Federal Aviation Administration

FAASafety.gov

Regression Test Plan

Revision History Summary

Version Number	Date	Document Description	A M D I *	Title or Brief Description	Author
1.0		FAA Safety Test Plan	I	FAA Safety Test Plan	FAA Safety Development Team

* Addition, Modification, Deletion, or Initial Release

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1 Purpose

This document describes the plan for testing the developed software system against the software requirements as defined in the Functional Requirements Document (FRD). The purposed of these system tests is to make sure that the software system developed during a release cycle or a "hot fix" cycle complies with the definition of the software requirements that have been approved in the FRD or an addendum to a previous FRD. The planning of these tests will be conducted as the FRD draft is being created. The design of these tests will be completed after an approved FRD has been accepted. The tests will be executed as required during the Software development life cycle. The System Test Plan (STP) describes plans for qualification testing of Computer Software Configuration Items (CSCIs) and software systems. It describes the test environment to be used for the testing, identifies the tests to be performed and provides approximate timeframes for test activities.

2 Scope

The FAA Safety Test plan describes the types of test cases performed for each functional requirement identified in the Functional Requirements document as each release (SDLC) is conducted.

2.1 In Scope

The scope of this document and test plan is test full functionality of the system. We will test the system against the following browsers; Mozilla Firefox, IE 8, 9 & 10, Safari and Chrome.   This is considered to be a living document. The timing of the periodic review and update of this document will be determined by the FAA IT PM.

3 Background

The origin of the FSTW is with the Safety Program Airman National Notification System (SPANS), which first fielded in March 2004. The original effort of SPANS was to provide an online event notification system designed to take the place of traditional and more costly paper-based notifications. The SPANS audience was broad and designed for pilots, mechanics and anyone interested in aviation safety events. Anonymous visitors to the site were able to browse the site for information regarding safety events and registered users could receive more detailed event information.

In FY 11, the system name changed from SPANS to the FAA Safety Team Website (FSTW) and SPANS became a component of FSTW.

In August of 2012, during the AQS-270 led annual Security Certification and Accreditation (C&A) it was determined that the FSTW site would be certified for only one year instead of the normal three years. This was due to the large number of Plan of Action and Milestone (POA&M) findings. One of those findings was to assign an AQS-230 IT Project Manager to the project. In March 2013, this assignment was made. Until that time, AFS-800, the General

Aviation and Commercial Division within Flight Standards, had managed and maintained the application.

L-3 was selected as the contractor for this system in 2010. from the previous contractor was Gold Systems. (Look in PMP statement) We have just developed this regression plan and will continue to grow and elaborate.

4   Related Documentation (find couple of links and add)

System Design Document

User Manual

5   User Descriptions

5.1   User Types

5.1.1   Guest

A guest user is a person who does not create an account, and uses the free materials and resources available to such users.

5.1.2   User

A user is a person who has created an account without supplying their airman certificate number, or a person who has no airman certificate number. When logged in, their status is shown as User.

5.1.3   Airman

An Airman is a pilot, mechanic, navigator, parachute rigger, flight engineer, repairman, instructor, or other user that has elected to provide their airman certification number for their FAASafety.gov user account. When logged in, their status is shown as Airman, and Administrators are able to see their Airman ID number on the User Management page.

5.1.4   Instructor

An instructor is an airman who has instructor privileges associated with their FAASafety.gov account with their airman registry information. This gives them validation privileges. When logged in, their status is shown as Airman, and Administrators are able to see their Airman ID number on the User Management page.

5.1.5   Lead Representative/Representative

Representatives are volunteers, not FAA employees. When logged in, their status is shown as Lead Representative or Representative, as appropriate.

5.1.6   FAASTeam Program Manager (FPM)

FAASTeam Program Managers have specific administrative permissions at FAASafety.gov. When logged in, their status is shown as FPM.

5.1.7 Regional FAASTeam Manager (RFM)

Regional FAASTeam Managers have specific administrative permissions at FAASafety.gov. When logged in, their status is shown as RFM.

5.1.8 Assistant Regional FAASTeam Manager (ARFM)

Regional FAASTeam Assistants have specific administrative permissions at FAASafety.gov. When logged in, their status is shown as RFM.

