

**COMMENT RESOLUTION MATRIX: Re-Entry Data Message R1.7
May 2019**

Comment led to document changes	Comment did not lead to document changes	Can/will be fixed by CCSDS technical editor	Interesting technical point, to be "archived" for RDM v2.0
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Page	Section	Line	Type	Comment/ Rationale	Source of Comment (Name/Agency)	Suggested Disposition	Disposition (Completed by Principal Editor)
G-7	G2	1	ed	PROBABILITY_OF_BURN-UP deviates from Table 3-3	DLR/GSOC	Correct on page G-7	Done
G-7	G2	3	ed	PROBABILITY_OF_BREAK-IUP deviates from Table 3-3	DLR/GSOC	Correct on page G-7	Done
G-7	G2		ed	IMPACT_n_CROSS_TRCK deviates from Table 3-3	DLR/GSOC	Correct on page G-7	Done
F-1	F	1	Ed	In the first two paragraphs there are several references to tables in the document, the word "table" should have a capital "T".	B. Swinburne/Airbus	Change "table" to "Table".	The CCSDS technical editor wants those as lowercase, and will change them to lowercase anyway.
3-8	3.5.2	10	TE	In the case of fragmentation(s), what should be considered as NOMINAL_IMPACT_EPOCH?	D. Oltrogge/AGI	Is this the largest fragment by mass? Etc. You explicitly state in 3.5.17 that the nominal location corresponds to the highest probability of fragments impacting there. I presume that the epoch corresponds to this (?)	The NOMINAL_IMPACT_EPOCH is an optional keyword. In the case fragmentation is predicted during re-entry, how it is used would depend on the RDM provider. They could just provide the _START/_END interval covering all fragments.
3-8	3.5.2	11,12	TE	Is the start/end of impact correspond to some confidence %, or is this 0 th and 100 th percentile?	D. Oltrogge/AGI	May want to explicitly state.	This was deliberately left unspecified, as different re-entry prediction systems use different values

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							for this (end empirical approaches are more YOLO than one would expect). This is something I would plan to address in the RDM v2, as I think it might make sense to make the epochs tied to the impact location intervals given.
3-12	3.5.2	3	TE	Is THRUST_ACCELERATION meant to be directional? Is it only meant to be in-track? What happens if the user intends to combine in-track and cross-track (or more likely, radial)?	D. Oltrogge/AGI	Suggest clarification.	It is only meant to be in-track, as: This will affect orbit lifetime more (it is the propagation up to the re-entry epoch as stated in the description, not ground impact). This is what the CDM has (I am not sure why the CDM is limited to in-track though). If the user wants to exchange detailed thrust information, I think they should use an OCM.
3-12	3.5.2	6,7	TE	Unclear if TIME_LASTOB_START and _END are epochs, or time since epoch, or what.	D. Oltrogge/AGI	Suggest we find good solution and make consistent between RDM	They are epochs and work in the same ways as the CDM v1.0:

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						and ODM. At a minimum, this needs an example, and needs to clearly show if these are epochs or relative times or what.	<i>Formatting rules are specified in 5.3.3.5</i> That number paragraph specifies CCSDS time strings.
3-12	3.5.2	8	TE	Unclear in an RDM why "RECOMMENDED_OD_SPAN" is useful?	D. Oltrogge/AGI	Consider deleting.	Consistency: I am re-using that block from the CDM. I am wondering why it is useful there. Maybe there was a maneuver in between some tracks?
3-12	3.5.2	12,1 3	TE	"TRACK" is not defined	D. Oltrogge/AGI	Consider defining	Sensor track is defined in annex G as: Sensor Track: <i>A set of at least three observations for the same object, observed by the same sensor, where each observation is within a specified number of minutes (which is dependent on the orbit regime of the object) of the other observations in the track.</i>
3-13	3.5.5		TE	I still find this multiple prediction span use of separate WINDOW	D. Oltrogge/AGI	Consider.	The idea was to offer the appropriate units for long-term and

