Problem Reporting Taxonomy and Data Preparation Tool Evaluation

January 28, 2010

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Report Approval and Revision History

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Volume I: Technical Assessment Report

1.0 Notification and Authorization

Mr. Robert J. Beil, a member of the NASA Engineering and Safety Center (NESC) Systems Engineering Office (SEO) Technical Discipline Team (TDT) requested this SEO-managed activity to perform a gap analysis for the proposed NASA Standard 0006 "Common NASA Taxonomy for Problem Reporting, Analysis, and Resolution" and to "develop a data filter to aid in performing data mining on the Space Shuttle Program PRACA data."

An NESC out-of-board activity was approved on June 7, 2007, by Ms. Dawn Schaible, NESC SEO Manager. Mr. Beil was selected to lead this assessment. The assessment plan was presented and approved by the SEO Manager on February 13, 2008. The final report was presented to the NESC Review Board (NRB) for approval on January 28, 2010.

The key stakeholders for this assessment are the NESC Data Mining and Trending Working Group and the Kennedy Space Center (KSC) Office of the Chief Engineer (OCE).

2.0 Signature Page

Submitted by:

_____

Mr. Robert J. Beil Date

Signatories declare the findings and observations complied in the report are factually based from data extracted from Program/Project documents, contractor reports, and open literature, and/or generated from independently conducted tests, analysis, and inspections.

3.0 Team List

Name	Discipline	Organization
Core Team		
Robert Beil	NESC Lead	KSC
Tim Adams	NESC Deputy Lead	KSC
Tim Barth	Systems Engineering	LaRC
Anthony Burris	Systems Engineering	KSC/SAIC
David Armstrong	Systems Engineering	KSC
Wayne Fowler	Systems Engineering	KSC/SAIC
Charles Wilson	Systems Engineering	KSC/SAIC
Pam Throckmorton	MTSO Program Analyst	LaRC
Administrative Support		
Erin Moran	Technical Writer	LaRC/ATK

4.0 Executive Summary

The two objectives of this assessment were: to perform a gap analysis on the proposed NASA Standard 0006, "Common NASA Taxonomy for Problem Reporting, Analysis, and Resolution", and to create an input filter and set of instructions for using the data-mining/data-cleansing tool TechOasis[1] with Space Shuttle Program (SSP) problem reporting data.

The gap analysis (classification of how well a product or solution meets a targeted need) used a bottoms-up approach (assessing against various problem reporting systems) to demonstrate the efficacy of the proposed standard and to identify variances between the actual and the desired state. The first section of this report reviews the work completed, discusses the results, and provides suggestions for further use of this data.

The second objective was achieved through the development and deployment of import filters for Web-based Program Compliance Assurance and Status System (WebPCASS) data (i.e., SSP Web-based PRACA data) to facilitate its use in the data/text mining tool, TechOasis.

The assessment team consisted of members from the NASA Engineering and Safety Center (NESC) Systems Engineering Office (SEO) Data Mining and Trending Working Group, the NESC SEO Statistics Technical Discipline Team (TDT) sub team, and contractor support (Science Applications International Corporation (SAIC)-Kennedy Space Center (KSC)) to assist with the filter development and data integration. The team also had support from Search Technologies Inc., developers of TechOasis, in developing the data filter.

The work that achieved these objectives and deployment of TechOasis are discussed in this report.

[1]TechOasis is a text and data mining/data-preparation software tool that was developed under contract to Defense Advanced Research Projects Agency (DARPA) and the United States (US) Army by Search Technologies Inc., and is freely accessible to the federal government.

5.0 Problem Description

The two objectives of this assessment were to perform a gap analysis on the proposed NASA Standard 0006 "Common NASA Taxonomy for Problem Reporting, Analysis, and Resolution", and to create an input filter and set of instructions for using the data mining/data-cleansing tool (TechOasis) with SSP problem-reporting data (described in the next paragraphs).

A gap analysis (classification of how well a product or solution meets a targeted need) was performed on the proposed "Common NASA Taxonomy for Problem Reporting, Analysis and Resolution Standard." The proposed standard was developed at the request of the OCE and developed by an Agency cross-cutting team led by the NESC. This standard has been informally utilized by the Constellation Program (CxP) in the development of their Level II PRACA system and has been released for final review and acceptance as a formal standard. The utility of this standard has not been fully demonstrated. Section 5.1 reviews the gap-analysis in greater detail and discusses the results. Suggestions for further use of this data are also presented.

The development and deployment of an import filter and set of instructions for utilization with WebPCASS data to facilitate its use in TechOasis was accomplished. TechOasis is a text and data-mining/data-preparation software tool that was developed under contract to Defense Advanced Research Projects Agency (DARPA) and the United States Army by Search Technologies Inc. and is freely accessible to federal government employees and contractors. The work that achieved this objective and the deployment of TechOasis is described in detail in Section 5.2.

5.1 Objective 1: Taxonomy Standard Data Field Analysis

At the request of the Agency OCE, in 2005, the NESC formed a multi Center group to develop a proposed NASA standard, "Common NASA Taxonomy for Problem Reporting, Analysis, and Resolution Standard". The proposed standard was approved at the NESC review board and went out for review and comment to the NASA Centers. Although it has been used as a reference and starting point for developing the CxP Level II PRACA system structured data fields, the utility of this standard had not been fully demonstrated.

This study performed a gap analysis, using the proposed standard as the baseline, assessing how well it performed against similar problem reporting systems. The approach taken was to gather structured data fields from a number of representative problem-reporting databases. These databases included: KSC Ground Operations Problem Reporting System, Aviation Safety Reporting System, Marshall Space Flight Center (MSFC) UNIX PRACA System, International Space Station (ISS) Program PRACA System, CxP PRACA, Space Shuttle Program PRACA Requirements (STS-08126K), Johnson Space Center (JSC) Government round-Furnished

Equipment Problem Reporting System, The Aerospace Corporation Anomaly Tracking System, Incident Reporting and Information System (IRIS)-partial, and General Atomics Failure Reporting Analysis and Corrective Action System **(**FRACAS). These structured fields were then consolidated and sorted to compare like fields and identify unique fields. The consolidated summary is provided in Appendix A. Based on this work, fields that should be considered for inclusion in the proposed standard were identified. These were binned into two categories: recommended additional mandatory fields and recommended additional fields (matching the format used in the proposed standard). Section 6.0 contains the descriptions of these fields, where they originated, and rationale for recommending their inclusion in the proposed standard.

5.2 Objective 2: TechOasis Filter

TechOasis is the US Government version of the commercially-available VantagePoint software from Search Technology, Inc, originally developed under contract to DARPA and the US Army. TechOasis is a text-mining tool used for discovery and extraction of knowledge from text-based sources. In order to utilize the tool, data has to be in a form that will allow it to be imported for analysis.

This task focused on establishing a set of 'how-to' procedures or user resource guides. The workflow of procedures is depicted in Figure 5.2-1. Each of these items represents an output from this task. The first procedure describes how to obtain access to the SSP PRACA data system. The second and third procedures are the key outputs from this task. The second procedure describes the intermediary process of outputting a tilde delimited search file followed by the truncation of certain characters from the beginning and end of the file to allow it to be configured as an Microsoft® Excel® file for subsequent building of an import filter and raw data import. The third procedure describes how to build the import filter using the previous search file and then import this raw data file. The fourth procedure is a summary of referenced key features found in the TechOasis User's Guide. The fifth procedure provides users who have processed data through the TechOasis application a means to validate their data analysis techniques and arrive at conclusions. Since this section is in its early stage of development, these methods and processes have not yet been fully determined. However, this effort provides a starting point for the community to build a knowledge base where methods, techniques, and other supporting information can be exchanged in an open forum. The procedures are contained in Appendix B, and can be found at: http://kscsma.ksc.nasa.gov/Reliability/IDAS.html. This site is the Integrated Design and Assurance System (IDAS) website, which is a KSC resource that shares and supports tools that perform technical analyses. This site also serves as a location for collecting and sharing information that helps analysts to learn and apply the tools and techniques. This site is open to all NASA employees and contractors.

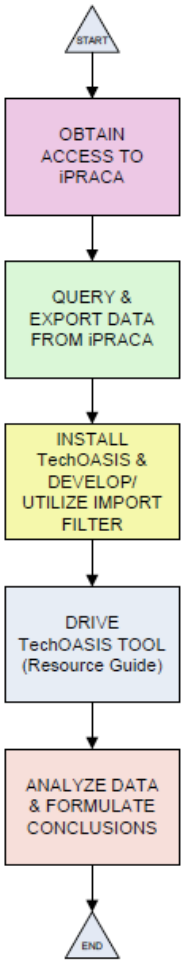

Figure 5.2-1. Process Flow Diagram

6.0 Data Analysis for Objective 1: Taxonomy Standard Data Field Analysis

6.1 Recommended Mandatory Additional Data Elements

The data elements in Table 6.1-1 are recommended mandatory additional data elements for the standard. These are the elements categorized in the standard as "all projects shall use in their reporting systems." The first column describes where the field reference originated (from the bottoms up review), while the next 3 fields mimic the proposed standard format. The last column "Rationale for Addition," describes the rationale for including the given field.

Table 6.1-1. Recommended Additional Mandatory Fields

PRACA System(s)	Data Field	Description	Data Type or Source	Rationale for Addition
CxP 70068-03 // ISS PRACA Db	DD250	Has the H/W or S/W been accepted by the government?	Yes/No	Important distinction during new system development and acquisition (may affect decisions about program/mission impacts, severity, priorities, etc.).
KSCPR	Deferred Date		Date	The specific definition and inclusion of this series of fields is dependent on the type of program/project. The message here is that if a problem resolution is being deferred, whether the hardware/software is in flight or on the ground, the deferral event needs to be documented, including the date, the signatories and a justification. The ISS Program uses a model where they include a review of the deferral rationale from flight to flight in the Certification of Flight Readiness (CoFR). This model seems to work well for them, ensuring problems are addressed prior to missions, as well as documenting the rationale for that deferral.
KSCPR/ISS PRACA Db	Deferred to Event/Flt#		Pick List	
ISS PRACA Db	Flight Effectivity Status	Open/Closed buttons indicating the status.	Open/Closed	
ISS PRACA Db	Justification	Justification for changes to the PR's Flight Effectivity.	Text string	
ISS PRACA Db	Name	Name of person responsible to open and close Flight Effectivity.	People Taxonomy	
PRACA System(s)	**Data Field**	**Description**	**Data Type or Source**	**Rationale for Addition**

CxP 70068-03	Likelihood Score	Determine likelihood of problem occurring again (1, 2, 3, 4 or 5) based on qualitative and quantitative values per CxP 70056.	Pick List	This series of fields offers various possibilities of addressing risk. It was based largely on the existing CxP PRACA requirements document, which has since evolved. However, these fields offer a possible approach. The proposed Standard includes a "Criticality Field" and an "Adverse Program Impact" field, which could be improved upon. The CxP has taken an interesting approach of identifying a significance category and a likelihood score, which is then multiplied, resulting in a risk score. No standardized risk approach exists for the Agency, but this approach provides a possible model that is based on a widely used risk matrix format. Additionally, the CxP suggests two fields, "Program Approval Required" and "Project Approval Required/Desired" that could be invoked if certain criteria are met. Inclusion of this series of fields is meant to spur thought, and to recommend inclusion of risk identification, but not suggest the solution.
CxP 70068-03	Program Approval Required?	Is program approval required?	Yes/No	
CxP 70068-03	Project Approval Required?	Is project approval required/desired? This approval field(s) depends on significance category, risk score, FMEA/CIL criticality code and resolution actions.	Yes/No	
CxP 70068-03/ Northrop Grumman - F18 FRACAS	Risk Score/ Safety Analysis RHI	Automatically calculates the product of Consequence Score times Likelihood Score. The RHI forms the basis for judging the acceptability of a risk and prioritizing resources.	Automatically Calculated	

PRACA System(s)	Data Field	Description	Data Type or Source	Rationale for Addition
CxP 70068-03	Significance Category	Significance of problem based on criteria in volume 1 of the PRACA requirements document. For Software: Assessment of the software/firmware/ complex electronics safety functions as defined in NASA-STD-8719.13B, Section 4.1.1, NASA Software Safety Standard. If the system is determined to be safety critical then the software must be evaluated for its contribution and addressed.	Pick List	
CxP 70068-03	Safety Critical Software?	Assessment of the software/firmware/complex electronics safety functions as defined in NASA-STD-8719.13B, Section 4.1.1, NASA Software Safety Standard. If the system is determined to be safety critical then the software must be evaluated for its contribution.	Yes/No	This field identifies if software is safety critical, per NASA-STD-8719.13B. (i.e., software is considered safety critical for those software operations that, if not performed, performed out-of sequence or performed incorrectly could result in improper control functions (or lack of control functions required for proper system operation) that could directly or indirectly cause or allow a hazardous condition to exist.)

PRACA System(s)	Data Field	Description	Data Type or Source	Rationale for Addition
CxP 70068-03 // Northrop Grumman - F18 FRACAS	Run Time/ Elapsed Time/Cycles	For items with elapsed time indicator (ETI) - time elapsed or number of cycles from NASA acceptance of equipment item to fault/failure/ anomaly detection; at the level at which maintenance action is initiated.	Text Field	This field would provide important trending data, which could support predictive analysis.
CxP 70068-03 // Aerospace ATR	Software Version (CSCI/CSC/ CSU)	Computer Software Configuration Item (CSCI): an aggregation of software that is designated for configuration management and treated as a single entity in the configuration management process. [IEEE-STD 610.12-1990] Computer Software Component (CSC)	Single line text field	Add a software version field, as required by NPR 7150.2.
CxP 70068-03	Software Classification	Identify classification of the defective software/ firmware/complex electronics as defined by NPR 7150.2. Refer to the system classification assessment or contact your software assurance representative for assistance in selection.	Pick List	This field is identified as mandatory for Problem Reporting by NPR 7150.2.

6.2 Recommended Additional Data Elements

The data elements in Table 6.2-1 represent recommended additional data elements categorized in the standard as non-mandatory. The first column describes where the field reference originated (from the bottoms up review), while the next 3 fields mimic the proposed standard format. The last column, "Rationale for addition," describes the rationale for including each field.

Table 6.2-1. Recommended Additional Fields

PRACA System(s)	Data Field	Description	Data Type or Source	Rationale for Addition
CxP 70068-03	Alias	Identifying numbers/names of the vendor's non-conformance/ problem report.	Auto-populate with edit capability.	Provides cross-reference to vendor-unique identification of problem.
Northrop Grumman - F18 FRACAS	Attachment		Attachment	This field can be automated with addition of attachment. It provides a quick indication of attachments included, or not.
CxP 70068-03	Common Hardware - Automatic	Automatically filled in by software for any common part numbers (need to define work flow).	Yes/No Automatic (when parts database created)	Suggest linking to parts database, if feasible.
CxP 70068-03	Cost Exceeded $100K	Yes, if Total Cost (Labor and Material) to work the problem exceeds $100K (high level estimate of cost).	Yes/No	Provides a discriminator to management. Suggest as non-mandatory field for NASA Standard 0006.
CxP 70068-03	Detectable	Fault is detectable during pre-operation screening, preventive maintenance	Pick List	This field provides additional management insight into the problem.

PRACA System(s)	Data Field	Description	Data Type or Source	Rationale for Addition
		checks, etc. Pick list includes: Screenable, Nonscreenable.		
USAF DRIS	Government-Furnished Material (GFM)		List	Government-furnished equipment (GFE) distinction.
Northrop Grumman - F18 FRACAS	How Detect Bit		Text	Combine with recommendation for BIT of failure…this is a sub-pick list.
Northrop Grumman - F18 FRACAS	How Indicate Bit		Text	Combine with recommendation for BIT of failure…this is a sub-pick list.
Northrop Grumman - F18 FRACAS	How Isolate Bit		Text	Combine with recommendation for BIT of failure…this is a sub-pick list.
IRIS	Incident Category	Example: occurrence or condition of employee concern where there is no injury or only minor injury requiring first aid and no significant equipment/property damage/mission failure (less than $1,000), but which possesses a potential to cause a mishap.	Pick List • Indicator-Close Call • Indicator-Construction • Indicator-False Alarm • Indicator-High Visibility • Indicator-Injury Involved • Indicator-Mission Affected • Indicator-Serious Damage to Aircraft or Space Hardware • Indicator-Serious Damage to Flight or Ground Support Hardware • Indicator-Test Failure • Indicator-Unexpected Damage Due to Test Failure	This provides linkage to IRIS in the event of an incident or mishap type event.

PRACA System(s)	Data Field	Description	Data Type or Source	Rationale for Addition
CxP 70068-03 // KSCPR	Location on Hardware	Zone location on hardware itself, if applicable. Based on engineering drawings.	Text Field	This field provides additional management insight into the problem.
Northrop Grumman - F18 FRACAS	Other How Isol bit		Text	Combine with recommendation for BIT of failure…this is a sub-pick list.
ISS PRACA Db	Reject PR	Used to reject public release of a PR that does not meet reportability criteria.	Selection button	Categorizes that a PR was initiated, but later rejected (provides quick reference/insight).
CxP 70068-03 // Northrop Grumman - F18 FRACAS	Repair/Fix	Elapsed maintenance time from fault/failure detection to return to service.	Text	This field provides additional management insight into the problem.
CxP 70068-03	Software Type	Identify the type of software/firmware/ complex electronics that is defective.	Pick List	This field provides additional management insight into the problem.
Aerospace ATR	Symptom Duration	Indicate duration of the anomalous behavior as “persistent” (permanent, continual), “transient” (momentary, temporary), “intermittent” (recurring at irregular intervals), “periodic” (recurring at regular intervals),	String (20)	Recommend adding to defect characteristic pick list.

PRACA System(s)	Data Field	Description	Data Type or Source	Rationale for Addition
		or “unrepeatable” (cannot recreate).		
Northrop Grumman - F18 FRACAS	Use as is Qty		Value	Good indicator of how many items affected by use-as-is condition.
Aerospace ATR	Verification Level	The verification level/method description that should have detected the most likely cause of the anomaly, given the verification process used.	String (60)	This field provides additional management insight into the problem.

7.0 Finding and NESC Recommendations

7.1 Finding

The following finding was identified:

F-1. The proposed NASA Standard 0006, "Common NASA Taxonomy for Problem Reporting, Analysis, and Resolution", is missing data fields (mandatory and suggested) when compared with referenced aerospace problem reporting databases.

7.2 NESC Recommendations

The following NESC recommendations were identified and are directed to the Agency OCE concerning the proposed NASA Standard 0006:

R-1. Fields described in Table 6.1-1 should be added as 'mandatory' fields in NASA Standard 0006. ***(F-1)***

R-2. Fields described in Table 6.1-2 should be considered for inclusion in NASA Standard 0006. ***(F-1)***

8.0 Definition of Terms

Corrective Actions	Changes to design processes, work instructions, workmanship practices, training, inspections, tests, procedures, specifications, drawings, tools, equipment, facilities, resources, or material that result in preventing, minimizing, or limiting the potential for recurrence of a problem.
Finding	A conclusion based on facts established by the investigating authority.
Lessons Learned	Knowledge or understanding gained by experience. The experience may be positive, as in a successful test or mission, or negative, as in a mishap or failure. A lesson must be significant in that it has real or assumed impact on operations; valid in that it is factually and technically correct; and applicable in that it identifies a specific design, process, or decision that reduces or limits the potential for failures and mishaps, or reinforces a positive result.
Observation	A factor, event, or circumstance identified during the assessment that did not contribute to the problem, but if left uncorrected has the potential to cause a mishap, injury, or increase the severity should a mishap occur.

	Alternatively, an observation could be a positive acknowledgement of a Center/Program/Project/Organization's operational structure, tools, and/or support provided.
Problem	The subject of the independent technical assessment.
Proximate Cause	The event(s) that occurred, including any condition(s) that existed immediately before the undesired outcome, directly resulted in its occurrence and, if eliminated or modified, would have prevented the undesired outcome.
Recommendation	An action identified by the NESC to correct a root cause or deficiency identified during the investigation. The recommendations may be used by the responsible Center/Program/Project/Organization in the preparation of a corrective action plan.
Root Cause	One of multiple factors (events, conditions, or organizational factors) that contributed to or created the proximate cause and subsequent undesired outcome and, if eliminated or modified, would have prevented the undesired outcome. Typically, multiple root causes contribute to an undesired outcome.