5.1.9 National FAASTeam Manager (NFM)

National FAASTeam Managers are assigned specific administrative permissions at FAASafety.gov. When logged in, their status is shown as NFM.

5.1.10 Industry Affiliates/Team Members

Industry Team Members are individuals or companies who have signed a Memorandum of Understanding (MOU) with the FAASTeam to provide a service, product, or something in exchange for our promise to publish their name on the FAASafety.gov website. This status is not shown when they are logged in.

5.1.11 Employer

An Employer is a user who employs AMTs who participate in the AMT Awards Program. . This status is not shown when they are logged in.

5.1.12 Services Provider

This role is under development. . This status is not shown when they are logged in.

5.1.13 Training Provider

A Training Provider is a non-FAA individual or organization who provides accredited activities or courses for FAASafety.gov users. . This status is not shown when they are logged in.

5.1.14 External Course Provider

The External Course Provider is a person that adds a link to external online courses to the FAASafety.gov website. . This status is not shown when they are logged in.

5.1.15 Administrator

Administrators refer to any user that has privileges above that of an airman, mechanic, Representative, visitor, or user. FAASTeam Program Managers (FPMs), Regional FAASTeam Program Managers (RFPMs), National FAASTeam Managers (NFMs), and "super users" are all considered administrators in this context. When logged in, only a system administrator status is shown as Administrator.

5.2 User Roles and Privileges

5.2.1 Airman

An Airman can be a User/Guest User – Anyone with a FAASafety.gov account that does not have an associated Certificate number.

A User is someone who is registered at FAASafety.gov that has not provided an airman certificate number or an Airman who is awaiting certificate validation from the FAA Airman Registry. Also included in this category are users that open FAASafety.gov but do not log in (Guest User). This user is able to navigate to a limited amount of information available on the site.

5.2.2 Air Traffic Control (ATC)

ATC users have limited permissions. Their job assignment requires that they occasionally send notices to the FAASafety.gov user group. They are similar to a Representative in that they can create a notice, but they cannot create a SPANS event. All notices sent by this user require approval by their assigned RFM. When a notice is created, the system generates an email chain for this approval before the notice is sent to the appropriate user group(s). ATC users can give final acceptance for Notices only.   ATCs are official FAA employees.

5.2.3 Instructor

An instructor is an airman who has instructor privileges who has associated their FAASafety.gov account with their airman registry information. This gives them validation privileges.

5.2.4 Lead Representative/Representative

A Lead Representative/Representative can access their Quick WINGS checklist only if their Representative account is also their Airman account. In some cases, a Representative will be able to perform certain specified administrative tasks. Representatives must complete online Representative training before their application is accepted. After appointment, Representatives are required to receive additional training with follow-up training to be received annually.

To become a Representative, a user must complete a FAASTeam application requesting this role. The application is submitted to an FPM for review and pre-acceptance. The FPM will conduct a background check and pre-accept or deny the application. If the application is pre-approved, it then goes to the RFM for final approval. When a representative is approved, a record is created that includes a training record and service notes showing when they were approved. An application may be denied because of missing or incomplete information, or because there is not at that time a need for a Representative in that area, or because the background check resulted in unfavorable information.

5.2.5 FAASTeam Program Manager (FPM)

FAASTeam Program Managers do not have control over all system functionality. They are responsible to review and pre-approve SPANS events and Notices. After SPANS events and Notices are pre-approved, they are forwarded to the FPM's designated RFM for final

approval. This user has access to the Quick WINGS checklist only if their FPM account is also their Airman account. FPMs are official FAA employees.

To be assigned a FAASTeam Program Manager role, a user must complete a FAASTeam application requesting this role. The application is submitted to an RFM for review and pre-approval. After the application is pre-approved, it then goes to the RFM for final approval. After the application is approved, the RFM must assign their geographic area of responsibility based on districts (one or more FSDOs).

5.2.6 Regional FAASTeam Manager (RFM)

Regional FAASTeam Managers do not have control over all system functionality. RFMs and ARFMs review pre-approved SPANS events and Notices for final approval (*The reason for this word choice here and other places in this document is the confusion generated by an earlier misunderstanding of a decision the FAA AGC made regarding Representatives. Their applications are accepted but SPANS events are approved by managers because only managers can approve the expenditure of funds, which can sometimes be the case*) before emails and or post cards are sent to the requested geographic and demographic FAASafety.gov user group. ATC and FAA Security users can give final approval for Notices only. This user has access to the Quick WINGS checklist only if their RFM account is also their Airman account. RFMs and ARFMs are official FAA employees.

