



**NASA GSFC Advanced
Mission Automation Branch
(Code 583)**

**SPLAT SYSTEM
TEST PLAN
AND
PROCEDURES**



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SSR Playback Automation Tool (SPLAT) Test Plan and Procedures

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Document Summary

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Date of Change	Ver	Summary of Change
	1.0	Initial Release
Sept 3, 2002	1.1	Added Test case to exercise Red and Yellow Limits. Also modified sync point selection test case to reflect playback removal and dump window removal or addition.
Sept 17, 2003	1.2	Added test case to exercise new manual sync point entry functionality.
Sept 19, 2003	1.3	Added tests for automated schedule generation. Fixed errors noted in test scenarios.

Approvals

Title	Name	Signature	Date

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1 Test Plan

1.1 Introduction

During each test period of the SPLAT development cycle, the test procedures defined below will be used to evaluate the SPLAT software. Note that each Test Case is based on functionality identified in the SPLAT Requirements, Architecture, or Design Documents. The test cases are marked in turn are for the applicability to either Build I or Build II development in the Requirements document and Build III, the first operational release of the tool.. The next section contains a check list to be used in testing.

SPLAT Test Check List

Directions: Review each test case. If testing is not appropriate, simply write “N/A” in the Comments section. For example, during Build1 testing, all Build II Test Cases should be marked “N/A”.

Test Case	Build	Pass	Fail	Tested By	Comments
1	1,2				
2	1,2				
3	1,2				
4	1,2				
5	1,2				
6	1,2,3				
7	1,2				
8	2				
9	2				
10	1,2				
11	1,2				
12	1,2				
13	1,2				
14	1, 2				
15	1,2				
16	1,2				
17	3				
18	3				
19	3				

The test procedures were completed on _____ using Build _____ of SPLAT.

Signature _____

2 Test Procedures

The Test Cases in Section 2 correspond to Use Cases and exercise the functionality of the SPLAT tool. Note that following test data sets will be used to validate the operation of the SPLAT tool. With the exception of the ASTER test, all of the test scenarios represent actual events and were provided by the Terra FOT.

1. Roll Maneuver for day 180 of 2002.
2. Roll Maneuver for day 210 of 2002.
3. DMU event for day 219 of 2002.
4. ASTER test scenario (Aquilent generated)

2.1 Test Case: 1 Parse Input Reports

2.1.1 Relevant Builds

This test case applies to Builds I and II.

2.1.2 Test Information

Goal in Context:	The Operator selects the Create Contact List button from the main viewer tool bar.
Pre-conditions:	Scheduling Options and Input Reports have been specified.
Success End Condition:	Events are extracted from the input reports and displayed on the main timeline.
Failed End Condition:	Timeline remains empty and system displays an error dialog indicating problem encountered.
Primary Actor:	Operator

2.1.3 Test Scenario

The following variations must be addressed:

1. Manual Aster Modeling with no Ground Contacts
 - Select the “Edit Scheduling Options” option from the tool bar.
 - Enter the Plan Start, Plans Stop, and Sync Point Offset
 - Select Manual Aster Modeling mode.
 - Specify a modeling percentage for Aster (0-100).
 - Select the “Select Reports” button.

- Provide entries for the TDRS Report, Orbital Events Report, and the SSR Buffer States Report.
- Select the “Ok” button on the Input Reports UI. Verify that the dialog is dismissed and no error dialog is displayed. Not specifying a needed report will cause an error dialog.
- Select the “Save” button on the Scheduling Options UI.
- Select the Create Contact List option from the tool bar.
- Review the events on the timeline to make sure all selected events are present and that they fall within the specified plan horizon.
- Open the Synchronization Selection Dialog and make sure all buffer state entries for the sync point offset window are present.

2. Automated Aster Modeling with no Ground Contacts

- Select the “Edit Scheduling Options” option from the tool bar.
- Enter the Plan Start, Plans Stop, and Sync Point Offset
- Select Automated Aster Modeling mode.
- Select the “Select Reports” button.
- Provide entries for the ATC Load Report, TDRS Report, Orbital Events Report, and the SSR Buffer States Report
- Select the Create Contact List option from the tool bar.
- Select the “Ok” button on the Input Reports UI. Verify that the dialog is dismissed and no error dialog is displayed. Not specifying a needed report will cause an error dialog.
- Select the “Save” button on the Scheduling Options UI.
- Review the events on the timeline to make sure they fall within the specified plan horizon and that the ASTER RTCS’s present in the ATC Load Report are on the timeline.
- Open the Synchronization Selection Dialog and make sure all buffer state entries for the sync point offset window are present.