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				keywords unnecessary. This opens the door to having inconsistencies throughout, as you point out in 3.5.7, 3.5.8, 3.5.9. Not clear why you want to introduce this complexity.			<p>short-term prediction. Days can be used for long-term predictions, while an epoch (with fraction of a second precision) can be used for short-term predictions.</p> <p>The thinking behind this was:</p> <p>Long term prediction might be used to check that mitigation guidelines are met, or for something predicted to re-enter in 20±4 months. In this case it is more helpful to have the orbit lifetime in days, as an epoch would be too much to interpret (bear in mind the window will still be several months).</p> <p>For short term prediction, the epoch is actually easier to interpret, as you can use the to-the-second</p>

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							precision and the window will be hours at most. So, for short-term predictions you will have both a lifetime, in days, and an epoch, as a CCSDS time string. The value of the lifetime conveys whether long or short-term prediction was used.
G-4	G1.5	2		Change 'losses' to 'loses'	Halverson/NASA	fix	Fixed
G-7	G2			In the last sentence in 'IMPACT_n_CONFIDENCE ...', starts with 'Since the probability distribution is skewed ...' Change 'the method is chosen' to 'the method chosen'	Halverson/NASA	fix	Fixed
1-1	1.1		ed	"These messages can be used" singular to be preferred as singular is used in previous sentence	Alain LAMY / CNES	"This message can be used"	fixed
1-1	1.2		ed	It contains the specifications for an RDM designed ..."	Alain LAMY / CNES	Change wording	Changed to "this Blue Book"

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				What is "it" ? if "it" stands for RDM, the sentence is strange: the RDM contains the specifications for an RDM			
1-1	1.2		ed	"For an RDM designed for ..."	Alain LAMY / CNES	A RDM ? (not quite sure)	It's an RDM. RDM begins with a vowel 'a' sound: ar-dee-em.
1-1	1.2		ed	"Re-entry data includes remaining ..."	Alain LAMY / CNES	include	I think current usage treats data as an uncountable noun with a singular verb. From Wiktionary: <i>This word is more often used as an uncountable noun with a singular verb than as a plural noun with singular datum. The latter is almost entirely restricted to formal contexts. Since native speakers did not complain, I would leave it as is.</i>
1-1	1.2		ed	"The CCSDS Navigation Working Group should be informed of new optional keywords..."	Alain LAMY / CNES	Replace "new keywords" by "proposed new keywords"	They are user defined in current use but could become optional RDM keywords in the future (<i>new optional keywords for possible inclusion in future</i>)

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				Are these new keywords user-defined keywords?			<i>revisions of the standard).</i>
1-2	1.2		ed	"to the algorithms used to produce the data within" Within necessary ?	Alain LAMY / CNES	Remove "within"	
1-3	1.5		ed	"The the extent possible, an effort has been made" The The ?	Alain LAMY / CNES		Fixed to "to the [...]"
1-4	1.5	a)	ed / te	"for a circular orbit altitude below 200 km" Why this information? Is it always true ?	Alain LAMY / CNES	Remove "(for a circular orbit altitude below 200 km)"	That wording was requested during agency review. The border is a bit fuzzy. If you are GOCE and thrusting, you obviously won't re-enter in a few days from below 200 km.
1-5	1.6		ed	http://sanaregistry.org/r/organizations/ https instead of http ? (as in reference 8)	Alain LAMY / CNES		fixed
2-1	2.2		ed	"The RDM is an ASCII format ..."	Alain LAMY / CNES	Remove "an"	I think the 'an' is necessary there.

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				In the CDM (for instance) : "The CDM is ASCII format encoded"			
5-1	52.2.21 / 5.2.2.2		ed	5.2.2.1 refer to "spaces" 5.2.22 refer to "blanks" Use same terminology throughout the book	Alain LAMY / CNES	Use spaces instead of blanks	This is the same in other messages. I did switch 5.2.2.2 to spaces, as all other whitespace characters (apart from line termination) are not allowed.
5-1	5.2.2.2		ed / ge	"Only printable ASCII characters..." EOL characters are not printable so the first sentence is not correct	Alain LAMY / CNES	Change sentence	The requirement makes an explicit exception for line termination characters (emphasis mine): <i>5.2.2.2 Only printable ASCII characters and blanks shall be used. Control characters (such as TAB, etc.) shall not be used, with the exception of the line termination</i>