To be assigned a Regional FAASTeam Manager role, a user must complete a FAASTeam application requesting this role. The application is submitted to an Administrator for review and approval. Because all applications require two approvals, the Administrator must approve this application twice.

5.2.7 Assistant Regional FAASTeam Manager (ARFM)

Assistant Regional FAASTeam Managers do not have control over all system functionality. ARFMs review pre-approved SPANS events and notices for final approval before emails and or post cards are sent to the requested geographic and demographic FAASafety.gov user group. ARFMs are official FAA employees.

5.2.8 National FAASTeam Manager (NFM)

National FAASTeam Managers do not have control over all system functionality, as Administrators do. This user has access to the Quick WINGS checklist only if their NFM account is also their Airman account. NFMs are official FAA employees and can include headquarters staff that requires access for reporting or other purposes.

To be assigned a National FAASTeam Manager role, a user must complete a FAASTeam application requesting this role. The application is submitted to an Administrator for review and approval.

5.2.9 Industry Affiliates/Team Members

Industry Team Members may provide rewards for FAASafety users when they achieve a WINGS or AMT training level. This role requires a FAASTeam Industry member application to be completed and approved by an NFM or Administrator. When the application is approved, the region must be set to AFS National if it is not the region that was selected by the user on the application. The region must be verified and changed during the approval process when necessary.

Currently the FAASTeam Outreach Program Manager or an authorized NFM contacts the Industry member about their application and gives them the password allowing them to complete their application.

5.2.10 Employer

An Employer user completes a short application which is then automatically approved upon submission. This then permits the Employer to participate in the AMT Awards Program as an Employer. See Advisory Circular 65-25 (AC 65-25) for more details.

5.2.11 Services Provider

This role is under development. The Services Provider is intended to be a FAASTeam member and must complete the FAASTeam application to request this role. Currently this role can be assigned but it has no function. Training is not required for this role. The application is processed in the same manner as a Representative application.

5.2.12 Training Provider

A Training Provider is a non-FAA individual or organization who provides accredited activities or courses for FAASafety.gov users. The Instructor role is different; instructors, or those with instructor ratings, can give training and credit without being a training provider.

A Training Provider must complete an application to be a training provider (Resources, Training Providers). Training Providers must be briefed (trained) before being approved to act in that capacity.

5.2.13 External Course Provider

The External Course Provider is a person who adds a link to external online courses to the FAASafety.gov website. These courses are intended to give credit to a phase of the WINGS program or AMT awards program

5.2.14 Administrator

Administrators refer to any user that has privileges above that of an airman, mechanic, Representative, visitor, or user. FAASTeam Program Managers (FPMs), Regional FAASTeam Program Managers (RFPMs), National FAASTeam Managers (NFMs), and "super users" are all considered administrators in this context. Super users include the FAASTeam Outreach Program Manager, designated assistant(s), Regional FAASafety.gov Person of Responsibility (POR), and members of the FAASafety.gov development team.

6 User Stories (Test Case Specifications)

Story ID	User Stories for External Portal, Homepages, Login	Notes
	User	
1	As an anonymous general user/guest, I want to navigate to the FAASafety.gov website, to start the	Submit request to create an account

	registration process.	
1.1	As an anonymous general user/guest, I want to complete the application for a user account **with** an Airman certificate.	
1.2	As an anonymous general user/guest, I want to complete the application for a user account **without** an Airman certificate.	
2	As an anonymous general user/guest, application completed and submitted, waiting to become a valid user.	A temporary password sent
3	Confirm all links on the Home page work	Not logged in and as logged in user
	Airman	
3	WINGS Program	WINGS is an award program for pilots
3.1	Register for WINGS Program	
3.2	Request Credit for Flight Activity	
3.3	Enroll for Courses	
3.4	Register for Seminars & Webinars	
3.5	Complete a Phase of WINGS	
4	Aviation Maintenance Technicians (**AMT**)	Awards Program for Mechanics
4.1	Register for Training Courses in the AMT Awards Program	
4.2	View MY AMT Core Courses	
4.3	Enter Training Hours	
4.4	Review Training History	
4.5	Claim AMT Award	This feature is only available in the month of January.
5	**Aviation Maintenance Technician - Employer**	