9.0 Acronyms List

AA/OSMA	Associate Administrator/Office of Safety and Mission Assurance
CFR	Certification of Flight Readiness
CSC	Computer Software Component
CSCI	Computer Software Configuration Item
CxP	Constellation Program
DARPA	Defense Advanced Research Projects Agency
Db	Database
DD	Deferred Date
ETI	Elapsed Time Indicator
FMEA/CIL	Failure Modes and Effects Analysis/Critical Item List
FRACAS	Failure Reporting Analysis and Corrective Action System
GFE	Government-Furnished Equipment
GFM	Government-Furnished Material
HQ Ops	Headquarters Operations
IEEE	Institute of Electrical and Electronics Engineers
IRIS	Incident Reporting and Information System

IDAS	Integrated Design and Assurance System
JSC	Johnson Space Center
KSC	Kennedy Space Center
LaRC	Langley Research Center
MTSO	Management and Technical Support Office
NESC	NASA Engineering and Safety Center
NRB	NESC Review Board
PRACA	Problem Reporting and Corrective Action
RHI	Risk Hazard Index
SAIC	Science Applications International Corporation
SEO	Systems Engineering Office
WebPCASS	Web-based Program Compliance Assurance and Status System

Volume II: Appendices

A. Gap Analysis
B. How-To Procedures

Appendix A. Gap Analysis

0006 Only	0006 Sort Order	Field in 0006	Definition in 0006	Type or Source 0006	Notes from 0006	Required	PHASE	CxP Field(s)	CxP Field Descriptions	ISS Field(s)	ISS Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descrip's	NG F-18 Field(s)	NG F-18 Field Descriptions	Comparison Comments
Yes	074	Residual Risk?	Is there remaining risk in using this item/system after implementation of final resolution (after corrective action)?	Yes/No			Analysis, Closeout	No Matching Field		No matching field		No Matching Field		No Matching Field		No matching field		No Matching Field		No matching field		
Yes	087	Lesson Learned?	Is there a lesson learned resulting from this problem?	Yes/No			Analysis, Closeout	No Matching Field		No matching field		No Matching Field		No Matching Field		No matching field		No Matching Field		No matching field		
Yes	062	Expected Date Root Cause(s)	Expected date for determination of root cause(s).	mm/dd/yyyy			Analysis	No Matching Field		No matching field		No Matching Field		No Matching Field		No matching field		No Matching Field		No matching field		
Yes	068	Expected Date Solution Development	Expected date for development of solution to resolve problem (remedial and/or corrective).	mm/dd/yyyy			Analysis	No Matching Field		No matching field		No Matching Field		No Matching Field		No matching field		No Matching Field		No matching field		
Yes	017	Mission Type	Type of mission.	Pick List			Initiation	No Matching Field		No matching field		No Matching Field		No Matching Field		No matching field		No Matching Field		No matching field		
Yes	089	Notification?	Does the flight crew, ground crew, or others need to be notified of the problem?	Yes/No			Initiation, Analysis, Closeout	No Matching Field		No matching field		No Matching Field		No Matching Field		No matching field		No Matching Field		No matching field		
Yes	011	Detection Time	Time when problem was detected.	hh:mm:ss			Initiation	No Matching Field		No matching field		No Matching Field		No Matching Field		No matching field		No Matching Field		No matching field		
	069	Expected Date Solution Implementation	Expected date for implementation of solution to resolve problem (remedial and/or corrective).	mm/dd/yyyy			Analysis	Expected Date(s) Corrective Action/Recurrence Control Implemented	Expected date(s) for implementation of problem solution and corrective action.	ECD		No Matching Field		No Matching Field		No matching field		No Matching Field		Date Repair Required // Estimated Date of Completion/Close-Out of Corrective Action		

0006 Only	0006 Sort Order	Field in 0006	Definition in 0006	Type or Source 0006	Notes from 0006	Required	PHASE	CxP Field(s)	CxP Field Descriptions	ISS Field(s)	ISS Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descrip's	NG F-18 Field(s)	NG F-18 Field Descriptions	Comparison Comments
	023	Failure Mode/Symptoms	The manner in which an item can fail or actually failed to perform its required function within specified limits, under specified limits, under specified conditions, for a specified duration / an actual component failure/error misperformance that was an i	Pick List		Y	Initiation, Analysis	Failure Mode/Symptoms	The symptoms of the failure and the manner in which an item can or actually failed to perform its required function within specified limits, under specified conditions, for a specified duration; an actual component failure/error misperformance that was an	Failure Mode // Failure Mode Code		Incident Type // Incident Sub Type		Failure Mode		Functional Effect // Symptom Description	Numeric code that rates the severity of functional effect from the malfunction. See para 6.1 of TOR. // a description of what was observed compared to what was expected during operations that led one to believe that an anomalous event had occurred	No Matching Field		Failure Mode Description // Failure Mode // How Mal // Recommended Failure Classification		
	086	Follow-on Action Description	Description of the follow-on actions assigned as a result of this problem, including who is actionable.	Text String			Analysis, Closeout	Corrective Action(s)/Recurrence Control Description(s) // Remedial Action/Disposition Description	Action (beyond remedial action) to correct a problem and prevent/control non-conformance/ problem recurrence in existing and/or future hardware or software. Corrective action should include one or more of the following: a. Design change; b. Manufacturing	Actionee Name // Corrective Action // Investigation/Analysis Summary // Maintenance Action Request // PR MRB Disposition // PR Recurrence Control		Follow Up		No Matching Field		Disposition	Describe actions taken for the suspect system and for in-process production hardware.	No Matching Field		Follow On		
	085	Follow-on Action?	Is follow-on action required as a result of this problem (other than configuration change, i.e., procedural)?	Yes/No			Analysis, Closeout	Corrective Action/Preventive Action	Based on significance category, risk score,	No matching field		Further Action Req'd?		No Matching Field		No matching field		No Matching Field		Repair Required?		

0006 Only	0006 Sort Order	Field in 0006	Definition in 0006	Type or Source 0006	Notes from 0006	Required	PHASE	CxP Field(s)	CxP Field Descriptions	ISS Field(s)	ISS Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descrip's	NG F-18 Field(s)	NG F-18 Field Descriptions	Comparison Comments
								Required?	criticality code, etc., the PRT will determine if corrective action is required. This may be based on the potential that this problem has to occur on other missions or systems; or the potential to recur again. I													
	037	Hardware Criticality Code	Criticality code assigned to particular hardware based on FMEA and CIL.	Pick List (auto fill)			Initiation, Analysis	Functional Criticality	Assessment of the criticality of the observed failure mode based on FMEA and CIL for the assembly level. This is the functional criticality level.	FMEA Criticality Code		No Matching Field		Hardware Criticality		No matching field		Risk Priority Code/Effect		No matchin g field		
	022	Immediate Response	Description of initial actions taken to respond to the problem as soon as it was discovered / e.g., remove-replace, securing.	Text String			Initiation	Immediate Response	Description of initial actions that were taken to respond to the problem and safe the situation as soon as it was discovered; (e.g., securing the system, spill containment, system shutdown). Provide clear status/conditio	Investigatio n/Analysis Summary		Immediate Corrective Action		No Matching Field		Recovery Method	briefly summarize what actions were taken to recover from the anomalous event	No Matching Field		Action Taken - Initial		

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									n for PRT.													
	077	Impacted Document Description	Description of documents that require revision as a result of this problem, including title, reference number, schedule for revision, etc.	Text String			Analysis, Closeout	Process Escape Description	Description of the process escape, list of processes names/numbers that are applicable. Specify the area of the process where the escape occurred.	Corrective Action // Disposition // Investigation/Analysis Summary		Document Description		No Matching Field		No matching field		Technical Data Deficiency		No matching field		
	018	Lifecycle Phase	Phase of mission when problem occurred.	Pick List		Y	Initiation	Lifecycle Phase	Phase of mission when problem occurred.	On-Orbit Notes		No Matching Field		No Matching Field		Life Cycle Stage	Life cycle stage during which the anomaly occurred - "launch", "checkout", "primary mission service life", "extended mission", and "retirement"	No Matching Field		No matching field		
	067	Implementation POC	Name, organization, email, and telephone of person responsible for implementing the problem resolution (remedial and/or corrective).	NASA People Taxonomy	Picklist or Auto-fill via direct link to the NASA Taxonomy		Analysis	Corrective Action/Recurrence Control POC	Name, organization, email, & telephone for person/team responsible for implementation of the problem resolution.	Last Name (Assigned To) // Phone		Organization - AR		Engineering Group		Cognizant Engineer	Primary domain expert responsible for the investigation of the anomaly	No Matching Field		Responsibility		This field should be broken into several fields and must be to use links to the NASA Taxonomy or other NASA database.
	005	Initiator POC	Name, organization, email, telephone, and role of person who initiated the problem report.	NASA People Taxonomy	Picklist or Auto-fill via direct link to the NASA Taxonomy		Initiation	Initiator/Reporter POC	Name, organization, email, telephone, & role of person/team who initiated the problem	E-mail (Initiator) // First Name // Initiator Name // Initiating Org // Last Name		Submitter's Name // Submitter's Phone // Submitter's Mail Stop // Created by		Reported by Last Name		Prepared By // Data Entered by	The name of the person who wrote the initial anomaly report. // Record the name of the person completing the	Name of Origination Point Rep. // Telephone		Reported by // Source // Source Cost Ctr // Source		This field should be broken into several fields and must be to use links to the NASA Taxonomy or

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									report	(problem initiator) // Org // Phone Number // PR Initiator Name							spreadsheet of data elements.			Dept		other NASA database.
	071	Interim Approval Responsibility	Name, organization, email, and telephone of person responsible for approval of interim resolution.	NASA People Taxonomy	Picklist or Auto-fill via direct link to the NASA Taxonomy		Analysis	No Matching Field		Focal Name		Responsible Manager/Supervisor		Responsible Org. Loc.		Cognizant Engineer	Primary domain expert responsible for the investigation of the anomaly	Certifying Official		No matching field		This field should be broken into several fields and must be to use links to the NASA Taxonomy or other NASA database.
	070	Interim Resolution	Description of the problem resolution, including plan of action and rationale.	Text String			Analysis	Remedial Action/Disposition Description // Open-Interim Disposition Rationale	Description of the activities taken to disposition a non-conforming process, software item, or hardware item. // Rationale allowing continued use or processing of specific components/ milestones/ events.	Investigation/Analysis Summary		Action To Take		Disposition Summary		Recovery Method	briefly summarize what actions were taken to recover from the anomalous event	No Matching Field		No matching field		
	039	Item Disposition	Description of what was done with the anomalous item, e.g., repair, return to vendor.	Text String			Initiation, Analysis	Remedial Action/Disposition // Reliability Disposition	Description of what was done with the anomalous/non-conforming/problem item. // Description of fault/failure disposition. To include: No Fault Found - Could Not	Disposition		Action Taken		Disposition		Disposition	Describe actions taken for the suspect system and for in-process production hardware.	Material Disposition // Exhibit Disposition		Disposition Text		

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									duplicate; Relevant Failure; Independent Failure.													
	036	Item History	Item history includes use time and cycles, design use time and cycles, longest observed use time and cycles.				Initiation, Analysis	No Matching Field		Flight History // ISS Flights (Deferrals) // ISSP Average Day Standard Values // Operating Times/Cycles Units		No Matching Field		Related Documents		Pedigree of Suspect Item // Other Reference Documentation // Revolution Number	Pedigree of Suspect Item // Other Reference Documentation // Revolution Number	Circumstances Prior To // Condition // Date Manufactured, Repaired, Or Overhauled // Operating Time at Failure		No matching field		
	093	Last Update Field	Automatically filled by software when record saved.	mm/dd/yyyy / hh:mm:ss		Y	Initiation, Analysis, Closeout (auto)	Last Updated	Automatically filled by software when record saved.	NCR Last Updated Date // Update Date		Last Updated		No Matching Field		No matching field		No Matching Field		Last Updated		
	088	Lesson Learned Description	Brief description of lesson learned from this process of identifying/working/resolving the problem, including link to lessons learned database item with more details.	Text String			Analysis, Closeout	No Matching Field		No matching field		No Matching Field		No Matching Field		Corrective Action/Lessons Learned	Comments pertaining to the actions taken to prevent recurrence of the anomaly on the vehicle in question, other like vehicles, and future vehicles. Applicable to the lowest level cause that is determined, preferably the true root cause.	No Matching Field		No matching field		
	076	Impacted Documents?	Are any documents invalidated or revisions required as a result of this problem?	Yes/No			Analysis, Closeout	Process Escape?	Was there a process escape?	No matching field		No Matching Field		CIL Affected		No matching field		No Matching Field		No matching field		

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	033	Assembly/Component/Part Serial Number	Serial number(s) of the hardware, firmware or software item(s) involved in the anomaly, incident, or problem.	Text String			Initiation, Analysis	Non-conforming Part/Assembly Serial Number or lot/date code	Smart serial number or lot/date code pick list based on part number.	LRU Serial Number // NCA Serial/Lot Number // Part Serial Numbers // Serial Number;		No Matching Field		Serial/Rev #		Serial Number or Lot Date Code	The serial number or Lot Date Code number as it appears in the official flight configuration or the ID plate attached to the part. See table 12 list.	Serial, Lot, Batch Number		Serial No // S/N Effectivity of Corrective Action		
	082	Actual Date Solution Development	Actual date(s) for development of problem solution.	mm/dd/yyyy			Analysis	Date(s) Corrective Action/Recurrence Control Implemented	Actual date(s) for implementation of problem solution and corrective action.	PR Release Date		Actual Comp. Date - AR response		Closure Date		no matching field		No Matching Field		No matching field		CxP field should be broken out into multiple fields.
	083	Actual Date Solution Implementation	Actual date(s) for implementation of problem solution.	mm/dd/yyyy			Analysis	Date(s) Corrective Action/Recurrence Control Implemented	Actual date(s) for implementation of problem solution and corrective action.	Close Date // Release/Closed Date		Date Closed // Actual Comp. Date - Issue		No Matching Field		Anomalous Item Closure Date	Date the anomaly report is closed by appropriate authority (failure review board recommendation or responsible authority). See table 7.	No Matching Field		Date Work Performed		
	041	Adverse Program Impact	Identification of adverse effects resulting from the problem, e.g., schedule delay, missed test date.	Pick List		Y	Initiation, Analysis, Closeout	Defect Impact	The impact to System as a result of the defect. (From CxP 70065 <TBD D-1>)	Investigation/Analysis Summary // Flight Effectivity // ISS Flights (Deferrals) // SSP Flights (Deferrals)		Program Impact		No Matching Field		Impact Statement // Mission Impact Code	Description of the operational and mission impacts caused by the anomaly // a four-digit number comprised of the selected enhanced criticality codes that represents the overall impact the anomaly has on mission and vehicle functions.	No Matching Field		Safety Impact		

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	042	Analysis POC	Name, organization, email, telephone, and role of person who has been assigned to analyze the problem.	NASA People Taxonomy	Picklist or Auto-fill fields via direct link to the NASA Taxonomy	Y	Initiation, Analysis	Analysis POC/Assigned Analyst	Name, organization, email, telephone, & role of person/team who has been assigned to analyze the problem.	Last Name (Assigned Engineer) // Phone # // Responsible Org		Investigator // First name (CI Coordinator) // Last Name (CI Coordinator) // Organization - CI		Engineering Group		Cognizant Engineer	Primary domain expert responsible for the investigation of the anomaly	Inspectors name or stamp and date		Safety Engineer		This field should be broken into several fields and must be to use links to the NASA Taxonomy or other NASA database.
	025	Anomalous Item State	Identification of the state or configuration of the anomalous item when the problem occurred.	Example List		Y	Initiation, Analysis	Defect Trigger	The defect trigger is the environment or condition that had to exist for the defect to surface. (From CxP 70065 <TBD D-1>)	Defect Code // Material Code // On-Orbit Notes // Prevailing Conditions		Incident Notes Details		No Matching Field		Activity // Configuration information	Specifies the activity in progress at the time of the anomaly (may be program office-specific) // Configuration information of other runtime software components (might be a reference to configuration management identification). See table 13.	Attributes		Description of Failure		
	053	Applicable Documents	Identification of references/documents that are applicable to this problem, e.g., CIL, HAZ, GIDEP, FMEA.	Example List			Analysis	Material Review Board Supporting Data // Related Documents	Attach supporting MRB documents used to disposition hardware. // Attach documents, pictures, and other supporting data. For process problems, attach the process that is broke and any other supporting	Attach Documents // Document Title // Related Documents		NASA Mishap Report // NCR		Related Documents Related Document Type Related Document Number Related Document Names		Other Reference Documentation	Enter document numbers for supporting analyses, lessons learned, bulletins or other relevant documentation related to the anomaly investigation.	Other Pertinent Data		TM // Test Doc No		

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									documentation. Attach applicable variance/waivers/devia													
	030	Assembly Level	Depends on the specific characteristics of the mission components (i.e., LRU, SRU, CRU, Component, Assembly, Part, etc.)	Example List			Initiation, Analysis	Assembly Level	Not defined.	Hardware Level Code // NCA Name		No Matching Field		NHA Part #		Build Level	The assembly level (i.e. system, module, part, etc.) of the anomalous item. (see 5.1 & Table 12 of TOR).	No Matching Field		No matching field		
	035	Assembly/Component/Part Integrator	Name and CAGE code of the company or other entity that assembled the hardware, firmware or software item(s) involved in the anomaly, incident, or problem.	Text String			Initiation, Analysis	Non-conforming Part/Assembly Integrator	Cage Code of the manufacturer of anomalous/non-conforming/problem assembly/component	Manufacturer Name		No Matching Field		No Matching Field		Manufacturer CAGE Code	Code for the manufacturer of the item and/or the entity responsible for the item at the time it is first completely assembled.	No Matching Field		Supplier Name // Supplier Number // Supplier Street Address // Supplier City // Supplier State // Supplier Zip Code		
	034	Assembly/Component/Part Manufacturer	Name and CAGE code of the company or other entity that manufactured the hardware, firmware or software item(s) involved in the anomaly, incident, or problem.	Text String			Initiation, Analysis	Non-conforming Part/Assembly Number Manufacturer	Manufacturer or software developer of anomalous/non-conforming/problem assembly/component	Manufacturer Name // Manufacturer CAGE Code	Manufacturer's authorized Commercial and Government Entity (CAGE) Code (automatically populated)	No Matching Field		No Matching Field		Manufacturer CAGE Code	Code for the manufacturer of the item and/or the entity responsible for the item at the time it is first completely assembled.	Manufacturer		Supplier Name		

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	080	Dissenting	Description of reasons for non-concurrence with the problem resolution, including name, date, role of person dissenting	Text String		Y	Analysis, Closeout	No Matching Field		Closure Comments // Closure Rationale Text // Deferral Rationale Text // MRB Rationale // Rejection Rationale		No Matching Field		No Matching Field		No matching field		Remarks		Engineering Comments		
	032	Assembly/Component/Part Number	Part Number(s) or other unique identifier of the hardware, firmware or software item(s) involved in the anomaly, incident, or problem.	Text String			Initiation, Analysis	Non-conforming Article/Component Number // Non-conforming Part/Assembly Number	Part number of the lowest level that the anomaly/non-conformance/ problem was isolated to. // Part/Assembly Number that the anomaly/non-conformance/ problem was isolated to.	Part Number;NCA Part Number // LRU Part Number // SRU Part Number		No Matching Field		Part/Program #		Item Number	The identifying number of the anomalous item (i.e., part number, module number, etc). See 5.1 of the TOR. See table 12.	Manufacturer's Part Number		Failed NG Part No // Supplier Part Number		
	012	Detection Location	Geographical or orbital location of the anomalous item when problem was detected.	Text String			Initiation	No Matching Field		Countries // Site Location		No Matching Field		Location		Eclipse Status	The sun exposure of the vehicle at the time of the anomaly. Choices include "sun", "dark" (eclipse), "entry", or "exit" from the drop-down menu. "Conjunction" can also be selected for planetary missions.	No Matching Field		No matching field		
	079	Concurrence(s)	Name, role, date for people that need to concur with the resolutiConcurrence(s)on for this problem, e.g., ITA, review boards, project manager.	NASA People Taxonomy	Picklist or Auto-fill fields via direct link to the NASA Taxonomy		Analysis, Closeout	Problem Closure Concurrences // Closure Signature(s)	Name, role, date for people that need to concur with the closure of this problem,	Available Concurrences // Concur Sign // Concur Sig Cmpl/Reqd // Focal		No Matching Field		No Matching Field		no matching field		(Multiple fields)		(Multiple)		This field should be broken into several fields and must be to use links to the NASA

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									e.g., ITA, review boards, project manager // Quality signature at minimum; depends on significance category, risk score, approval level, etc, for who and how many closure si	Name // several others												Taxonomy or other NASA database.
	084	Configuration Change?	Was there a configuration change as a result of this problem? This would generate an automatic notification to key persons.	Yes/No		Y	Analysis, Closeout	No Matching Field		No matching field		No Matching Field		No Matching Field		Configuration information	Configuration information of other runtime software components (might be a reference to configuration management identification). See table 13.	No Matching Field		No matching field		
	055	Contributing Factor Category(s)	Classification of the contributing factor(s) for the problem.	Pick List		Y	Analysis	Cause Code	The cause code that most closely matches the root cause (or probable cause if root cause is not known).	No matching field		No Matching Field		No Matching Field		No matching field		No Matching Field		Failure Cause Code		
	056	Contributing Factors	Description of the contributing factors to this problem (a) contributing factor is an event or condition that may have contributed to the occurrence of an undesired outcome, but if eliminated or modified, would not by itself have prevented the occurrence)	Text String		Y	Analysis	Cause(s)	Description of the root, probable, or proximate cause(s) for this problem (a root cause is one of multiple factors (events,	Flight History		Contributing Factors		No Matching Field		Activity // Eclipse Status	specifies the activity in progress at the time of the anomaly (may be program office-specific) // Configuration information of other runtime software	Pertinent Data		Contributing Factors		Seems to duplicate the information defined for "Probable Causes"

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									conditions, organizational factors, etc.) that contributed to or created the proximate cause and subsequent undesired outcome, and								components (might be a reference to configuration management identification). See table 13.					
	073	Corrective Action	Description of final resolution to prevent reoccurrence of this problem or to minimize its impact – a systemic fix – "prescription" is provided for information to be included (see Appendix C.2).	Text String		Y	Analysis	Corrective Action(s)/Recurrence Control Description (s)	Action (beyond remedial action) to correct a problem and prevent/control non-conformance/ problem recurrence in existing and/or future hardware or software. Corrective action should include one or more of the following: a. Design change; b. Manufacturing	Corrective Action		Corrective Action		No Matching Field		Corrective Action/Lessons Learned	Comments pertaining to the actions taken to prevent recurrence of the anomaly on the vehicle in question, other like vehicles, and future vehicles. applicable to the lowest level cause that is determined, preferably the true root cause.	Action Taken And-Or Recommended		CAR Candidate		
	038	Criticality Code	Assessment of the severity of the problem based on FMEA and CIL for the assembly level / this is the functional criticality level.	Pick List		Y	Initiation, Analysis	Criticality Code / Consequence Score (Severity)	Not defined in 0006 (see comments) // Determine Severity of Problem (1, 2, 3, 4, or 5) based on CxP 70056	FMEA Criticality Code		Severity		Functional Criticality		Criticality Level	The degree of impact that the anomaly had on the mission	Risk Priority Code/Effect // Severity of Defect		Hazard Category		Criticality Code in CxP fields list is from a Pick list title. It is not listed with the data elements and not defined in the pick list.

