



Aviation Electronic Flight Bag (EFB) Tactics, Techniques, and Procedures (TTP)





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Subj: ELECTRONIC FLIGHT BAG TACTICS, TECHNIQUES, AND PROCEDURES

Ref: (a) USCG Personal Property Management Manual and Reference, COMDTINST M4500.5 (series)
(b) USCG Financial Resource Management Manual, COMDTINST M7100.3 (series)
(c) Coast Guard Security and Information Assurance Manual, COMDTINST M5500.13 (series)
(d) Coast Guard Air Operations Manual, COMDTINST M3710.1 (series)

1. PURPOSE. To provide aviation crew members with Coast Guard tactics, techniques, and procedures (TTP) for the use and management of the Electronic Flight Bag (EFB).
2. ACTION. This TTP publication applies to all EFB users and administrators. Internet release authorized.
3. DIRECTIVES/TTP AFFECTED. None.
4. DISCUSSION. This TTP provides guidance to field operators, operational commanders, and training system instructors employing the EFB during operations or training.
5. DISCLAIMER. This guidance is not a substitute for applicable legal requirements, nor is itself a rule. It provides guidance for Coast Guard personnel and does not impose legally-binding requirements on any party outside the Coast Guard.
6. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS. While developing this publication, Integrated Process Team (IPT) members examined environmental considerations under the National Environmental Policy Act (NEPA) and determined they are not applicable.
7. DISTRIBUTION. FORCECOM TTP Division posts an electronic version of this TTP publication to the TTP Library on the CG Portal. In the CG Portal, navigate to the TTP Library by selecting References, Tactics, Techniques, and Procedures (TTP), and then TTP Library. FORCECOM TTP Division does not provide paper distribution of this publication.

8. RECORDS MANAGEMENT CONSIDERATIONS. Integrated Process Team (IPT) members thoroughly reviewed this publication during the TTP coordinated approval process and determined there are no further records scheduling requirements per Federal Records Act, 44 U.S.C. Chapter 31 § 3101 et seq., NARA requirements, and Information and Life Cycle Management Manual, COMDTINST M5212.12 (series). This publication does not have any significant or substantial change to existing records management requirements.
9. FORMS/REPORTS. The forms called for in this publication are available in USCG electronic forms on the standard workstation or on the Internet: <http://www.uscg.mil/forms/>; CG Portal: Select References from the home page; and Intranet at <http://cgweb.comdt.uscg.mil/CGForms>.
10. REQUEST FOR CHANGES. Submit recommendations for TTP improvements or corrections via email to FORCECOM-PI@uscg.mil or through the TTP Request form on the CG Portal. In the CG Portal, navigate to the TTP Request form by selecting References, Tactics, Techniques, and Procedures (TTP), and then TTP Request.

Info COMCOGARD FORCECOM NORFOLK VA//FC-P// on message traffic containing lessons learned applicable to this TTP publication.

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By Direction of the FORCECOM Commander

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Chapter 1: Electronic Flight Bag

Introduction This chapter overviews the contents of this TTP publication. It also defines the use of notes, cautions, and warnings in TTP publications.

In This Chapter This chapter contains the following sections:

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Section A: Introduction

A.1. Introduction The Electronic Flight Bag (EFB) is an electronic information management tool for aviation mission planning and execution designed to reduce paper products carried on Coast Guard aircraft. The EFB can reduce pilot workload, increase efficiency, and enhance situational awareness.

A.2. Scope This Coast Guard Tactics, Techniques, and Procedures (TTP) introduces the various roles, training, management, and use of the EFB in Coast Guard aviation.

Section B: Notes, Cautions, and Warnings

B.1. Overview The following definitions apply to notes, cautions, and warnings found in this publication.

NOTE: **An emphasized statement, procedure, or technique.**

CAUTION: **A procedure, technique, or action that, if not followed, carries the risk of equipment damage.**

WARNING: *A procedure, technique, or action that, if not followed, carries the risk of injury or loss of life.*

Chapter 2: Introduction to the Electronic Flight Bag

Introduction This chapter provides general information relating to using the EFB in USCG aviation flight decks.

In This Chapter This chapter contains the following sections:

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Section A: Introduction

A.1. Overview

Aviation policy and procedures have increased to a point where aircrews cannot carry all required paper documents because of the sheer volume and weight. An EFB allows aircrews to possess required information in digital format, without jeopardizing aircraft performance or safety.

The EFB has the capability to display a variety of aviation publications and aeronautical charts, and allows aircrews to have on hand all required information for USCG aviation's area of responsibility (AOR).

The EFB is an electronic information management device that helps flight crews perform pre-flight, in-flight, and post-flight management tasks more efficiently.

A.2. Scope

This TTP applies to all aviation units authorized to use EFBs in their airframes.

The USCG aviation mobile device management (MDM) system manages EFBs. Only EFBs managed within the MDM are authorized for use in USCG flight operations.

Section B: Roles and Responsibilities

B.1. COMDT CG-711

- Sets future capability requirements for the EFB.
- Reviews CG-6 configuration and image specifications to ensure operational integrity.
- Authorizes all device applications.
- Provides approval for operational use.
- Identifies funding for hardware and software.
- Coordinates with Aviation Logistics Center (ALC) /Engineering Services Division (ESD) any changes related to the baseline EFB hardware.