5.1	Register as an AMT Employer	Complete application on Employer Application page
5.2	Upload list of employees for AMT Awards Program	
5.3	Claim Award	This feature is only available in the month of February.
5.4	Submit Employee Training record	Use Individual and Bulk Upload features
6	**Representative**	
6.1	Create, seminars & webinars	
6.2	Close Out Seminars	Gives credits to attendees
6.3	Utilizes Bulk Upload procedure for giving credit	
7	**Lead Representative**	On the web site, Lead Reps have exactly the same privileges as Reps. Only "on the ground" do they have other responsibilities.
8	**FPM - FAASTeam Program Manager**	
8.1	Reviews and Pre-Approves SPANS events and Notices	
8.2	Reviews and pre-Accepts applications from Representatives	
8.3	Utilizes Bulk Upload procedure for giving credit	
8.4	Enters Rep Training directly and using the Quick Entry feature	
8.5	Modifies User on User Management page	Changes email address
8.6	Create a new SPANS template	
9	**RFM - Regional FAASTeam Manager**	

9.1	Reviews pre-accepted Representative and Lead Representative applications for final acceptance	
9.2	Approves SPANS events and Notices	
10	**NFM - National FAASTeam Manager**	
10.1	Reviews pre-accepted Industry Member applications for final acceptance	
11	**Administrator**	
11.1	Reviews and Approves Training Provider application	
11.2	Creates new External Training Provider	
11.3	As logged in Administrator, performs all activities of an NFM, RFM, and FPM	
11.4	Creates user account using the Airshow Registration feature.	
11.5	Generate all reports found on the Report page	Reports should be generated before a change and after for comparison purposes
11.6	Finds and Modifies User on User Management page	Changes email address. Use all options for finding a user.
11.7	Accesses User account	Uses "Impersonate" feature
11.8	Uses all Admin Tools (as appropriate)	
11.9	Cancels Representative account	Accomplished by Deleting the Directory Application
11.10	Changes Representative account to a Services Provider account	
11.11	Creates and submits a new Online Course	
11.12	Modifies an Employer account	
11.13	Associates an additional user with an Employer account	
11.14	Creates new Online Content	

11.15	Creates and Modifies Hot Topics	
11.16	Creates new Library content	
11.17	Adds and modifies Master Pilot roster	
11.18	Adds and modifies Master Mechanic roster	
11.19	Modify Marketing Text	
11.20	Use the Region / District / FSDO management tools	
11.21	Create a new News item	
11.22	Modify the Featured Courses list	
11.23	Create and modify a Page Help entry	
11.24	Use the Revoke Credit tool on the Credit page	Confirm the credit was removed from the user account
11.25	Create a new Syllabus	
11.26	Add and Modify Airman Certificates, Subject Areas, and Aircraft Categories & Ratings	
11.27	Create a new Team Member	
11.28	Designate a new Core Course	Confirm it appears in the AMT Program as a Core Course
11.29	Add and Modify Library Categories	
11.30	Edit FAQs	
11.30	Create New External Course	
11.31	Create a new Notice Type	
12	**ATC** – Air Traffic Controller	
12.1	Create and submit Notice	
13	**Instructor**	
13.1	Gives credit for activities	

14	**Training Provider**	
14.1	Creates and submits accredited activities for review and approval	
14.2	Gives credit for activities	
14.3	Utilizes Bulk Upload procedure for giving credit	
15	**External Training Provider**	
16	**Industry Affiliates/Team Members**	
16.1	Creates and submits Industry Member application	Requires security password
17	**Service Provider ?**	
18	**Team Member**	
18.1	Review Team Member report	Must be logged in as a Team Member

7 Use Cases (Need data)

7.1 Use Case Summary

Test cases performed:

Use Case	Title	Primary Actors
UC-1	Initial Request for User/Guest User ID	External User - Anonymous
UC-1.1	Registering for User/Guest with an Airman Certificate Number	Airman
UC-1.2	Request for User/Guest without an Airman Certificate Number	General User
UC-2	Submit Registration as General User / Airman	General User / Airman
UC-3	WINGS Program	Airman or General User

UC-3.1	Register for WINGS Program	Airman or General User
UC-3.2	Enroll for Courses	Airman or General User
UC- 3.3	Register for Seminars & Webinars	Airman or General User
UC-3.4	Request Credit for Flight Activities	Airman or General User
UC-3.5	Complete a Phase of WINGS	Airman or General User
UC-4	Aviation Mechanic Technician (AMT)	Mechanic Technicians
UC-4.1	Aviation Maintenance Technician Program (AMT)	Mechanic Technicians

7.2 Use Case Description

The test data used for test case execution has been modified from its original state to meet the needs of a specific test.