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	024	Defect Characteristics	A fault/flaw/discrepancy/nonconformance in a component or process that causes discrepant performance of the component or assembly involved.	Example List		Y	Analysis	Failure Mechanism // Malfunction // Defect Type	The physical process which causes the failure; the manner in which an item can or actually failed to perform required function; an actual component failure/error mis-performance that was an initiating event in occurrence. // Identification of the nature o	Defect Code		No Matching Field		How Malfunctioned		Cause Description	summarize the results of the investigation and conclude what the results were.	No Matching Field		How Mal		
	010	Detection Date	Date when problem was detected.	mm/dd/yyyy			Initiation	Detection Date	Date when problem was detected.	Detect Date // PR Detect Date		No Matching Field		Date Detected // When Discovered		Report Date	the date the anomaly report is written.	Date Deficiency Discovered		Date Entered		
	013	Detected During	Description of the activity that led to detection of the problem, e.g., analysis, text, maintenance.	Text String			Initiation	Detecting During / Defect Activity	Description of the activity that was occurring when the problem was identified, (e.g., analysis, functional test, environmental testing, shipping & receiving, maintenance, work authorization document number, etc.) // The defect activity is the specific ac	Detected During		Project/Activity		Detected During		Activity // Activity Category	specifies the activity in progress at the time of the anomaly (may be program office-specific) // category of activity within the Life Cycle Stage as defined in section 5.3 of the TOR.	No Matching Field		No matching field		

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	040	Mishap Report?	Did this problem result in a formal mishap report due to damage of equipment or personal injury?	Yes/No			Initiation, Analysis, Closeout	Mishap Report?	Did this problem result in a formal mishap report due to damage of equipment or personal injury? Is a mishap per NPD 8621.1G - NASA Mishap Reporting and Investigating Policy.	No matching field		NASA Mishap Report		No Matching Field		No matching field		No Matching Field		NASA Mishap Report		
	031	Assembly/Component/Part Name	Name(s) of the hardware, firmware or software item(s) involved in the anomaly, incident, or problem.	Text String			Initiation, Analysis	Non-conforming Assembly/ Part Name // Non-conforming Article/Component Name	Part Name that the anomaly/non-conformance/ problem was isolated to. // Name of the lowest level Part/Component that the anomaly/non-conformance/ problem was isolated to.	Part Name // NCA Part Name // LRU Part Name // SRU Part Name		No Matching Field		Part/Program Name		Item Name	The name of the anomalous item (may be system name, module name, part name, etc. See 5.1 of the TOR. See table 12.	Item Description		Part Name		
	078	Resolution Approver(s)	Name, role, date for approver(s) of final resolution that corrects the problem.	NASA People Taxonomy	Picklist or Auto-fill via direct link to the NASA Taxonomy		Analysis, Closeout	No Matching Field		Focal Name // Required Concurrences		Organization - CI // Organization - AR		(multiple fields)		No matching field		Certifying Official		No matching field		This field should be broken into several fields and must be to use links to the NASA Taxonomy or other NASA database.
	014	Program	Program name (program attributes defined in NPR 7120.5C).	NASA Taxonomy	Picklist or Auto-fill via direct link to the NASA Taxonomy		Initiation	Program	The name of the program or programs supported	Program		No Matching Field		Part/Program Name		Vehicle Program Name	The commonly used name to identify large systems covering all interrelated aspects of procurement	No Matching Field		No matching field		This field should be broken into several fields and must be to use links to the NASA Taxonomy or

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																	and operational life cycles.					other NASA database.
	015	Project	Project name (project attributes defined in NPR 7120.5C).	NASA Taxonomy	Picklist or Auto-fill via direct link to the NASA Taxonomy	Y	Initiation	Project	Project Name (see CxP 70070-ANX02)	Project		Project/Activity		No Matching Field		No matching field		No Matching Field		No matching field		This field should be broken into several fields and must be to use links to the NASA Taxonomy or other NASA database.
	060	Proximate Cause Category(s)	Classification of the proximate cause(s) for the problem.	Pick List		Y	Analysis	Cause Code	The cause code that most closely matches the root cause (or probable cause if root cause is not known).	Cause Code		No Matching Field		No Matching Field		Cause Category	cause category for the "most probable" cause	No Matching Field		No matching field		
	061	Proximate Cause(s)	Description of the most immediate proximate cause(s) for this problem. A proximate cause is one of multiple factors (events or conditions) that occurred, including any condition(s) that existed immediately before the undesired outcome, directly resulted	Text String		Y	Analysis	Cause(s)	Description of the root, probable, or proximate cause(s) for this problem (a root cause is one of multiple factors (events, conditions, organizational factors, etc.) that contributed to or created the proximate cause and subsequent undesired outcome, and	Cause Code		No Matching Field		No Matching Field		Cause Description // Suspect Items List	summarize the results of the investigation and conclude what the results were. // the suspect part numbers when the specific name, part number, and serial number are not known.	No Matching Field		Cause of Failure		

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	027	Recurrence Control Required?	"Yes" indicates that this problem has the potential to occur on other missions or systems. It's a generic issue.	Yes/No			Initiation, Analysis	Corrective Action/Preventive Action Required?	Based on significance category, risk score, criticality code, etc., the PRT will determine if corrective action is required. This may be based on the potential that this problem has to occur on other missions or systems; or the potential to recur again. I	Recurrence Control Code		No Matching Field		Recurrence Control Required?		No matching field		No Matching Field		No matching field		Duplicates the intent of "Potential Future Impact?" I would think the answer would be the same for both and generate the same end results.
	044	Related Problems	Description of related problems, including the problem identifiers and how this problem is different or similar to those / this could also include descriptions of noticed irregularities that did not generate formal problem records.	Text String			Initiation, Analysis	Related Problem Link/Problem Linking	List and links of PRACA problems that are related to this problem. See CxP 70068-02, Section 2.7.	Investigation/Analysis Summary		Contributing Factors Available		Related Documents		Reference ARN	report number of a previous anomaly that appears to be similar or related. See table 6	No Matching Field		No matching field		
	072	Remedial Action	Action taken to bring a specific failed unit to operational status or to eliminate an unsatisfactory condition on the specific unit / e.g., remove and replace, rework to print, Material Review Board (MRB) disposition, etc. Description of resolution to cor	Text String	Problem resolution summary, Problem Clarification, Analysis/Investigation Summary, Problem History, Effect on Fielded Units, Mission Effect, Last test, Recurrence		Analysis	Remedial Action/Disposition Description	Description of the activities taken to disposition a non-conforming process, software item, or hardware item;	PR MRB Disposition		Corrective Action		Disposition Summary		No matching field		No Matching Field		Rework/ Repair Action		

0006 Only	0006 Sort Order	Field in 0006	Definition in 0006	Type or Source 0006	Notes from 0006	Required	PHASE	CxP Field(s)	CxP Field Descriptions	ISS Field(s)	ISS Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descrip's	NG F-18 Field(s)	NG F-18 Field Descriptions	Comparison Comments
					Control actions, etc.																	
	051	Requirement Violation Description	Description of the requirement that was violated and the mitigating circumstances.	Text String			Initiation, Analysis	No Matching Field		Investigation/Analysis Summary		No Matching Field		No Matching Field		No matching field		No Matching Field		Non Conformance Text		
	026	Material Involved	Identification of materials related to the anomalous item, e.g., gases, liquids.	Example List	Create Project specific Pick List (see examples in -0006).		Initiation, Analysis	No Matching Field		Material Code		No Matching Field		No Matching Field		No matching field		No Matching Field		No matching field		
	075	Residual Risk Description	Description of the remaining risk factors (after corrective action) in using this item/system after implementation of final resolution.	Text String			Analysis, Closeout	No Matching Field		No matching field		No Matching Field		Disposition		No matching field		No Matching Field		No matching field		
	004	Problem Type	Categorization of the type of problem.	Pick List			Initiation	Problem Type	Identification if a hardware problem, software problem, GSE/facility hardware or software, or process problem (Multiple types permitted).	No matching field		Incident Type // Accident Type // Issue Type		No Matching Field		Cause Type	cause type for the "most probable" cause	Deficiency Category		Type Report		
	066	Resolution POC	Name, organization, email, and telephone of person responsible for resolution development.	NASA People Taxonomy	Picklist or Auto-fill via direct link to the NASA Taxonomy		Analysis	Remedial Action POC	Name, organization, email, & telephone for person/team responsible for resolution development.	Actionee Name // Assigned To Last Name // Assigned To Name // Assignee Name // E-Mail (PR OPR) //		Organization - CI // Organization - AR		Engineering Group		Cognizant Engineer	Primary domain expert responsible for the investigation of the anomaly	No Matching Field		Responsibility // Safety Engineer		This field should be broken into several fields and must be to use links to the NASA Taxonomy or other NASA database.

0006 Only	0006 Sort Order	Field in 0006	Definition in 0006	Type or Source 0006	Notes from 0006	Required	PHASE	CxP Field(s)	CxP Field Descriptions	ISS Field(s)	ISS Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descrip's	NG F-18 Field(s)	NG F-18 Field Descriptions	Comparison Comments
										First/Last Name												
	054	Root Cause Analysis Techniques	Identification of the root cause analysis techniques and/or tools that were used in the analysis, e.g., fault tree, Relex, Reason.	Example List			Analysis	Investigation and Analysis Description	Description of the steps taken during the investigation and analysis to determine the corrective action.	Investigation/Analysis Summary		No Matching Field		No Matching Field		No matching field		No Matching Field		No matching field		
	058	Root Cause Category(s)	Classification of the root cause(s) for the problem.	Pick List		Y	Analysis	Cause Code	The cause code that most closely matches the root cause (or probable cause if root cause is not known).	Cause Code		No Matching Field		No Matching Field		Cause Category	cause category for the "most probable" cause	No Matching Field		Failure Cause Code		
	059	Root Cause(s)	Description of the root cause(s) for this problem. A root cause is one of multiple factors (events, conditions, organizational factors, etc.) that contributed to or created the proximate cause and subsequent undesired outcome, and if eliminated or modifi	Text String		Y	Analysis	Cause(s)	Description of the root, probable, or proximate cause(s) for this problem (a root cause is one of multiple factors (events, conditions, organizational factors, etc.) that contributed to or created the proximate cause and subsequent undesired outcome, and	Root Cause Statement // Root Cause Summary		Root Cause		Cause		Cause Description	summarize the results of the investigation and conclude what the results were.	Detailed Cause		Cause of Failure		

0006 Only	0006 Sort Order	Field in 0006	Definition in 0006	Type or Source 0006	Notes from 0006	Required	PHASE	CxP Field(s)	CxP Field Descriptions	ISS Field(s)	ISS Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descrip's	NG F-18 Field(s)	NG F-18 Field Descriptions	Comparison Comments
	029	SubSystem	The applicable subsystem associated with the specified system. Generally the subsystems are the first level breakdown in the hierarchy of elements that make up a system.	Generic Subsystem	Picklist from Table 5 in NASA Std-0006. Type of element to which the anomalous item applies. Provides context for the subsystems in the Subsystems Field.		Initiation, Analysis	Subsystem	Not defined in 0006.	Distributed Subsystem Name // Subsystem Name		No Matching Field		System		Subsystem Type	Defined in section 4.4.1 of the TOR and should represent the subsystem type most likely responsible for the anomaly. Subsystem type and confidence level are related. If multiple subsystem types are selected. See table 7 & 8	No Matching Field		No matching field		
	028	System	Type of element to which the anomalous item applies. Provides context for the subsystems in the Subsystems Field.	Generic Subsystem	Picklist from Table 5 in NASA Std-0006. Type of element to which the anomalous item applies. Provides context for the subsystems in the Subsystems Field.	Y	Initiation, Analysis	System	Not defined in 0006.	System Name		No Matching Field		Element		Vehicle Product Number	The part number of the system-level item as given in the list of program deliverables.	End Item		No matching field		
	052	Usage Constraints	Description of the constraints that were immediately applied as a result of this problem until the problem is resolved.	Text String			Initiation, Analysis	Usage Constraints	Describe constraints such that processing of a part/system can't go past point until this problem is resolved.	Flight Effectivity		No Matching Field		No Matching Field		Impact Statement	Description of the operational and mission impacts caused by the anomaly	Attributes		No matching field		

0006 Only	0006 Sort Order	Field in 0006	Definition in 0006	Type or Source 0006	Notes from 0006	Required	PHASE	CxP Field(s)	CxP Field Descriptions	ISS Field(s)	ISS Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descrip's	NG F-18 Field(s)	NG F-18 Field Descriptions	Comparison Comments
	019	Vehicle/Spacecraft Type	This is either the spacecraft type or a particular vehicle name.	Pick List	Picklist or Auto-fill via direct link to the NASA Taxonomy	Y	Initiation	No Matching Field		No matching field		Vehicle Class		No Matching Field		Vehicle Program Block Number	Refers to the designator associated with a particular block of vehicles. When referencing a program, it is common to specify both the short program name and its block contract number. Examples are GPS I, GPS II, and GPS IIA.	No Matching Field		Aircraft model // Aircraft Number		This field should be broken into several fields and must be to use links to the NASA Taxonomy or other NASA database.
	045	Waiver/ Deviation?	Has a waiver or deviation been issued for this type problem before?	Yes/No			Initiation, Analysis	Waiver/Deviation/variance?	Has a waiver, variance or deviation been issued that addresses this problem before or does a variance, waiver, or deviation need to be issued?	No matching field		No Matching Field		Waiver/Deviation Req?		Configuration information	Configuration information of other runtime software components (might be a reference to configuration management identification). See table 13.	No Matching Field		No matching field		
	050	Requirement Violation?	Was this problem in violation of the functionality of the system/subsystem/assembly/component/part?	Yes/No			Initiation, Analysis	No Matching Field		No matching field		No Matching Field		Requirement #		No matching field		No Matching Field		Non Conformance Code		
	043	Previous occurrence?	Has this or a similar problem happened before in this mission or others?	Yes/No			Initiation, Analysis	Previous occurrence?	Has this or a similar problem happened before in this mission or others?	No matching field		Contributing Factors Available		No Matching Field		Reference ARN	report number of a previous anomaly that appears to be similar or related. See table 6	No Matching Field		No matching field		
	047	Material Review Board?	Does this problem need to be referred to the Material Review Board?	Yes/No			Initiation, Analysis	Material Review Board (MRB) Required?	Does this problem need to be referred to the Materials Review	MRB Req'd // MRB Required		No Matching Field		Material Review Required		No matching field		No Matching Field		No matching field		

0006 Only	0006 Sort Order	Field in 0006	Definition in 0006	Type or Source 0006	Notes from 0006	Required	PHASE	CxP Field(s)	CxP Field Descriptions	ISS Field(s)	ISS Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descrip's	NG F-18 Field(s)	NG F-18 Field Descriptions	Comparison Comments
									Board?													
	046	Waiver/Deviation Info	Description of applicable waivers/deviation documentation.	Text String			Initiation, Analysis	Waiver/Deviation/variance Information	Attach applicable variances/waivers/deviation documentation	Waiver/Deviation Number		No Matching Field		Disposition		Configuration information	Configuration information of other runtime software components (might be a reference to configuration management identification). See table 13.	No Matching Field		No matching field		
	016	Mission Name	Mission name within project, e.g., STS 114, GOES-N.	NASA Taxonomy	Picklist or Auto-fill via direct link to the NASA Taxonomy		Initiation	Mission Name	Mission name within project that the hardware/software was assigned to when the non-conformance occurred.	Flight Name		No Matching Field		Mission Effectivity		Mission Number // Flight/Sequence Number	The mission control center and/or operational support office's official mission designator number used to identify the specific mission. // The flight number/sequence number as assigned by the program office.	No Matching Field		Flight No		This field should be broken into several fields and must be to use links to the NASA Taxonomy or other NASA database.
	090	Notification Identification	Identification of who needs to be notified as a result of this problem occurrence.	Text String			Initiation, Analysis, Closeout	No Matching Field		No matching field		Report Type		No Matching Field		No matching field		No Matching Field		No matching field		
	008	Occurrence Location	Geographical or orbital location of the anomalous item when problem occurred.	Text String		Y	Initiation	Occurrence Location	NASA Center, government facility, Contractor Facility, or orbital location of the anomalous item when problem occurred.	On-Orbit Notes // Site Location		General Location // Specific Location // Site // Country // Campus // Country - AR Origin		Location		Space Vehicle Location	Altitude, Orbital longitude and Orbital latitude based on the Earth Relative position as defined in 4.2.14 of the ATR	No Matching Field		No matching field		
	091	Owner of anomalous item	Identification of who owns the hardware/software that experienced the problem.	Text String			Analysis, Closeout	No Matching Field		Countries		First name (Incident Owner) // Last Name (Incident		Responsible Org. Loc.		No matching field		Originating Activity // Manager		No matching field		

0006 Only	0006 Sort Order	Field in 0006	Definition in 0006	Type or Source 0006	Notes from 0006	Required	PHASE	CxP Field(s)	CxP Field Descriptions	ISS Field(s)	ISS Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descrip's	NG F-18 Field(s)	NG F-18 Field Descriptions	Comparison Comments
												Owner) // Submitter's Employer										
	020	Payload/Instrument Name	Name given to the element within the mission that is gathering the science data.	NASA Taxonomy	Picklist or Auto-fill via direct link to the NASA Taxonomy		Initiation	Element	Not defined in CxP 70068.	Flight Element Code		No Matching Field		No Matching Field		No matching field		No Matching Field		No matching field		This field should be broken into several fields and must be to use links to the NASA Taxonomy or other NASA database.
	021	Payload/Instrument Type	Type of instrument or payload.	NASA Taxonomy	Picklist or Auto-fill via direct link to the NASA Taxonomy		Initiation	Element	Not defined in CxP 70068.	Flight Element Code		No Matching Field		No Matching Field		Satellite Catalog Number	Satellite Catalogue Number (SCN) is the identifying number used in NORAD two-card element data sets.	No Matching Field		No matching field		This field should be broken into several fields and must be to use links to the NASA Taxonomy or other NASA database.
	065	Potential Future Impact Description	Description of the potential ripple effects of this problem within this mission or other missions, including dependencies among components, existence of common components, effectivity.	Text String			Initiation, Analysis	Failure Consequence	Effect of failure on failed unit function and impact on next higher assembly, end item, or system. Pick list includes: Loss of all functions; Loss of function (partial failure); Erroneous indication of fault.	Flight Effectivity // Investigation/Analysis Summary // ISS Flights (Deferrals) // SSP Flights (Deferrals)		No Matching Field		No Matching Field		Impact Statement // Mission Effect	Description of the operational and mission impacts caused by the anomaly // numeric code that rates the severity of functional effect from the malfunction. See Figure 1 of the TOR.	No Matching Field		No matching field		

0006 Only	0006 Sort Order	Field in 0006	Definition in 0006	Type or Source 0006	Notes from 0006	Required	PHASE	CxP Field(s)	CxP Field Descriptions	ISS Field(s)	ISS Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descrip's	NG F-18 Field(s)	NG F-18 Field Descriptions	Comparison Comments
	048	Process Escape?	Should this problem have been prevented by some established process?	Yes/No		Y	Initiation, Analysis	Process Escape?	Was there a process escape?	No matching field		No Matching Field		Process Escape		Existence of Verification Method	indicates if a verification method should have detected the most likely cause of the anomaly, given the verification process used	No Matching Field		No matching field		
	009	Prevailing Conditions	Environment in which the anomalous item existed when the problem occurred.	Text String		Y	Initiation	No Matching Field		Prevailing Conditions // Prevailing Condition Code		Incident Notes Details		No Matching Field		Eclipse Status	The sun exposure of the vehicle at the time of the anomaly. Choices include “sun”, “dark” (eclipse), “entry”, or “exit” from the drop-down menu. "Conjunction" can also be selected for planetary missions.	Condition		Environment		
	049	Process Description	Description of the process that should have prevented this problem, including identification of the process and the circumstances associated with missing the problem.	Text String		Y	Initiation, Analysis	Process Description	Give a description of the process associated with this problem and the aspects of the process that caused the problem or could have caused a problem.	Investigation/Analysis Summary		Project/Activity		No Matching Field		Task(s) or process(es) in which defect existed	Software runtime environment in which the defect existed. See table 13	Technical Information		No matching field		
	057	Probable Cause(s)	Description of the probable cause(s) for this problem (a) probable cause is a factor that is believed to have contributed to or created the undesired outcome)—“prescription” is provided for information to be included (see Appendix C.4) —either there is a	Text String		Y	Analysis	Cause(s)	Description of the root, probable, or proximate cause(s) for this problem (a root cause is one of multiple factors	Cause Code		Contributing Factors		Cause		Cause Description	summarize the results of the investigation and conclude what the results were.	Broad Cause of Defect		Cause of Failure		Seems to duplicate the information defined for "Contributing Factors"

0006 Only	0006 Sort Order	Field in 0006	Definition in 0006	Type or Source 0006	Notes from 0006	Required	PHASE	CxP Field(s)	CxP Field Descriptions	ISS Field(s)	ISS Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descrip's	NG F-18 Field(s)	NG F-18 Field Descriptions	Comparison Comments
									(events, conditions, organizational factors, etc.) that contributed to or created the proximate cause and subsequent undesired outcome, and													
	081	Problem Closeout Summary	Description of the problem resolution implementation including results.	Text String		Y	Analysis, Closeout	Problem Closeout Summary	Description of the problem resolution implementation including results.	Closure Comments // Closure Rationale Text // Recurrence Control		No Matching Field		Disposition Summary		Abstract	short summary of the more detailed information in the Symptom description, Cause Description, Recovery Method, and Impact Statement text fields.	No Matching Field		No matching field		
	003	Problem Description	Detailed description of the problem – "prescription" is provided for information to be included (see Appendix C.3).	Large Text String		Y	Initiation	Problem Description	The Problem Description is a complete and succinct explanation of the problem. It should include information that will assist in identifying the cause of the problem.	Problem Description // Reportable Problem Description		Description - Issue // Description - General		Problem Description		Symptom Description	a description of what was observed compared to what was expected during operations that led one to believe that an anomalous event had occurred	Description and Cause of Difficulty		Description of Failure // Incident ID		
	001	Problem Identifier	Computer-generated unique identification number, based on some predetermined scheme.	Computer Generated		Y	Initiation	Problem Identifier	Computer-generated unique identification number, based on some predetermined scheme.	PR Number // NCR Number // Nonconformance Number		Incident Number // Parent Case #		PRACA #		Anomaly Report Number (ARN)	Established numbering system for anomaly reports.	Report Control Number (RCN)		Customer Ref No // Original Report No		

0006 Only	0006 Sort Order	Field in 0006	Definition in 0006	Type or Source 0006	Notes from 0006	Required	PHASE	CxP Field(s)	CxP Field Descriptions	ISS Field(s)	ISS Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descrip's	NG F-18 Field(s)	NG F-18 Field Descriptions	Comparison Comments
	006	Problem Occurrence Date	Date that problem occurred.	mm/dd/yyyy		Y	Initiation	Problem Occurrence Date	Date that problem occurred (if design center or problem initiator knows?)	Reject Date		Incident Date		No Matching Field		Anomaly Date	best estimate of the actual occurrence date of the anomaly, referenced to GMT	No Matching Field		Failed Date		
	007	Problem Occurrence Time	Time that problem occurred.	hh:mm:ss			Initiation	No Matching Field		No matching field		Time // Incident Time		No Matching Field		Anomaly Time (UT)	best estimate of the actual occurrence time of the anomaly, in reference to Universal Time (GMT).	No Matching Field		No matching field		
	092	Problem Status	Identification of the current status of this problem, e.g., open, assigned, closed.	Pick List		Y	Initiation, Analysis, Closeout	Problem Status	Identification of the current status of this problem, e.g., open, assigned, closed.	PR Status		Case Status // Status // Incident Status // Corrective Action Status // Investigation Status // Issue Status		Problem Status		No matching field		No Matching Field		Design Eng Status // Safety Eng Status		
	002	Problem Title	Short description of the problem (100 -120 characters), indicating the what, when, where.	Limited Length Text String		Y	Initiation	Problem Title/Summary	Short description of the problem (150 characters), indicating the what, when, where State what experienced the non-conformance and what the non-conformance is. (e.g., APU has scratch near connector J1).	Problem Title		Incident Title // Title // Title - CI // Issue Title		Title		Title	A simple, descriptive title that indicates the nature of the anomaly	Title		No matching field		
	063	Actual Date Root Cause(s)	Actual date for determination of root cause(s).	mm/dd/yyyy			Analysis	No Matching Field		PR Release Date		No Matching Field		No Matching Field		no matching field		No Matching Field		Failure Analysis Required Date		

0006 Only	0006 Sort Order	Field in 0006	Definition in 0006	Type or Source 0006	Notes from 0006	Required	PHASE	CxP Field(s)	CxP Field Descriptions	ISS Field(s)	ISS Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descrip's	NG F-18 Field(s)	NG F-18 Field Descriptions	Comparison Comments
	064	Potential Future Impact?	Are there potential ripple effects of this problem within this mission or other missions?	Yes/No			Initiation, Analysis	No Matching Field		No matching field		No Matching Field		No Matching Field		No matching field		No Matching Field		Safety Impact		Duplicates the intent of "Recurrence Control Required?" I would think the answer would be the same for both and generate the same end results.