B.2. COMDT CG-6

- Establishes configuration and imaging specifications.

- Supervises the configuration manager.
- Provides MDM software management:
 - Establishes new device accounts on the MDM.
 - Distributes application licenses.
 - Maintains permissions and data integrity within the secure content locker (SCL).
 - Conducts audits on security compliance, internet accessibility, device inventory, and license allocations.
 - Provides configuration management control and monitors image compliance.
- Manages distribution of the EFB device and:
 - Coordinates with CG-711 on device hardware procurement, including any contract modifications that would change the baseline hardware model.
 - Serves as liaison to the vendor for shipping devices directly to USCG air stations.
- Provides MDM support functions:
 - Monitors the MDM user self-help portal.
 - Manages the Coast Guard MDM Aviation server.
 - Liaises between the user and the MDM helpdesk.

B.3. CG EFB Administrators

COMDT CG-7113 (C4ISR) and the USCG Mission Planning Systems position at ATC Mobile are the USCG EFB administrators. The administrators manage the EFB initiative and ensure EFB hardware and software solutions conform to established specifications.

- Review future hardware and software capabilities and provide recommendations to CG-711.
- Publish approved software applications.
- Establish and maintain EFB curriculum in consultation with ATC Mobile Training Divisions.
- Review Training Division requests for new software applications and provide recommendations to CG-711.
- Define access rights for users and administrators within the SCL.

- Manage user's access to platform and air station folders within the SCL.
- Manage access to data within the SCL to ensure integrity and currency of data.
- Process all requests submitted by unit EFB administrator as defined in Section B.5: Air Station.

B.4. ATC Mobile ATC Mobile Training Divisions:

- Incorporate EFB training and evaluation into applicable courses emphasizing human factors considerations and crew resource management (CRM) with the use of electronic devices.
- Establish procedures for the respective platforms to ensure currency and validity of safety-critical data prior to use in flight (e.g., app version, chart and database currency, etc.).
- Ensure crews maintain proficiency in non-EFB procedures (e.g., paper charts and flight information publications (FLIP)).
- Provide additional training for new applications or for significant hardware changes.

B.5. Air Station Air stations have the bulk of the effort to establish an effective EFB program. Depending on the size of the air station and the associated work load, one or more people can fill the roles described below.

B.5.a. Unit EFB Administrator

- Manages unit EFB administrator security group email:
 - Ensures members of email are current (includes only the current unit EFB administrator and a maximum of two additional members for back up).
- Manages members' MDM accounts:
 - Initiates and maintains EFB User Agreements, located on the [EFB CG Portal](#) page, for all newly assigned personnel at his or her unit.
 - Submits requests for new MDM accounts to the Centralized Service Desk (CSD) via CGFIXIT.
 - Provides a copy of the EFB user agreement to the EFB property custodian.
 - Submits MDM account changes, such as permanent change of station (PCS) and separation from service, to CSD and EFB

administrators.

- Transfers or disposes of the EFB User Agreements upon user transfer or separation.
- Manages returned devices:
 - Ensures returned devices are properly reset (**Settings > Reset > Erase All Content and Settings**) enabling device re-issue to another user.
 - Submits MDM removal requests to the CSD and EFB administrators for all members:
 - Separating from service,
 - Executing PCS orders to a non-flying billet (DIFDEN), or
 - Transferring to duty as Naval flight training instructors.
 - Returns devices to the EFB property custodian for re-issue.
- Governs enterprise EFB software application license allocations:
 - Adds and removes member accounts as needed.
 - Generates monthly reports on member compliance with safety critical EFB flight data (e.g., maps, FLIP, manuals, etc.).
- Manages unit documents in the air station folder within the SCL.

B.5.b. Unit EFB
Property
Custodian

The air station EFB property custodian manages accountability of the devices per reference (a) USCG Personal Property Management Manual and reference, COMDTINST M4500.5 (series) and reference (b) USCG Financial Resource Management Manual, COMDTINST M7100.3 (series).

- Receives the signed EFB User Agreement from the unit EFB administrator.
- Initiates and maintains DHS Form 560-1, Custody Receipt for Personal Property/Property Pass.
- Determines if loss or damage to the EFB, charging cords, and protective cases is due to neglect or normal use, and initiates further action per reference (a).
- Determines if unit funds are available to replace the device. Follow the steps listed in Chapter 4, Section F: Tech Support.
- Determines if software and hardware issues are covered by the manufacturer's one-year warranty.

➤ Coordinates replacement of the device following the steps listed in Chapter 4, Section F: Tech Support.

- Determines adequate sparing for devices, charging cords, and protective cases.
- Initiates and distributes DD Form 1149, Requisition and Invoice/Shipping Document, for members transferring to another flying billet (DIFOPS, DIFPRO), except for pilots transferring to Naval Air Station Pensacola.
- Retrieves the EFB device from members that are on orders to a non-flying billet (DIFDEN), Naval flight training instructors (Pensacola), and from members separating from service (End of Term of Service (ETS), released from active duty (RELAD), or retirement).