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							<i>characters specified below.</i>
5-1	5.2.3.1		ed	"A nonempty"	Alain LAMY / CNES	A non empty (space between non and empty)	Nonempty is a word, per Wiktionary: nonempty (<i>not comparable</i>) 1. Not empty, containing something. 2. (<i>mathematics</i>) Of a <u>set</u> , containing at least one <u>element</u> , thereby being distinct from the <u>empty set</u> .
5-1	5.2.3.3		ed	"Blank spaces" (see comment above)	Alain LAMY / CNES	Replace by "spaces" or whatever word is chosen	Changed to 'space'
5-1	5.2.3.4		ed	"Blanks" => spaces (Same as above)	Alain LAMY / CNES		This applies to all whitespace characters, not just space.

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5-2	5.3.2.3		ed / ge	<p>"All header, metadata, and data lines shall use 'keyword = value' notation"</p> <p>Comment lines do not follow this syntax</p>	Alain LAMY / CNES	Add that comment lines are not concerned	This is present in other Blue Books as well. I was under the impression COMMENT is a variation of the KVN.
5-3	5.3.2.5		ed	<p>"must not contain blanks"</p> <p>Blanks or spaces?</p>	Alain LAMY / CNES	Check for "blank(s)" or "space(s)" in whole document and replace by the chosen word / expression	Applies to all whitespace characters, not just space.
5-4	5.3.3.3	e)	ed	<p>"The maximum positive floating point value is approximately $1.798 \cdot 10^{308}$, with 16 significant decimal digits precision ..."</p> <p>This is not a requirement. It should be a note.</p>	Alain LAMY / CNES		That part is in "statement of fact", rather than requirement language.
5-4	5.3.5		ed	"White space shall be retained"	Alain LAMY / CNES	White spaces ?	It refers to 'white space' or 'whitespace' (from Wiktionary): Alternative forms whitespace Pronunciation (UK) IPA(key): /ˈwaɪt speɪs/ Rhymes: -eɪs Noun[edit]

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							<p>white space (countable and uncountable, plural white spaces)</p> <p>White area between written characters and graphic regions on a produced page or computer display; blanks and the vertical blank lines in between paragraphs, or other organized rows of text lines (poetry). (computer science)</p> <p>Any single character or series of characters that represents horizontal or vertical space in typography. Synonyms (computer science) whitespace character</p>
Viii	Table TOC			Table E-1 listing does not have the text left justified and also is spread across two lines	patrick.zimmerman@nasa.gov	Correct justification and reduce to a single line	The technical editor will fix this in the Blue Book as he re-does all the front matter. I don't know how to fix it anyway.

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A-4	A2.2			The word 're-entry' is not hyphenated in the feature description field of item 35. All other cases of re-entry use the hyphen.	patrick.zimmerman@nasa.gov	Suggest use of hyphen for re-entry in this description	fixed
C-1	Para 1	6	Ed	Suggest re-organizing the sentence regarding Figure C-2 to match the structure of the prior sentence regarding C-1. So that both have the arrangement: Figure C-X ..., the kind..., and containing....	patrick.zimmerman@nasa.gov	Suggest adjusted sentence of: Figure C-2 shows a more complex message, the kind of information two Member Agencies might exchange with each other for short-term re-entry predictions and containing the state vector, position/velocity covariance matrix, etc.	fixed
C-1	Figure C-2		Ed	The font size in Figure C-2 is smaller than the font size in the other three figures in Annex C.	patrick.zimmerman@nasa.gov	Suggest increasing the font size of the text in Figure C-2 to match the size in the other three figures	Fixed, the technical editor will love that.
C-3	Figure C-3	2	Ed	W3.org hyperlink contains the closing quote mark ("), breaking link and resulting in 404 page not found. Also, text is a larger font than remainder of message	patrick.zimmerman@nasa.gov	Suggest correcting the link and removing the closing quote mark. Suggest changing link text from TimesNewRoman to CourierNew and reduce to font size 10	Fixed (I hope)
C-3	Figure C-3	7	Ed	Comment refers to Annex D and Figure D-1, but believe it should be Annex C and Figure C-1	patrick.zimmerman@nasa.gov	Suggest changing Comment to indicate Annex C and Figure C-1	fixed