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
ARN Source Identifier	Identify the agency, group, or organization which issued the report number, and which assures the uniqueness of the report number within its system, i.e., GPS I / Intelsat III; IUS; or possibly the name of a contractor that issues anomaly reports.	Aerospace ATR									ARN Source Identifier	Identify the agency, group, or organization which issued the report number, and which assures the uniqueness of the report number within its system, i.e., GPS I / Intelsat III; IUS; or possibly the name of a contractor that issues anomaly reports.						
Comments	any relevant information that is not contained in the other fields regarding this anomaly	Aerospace ATR									Comments	any relevant information that is not contained in the other fields regarding this anomaly					Yes	

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
Confidence Level	The level of confidence that the source of the anomaly can be identified to have been a particular anomalous item. See table 7 of the TOR	Aerospace ATR									Confidence Level	The level of confidence that the source of the anomaly can be identified to have been a particular anomalous item. See table 7 of the TOR					Yes	
Database field name(s)	Identify all database fields, elements, or columns involved with the anomaly. See Table 13 in the TOR	Aerospace ATR									Database field name(s)	Identify all database fields, elements, or columns involved with the anomaly. See Table 13 in the TOR						
Database name(s)	Identify all databases involved with the anomaly. See Table 13 in the TOR	Aerospace ATR									Database name(s)	Identify all databases involved with the anomaly. See Table 13 in the TOR						
Database record(s)	Identify all database records, by record ID, involved with the anomaly. See Table 13 in the TOR	Aerospace ATR									Database record(s)	Identify all database records, by record ID, involved						

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
												with the anomaly. See Table 13 in the TOR						
Database table name(s)	Identify all database tables involved with the anomaly. See Table 13 in the TOR	Aerospace ATR									Database table name(s)	Identify all database tables involved with the anomaly. See Table 13 in the TOR						
Downtime (in seconds)	The amount of time (in seconds) "normal" operation was disrupted.	Aerospace ATR									Downtime (in seconds)	The amount of time (in seconds) "normal" operation was disrupted.						
Fourth level development identification	The conventionally developed module name or the object oriented affected method(s). See table 13.	Aerospace ATR									Fourth level development identification	the conventionally developed module name or the object oriented affected method(s). See table 13.						
In-production Item Closure Date	Date the corrective action for similar items currently in the factory is resolved. See table 7.	Aerospace ATR									In-production Item Closure Date	date the corrective action for similar items currently in the factory is					Yes	

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
												resolved. See table 7.						
In-production Item Disposition Category	The category of the actions taken as a result of the anomalous event (e.g., Use As Is, Change Specification, Redesign). See table 7.	Aerospace ATR									In-production Item Disposition Category	The category of the actions taken as a result of the anomalous event (e.g., Use As Is, Change Specification, Redesign). See table 7.					Yes	
Recovery Method Category	redundancy, software upload, operational workaround, automatic recovery, and reduced capability	Aerospace ATR									Recovery Method Category	redundancy, software upload, operational workaround, automatic recovery, and reduced capability						
Reference ARN Source Identifier	the organization issuing the ARN. See table 6	Aerospace ATR									Reference ARN Source Identifier	the organization issuing the ARN. See table 6						
Reference Type	Indicates what aspect of a referenced anomaly makes it relevant to the current anomaly. Allowed values are:	Aerospace ATR									Reference Type	Indicates what aspect of a referenced						

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
	repeat within satellite / repeat within fleet; repeat on-ground. See table 6											anomaly makes it relevant to the current anomaly. Allowed values are: repeat within satellite / repeat within fleet; repeat on-ground. See table 6						
Second level development identification	the conventionally developed CSC or the object-oriented base class(es) name(s). See table 13.	Aerospace ATR									Second level development identification	the conventionally developed CSC or the object-oriented base class(es) name(s). See table 13.						
Software build version number	Enter the entire name of the software application, including the build version number. See table 13	Aerospace ATR									Software build version number	Enter the entire name of the software application, including the build version number. See table 13						

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
Symptom Duration	indicate duration of the anomalous behavior as "persistent" (permanent, continual), "transient" (momentary, temporary), "intermittent" (recurring at irregular intervals), "periodic" (recurring at regular intervals), or "unrepeatable" (cannot recreate).	Aerospace ATR									Symptom Duration	indicate duration of the anomalous behavior as "persistent" (permanent, continual), "transient" (momentary, temporary), "intermittent" (recurring at irregular intervals), "periodic" (recurring at regular intervals), or "unrepeatable" (cannot recreate).					Yes	
Task(s) or process(es) affected by defect	Software runtime task or process affected by the defect. See table 13	Aerospace ATR									Task(s) or process(es) affected by defect	Software runtime task or process affected by the defect. See table 13						

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
Test Like You Fly Exception	Enter "Yes" if the most likely contributor to the system was processed as an exception to Test Like you Fly Criteria, as defined in 2.3.8.1-T1-Test-1.1-G Test Engineering Guidebook (The Test Like You Fly principle necessitates that a product should experi	Aerospace ATR									Test Like You Fly Exception	Enter "Yes" if the most likely contributor to the system was processed as an exception to Test Like you Fly Criteria, as defined in 2.3.8.1-T1-Test-1.1-G Test Engineering Guidebook (The Test Like You Fly principle necessitates that a product should experi	Test in Process					
Third level development identification	the conventionally developed CSU or the object oriented derived class(es) names(s). See table 13.	Aerospace ATR									Third level development identification	the conventionally developed CSU or the object oriented derived class(es) names(s). See table 13.						

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
Unique Item Identifier (UII)	A concatenation of the Enterprise Identifier, Original Part Number, and Serial Number, not to exceed 78 characters. See table 12.	Aerospace ATR									Unique Item Identifier (UII)	A concatenation of the Enterprise Identifier, Original Part Number, and Serial Number, not to exceed 78 characters. See table 12.					Yes	
Unbuild Item Closure Date	date corrective action is resolved for similar items in the program production stream (but not yet in the factory). See table 7.	Aerospace ATR									Unbuild Item Closure Date	date corrective action is resolved for similar items in the program production stream (but not yet in the factory). See table 7.						
Unbuild Item Disposition Category	The category of the actions taken as a result of the anomalous event (e.g., Use As Is, Change Specification, Redesign). See table 7.	Aerospace ATR									Unbuild Item Disposition Category	The category of the actions taken as a result of the anomalous event (e.g., Use As Is, Change						

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
												Specification, Redesign). See table 7.						
Verification Assessment Narrative	a detailed description of how the verification program was executed that may have impacted the detected anomaly.	Aerospace ATR									Verification Assessment Narrative	a detailed description of how the verification program was executed that may have impacted the detected anomaly.						
Verification Level	the verification level that should have detected the most likely cause of the anomaly, given the verification process used	Aerospace ATR									Verification Level	the verification level that should have detected the most likely cause of the anomaly, given the verification process used						
Verification Category	Test, Analysis, Simulation or other method used to detect the anomaly.	Aerospace ATR									Verification Category	Test, Analysis, Simulation or other method used to detect the anomaly.						

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
Verification Method Name	name of the verification method included in the verification program that should have identified the detected anomaly.	Aerospace ATR									Verification Method Name	name of the verification method included in the verification program that should have identified the detected anomaly.						
Impact Severity on Mission	Numeric code identifying the severity of the impact on the mission (ranges from Catastrophic to Negligible).	Aerospace ATR									Impact Severity on Mission	numeric code identifying the severity of the impact on the mission (ranges from Catastrophic to Negligible).					Yes	
Impact Severity on Anomalous Item	Numeric code identifying the severity of the impact on the anomalous item (ranges from Catastrophic to Negligible)	Aerospace ATR									Impact Severity on Anomalous Item	numeric code identifying the severity of the impact on the anomalous item (ranges from Catastrophic to Negligible)					Yes	

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
Plus/Minus Anomaly DateTime Offset	The range in date and time during which the anomaly may have occurred. See 4.2.17. in the TOR.	Aerospace ATR									Plus/Minus Anomaly DateTime Offset	The range in date and time during which the anomaly may have occurred. See 4.2.17. in the TOR.						
Data Collection Report Date	Enter the date that this report was prepared for submittal to the appropriate agency for analysis and trending.	Aerospace ATR									Data Collection Report Date	Enter the date that this report was prepared for submittal to the appropriate agency for analysis and trending.						
IFA Number	If checked yes to IFA, need IFI number here. Generate automatically based on what IFI process ends up being.	CxP 70068-03 // KSCPR	IFA Number	If checked yes to IFA, need IFI number here. Generate automatically based on what IFI process ends up being.					IFA#	Official IFA number assigned by SSP or by design element/project office (SASCB).							Yes	
In-Flight Anomaly (IFA)	In-flight anomalies (IFA's) are problems that occur from L-5 hours during the mission until recovery. (Including its on-orbit/in-space duty cycle). This includes any IFA's detected during post-mission or post-use analysis. (See	CxP 70068-03	In-Flight Anomaly (IFA)	In-flight anomalies (IFA's) are problems that occur from L-5 hours during the mission until recovery. (Including its on-orbit/in-space duty cycle). This includes any IFA's detected during													Yes	

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
	Table 4.1.3 for unique In-F			post-mission or post-use analysis. (See Table 4.1.3 for unique In-F														
Likelihood Score	Determine Likelihood of Problem occurring again (1, 2, 3, 4, or 5) based on Qualitative and Quantitative values per CxP 70056	CxP 70068-03	Likelihood Score	Determine Likelihood of Problem occurring again (1, 2, 3, 4, or 5) based on Qualitative and Quantitative values per CxP 70056									Prob of Occur				Yes	
Location on Hardware	Zone location on hardware itself, if applicable Based on engineering drawings.	CxP 70068-03 // KSCPR	Location on Hardware	Zone location on hardware itself, if applicable Based on engineering drawings.					Zone								Yes	
MRB Rationale	Rationale for accepting the disposition of the non-conforming part(s).	CxP 70068-03	MRB Rationale	Rationale for accepting the disposition of the non-conforming part(s).													Yes	
Next Higher Assembly		CxP 70068-03 & ISS PRACA Db & Northrop Grumman - F1	Next Higher Assembly				Next Higher Assembly						Next Higher Assembly				Yes	To use Smart Pick List, an indentured parts list database including all levels of indenture, must be developed and maintained.
Next Higher Assembly Part Number		CxP 70068-03 & ISS PRACA Db & Northrop Grumman - F1	Next Higher Assembly Part Number				Next Higher Assembly Part Number						Next Higher Assembly Part Number				Yes	To use Smart Pick List, an indentured parts list database including all levels of

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
																		indenture, must be developed and maintained.
Next Higher Assembly Serial Number/ Lot/Date Code		CxP 70068-03 & ISS PRACA Db & Northrop Grumman - F1	Next Higher Assembly Serial Number/ Lot/Date Code				Next Higher Assembly Serial Number/ Lot/Date Code						Next Higher Assembly Serial Number/ Lot/Date Code				Yes	To use Smart Pick List, an indentured parts list database including all levels of indenture, must be developed and maintained.
Alias	Identifying numbers/names of the vendor's non-conformance/ problem report.	CxP 70068-03	Alias	Identifying numbers/names of the vendor's non-conformance/ problem report.													Yes	
Applicable FMEA/CIL and/or Hazard Report and/or Program Risk	Link to the version of the applicable FMEA/CIL, Hazard Report, and/or Program Risk Assessment at time of PR closure. Mandatory for government Facilities and NASA Centers; otherwise Optional.	CxP 70068-03	Applicable FMEA/CIL and/or Hazard Report and/or Program Risk	Link to the version of the applicable FMEA/CIL, Hazard Report, and/or Program Risk Assessment at time of PR closure. Mandatory for government Facilities and NASA Centers; otherwise Optional.													Yes	
Cause Type	List of whether cause listed is a "Root Cause," "Probable Cause," or a "Proximate Cause" either there is a root cause or a probable cause (not both). Optional/ May be selected by the Project. Required for directly entered problems.	CxP 70068-03	Cause Type	List of whether cause listed is a "Root Cause," "Probable Cause," or a "Proximate Cause" either there is a root cause or a probable cause (not both). Optional/ May be selected by the Project. Required														

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
				for directly entered problems.														
Common Hardware - Automatic	Automatically filled in by software for any common part numbers (need to define work flow)	CxP 70068-03	Common Hardware - Automatic	Automatically filled in by software for any common part numbers (need to define work flow)													Yes	
Cost Exceeded $100K	Yes, if Total Cost (Labor and Material) to work the problem exceeds $100K (High level estimate of cost.)	CxP 70068-03	Cost Exceeded $100K	Yes, if Total Cost (Labor and Material) to work the problem exceeds $100K (High level estimate of cost.)														
DD250?	Has the H/W or S/W been accepted by the government?	CxP 70068-03 & ISS PRACA Db	DD250?	Has the H/W or S/W been accepted by the government?			DD250?	Has the H/W or S/W been accepted by the government?									Yes	Important distinction during new system development & acquisition (may affect decisions about program/mission impacts, severity, priorities, etc.)
Detectable	Fault is detectable during pre-operation screening, preventive maintenance checks, etc. Pick list includes: Screenable, Nonscreenable	CxP 70068-03	Detectable	Fault is detectable during pre-operation screening, preventive maintenance checks, etc. Pick list includes: Screenable, Nonscreenable														

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
Failure Detection	Identification of failure detection to include Built-In-Test (BIT), Built-In-Test-Equipment (BITE), Preventive Maintenance Screen, Corrective Maintenance	CxP 70068-03	Failure Detection	Identification of failure detection to include Built-In-Test (BIT), Built-In-Test-Equipment (BITE), Preventive Maintenance Screen, Corrective Maintenance													Yes	
Program Approval Required?	Is program approval required?	CxP 70068-03	Program Approval Required?	Is program approval required?													Yes	
Project Approval Required?	Is project approval required/desired? These approval field(s) depend on significance category, risk score, FMEA/CIL criticality code, and Resolution Actions.	CxP 70068-03	Project Approval Required?	Is project approval required/desired? These approval field(s) depend on significance category, risk score, FMEA/CIL criticality code, and Resolution Actions.													Yes	
Refurbishment Item	Is the item identified as a reuse item? Is the item refurbished at center? Is the item refurbished at Depot Level Maintenance?	CxP 70068-03	Refurbishment Item	Is the item identified as a reuse item? Is the item refurbished at center? Is the item refurbished at Depot Level Maintenance?														Need separate Yes/No field for 1st question. Cannot answer all 3 with only one field.
Repair Grading	Identification of preventive and corrective maintenance repair results. Indication of effect of repair on system functionality. Includes: Good - Condition return to service Above Average - Condition minor degradation Average - Condition adequate to function.	CxP 70068-03	Repair Grading	Identification of preventive and corrective maintenance repair results. Indication of effect of repair on system functionality. Includes: Good - Condition return to service Above Average - Condition minor degradation Average - Condition adequate to														

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
				function.														
Repair/Fix	Elapsed Maintenance Time from fault/failure detection to return to service.	CxP 70068-03 // Northrop Grumman - F18 FRACAS	Repair/Fix	Elapsed Maintenance Time from fault/failure detection to return to service.									Repair Time EMT				Yes	Including Supply time?
Risk Score	Automatically calculates the product of Consequence Score times Likelihood Score	CxP 70068-03	Risk Score	Automatically calculates the product of Consequence Score times Likelihood Score													Yes	
Run time/ Elapsed Time/Cycles	For items with Elapsed Time Indicator (ETI) - Time elapsed or number of cycles from NASA Acceptance of equipment item to fault/failure/anomaly detection; At the level at which maintenance action is initiated.	CxP 70068-03 // Northrop Grumman - F18 FRACAS	Run time/ Elapsed Time/Cycles	For items with Elapsed Time Indicator (ETI) - Time elapsed or number of cycles from NASA Acceptance of equipment item to fault/failure/anomaly detection; At the level at which maintenance action is initiated.									Time/Cycle					
Safety critical software?	Assessment of the software/firmware/complex electronics safety functions as defined in NASA-STD-8719.13B, Section 4.1.1, NASA Software Safety Standard. If the system is determined to be safety critical then the software must be evaluated for its contribut	CxP 70068-03	Safety critical software?	Assessment of the software/firmware/ complex electronics safety functions as defined in NASA-STD-8719.13B, Section 4.1.1, NASA Software Safety Standard. If the system is determined to be safety critical then the software must be evaluated for its														

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
				contribution														
Significance Category	Significance of problem based on criteria in volume 1 of the PRACA Requirements document	CxP 70068-03	Significance Category	Significance of problem based on criteria in volume 1 of the PRACA Requirements document														Same as RHI?
Software Classification	Identify classification of the defective software/firmware/complex electronics as defined by NPR 7150.2. Refer to the system classification assessment or contact your software assurance representative for assistance in selection.	CxP 70068-03	Software Classification	Identify classification of the defective software/firmware/ complex electronics as defined by NPR 7150.2. Refer to the system classification assessment or contact your software assurance representative for assistance in selection.														
Software Type	Identify the type of software/firmware/ complex electronics that is defective.	CxP 70068-03	Software Type	Identify the type of software/firmware/ complex electronics that is defective.														
Software Version (CSCI/CSC/ CSU)	Computer Software Configuration Item (CSCI) An aggregation of software that is designated for configuration management and treated as a single entity in the configuration	CxP 70068-03 // Aerospace ATR	Software Version (CSCI/CSC/ CSU)	Computer Software Configuration Item (CSCI) An aggregation of software that is designated for configuration management and treated as a single entity in the							Software build version number	Enter the entire name of the software application, including the build version number.						

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
	management process. [IEEE-STD 610.12-1990] Computer Software Component (CSC)- A dist			configuration management process. [IEEE-STD 610.12-1990] Computer Software Component (CSC)- A dist								See table 13						
Work Authorization Document Number	If WAD is initiated based on remedial or corrective action, list WAD number. Active Link with Work Authorization System until WAD closed then version in Government approved format version of final (closed) WAD is attached	CxP 70068-03 // IRIS	Work Authorization Document Number	If WAD is initiated based on remedial or corrective action, list WAD number. Active Link with Work Authorization System until WAD closed then version in Government approved format version of final (closed) WAD is attached	WOA	State the Work Order Authorization, if applicable.											Yes	
Name	Name of person responsible to open and close Flight Effectivity	ISS PRACA Db					Name	Name of person responsible to open and close Flight Effectivity										
NASA Engineer Review	Accept/Reject/Clear selection boxes for PR Closure	ISS PRACA Db					NASA Engineer Review	Accept/Reject/Clear selection boxes for PR Closure										
NASA QA Review	NASA QA Accept/Reject/Clear selection boxes for PR Closure	ISS PRACA Db					NASA QA Review	NASA QA Accept/Reject/Clear selection boxes for PR Closure										
Accept?	This field is disabled until the PR is released	ISS PRACA Db					Accept?	This field is disabled until the PR is released										
Board Chair	Accept/Reject/Clear selection boxes for PR Closure	ISS PRACA Db					Board Chair	Accept/Reject/Clear selection boxes for PR Closure										
Identification Data	Activates Problem Identification form (used to enter original PR data)	ISS PRACA Db					Identification Data	Activates Problem Identification form (used to enter original PR										

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
								data)										
Export Control		ISS PRACA Db					Export Control										Yes	
F.E. Signoff	Allows users to add/delete flights and enter signature(s) for individual flights.	ISS PRACA Db					F.E. Signoff	Allows users to add/delete flights and enter signature(s) for individual flights.										
Local MRB		ISS PRACA Db					Local MRB											
MAR Number		ISS PRACA Db					MAR Number											
MAR Required		ISS PRACA Db					MAR Required											
Justification	Justification for changes to the PR's Flight Effectivity	ISS PRACA Db					Justification	Justification for changes to the PR's Flight Effectivity										
Like H/W On-Orbit	Indicates if like hardware is already on-orbit.	ISS PRACA Db					Like H/W On-Orbit	Indicates if like hardware is already on-orbit.									Yes	
CEO Engineer Review		ISS PRACA Db					CEO Engineer Review											
CEO QA Review	CEO QA Accept/Reject/Clear	ISS PRACA Db					CEO QA Review	CEO QA Accept/Reject/Clear										
CEO Safety Review		ISS PRACA Db					CEO Safety Review											
Closed Not-Reportable Criteria Code		ISS PRACA Db					Closed Not-Reportable Criteria Code										Yes	
Contractor QA Review		ISS PRACA Db					Contractor QA Review											
Date Signed	Date signed box for each required concurrence signature.	ISS PRACA Db					Date Signed	Date signed box for each required concurrence signature.									Yes	

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
Date Submitted		ISS PRACA Db					Date Submitted // PR Submit Date								DR submission date		Yes	
Flight Effectivity Status	Open/Closed buttons indicating the status.	ISS PRACA Db					Flight Effectivity Status	Open/Closed buttons indicating the status.										
Flt Sig date		ISS PRACA Db					Flt Sig date											
Flt Status		ISS PRACA Db					Flt Status											
Flt#		ISS PRACA Db					Flt#											
FMEA Number	Unique FMEA worksheet number that identifies the hardware item and specific failure mode being analyzed. If multiple worksheets apply, identify the worst-case effect FMEA worksheet.	ISS PRACA Db // KSCPR					FMEA Number	Unique FMEA worksheet number that identifies the hardware item and specific failure mode being analyzed. If multiple worksheets apply, identify the worst-case effect FMEA worksheet.	FMEA #	The FMEA number which addresses the failure mode of failed elements/LRU/ SRU (to lowest level possible).								
FMEA Rationale	Explanation/additional information/rationale for FMEA criticality and implementation.	ISS PRACA Db					FMEA Rationale	Explanation/additional information/rationale for FMEA criticality and implementation.										
FMEA Verified	Selected by R/M engineer after all FMEA data has been entered and verified	ISS PRACA Db					FMEA Verified	Selected by R/M engineer after all FMEA data has been entered and verified										
Fracture Critical Indicator		ISS PRACA Db					Fracture Critical Indicator											

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
PR Level		ISS PRACA Db					PR Level											
Pre/Post DD250		ISS PRACA Db					Pre/Post DD250											
Private PR #	Non-editable field; private number is assigned when a problem has been submitted/saved. This is not the public PR number.	ISS PRACA Db					Private PR #	Non-editable field; private number is assigned when a problem has been submitted/saved. This is not the public PR number.										
Problem Priority Designation (PPD)		ISS PRACA Db					Problem Priority Designation (PPD)											
Reject PR	Used to reject public release of a PR that does not meet reportability criteria.	ISS PRACA Db					Reject PR	Used to reject public release of a PR that does not meet reportability criteria.										
Rejected By		ISS PRACA Db					Rejected By											
Serial Number Status		ISS PRACA Db					Serial Number Status											
SPRT Lead Review	Accept/Reject/Clear selection boxes for PR Closure	ISS PRACA Db					SPRT Lead Review	Accept/Reject/Clear selection boxes for PR Closure										System Problem Resolution Team (SPRT)
System Problem Resolution Team	System Problem Resolution Team (SPRT) that will be responsible for the PR	ISS PRACA Db					System Problem Resolution Team	System Problem Resolution Team (SPRT) that will be responsible for the PR										
Test Op Code	Code identifying the type of test/operation at the time the problem was detected.	ISS PRACA Db // Northrop Grumman - F18					Test Op Code	Code identifying the type of test/operation at the time the problem was detected.										