3. Manual Aster Modeling with Ground Contacts

- Select the “Edit Scheduling Options” option from the tool bar.
- Enter the Plan Start, Plans Stop, and Sync Point Offset
- Select Manual Aster Modeling mode.
- Specify a modeling percentage for Aster (0-100).
- Select the “Select Reports” button.
- Provide entries for the TDRS Report, Orbital Events Report, the SSR Buffer States Report, and the GN Report.
- Select the “Ok” button on the Input Reports UI. Verify that the dialog is dismissed and no error dialog is displayed. Not specifying a needed report will cause an error dialog.
- Select the “Save” button on the Scheduling Options UI.
- Select the Create Contact List option from the tool bar.

- Review the events on the timeline to make sure they fall within the specified plan horizon.
- Open the Synchronization Selection Dialog and make sure all buffer state entries for the sync point offset window are present.

4. Automated Aster Modeling with Ground Contacts

- Select the “Edit Scheduling Options” option from the tool bar.
- Enter the Plan Start, Plans Stop, and Sync Point Offset
- Select Automated Aster Modeling mode.
- Select the “Select Reports” button.
- Provide entries for the ATC Load Report, Integrated Report, Orbital Events Report, the SSR Buffer States Report, and the GN Report,
- Select the “Ok” button on the Input Reports UI. Verify that the dialog is dismissed and no error dialog is displayed. Not specifying a needed report will cause an error dialog.
- Select the “Save” button on the Scheduling Options UI.
- Select the Create Contact List option from the tool bar.
- Review the events on the timeline to make sure they fall within the specified plan horizon and that ASTER RTCS’s from the ATC Load report are on the timeline.
- Open the Synchronization Selection Dialog and make sure all buffer state entries for the sync point offset window are present.

2.2 Test Case: 2 Specifying Scheduling Options

2.2.1 Relevant Builds

This test case applies to Builds I and II

2.2.2 Test Information

Goal in Context:	Operator enters the options needed from schedule generation.
Success End Condition:	A valid set of scheduling options is selected.
Failed End Condition:	The scheduling options dialog remains active and a dialog box is displayed containing the error condition.
Primary Actor:	Operator

2.2.3 Test Scenario

The following variations must be addressed:

1. Manual Aster Modeling

- Select the “Edit Scheduling Options” operation from the tool bar.
- Enter the plan start time (e.g. 2002/180/11:30:00)
- Enter the plan stop time (e.g. 2002/180/15:55:00)
- Enter the sync point offset (e.g. 02:30. Specified as hours and minutes)
- Select the Manual ASTER Modeling Mode.
- Specify an Aster modeling percentage (0-100).
- Select the Reports Location option and choose either Local or MMS. Observe that selection of the MMS option should result in an information dialog raised to indicate that the connection to MMS is a future enhancement.
- Select the Local Reports Option and select the Specify Reports option.
- A dialog will be raised for specifying input reports.
- Browse to the correct directory and locate the TDRS Report, the SSR Buffer States Reports, and the AM1 Orbital Events. No entry is required for the GN Report unless Ground Contacts are needed.
- Select the “Ok” button and the dialog is dismissed.
- Select the “Save” button on the Scheduling Options UI and the values are checked for validity. Verify that the dialog is dismissed and no error dialog is displayed.

2. Automated Aster Modeling

- Select the “Edit Scheduling Options” operation from the tool bar.
- Enter the plan start time (e.g. 2002/180/11:30:00)
- Enter the plan stop time (e.g. 2002/180/15:55:00)
- Enter the sync point offset (e.g. 02:30. Specified as hours and minutes)
- Select the Automatic ASTER Modeling Mode (Automatic or Manual). Observe that the ASTER modeling percentage field is disabled.
- Select the Reports Location option and choose either Local or MMS. Observe that selection of the MMS option should result in an information dialog raised to indicate that the connection to MMS is a future enhancement.
- Select the Local Reports Option and select the Specify Reports option.
- A dialog will be raised for specifying input reports.
- Browse to the correct directory and locate the ATC Load Report, TDRS Report, the SSR Buffer States Reports, and the AM1 Orbital Events. No entry is required for the GN Report unless Ground Contacts are needed.
- Select the “Ok” button and the dialog is dismissed.
- Select the Save button on the Scheduling Options UI and the values are checked for validity. Verify that the dialog is dismissed and no error dialog is displayed.

2.3 Test Case: 3 Adding a Dump Window to a Contact

2.3.1 Relevant Builds

This test case is applicable to Builds I and II.

