Defence
Safety Authority

DSA DFSR 02 Aerodrome Rescue and Fire Fighting Regulations.

Consultation Responses

Defence Fire
Safety Regulator

DFSR

The Defence Safety Authority (DSA) Defence Fire Safety Regulator (DFSR) 02 Aerodrome Rescue and firefighting Regulation (DSA DFSR 02 ARFF Regulations) were submitted for consultations via an internal Notice of Proposed Amendment (iNPA) to all DSA Regulators during Mar 2019. The responses from this period of consultation along with the decisions of Regulatory Review Panel (RRP) can be found in table 1.

Following the iNPA the regulations were submitted for further consultation to the wider Defence regulated community (RC) resulting in 157 responses which are contained in Table 2 along with the decisions of the RRP.

Table 2:

Serial Number	DSA DSFR No	Chapter &/ or Para No	Comment	Proposed Amendment	DFSR Decision	DFSR Comments
1			Foreword spelt incorrectly, DFSR and ARFF used without introduction and the whole adds no value to the document. MAA used without introduction in Regulation and Policy section.		Accepted	Completed
2			Authority, first para replicates preceding para.		Accepted	Proceeding sentence removed
3			Aviation Safety Hierarchy Adds no value to document		Accepted	Removed
4			Margins need amending to allow printing		Accepted	
5			Defence Safety Committee, adds no value to document without		Accepted	Removed

			context of what it does, question is ‘so what?’			
6			Interpretation, is this a definition?		Accepted	Removed
7			MAA used in full then abbreviated when it should just be abbreviated form if comment from Line 1 comment is acted upon.		Accepted	Completed
8			Title of RA 1020 needs amending (Roles & Responsibilities now at the end).		Accepted	Completed
9			RA 3550, title needs amending (word zone is singular).		Accepted	Completed
10			Pagination for EASA documents title		Accepted	
11			RA 3311 needs moving up the list to preserve numerical sequence.		Accepted	Completed
12			Pagination for ICAO, CAA, UKESP & NFPA documents titles need line spacing from text above.		Accepted	Completed
13			Fonts for CAP 789, 1150 and CAA Information Notice (IN-2016/052) need		Accepted	Completed

			changing to Ariel from Calibri.			
14			FAA Publications title needs changing to Ariel from Calibri.		Accepted	Completed
15	1	Para 1	Authority Para 1, suggest replacing 'taken into account' with 'considered'?		Accepted	Completed
16	1	Para 1 and 5	First para, suggest replacing the word emulates with mirrors, as emulates means rivals or outdoes. All text should be left justified and all page numbering needs amending as it restarts from 1, rather than following previous pages or becoming DSA 02 DFSR-1 or similar in the footers. AMC para, line 5 requires additional closing bracket after AAMC		Accepted	Changes made to document
17	1	Para 2 and 3	All text should be left justified and all page numbering needs amending as it restarts from 1, rather than following previous pages or becoming DSA 02 DFSR – 1 or similar in the footers.	The ARFF should be in accordance with the categories detailed in Table 1.	Accepted	Changes made to document

18	1	Para 2 and 3	Would be better if regulation started on next page and pages require renumbering to include DFSR 01 on the footers. Regulation AMC 01 paras 2 / 3 require combining and subsequent paras need renumbering. Footnotes page 4, extra line needs removing between Footnote 2 & 3. Table 2 Note 2, the words 'and their width' needs removing from line 2 to replicate the referenced CAP 168, when measuring helicopters, the words 'rotor span' is used. Also, Footnote 4 needs amending as it also mentions width which is incorrect and not from CAP 168.Table 3 Page 7, pagination needs sorting, headers of table are on line 2 and page 8 they are on line 3. Tornado GR4A now retired from service.	Removed last sentence of Para 3. Removed footnote & inserted 'fuselage' before width.	Partially Accepted	All agreed with the exception of use of the term 'Width', this term refers to the width of the fuselage and in specific to defence. CAP 168 does has removed width factors on 'H' categories.
19	1	2,3,8	Footnotes page 4, extra line needs removing between Footnote 2 & 3.	consider location. Annexes for tables?	Accepted	Foot note space removed.

20	1	Para 3 table notes	Table 2 Note 2, the words ‘and their width’ needs removing from line 2 to replicate the referenced CAP 168, when measuring helicopters, the words ‘rotor span’ is used. Also, Footnote 4 needs amending as it also mentions width which is incorrect and not from CAP 168.		Noted	Highlighted
21	1	Table 3	Table 3 Page 7, pagination needs sorting, headers of table are on line 2 and page 8 they are on line 3.	Replace "Dauphin N3" with "Dauphin".	Accepted	Completed
22	1	Table 3	Update Table with E 7 Wedgetail requirements	Water Calculation = 8323 Aircraft Category 6 Minimum Water Required 8323 Discharge Rate 4162	Accepted	Completed
23	1	Table 3	Received an email from RN requesting confirmation of Crash Category for Avenger T Mk 1 aircraft.	This AS is a Beechcraft 350 ER which is also operated by the RAF as Shadow R1. Therefore, we either add a new column or place a footnote against Shadow R1 in Table 3.	Accepted	Completed

24	1	Para 12,14,17,20	There is also A Dauphin N2 operated in support of Flag Officer Sea Training (FOST), presume both require the same and therefore N3 could be removed. Not sure Sikorsky S-61N should be in list, if it is for the Falkland Islands, I believe they have AW189 for SAR Para 12 & 17 Page 9, footnotes have moved to following page and footnote 9 number is in red font. Para 14 pagination has gone to justified. Para 20, text is 10pt spacing.		Partially Accepted	Also note that we have removed some aircraft type numbers i.e. C-130 / Hawk. The term 'All Variants' removed.
25	1	4	Not sure Sikorsky S-61N should be in list, if it is for the Falkland Islands, I believe they have AW189 for SAR	replace	Not Accepted	Retain: S61 N is operating at MPA
26	1	01 para B.6.1	Para 12 & 17 Page 9, footnotes have moved to following page and footnote 9 number is in red font.	Remove JHC definition.	Partially Accepted	Foot note moved to bottom of page. JHC changed to DFSR
27	1	para 8	Para 14 pagination has gone to justified.		Accepted	Adjusted to left

28	1	para 9	Para 20, text is 10pt spacing.		Accepted	Adjusted to 6pt
29	1	Annex A	Line spacing on all lines should be 0pt. Para 1 should be pre-fixed A.1 like following paragraphs. Font for footnotes 12 & 13 in main body needs changing to Arial. Para A.3 sub paras 1-3 text should be combined to form 2 paragraphs and be recorded to ensure flow of logic. Table 2 notes 3, should reference b to para 15 not 14		Accepted	Adjustments made to document. Adjustments to pervious para brought the pagination in line with text (para14). Para's combined
30	1	Annex A	A.3.1, replace station with section in line 1 & line 2 and capitalise the words in line 2 to match line 1.		Not Accepted	
31	1	Annex A	Should have the document name in the footers.		Accepted	Document updated
32	1	01 para B.10	A.3.1, replace station with section in line 1 & line 2 and capitalise the words in line 2 to match line 1.	Change '...or SQEP fire advice within JHC' to '...or SQEP fire advice within Command/Group HQ.	Accepted	Wording changed to reflect that DFSR have set the guidance not JHC
33	1	GM Para 10		Add, "reduced hazard profile categories should not be applied without the explicit approval of the ADH	Accepted	Updated document

				chain responsible for the aircraft."		
34	1	para 13	Should have the document name in the footers.	13.14. ~~Tactical/~~Temporary Landing Sites as defined in MAA RA 3550~~ - Temporary Landing Zone may be judged to be out of scope aerodromes in accordance with MAA RA 3263 - Aerodrome Classification. Full criteria and operating requirements for each category of tactical/temporary Aerodrome are detailed in the Manual of Aerodrome Design and Safeguarding (MADS)RA 3550~~. Suitably Qualified Experienced Personnel (SQEP) advice can be sought from the Defence ARFF Service Provider to assist with informing the risk assessment.	Accepted	Documented Adjusted
35	1	Appendix B1 to Annex B	Notes, point 3 font colour needs changing to black.		Accepted	Document Adjusted