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
		FRACAS																
Trend Codes Verified	Selected by CEO QA after all trend codes have been entered and verified	ISS PRACA Db					Trend Codes Verified	Selected by CEO QA after all trend codes have been entered and verified										
Updated By		ISS PRACA Db					Updated By											
Applicable Paragraph		Northrop Grumman - F18 FRACAS											Applicable Paragraph				Yes	
Bench Test Reqd		Northrop Grumman - F18 FRACAS											Bench Test Reqd					
Buyer		Northrop Grumman - F18 FRACAS											Buyer					
Customer Date		Northrop Grumman - F18 FRACAS											Customer Date					
Engineering Liaison Date		Northrop Grumman - F18 FRACAS											Engineering Liaison Date				Yes	
Fact Closed Date		Northrop Grumman - F18 FRACAS											Fact Closed Date					
Fact Review Completed?		Northrop Grumman - F18 FRACAS											Fact Review Completed?					
Fail Verified		Northrop Grumman - F18 FRACAS											Fail Verified				Yes	

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
How detect bit		Northrop Grumman - F18 FRACAS											How detect bit					
How Indicate bit		Northrop Grumman - F18 FRACAS											How Indicate bit					
How Isolate bit		Northrop Grumman - F18 FRACAS											How Isolate bit					
Final How Mal		Northrop Grumman - F18 FRACAS											Final How Mal				Yes	
JCN	Job Control number	Northrop Grumman - F18 FRACAS											JCN	Job Control number				
Maintenance Level		Northrop Grumman - F18 FRACAS											Maintenance Level					
Manufacturing Status		Northrop Grumman - F18 FRACAS											Manufacturing Status					
Material Eng Status		Northrop Grumman - F18 FRACAS											Material Eng Status					
Modified Part Number		Northrop Grumman - F18 FRACAS											Modified Part Number					
Other How Isol bit		Northrop Grumman - F18 FRACAS											Other How Isol bit					
Part Category Code		Northrop Grumman - F18 FRACAS											Part Category Code					
Preliminary Review Date		Northrop Grumman - F18 FRACAS											Preliminary Review Date					

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
Qty Inspected		Northrop Grumman - F18 FRACAS // USAF DRIS											Qty Inspected		Quantity Inspection	Number of items inspected and type of inspection.		
Qty Rejected		Northrop Grumman - F18 FRACAS // USAF DRIS											Qty Rejected		Quantity Deficient	Number of items determined to be deficient as a result of the inspection.		
Quality Status		Northrop Grumman - F18 FRACAS											Quality Status					
Receiving Report No		Northrop Grumman - F18 FRACAS											Receiving Report No					
Reliability Eng Status		Northrop Grumman - F18 FRACAS											Reliability Eng Status					
Repair Qty		Northrop Grumman - F18 FRACAS											Repair Qty					
Repair Time Date		Northrop Grumman - F18 FRACAS											Repair Time Date					
Rtn to Supplier Qty		Northrop Grumman - F18 FRACAS											Rtn to Supplier Qty					
Rwk to Spec Qty		Northrop Grumman - F18 FRACAS											Rwk to Spec Qty					
Safety Analysis RHI	Risk Hazard Index (RHI) derived by combining the probability of occurrence with hazard severity. The RHI forms the basis for judging the	Northrop Grumman - F18 FRACAS											Safety Analysis RHI	Risk Hazard Index (RHI) derived by combining the probability				

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
	acceptability of a risk and to prioritize resources.													of occurrence with hazard severity. The RHI forms the basis for judging the acceptability of a risk and to prioritize resources.				
Safety Eng Status		Northrop Grumman - F18 FRACAS											Safety Eng Status					
Safety Final RHI	Risk Hazard Index (RHI) derived by combining the probability of occurrence with hazard severity. The RHI forms the basis for judging the acceptability of a risk and to prioritize resources.	Northrop Grumman - F18 FRACAS											Safety Final RHI	Risk Hazard Index (RHI) derived by combining the probability of occurrence with hazard severity. The RHI forms the basis for judging the acceptability of a risk and to prioritize resources.				
Safety Initial RHI	Risk Hazard Index (RHI) derived by combining the probability of occurrence with hazard severity. The RHI forms the basis	Northrop Grumman - F18 FRACAS											Safety Initial RHI	Risk Hazard Index (RHI) derived by combining the				

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
	for judging the acceptability of a risk and to prioritize resources.													probability of occurrence with hazard severity. The RHI forms the basis for judging the acceptability of a risk and to prioritize resources.				
Scrap Qty		Northrop Grumman - F18 FRACAS											Scrap Qty					
Ship Date		Northrop Grumman - F18 FRACAS											Ship Date					
Std Repair Qty		Northrop Grumman - F18 FRACAS											Std Repair Qty					
Team Code		Northrop Grumman - F18 FRACAS											Team Code					
Test Failure		Northrop Grumman - F18 FRACAS											Test Failure					
Time/Unit		Northrop Grumman - F18 FRACAS											Time/Unit					
Use as is Qty		Northrop Grumman - F18 FRACAS											Use as is Qty					

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
Warranty Expiration Date		Northrop Grumman - F18 FRACAS // USAF DRIS											Warranty Date		Warranty Expiration Date			
Type FENR		Northrop Grumman - F18 FRACAS											Type FENR					
Relevant?		Northrop Grumman - F18 FRACAS											Relevant?					
Relevant Date		Northrop Grumman - F18 FRACAS											Relevant Date					
Failure Analysis Required?		Northrop Grumman - F18 FRACAS											Failure Analysis Required?				Yes	
Failure Analysis Required Date		Northrop Grumman - F18 FRACAS											Failure Analysis Required Date					
Failure Analysis Required By		Northrop Grumman - F18 FRACAS											Failure Analysis Required By					
Failure Analysis Approved?		Northrop Grumman - F18 FRACAS											Failure Analysis Approved?					
Failure Analysis Approved Date		Northrop Grumman - F18 FRACAS											Failure Analysis Approved Date					
Failure Analysis Approved By		Northrop Grumman - F18 FRACAS											Failure Analysis Approved By					
Failure Trend		Northrop Grumman - F18 FRACAS											Failure Trend				Yes	

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
No Fault Found		Northrop Grumman - F18 FRACAS											No Fault Found					
Failure Analysis Finding		Northrop Grumman - F18 FRACAS											Failure Analysis Finding					
Safety Initial RHI By		Northrop Grumman - F18 FRACAS											Safety Initial RHI By					
Safety Final RHI By		Northrop Grumman - F18 FRACAS											Safety Final RHI By					
Safety Final RHI Date		Northrop Grumman - F18 FRACAS											Safety Final RHI Date					
Pertinent Stress Levels		Northrop Grumman - F18 FRACAS											Pertinent Stress Levels					
Verification Method/Period		Northrop Grumman - F18 FRACAS											Verification Method/Period					
Reliability		Northrop Grumman - F18 FRACAS											Reliability					
Quality Comments		Northrop Grumman - F18 FRACAS											Quality Comments				Yes	
Design Comments		Northrop Grumman - F18 FRACAS											Design Comments					
Built-In-Test Indication of Failure		Northrop Grumman - F18 FRACAS											Built-In-Test Indication of Failure					
Failure Analysis Results		Northrop Grumman - F18 FRACAS											Failure Analysis Results				Yes	

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
Attachment		Northrop Grumman - F18 FRACAS											Attachment					
Failure Analysis Attachment		Northrop Grumman - F18 FRACAS											Failure Analysis Attachment					
Workflow		Northrop Grumman - F18 FRACAS											Workflow					
Complaint Narrative	Additional Information not included in the other fields that will assist in identifying the exhibits.	USAF DRIS													Complaint Narrative	Additional Information not included in the other fields that will assist in identifying the exhibits.		
Condition Code		USAF DRIS													Condition Code			
Credit/Replacement Statement		USAF DRIS													Credit/Replacement Statement			
Action Taken	Maintenance action taken to include Removal, Replace, Repair, Service or Calibrate	CxP 70068-03 // Northrop Grumman - F18 FRACAS // USAF DRIS	Action Taken	Maintenance action taken to include Removal, Replace, Repair, Service or Calibrate									Action Taken - Final	Final Action Taken	Action Taken Code	Identifies the primary action taken by the responsible party (contractor, item manager, depot, etc.) to correct the root cause of the reported, or discernible discrepancy/deficiency, and to prevent recurrence.		
Date Exhibit Released	Date that the exhibit was released to the Screening Point, Action Point, or support point.	USAF DRIS													Date Exhibit Released	Date that the exhibit was released to the Screening Point, Action Point, or support point.		

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
Deficiency Responsibility Code	Used primarily to determine who (contractor or Government) was responsible for the reported or any other deficiency found during the investigation. They are measurements used to evaluate contractor's/Government's quality performance. The responsibility he reported or any other deficiency found during the investigation.	USAF DRIS													Deficiency Responsibility Code	Used primarily to determine who (contractor or Government) was responsible for the reported or any other deficiency found during the investigation. They are measurements used to evaluate contractor's/Government's quality performance.	Yes	Possible duplicate of DD250? Similar information.
Estimated Repair Cost		USAF DRIS													Estimated Repair Cost		Yes	
Exhibit Holding Activity	Name, address and phone numbers of contact person for the DR exhibit holding activity.	USAF DRIS													Exhibit Holding Activity	Name, address and phone numbers of contact person for the DR exhibit holding activity.	Yes	
Exhibit Released To	Name, address, and telephone number of the Screening Point, Action Point, or support point to whom the exhibit was released.	USAF DRIS													Exhibit Released To	Name, address, and telephone number of the Screening Point, Action Point, or support point to whom the exhibit was released.	Yes	
GBL Number	If unknown, leave blank.	USAF DRIS													GBL Number	If unknown, leave blank.		
Government Furnished Material (GFM)		USAF DRIS													Government Furnished Material (GFM)		Yes	
National Stock Number	The NSN and the applicable materiel management aggregation code. If no stock number is assigned enter "SL." Use the NSN of the TCTO or when reporting deficiencies on non-	USAF DRIS													National Stock Number	The NSN and the applicable materiel management aggregation code. If no stock number is assigned enter "SL." Use the NSN of the TCTO or when reporting deficiencies on non-		

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
	stocklisted parts in a TCTO or repair kit. For software deficiencies enter the Compu															stocklisted parts in a TCTO or repair kit. For software deficiencies enter the Compu		
Next inspection due		USAF DRIS													Next inspection due		Yes	
Purchase Order Number	Enter these numbers or any other available transportation document number in lieu of the GBI. Such numbers appear on the container, purchase document and/or the item. If unknown, enter "UNK."	Northrop Grumman - F18 FRACAS & USAF DRIS											Purchase Order Number	Enter these numbers or any other available transportation document number in lieu of the GBI. Such numbers appear on the container, purchase document and/or the item. If unknown, enter "UNK."	Purchase Order Number	Enter these numbers or any other available transportation document number in lieu of the GBI. Such numbers appear on the container, purchase document and/or the item. If unknown, enter "UNK."		
Quantity In Stock	The quantity of materiel from the same manufacturer remaining in stock.	USAF DRIS													Quantity In Stock	The quantity of materiel from the same manufacturer remaining in stock.		
Quantity Received	Total number of items received in the lot or batch in which the condition was found, if known. Disregard the unit of issue.	USAF DRIS													Quantity Received	Total number of items received in the lot or batch in which the condition was found, if known. Disregard the unit of issue.		
Reason or authority		USAF DRIS													Reason or authority			

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
Requisition Number	Required for credit, but if unknown, leave blank.	USAF DRIS													Requisition Number	Required for credit, but if unknown, leave blank.		
Result of Investigation (ROI) Code	Specifies the result of the investigation relative to the reported deficiency; the ROI Code should support, substantiate, or refute the root cause of the reported deficiency. Used with one of the associated status codes.	USAF DRIS													Result of Investigation (ROI) Code	Specifies the result of the investigation relative to the reported deficiency; the ROI Code should support, substantiate, or refute the root cause of the reported deficiency. Used with one of the associated status codes.		
Results of stock screening	Results of, or necessity for stock screening.	USAF DRIS													Results of stock screening	Results of, or necessity for stock screening.		
Shipper, City And State	When the shipper of an item is different from the manufacturer, also include the shipper's or supplier's name.	USAF DRIS													Shipper, City And State	When the shipper of an item is different from the manufacturer, also include the shipper's or supplier's name.		
Support Data Mailed	Describe support data provided (photographs, tags, labels, etc.) and ensure the DR control number is identified on any support data mailed under separate cover.	USAF DRIS													Support Data Mailed	Describe support data provided (photographs, tags, labels, etc.) and ensure the DR control number is identified on any support data mailed under separate cover.		
Unit cost	Dollar value of the deficient item (per unit of issue).	USAF DRIS													Unit cost	Dollar value of the deficient item (per unit of issue).		
Unit of Issue	Self Explanatory	USAF DRIS													Unit of Issue	Self Explanatory		
Warranty Item?		USAF DRIS													Warranty Item?			

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
Work Unit Code	The WUC of the item for which the DR is submitted. Refer to the applicable -06 technical order (aircraft, support equipment, munitions, etc). For software DRs, if a WUC is not available for specific item but there is one for the NHA, use the WUC of the NH	Northrop Grumman - F18 FRACAS // USAF DRIS											Work Unit Code	The WUC of the item for which the DR is submitted. Refer to the applicable -06 technical order (aircraft, support equipment, munitions, etc). For software DRs, if a WUC is not available for specific item but there is one for the NHA, use the WUC of the NH	Work Unit Code	The WUC of the item for which the DR is submitted. Refer to the applicable -06 technical order (aircraft, support equipment, munitions, etc). For software DRs, if a WUC is not available for specific item but there is one for the NHA, use the WUC of the NH		
Site Type	Onsite (NASA property)/Offsite (NASA contractor property)/Other (neither)	IRIS			Site Type	Onsite (NASA property)/Offsite (NASA contractor property)/Other (neither)												
AR Assigned By	Name of AR sender	IRIS			AR Assigned By	Name of AR sender												
AR Assigned To	Name of AR recipient	IRIS			AR Assigned To	Name of AR recipient												
AR Number	Displays unique Action Request ID assigned sequentially by IRIS	IRIS			AR Number	Displays unique Action Request ID assigned sequentially by IRIS												
AR Title	Short descriptor of AR	IRIS			AR Title	Short descriptor of AR												

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
Is this AR private (Between Sender and Recipient Only)?	Yes/No	IRIS			Is this AR private (Between Sender and Recipient Only)?	Yes/No												
Sch. Comp. Date	Displays date in future of AR assignment date for suspense tracking. Default is 14 days, can be changed by AR assigner.	IRIS			Sch. Comp. Date	Displays date in future of AR assignment date for suspense tracking. Default is 14 days, can be changed by AR assigner.												
Apply Privacy Act?	Yes/No	IRIS			Apply Privacy Act?	Yes/No												
Description - Attachment	Description of attached file contents	IRIS			Description - Attachment	Description of attached file contents												
Last Modified By	Name of IRIS User most recently modifying issue record	IRIS			Last Modified By	Name of IRIS User most recently modifying issue record												
Notification Sent Date	User enters date	IRIS			Notification Sent Date	User enters date												
Audit Date From	Date range start	IRIS			Audit Date From	Date range start												
Audit Date To	Date range end	IRIS			Audit Date To	Date range end												
Title Search	Searches Incident Titles	IRIS			Title Search	Searches Incident Titles												
Organization Type	All/Contractor/Organization	IRIS			Organization Type	All/Contractor/Organization												
Sched Comp. Date From	Date range start	IRIS			Sched Comp. Date From	Date range start												
Sched Comp. Date To	Date range end	IRIS			Sched Comp. Date To	Date range end												
Employee Type	Example - NASA government employee	IRIS			Employee Type	Example - NASA government employee												
Level of Experience	Time employed with NASA or NASA contractor	IRIS			Level of Experience	Time employed with NASA or NASA contractor											Yes	
Organization	NASA real estate holding associated with IRIS case	IRIS			Organization	NASA real estate holding associated with IRIS case												
Safety Devices Provided?	PPE, guards, other controls provided	IRIS			Safety Devices Provided?	PPE, guards, other controls provided												

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
Safety Devices Used?	PPE, guards, other controls used	IRIS			Safety Devices Used?	PPE, guards, other controls used												
Classification, Investigation Type	Example: Condition of employee concern where there is no injury or only minor injury requiring first aid and no significant equipment/property damage/mission failure (less than $1,000), but which possesses a potential to cause a mishap.	IRIS			Classification, Investigation Type	Example: Condition of employee concern where there is no injury or only minor injury requiring first aid and no significant equipment/property damage/mission failure (less than $1,000), but which possesses a potential to cause a mishap.												
Classification	Example: COTS	IRIS			Classification	Example: COTS												
Contractor Investigation Type	Example: Responsible contractor convenes board	IRIS			Contractor Investigation Type	Example: Responsible contractor convenes board												
Government Investigation Type	Example: NASA appoints team	IRIS			Government Investigation Type	Example: NASA appoints team												
Headquarters Notified?	Telephonic notification at minimum of HQ OSMA	IRIS			Headquarters Notified?	Telephonic notification at minimum of HQ OSMA												
Incident Estimate	Estimated sum of the costs (the greater value of actual or fair market value) of damaged property, destroyed property, or mission failure, actual cost of repair or replacement, labor (actual value of replacement or repair hours for internal and external/c	IRIS			Incident Estimate	Estimated sum of the costs (the greater value of actual or fair market value) of damaged property, destroyed property, or mission failure, actual cost of repair or replacement, labor (actual value of replacement or repair hours for internal and external/c												
Indicator	Example: Affected Primary Objective(s) of Mission	IRIS			Indicator	Example: Affected Primary Objective(s) of Mission												
Probability	Example: Likelihood	IRIS			Probability	Example: Likelihood												

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
	of recurrence 1-1/10					of recurrence 1-1/10												
Class	Example: Real estate holding or structure	IRIS			Class	Example: Real estate holding or structure												
Report Source	Example: IRIS Quick Incident Report (Health)	IRIS			Report Source	Example: IRIS Quick Incident Report (Health)												
AR's Open	Number of associated AR's with Status=Open	IRIS			AR's Open	Number of associated AR's with Status=Open												
Issues Open	Number of associated issues with Status=Open	IRIS			Issues Open	Number of associated issues with Status=Open												
Are there any issues?	Yes/No	IRIS			Are there any issues?	Yes/No												
Audit Date	Date audit initiated	IRIS			Audit Date	Date audit initiated												
Contractor	NASA Contractor which one or more NASA Centers monitor for incident data	IRIS			Contractor	NASA Contractor which one or more NASA Centers monitor for incident data												
Contract	NASA contract number	IRIS			Contract	NASA contract number												
Location	All/Indoor/Outdoor	IRIS			Location	All/Indoor/Outdoor												Broad class of location - not same as other location fields
Incident Category	Example: Occurrence or condition of employee concern where there is no injury or only minor injury requiring first aid and no significant equipment/property damage/mission failure (less than $1,000), but which possesses a potential to cause a mishap.	IRIS			Incident Category	Example: Occurrence or condition of employee concern where there is no injury or only minor injury requiring first aid and no significant equipment/property damage/mission failure (less than $1,000), but which possesses a potential to cause a mishap.												
Affiliation	State the project, company, or Code	IRIS			Affiliation	State the project, company, or Code												

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
	the personnel involved work for.					the personnel involved work for.												
Beginning Period	from Indicators screen	IRIS			Beginning Period	from Indicators screen												
Date Type	from Indicators screen	IRIS			Date Type	from Indicators screen												
Ending Period	from Indicators screen	IRIS			Ending Period	from Indicators screen												
Eye Witness	List all personnel that were not involved in the incident, but witnesses what happened.	IRIS			Eye Witness	List all personnel that were not involved in the incident, but witnesses what happened.												
Injury	Describe any injuries involved in the incident.	IRIS			Injury	Describe any injuries involved in the incident.												
IRIS File		IRIS			IRIS File													
NASA/Contractor?		IRIS			NASA/Contractor?													Similar to "Responsibility" field
Personnel Involved	State names of all personnel involved in the incident.	IRIS			Personnel Involved	State names of all personnel involved in the incident.												
Property Damage Indicator		IRIS			Property Damage Indicator													
Vehicle Damage Indicator		IRIS			Vehicle Damage Indicator													
Direct Damage Cost		IRIS			Direct Damage Cost													
Total Direct Damage		IRIS			Total Direct Damage													
Injury Cases		IRIS			Injury Cases													
Damage Cases		IRIS			Damage Cases													
Audit From		IRIS			Audit From													
Audit To		IRIS			Audit To													
Report Output	(HTML, Excel, etc.)	IRIS			Report Output	(HTML, Excel, etc.)												
Report Sections		IRIS			Report Sections													
Accident Source	NASA or other aircraft	IRIS			Accident Source	NASA or other aircraft												
CrtInc Type	ISO Audit Metric	IRIS			CrtInc Type	ISO Audit Metric												