2.3.2 Test Information

Goal in Context:	Operator selects the Add button for one of the K or X band contacts on the timeline.
Preconditions:	A schedule with a minimum of X or K band contact is displayed on the timeline.
Success End Condition:	A new dump window is added to the contact period.
Failed End Condition:	An error dialog is displayed describing the problem.
Primary Actor:	Operator

2.3.3 Test Scenario

1. Select the “Add” button for one of the K or X band contacts
2. In the dialog specify the start and stop of the playback, the location (AOS or LOS), and the maximum dump percentages for the MODIS, MISR and ASTER buffers.
3. Verify that omitting any entry will result in an error dialog being displayed on save.
4. Also verify that dump percentages < 0 or > 100 will result in error on save.
5. Verify that entering a stop time or end time outside of the parent contact will result in an error dialog on save.
6. Verify that the dump window is displayed on the timeline when the data specified is valid.

2.4 Test Case: 4 Edit an Existing Dump Window

2.4.1 Relevant Builds

This test case is applicable to Builds I and II

2.4.2 Test Information

Goal in Context:	Operator Selects the Edit Button for one of the dump windows on the timeline
Preconditions:	A valid schedule with one or more dump windows is visible on the timeline.
Success End Condition:	A modified dump window is displayed on the timeline
Failed End Condition:	An error dialog is raised describing the error.
Primary Actor:	Operator

2.4.3 Test Scenario

1. Select the “Edit” button for one of the dump windows on the timeline.
2. Verify that a dialog box is raised containing the selected dump window settings.

3. Modify one or more of the dump window settings (start, stop, max dump percentages). Verify that incorrect entries result in an error dialog being displayed.
4. Select the “Save” option and verify that dialog is dismissed and the modified dump window is displayed on the timeline.
5. Verify that any playbacks in the modified dump window have been removed from the timeline. [Valid on for builds I and II. For Build III and beyond modifications to dump windows or sync points causes an automatic schedule regeneration. See test case 19].

2.5 Test Case: 5 Delete an Existing Dump Window

2.5.1 Relevant Builds

This test case is relevant to Builds I and II.

2.5.2 Test Information

Goal in Context:	The Operator removes a dump window from the schedule.
Preconditions:	A valid schedule with one or more dump windows must be present and visible on the timeline.
Success End Condition:	The schedule with the dump window removed
Failed End Condition:	The dump window is not removed and an error dialog is displayed.
Primary Actor:	Operator

2.5.3 Test Scenario

1. Select the “Edit” button for one of the dump windows on the timeline.
2. Verify that the raised dialog contains the selected dump window information.
3. Select the “Delete” button.
4. Verify that the dialog box is dismissed and the dump window is removed from the timeline.

2.6 Test Case: 6 Select Synchronization Point

2.6.1 Relevant Builds

This test case applies to Builds I and II.

2.6.2 Test Information

Goal in Context:	Operator selects a different synchronization point than the one selected by the tool.
Preconditions:	The contact list must have been created and the scheduling options

	specified.
Success End Condition:	A new synchronization point is selected and displayed on the timeline
Failed End Condition:	An error dialog is raised indicating the error
Primary Actor:	Operator

2.6.3 Test Scenario

1. Select the “Select Synchronization Point” option from the tool bar.
2. Click the radio button next to the desired sync point to select it.
3. Select the “Save” Option.
4. Verify that a warning dialog is raised notifying the operator that selecting a new sync point requires the schedule be re-generated.
5. Verify the following:
 - a. The synchronization point changes on the timeline.
 - b. Dump windows are added/removed depending on the selected sync point.
 - c. Playback windows for existing dump windows are removed. [\[Valid on for builds I and II. For Build III and beyond modifications to dump windows or sync points causes an automatic schedule regeneration. See test case 19\].](#)

2.7 Test Case: 7 Main Window

2.7.1 Relevant Builds

This test case is applicable to Builds I and II.

2.7.2 Test Information

Goal in Context:	The Operator starts SPLAT.
Preconditions:	A functioning computer which supports Java 2; correct installation of SPLAT.
Success End Condition:	The operator sees a splash window identifying the SPLAT product followed by the display of the SPLAT main window.
Failed end conditions:	The main window fails to be displayed or a fatal exception is thrown.
Primary Actor:	Operator

2.7.3 Test Scenario

1. The SPLAT Main Window is displayed and is ready for operator input/schedule generation.

2.8 Test Case: 8 Automated Dump Window Determination

2.8.1 Relevant Builds

This test case is applicable to Build II only.