36	1	Annex C	Para C.1.1., suggest list of names are in alphabetical order.		Accepted	Document Adjusted
37	1	Annex D	Line spacing should be 0pt. Page 19, 20, 21 & 22 table contents are on line 2 or 3.		Accepted	Document Adjusted
38	1	01 para 15	Page 19, 20, 21 & 22 table contents are on line 2 or 3.	Remove JHC guidance and make it DSFR guidance if deemed appropriate. Consider consultation with other helicopter operators e.g. ACNS for Royal Navy helicopters that are not part of JHC.	Accepted	See Line 35
39	1	16	missing "are" between "aerodromes" and "operating"	add	Accepted	comma' inserted after aerodromes
40	1	17	"are to be assessed" sounds like AMC "should". Who by?	review	Accepted	Moved to AMC Para 8. RA is covered in the Regulation Paras
41	2	1	Remove MMATM reference		Accepted	Removed
42	2	1	MMATM does not discuss notification of ARFF	delete ref to MMATM and add ref to MAA 3261(1)	Accepted	See Line 44
43	2	1	Regulation should be left justified to match rest of text, Page numbers should be Arial font not	Regulation should be left justified to match rest of text, Page	Accepted	Document adjusted

			Calibri. Para 1, hyperlink to RA 3311 not working.	numbers should be Arial font not Calibri.		
44	2	2	Info not AMC	relocate	Accepted	Re-located now Para 20 GM
45	2	4	Para 4c, footnote adds no value and as a standalone regulation it (and the following ones) should be should be renumbered from 1 not 25		Partially Accepted	Foot Note Remains: Required for Defence ARFF Service personnel to understand Principle Objectives. Footnote re-numbered starting at the beginning of each section.
46	2	6, 7, 8	amalgamate - all talking about response time	the response time should be in accordance with: (list)	Partially Accepted	Para's 6 & 7 (Surface Level Heliports) amalgamated
47	2	10	Para 10, fire vehicles should be housed in a Fire Section, not a Fire Station.		Not Accepted	For consistency check term
48	2	13	Only requires carriage of station crash map. RA also requires provision of local area crash map and for 'essential aerodrome vehicles' to carry OS maps. NB both sets of regs require maps to be located in various places.	replace "station crash map" with "crash maps and OS maps covering a radius of 20 nm from the aerodrome"	Partially Accepted	See line 52
49	2	13	Station crash map - replicate RA 3261(2)	Crash maps	Accepted	Changed to read "Crash Maps and Ordinance Survey Maps iaw MAA RA 3261 (2".
50	2	13, 14, 15	13 requires a should. 14 and 15 can be		Accepted	Amalgamated

			amalgamated and have a should added.			
51	2	14	Para 14, sub paras a-q should be double spaced to match rest of regulation		Accepted	Carried out
52	2	14	AMC?	review/ highlight "should"	Accepted	Changed
53	2	15	AMC?		Accepted	Confirmed that this is AMC
54	2	18	First 2 paras need "should"	revise	Accepted	Completed
55	2	18, 19, 20	Paras 18-20, text should be single spaced rather than 6pt.		Accepted	Document adjusted
56	2		Change e.g. to e.g. and fire-fighting to firefighting throughout document.		Partially Accepted	EG stays iaw MAA SOPs. 'Fire-fighting' used throughout document.
57	2	27	Some reproduction of the MAA RA in para 27 so risks getting out of date.	add "iaw MAA RA 3261 (2) and consider removing ref to unit orders here.	Partially Accepted	Moved to AMC Para 21
58	2	27	Para 27, line 2, suggest words ‘crash/ditching’ are replaced by ‘incident’, they may be responding to a forced landing, which is neither a crash or ditching and this will also match the word in Para 28		Accepted	Changed

59	2	29	Should this not be in reg vice AMC?	Elevate to regs	Partially Accepted	Paras moved to AMC with some minor changes
60	2	29	No equivalent MAA reg giving controller this authority to deploy ARFF. Reliance placed on 'local orders'.	Probably more of an issue for MAA RA. Coord with MAA?		
61	2	29	Other responsibilities of DATCO are not in 3261 (2).	Specify where DATCO responsibilities are detailed or avoid stating this.		
62	3		Regulation should be left justified to match rest of text.		Noted	IAW MAA Reg's
63	3	8,9	Para 8 & 9, fire vehicles should be housed in a Fire Section, not a Fire Station.		Not Accepted	For consistency check term
64	3	22	Para 22, footnote 34 is a repeat of text in paragraph.		Accepted	Removed Footnote
65	4		Regulation should be left justified to match rest of text. All paras, should be single spaced rather than 6pt. Footnotes should be renumbered from 1 not 42 as it is a standalone regulation.		Partially Accepted	Foot notes corrected
66	4	1b	should' not required as per other sub-paras	delete	Accepted	Corrected, changed Should to must

67	4	2	Para 2, contents is not really AMC and this should be considered to be removed and used as a footnote to Para 1.		Not Accepted	Para to remain TRA is a risk based approach that determines appropriate manning levels for relevant crash categories
68	4	2	Second sentence needs 'should'.	replace will with should or demote to guidance	Accepted	Corrected
69	4	3	Contains info/guidance	demote to guidance as required or expand the 'should' sentence	Partially Accepted	Some of para 3 relocated a foot note.
70	4	07,08	No should	Add 'should' or demote to guidance	Accepted	Added Should
71	4	7,8	Paras 7 & 8, sub paras need full stops.		Accepted	Corrected
72	4	8	Requires a should		Accepted	See Line 74
73	4	17	Para 17, footnote 42 appears on following page.		Accepted	Document Adjusted
74	4	25	Para 25, this is a repeat of Para 7.			Unable to find para 25 in DFSR 04
75	4	27	Paras 27 & 27 contradict each other.			Unable to find para 27 in DFSR 04
76	4	42	Para 42, font needs changing to Arial for DFSR Form 0203 and it is not hyperlinked.		Accepted	Document adjusted
77	5	2, 3	require should		Accepted	Removed to Guidance Material

78	5	02,04	No should	Add 'should' or demote to guidance	Accepted	
79	5	Para 13	Following meeting with DIO/Aquatrine SP/Team Leidos/DFR paragraph requires amending.	The foam solution ~~and concentrate~~ should be ~~accepted by~~ ►acceptable to the◄ local water utilities for discharge into the foul sewer, minimising the impact on the environment and reducing the risk of enforcement action from an environmental release.	Accepted	Para reads: The foam solution should be acceptable to the local water utilities for discharge into the foul sewer, minimising the impact on the environment and reducing the risk of enforcement action from an environmental release.
80	6		Regulation should be left justified to match rest of text. All paras, should be single spaced rather than 6pt. Footnotes should be renumbered from 1 not 44 as it is a standalone regulation. Regulation, last line of text uses the word aerodrome, should this not also include heliport, which would tie in with Para 4?		Partially Accepted	Footers corrected, 'Location' added in place of 'aerodrome'
81	6	4,5	Repeats earlier reg	delete	Accepted	Standalone Regulations
82	6	6,7,8,9,10	As above.	Consider reorder of regs to put ops before response or remove these regs	Noted	Consider post NPA

83	6	9	Para 9 line 3, should the word Readiness be included before ‘State 3’ to match para 8 line 2?		Accepted	Corrected
84	6	10	Para 10 line 2, should the word Readiness be included before ‘State 3’ to match para 8 line 2?		Accepted	Corrected
85	6	10	Para 10, footnote 47, should that be included in a regulation?		Accepted	Removed
86	6	12	Para 12 line 3, hyperlink for DFSR 0204 & 0205 missing and in line 6 consider removing the hyperlink to the DAM.		Accepted	Hyperlinks to Annexes were removed as these will be getting released as a separate document. Link to DAM throughout the whole document should be removed.
87	6	18,19	states requirements	detail where requirements are actually stated or elevate to AMC	Accepted	Re-Worded
88	6	18	Para 18 line 3, should this include AM(MF) after ADHs (thinking of Thales at West Wales Airport)? Also, there needs to be another space inserted before ADH.		Accepted	Corrected & Re-worded. RPAS ARFF Requirements to be considered by DDH.
89	6	19	Para 19 footnote 53, RPAS is not the same as GIA.		Accepted	Footnote removed

90	7	entire	Can this section be lifted into section 1?		Noted	Consider post NPA
91	7		Regulation should be left justified to match rest of text. All paras, should be single spaced rather than 6pt. Footnotes should be renumbered from 1 not 54 as it is a standard regulation		Accepted	Corrected
92	7	1	Title does not require initial ARFF	Retitle - Reductions in ARFF Cover	Accepted	Corrected
93	7	4	Para 4, this is a repeat of Para 13 to DSFR 06, does it need repeating?		Not Accepted	Para remains
94	7	5	Para 5, sub paras need double spacing.		Accepted	Corrected
95	7	6	Para 6, needs a ‘,’ after the word present on line 1 and consider removing hyperlink to DAM in last line.		Partially Accepted	comma added after the word 'Present'
96	7	6	If using words like "are to" it sounds like it should be in AMC.	Consider if current AMC is sufficient	Not Accepted	Remains as GM especially as CFAOS locations may choose to use locally produced forms
97	7	Annex A	All paras, should be single spaced rather than 6pt and page numbers should be amended to show it is an annex.		Accepted	Corrected