B.5.c. Unit
Standardization
Officer

- Ensures all aircrew complete the required EFB curriculum before use in the aircraft.
- Ensures standardized EFB use.
- Ensures aircrew maintain up-to-date flight data on the EFB through reports generated by the unit EFB administrator.

B.5.d. EFB User

- Ensures initial set-up of the EFB following the guidance on the EFB CG Portal page.
- Ensures the EFB is provisioned with the USCG MDM at all times.
- Completes applicable EFB curriculum before operational use in the aircraft.
- Maintains and secures the EFB per reference (a) USCG Personal Property Management Manual and Reference, COMDTINST M4500.5 (series).
- Transfers the device to the gaining unit's property account using DD Form 1149, Requisition and Invoice/Shipping Document during all PCS transfers to another flying billet (DIFPRO or DIFOPS).
- Returns the EFB to the property custodian upon separation or transfer to a DIFDEN or Naval flight training instructor billet. This includes returning a functional power cord and protective case.
- When returning an EFB, ensures the device is reset to factory settings (**Settings > Reset > Erase All Content and Settings**).
- Use CGFIXIT to address issues with the MDM software.
- Coordinates with the unit EFB administrator and the unit EFB property

custodian if the device becomes inoperative and requires replacement.

NOTE:

The ForeFlight App can be re-installed and license reset without the MDM for use in flight. Reset the MDM as soon as time permits.

Section C: Training

- C.1. Overview** All pilots complete the FORCECOM approved curriculum. The standardized curriculum enables safe and effective use of the EFB during execution of USCG aviation missions.
- Recognizing differences in human/machine interface between USCG aircraft, the curriculum allows ATC Mobile Training Divisions to determine best practices for use in their respective airframes.
-
- C.2. Objective** Completing the approved curriculum and recurrent training assessments prepares pilots and ensures proper use of the EFB throughout the full spectrum of USCG aviation missions. Knowledge, skill, and proficiency requirements are standardized throughout the various platforms for both pre-flight mission planning and in-flight use.
-
- C.3. ATC Mobile**
- Trains pilots during initial and requalification events as needed.
 - Evaluates training quality delivered by unit instructors to ensure standardization throughout the unit's respective platform.
 - Incorporates, trains, and evaluates human factors and CRM tenets associated with the use of electronic devices in flight during initial and recurrent training events.
 - Maintains the EFB curriculum and provides recommended changes to CG-711.
-
- C.4. Unit Instructor Pilots**
- Provide EFB training using the EFB curriculum for unqualified aviators before departing for training at ATC Mobile.
 - Provide EFB training using the EFB curriculum before using in the aircraft.
 - Incorporate, train, and evaluate human factors and CRM tenets associated with using electronic devices in flight.
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Chapter 3: Operating Instructions

Introduction This chapter outlines aircrew-operating guidelines for the EFB.

In This Chapter This chapter contains the following sections:

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E	Crew Resource Management	3-6

Section A: Overview

A.1. Introduction

Operating instructions provide standard protocols for using the EFB in USCG aviation operations. The EFB is a mission tool and not a replacement for good judgment and airmanship.

At this time, the EFB does not replace any paper information required aboard the aircraft. Commands can elect to reduce the number of paper copies currently carried once all crews are trained and proficient with the EFB.

Section B: General

B.1. General Aircrew Guidelines

- Operate the EFB per this publication's provisions and procedures.
- Ensure the aircraft configuration control board (ACCB) process (ACCB1 and ACCB2) is complete before using in the aircraft.
- Complete the EFB curriculum before using in flight.
- Operate only government furnished equipment (GFE) EFBs managed with the MDM system during flight operations.
- Use the provided protective case at all times.
- Load only approved software applications on the device. An approved list is available on the EFB CG Portal page.
- Use only approved in-flight applications (e.g., ForeFlight) during aircraft operations.
- Comply with the proper configuration of the EFB. Device settings are essential for complying with reference (c) Coast Guard Security and Information Assurance Manual, COMDTINST M5500.13 (series).
- Ensure Coast Guard technical manuals (e.g., aircraft flight manual -1) remain within the SCL. These manuals are not internet releasable and the information needs to be protected.

B.1.a. Operational Use

- Ensure the EFB is properly stowed, mounted, or attached to a kneeboard for all take-offs and landings.
- Ensure the EFB does not interfere with the aircraft flight controls or

egress of the aircraft.

- Ensure the EFB does not obstruct pilot and aircrew visibility, or hinder the ability to scan outside of the aircraft when mounted to a cockpit windshield.
- Set EFB and application brightness levels to have minimum impact on night vision during night operations.
- Continue paper-based reference for the aircraft flight manual, checklists, and procedures for aircraft operations.

WARNING:

Reference (d), Coast Guard Air Operations Manual, COMDTINST M3710.1 (series), requires aircrews to carry current flight/performance manual(s) and all pertinent checklists on the aircraft. Because current processes and procedures are not yet mature enough to support automatic updates to electronic technical publications, using electronic publications (e.g., the aircraft flight manual -1) in flight carries serious risk of flight crew injury and/or aircraft damage due to outdated specifications or procedures. This does not preclude the crew from using current FLIP via ForeFlight.

- Use aircraft instruments to determine position and navigation information. The EFB is not a certified navigational system and cannot be used for navigation. The EFB, with own-ship GPS functionality, may be used for situational awareness only.

