upon receipt of a Request to subtract two time values, the cFE shall provide the result to the requester using the format specified in the cFE Application Developer's Guide.
172	cTIME2311	cTIME2311 Upon receipt of a Request to compare two time values, the cFE shall provide the result to the requester using the format specified in the cFE Application Developer's Guide.
174	cTIME2312	cTIME2312 Upon receipt of a Request to convert a cFE sub-seconds value to micro-seconds, the cFE shall provide the result to the requester.
176	cTIME2313	cTIME2313 Upon receipt of a Request to convert a number of micro-seconds to sub-seconds, the cFE shall provide the result to the requester.
178	cTIME2314	cTIME2314 Upon receipt of a Request the cFE shall return the provided system time in the following format; yyyy-ddd-hh:mm:ss.xxxxx\0
180	cTIME2500	cTIME2500 Upon a Power-on Reset the cFE shall set the following time elements to their <MISSION_DEFINED> default values: Time Status DataSTCFLeap Seconds
182	cTIME2501	cTIME2501 Upon a Processor Reset the cFE shall acquire the following time elements from the <MISSION_DEFINED> Critical Data Store: Time Status DataSTCFLeap Seconds
184	cTIME2502	cTIME2502 Upon a Processor Reset the cFE shall verify the Critical Data Store used to store time values.
186	cTIME2502.1	cTIME2502.1 If the critical data store is not valid, all of the time elements shall be initialized in the same fashion as following a power-on reset.
188	cTIME2700	cTIME2700 During normal operation, the cFE shall preserve the following time elements in the <MISSION_DEFINED> Critical Data Store: Time Status DataSTCFLeap SecondsMET
190	cTIME2701	cTIME2701 The cFE Time Services Server shall send a time at the tone Software Bus message within a <MISSION_DEFINED> period of time preceding or following the tone.
192	cTIME2702	cTIME2702 The cFE Time Services Server shall update its MET using the timer hardware interface defined in the cFE Application Developer's Guide.
194	cTIME2703	cTIME2703 The cFE shall define a MET with a <MISSION_DEFINED> resolution.
		Task Allocation Item Total: *338*