98	7	Annex A	Para A.1.2, line 2, remove hyperlink to DAM.		Accepted	Corrected
99	7	Annex A	Para A.2.1., all sub para lines should be double spaced. In the Aircraft Type part, should there be a line for dangerous POL, thinking of hydrazine, also sub para h is in bold font.		Accepted	A.2.1 g. g. What is the a/c fuel load? now includes; (Hydrazine/AVTUR/AVGAS) Document updated.
100	8		Regulation should be left justified to match rest of text. All paras, should be single spaced rather than 6pt. Footnotes should be renumbered from 1 not 60 as it is a standalone regulation.		Accepted	Corrected
101	8	1	Much of text appears to be rationale for reg.	Include Rationale before reg.	Accepted	Corrected
102	8	2e	extra should	delete	Accepted	Corrected
103	8	5	Para 5, abbreviations could be used rather than in full as they are introduced in the regulation.		Accepted	Corrected
104	8	5b	second sentence covered by para a	delete 2nd sentence	Accepted	Re-worded & amalgamated sub paras a & b.
105	8	9	Para 9 Fire Fighters spelt incorrectly!		Accepted	Corrected

106	8	12,13,14,15,18,21,22, 23,24,	sound like AMC	review	Partially Accepted	Para 13 after 'sufficient training' add foot note & hyperlink to IER Training Framework Document. Para's 22 & 23 raised to AMC.
107	8	22	Para 22, sub paras require full stops.		Accepted	Corrected
108	8	25	Para 25, hyperlink opens RA 1600 not RA 3049		Accepted	Hyperlink to be corrected
109	8		No mention of familiarisation on station-based, or regular visiting, aircraft here; e.g. location of emergency access points, how to shut off fuel and electrical power.	Consider adding this requirement to the regulation, unless it is covered elsewhere.	Accepted	
110	all	all	No reference to the material provided to crews (or not) regarding rescue procedures from aircraft. This is still subject to a rec from the Tucano ZF349 Service Inquiry relating to provision of standardised material. What are the crews required to carry in ARFF vehicles or to be provided with in their stations? Who provides it?	Consider appropriate reg to address recommendation. If such info is not considered necessary, could we have a statement to that effect so we can close this rec?	Accepted	Para's 2 b, c & 6 added to DFSR 08. Moreover, Work continues with DES Defence Airworthiness Team to place this requirement on to TAAs via an amendment to or creation of an MAA RA.

111		Foreword, Authority	The authority of the DFSR derives from statute which underpins the DSA Charter. See section 25(c) of the Regulatory Reform (Fire Safety) Order 2005, and section 61(9)(zb) of the Fire (Scotland) Act 2005, both of which name the fire service maintained by the SofS Defence as the "enforcing authority" for premises occupied for the purposes of the armed forces of the Crown. This is unusual amongst DSA regulators.	The authority of the DFSR derives from statute which underpins the DSA Charter. See section 25(c) of the Regulatory Reform (Fire Safety) Order 2005, and section 61(9)(zb) of the Fire (Scotland) Act 2005, both of which name the fire service maintained by the SofS Defence as the "enforcing authority" for premises occupied for the purposes of the armed forces of the Crown.	Not Accepted	RRO (Fire Safety) 2015 refers to fire safety not ARFF.
112	Annex A	A 2.2.	Duty Delivery Holder	Aviation Duty Holder	Not Accepted	Should be changed to 'Delivery Duty Holder' as this is the lowest role within the ADH chain for holding risk.
113		Response Area Assessment	Contents replace Station with Section under FSM signature block. A3.1, replace station with section in line 1 & line 2 and capitalise the words in line 2 to match line 1		Accepted	Corrected
114		1000m Response Area Assessment	Contents replace Station with Section under FSM signature block. Should have the document name in the footers. Footnotes should be renumbered		Partially Accepted	FSM is a role and does not refer to Fire Station/Section. Tables need re-sized to font 10Pt. HoE replaced Delivery Duty Holder (DDH)

			from 1 not 66 as it is a standalone document. B.7.2. line 2, should it be HOE rather than DDH?			
115		Water Assessment	Contents, replace Station with Section under FSM signature block. Should have the document name in the footers. All paras, should be single spaced rather than 6pt. B.7.2. line 2, should it be HOE rather than DDH?		Partially Accepted	
116		Specific Tasks Hazard Assessment DDH	Title, should it not be DDH / HOE Should have the document name in the footers. All paras, should be single spaced rather than 6pt. DDH comments box, should that not be DDH/HOE?		Partially Accepted	
117		Specific Tasks Hazard Assessment (AM/MF)	All paras, should be single spaced rather than 6pt.		Partially Accepted	

Table 2:

Serial Number	DSA DSFR No	Chapter &/ or Para No	Comment	Proposed Amendment	DFSR Decision	DFSR Comments

1	1	Table 3	During formatting details for BAE 146 Mk3 (RJ 100) have been lost.	Aircraft Category should read '6'. Minimum Water Requirements should read '7900'.	Accepted	Documented updated to reflect comment
2	1	Table 3	During formatting details for Dakota have been incorrectly inserted.	Water Calculations should read '2226'.	Accepted	Documented updated to reflect comment
3			Check page numbering throughout document, e.g. first 4 pages 1,2,3,4		Accepted	Documented updated to reflect comment
4			Check footnote numbering throughout document, e.g. start from 1 of new Reg/Annex	Ensure footnotes run concurrently without jumps e.g. 6-30	Accepted	Documented updated to reflect comment
5	1		Footers to align to regulation title or Annex etc.	e.g. DFSR 01 not DFSR ARFF regulations	Accepted	Documented updated to reflect comment
6			Page breaks (Intentionally blank) at start of new Reg/Annex throughout Doc	To separate regulation to allow ease of printing	Accepted	Documented updated to reflect comment
7		Table 3	Piper PA-31 listed as CC1 with a min water requirement of 670	Should this be CC2	Accepted	Documented updated to reflect comment
8		Table 3	Sea Fury listed as CC3 with a min water requirement of 100		Accepted	Documented updated to reflect comment

9		DFSR 05 / 28	DFSR 05 – paragraph 28 – “Where insufficient water supplies are identified, it should be recorded on the Establishment Station Risk Register, the Aerodrome Operating Hazard Log within the DAM and elevated to the AO with the implications for the provision of the ARFF crash category.” We currently have no supplementary water supplies at Chetwynd and it will be highlighted within the water assessment (and DAM). I understand this could affect the replenishment of ARFF vehicles but what are the implications for the provision of the ARFF CC?		Noted	Under ICAO the water requirements are designed to meet Q1 - the water for control of the fire in the practical critical area. And, Q2 - the water required after control has been established and is needed for such factors as the maintenance of control and/or extinguishment of the remaining fire. The required ICAO aircraft category will be met by the provision of an ARFF vehicle. However, it is for the FSM to then conduct a water assessment taking into account various other sources of information which are identified within the water assessment form. When considering how much water is required, the first task is to identify the individual aircraft water requirements, then consider how much water is carried within the particular ARFF vehicle.
10		DFSR 06 / 17	DFSR 06 – paragraph 17 – Flying displays. “Following a risk assessment, the agreed level of ARFF capability including personnel levels confirmed by completion of a Task Resource Analysis (TRA) in accordance with DFSR 04”. Is the full TRA process to be followed as detailed in the CFOI (i.e. request, brief, agreed CWCS etc), which could take several		Partially accepted	Yes-The TRA can be conducted at local level providing the person conducting the TRA is suitably competent to undertake the TRA and risk assessment, the TRA forms part of the event risk assessment where forms 02/04 or 02/05 should be used dependant on the DH. Format changes have resulted in this para now being DFRS 06 GM para 5

			weeks. Shawbury have 3 qualified FDD's who oversee all flying displays (Families days, landowners day etc.) in accordance with MAA RA 2335. Can the TRA be conducted at a local level?			
11		DFSR 08 / 22	DFSR 08 – paragraph 22 – "It is important that, if LPG is used during live fire drills, ARFF personnel are provided with suitable training to enable them to recognise the differing characteristics of LPG as opposed to Class B fires when used to simulate realistic fire training." Can this be achieved using simple tray fires (opposed to pressure fed)?		Not Accepted	The 1* TRA has accepted a residual training gap, see footnote 8 Para 23 supporting this paragraph.
12	1	Table 3	Re-Formatting of table has resulted in the following aircraft being missed; Sea Hawk, Sentinel R1, Sentry, Shadow R1,	Include all aircraft that have found to be missing	Accepted	Documented updated to reflect comment
13	1	Table 3	Re-Formatting of table has resulted in the Discharge Rate for AW 109 being incorrectly set at 430 Ltr. This should read 402		Accepted	Documented updated to reflect comment