WARNING:

Per reference (d), do not use the EFB own-ship position information for navigation, as the device's internal GPS is not certified for flight. Measurements of position, direction, distance, location, or topography could be inaccurate. Never base terrain separation and obstacle avoidance upon the terrain or obstacle function.

- Validate the EFB contains all applicable information for the intended route of flight, including alternate divers.
- Validate that safety-critical flight data is current.
- Carry two properly charged EFBs for flight operations.
- Manage battery power levels to ensure sufficient battery life for the duration of the flight. Plan for diversion and ground operation time.
 - Battery levels for all EFBs must be at least 10 percent for each hour of planned flight, but not less than 50 percent.
 - Battery levels for all EFBs must be at least 95 percent for

anticipated flights in excess of 10 hours.

- Carry and use battery chargers for flights in excess of five hours.
- Place the EFB in sleep mode when not in use.
- Close unused applications before flight (double tap 'home' key and slide apps up).
- Set appropriate brightness levels to conserve battery life.

NOTE:

There are several external battery packs available for purchase. ALC has evaluated the effects of lithium-polymer and lithium-ion batteries and conveyed the following precautions for use:

- a) separate or pack the battery in a manner to prevent contact with other batteries, devices, or conductive materials; and**
- b) protect exposed terminals or connectors with non-conductive caps, non-conductive tape, or by other means. See the EFB CG Portal page for more guidance.**

- Protect the EFBs and battery packs from direct sunlight or other sources of heat.

CAUTION:

Exposing an EFB or battery pack to high temperatures or direct sunlight can damage the device or cause an overheat condition. The EFB has a thermal sensor that will shut the device down to prevent damage. If this happens, move the EFB out of direct sunlight to a cooler temperature with adequate airflow. Once the EFB cools, it will become functional again if undamaged.

Section C: In-Flight Configurations

C.1. Introduction

Per the requirements in reference (c) Coast Guard Security and Information Assurance Manual, COMDTINST M5500.13 (series), CG-711 obtained a waiver to operate the EFB. A digital copy is available on the EFB CG Portal page. This waiver authorizes aircrews to operate the EFB aboard USCG aircraft if:

- The device remains on the flight deck,

- The device is configured to a specific setting; and
- The aircraft commander validates proper configurations of all EFBs.

NOTE:

As the EFB matures, it is anticipated the MDM will configure all EFBs automatically into an approved standardized setting. Until that time, per reference (d) Coast Guard Air Operations Manual, COMDTINST M3710.1G (series) crews shall manually configure the EFB before each flight per the below configurations.

C.2. Standard Flight Configuration

Use the standard flight configuration for all unclassified flights that do not have classified materials and communications on the flight deck.

Set the functions of the EFB as follows:

- **Cellular > Disabled**
- **Bluetooth > Disabled**
- **WiFi > Enabled**

NOTE:

Use of WiFi is approved when using an approved automatic dependent surveillance-broadcast (ADS-B) receiver. Use of WiFi increases battery consumption, therefore, the Aircraft Commander will exercise discretion for WiFi usage. Turn off the WiFi when not in use.

C.3. Restricted Flight Configuration

Use the restricted flight configuration for all classified missions, when classified material is exposed on the flight deck, or any time secure communications are in use or classified keymat is loaded (with the exception of GPS or IFF systems).

Set the functions on the EFB as follows:

- **Cellular > Disabled**
- **Bluetooth > Disabled**
- **WiFi > Disabled**
- **Microphone > Disabled**
- **Camera > Disabled**

NOTE:

Both the aircraft commander and copilot must use the two-person integrity (TPI) policy to verify all EFBs comply with this configuration.

C.4. Configuration Instructions

Refer to the EFB Device Management Job Aid on the EFB CG Portal page for instructions on how to disable specific functions.

Section D: In-Flight EFB Failure

D.1. Introduction

The EFB is highly functional, but errors can occur without a fault indication. Monitoring and/or self-test capability for all conceivable system failures is not practical. Pilots should be proficient in detecting anomalies and continuously crosscheck other available information.

NOTE:

Before departure, the aircraft commander must ensure two charged EFBs are onboard the aircraft with current editions of the aeronautical maps, charts, and other aeronautical information and instructions applicable to the route to be flown, or to any alternative route the aircrew might fly on that flight.

D.2. Single EFB Failure

The aircraft commander distributes remaining EFBs as appropriate to minimize aircrew workload, maximize situational awareness, and maintain safety of flight.

D.3. Multiple EFB Failures

- If available EFBs fail, use paper publications as available.
- If at least one EFB remains functional, the aircraft commander distributes the EFB as appropriate to minimize aircrew workload, maximize situational awareness and CRM, and maintain safety of flight.

Section E: Crew Resource Management

E.1. Crew Resource

Consistent with Federal Aviation Administration (FAA) policy, pilots select the appropriate display(s) for the respective operation (e.g.,

Management

aeronautical approach plate selected during approach or airport diagram selected for taxi). Cognitive tunneling may reduce a pilot's situational awareness due to the sheer abundance of information available on the EFB.