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C-3	Figure C-4	2	Ed	W3.org hyperlink contains the closing quote mark ("), breaking link and resulting in 404 page not found. Also, text is a larger font than remainder of message	patrick.zimmerman@nasa.gov	Suggest correcting the link and removing the closing quote mark. Suggest changing link text from TimesNewRoman to CourierNew and reduce to font size 10	Fixed (I hope)
C-3	Figure C-4	7	Ed	Comment refers to Annex D and Figure D-1, but believe it should be Annex C and Figure C-1	patrick.zimmerman@nasa.gov	Suggest changing Comment to indicate Annex C and Figure C-2	fixed
C-5	Figure C-4	7&8	Ed	Closing ">" in wrong spot for CZ_X and CZ_Y, should be after the units identifier	patrick.zimmerman@nasa.gov	Suggest moving closing">" for the CZ_X and CZ_Y lines to after the units identifier	fixed
D-1				Acronym ordering: COSPAR should be after CDM	patrick.zimmerman@nasa.gov	Suggest moving CDM prior to COSPAR	Re-sorted table
D-1				Acronym ordering: OEM should be after ODM	patrick.zimmerman@nasa.gov	Suggest moving ODM prior to OEM	fixed
F-1	Table F-1		Ed	The very first relevant data blocks field indicates: required: none (only mandatory keywords) The four other "required: none" entries do not contain the additional text.	patrick.zimmerman@nasa.gov	Suggest adding "(only mandatory keywords)" if appropriate to the other four data block description fields, or removing those words from the first entry. If appropriate.	Added "(only mandatory keywords)" to the other none entries in the second and third column.
H-1			Ed	H1 reference is never used within the document. Find an appropriate place to include, or determine if it is still needed now that the SANA registry is established.	patrick.zimmerman@nasa.gov	Suggest referencing H1 within document, or deleting, as appropriate	Added sentence referencing H1

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1-1	1.1	a) 2	ed	Word choice... "who" anthropomorphizes a non-human entity	David S. Berry / NASA	From: "... entities who use it" To: "... entities that use it"	fixed
1-1	1.2	4	ed	Readability. The parenthetical phrase between "prediction" and "information" makes it choppy to read.	David S. Berry / NASA	From: "re-entry prediction (though it can be used post-facto as well) information exchange..." To: "re-entry prediction information exchange (though it can be used post-facto as well)..."	changed
1-2	1.3		ed	In line for Annex B, missing Oxford comma	David S. Berry / NASA	From: "...security, SANA and patent..." To: "...security, SANA, and patent..."	fixed
1-3	1.5	1	ed	Repeated word.	David S. Berry / NASA	From: "The the extent..." To: "To the extent..."	Fixed already
1-5	1.6	[7]	ed	Uses "UNOOSA"... you have used "UN OOSA" (with a space) in a few other places in the doc.	David S. Berry / NASA	Their website uses "UNOOSA" with no space, so I think that would be preferable... but if you want to have a space "UN OOSA", then use it in all instances.	Switched the 3 instances of UN OOSA to UNOOSA.