2.8.2 Test Information

Goal in Context:	The operator selects the “Create Contact List” and the tool determines the appropriate locations for an initial set of dump windows.
Preconditions:	SPLAT is executing and valid scheduling options have been entered.
Success End Condition:	A parsed schedule is displayed containing an initial set of dump windows determined by the tool.
Failed end condition:	No schedule is displayed.
Primary Actor:	Operator

2.8.3 Test Scenario

1. Select the ‘Create Contact List’ Operation from the tool bar.
2. Review the tool selected dump windows on the timeline.
3. Verify that dump windows are placed in each X and K-band contact that is not a TDRS 275 contact following the sync point.
4. Verify that dump window start times and end times adhere to the following rules.
 - a. For TDRS Contacts – If the S -band contact starts more than 60 seconds prior to the K-band contact, the dump window start time is offset 30 seconds from the start of the K-band contact. Otherwise if the S-band contact start time doesn’t precede the corresponding K-band contact by more than 60 seconds, the dump window start time is offset 90 seconds from the start of the S-band contact. The dump window stop time is offset 180 seconds before the end of the K-band contact.
 - b. For Ground Contacts – The dump window start time is 120 seconds after the start of the X-band contact and the dump window stop time is offset 60 seconds before the end of the X-band contact.

2.9 Test Case: 9 Automated Sync Point Selection

2.9.1 Relevant Builds

This test case applies only to Build II.

2.9.2 Test Information

Goal in Context:	The operator reviews the system selected synchronization point
Preconditions:	The Scheduling Options must be specified and a contact list Created and an SSR Buffer states report must be supplied.
Success End Condition:	All buffer state entries in the sync point offset window must be present.
Failed end condition:	All sync point entries are not available or none are displayed
Primary Actor:	Operator

2.9.3 Test Scenario

1. After creating a contact list, the operator selects the “Specify Selected Sync Point” option.
2. Verify that all buffer state entries in the sync point offset window are displayed in the sync point parameters dialog.
3. Verify that the selected sync point is the latest contact before the start of the planning horizon in which the buffers can be completely emptied.
4. Verify that none of the sync point candidates fall in a TDRS 275 contact.
5. Verify that the start times of the candidate sync points adhere to the following rules:
 - a. For TDRS Contacts – If the S -band contact starts more than 60 seconds prior to the K-band contact, the dump window start time is offset 30 seconds from the start of the K-band contact. Otherwise if the S-band contact start time doesn't precede the corresponding K-band contact by more than 60 seconds, the dump window start time is offset 90 seconds from the start of the S-band contact. The dump window stop time is offset 180 seconds before the end of the K-band contact.
 - b. For Ground Contacts – The dump window start time is 120 seconds after the start of the X-band contact and the dump window stop time is offset 60 seconds before the end of the X-band contact.

2.10 Test Case: 10 Generate a Schedule

2.10.1 Relevant Builds

This test case applies to Builds I and II.

2.10.2 Test Information

Goal in Context:	The operator schedules playbacks.
Preconditions:	A contact list must be created and displayed on the timeline.
Success End Condition:	The completed schedule is displayed to the operator on the timeline.
Failed End Condition:	The timeline remains unchanged. A dialog box is displayed describing the error.

Primary Actor: Operator

2.10.3 Test Scenario

1. Select the “Generate Schedule” option from the menu bar.
2. Verify that each dump window contains a playback window.
3. Verify that the playback window is offset from the start of the dump window by the correct amount.
4. Verify against a known scenario (one of the provided test data sets) that the tool is correctly calculating buffer full percentages, and playback durations.
5. Verify that the correct argument is placed in the Stn/Arg field for each PB_START event. For dump window where no dump percentages are specified (PBFLEX) dumps, this value will be the time between the start of the playback and the end of the corresponding dump window to which it belongs. For dump windows that specify maximum dump percentages, this value will be the user specified percentage for MODIS, MISR, and ASTER separated by commas.
6. Verify that the duration for each playback represents the time between the last playback start and the current playback start.
7. Verify that the time specified in the TOT column represents the sum of the times specified in the MOD, MIS, and AST columns.
8. Verify that for all FLEX playbacks the duration field on the playback stop event contains the difference between the playback end time and the end of the dump window (safety margin).
9. Verify that any data that needs to be carried over to the next dump is specified in a PB_Carryover event. Also verify that carryover amounts and durations are consistent with those provided with scenario.

2.11 Test Case: 11 Create a New Schedule

2.11.1 Relevant Builds

This test case applies to Builds I and II.