During EFB use:

- Pilots abide by the principles of aviate-navigate-communicate.
 - One pilot must always fly the aircraft.
 - Pilots announce when heads-down.
 - Pilots direct the other pilot to monitor the controls.
 - Pilots transfer the controls for complex EFB functions (e.g., flight plan insertion or terrain analysis).
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Chapter 4: Mobile Device Management

Introduction This chapter outlines MDM protocols for EFB enterprise deployment for USCG aviation operations.

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Section A: System Capabilities

A.1. Overview The MDM provides complete mobility management protocol for EFB enterprise deployment. The MDM, Mobile Application Management, and Mobile Content Management applications enable USCG aviation to manage EFB devices throughout the entire mobile device lifecycle.

A.2. General The MDM enables EFB devices with:

- Enterprise settings, policies, and restrictions through over-the-air (OTA) configuration profiles.
- Additional device security to protect the EFB and ensure compliance with USCG security policies.
- Enterprise application access to USCG developed, recommended public, or bulk purchased applications.
- Secure USCG publication content locker (Federal Information Processing Standards validated) including auto and/or on demand downloading.
- Personal device management (PDM) to allow aircrew to manage and monitor his or her own devices from a browser or other device.
- Two-factor authentication access for virtual private network (VPN), USCG network, USCG e-mail, calendar, and contacts.

The MDM enables auto reporting to the configuration manager as follows:

- EFB information such as platform, model, operating system, serial number, international mobile station equipment identity (IMEI), unique device identifier (UDID).
 - Security compliance information such as compromised status, encryption status, passcode, and restrictions settings.
 - Network / telecom information such as WiFi, cellular, bluetooth, and roaming status.
 - Additional information such as GPS location, applications, profiles, and certificates.
-

Section B: Configuration Management and Policy Enforcement

- B.1. Overview** The MDM allows the configuration manager to:
- Deploy devices with a secure, standardized, and streamlined device activation process.
 - Set configuration and use the automated process for assigning and deploying configuration profiles to a group, enterprise, or individual EFB.
 - Push over-the-air (OTA) software and operating system updates with push/pull delivery.
 - Reduce IT resource support requirements to configure and re-configure devices throughout the entire lifecycle of the device.
-
- B.2. General** The configuration manager uses the Coast Guard approved configuration profile.
-

Section C: Inventory and Audits

- C.1. Overview** The configuration manager can use the inventory and audit MDM functions to track the device for security audits, event logs, and compliance monitoring.
-
- C.2. General** The configuration manager must conduct, at a minimum, quarterly inventory and audit reports for CG-711.
-

Section D: Application Management

- D.1. Overview** The configuration manager can use the MDM application catalog to manage the USCG approved application list and distribute application licenses to individual or group EFB users.
-

D.2. General	A list of applications can be found at the USCG Electronic Flight Bag Initiative on the CG Portal. The list includes mandatory applications, optional approved applications, and disapproved applications.
D.3. Enterprise Application Purchase	Use Appendix D: Application Purchase Process as practicable.
D.4. Application Approval Process	Refer to Appendix B: New EFB Software Application.
D.5. Accounts	COMDT CG-711 manages application accounts, and grants both single user accounts and multiple unit accounts.

Section E: Secure Content Locker (SCL) Management

E.1. Overview	The MDM provides a means to distribute encrypted publications based upon user role, groupings, or individuals (e.g., standardization team, air station, or all pilots with a certain airframe, etc.).
E.2. General	The SCL tracks content versions, notifies EFB users of updates, and prevents access to a compromised EFB. Data management within content folders is as follows:
E.3. Content Locker Server	<ul style="list-style-type: none">• The associated ATC Training Division manages airframe-specific folder.• The air station manages unit-specific folder content.• The configuration manager grants access to specific folders to folder content managers.

Section F: Tech Support

F.1. Overview

The device vendor provides direct EFB operating system and hardware support. This provides both cost savings and enterprise flexibility.

F.2. Device Support

Vendor-provided support (<http://www.apple.com/support/ipad/>) for the first year of use is as follows:

- Call Apple Care Support (1-800-275-2273) and provide the device serial number. The representative then provides warranty information. The device and charging cable are covered by a one year warranty. If feasible, reset the device to factory settings before sending to Apple (**Settings > Reset > Erase all Content and Settings**).
- If covered under warranty:
 - Option 1: Apple Care Support emails a return shipping label for UPS (original box use not required). Retain the tracking number. The repair facility either repairs or sends a new device. If repaired, the device will most likely be reset to factory settings. Apple Care takes security seriously and protects personal data (a concern for government only information).
 - Option 2: Apple Care Support provides information for the nearest Apple Store(s). Contact the preferred store and at the recorded voice prompt ask for a ‘manager’ or ‘genius bar representative’ to talk to a live person. Ask if the representative can either support the required repair, or replace the device.
- If not covered by warranty:
 - Apple will still support the device for a fee. If the device requires replacement, the current \$300 fee will apply. Expend Unit funds to cover the cost.
 - Use the previously mentioned options.
- Provide paperwork to the unit EFB administrator and the EFB property custodian with serial numbers of the old and new devices. Update the hand receipt and property records if replaced.
- Submit a CGFIXIT ticket to disable the MDM from the old device (if replaced) and reprovision the new device.
- The EFB unit administrator removes the old device from the unit ForeFlight administrator site. Sign into the ForeFlight app on the new device.