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
Indicator-Affected Primary Objective(s) of Mission	Per mission operations report or equivalent document	IRIS			Indicator-Affected Primary Objective(s) of Mission	Per mission operations report or equivalent document												
Indicator-Close Call	Occurrence or condition of employee concern where there is no injury or only minor injury requiring first aid and no significant equipment/property damage/mission failure (less than $1,000), but which possesses a potential to cause a mishap.	IRIS			Indicator-Close Call	Occurrence or condition of employee concern where there is no injury or only minor injury requiring first aid and no significant equipment/property damage/mission failure (less than $1,000), but which possesses a potential to cause a mishap.												
Indicator-Construction	NASA Facilities-related	IRIS			Indicator-Construction	NASA Facilities-related												
Indicator-False Alarm	Report later found inaccurate or baseless	IRIS			Indicator-False Alarm	Report later found inaccurate or baseless												
Indicator-High Visibility	Those particular mishaps or close calls, regardless of the amount of property damage or personnel injury, that the Administrator, AA/OSMA, CD, Director, HQ Ops., or the Center SMA director judges to possess a high degree of programmatic impact or public,	IRIS			Indicator-High Visibility	Those particular mishaps or close calls, regardless of the amount of property damage or personnel injury, that the Administrator, AA/OSMA, CD, Director, HQ Ops., or the Center SMA director judges to possess a high degree of programmatic impact or public,												
Indicator-Injury Involved	Incident where victim is instantaneously exposed to condition or object causing physical harm.	IRIS			Indicator-Injury Involved	Incident where victim is instantaneously exposed to condition or object causing physical harm.												
Indicator-Mission Affected	Per mission operations report or equivalent document	IRIS			Indicator-Mission Affected	Per mission operations report or equivalent document												

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
Indicator-Serious Damage to Aircraft or Space Hardware	Any hardware that is flown on or is a part of an aircraft, experimental flight vehicle, satellite, lighter than air vehicles, unoccupied aerial vehicle, or space transportation system.	IRIS			Indicator-Serious Damage to Aircraft or Space Hardware	Any hardware that is flown on or is a part of an aircraft, experimental flight vehicle, satellite, lighter than air vehicles, unoccupied aerial vehicle, or space transportation system.												
Indicator-Serious Damage to Flight or Ground Support Hardware	Equipment dedicated to flight support or ground-to-flight support	IRIS			Indicator-Serious Damage to Flight or Ground Support Hardware	Equipment dedicated to flight support or ground-to-flight support												
Indicator-Test Failure	Damage expected as part of test procedures	IRIS			Indicator-Test Failure	Damage expected as part of test procedures												
Indicator-Unexpected Damage Due to Test Failure	Damage not expected as part of test procedures	IRIS			Indicator-Unexpected Damage Due to Test Failure	Damage not expected as part of test procedures												
Property Class	Real estate holding or structure	IRIS			Property Class	Real estate holding or structure												
Substandard Action	Human action that may have contributed to accident	IRIS			Substandard Action	Human action that may have contributed to accident												
Substandard Condition	Human condition that may have contributed to accident	IRIS			Substandard Condition	Human condition that may have contributed to accident												
Shift	Day shift	IRIS			Shift	Day shift												
Hospital	Local medical treatment facility associated with IRIS case	IRIS			Hospital	Local medical treatment facility associated with IRIS case												
Office of Visit	NASA real estate holding associated with IRIS case	IRIS			Office of Visit	NASA real estate holding associated with IRIS case												
Case Type	Employee takes medical leave due to a non-occupational injury, illness, or scheduled procedure	IRIS			Case Type	Employee takes medical leave due to a non-occupational injury, illness, or scheduled procedure												

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
Restriction	Supervisor-medical professional consensus on employee work limitation	IRIS			Restriction	Supervisor-medical professional consensus on employee work limitation												
Attributable Source		KSCPR							Attributable Source									
Deferred Date		KSCPR							Deferred Date									
Deferred to Event		KSCPR							Deferred to Event									
EICN	An end-item control number is a sequential identifier contained in implementing organization instructions.	KSCPR							EICN	An end-item control number is a sequential identifier contained in implementing organization instructions.								
OMRS Affected		KSCPR							OMRS Affected									
Out of Family		KSCPR							Out of Family									
Report Date		KSCPR							Report Date									
Report Group		KSCPR							Report Group									
Report Sequence	Report number assigned by the design center, contractor, or KSC.	KSCPR							Report Sequence	Report number assigned by the design center, contractor, or KSC.								
Report Type		KSCPR							Report Type									
Work Area Code		KSCPR							Work Area Code									
Hazard Report #	This number is the alpha/numeric designator associated with the SSP approved HR found in the SSP WebPCASS.	KSCPR							Hazard Report #	This number is the alpha/numeric designator associated with the SSP approved HR found in the SSP								

Data Fields (from All Systems Compared)	Definition	PRACA System	CxP Field(s)	CxP Field Descriptions	IRIS Field(s)	IRIS Field Descriptions	ISS Field(s)	ISS Field Descriptions	KSC PR Field(s)	KSC PR Field Descriptions	Aerospace Field(s)	Aerospace Field Descriptions	NG F-18 Field(s)	NG F-18 Field Descriptions	AF DRIS Field(s)	AF DRIS Field Descriptions	Recommended Addition	Comparison Comments
										WebPCASS.								
Include Related Parts		KSCPR							Include Related Parts									
Date Isolated	Date that the problem was isolated.	KSCPR							Date Isolated	Date that the problem was isolated.							Yes	from NSTS 08126k - may differ from the detection date
Date/Time Updated	Date/Time of latest status or update.	KSCPR							Date/Time Updated	Date/Time of latest status or update.								from NSTS 08126k
Expected Date or Mission of Interim Disposition	Date or mission that problem was interim dispositioned to.	KSCPR							Expected Date or Mission of Interim Disposition	Date or mission that problem was interim dispositioned to.								from NSTS 08126k
Latest Interim Disposition Date	Date that last interim disposition occurred.	KSCPR							Latest Interim Disposition Date	Date that last interim disposition occurred.								from NSTS 08126k
Report Number	Report number assigned by the design center, contractor, or KSC.	KSCPR							Report Number	Report number assigned by the design center, contractor, or KSC.								from NSTS 08126k

In 0006 Only	0006 Sort Order	PRACA System(s)	Data Field	Description	Data Type or Source	Field in 0006	Definition in 0006	Recommend Addition to 0006	Comparison Comments
		CxP 70068-03 // ISS PRACA Db	DD250?	Has the H/W or S/W been accepted by the government?	Yes/No	* Mandatory		Yes	Important distinction during new system development & acquisition (may affect decisions about program/mission impacts, severity, priorities, etc.)
		KSCPR	Deferred Date		DATE	* Mandatory			
		KSCPR	Deferred to Event		VARCHAR2(30)	* Mandatory			
		CxP 70068-03	Detectable	Fault is detectable during pre-operation screening, preventive maintenance checks, etc. Pick list includes: Screenable, Nonscreenable	Pick List	*			
		ISS PRACA Db	Flight Effectivity Status	Open/Closed buttons indicating the status.	Open/Closed	* Mandatory			Indication of whether or not the PR has been addressed by CoFR process for a given mission. Add to recommendation along w/Flight effectivity and justification
		ISS PRACA Db	Flt#			* Mandatory			Combine w/recommendation for ISS PRACA Db "Flight Effectivity Status"
		CxP 70068-03 // KSCPR	IFA Number	If checked yes to IFA, need IFI number here. Generate automatically based on what IFI process ends up being.	String	\			Covered in -0006 by "Occurrence Location" field
		CxP 70068-03	In-Flight Anomaly (IFA)	In-flight anomalies (IFA's) are problems that occur from L-5 hours during the mission until recovery. (Including its on-orbit/in-space duty cycle). This includes any IFA's detected during post-mission or post-use analysis. (See Table 4.1.3 for unique In-F	Yes/No	\			This is at discretion of Program/Project
		ISS PRACA Db	Justification	Justification for changes to the PR's Flight Effectivity		* Mandatory			Aligned with Flight Effectivity field
		ISS PRACA Db	Like H/W On-Orbit	Indicates if like hardware is already on-orbit.	Y/N	\		Yes	Covered in -0006 by "Potential Future Impact" field
		CxP 70068-03	Likelihood Score	Determine Likelihood of Problem occurring again (1, 2, 3, 4, or 5) based on Qualitative and Quantitative values per CxP 70056	Pick List	* Mandatory		Yes	Recommend addition
		ISS PRACA Db	Name	Name of person responsible to open and close Flight Effectivity	Display	* Mandatory			Part of flight effectivity
		CxP 70068-03	Program Approval Required?	Is program approval required?	Yes/No	* Mandatory		Yes	Change this to risk approval required, combined w/significance and likelihood categories

In 0006 Only	0006 Sort Order	PRACA System(s)	Data Field	Description	Data Type or Source	Field in 0006	Definition in 0006	Recommend Addition to 0006	Comparison Comments
		CxP 70068-03	Project Approval Required?	Is project approval required/desired? These approval field(s) depend on significance category, risk score, FMEA/CIL criticality code, and Resolution Actions.	Yes/No	* Mandatory		Yes	Change this to risk approval required, combined w/significance and likelihood categories
		CxP 70068-03	Risk Score	Automatically calculates the product of Consequence Score times Likelihood Score	Automatically Calculated	* Mandatory		Yes	Automatically calculated by likelihood and significance category
		CxP 70068-03 // Northrop Grumman - F18 FRACAS	Run time/ Elapsed Time/Cycles	For items with Elapsed Time Indicator (ETI) - Time elapsed or number of cycles from NASA Acceptance of equipment item to fault/failure/anomaly detection; At the level at which maintenance action is initiated.	Text Field	* Mandatory			Recommend inclusion as mandatory for hardware/software that has capability to track.
		Northrop Grumman - F18 FRACAS	Safety Analysis RHI	Risk Hazard Index (RHI) derived by combining the probability of occurrence with hazard severity. The RHI forms the basis for judging the acceptability of a risk and to prioritize resources.	List - Text	* Mandatory			This is covered by the CxP "Risk Score"
		CxP 70068-03	Safety critical software?	Assessment of the software/firmware/complex electronics safety functions as defined in NASA-STD-8719.13B, Section 4.1.1, NASA Software Safety Standard. If the system is determined to be safety critical then the software must be evaluated for its contribut	Yes/No	* Mandatory			Recommend as Mandatory as specified in NPR 7150.2
		CxP 70068-03	Significance Category	Significance of problem based on criteria in volume 1 of the PRACA Requirements document	Pick List	* Mandatory			Risk Identifier
		Aerospace ATR	Software build version number	Enter the entire name of the software application, including the build version number. See table 13	string (1024)	* Mandatory			Combine description w/Software Version (CSCI/CSC/CSU)

In 0006 Only	0006 Sort Order	PRACA System(s)	Data Field	Description	Data Type or Source	Field in 0006	Definition in 0006	Recommend Addition to 0006	Comparison Comments
		CxP 70068-03	Software Classification	Identify classification of the defective software/firmware/complex electronics as defined by NPR 7150.2. Refer to the system classification assessment or contact your software assurance representative for assistance in selection.	Pick List	* Mandatory			

Appendix B. How-To Procedures

WEBPCASS/iPRACA Access

Objective

This document provides users basic instruction for gaining access to WEBPCASS/iPRACA resources.

Procedure

Note: As a prerequisite to using the WEBPCASS/iPRACA Query and Data Export procedure 2, users must first have access to WEBPCASS. Users who already have access to WEBPCASS may skip this procedure and proceed directly to procedure 2.

For those requiring access:

1. Click http://usa1.unitedspacealliance.com/hq/warehouse/ to go to USA's ADAM Data Warehouse, a portal for Space Shuttle Program (SSP) anomaly data.

2. If you do not currently have access, you must use the 'REQUEST ACCESS' option under the main menu. When you reach the 'Request Access to ADAM Data' screen, look down to the section labeled 'WEBPCASS' and then click in the far-right column where it says "External CURF'. At this point, follow the on-screen instructions.

Continue to Procedure 2

Procedure 2:

Space Shuttle Anomaly Data—Exporting USA's WEBPCASS/iPRACA Data

Objective

The purpose of this procedure is to provide users a basic instruction on the performance of data query and export from WEBPCASS/iPRACA. This serves as a prerequisite to subsequent TechOASIS import filter creation and data analysis work (See TechOASIS procedures 3-5).

Procedure

1. Click http://usa1.unitedspacealliance.com/hq/warehouse/ to go to USA's **ADAM Data Warehouse**, a portal for Space Shuttle Program (SSP) anomaly data.
2. Click on the **WebPCASS** button on the right side.
   - **Note 1**: WebPCASS = Web based Program Compliance Assurance and Status System.
   - **Note 2**:"WebPCASS is required by, and supports the objectives of, the System Integrity Assurance Program (SIAP), NSTS 07700, Volume XI. It was created in 1987 in response to the Rogers Commission recommendation to provide decision makers with readily available, timely, and accurate data. WebPCASS is a centralized database system that provides access to data from numerous sources, required to accurately analyze and assess the status of Shuttle pre-flight, flight and post-flight activities."
3. At the next screen, select '**iPRACA**' from the '**Nonconformance**' pull-down menu.
   - The iPRACA database for contractor-furnished equipment, **CFE**, at each Center is:
     - ✓ KSC = iPRACA
     - ✓ JSC = Orbiter CAR (PDSS)
     - ✓ MSFC = MSFC PRACA
   - For government furnished-equipment, GFE, use "JSC GFE."
4. You should now be at the iPRACA basic search screen. Enter values as shown in the following sub-tasks:

   Note 4: The following sequence for conducting a basic iPRACA data query and export is based on criteria considered to be suitable for many general purpose applications. However, at the discretion of the individual user, deviations to the query and export criteria may be implemented to suit specific applications as required.

a) Under the '**Document/Issue Information**' area, enter, at a minimum, the issue initiated or issue closure date criteria along with applicable on, before, after, or between qualifier.

b) Click the '**Parts/Related Part Information**' link found near the bottom left of the screen and enter part name and/or part number information as applicable.

c) Near the top-center of screen, click the '**Execute Search**' button.

d) Near the top-left area of the display, click the '**Save All**' button.

e) Towards the left of the screen, select the '**User Defined Layout**' tab.

f) In the '**Fields to Select**' box, select the following fields and move them to the '**Listing Order**' box by clicking the right-hand red arrow:

- Issue Tab Document Issue Number
- Issue Tab Issue Detected Date
- Task Tab Task Description
- Task Tab Task Summary

g) Towards the bottom left of this screen, under '**Report Format**', select '**Tilde Delimited**' from the options.

h) Click the '**Generate Report**' button.

i) **Copy and Paste** the resulting data (see following note) from the browser screen to a new Notepad document saving as a .txt file with a name and location of your choosing.

Note 5: Prior to the copy operation, select data starting immediately after the report date/time shown in the format '**AS OF XX-XXX-XXXX YY:YY:AM/PM**' and ending immediately following the last Tilde in the data stream.

j) After the Notepad file has been created, edit the file to delete the duplicate Tilde character, if one occurs, immediately following the words '**Task Tab Task Summary**' located within the first few lines of the report data.

k) **The data is now ready for import to TechOasis given the proper Import Filter**.

Continue to Procedure 3

Procedure 3:

TechOasis Import Filter Development and Data Import Procedure

Objective

The purpose of this document is to provide users with a process for creating custom import filters in support of work with the TechOASIS Text Mining software tool.

Note:

Before proceeding, the user must have generated a proper data file using a tilde delimited format due to anomalies that may occur within MS Excel (.xls) formatted files. Additionally, use of this procedure is contingent upon the user obtaining and installing the Vantage Point TechOASIS software application. For details on obtaining the package, please contact Tim Adams, NASA SA-G at tim.adams@nasa.gov or by phone at (321) 867-2267).

Although the following steps first guide the user through conversion and subsequent use of an MS Excel format file, this is done for data modeling and import filter creation purposes only and any actual data import must take place utilizing the original, tilde delimited data.

AFTER COMPLETION OF THIS PROCESS, PROCEED TO PROCEDURE 4

Procedure:

1. **Build the Excel data model as follows**:

   a. Launch the MS Excel application and chose '**Open**' from the '**File**' menu.

   b. When the Open dialog box appears (see figure 1), click the down arrow at the bottom of the dialog box to change the '**Files of Type**' entry to '**Text Files**' as shown in the figure.

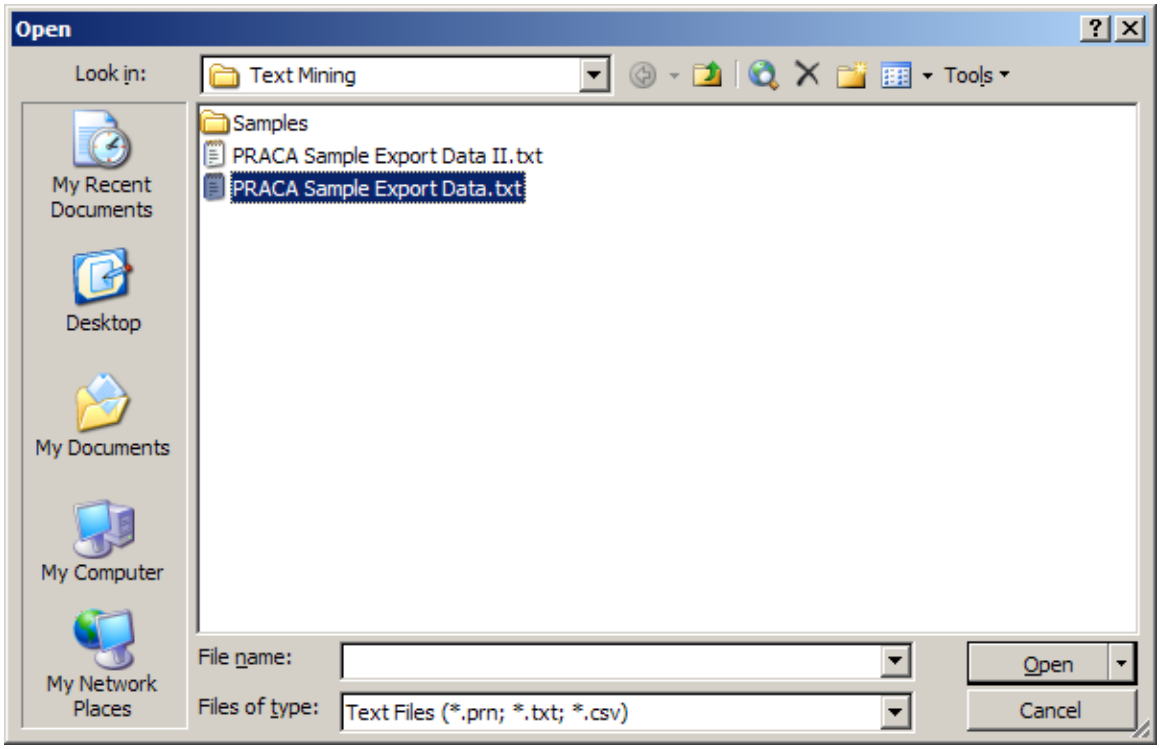


Figure 1

   c. Once you have configured the dialog box as instructed, use the dialog box to locate the tilde delimited file you exported from WEBPCASS.

   d. Once you have located your file, select it and click the '**Open**' button.

   e. Text Import Wizard step 1 of 3 (see Figure 2) appears next. Click the '**Delimited**' button as shown in Figure 2.

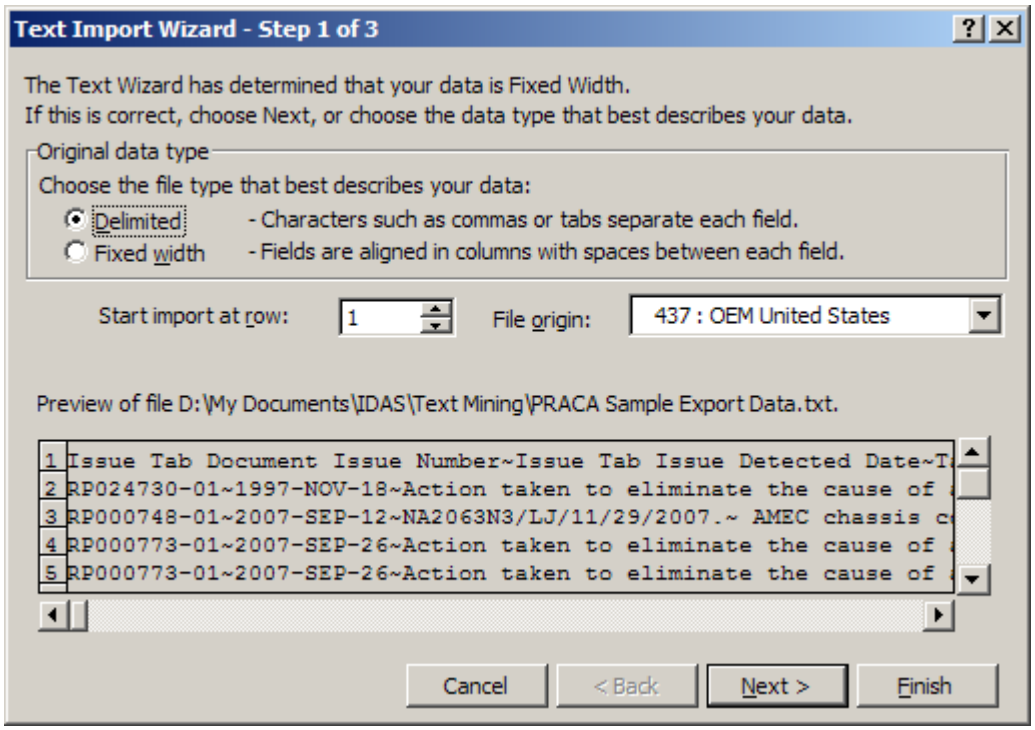


Figure 2

f. Now click the '**Next**' button.

g. Configure the Text Import Wizard window (step 2 of 3) as shown (see Figure 3 as shown on next page). To do this, manually set the delimiters options to show a check next to the '**Other**' option and a '**Tilde**' is to be typed in the adjacent box. Additionally, check the box labeled '**Treat consecutive delimiters as one**'.