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3-2	3.3		ed/te	MESSAGE_ID: Example only shows numeric character.	David S. Berry / NASA	Add an example that includes alpha characters.	Added example with letters and a dash.
3-3	Table 3-2	3	ed	In comment line in the table, missing Oxford comma.	David S. Berry / NASA	From: "... celestial body it is orbiting and the time system..." To: "... celestial body it is orbiting, and the time system..."	fixed
3-5	Table 3-2		ed	N_BODY_PERTURBATIONS: Example implies comma separated list, text should specify it.	David S. Berry / NASA	From: "List of other bodies..." To: "Comma separated list of other bodies..." or other equivalent phrase.	Switched to comma separated list of ...
3-8	Table 3-3		ed	IMPACT_REF_FRAME: SANA Registry cited used "Body-Fixed" vice "Body-fixed".	David S. Berry / NASA	From: "Body-fixed" To: "Body-Fixed"	fixed
3-10	Table 3-3		ed/te	Requirements language in the comment before the covariance matrix (at the bottom of the page).	David S. Berry / NASA	From: "... can be omitted..." To: "... may be omitted..."	fixed
3-11	Table 3-3		ed	SOLAR_RAD_COEFF missing word	David S. Berry / NASA	From: "Object radiation coefficient" To: "Object solar radiation coefficient"	fixed
3-13	3.5.5		ed/te	I know this is only supposed to be a proofreading review, so "technical" comments are technically forbidden, however, I'm confused by this one. I started out being confused by part (a), since the mandatory keyword has units of "d" (days). The means of	David S. Berry / NASA	It seems to me that 3.5.5 (b) was ignored by the experts who tested the standard, and that there is no permitted way to specify part (a) if the prediction is short-term.	The prototyping engineers did interpret the standard as it was indented, but the wording of 3.5.5 b) is not clear. The point of a) is that if the value is <= 2.0

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				conveying short-term as opposed to medium/long-term is not well specified, since it appears to only allow a value in "days". The boundary of "short term" is not well defined ("the last few days (up to a few weeks)"), and 3.5.5(b) implies that the remaining orbital lifetime is only provided for long and medium-term predictions, thus it's not clear what should be in this mandatory keyword for a short-term re-entry prediction. I looked at the Test Report, and Test Case #5 has the following: "<ORBIT_LIFETIME units="d">0.4166666666666667</ORBIT_LIFETIME>" which is clearly not medium or long term. Only Test Case #2 has a medium term value.		Maybe 3.5.5 can be shortened to "... shall be used to convey the remaining orbital lifetime." since that's what the test teams seem to have done.	(or thereabout), it is short term prediction and the reader should look the NOMINAL_REENTRY_EPOCH keyword. As specified by 3.5.8, both ORBIT_LIFETIME and NOMINAL_REENTRY_EPOCH should resolve to the same value. The thinking behind this was: Long term prediction might be used to check that mitigation guidelines are met, or for something predicted to re-enter in 20±4 months. In this case it is more helpful to have the orbit lifetime in days, as an epoch would be too much to interpret (bear in mind the window will still be several months).

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							<p>For short term prediction, the epoch is actually easier to interpret, as you can use the to-the-second precision and the window will be hours at most.</p> <p>So, for short-term predictions you will have both a lifetime, in days, and an epoch, as a CCSDS time string. The value of the lifetime conveys whether long or short-term prediction was used.</p> <p>I changed 3.5.5. a bit to:</p> <p><i>3.5.5 The ORBIT_LIFETIME keyword is mandatory and its value shall be used to convey both:</i></p> <p><i>a) whether it is short-term or medium and long-term re-entry prediction (defined in 1.5);</i></p>

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							<i>b) the remaining orbital lifetime.</i>
3-14	3.5.18		ed	I think some editorial clarification of this specification may be in order... since there is only one keyword for "PROBABILITY_OF_LAND_IMPACT", it's not clear what it means to say that "the probability of ground impact should be within 5 percent at the following four points for each confidence interval given".	David S. Berry / NASA	Please add text explaining what is meant here, and how it should be coded in an RDM.	I removed ground, as it should only be probability if impact. This is supposed to be a rule on how to "draw" the lines of in the impact confidence intervals. These probabilities would not appear in the message, it is how the user should implement the conversion from their impact prediction output to an RDM.
4-4	4.4.7.2	2	ed	Awkward phrase "... the tags those specified...".	David S. Berry / NASA	From: "... the tags those specified..." To: "... the tags specified..." OR To: "... those specified..."	Removed those.
4-5	Table 4-1	last	ed	Missing period on "NOTE" in the "Definition" column.	David S. Berry / NASA	Add period after "4.16".	Added '.'
4-5	4.5.1	3-4	ed	The referral to ref [13] "(more details ... 4.3.5)" can be deleted since it doesn't really add anything more to	David S. Berry / NASA	Delete if you wish. It's not WRONG, but you basically point the reader	deleted