F.3. MDM Support

The USCG CSD provides assistance for initial set up, trouble shooting and reactivation. To submit a ticket, click on the CGFIXIT icon on the desktop or visit [CG Portal Applications](#). Job aides for initial set up and password reset can be found at the [Coast Guard Electronic Flight Bag Initiative Portal](#) page.

Appendix A: Glossary and Acronyms

A.1. Glossary

Aircraft Commander	A pilot who has completed more training and flight hours than a first pilot (FP). Always eligible to be assigned as pilot in command (PIC).
Airframe Specific	A requirement that applies to a specific model of aircraft, e.g. HH-60, HH-65, C-130, etc.
Apple Care Support	Service of Apple, Inc. that provides hardware and software support and service for Apple products.
Application Purchase Process	Provides a simple, scalable solution to manage an organization's content needs. Allows purchase of applications and software in bulk and allows for management of its distribution across the organization.
Aviate-Navigate-Communicate	A phrase that dictates aircrew priorities during normal flight or emergency profiles. Emphasizes the crew's requirement to maintain control of the aircraft, fly the needed route to the destination, and keep each other informed of his or her status and actions taken.
Bluetooth	Wireless technology standard for exchanging data over short distances (using short-wavelength UHF radio waves in the ISM band from 2.4 to 2.485 GHz) from fixed and mobile devices.
Cellular	A system that uses radio waves instead of wires to send telephone signals.
Certified Navigational System	A navigation system certified under FAA rules as safe for navigation while flying.
Configuration Manager	Individuals responsible for the sustainment aspect of <i>software</i> -related aviation components or support equipment.
Crew Resource Management	Reduces human error mishaps by improving individual and crew performance.
Cross Checking	To check (as data or reports) from various angles or sources to determine validity or accuracy.

Device Serial Number	The unique number assigned to a device that allows for identification of the device and tracking of the device throughout its life cycle.
Device Vendor	The individual or business that sells a particular device.
Federal Information Processing Standards	Publicly announced standardizations developed by the United States federal government for use in computer systems by all non-military government agencies and by government contractors, when properly invoked and tailored on a contract.
ForeFlight HD Pro	A custom application developed for the Apple iPad that provides flight planning, flight support, and electronic flight bag. Includes navigation charts, internet and in-flight weather, airport facility directory information, moving map, hazard and terrain awareness, aviation documents, etc.
Gaining Unit	The unit that is receiving an item (whether a device or person).
Heads Down	A common position described as looking into the cockpit, such as at navigational or operational publications, instead of outside the aircraft.
Human Factors	Human Factors refer to environmental, organizational and job factors, and human and individual characteristics which influence behavior at work in a way which can affect health and safety.
Internet Releasable	A phrase used to communicate the information is suitable for release outside the Coast Guard Network.
Job Aides	A device or tool (such as instruction cards, memory joggers, or wall charts) that allows an individual to access quickly the information he or she needs to perform a task.
Mirror Images	Identical configurations installed on separate devices created to mirror one another. This redundancy allows aircrew to shift away from a device due to device failure.
Mobile Application Management	Allows administrators to securely enroll devices in an enterprise environment and configure update settings, monitor compliance with corporate policies, and remotely wipe or lock managed devices from a centralized location.
Mobile Content Management	Allows administrators to securely manage content on an enrolled device.

Redundancy	The use of multiple back-up devices or systems configured to mitigate the negative effects of a device or system failure.
Restricted Flight Configuration	A designation used for all classified missions, or when classified material is exposed on the flight deck, or anytime secure communications are in use or classified keymat is loaded (with the exception of GPS or IFF systems). All cellular, bluetooth, WiFi, microphone, and camera settings are “DISABLED”.
Roaming Status	When a mobile device moves out of its network region and attaches to different networks in order to resume service.
Safety of Flight	A term used to communicate the overall safety of the aircraft and crew during a mission. Includes pre-flight, flight, and post-flight.
Secure Document Locker	Enables secure access to enterprise content on smartphones and tablets, advanced data loss prevention features and administrative controls.
Situational Awareness	The perception of environmental elements with respect to time and/or space, the comprehension of its meaning, and the projection of its status after some variable has changed, such as time, or some other variable, such as a predetermined event.
Sleep Mode	Extends the device’s battery life, ensuring the battery rests when not in use.
Standard Flight Configuration	Used during all unclassified flights that do not have classified materials exposed on the flight deck. All cellular and Bluetooth capabilities are “DISABLED”. Use of WiFi, when using an approved ADS-B receiver, is approved. Turn off the WiFi when not in use to minimize battery consumption.
Stowing	Temporarily storing equipment or gear in a safe location where it is quickly accessible.
Telecom	Of or relating to telecommunications.
Two-Factor Authentication	A security process in which the user provides two means of identification, one of which is typically a physical token, such as a card, and the other of which is typically something memorized, such as a security code.

WiFi A technology allowing electronic devices to wirelessly exchange data or connect to the internet using microwaves in the 2.4 GHz and 5 GHz bands.

Wiped In computing, means to render all data on a hard drive unreadable. Commonly used term to make data stored on a computer, smart phone or tablet inaccessible before disposing of the device.