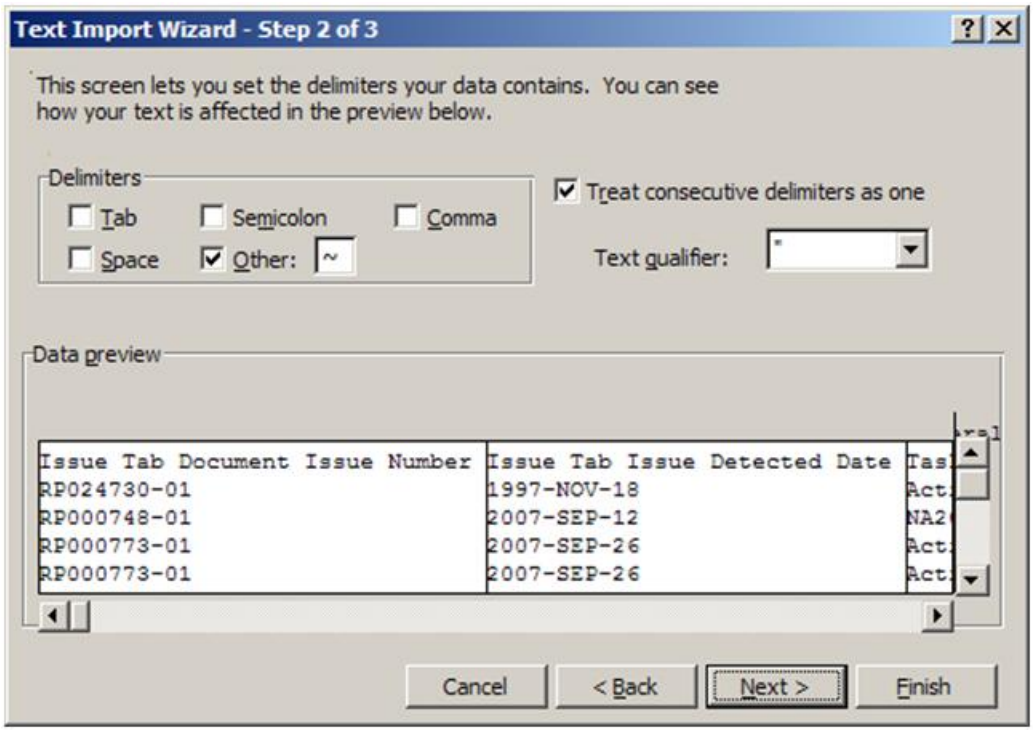


Figure 3

h. Now click the '**Next**' button.

i. Accept the defaults by clicking '**Finish**' at step 3 of 3 of the Text Import Wizard (see Figure 4 on next page).

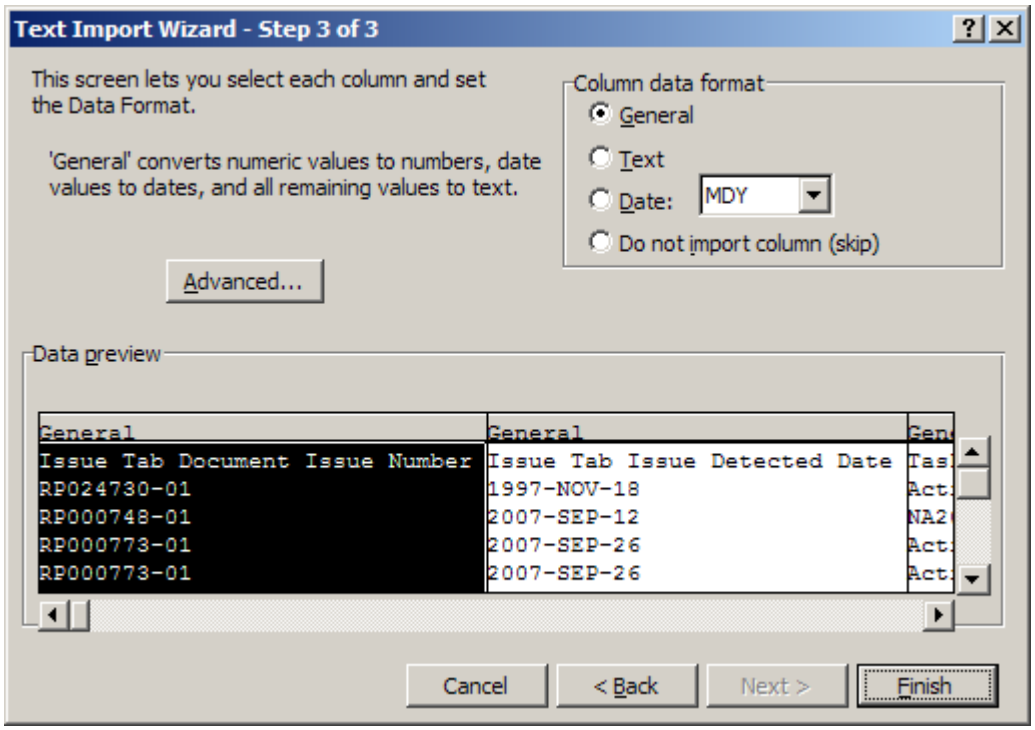


Figure 4

j. The resulting Excel worksheet should now appear.

k. Save the sheet to a location of your choice by using the '**Save As**' command under the '**File**' menu making sure to select '**.xls**' as the file type in the Save As dialog box.

2. **Create the Import Filter from the Excel Data Model**:

a. Launch TechOasis, select the '**Import Excel Table**' radio button and then click '**OK**'.

Note: The first time you launch the TechOASIS application, you will be prompted for the registration code as provided.

b. Locate the Excel you file you wish to import in the '**Import Data**' dialog box and click '**Open**'.

c. If your Excel workbook contains multiple worksheets, a dialog box may appear asking you to select which worksheet contains the desired data. If this occurs, select the worksheet from the list and click '**OK**'.

d. The import process should now begin and during this process, an icon will appear showing that data is being processed.

e. Once data processing has completed, a summary is displayed showing all of the column headings and associated information.

f. Accesses the Import Engine Editor by selecting the '**Tools**' menu, then the '**Import Engine Editor**'.

   i. From the '**File**' menu, select '**New**'

   ii. Go to the '**File**' and select '**Open from Dataset**'.

   iii. Double-click on '**Excel Quick Import'**.

   iv. Highlight '**Excel Quick Import**' in the database window. The fields will automatically populate below.

      1. Typical field and database settings can be found in the additional figures 4-6 on the following pages.

      2. Use these settings unless a custom export file has been generated that is different from that as defined in the WEBPCASS/iPRACA query and data export procedure located in the TechOASIS server folder.

   v. Right-click on '**Excel Quick Import**', in the database section, and rename the field. This will be the name of your new import filter. Then go to the '**File**' menu and select '**Save As**' to put the new configuration file in the desired directory.

3. **Basic Data Import**:

a. The first time you Import Data, you are presented with a dialog box, where you choose which import method to use: the Import Wizard or the Classic Interface. Either selection will perform the desired import so choosing between the two options is based purely on user preference and TechOasis familiarity level.

i. From the '**File**' menu, select '**Import Raw Data**'.

ii. Click on '**Select Files**' and when the '**Open**' dialog box appears, select the desired tilde delimited data file that you obtained from your data query/export and click '**Open**'. Follow the directions until you are asked to select the filter.

iii. Choose '**Select New Filter Directory**' and select the import filter that you created earlier.

iv. Continue to open your data file. The data will appear in the correct formant and you are now ready to use the program to create lists, matrices, etc…

Additional Figures

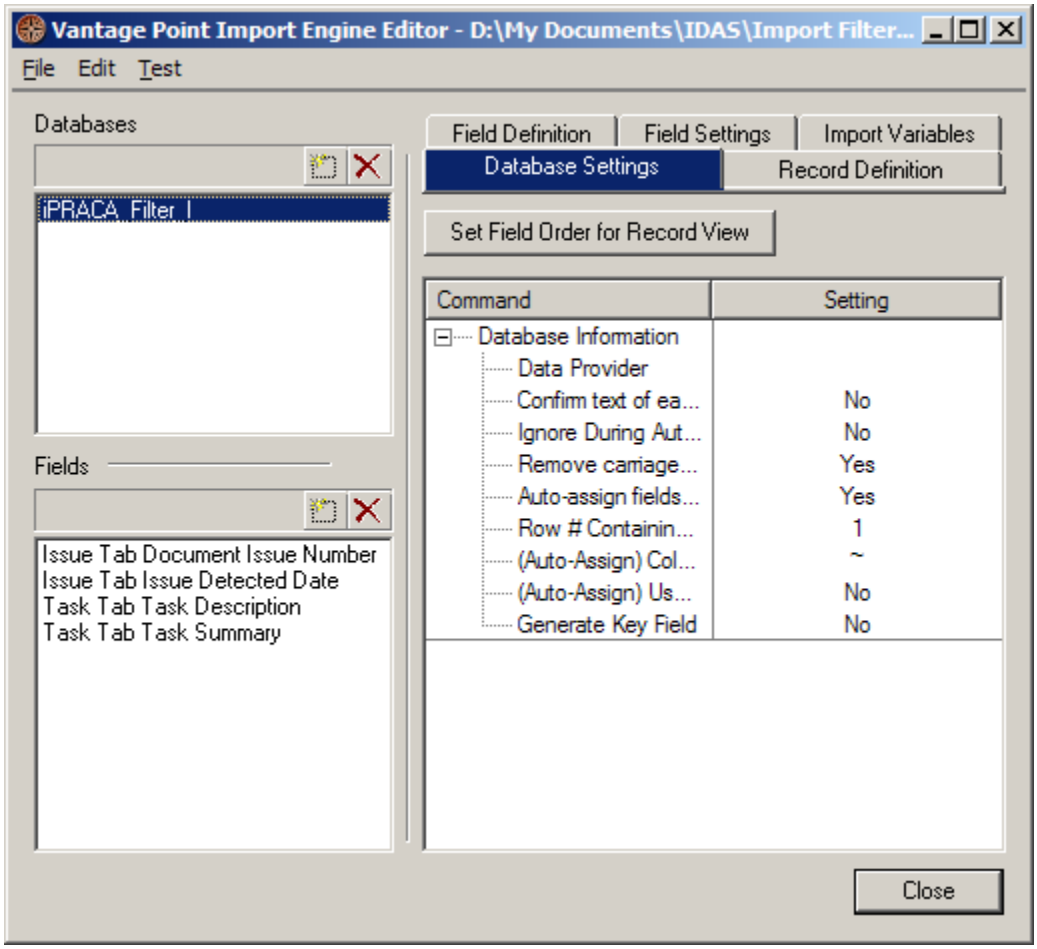


Figure 5: Typical Database Settings Configuration Window

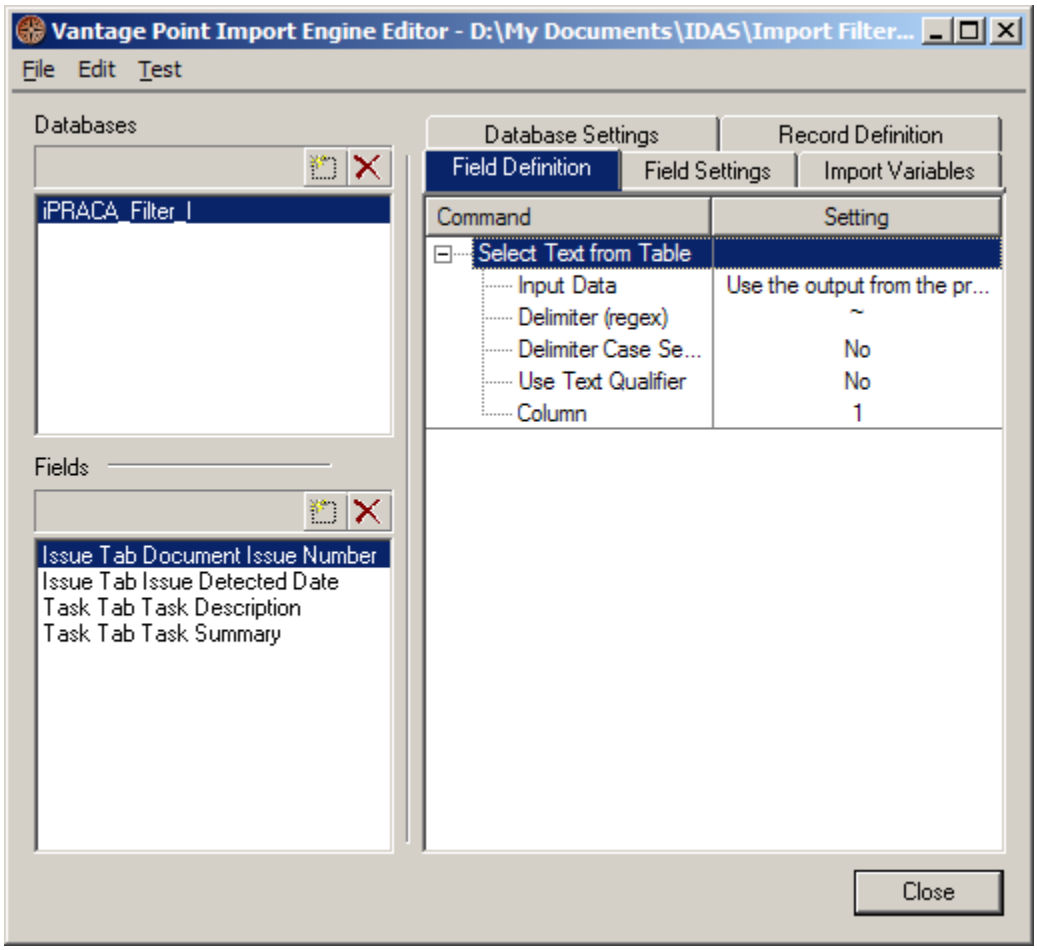


Figure 6: Typical Field Definition Configuration Window

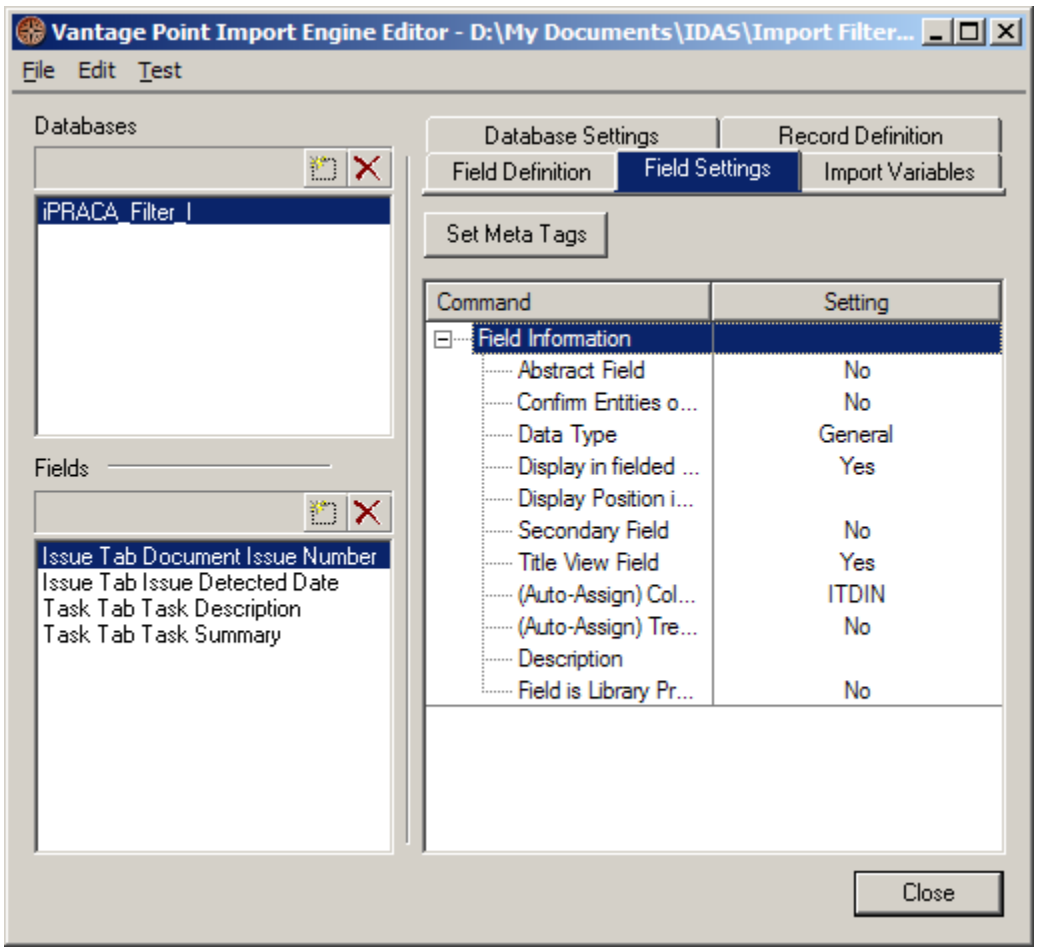


Figure 7: Typical Field Settings Configuration Window

TechOASIS Software Basic Hands-On Introductory Resource Guide

Objective

The ultimate purpose of the document is to provide a hands-on guide to the tools and utilities found within the TechOASIS suite.

At this time, the IDAS team is working to further explore and validate the capabilities and application of Vantage Point Software's TechOASIS text mining solution. This document's objective is to provide a high-level guide to resources to assist users in applying key tools and utilities within the TechOASIS application. The current version of this document serves as a straw-man for development of a detailed hands-on guide and quick access reference to support tools.

Users are encouraged to use the identified resources as they work through their own specific text mining trials and share lessons learned and developed methods. With that, text mining becomes in some senses, an open-source community based skill.

For further information or to participate in this informational exchange effort, please contact Charles Wilson, SAIC at KSC, (321) 867-4430 or charles.a.wilson@nasa.gov.

AS FOLLOW-ON TO THIS GUIDE, USERS SHOULD REFER TO PROCEDURE 5

TechOASIS Identified Resources

Lists & Data Cleaning:

An important stepping stone for data analysis within TechOASIS is what is called list view. Please use the section titled 'List' and the section titled 'Tools for Working With Lists' starting on pages 55 and 72 respectively.

TechOASIS Tools & Utilities:

Preliminary exploration with TechOASIS has revealed that there are multiple tools likely to be applicable for use in text mining applications as follows:

1. **Extract Nearby Phrases**: The identification of phrases that occur based upon their proximity to items in a predefined group.

   For details on using this capability, see the Files section, page 54 of the VantagePoint User's Guide.

2. **Co-Occurrence Matrix**: Generates a table that outlines the number of records in the dataset where the row and column list items coexist.

   For details on using this capability, see the Co-Occurrence section, page 107 of the VantagePoint User's Guide.

3. **Correlation Matrix**: Generates a table that outlines the degree of correlation between items that tend to occur in the same record (correlation).

   There are multiple varieties of the Correlation Matrix including Auto-Correlation and Cross-Correlation styles.

   For details on using this capability, see the Correlation Matrix section, page 116 of the VantagePoint User's Guide.

4. **Factor Matrix**: This is a statistical analysis tool that attempts to identify related list items in the dataset.

   For details on using this capability, see the Factor Matrix section, page 122 of the VantagePoint User's Guide.

TechOASIS Built-In Tutorials and How-To Videos:

TechOASIS has many built in demonstrated tutorials and how-to style videos that can be access through the Analyst Guide section under the Help menu.

See Figure 1 for a screen shot of the Analyst Guide's contents and point-click access instructions.

Analyst Guide: Introductory Demonstrations Section:

By clicking the 'Introductory Demonstrations' link in the Analyst Guide, the user is taken to a series of video based tutorials encompassing a variety of subjects including:

- Basic Maintenance Functions
- Data Cleanup
- Data Field Operations
- Mapping Functions
- Advanced Topics

See Figure 2 for a screen shot of the Introductory Demonstrations list of contents.

Analyst's Handbook Section:

By clicking the 'Analyst's Handbook link, the user is taken to an option screen containing links to a series of reference write-ups and mini articles on subjects to include:

- Introductory Comments
- Data Cleanup
- Data Analysis
- General Feature Reference

See Figure 3 for a screen shot of the Analyst's Handbook contents screen.