2.11.2 Test Information

Goal in Context: The operator creates an empty schedule
Preconditions: The SPLAT tool must be running.
Success End Condition: A new blank schedule is created.
Failed End Condition: The old schedule remains unchanged.
Primary Actor: Operator

2.11.3 Test Scenario

1. Select the “create new schedule” option from the tool bar.

2. Verify that the tool raises a dialog box asking whether or not to save the current schedule.
 - a. Selecting “Yes” causes another dialog to be displayed in which the observer can choose the name and location of the saved schedule.
 - b. Selecting “No” causes the existing schedule to be deleted and a new schedule to be created and the timeline cleared.

2.12 Test Case: 12 Customize Display/Print Layout of Schedule Data

2.12.1 Relevant Builds

This test case is relevant to Builds I and II.

2.12.2 Test Information

Goal in Context:	The Operator chooses which fields/events to display and/or print and the order in which these fields should be presented.
Preconditions:	None for customizing display of fields; However, a contact list must be created to filter by event type.
Success End Condition:	A schedule on the timeline or printed schedule reflecting the ordering and field selection specified by the operator.
Failed End Condition:	Incorrect fields are displayed or no fields are displayed at all.
Primary Actor:	Operator

2.12.3 Test Scenario

The following variations should be tested:

1. Hide Columns (Fields) on timeline.
 - Select the Filters → Display Filter option from the Settings Menu.
 - In the Display Filter dialog, select the field option.
 - Select several of the visible fields (for multi-select, selections must be contiguous) and select the “Hide <<” button to move them to the available fields area.
 - Select the “Save” option and verify that the columns (fields) are removed from the timeline display.
2. Change the ordering of columns on the timeline.
 - Select the Filters → Display Filter options from the Settings Menu
 - In the Display Filter dialog, select the field option.
 - Select one or more contiguous fields in the available window.
 - Reorder them using the up or down options to move the selection up or down in the available list.

- Select the “Save” option and verify that the columns (fields) have been reordered on the timeline.
3. Hide Event types on the timeline.
 - Enter scheduling options and create a contact list.
 - Select the Filters → Display Filter option from the Settings Menu.
 - In the Display Filter dialog, select the “Event Types” option.
 - Select several of the visible events (for multi-select, selections must be contiguous) and select the “Hide <<” button to move them to the available events area.
 - Select the “Save” option and verify that the Event types are removed from the timeline display.
 4. Hide Columns (Fields) in a printed schedule.
 - Enter Scheduling Options
 - Create contact list
 - Generate playback schedule
 - Select the Filters → Print Filter option from the Settings Menu.
 - In the Display Filter dialog, select the field option.
 - Select several of the visible fields (for multi-select, selections must be contiguous) and select the “Hide <<” button to move them to the available fields area.
 - Select the “Save” option.
 - Select the “Print Current Schedule” option from the tool bar.
 - Enter additional text if required and select the preview button.
 - Verify that the displayed schedule contains only the selected columns.
 - Close the schedule print preview.
 5. Change the ordering of columns in a printed schedule.
 - Enter Scheduling Options
 - Create contact list
 - Generate playback schedule
 - Select the Filters → Print Filter option from the Settings Menu.
 - In the Display Filter dialog, select the field option.
 - Select several of the visible fields (for multi-select, selections must be contiguous)
 - Reorder them using the up or down options to move the selection up or down in the available list.
 - Select the “Save” option.
 - Select the “Print Current Schedule” option from the tool bar.
 - Enter additional text if required and select the preview button.
 - Verify that the displayed schedule contains only the visible columns in the specified order.
 - Close the schedule print preview.
 6. Hide Event types in a printed schedule.

- Enter Scheduling Options
- Create contact list
- Generate playback schedule
- Select the Filters → Print Filter option from the Settings Menu.
- In the Display Filter dialog, select the “Event Types” option.
- Select several of the visible events (for multi-select, selections must be contiguous) and select the “Hide <<” button to move them to the available events area.
- Select the “Save” option.
- Select the “Print Current Schedule” option from the tool bar.
- Enter additional text if required and select the preview button.
- Verify that the displayed schedule contains only the visible columns in the specified order.
- Close the schedule print preview.

7. Hide and Reorder columns from timeline (Build III only)

- Right click with the cursor over the time line column headers.
- Check and uncheck column headings to hide/display the columns
- To Reorder the columns, left click on a column heading and drag it horizontally left or right to the appropriate position.

2.13 Test Case: 13 Edit Modeling Parameters

2.13.1 Relevant Builds

This test case applies to Builds I and II.