A.2. Acronyms

ACCB Aircraft configuration control board

ADS-B Automatic dependent surveillance-broadcast

ALC Aviation logistics center

AOR Area of responsibility

APP Application

C4ISR Command, control, communications, computers, intelligence, surveillance, and reconnaissance

CC Carbon copy

CSD Centralized service desk

CRM Crew resource management

CCB Configuration control board

DD1149 Requisition and invoice/shipping document

DIFDEN Duty involving flying – denied

DIFPRO Duty involving flying – proficiency

DIFOPS Duty involving flying – operations

EFB Electronic flight bag

ESD Engineering services division

FAA Federal aviation administration

FLIP Flight information publications

FPD Financial procurement desktop

GPS Global positioning system

GFE Government furnished equipment

IMEI International mobile station equipment identity

iOS Apple operating system

IP Instructor pilots

iPAD Apple product name

iTunes Apple product name

MDM Mobile device management

PCS Permanent change of station

PIC Pilot in command

PIN Personal identification number

PDM Personal device management

PR Purchase request

RELAD Released from active duty

SAP Simplified acquisition procedures

SCL Secure content locker

SDL Secure document locker

TPI Two person integrity

UDID Unique device identifier

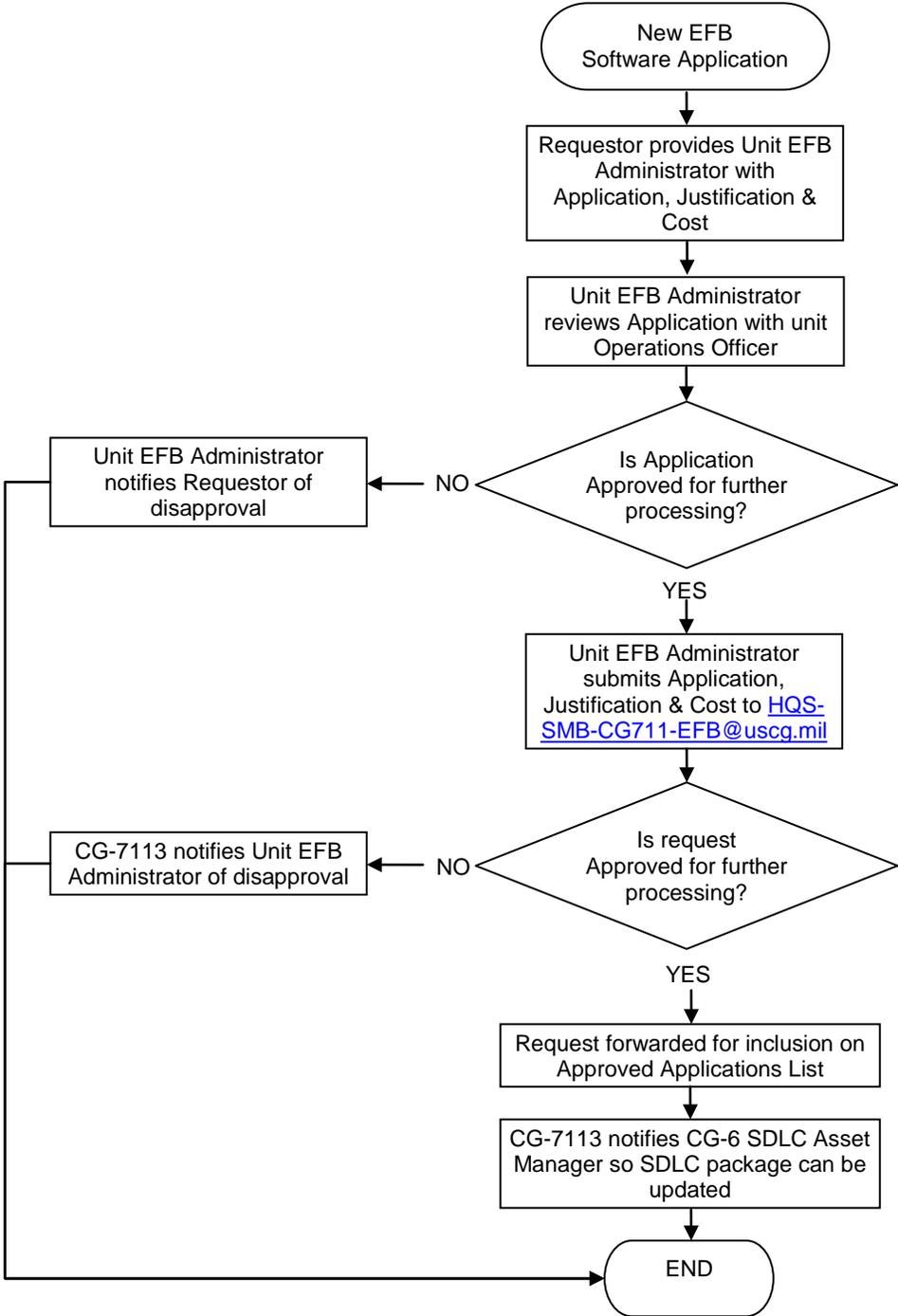
VPN Virtual private network

VPP Volume purchase plan

WSIII Work station III

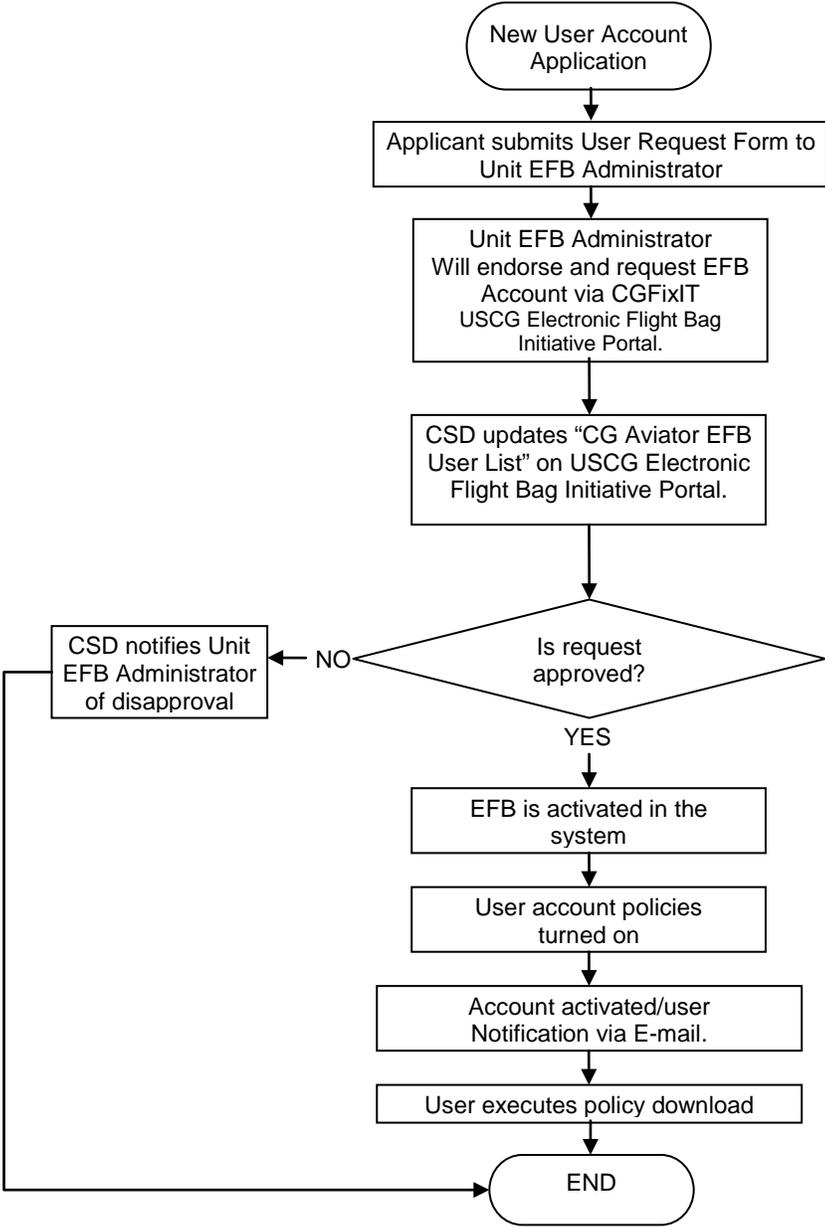
Appendix B: New EFB Software Application

B.1. New EFB Software Application



Appendix C: New User Account Application

C.1. New User Account Application



Appendix D: Application Purchase Process

D.1. Application Purchase Process

Steps to purchase and install an application within the EFB initiative:

1. Install iTunes on a MAC or Windows machine.
2. Register an iTunes account with Apple and update iOS on all devices.