Name	UC – 1: Initial Request for User/Guest User ID
Primary Actors	External User – Anonymous
Pre-condition	External user has navigated to the public FAASafety.gov website
Post-condition	User accessed a link to the Create Account page
Basic Course of Events	1. Anonymous external user clicks Create an Account from FAASafety.gov Home page.
Alternative paths	None

Name	UC – 1.1: Registering for User/Guest with an Airman Certificate Number
Primary Actors	Airman
Pre-condition	User has navigated to the FAASafety.gov Account Registration page
Post-condition	User has completed application
Basic Course of Events	1. User enters email address, current airman certificate number
Alternative paths	None

Name	UC – 1.2: Request for User/Guest without an Airman Certificate Number
Primary Actors	General User
Pre-condition	User has navigated to the FAASafety.gov Account Registration page
Post-condition	User has completed application
Basic Course of Events	1. User enters email address
Alternative paths	None

Name	UC – 2: Submit Registration as General User / Airman
Primary Actors	General User / Airman
Pre-condition	User has completed FAASafety.gov Account Registration page
Post-condition	User has completed application
Basic Course of Events	1. FAASafety sends an email to the submitted email address with a temporary password to submitted email address
Alternative paths	None

Name	UC – 3: WINGS Program
Primary Actors	Airman or General User
Pre-condition	User registers to participate in the WINGS Program **with and without** Airman Certificate
Post-condition	User is registered with WINGS and checklist is now available
Basic Course of Events	1. User accesses My WINGS from Pilot Tab, launches Profile page 2. Update WINGS Profile, Categories, Classes and Certification information 3. Answer WINGS Participation question 4. Enter Flight Review Date 5. Save
Alternative paths	None

Name	UC – 3.1: Register for WINGS Program

Primary Actors	Airman or General User
Pre-condition	User customizes Checklist in the WINGS Program
Post-condition	User selects courses of study
Basic Course of Events	1. User accesses My WINGS from Pilot Tab, to display My WINGS page 2. Click updated your WINGS Profile link 3. The system will pre-select Knowledge Activities, Flight Activities, which you can change 4. From the Checklist "Search" link you can view activities, courses, seminars & webinars available.
Alternative paths	User may select the Activities, Courses, Seminars & Webinars tab from the Home Page 1. Activities, Courses, Seminars & Webinars are available from this tab **NOTE**: Completing activities will automatically modify the checklist.

Name	UC **– 3.2: Enroll for Courses**
Primary Actors	Airman or General User
Pre-condition	User selects specific courses
Post-condition	User registered for course of study
Basic Course of Events	1. From the Pilots tab on Home page select MY WINGS 2. From category selection made earlier, recommended courses are displayed 3. Using the Search link under the MORE column, scroll down list and select your choice. 4. Under STATUS column click Enroll 5. Read instructions and click 1 6. click ► or the course link below button to launch the course 7. Take Exam 8. When passed, checklist will be automatically updated
Alternative paths	User may select the Activities, Courses, Seminars & Webinars tab from the Home Page 1. Click on Title, system launches Course Overview page 2. Select Enroll in Course or Preview Course 3. Read Intro then click 1 which launches the Course link 4. Click the ► or the course link below button to launch course 5. Complete course 6. Take exam 7. When passed, checklist will be automatically updated

Name	UC – 3.3: Register for Seminars & Webinars
Primary Actors	Airman or General User
Pre-condition	User selects specific seminars and/or webinars
Post-condition	User registered for seminar or webinar
Basic Course of Events	1. From the Pilots tab on Home page select MY WINGS 2. Follow same steps from 3.2 Enroll for Courses, steps 2 thru 7
Alternative paths	User may select the Activities, Courses, Seminars & Webinars tab from the Home Page 1. Selects the Seminars & Webinars tab 2. Complete information in Search Seminars and Webinars 3. Click Search

