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# **Specification**

**for**

# **TCID Batch Upload**

**Version 1.15 approved**

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## Revision History

Name	Date	Reason For Changes	Version
T. Pappas	2015-05-27	Added 'N/A' as a valid value for the 'DAMAGETYPE' field.	1.9
T. Pappas	2016-04-16	Updated valid values for field #4 (Stencil Class), #17 (Constructed car spec) and #18 (Car spec after modification per R-1). This update was performed per <a href="#">NOI 0001</a> .	1.10
T. Pappas	2016-07-14	Changed 'Facility Rep. Name' field name to 'Name of Management Representative'. Changed 'Submitted by' field name to 'Submitted by (name and company)'. Removed revision history to this document prior to 2015. Added 'Welded Repair' as a valid value for the INSPREASON field. Added the capability to record up to 3 crack orientation codes per weld defect.	1.11
T. Pappas	2017-01-08	A value of 0 in the miles field is no longer accepted. If actual mileage is unknown, the user should estimate 18k miles per year of service.	1.12
T. Pappas	2017-07-11	Corrected links in 2.1.1.2 and 2.1.1.3.	1.13
T. Pappas	2017-09-15	Correct INSPREASON field allowable values to remove 0 as a valid entry.	1.14
T. Pappas	2017-12-03	Added compartment reporting capability.	1.15

# **1. Introduction**

## **1.1 Purpose**

This specification details how to create a TCID Batch File for upload to the TCID system, the upload mechanism itself and the method of reporting back to the user the results of the upload.

The frequency of submission is left up to the submitting entity to decide.

## 2. System Features

### 2.1 Batch File Creation

#### Description

The TCID Batch File is a CSV (Comma Separated Value) file consisting of 4 types of data including various tank car common information, updated drawings affecting the tank car design, attachment weld inspection information and shell and sill inspection information.

#### 2.1.1 Detailed File Format

In the following table, the field 'INSP\_ID' is defined and has a special purpose. This field is user assigned and designates those rows of data that belong to the same event. If a user is submitting data for a particular event that contains 2 drawing updates and an attachment weld inspection, then the 'INSP\_ID' field will be identical for each of the 3 rows detailing this event.

##### 2.1.1.1 TCID Batch File Fields

The following table details the allowable fields in a batch car submission to the TCID system. The 'Field Name' column contains the field names for the data and **must** be included as the first row in all batch car submissions.

Field Name	Description	Data Rules	Required
INSP_ID	Unique inspection ID, assigned by submitting party for each event	Alpha-numeric, 12 characters max	TRUE
CARMARK		Only the values in Appendix C are allowed.	TRUE
CARNUM		Numeric, 6 digit max	TRUE
CLASS	Current car spec, as stenciled, prior to any R1 modifications	Only the values in Appendix A are allowed.	TRUE
SHOPCOMP	Station Stencil of inspecting company or facility	Only the values in Appendix P are allowed.	TRUE
SHOPCITY	City name of facility performing the inspection	Alpha-numeric, 30 character max	TRUE
SHOPSTATE	State or Province of facility performing the inspection	Alpha-numeric, 30 character max	TRUE
BUILDDATE	Car built date, as per Umler	YYYYMMDD	TRUE
INSPDATE	Inspection date	YYYYMMDD	TRUE
ISJACKET	Jacketed; Yes = 1, No = 0	0 OR 1	TRUE
RESERVE1	Open Field	Alpha-numeric, 30 characters max	FALSE
RESERVE2	Open Field	Alpha-numeric, 30 characters max	FALSE
RESERVE3	Open Field	Alpha numeric, 10 character max	FALSE
RESERVE4	Open Field	Alpha numeric, 10 character max	FALSE
RESERVE5	Open Field	Alpha numeric, 10 character max	FALSE