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				what is stated in RDM 4.5.1 and 4.5.2.		to something they don't really need.	
5-4	5.3.4	(b)	ed	It's probably not necessary to indicate that uppercase units are not used (though I suppose they could be applicable to a User Defined Parameter). The resultant specification is simpler.	David S. Berry / NASA	From: existing text To: "b) units shall be in lower case, exactly as indicated in tables 3-2 and 3-3; and"	I think SEDR was present in some older version that had W as part of the unit. For consistency with future versions, I would keep things as they are now. I can see someone adding user defined parameters with W or Hz and don't want them confused by the "only lowercase units" requirement.
A-3	A2.1.4	1	ed	Needs the CCSDS document number	David S. Berry / NASA	Add "508.1-B-1" in the row.	Added
A-4	table entry 19	1	ed	Error in ICS feature description.	David S. Berry / NASA	From: "Time system user..." To: "Time system used..."	fixed
A-5	table entries 39, 40, 41		ed	Item 39 "Feature" text looks like it should be on line 40; the current line 39 feature and line 40 feature seem like maybe they are the same thing? (or maybe not... depends upon the meaning of "EPOCH" in the previous and next messages... is it the epoch when the message was created? or the epoch of the state vector? Line 41 looks like it could be correct	David S. Berry / NASA	Check the "Feature" column for line items 39, 40, and 41 and correct as applicable.	fixed

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C-2	Figure C-2		ed/te	In the section "Short term re-entry prediction results" of the sample RDM, near the top, the guidance provided in section 3.5.6 is not observed (specifically, the NOMINAL_REENTRY_EPOCH is not provided.	David S. Berry / NASA	Since it's only "should" guidance, this is not an error, but consider if an example like this would be something we want to provide... one could argue either way.	Added NOMINAL_REENTRY_EPOCH to Figure C-2 and C-4
C-3	Figure C-3	7	ed	This sample was originally in Annex D (apparently) but, now it's in Annex C.	David S. Berry / NASA	From: "<COMMENT>... Annex D KVN Fig D-1..." To: "<COMMENT>... Annex C KVN Fig C-1..."	fixed
C-3	Figure C-3			<OBJECT_TYPE> is included in the sample, but it's not a mandatory keyword (as indicated in the caption). Perhaps the object type requirement changed along the way.	David S. Berry / NASA	Remove the <OBJECT_TYPE> line from the sample.	Removed OBJECT_TYPE
C-3	Figure C-4	7	ed	This sample was originally in Annex D (apparently) but, now it's in Annex C.	David S. Berry / NASA	From: "<COMMENT>... Annex D KVN Fig D-2..." To: "<COMMENT>... Annex C KVN Fig C-2..."	fixed
C-4	Figure C-4		ed	EPOCH_TZERO: Is T09:00:00.00 in Figure C-2, but is T00:00:00.00 in Figure C-4	David S. Berry / NASA	Not really an error, but could fix if you want Figure C-4 to match Figure C-2.	Fixed in C-4
C-4	Figure C-4		ed	PREVIOUS_MESSAGE_ID and PREVIOUS_MESSAGE_EPOCH are different in Figure C-4 compared to Figure C-2	David S. Berry / NASA	Not really an error, but could fix if you want Figure C-4 to match Figure C-2. (In this instance, there's a better case for fixing since the	Fixed in C-4. It was also previous epoch in one figure, next epoch in the other; changed both to next.