14		Table 3	Table 2 from the current 426 records the aircraft minimum water requirements exactly the same as the Aerodrome Cat (i.e. Cat 5 - 5400 ltrs). Table 3 of the new regs records 10 fixed wing and 9 rotary wing above the minimum water requirements for the aircraft Cat. I.e. Airbus 135 aircraft category H1 has a minimum water requirement of 744 yet the minimum water requirement of a H1 aerodrome is 500. Understand that these are minimum requirements but could a H1 aerodrome inadvertently not provide enough media for a H1 aircraft.		Accepted	Reclassification of aircraft iaw with ICAO allows greater flexibility for ADH to make greater use of civil aerodromes. The media quantities will need to be confirmed by AO to ensure they meet the minimum required for individual MOD Registered AS.

15		Para 14	"Helicopter Landing Sites (HLS), either permanent or temporary, are unlikely to have Rescue or Fire-fighting Services. Consequently, ADHs/HoEs/AM(MF)s are to conduct a risk assessment providing direction on the level of Rescue and Fire-fighting Services required" The comments from RAF Odiham (serials 15 - 18) all centre on one point, the guidance that it is the responsibility of the ADH to ensure that all HLS' are risk assessed (from a Fire pov) prior to landing there. All HLS' are risk assessed from an air safety pov through a multitude of methods but most notably the use of HLS directories produced by MAOT recces and the airborne 5S recce that the crew will undertake every time prior to landing. The Ch Fce (and other RW assets) use hundreds of different HLS' throughout the UK, not to mention overseas. The requirement for all HLS' to be risk	Whilst it is only contained within the 'Guidance' section of the document, this still implies that ADH's 'SHOULD' do it. A civilian court of law would probably not differentiate between SHOULD and SHALL, so I suggest the removal of the paragraphs placing this requirement/restriction upon the ADHs. At the absolute minimum using terminology such as the ADH should ""consider"" ……. would provide the ADHs with more flexibility wrt adherence to the new regulations. JHC Proposal from email 20190806:10:58 from Mt Dave Atkins Helicopter Landing Sites (HLS), either permanent or temporary, may or may not have Rescue or Fire-fighting Services depending on the magnitude and	Partially accepted	Helicopter Landing Sites (HLS), either permanent or temporary and austere exercise locations are unlikely to have Rescue or Fire-fighting Services routinely. In order that Aviation Duty Holders (ADH) (insert footnote to [1] RA 1020 – Roles and Responsibilities: Aviation Duty Holder (ADH) and ADH-Facing Organizations), or Accountable Managers (Military Flying) (AM ((MF)) (Insert footnote to RA 1024 - Accountable Manager (Military Flying)), meet their responsibilities, they must ensure that Aerodrome Rescue Fire-fighting (ARFF) Services are considered when helicopters land away from base at HLS or at exercise locations. Therefore, ADHs/HoEs/AM(MF)s are to consider conducting a risk assessment providing direction on the level of Rescue and Fire-fighting Services required, the risk assessment is to be recorded and the decision on the appropriate level of Rescue or Fire Fighting cover documented. SQEP advice can be sought from the Command / Group HQ /Defence ARFF Service Provider to assist with informing the risk assessment.

			assessed places an unrealistic burden upon the DH to assure each site and could lead to constraining SH freedom of movement.	complexity of their operation. Consequently, ADHs/HoEs/AM(MF)s are to conduct a risk assessment providing direction on the level of Rescue and Fire-fighting Services required. The amount of fire-fighting water required for individual aircraft types is recorded in Table 3. The risk assessment is to be recorded and the decision on the appropriate level of ARFF cover documented in local orders or exercise instructions, as appropriate. SQEP advice can be sought from the Defence ARFF Service Provider to assist with informing the risk assessment.		

16		Annex B1	B.1.1 Standards for aerodrome fire cover are contained within DSA 02 DFSR – Defence Aerodrome Rescue and Fire-fighting (ARFF) Regulations. Front Line Commands (FLC) and Industry must ensure that Aerodrome Rescue Fire-fighting (ARFF) Services are considered when landing away from base. Assessment of a Helicopter Landing Site (HLS) responsibility will enable the Aviation Duty Holder (ADH) or the Accountable Manager (Military Flying) (AM ((MF)) to meet their responsibilities in accordance with RA 1020 B.1.3 The risk assessment is an executive responsibility, and owned by the risk owner (e.g. ADH, AM (MF)). The process may be delegated to ADH-Facing individuals i.e. Aerodrome Operator or SATCO etc. Specialist advice may be sought through SQEP personnel including the Command/Group HQ or Defence ARFF Service	As above	Partially accepted	Reviewed Annex B Para B.1.1 and noted that it states that ARFF services are to be "considered when landing away from base" Para B.1.2 removed. Para B.1.3 risk assessment still to be considered - no change to wording. Para B.1.4 - No change to wording paragraph considered appropriate.

			Provider. B.1.4 The mitigations are to be interpreted and applicable to the intensity of operations and be proportionate to the risk identified by the ADH or AM (MF)			
17		Annex B2	B.2.3 The level of fire support must be addressed through risk assessment and be proportionate to the flying operations being conducted. Factors to be considered during this process are: a. Total number of planned movements in a 24hr period. b. Total number of helicopters in use at peak period including other operators. c. Operating risks. Apart from the type of aircraft and the number of occupants, other operating factors to be taken into consideration include: (1) Presence of Dangerous Goods. (2) Fuel quantities. (3) Aircraft armaments. (4) Type of flying being conducted. (5) Time of day and	As above	Noted	This paragraph support the requirement detail in para B.1.4 and assists the ADH or AM (MF) when conducting a risk assessment.

			weather considerations including; Night Vision Device (NVD) sorties. (6) Response time of Civilian Emergency Services (CES) and their ability to provide adequate support2. (7) Local topography. (8) Provision of fire cover for rotors running refuels3. d. The establishment of an Emergency Plan is the bare minimum requirement. This may be included within any Safe Operating Environment (SOE) documentation.			
18		Annex B3	B.3 Domestic Helicopter Landing Sites (HLS) B.3.1 RA 1026 (5) - Use of Domestic Helicopter Landing Sites, stipulates there is no requirement to establish an Aerodrome Operator (AO) at a MOD HLS, but the HoE and ADH and/or AM (MF) are not prevented from doing so, if it is considered, appropriate. The ADH and/or AM (MF) must assess the suitability of all HLS which they have responsibility for Risk to Life (RtL). B.3.2 All Domestic HLS are	As above	Noted	Foot note added. "This can be provided from internal resources or external resources".

			to have an emergency plan in place. It is to include but not limited to; emergency contact numbers, rendezvous points, emergency services access, First Aid provision, water supplies available and actions in the event of fire.			
19	1	Table 3	Apache helicopter is identified as an ICAO H3 air system. During the Roadshow at AAC Wattisham a request for confirmation of how this aircraft was calculated as an ICAO H3 air system. The methodology was provided by WO Fox DFSR ARFF (A) Team, the Unit Aerodrome Operator requested that this aircraft be recalculated, taking in to account the role of the air system.	Following the Roadshow the air system was re-calculated using a reduced airframe width based purely on the crew compartment. This recalculation has identified that the Apache will be identified as an ICAO H2 air system. This has been agreed by the Apache DDH. Regulation to be updated accordingly.	Accepted	Following the Roadshow the air system was re-calculated using a reduced airframe width based purely on the crew compartment. This recalculation has identified that the Apache will be classified as an ICAO H2 air system. This has been agreed by the Apache DDH. Regulation updated accordingly.
20		All	658 Sqn has looked at the document as a team and had the road show. We believe that it is a good document and of help to us. Once the review of our area has been undertaken, we can better asses the changes but the comments above are noted so as not	N/A	Noted	

			to repeat them and we agree with Odiham.			
21		All	Can the author confirm that the requirements of AP 8000 lflt 8214 change management have been complied with and provide documentary evidence.		Noted	AP 8000 is a single Service publication. However, as the author is a Warrant Officer within the RAF he did consult this publication. DSA DFSR 02 is a Defence wide regulation. Therefore, it has been developed using DSA/MAA methodologies; DSA 01.1 and MAA 003 which include ensuring that the safety risks associated with any given change are suitably managed. This has included engagement with all individual aircraft DDH. The draft regulation was released under the NPA process for a suitable time period, ensuring that all safety risk owners had the opportunity to ensure that changes within their AOR, were assessed with respect to the impact on safety, the change may have prior to implementation. No changes with the introduction of this regulations increase levels of risk.
22		references	Incorrect STANAG Reference 3712 CFR ed 7 Has been superseded with ed 8	review document to ensure compliance with agreed NATO Stanag	Accepted	Documented updated to reflect comment
23		references	Incorrect STANAG Reference 7133 Has been superseded by 7206 ASSESSMENT GUIDES FOR THE PROVISION OF FIRE SERVICES DURING DEPLOYED OPERATIONS since Dec 2012	review document to ensure compliance with agreed NATO Stanag	Accepted	Documented updated to reflect comment