RESERVE6	Open Field	Alpha numeric, 10 character max	FALSE
RESERVE7	Open Field	Alpha numeric, 10 character max	FALSE
RESERVE8	Open Field	Alpha numeric, 10 character max	FALSE
RESERVE9	Open Field	Alpha numeric, 50 character max	FALSE
RESERVE10	Open Field	Alpha numeric, 50 character max	FALSE
ORIGCERT	Original AAR Certificate of Construction number	Alpha-numeric, 5-8 characters	TRUE
BUILDER	Builder Code, as per Umler	Only the values in Appendix B are allowed.	TRUE
STUBSILLDESIGN	Current Stub Sill Design, as per Umler	Only the values in Appendix D are allowed.	TRUE
STUBSILLDESIGNVARIATION	Type of inboard sill reinforcement, continuous or non-continuous	'Continuous' OR 'Non-Continuous' OR 'N/A'	TRUE
MILES	Number of car miles in thousands of miles. User should estimate 18k miles per year of service if the actual mileage is unknown.	Numeric, > 0	FALSE
CONSTRCARSPEC	Constructed car spec	Only the values in Appendix Q are allowed.	TRUE
POSTR1CARSPEC	Car Spec after R1 modification	Only the values in Appendix R are allowed.	FALSE
INSPREASON	Reason for Inspection	Numeric value from 1 to 63 corresponding to the bitwise OR of the 6 options as follows: Welded Repair: 32 Other: 16 Tank Qualification: 8 Stub Sill Inspection: 4 Alteration: 2 Conversion: 1  For example, if both Alteration and Conversion are applicable, the numeric value 3 would be entered here (2 + 1).	TRUE
DAMAGETYPE	Cause of damage	'Accident' or 'Non-Accident' or 'N/A'	TRUE
RAILRESP	Railroad Responsibility; Yes = 1, No = 0	0 OR 1	TRUE
STUBSILLDEFA	A-end Stub Sill Deformation; Yes = 1, No = 0	0 OR 1	FALSE
STUBSILLDEFB	B-end Stub Sill Deformation; Yes = 1, No = 0	0 OR 1	FALSE
LASTTANKQUALYEAR	Year of last qualification	YYYY	TRUE
TANKFAIL	Tank Containment Failure; Yes = 1, No = 0	0 OR 1	FALSE
NUMCOMPARTMENTS	Number of compartments in the car.	Numeric value from 1-6	TRUE
SUBMITTEDBY	The name and company submitting the record.	Alpha-numeric, 30 character max, value must be enclosed in "" and must not contain "	TRUE
MANAGEMENTREP	Name of Management Representative, typically the name of the person submitting the batch	Alpha-numeric, 30 character max, value must be enclosed in "" and must not contain "	TRUE
COMPARTMENT_NO_CHANGE	Compartment number associated with the change to the car.	Numeric value from 1-6	FALSE
CHANGE_CATEGORY	Type of drawing used to support the R1 alteration/conversion	Only the values in Appendix E are allowed.	FALSE

DRAWING_NUMBER	New drawing, part, document or commodity id used to support the R1 alteration/conversion	Alpha-numeric, 50 character max	FALSE
APPROVAL_REFERENCE	Number of the AAR approval that supports the R1 alteration/conversion	Alpha-numeric, 10 character max	FALSE
DRAWING_COMMENTS	Drawing comments field, free form text box	Alpha-numeric, 250 character max	FALSE
COMPARTMENT_NO_WELD	Compartment number associated with the weld inspection.	Numeric value from 1-6	FALSE
INSPECTION_RESULTS	Used to indicate that defects were found or that no defects were found	'Defect(s) Found' OR 'No exceptions found'	FALSE
WELD_CODE	Identifies the weld that is defective	Only the values in Appendix K are allowed.	FALSE
LOCATION	Identifies the location on the car of the weld defect	Only the values in Appendix L are allowed.	FALSE
INSPECTION_TECHNIQUE	Technique used to identify the weld defect	Only the values in Appendix M are allowed.	FALSE
NUM_CRACKS	Number of Cracks	Numeric	FALSE
MAX_CRACK_LENGTH	Length, measured to the hundredth of an inch, of the longest crack found during inspection	Numeric, precision: 0.00	FALSE
CRACK_ORIENTATION_CODE	Orientation of the crack in the weld or parent metal	Only the values in Appendix N are allowed.	FALSE
CRACK_ORIENTATION_CODE2	Orientation of the crack in the weld or parent metal	Only the values in Appendix N are allowed.	FALSE
CRACK_ORIENTATION_CODE3	Orientation of the crack in the weld or parent metal	Only the values in Appendix N are allowed.	FALSE
HOW_REPAIRED_WELD	Designation of the repair method (AAR Appendix R M-1002)	Only the values in Appendix O are allowed.	FALSE
COMPARTMENT_NO_SHELL	Compartment number associated with the shell inspection.	Numeric value from 1-6	FALSE
COMPONENT	Tank component containing the damage	Only the values in Appendix F are allowed.	FALSE
FAILURE_TYPE	Type of tank damage	Only the values in Appendix G are allowed.	FALSE
FAILURE_CAUSE	Condition that caused the tank damage	Only the values in Appendix H are allowed.	FALSE
HOW_REPAIRED_SHELL	The rule/procedure used to repair the tank damage (AAR Appendix R M-1002)	Only the values in Appendix I are allowed.	FALSE
CRACK_LENGTH	Length, measured to the hundredth of an inch, of the longest crack found during inspection	Numeric, precision: 0.00	FALSE
REPAIR_LOCATION	Location on car of the repair	Only the values in Appendix J are allowed.	FALSE
INSPECTION_METHOD	Method used to inspect the tank damage	Only the values in Appendix M are allowed.	FALSE