2.13.2 Test Information

Goal in Context:	Operator changes parameter values affecting schedule generation
Preconditions:	None
Success End Condition:	Successfully modified set of modeling parameters
Failed End Condition:	Modeling parameters left unchanged.
Primary Actor:	Operator

2.13.3 Test Scenario

The following variations need to be tested:

1. Modify an Instrument Imaging Rate.
 - Select the “Modeling Parameters” option from the “Settings” menu.
 - Modify one or more of the instrument rates.

- Select the “Save” option.
 - Generate a schedule and verify that imaging rate change is reflected properly.
2. Change the Superset capacity of SSR Buffers.
 - Select the “Modeling Parameters” option from the “Settings” menu.
 - Modify one or more of the buffer capacity settings.
 - Select the “Save” option.
 - Generate a schedule and verify that buffer capacity is reflected properly.
3. Change the MODIS and MISR Night and Day offsets.
 - Select the “Modeling Parameters” option from the “Settings” menu.
 - Modify the settings for MISR and MODIS day/night offsets.
 - Select the “Save” option.
 - Enter scheduling options and create a contact list.
 - Verify that MODIS and MISR day night events are offset the proper distance from NADIR_TERM_CROSSING events in the Orbital Events Report.
4. Change the PBFLEX dump time allocation priority.
 - Select the “Modeling Parameters” option from the “Settings” menu.
 - Select one or more of the entries in “Dump Time Allocation Priority (PBFLEX)” window.
 - Move the selection up or down to reorder the priority.
 - Select the “Save” option.
 - Generate a schedule and verify that the dump time allocation priority has changed.
5. Modify the Playback offset from the start of a dump.
 - Select the “Modeling Parameters” option from the “Settings” menu.
 - Modify the playback offset setting.
 - Select the “Save” option.
 - Generate a schedule.
 - Verify that playbacks are offset by the specified amount from the start of dump windows.
6. Modify the ASTER Automated Imaging Rate Settings
 - Select the “Modeling Parameters” option from the “Settings” menu.
 - Select the “Aster Imaging Rates” Button
 - Modify one or more of the ASTER Auto Imaging Rates, changing which instruments are used, and when they turn on/off.
 - Select Automated Aster modeling
 - Generate a schedule
 - Verify that changes to ASTER Imaging rate is reflected in schedule.

2.14 Test Case: 14 Modify SPLAT Preferences

2.14.1 Relevant Builds

This test case is applicable to Builds I and II.

2.14.2 Test Information

Goal in Context:	The operator changes the appearance of the SPLAT windows and timeline.
Preconditions:	None
Success End Condition:	An Operator customized version of the SPLAT tool.
Failed End Condition:	SPLAT default settings remain.
Primary Actor:	Operator

2.14.3 Test Scenario

The following variations need to be tested:

- 1 Change the SPLAT look and feel.
 - Select the “Preferences” option from the “Settings” menu.
 - Select the “General” Tab from the preferences dialog.
 - Select one of the available options for “look and feel” (Java Look and Feel, CDE/Motif, Windows)
 - Select the “Ok” or “Apply” option.
 - Verify that look and feel of the tool has been modified according to the selection.
- 2 Display/Hide Advanced Fields on the Modeling Parameters Display
 - Select the “Preferences” option from the “Settings” menu.
 - Select the “General” Tab from the preferences dialog.
 - De-select the “Show Advanced Edits” checkbox.
 - Select the “Ok” or “Apply” option.
 - Select the “Modeling Parameters” option from the “Settings” menu.
 - Verify that only buffer capacities are shown.
- 3 Set the Report and Saved data directories.
 - Select the “Preferences” option from the “Settings” menu.
 - Select the “General” Tab from the preferences dialog.
 - Select the “Browse” button next to the “Report Directory” entry and select the location for input reports.

- Select the “Browse” button next to the “Data Directory” entry and select the location for output.
 - Select the “Ok” button.
 - Select the “Scheduling Options” option from the “File” menu.
 - Select the “Select Reports” option from the Scheduling Options Menu.
 - Select the browse button next to one of the input reports.
 - Verify that the default directory displayed in the open dialog is the one selected for input reports.
 - Select input reports and scheduling options.
 - Create contact list.
 - Generate schedule.
 - Select “Save Schedule as Text” option from the toolbar.
 - Verify that directory specified in save dialog box is the same as the data directory specified earlier.
- 4 Select the timeline event colors and font size.
- Select the “Preferences” option from the “Settings” menu.
 - Select the “Timeline” Tab from the preferences dialog.
 - Change the font size.
 - Select the “Choose Color” option next to one of the event types.
 - In the color selection dialog, select how to display the color (RGB, HSB, Swatches)
 - Select the appropriate color.
 - Select the “Ok” option in the color selection dialog.
 - Select the “Ok” button in the Preferences dialog.
 - Verify that the font size has changed for entries in the timeline and that the event type for which the color was modified now displays correctly.
- 5 Reset the SPLAT preferences.
- Select the “Preferences” option from the “Settings” menu.
 - Select the “General” Tab from the preferences dialog.
 - Select the “Reset” button.
 - Verify that the input report location and data directory are cleared.