24		references	No Reference for STANAG 3796 AEROSPACE EMERGENCY RESCUE AND MISHAP RESPONSE INFORMATION (EMERGENCY SERVICES)UK has indicated ratified no reservations	review document to ensure compliance with agreed NATO Stanag	Accepted	STANAG 3796 incorrect should read STANAG 3896 ed 6, footnote 1 to DFSR 08 references this STANAG although omitted from references, now updated.
25		references	No Reference to STANAG 3929 EVALUATION GUIDE FOR NATO CRASH/FIRE/ RESCUE SERVICES, furthermore, current Audit processes either2nd party or 3rd party comply with this Stanag	review document to ensure compliance with agreed NATO Stanag	Noted	STANAG 3929 is a provision to support NATO forces, this is a Host Nation document.
26		references	No Reference to STANAG 7179 PLANNING GUIDELINES FOR FIRE AND EMERGENCY SERVICES RESPONSE TO MAJOR FIRE AND EMERGENCY INCIDENTS.UK has indicated ratified no reservations	review document to ensure compliance with agreed NATO Stanag	Accepted	Added to references
27		references	No Reference to STANAG 7193 INCIDENT COMMAND SYSTEM FOR FIRE AND EMERGENCY SERVICES RESPONSES TO INCIDENTS - UK has	review document to ensure compliance with agreed NATO Stanag	Accepted	We should include this in DFSR 08

			indicated ratified no reservations			
28		references	No Reference to STANAG 7048 CRASH, FIRE-FIGHTING AND RESCUE (CFR) RESPONSE READINESS - UK has indicated Ratified no reservation	review document to ensure compliance with agreed NATO Stanag	Not Accepted	GBR have reservations against this STANAG. UK National doctrine do not use the definitions within this STANAG 20/10/2009 Ratification reference: D/DSTAN/12/15/7048
29	1	2	ARFF services cannot align with Both NATO and ICAO due to the requirements of STANAG 3712 which the UK has indicated has a National Reservation stating that the MOD only use ICAO standards.	replace all with ICAO	Not Accepted	Regulation aligns with both, where it is needed i.e. on Deployed Ops regulation aligns to NATO STANAG's as requested by HQ AIR the FLC that holds the deployable ARFF Service at readiness, reservation against STANAG needs to be up dated to reflect.

30	1	table 1	H1-3 Categories do not hold sufficient water for the calculated amount of water required for the largest Aircraft in that category i.e. H1-500L-Jupiter Requires 860L H2-1000L-sea king requires 1559L, H3-1600L Chinook Requires 3585L	Review and correct or clarify	Partially Accepted	The ICAO methodology for determining aircraft (both FW and RW) provides the minimum quantity of water required for foam production, based on an average size aircraft from within each category. However, then stipulates that for aircraft larger than the average size individual calculations should be carried out. This has been conducted on all aircraft identified within the regulation. Therefore, although the water requirements, for foam production, may, in some circumstances, be higher than the minimum quantities stipulated for a given category the Air System remains the given category based upon the overall size. There are also examples of aircraft within the document, where the water requirements, for foam production, are lower than the minimum requirements for a given category. However, this does not allow these aircraft to routinely operate below the required category and the minimum water requirements, for foam production, must be met. Note 1 to table 1 has been adjusted to provide greater clarification to the reader.

31	1	6	Directs the user to DFSR 04 to determine personnel levels, however H1-3 are set by CAA standards, with deployed locations minimum is set by STANAG 7206		Partially Accepted	DSA DFSR 02 Regulations are; aligned to, not In accordance with, ICAO/NATO/EASA standards, where they meet the needs of Defence. Therefore, although CAA CAP 168 does identify the minimum number of ARFF personnel required for ICAO 'H' categories, the decision taken by the DFSR ARFF (A) Team, is based upon safety. Therefore, crewing sizes will be based upon the TRA process. The exception is for Deployed Ops which will be IAW DSA DFSR01: Annex A which derives from STANAG 7206. To date TRAs conducted upon RW aircraft, have confirmed that the minimum numbers of ARFF personnel, identified within CAA documentation, is insufficient to ensure safe systems of work by ARFF personnel when dealing with probable worst credible scenarios of Unit based RW aircraft.
32	1	7	The ICAO Methodology to utilise the critical area is a concept for rescue of the occupants of an aircraft. It differs from other concepts in that, instead of attempting to control and extinguish the entire fire, it seeks to control only that area of fire adjacent to the fuselage. The objective is to safeguard the integrity of the fuselage and maintain tolerable conditions for its occupants. I do not believe that this approach is applicable to Military Type		Noted	Defence required DFRMO (now DFR) to align closer to ICAO and replace the then MOD Crash Categories in 2010. JSP 426 Vol3 Lflt2 has been aligned to ICAO since its introduction. All fires involving aircraft, of all types/configuration have the potential to impact upon the fuselage. The Critical Area Concept of ARFF operations are generic across all organizations (NATO/ICAO/EASA/CAA).

			Aircraft, where the fire is most likely to involve the fuselage.			
33	1	Table 3	this table contains many confusing aspects. C130 requires more water than cat 6 provides. A Dakota only requires 226 L, but is assigned to cat 4?, the chipmunk and tutor are cat 1, but the minimum provided is less than required, the Tucano requires less water than Texan, but is in a higher category		Partially Accepted	1. See response to Serial 30. 2. It has been identified that during final formatting prior to release for NPA several tables within the regulation became corrupted. Therefore, during Sentencing all tables have been reviewed and corrected accordingly. 3. Tucano was identified as an ICAO 2 aircraft. However, within weeks of this regulation being released this ac will be retired from Service. At the request of the DDH the individual aircraft category was left set at ICAO 3. This negated the need for nugatory work to be carried out by the Aircraft Operating Authority. Footnote 9 added to table to provide further clarity.
34	1	table 3	All Fast Jets have been classified as Category 5 with no water calculation. The author of this document must have known that the UK have informed NATO of a national reservation accepting the STANAG 3712, but stating that the UK use ICAO Categories. All FJ AC Fall in to Category 3, why have they been incorrectly classified?		Accepted	DSA DFSR 02 Regulations are aligned to NATO STANAGs/ICAO/EASA/CAA Regulations. It was not considered safe to reduce the requirements to ICAO 3 for Fast Jet aircraft.