**2.1.1.2 Dependencies**

In addition to the rules specified in 2.1.1.1 - TCID Batch File Fields, there are dependencies between some fields. These dependencies are detailed in the dependency document located at the following URL:

[http://www.rsiaarproject.com/download.php?doc\\_id=174](http://www.rsiaarproject.com/download.php?doc_id=174)

**2.1.1.3 Batch Submission Example File**

An example file can be downloaded on the TCID website at the following location:

[http://www.rsiaarproject.com/download.php?doc\\_id=173](http://www.rsiaarproject.com/download.php?doc_id=173)



## 2.2 Batch File Upload

### Description

The TCID Batch File will be uploaded to TCID via web form or FTPS server. Once the file is uploaded, it will be added to the processing queue and will be processed within 15 minutes. The designated user from each car owner will receive a report detailing the results of the import once the processing job is complete.

#### 2.2.1 Web Based Upload Process

Once the TCID Batch File is created, the user then needs to upload the file to TCID. This is performed by following these steps:

- Log into the TCID website at <https://www.rsiaarproject.com>
- Click on the 'INSPECTIONS' link on the main menu bar
- Click on the 'Batch Import' link on the sub-menu bar
- Click on the 'Browse' button to select the TCID Batch File for upload
- Click the 'Upload File' button to complete the process

#### 2.2.2 FTPS Based Upload Process

Once the TCID Batch File is created, the user then needs to upload the file to TCID. This is performed by following these steps:

- Log into the TCID FTPS server at <ftps://batch.rsiaarproject.com:1793/>
- Upload the batch file to the server.
- Disconnect from the FTPS server.

##### 2.2.2.1 FTPS Credentials

If the user does not yet have FTPS credentials for the TCID system, the user will be required to log into the TCID web interface (<https://www.rsiaarproject.com>) and request that FTPS credentials be assigned from their 'Profile' page. Once requested through the Web interface, FTPS credentials will be assigned and e-mailed to the user.

#### 2.2.3 Batch Upload Quota

Your FTPS user account is limited to 100MB and 50 total files. It is the responsibility of the user to make sure that these quotas are not exceeded. The server will reject uploads via FTPS if the upload would exceed the previously mentioned quota limitations.

To help the user identify when it is safe to remove files from their batch upload directory, the TCID system will append the extension '.queued' onto the file once it has been pulled into TCID for processing. Any files with this extension are safe to delete from the user's directory.

## **2.3 Results Reporting**

### **Description**

An e-mail will be sent to the designated user containing the results of the import of the file. Only users with 'member' permissions are allowed to assign the recipient of these e-mails.

### **2.3.1 Reporting**

After the user completes uploading a TCID Batch File with the proper format, TCID will perform the following steps

- Analyze the contents of the file to make sure supplied data is within industry defined limits
- Import the inspection records that contain valid data
- Reject the inspection records that contain any incorrect data
- Provide the results of the import process in an e-mail to the designated user. The format of this reply is TBD.

## **3. External Interface Requirements**

### **3.1 User Interfaces**

The only user interface requirement is that the user has an internet connected computer with a JavaScript enabled web browser and an e-mail account.

### **3.2 Software Interfaces**

The following web browsers are supported and known to work with TCID

- Mozilla Firefox (all versions)
- Google Chrome (all versions)
- Microsoft Internet Explorer 9.0.8112.16421, Update Version 9.0.9 (KB2722913)

The following web browsers are supported and are more than 95% functional, but have some formatting eccentricities

- Opera (version 12)

## **4. Additional References**

### **4.1 Technical Contact**

If you have additional questions about the TCID Batch Upload process, which are not answered here, please contact Tom Pappas by e-mail at [tjp@simspe.com](mailto:tjp@simspe.com).