3. Identify the app to purchase in the volume purchase plan (VPP).
4. Draft and submit a purchase request (PR) within financial procurement desktop (FPD).
5. Set up Dun and Bradstreet (DUNS) # via <http://fedgov.dnb.com/webform>
 - This step requires personal information for account validation.
6. Enroll in a Business VPP via <https://enroll.vpp.itunes.apple.com/>
 - This step requires the provided DUNS #.
7. Coordinate payment with a card holder authorized to submit payment with a government credit card. Request support from the SK with the approved PR to complete this step.
8. Log on to the Apple APP store with VPP credentials from a WSIII.
9. Select the desired apps, and request the credit card holder submit payment information detailed in the PR.
10. Download the Excel spreadsheet from the Apple VPP store with the licenses. Email downloaded items to MDM manager to upload and distribute to individual users.

D.2. Subscriptions

While most of the apps are free, a required a subscription needs to be purchased and managed (i.e., the ForeFlight HD Pro App is a purchased subscription managed by the Coast Guard). For example, purchasing the ForeFlight Pro app is described below.

- Purchase an iPad and install iTunes on MAC or Windows machine.
- Register an iTunes account with Apple and update iOS on all devices.
- Go to the App store and download the free ForeFlight HD Pro app.
- Go to the corporate/business subscription page on ForeFlight's website and select the plan desired.
- Save the link to the desired plan and include it in the PR. Include with

the request a completed simplified acquisition procedures (SAP) justification for other than full and open competition.

- After PR approval, the SK will purchase the subscription with a credit card via the ForeFlight link. The unit EFB administrator manages subscriptions after this step is complete.
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