35	1	9, 10, 11, 12	The Remission Factor and Reduced Hazard Profiles allow the operation of larger airplanes to aerodromes where RFF services are inadequate for these airplane categories. For several widely used airplane types, this reduction results in far less RFF service than required. This imposes an unnecessary safety risk to aircrew, RFF crew and passengers, solely for economic reasons. Any day, something unpredictable can cause an aircraft accident, placing every one of those lives at risk. Without the means immediately at hand to apply appropriate quantities of fire retardant foam within 2-3 minutes, lives may be lost in what would otherwise have been a survivable situation. Fire is the greater killer when it happens after a crash landing. There have been numerous instances when the impact of the landing did not result in passenger fatalities, but the ensuing fire did. Usage of this provision means that, for example, the Voyager		Noted	It should be noted, that although the wording in DSA DFSR 02 may be new, the ability for the ADH to operate aircraft at lower categories has been available within JSP 426 Vol3 Lflt2 since its introduction. This has included the ability for the Aircraft Operating Authority to issue standing dispensation for regular activity. Therefore, across Defence it is common for Air Staff Orders to be produced, identifying the individual responsible for allowing permission for aircraft to operate at locations with lower levels of ARFF provision. It should be noted that the example provided for Voyager operating at ICAO 6 would only be done within this regulation for an aircraft operating under Reduced Hazard Profile Category, thus there would be no passengers on board, thus reducing the numbers of ARFF personnel required to enter an aircraft fuselage for rescue purposes. Also see response to serial 73

			AC with a normal RFF category of 8, reduction to RFF category 6 is possible. This reduction will result in less RFF crew, approximately 50% less extinguishing agent, making it likely impossible to extinguish fire . This results in a serious degradation of the chances of survival for crew and passengers in case of emergency. At regulation 02, guidance para 6 it states that air transport incidents will likely require a multi agency response. if this is the acknowledged, why would this document recommend reducing available resource?			
36	1	17	deployed locations minimum is set by STANAG 7206		Accepted	
37	1	Annex A	Quotes STANAG 7133 which has been replaced by 7206. Question why Deployed ops receive greater numbers of staff than Home station?		Noted	DFR like all other ARFF Services across the World are a first/initial response to an identified risk. External support is anticipated and planned for under all emergency plans. On Deployed Ops this external support cannot be guaranteed. Therefore, planning for Deployed Ops is based upon Defence Strategic Direction and is IAW NATO STANAG 7206

38	1	Annex c table 1	note 2 is misleading. EG NFPA minimum water is greatly in excess of ICAO standards and is therefore absolutely the AOAs concern. Minimum Water for Cat 4 NFPA is 5050L, Cat 5 is 10450L almost double the ICAO Requirement and providing a much safer operating environment.		Not Accepted	This table was requested by 2 Gp who requested greater clarity on comparisons between ARFF provisions when operating from/to aerodromes in North America and other worldwide locations.
39	1	Annex c table 1	NFPA 403 also does not categorise Aircraft by calculation of critical area, just size to eliminate the need for calculating specific quantities of extinguishing agents for each type of aircraft		Partially Accepted	This document does not align to NFPA 403 However, the same information regarding critical area methodology can be found in all ARFF documentation including NFPA 403. Lastly, we must be reminded that Defence instructed DFRMO (now DFR) to align to ICAO not NFPA which was over prescriptive to defence requirements and was very similar to the old MOD Crash categories.
40	1	Annex D Table 1	as DH Facing organisations, the unit receiving visiting allied aircraft will generally provide the category requested by the AOA, and not prescribe a level of cover		Noted	The table is to provide AO's, ATC, OPS and fire station personnel with accurate information on individual NATO aircraft. Evidence gained during the initial consultation period identified the need for this table.
41	3	1 table 1	why is the number of vehicles not the same as the requirement in DFSR 01 A3 Table 1?		Noted	DFSR 01 Annex A Table 1 aligns to NATO STANAG 7206 for deployed locations. DFSR 03 Table 1 is aligned to ICAO

						Airport Services Manual Part 1 for all other locations.
42	3	5b	who conducts the TNA and where is the guidance promulgated?		Noted	This should be carried out in consultation between the ARFF Service Provider & the ADH.
43	4	1a	this differs from dfsr 01 para 4. no reference to landing within 15 minutes?		Not Accepted	
44	4	1d	not required. Covered in DFSR 03 para 7		Noted	Duplicated, just in case individual regulations are read in isolation. There are other examples throughout the document.
45	4	3	this para recommends that a TRA be carried out, however this is at odds with the direction in STANAG 7206. on operations a minimum safe number of staff are required, but at home station, this could be less than that on deployed ops. This does not seem to be at all correct.. similarly, three stations could all have different aircraft at the same category. following a TRA, they could all have differing levels of staff, but could still be promulgating the same category. The TRA should in my opinion be assessed		Partially Accepted	See response to serial 37. Furthermore be advised TRA conducted to date have been assessed against the greatest risk in a given category at each location operating differing AS in the same ICAO AC category. Therefore, ensuring a consistent approach across defence.

			against the greatest risk in that category to ensure a consistent approach across defence.			
46	4	4	on operations, deployed crews seem to be scaled to deal with the incident on site, if no external support is required. Why is this different in the UK?		Noted	See response to serial 37.
47	4	table A1	Footnote 41 states that this level of manning has been proved to be inadequate during TRAs. Why then is this still recommended manning?		Accepted	Footnote added regarding fixed wing aircraft and original footnote amended to reflect rotary wing aircraft.
48		Reference material	NFPA definition incorrect	should read "National"	Accepted	Documented updated to reflect comment
49		General	No glossary of terms within document	consider providing glossary or use full title the first time an abbreviation is used	Accepted	Documented updated to reflect comment
50		Reference material	Some reference material has editions/dates and some not	consider including for all and provide hyperlinks to all documents	Noted	MAA recommended to remove hyperlinks to external documents as lessons identified difficulty in maintaining links. Reference Material has been reviewed, all dates have been removed and a standard approach has been used for each sub section regarding whether or not the edition number has been included.

51		Reference material	CAP 789 no longer extant, superseded 14 Jul 14 with EASA aircrew regulations	consider replacing reference	Noted	Confirmed with CAA Lead for OAA (RFFS) that CAP 789 remains extant, but will not be subject to future review. Hence, it no longer appears in the CAA List. However, they also use it as a reference document for unlicensed Aerodromes. Moreover, it is still referred to in CAP 168 Edition 11 which was published January 2019.
52		Reference material	NATO STANAG	consider the addition of corresponding AATMP to future proof	Noted	The AATMP was not used in the development of this document. STANAG (7051) covered the requirements for ARFF services on operational deployments
53		Intro - Rationale	Formatting: EASA regs and ICAO Annex 14 Vol I are all under sub para c	should they be split up?	Accepted	Documented updated to reflect comment
54	DFS R 01		No definition of what an aerodrome is	consider including to also capture heliports, permanent HLS etc	Not Accepted	MAA output and not for this document to determine what a heliport permanent HLS is.
56	DFS R 01		Table 1 & 2 – first time reader confronted with H cat	consider capturing H cats within rationale	Not Accepted	Already included within rationale under sub para e
57	DFS R 01	Table 1 notes		Note 1 – Use term "aircraft" or include helicopters as well as aeroplane (average overall length & width)	Accepted	Documented updated to reflect comment
58	DFS R 01	Table 1 notes		Note 2 – (1) define surface level heliport? (2) a. add (excluding	Partially Accepted	(1) Surface Level Heliport is ground level. (2) This is a direct cut & paste from both ICAO/CAA documents. Note 2 has been amended to reflect the difference between

				CO2) after gaseous agent from note 2a		media substitution between fixed and rotary wing aircraft.
59	DFS R 01	Table 1 notes		Note 3 – future removal of reduction in high performance dry powder likely in 2020	Not Accepted	This wording has been cut & paste from the CAP 168 Licensing of Aerodromes (Ed 11 Jan 2019)
60	DFS R 01	Table 1 notes		Note 4 – is it necessary to reference major/small vehicles and if so define major/smaller vehicles?	Noted	The review panel felt that small and major vehicles are well defined in ICAO Airfield Manual Part 1 and didn't feel the need to further expand within this document, see further DFSR 03 Para 2
61	DFS R 01	Table 1 notes		Note 6 – (I) define rotary wing aerodrome (ii) confirm gaseous/CO2 requirement at aerodrome i.e. is 18kg CO2 the totality for the rotary aerodrome?	Partially Accepted	(1) See serial 54 (2) Where the main complementary agent is dry powder, an additional quantity of gaseous agent CO2 (18 kg) is required for effective intervention in cases of aircraft engine fire. And, where the main complementary agent is gaseous, an additional quantity of dry powder (9 kg) is required to assist in dealing with a running fuel fire.' Note 6 Amended to reflect wording contained in CAP 689
62	DFS R 01	Para 3	Para 3 - 1. Are Partners for Peace and ANZAF captured under NATO aircraft? 2. Following a discussion with an AO on 5/6/19 who used to work in MAA, he stated AO is only required to inform the visiting	If yes then provide detail in Para	Not Accepted	(1) No. (2) See Serial 40. There have been many examples of where individual Units have uplifted the aerodrome category incorrectly, to meet the aircraft requirements.