Name	UC – 3.4: Request Credit for Activities
Primary Actors	Airman or General User
Pre-condition	User takes exam for courses, seminars and/or webinars
Post-condition	Pass exam – view courses, seminar and/or webinars completed
Basic Course of Events	1. From the Pilots tab on Home page select MY WINGS 2. From category selection made earlier, recommended courses are displayed 3. Search for other courses, seminars and/or webinars. Select your choice 4. Under status click Enroll 5. Read instructions and click 1 and then continue to course 6. Click link to see / print certificate, email certificate or return to courses page 7. View courses completed
Alternative paths	User may select the Activities, Courses, Seminars & Webinars tab from the Home Page 1. Enter Keyword if known 2. Select Activity Type 3. Program 4. Perform Search 5. Select Activity 6. Continue with steps 2 through 5 on Basic Course of Events 3.4

Name	UC – 3.5: Complete a Phase of WINGS
Primary Actors	Airman or General User

Pre-condition	Complete Courses for Basic WINGS - Phase 1
Post-condition	Completed 3 courses for Basic WINGS – Phase 1
Basic Course of Events	1. From the Pilots tab on Home page select MY WINGS 2. From category selection made earlier, recommended courses are displayed 3. Search for other courses, seminars and/or webinars. Select your choice 4. Under status click Enroll 5. Read instructions and click 1 and then continue to course
Alternative paths	User may select the Activities, Courses, Seminars & Webinars tab from the Home Page 1. Activities, Courses, Seminars & Webinars are available from this tab 2. Courses can be accessed by clicking the Title

Name	UC – 4: Aviation Maintenance Technician Program (AMT)
Primary Actors	Mechanic Technician
Pre-condition	User registers to participate in the AMT Awards Program **with and without** FAASafety account
Post-condition	User is registered in AMT Awards Program
Basic Course of Events	1. User accesses My AMT from Maintenance Hangar Tab, to display My AMT page 2. Click Enroll in AMT button 3. Click Enroll as an individual AMT link 4. Select certificates 5. Save
Alternative paths	Under Activities, Courses, Seminars & Webinars tab on the home page click Awards 1. Click The Aviation Maintenance Technician Awards Program link 2. Click Individual Aviation Maintenance Technicians link 3. Click enroll in AMT Awards Program link

Name	UC – 4.1: Register for Training Courses in the AMT Awards Program
Primary Actors	Mechanic Technician
Pre-condition	User registers to participate in the AMT Awards Program **with and without** FAASafety account
Post-condition	User is registered in AMT Awards Program
Basic Course of Events	1. User accesses My AMT from Maintenance Hangar Tab, to display My AMT page 2. Click Core Training Courses tab. Based on what categories you selected in the

	registration process, course have been pre-selected
	3. Click Enroll link under the Status heading
	4. Read information about this course, then click 1 the arrow at bottom of page to start the course
	5. Save
Alternative paths	Under Activities, Courses, Seminars & Webinars tab on the home page click Awards
	1. Click The Aviation Maintenance Technician Awards Program link
	2. Click Individual Aviation Maintenance Technicians link
	3. Click enroll in AMT Awards Program link

Test cases performed:

7.3 Business Rules – (Get info from Bryan Neville)

- The user has to be an FAA employee to view Airman ID or Airman Certificate confirmation.

Instructors

- If a user has elevated privileges, they should have two accounts. They should use their FAA account for Admin info and their private account for WINGS programs.

8 Acronyms and Definitions

AC 61-91 – Advisory Circular 61-91

AC 65-25 – Advisory Circular 65-25

ATC – Air Traffic Control

AMT – Aviation Maintenance Technicians

ARFM – Assistant Regional FAASTeam Manager

CSCIs – Computer Softer Configuration Items

FSDO – Flight Standards District Office

FPMs – FAAST Team Program Managers

MOU - Memorandum of Understanding

NFMs – National FAASTeam Managers

POR - Person of Responsibility

RFPM – Regional FAAST Team Program Manager

SPANS – Safety Program Airman Notification System

STP – System Test Plan

WINGS – Pilot Proficiency Program