Analyst's Guide Additional Features:

In addition to the aforementioned contents found within the Analyst's Guide, there are links to the following:

- Walkthroughs of Common Analysis Techniques
- A Frequently Asked Question (FAQ) section
- A Link to a general help section
- A link to the Vantage Point software website (developer of TechOASIS)

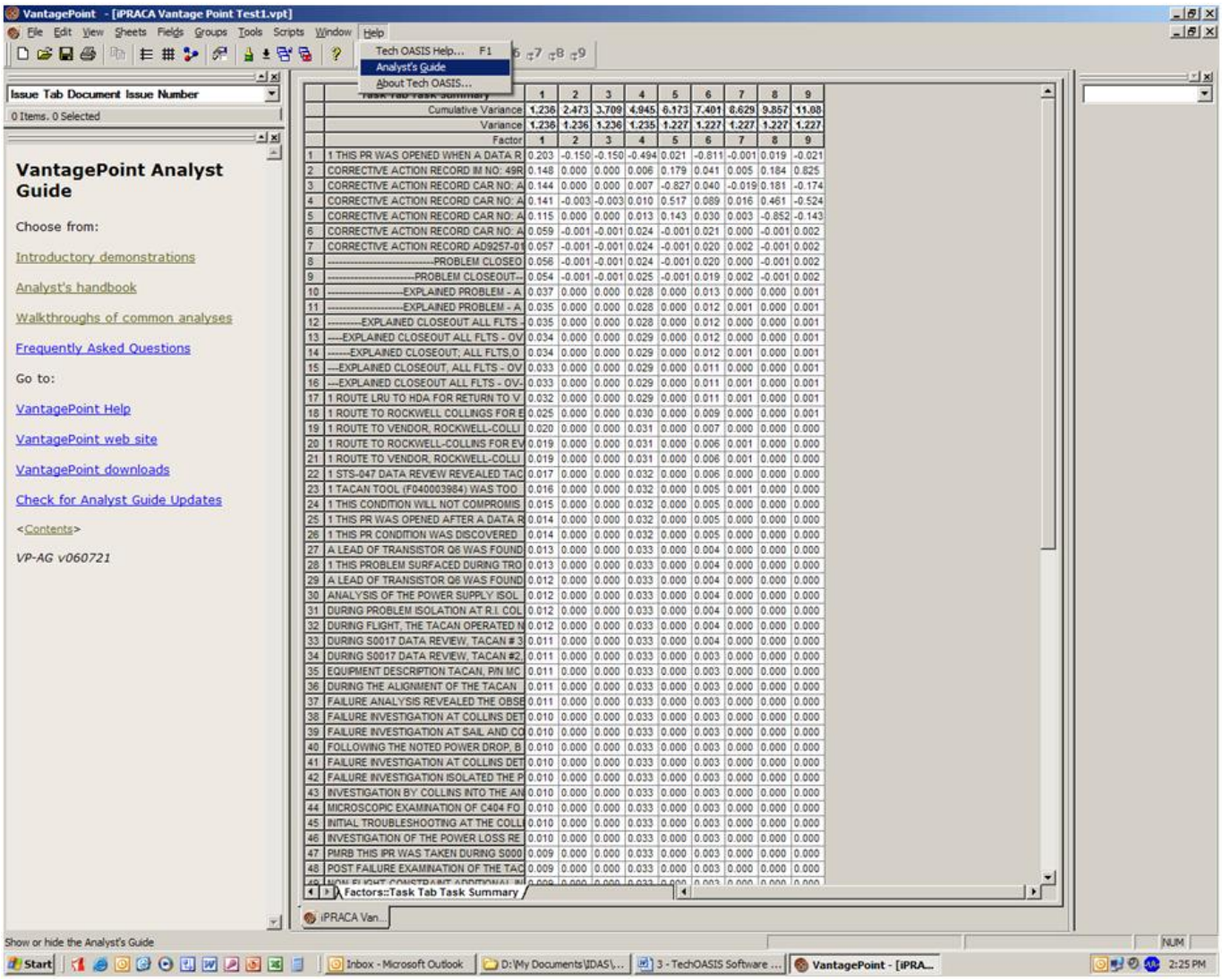
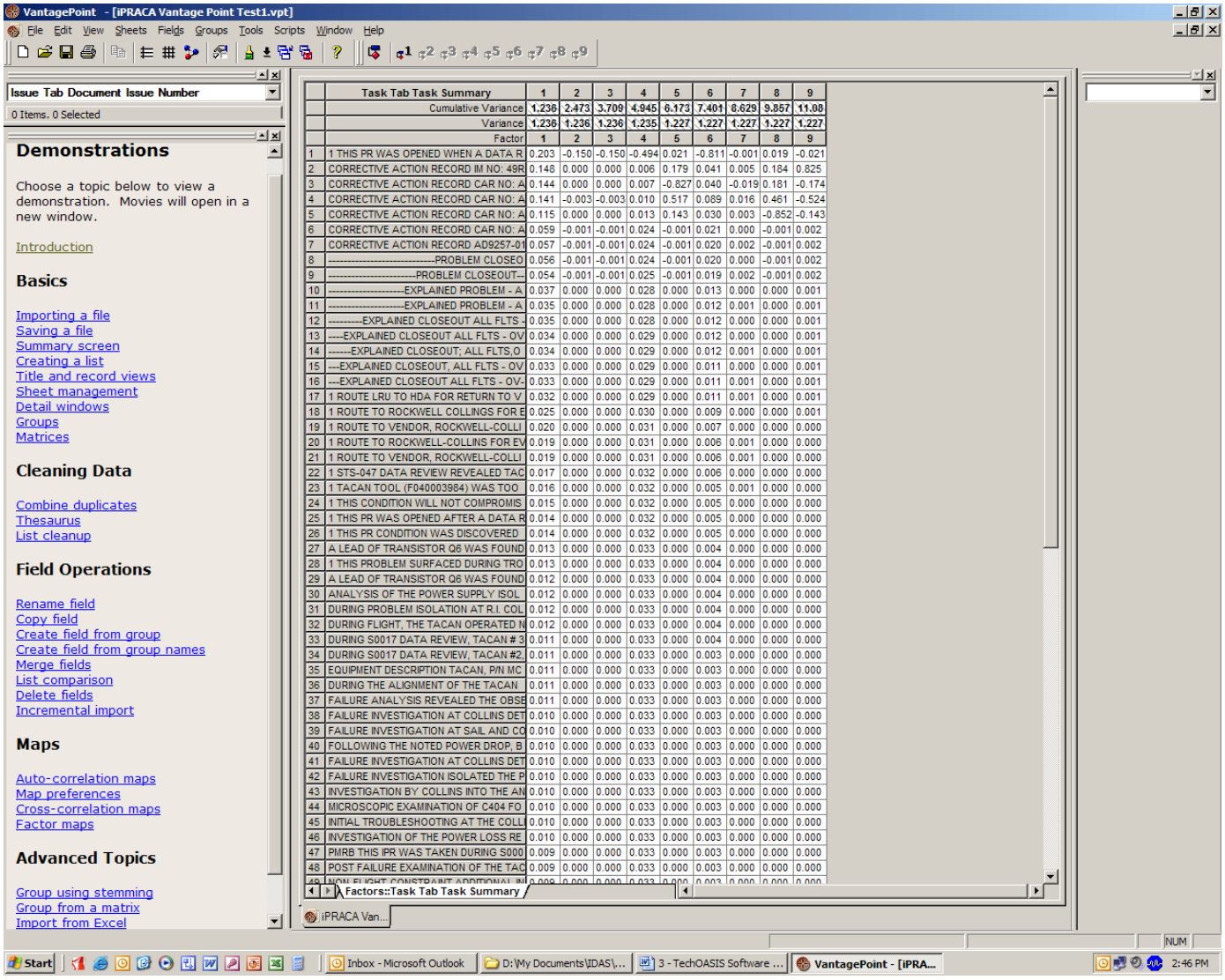
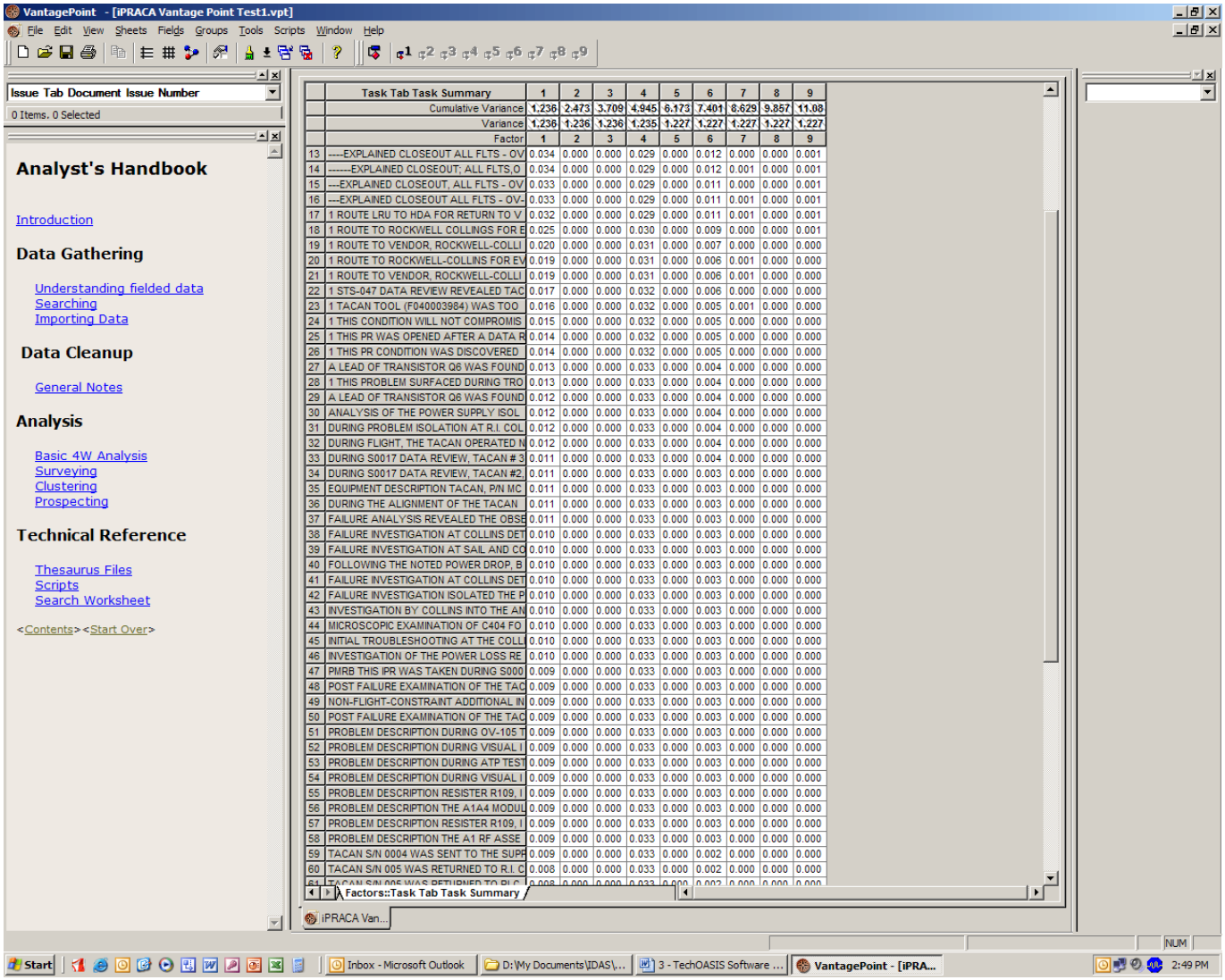


Figure 1: Accessing the Analysts Guide



	Task Tab Task Summary	1	2	3	4	5	6	7	8	9
	Cumulative Variance	1.236	2.473	3.709	4.945	6.173	7.401	8.629	9.857	11.08
	Variance	1.236	1.236	1.236	1.235	1.227	1.227	1.227	1.227	1.227
	Factor	1	2	3	4	5	6	7	8	9
1	1 THIS PR WAS OPENED WHEN A DATA R	0.203	-0.150	-0.150	-0.494	0.021	-0.811	-0.001	0.019	-0.021
2	CORRECTIVE ACTION RECORD IM NO: 49R	0.148	0.000	0.000	0.006	0.179	0.041	0.005	0.184	0.825
3	CORRECTIVE ACTION RECORD CAR NO: A	0.144	0.000	0.000	0.007	-0.827	0.040	-0.019	0.181	-0.174
4	CORRECTIVE ACTION RECORD CAR NO: A	0.141	-0.003	-0.003	0.010	0.517	0.089	0.016	0.461	-0.524
5	CORRECTIVE ACTION RECORD CAR NO: A	0.115	0.000	0.000	0.013	0.143	0.030	0.003	-0.852	-0.143
6	CORRECTIVE ACTION RECORD CAR NO: A	0.059	-0.001	-0.001	0.024	-0.001	0.021	0.000	-0.001	0.002
7	CORRECTIVE ACTION RECORD AD9257-01	0.057	-0.001	-0.001	0.024	-0.001	0.020	0.002	-0.001	0.002
8	----------PROBLEM CLOSEO	0.056	-0.001	-0.001	0.024	-0.001	0.020	0.000	-0.001	0.002
9	----------PROBLEM CLOSEOUT--	0.054	-0.001	-0.001	0.025	-0.001	0.019	0.002	-0.001	0.002
10	----------EXPLAINED PROBLEM - A	0.037	0.000	0.000	0.028	0.000	0.013	0.000	0.000	0.001
11	----------EXPLAINED PROBLEM - A	0.035	0.000	0.000	0.028	0.000	0.012	0.001	0.000	0.001
12	---------EXPLAINED CLOSEOUT ALL FLTS -	0.035	0.000	0.000	0.028	0.000	0.012	0.000	0.000	0.001
13	----EXPLAINED CLOSEOUT ALL FLTS - OV	0.034	0.000	0.000	0.029	0.000	0.012	0.000	0.000	0.001
14	-------EXPLAINED CLOSEOUT; ALL FLTS,O	0.034	0.000	0.000	0.029	0.000	0.012	0.001	0.000	0.001
15	---EXPLAINED CLOSEOUT, ALL FLTS - OV	0.033	0.000	0.000	0.029	0.000	0.011	0.000	0.000	0.001
16	---EXPLAINED CLOSEOUT ALL FLTS - OV-	0.033	0.000	0.000	0.029	0.000	0.011	0.001	0.000	0.001
17	1 ROUTE LRU TO HDA FOR RETURN TO V	0.032	0.000	0.000	0.029	0.000	0.011	0.001	0.000	0.001
18	1 ROUTE TO ROCKWELL COLLINGS FOR E	0.025	0.000	0.000	0.030	0.000	0.009	0.000	0.000	0.001
19	1 ROUTE TO VENDOR, ROCKWELL-COLLI	0.020	0.000	0.000	0.031	0.000	0.007	0.000	0.000	0.000
20	1 ROUTE TO ROCKWELL-COLLINS FOR EV	0.019	0.000	0.000	0.031	0.000	0.006	0.001	0.000	0.000
21	1 ROUTE TO VENDOR, ROCKWELL-COLLI	0.019	0.000	0.000	0.031	0.000	0.006	0.001	0.000	0.000
22	1 STS-047 DATA REVIEW REVEALED TAC	0.017	0.000	0.000	0.032	0.000	0.006	0.000	0.000	0.000
23	1 TACAN TOOL (F040003984) WAS TOO	0.016	0.000	0.000	0.032	0.000	0.005	0.001	0.000	0.000
24	1 THIS CONDITION WILL NOT COMPROMIS	0.015	0.000	0.000	0.032	0.000	0.005	0.000	0.000	0.000
25	1 THIS PR WAS OPENED AFTER A DATA R	0.014	0.000	0.000	0.032	0.000	0.005	0.000	0.000	0.000
26	1 THIS PR CONDITION WAS DISCOVERED	0.014	0.000	0.000	0.032	0.000	0.005	0.000	0.000	0.000
27	A LEAD OF TRANSISTOR Q6 WAS FOUND	0.013	0.000	0.000	0.033	0.000	0.004	0.000	0.000	0.000
28	1 THIS PROBLEM SURFACED DURING TRO	0.013	0.000	0.000	0.033	0.000	0.004	0.000	0.000	0.000
29	A LEAD OF TRANSISTOR Q6 WAS FOUND	0.012	0.000	0.000	0.033	0.000	0.004	0.000	0.000	0.000
30	ANALYSIS OF THE POWER SUPPLY ISOL	0.012	0.000	0.000	0.033	0.000	0.004	0.000	0.000	0.000
31	DURING PROBLEM ISOLATION AT R.I. COL	0.012	0.000	0.000	0.033	0.000	0.004	0.000	0.000	0.000
32	DURING FLIGHT, THE TACAN OPERATED N	0.012	0.000	0.000	0.033	0.000	0.004	0.000	0.000	0.000
33	DURING S0017 DATA REVIEW, TACAN # 3	0.011	0.000	0.000	0.033	0.000	0.004	0.000	0.000	0.000
34	DURING S0017 DATA REVIEW, TACAN #2,	0.011	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
35	EQUIPMENT DESCRIPTION TACAN, P/N MC	0.011	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
36	DURING THE ALIGNMENT OF THE TACAN	0.011	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
37	FAILURE ANALYSIS REVEALED THE OBSE	0.011	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
38	FAILURE INVESTIGATION AT COLLINS DET	0.010	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
39	FAILURE INVESTIGATION AT SAIL AND CO	0.010	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
40	FOLLOWING THE NOTED POWER DROP, B	0.010	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
41	FAILURE INVESTIGATION AT COLLINS DET	0.010	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
42	FAILURE INVESTIGATION ISOLATED THE P	0.010	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
43	INVESTIGATION BY COLLINS INTO THE AN	0.010	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
44	MICROSCOPIC EXAMINATION OF C404 FO	0.010	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
45	INITIAL TROUBLESHOOTING AT THE COLL	0.010	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
46	INVESTIGATION OF THE POWER LOSS RE	0.010	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
47	PMRB THIS IPR WAS TAKEN DURING S000	0.009	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
48	POST FAILURE EXAMINATION OF THE TAC	0.009	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
49	NON FLIGHT CONSTRAINT ADDITIONAL W	0.009	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000

Figure 2: Various Functional Demonstrations (via clicking Introductory Demonstrations)



	Task Tab Task Summary	1	2	3	4	5	6	7	8	9
	Cumulative Variance	1.236	2.473	3.709	4.945	6.173	7.401	8.629	9.857	11.08
	Variance	1.236	1.236	1.236	1.235	1.227	1.227	1.227	1.227	1.227
	Factor	1	2	3	4	5	6	7	8	9
13	----EXPLAINED CLOSEOUT ALL FLTS - OV	0.034	0.000	0.000	0.029	0.000	0.012	0.000	0.000	0.001
14	------EXPLAINED CLOSEOUT; ALL FLTS,O	0.034	0.000	0.000	0.029	0.000	0.012	0.001	0.000	0.001
15	---EXPLAINED CLOSEOUT, ALL FLTS - OV	0.033	0.000	0.000	0.029	0.000	0.011	0.000	0.000	0.001
16	---EXPLAINED CLOSEOUT ALL FLTS - OV-	0.033	0.000	0.000	0.029	0.000	0.011	0.001	0.000	0.001
17	1 ROUTE LRU TO HDA FOR RETURN TO V	0.032	0.000	0.000	0.029	0.000	0.011	0.001	0.000	0.001
18	1 ROUTE TO ROCKWELL COLLINGS FOR E	0.025	0.000	0.000	0.030	0.000	0.009	0.000	0.000	0.001
19	1 ROUTE TO VENDOR, ROCKWELL-COLLI	0.020	0.000	0.000	0.031	0.000	0.007	0.000	0.000	0.000
20	1 ROUTE TO ROCKWELL-COLLINS FOR EV	0.019	0.000	0.000	0.031	0.000	0.006	0.001	0.000	0.000
21	1 ROUTE TO VENDOR, ROCKWELL-COLLI	0.019	0.000	0.000	0.031	0.000	0.006	0.001	0.000	0.000
22	1 STS-047 DATA REVIEW REVEALED TAC	0.017	0.000	0.000	0.032	0.000	0.006	0.000	0.000	0.000
23	1 TACAN TOOL (F040003984) WAS TOO	0.016	0.000	0.000	0.032	0.000	0.005	0.001	0.000	0.000
24	1 THIS CONDITION WILL NOT COMPROMIS	0.015	0.000	0.000	0.032	0.000	0.005	0.000	0.000	0.000
25	1 THIS PR WAS OPENED AFTER A DATA R	0.014	0.000	0.000	0.032	0.000	0.005	0.000	0.000	0.000
26	1 THIS PR CONDITION WAS DISCOVERED	0.014	0.000	0.000	0.032	0.000	0.005	0.000	0.000	0.000
27	A LEAD OF TRANSISTOR Q6 WAS FOUND	0.013	0.000	0.000	0.033	0.000	0.004	0.000	0.000	0.000
28	1 THIS PROBLEM SURFACED DURING TRO	0.013	0.000	0.000	0.033	0.000	0.004	0.000	0.000	0.000
29	A LEAD OF TRANSISTOR Q6 WAS FOUND	0.012	0.000	0.000	0.033	0.000	0.004	0.000	0.000	0.000
30	ANALYSIS OF THE POWER SUPPLY ISOL	0.012	0.000	0.000	0.033	0.000	0.004	0.000	0.000	0.000
31	DURING PROBLEM ISOLATION AT R.I. COL	0.012	0.000	0.000	0.033	0.000	0.004	0.000	0.000	0.000
32	DURING FLIGHT, THE TACAN OPERATED N	0.012	0.000	0.000	0.033	0.000	0.004	0.000	0.000	0.000
33	DURING S0017 DATA REVIEW, TACAN # 3	0.011	0.000	0.000	0.033	0.000	0.004	0.000	0.000	0.000
34	DURING S0017 DATA REVIEW, TACAN #2,	0.011	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
35	EQUIPMENT DESCRIPTION TACAN, P/N MC	0.011	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
36	DURING THE ALIGNMENT OF THE TACAN	0.011	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
37	FAILURE ANALYSIS REVEALED THE OBSE	0.011	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
38	FAILURE INVESTIGATION AT COLLINS DET	0.010	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
39	FAILURE INVESTIGATION AT SAIL AND CO	0.010	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
40	FOLLOWING THE NOTED POWER DROP, B	0.010	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
41	FAILURE INVESTIGATION AT COLLINS DET	0.010	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
42	FAILURE INVESTIGATION ISOLATED THE P	0.010	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
43	INVESTIGATION BY COLLINS INTO THE AN	0.010	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
44	MICROSCOPIC EXAMINATION OF C404 FO	0.010	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
45	INITIAL TROUBLESHOOTING AT THE COLL	0.010	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
46	INVESTIGATION OF THE POWER LOSS RE	0.010	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
47	PMRB THIS IPR WAS TAKEN DURING S000	0.009	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
48	POST FAILURE EXAMINATION OF THE TAC	0.009	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
49	NON-FLIGHT-CONSTRAINT ADDITIONAL IN	0.009	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
50	POST FAILURE EXAMINATION OF THE TAC	0.009	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
51	PROBLEM DESCRIPTION DURING OV-105 T	0.009	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
52	PROBLEM DESCRIPTION DURING VISUAL I	0.009	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
53	PROBLEM DESCRIPTION DURING ATP TEST	0.009	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
54	PROBLEM DESCRIPTION DURING VISUAL I	0.009	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
55	PROBLEM DESCRIPTION RESISTER R109, I	0.009	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
56	PROBLEM DESCRIPTION THE A1A4 MODUL	0.009	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
57	PROBLEM DESCRIPTION RESISTER R109, I	0.009	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
58	PROBLEM DESCRIPTION THE A1 RF ASSE	0.009	0.000	0.000	0.033	0.000	0.003	0.000	0.000	0.000
59	TACAN S/N 0004 WAS SENT TO THE SUPP	0.009	0.000	0.000	0.033	0.000	0.002	0.000	0.000	0.000
60	TACAN S/N 005 WAS RETURNED TO R.I. C	0.008	0.000	0.000	0.033	0.000	0.002	0.000	0.000	0.000
61	TACAN S/N 005 WAS RETURNED TO R.I. C	0.008	0.000	0.000	0.033	0.000	0.002	0.000	0.000	0.000

Figure 3: Contents of the Analyst's Handbook

Data Analysis and Formulation of Conclusions Utilizing TechOASIS

Objective

The purpose of this document is to provide users, who have completed processed data through the TechOASIS application, a means to validate their data analysis techniques and arrive at valid conclusions.

As the IDAS team is in its early stage of exploration, these methods and processes have not yet been determined. However, we welcome input from the KSC/NASA community as we build a knowledge base where methods, techniques, and other supporting information can be exchanged in an open forum type environment.

For further information or to participate in this informational exchange effort, please contact Charles Wilson, SAIC at KSC, (321) 867-4430 or charles.a.wilson@nasa.gov.