			aircraft what ICAO Cat they are providing, not necessarily provide the Cat needed			
63	DFS R 01	Para 7		Para 7, line 5 – consider inserting “minimum” (quantity of water)	Accepted	Documented updated to reflect comment
64	DFS R 01	Table 3		(I) consider including civil designation, if applicable (see BAE 146/EC135/EC 145) (ii) consider retitle to meet context within Para 7.	Not Accepted	(1) MAA advised to remove civil designations where not required (2) Unsure of commentator’s intent, the panel believe the title of the table meets context of the table.
65	DFS R 01	Table 3	ICAO Heliport Manual classifies AW 189 & Bell 212/412 as H2 - what is the rationale for H3 within this regulation?	Consider a footnote to detail the rationale	Not Accepted	No need to provide a footnote. This has been explained to the ADH for each aircraft. Moreover, rationale is explained in Table 2, including Note 2.
66	DFS R 01	Table 3	Size of Juno/Jupiter falls within H1, however, the water requirement is more than min H1 requirements. Civil heliports may only have min H1 water requirement if air systems were going to operate from them		Accepted	See Serial 30.
67	DFS R 01	Table 3	Review contents for accuracy (i.e. Dakota [226 lts], Tucano, Texan etc)		Accepted	Documented updated to reflect comment

68	DFS R 01	Table 3	Water requirements in Table 3 do not correlate with minimum requirements with table 1	Review accuracy of all tables	Noted	See Serial 30. Moreover, Table 1 (Note 1) has been changed to read: "The quantities of water shown in columns 2 and 4 are based on the average overall length of aircraft in each category. Where the aircraft is larger than the average size in a given category, the quantities of water and discharge rates have been individually recalculated in accordance with ICAO Airport Services Manual Part 1 and can be found in DFSR 01 Table 3."
69	DFS R 01	Para 8	1. Reads ARFF Service provider, this needs to be DFR HQ. 2. Some of the text is actually guidance within AMC	consider placing the guidance text within GM?	Partially Accepted	(1) DFR HQ are included within the terminology Service Provider. (2) Document updated to align to Acceptable Means of Compliance.
70	DFS R 01	Para 9	1. Is there a provision/need for RW to sit within reduced hazard profile 2. provide definition of cargo and does this also include fuel (tanker) 3. if you are "ferrying" people then they will not be in cockpit and therefore reduced hazard profile is not applicable		Partially Accepted	1. Reduced hazard profile is only to be used for FW aircraft. 2. AOA recognise the terminology of cargo, mail, ferry, positioning or end of life and this document should not define what these are. Defence no longer have aircraft with an internal fuel tank inside the fuselage, where passenger seats would have been placed, so these are included within reduced hazard profile category. Paragraph 9 amended to reflect this. 3. See response to 2.
71	DFS R 01	Para 9		consider inserting "all" cargo as some flights may have mixed roles.	Not Accepted	During iNPA MAA advised to remove the terminology 'all' cargo flights and only make reference to cargo. AOA assisted in the wording of this paragraph, hence understand the requirement.

72	DFS R 01	Para 9	Should reduced hazard profile sit in AMC rather than GM	move to AMC	Not Accepted	If it were AMC then it has to be used, leaving it GM means that the ADH Chain have the option to use should they so wish. Moreover, this aligns to the principles of ICAO/EASA/CAA who also offer the ability for the use of Reduced Hazard Profile Category operations.
73	DFS R 01	Para 11	Should remission sit in AMC rather than GM	move to AMC	Not Accepted	If it were AMC then it has to be used, leaving it GM means that the ADH Chain have the option to use should they so wish. Moreover, this aligns to the principles of ICAO/EASA/CAA who also offer the ability for the use of Remission.
74	DFS R 01	Para 11	International Federation of Air Line Pilots Associations (IFALPA) strongly opposes the use of the Remission Factor. They do not support airplane operations to aerodromes with a lower RFF category than what would normally be required. Minimum aerodrome categorization should be based on the largest airplane using the aerodrome, as specified in ICAO Annex 14, table 9-1 (2) Usage of this provision means that, for example, for the Airbus A320 with a normal ARFF category of 6, reduction to ARFF category 5 is possible. This reduction will result in less ARFF crew, approximately		Noted	

			30% less extinguishing agent, but also only one crash vehicle instead of two normally required, making it impossible to extinguish fire from two sides of the aircraft at a time. This results in a serious degradation of the chances of survival for crew and passengers in case of emergency			
75	DFS R 01	Para 11	Confirm visiting aircraft only (≤700 movements in the busiest 3 months)?	Should this not be the totality of all air movements at the aerodrome and not the number of movements of the aircraft performing passenger transportation in the highest category, visiting the aerodrome…..	Not Accepted	Paragraph is 'cut & paste' from ICAO reference material. Hence, is correct & refers to visiting aircraft.
76	DFS R 01	Para 11	Safe and effective crew levels are identified by TRA process for the largest aircraft regularly operating from an aerodrome. Can these agreed safe and effective staffing levels be reduced under remission. Are		Not Accepted	This process has been used for many years across the globe. However, it is a risk assessed process & as such remains under the authority of the ADH chain. There is no need for a separate TRA unless this is considered necessary during the risk assessment process. It should be noted that this has been permissible in the JSP 426 Vol3 Lflt2 since its introduction, just not titled 'Remission'. The ARFF

			additional TRA's required for remission?			Service Provider is to consider the necessity to provide TTPs when operating under Remission.
77	DFS R 01	Para 12	should this not be AMC? Rather than guidance	move to AMC	Not Accepted	Remission & Reduced Hazard Profile Categories are only introduced within GM.
78	DFS R 01	Para 13/14	Para 13 states "advice can be sought from Command/Group HQ/Defence ARFF Service Provider. Para 14 only identifies Defence ARFF Service Provider is to assist - why is this different?	This should be DFR HQ	Partially Accepted	DFR HQ are included within the terminology Service Provider, however paragraph 13 & 14 have been updated to mirror each other in where the sources of SQEP advice can be obtained.
79	DFS R 01	Para 15	Same source of advice as Para 14 - Why?	This should be DFR HQ	Partially Accepted	See response to Serial 78.
80	DFS R 01	Para 16		DFR HQ should set the requirement and endorse	Partially Accepted	See response to Serial 78.
82	DFS R 01	Annex A	A.3.2 – STANAG 7133 Superseded		Accepted	See response to Serial 23
83	DFS R 01	Annex B, B1.1 & B1.2	First line reads DSA 02 DFSR	should read DSA DFSR 02?	Accepted	Documented updated to reflect comment

84	DFS R 01	Annex B, B2.1	Consider rewording - The principal objective of a rescue and firefighting response is to save lives. For this reason, the provision of means of dealing with a helicopter accident or incident occurring at or in the immediate vicinity of non-aerodrome sites assumes primary importance because it is within this area that there are the greatest opportunities for saving lives. This must assume at all times the possibility of, and need for, extinguishing a fire which may occur either immediately following a helicopter accident or incident or at any time during rescue operations.		0	Changing to this would automatically require an ARFF Service response. This is not always required, hence the wording of this paragraph.

85	DFS R 01	Annex B, B2.2	Consider linking to response regulation 02 (AMC) (2) Are non ARFF specialists still required to meet the response criteria considering the most important factors bearing on effective rescue in a survivable helicopter accident are the speed of initiating a response and the effectiveness of that response – see DFSR 02 footnote 3. (3) Risk assessment will need to capture how the extinguishing media (extinguishers) and non ARFF professionals are going to get to all areas of the response areas (FATO, designated aiming point(s) and TLOF, including all areas used for the manoeuvring, rejected take-off, taxiing, air taxiing and parking of helicopters. Looks like a replacement for the RB 44/Land Rover FES may be the only option to meet response time/discharge rates.		Noted	The response times detailed in the regulation are to be met by professional ARFF services. Fire provision at a HLS is dependent on the outcome of a risk assessment conducted by the relevant Duty Holder. Appendix B1 has been removed.
86	DFS R 01	Annex B, B2.3 para d	Consider removing ‘emergency plan is the bare minimum requirement as its captured within B3.2	just keep in Para B.3.2	Not Accepted	Para B.2.3 is a GRA as opposed to Para B.3.2 which relates purely to Domestic HLS.