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						dates are in 2015 but the re-entry is in 2018.)	
C-5	Figure C-4	2	ed	<COMMENT> on line 2 is different in Figure C-4 compared to Figure C-2	David S. Berry / NASA	Add "Position/velocity" before "covariance matrix" in the comment. Not an error, but could fix if you want Figure C-4 to match Figure C-2.	I removed position/velocity to eliminate one line break in the file, but there were plenty of other line breaks so added position/velocity back in for consistency.
C-5	Figure C-4	7, 8	ed/te	Invalid XML for CZ_X and CZ_Y.	David S. Berry / NASA	Move the end bracket ">" for CZ_X and CZ_Y to a position after the units endquote and the value.	fixed
C-5	Figure C-4		ed	Values for several of the tags between CX_DOT_X and CZ_DOT_Z are different in Figure C-4 compared to Figure C-2.	David S. Berry / NASA	Not really an error, but could fix if you want Figure C-4 to match Figure C-2.	Fixed (?)
C-5	Figure C-4		ed/te	Units are not included for the <WET_MASS> and <DRAG_AREA>	David S. Berry / NASA	Add units per 5.2.4.1	Added units
C-5	Figure C-4		ed	In <odParameters> the <COMMENT> is different in Figure C-4 compared to Figure C-2.	David S. Berry / NASA	Not an error, but could fix if you want Figure C-4 to match Figure C-2.	fixed
C-5	Figure C-4		ed	<OBS_AVAILABLE> AND <OBS_USED> are present in Figure C-4, but not in Figure C-2.	David S. Berry / NASA	You could remove these keywords from Figure C-4, or add them to Figure C-2, if you want the two figures to match.	Removed from C-4
D-1	Annex D		ed	Candidate acronyms to add: DOF, IADC, RMS, URL. These acronyms	David S. Berry / NASA	Consider adding.	Added to annex D

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				appear in the document but not in the acronyms annex.			
E-1	Annex E	RDM - 0055	ed	Missing Oxford comma in the requirement statement.	David S. Berry / NASA	From: "uncontrolled or unknown" To: "uncontrolled, or unknown"	oxforded
E-1	Annex E	RDM - 0060	ed/te	The metadata section Table 3-2 doesn't specify the time format.	David S. Berry / NASA	Change the "Trace" From: table 3-2 To: 5.3.3.5	fixed
E-2	Annex E	RDM - 0070	ed/te	I would add table 3-2 to the Trace since there are units on a couple of metadata items	David S. Berry / NASA	Add "table 3-2" to the "Trace"	added
E-2	Annex E	RDM - 0100	ed/te	Given the "Rationale", I'm not sure how table 3-1 applies to the Trace	David S. Berry / NASA	Change the Trace to remove table 3-1	removed
E-2	Annex E	RDM - 0110	ed/te	I think there are substantial elements of consistency in all tables 3-1 through 3-3	David S. Berry / NASA	Change the Trace to add table 3-1 and table 3-3	added
E-2	Annex E	RDM - 0190	ed	awkward phrase in "Rationale"	David S. Berry / NASA	From: "how reliable is the data" To: "the reliability of the data"	changed
F-1 F-2	Annex F		ed	There are several instances of the phrase "spacecraft parameters" in this Annex, but there is no data block in Table 3-3 labelled as such. The relevant block is labelled "Object physical parameters" in Table 3-3. [Note that there are 3 instances of	David S. Berry / NASA	For instances in Annex F: From: "spacecraft parameters" To: "object physical parameters"	fixed

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				"spacecraft parameters" outside Annex F, but 2 appear in sample RDMs and 1 appears in the Requirements Annex E, so I don't think those need to change.]			
F-1	Annex F		ed/te	It's not clear to me why the state vector is not a relevant required data block for the "object state vector" data category ("required: none" is stated). Compare for example the relevant data block for the "ground impact data" category.	David S. Berry / NASA	Consider apparent inconsistency here and resolve.	I think this is due to the renaming from data block to data category or whatever that was requested by one of the ADs. I added the block itself as a requirement where it was missing, apart from the two atmospheric re-entry rows, which can be done with just mandatory keywords.
G-3	Annex G, G1.4		ed	v_{impact} has a rho nought that is not in the nomenclature list	David S. Berry / NASA	Add the rho nought definition to nomenclature.	Added ρ_0 as Earth sea level atmospheric density
G-4	Annex G, G1.5		ed	Misspelled word	David S. Berry / NASA	From: fragments or losses external parts To: fragments or loses external parts	fixed
G-8	Annex G, G3	3-4	ed	Awkward phrase... to fix just requires moving one word ("was").	David S. Berry / NASA	From: "... and when was the re-entering object last observed." To: "... and when the re-entering object was last observed."	fixed

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