## **Appendix A** Allowable Car Classes

[https://www.rsiaarproject.com/valid\\_data.php?fieldname=carclass](https://www.rsiaarproject.com/valid_data.php?fieldname=carclass)

## **Appendix B** Allowable Builders

[https://www.rsiaarproject.com/valid\\_data.php?fieldname=builder](https://www.rsiaarproject.com/valid_data.php?fieldname=builder)

## **Appendix C** Allowable Car Marks

[https://www.rsiaarproject.com/valid\\_data.php?fieldname=carmark](https://www.rsiaarproject.com/valid_data.php?fieldname=carmark)

## **Appendix D** Allowable Stub Sill Designs

[https://www.rsiaarproject.com/valid\\_data.php?fieldname=stubsill](https://www.rsiaarproject.com/valid_data.php?fieldname=stubsill)



## **Appendix E** Allowable Change Categories

[https://www.rsiaarproject.com/valid\\_data.php?fieldname=changecategory](https://www.rsiaarproject.com/valid_data.php?fieldname=changecategory)

## **Appendix F** Allowable Components

[https://www.rsiaarproject.com/valid\\_data.php?fieldname=shellcomponent](https://www.rsiaarproject.com/valid_data.php?fieldname=shellcomponent)

## **Appendix G** Allowable Failure Types

[https://www.rsiaarproject.com/valid\\_data.php?fieldname=failuretype](https://www.rsiaarproject.com/valid_data.php?fieldname=failuretype)

## **Appendix H** Allowable Failure Causes

[https://www.rsiaarproject.com/valid\\_data.php?fieldname=failurecause](https://www.rsiaarproject.com/valid_data.php?fieldname=failurecause)

## **Appendix I** Allowable Values for How Repaired

[https://www.rsiaarproject.com/valid\\_data.php?fieldname=howrepairedshell](https://www.rsiaarproject.com/valid_data.php?fieldname=howrepairedshell)

## **Appendix J** Allowable Repair Locations

[https://www.rsiaarproject.com/valid\\_data.php?fieldname=repairlocation](https://www.rsiaarproject.com/valid_data.php?fieldname=repairlocation)

## **Appendix K** Allowable Weld Codes

[https://www.rsiaarproject.com/valid\\_data.php?fieldname=weldcode](https://www.rsiaarproject.com/valid_data.php?fieldname=weldcode)

## **Appendix L** Allowable Locations

[https://www.rsiaarproject.com/valid\\_data.php?fieldname=location](https://www.rsiaarproject.com/valid_data.php?fieldname=location)



## **Appendix M** Allowable Inspection Techniques

[https://www.rsiaarproject.com/valid\\_data.php?fieldname=inspectiontechnique](https://www.rsiaarproject.com/valid_data.php?fieldname=inspectiontechnique)

## **Appendix N** Allowable Crack Orientation Codes

[https://www.rsiaarproject.com/valid\\_data.php?fieldname=crackorientation](https://www.rsiaarproject.com/valid_data.php?fieldname=crackorientation)

## **Appendix O** Allowable Values for How Repaired

[https://www.rsiaarproject.com/valid\\_data.php?fieldname=howrepairedweld](https://www.rsiaarproject.com/valid_data.php?fieldname=howrepairedweld)

## **Appendix P** Allowable Values for Station Stencil (SHOPCOMP)

[https://www.rsiaarproject.com/valid\\_data.php?fieldname=shopcomp](https://www.rsiaarproject.com/valid_data.php?fieldname=shopcomp)

## **Appendix Q** Allowable Values for Constructed car spec (CONSTRCARSPEC)

[https://www.rsiaarproject.com/valid\\_data.php?fieldname=constrcarspec](https://www.rsiaarproject.com/valid_data.php?fieldname=constrcarspec)

**Appendix R** Allowable Values for Car spec after modification  
per R-1 (POSTR1CARSPEC)

[https://www.rsiaarproject.com/valid\\_data.php?fieldname=postr1carspec](https://www.rsiaarproject.com/valid_data.php?fieldname=postr1carspec)