2.15 Test Case: 15 Print the Current Schedule

2.15.1 Relevant Builds

This test case applies to Builds I and II.

2.15.2 Test Information

Goal in Context: Operator prints the current playback schedule

Preconditions:	A generated schedule must be loaded/displayed on the timeline.
Success End Condition:	A hardcopy of the current schedule, filtered per the selected print filters.
Failed End Condition:	No hardcopy is generated.
Primary Actor:	Operator

2.15.3 Test Scenario

1. Select the “Specify Scheduling Options” operation from the tool bar.
2. Enter the scheduling options
3. Select the “Create Contact List” operation from the tool bar
4. Select the “Generate Schedule” operation from the tool bar.
5. Select the Filters → Print Filter option from the Settings menu
6. Modify the Print filters.
7. Select the “Print Current Schedule” option from the toolbar.
8. Specify any additional text in the provided field.
9. Select the “Preview” button.
10. When the Print Preview is displayed, verify that the hardcopy contains all selected fields, etc.
11. Select the “Ok” option from the tool bar or modify the print options.
12. Select “Print” when the printer dialog box is raised.
13. Retrieve printout and verify content/layout.

2.16 Test Case: 16 Save Current Schedule

2.16.1 Relevant Builds

This test case is applicable to Builds I and II.

2.16.2 Test Information

Goal in Context:	Operator chooses to save the current schedule to disk.
Preconditions:	A playback schedule must be generated.
Success End Condition:	Ether a binary or textual representation of the current schedule is saved to disk.
Failed End Condition:	The schedule is not saved.
Primary Actor:	Operator

2.16.3 Test Scenario

The following variations must be addressed:

- 1 Save the schedule as text.

- Select the “Save as Text” option from the main toolbar.
 - In the Save dialog box, browse to the desired location, and specify a name for the saved report.
 - Select the “Save” button.
 - Verify that schedule has been saved as text and that all events and fields are contained in the text file.
- 2 Save the schedule as binary.
- Select the “Save Current” option from the main toolbar.
 - In the Save dialog box, browse to the desired location, and specify a name for the saved report.
 - Select the “Save” button.
 - Verify that schedule has been saved as “xxx.splat”.

2.17 Test Case: 17 Test Red and Yellow Limits

2.17.1 Relevant Builds

This test case is applicable to Build III.

2.17.2 Test Information

Goal in Context:	Operator modifies the Red and Yellow limits and tests to see that they are correctly applied during schedule generation.
Preconditions:	A contact list must be created.
Success End Condition:	A playback schedule with the red and yellow limits correctly applied.
Failed End Condition:	A playback schedule with incorrect red and yellow limits.
Primary Actor:	Operator

2.17.3 Test Scenario

1. The operator selects the “Red & Yellow Limits” option from the Settings Menu.
2. In the Limits UI, the operator changes the Red and Yellow Limits for one or more of the buffers.
3. The operator selects the “Save” button on the Limits UI.
4. The operator selects the “Generate Schedule” button.
5. The operator verifies that the generated schedule reflects the red and yellow limit settings.
 - a. If the buffer full percentages do not exceed the limit settings, the operator modifies dump window playback percentages in one or more preceding dump windows causing enough carryover from one playback to another to force buffer usages beyond limits.

- b. The operator verifies that yellow and red limits are applied correctly during schedule generation.
- c. If a buffer usage exceeds a limit, the buffer usage column will be color coded either yellow or red and the corresponding buffer “xxx_lim” field will have a text field color coded accordingly with a text message indicating which limit was exceeded.

2.18 Test Case: 18 Manually Specify Sync Point

2.18.1 Relevant Builds

This test case is applicable to Build III.

2.18.2 Test Information

Goal in Context:	Operator opts for a manually entered sync point.
Preconditions:	A contact list must be created. Note the different scenarios for cases with and without an SSR buffer states re[prt
Success End Condition:	The operator specified manual sync point is displayed on the timeline and dump window shave been updated accordingly.
Failed End Condition:	An error dialog explaining why the manual sync point was not Added to the schedule.
Primary Actor:	Operator

2.18.3 Test Scenario

The following variations must be addressed:

1. Candidate Sync Points loaded from SSR Buffer States Report
 - Specify an SSR Buffer States Report in the Input Reports UI.
 - Select the “Create Contacts” option from the tool bar.
 - Review the schedule to make sure candidate dump windows and a sync point have been selected by SPLAT.
 - Select the “Synchronization Points” option from the tool bar.
 - Verify that all buffer state entries in the sync point offset window are displayed by the dialog.
 - Select the “Set Manual” button from the Synchronization Points UI.
 - In the raised dialog, enter the desired time of the new sync point. Test several variations where the times are in an outside of X and K band contacts. Verify that the tool correctly identifies these cases.
 - Select the “Ok” button on the Manual sync point dialog.
 - Verify that the specified manual sync point is displayed and selected in the list of candidate sync points.

- Select the “Save” button from the Synchronization Point UI. Verify that the tool displays a dialog box indicating the outcome of selecting a sync point.
- Select the “Yes” button to proceed. Verify that the sync point changes to the selected time and that dump windows are updated to reflect the new sync point, and that all playbacks are invalidated and removed from the timeline. [Valid on for builds I and II. For Build III and beyond modifications to dump windows or sync points causes an automatic schedule regeneration. See test case 19].

1. No SSR Buffer States Report

- Do not specify an SSR Buffer States Report when selecting input reports.
- Select the “Create Contacts” option from the toolbar. Verify that the contact list contains only events extracted from input reports. No sync point or dump windows should be present.
- Select the “Synchronization Points” option from the toolbar.
- Verify that the Synchronization Points UI contains no candidate sync points.
- Select the “Set Manual” button in the Synchronization Points UI.
- In the raised dialog, enter the desired time of the new sync point. Test several variations where the times are in an outside of X and K band contacts. Verify that the tool correctly identifies these cases.
- Select the “Ok” button on the Manual sync point dialog.
- Verify that the specified manual sync point is displayed and selected in the list of candidate sync points.
- Select the “Save” option from the Synchronization Points UI and verify that the tool displays a dialog box indicating the outcome of selecting a sync point.
- Select the “Yes” button from the dialog window. Verify that the sync point is displayed on the timeline and candidate dump windows are placed in all X and K band contacts except K band 275 contacts.

2.19 Test Case: 19 Automated Schedule Re-Generation

2.19.1 Relevant Builds

This test case is applicable to Build III.

2.19.2 Test Information

Goal in Context:	Operator edits, adds or removes a dump window or selects another sync point.
Preconditions:	A contact list must be created.
Success End Condition:	The timeline updates automatically to reflect the change.
Failed End Condition:	The timeline doesn't update correctly.
Primary Actor:	Operator

2.19.3 Test Scenario

The following variations must be addressed:

1. Operator adds a dump window to a contact
 - Select the “Add” button associated with a K or X band contact.
 - Specify the dump start and stop and any buffer playback percentages.
 - Select the “Add” button and verify that the dump window has been added to the schedule, the schedule is regenerated and reflects the additional dump window, and that the Status bar contains the following message “SSR Playback Automation Tool: Schedule Regenerated”.
2. Operator modifies an existing dump window
 - Select the “Edit” button for a specific dump window.
 - Change one or more of the dump window parameters.
 - Select the “Save” button and verify that the changes to the dump window are present on the timeline and that the schedule is regenerated reflecting the changes, and the status bar contains the following message “SSR Playback Automation Tool: Schedule Regenerated”.
3. Operator removes a dump window
 - Select the “Edit” button for a specific dump window.
 - Select the “Delete” button in the Dump Windows UI.
 - Verify that the dump window was removed from the timeline and that the schedule is regenerated reflecting the changes, and the status bar contains the following message “SSR Playback Automation Tool: Schedule Regenerated”.
4. Operator selects a different sync point
 - Select the “Synchronization Points” option from the tool bar.
 - Click on the radio button associated with one of the available sync points.
 - Click the Save button and verify that the selected sync point is displayed on the timeline and that the schedule is regenerated reflecting the changes, and the status bar contains the following message “SSR Playback Automation Tool: Schedule Regenerated”.
5. Operator enters a sync point
 - Select the “Synchronization Points” option from the tool bar.
 - Click the “Set Manual” button.
 - Enter the Sync point time. Verify that entering a value outside of a K or X band contact causes an error dialog to be displayed.
 - Click the Save button and verify that the selected sync point is displayed on the timeline and that the schedule is regenerated reflecting the changes, and the status bar

contains the following message “SSR Playback Automation Tool: Schedule Regenerated”.