			and it doesn't fall under factor.			
87	DFS R 01	Annex B, B5.1	"Low Intensity is not mentioned within CAP 168		Noted	Correct, but CAP 168 Edition 11 (Jan 2019) refers to CAP 789 which does.
88	DFS R 01	Annex B, B5.1	CAP 789 is guidance material for civil unlicensed sites. Provide rationale for reducing levels of protection for Defence requirements (Dynamic flying operations/NVG etc).		Not Accepted	JHC requested greater flexibility to use the RW force elements with greater agility, requesting the ability to utilise the benefits available within CAP 789.
89	DFS R 01	Annex B, B5.1	Provide rationale for greater than 10 movements in a 24-hr period		Noted	b.5.1 - Examples of low and standard intensity movements have been removed from Annex B and the definition of low and standard intensity will be determined by the individual ADH chain allowing a reduced level of ARFF response. Examples of fire provision for low intensity operations can be found in CAP 789. B.6.1 Standard Intensity changed removing figures determining standard intensity.
90	DFS R 01	Appx B1, Table 1	Consider replacing 'output' with 'minimum useable amounts of extinguishing agents'		Accepted	Documented updated to reflect comment

91	DFS R 01	Appx B1, Table 1	1. Confirm foam concentrate used within 90 ltr foam is performance level B. 2. Confirm the use of "high performance dry powder" can still lead to a reduction in the minimum amount provided		Partially Accepted	1. Foam used on aviation fuel fires is level B, it is the organisation that provides SME advice to the contracting authority to determine the requirement. 2. See response to Serial 59 - Wording directly aligns to CAP 168 Edition 11. It will be necessary to apply for an Alternative Acceptable Means of Compliance, Waiver or Exemption from DFSR using MAA 003 policy. There will be further requirements for these once the Regulation is released. The DFR CFO will be informed accordingly.
92	DFS R 01	Appx B1, Table 1	Review examples of cover (some do not meet the minimum useable amounts of extinguishing agents stipulated and discharge rates)		Accepted	Appendix B1 deleted
93	DFS R 01	Appx C1, Table 1	1. Consider rewording (most common?) 2. Footnote 1 – consider adding Crash Fire Rescue (CFR) contained within NATO Standardised terminology APP- 15		Accepted	Documented updated to reflect comment

94	DFS R 01	Annex D	1. Minimum water requirements for all current NATO aircraft are captured with NATO ST 3712 2. Confirm that all NATO, PfP & ANZAF aircraft are captured iaw NATO ST 3896.		Noted	1. STANAG 3712 provides water requirements for NATO Crash Cats, which are based on NFPA 403 requirements. GBR have placed National Reservations against ST 3712. 2. No, there are some aircraft identified within Annex D Table 1 that do not appear within NATO ST 3896. The list of aircraft was provided by the UK NATO Rep based at Ramstein AFB. It should be noted that this table is designed to assist AOs.
95	DFS R 01	Annex D, D.1	Consider rewording – captures more than just water requirements. Do you need to explain Q1 & Q2 within the text?		Not Accepted	Para D.1 explains Q1 & Q2.
96	DFS R 01	Annex D, Table 1	Consider grouping aircraft by categories (as per ICAO ASM)		Not Accepted	Table is constructed in the same manner as DFSR 01 Table 3 in fixed wing alphabetically order followed by rotary wing alphabetical order. It was decided that this method most suited the intent, which was to provide assistance to Aerodrome Ops Wgs.
97	DFS R 02	AMC 02, Para 5	Define operating area (response area?)	include (response area)	Partially Accepted	Operating Area' changed to 'Movement Area' which is the new terminology in the recently reviewed CAP 168.
98	DFS R 02	AMC 02, Para 6	Footnote for Para - talks about meeting the response time within 2 mins - the ARFF response should already meet this	Remove para 6 as it is the same for all operating/response areas	Not Accepted	IAW ICAO Heliport Manual "Surface Level Heliports have a response time of 2 mins_ _ _". Which is different to an aerodrome Response time of 2 mins not exceeding 3 mins.

99	DFS R 02	AMC 02, Para 7 & 8	Review para's as it contradicts Para 5 that states ARFF services should achieve response times……..		Not Accepted	Paragraphs set the requirement for a fire station & where it is located.
100	DFS R 02	AMC 02, Para 13	States that the Defence ARFF service provider is responsible for completing the Response Area Risk Assessment, whereas, Para 14 states that the Senior ARFF Officer present shall carry out the 1000m assessment	Change so they both read the same/completed by same person	Accepted	Documented updated to reflect comment
101	DFS R 02	AMC 02, Para 17	Confirm hazards ALARP? …. risks can be ALARP through control measures		Accepted	Documented updated to reflect comment
102	DFS R 02	Para 16	Covering same - 1000m assessment	just have in one para	Partially Accepted	Removed response area from Para 16- Documented updated to reflect comment. However, it is to be noted that the DFRMO supplied form is titled "1000Mtr Response Area Assessment".
103	DFS R 02	Para 18	Does this Contradict DFSR 01 Para 4?	Review	Noted	
104	DFS R 02	Para 19	"Senior ARFF Officer" term may cause confusion	Consider wording of "On scene" officer or just Incident Commander.	Not Accepted	Current JSP 426 Vol 3 lflt 2 Paragraph 2.4.1 states 'The Senior DFRMO Manager' this has been updated to Senior ARFF officer and reflects a broader provisioning for Non DFR aerodromes i.e. MAA CAFOS locations.

105	DFS R 02	GM 02, Para 1	FYI - NATO are changing states of readiness definitions to comply with ICAO		Noted	
106	DFS R 02	GM 02, Para 6	Consider rewording, not all LAFRS have/use PDA		Noted	This is designed to meet the needs of Defence. The RRP believe the terminology is understandable to Defence.
107	DFS R 02	GM 02, Para 7	Check currency of NOGP – The programme finished in 18. Now known as NOG hosted on UKFRS site	Change to NOG	Accepted	Documented updated to reflect comment
108	DFS R 03	Para 2		include definition of an ARFF vehicle and not just direct to ICAO Airport Services Manual	Not Accepted	This has not changed from JSP 426 Vol3 Lflt2. To accept this comment would add approximately 20 pages of text to the DFSR 03.
109	DFS R 03	AMC 03, Para 4	Confirm water jets would be desirable within an AMC?	Move to guidance material	Not Accepted	Wording suits AMC. It is important that a dual-purpose vehicle, meets the requirements for ARFF above structural hazards.

110	DFS R 03	AMC 03, footnote 30	Provide rationale - DFSR 02 para 20 states that ARFF crews will respond to all emergency incidents	Remove footnote	Noted	Issue caused by footnote 7 to DFSR 02 Para 20 being lost during formatting of document prior to NPA footnote reads. "In some instances, where ARFF capability is provided by a contracted Service Provider, where no provision has been made within the contract to provide a structural response capability. ARFF personnel will not be authorised or contracted to collate any pre-planning or structural risk information activities, which support Safe Systems of Work (SSoW). Where the situation exists, the expectation is to provide a 'defensive' response only whereby no personnel are committed to the immediate risk area, the primary aim being to limit the spread of fire to the compartment or building of origin." Furthermore, there will be some deployed locations where structural cover is not provided by GBR ARFF services. Lastly, ICAO Category 5 minimum vehicle requirements can be maintained by using 1 FFV. Therefore, the aerodrome category can be maintained with only 1 vehicle. But this may result in a change to delivery of response to a structural incident, which should be risk assessed by the DH RtL.
111	DFS R 03	GM 03, Para 14	Acceptable colour scheme for deployed operations?	Provide guidance for colour scheme for deployed ops vehicles in footnote	Not Accepted	Choices to wide and varied to be defined in a regulation, this can be decided depending upon location during planning stage
112	DFS R 03	GM 03, Para 16	What is the definition of category special		Noted	See DFSR 01 Table 1.

113	DFS R 04	Para 1, sub para c	is this relevant for ARFF Personnel requirements	consider removing	Noted	0
114	DFS R 04	AMC 04, Para 2	1. Sentence 2 should capture training should be undertaken to deal with all possible scenarios and not just the WCS.		Noted	Disregard
115	DFS R	AMC 04, Para 2	The TRA should be requested by the HoE/AO through DFR HQ	Insert	Not Accepted	This document has a broader audience than the DFR AOR, therefore will be unchanged
116	DFS R 04	AMC 04, Para 5	Refers to "minimum" number of personnel	Change to read "appropriate"	Accepted	Documented updated to reflect comment
117	DFS R 04	AMC 04, Para 8 (I)	Difference between AERP and MIP	Should refer to both?	Partially Accepted	Aligned to the MAA DAM which States "Emergency Orders - (Aerodrome Crash Plan)"
118	DFS R 04	AMC 04, Para 9	Introduction of new air system should not be a reason for carrying out a TRA unless it changes the WCS	Consider removing	Noted	
119	DFS R 04	GM 04, Para 14	ST 7162 UK ratified with reservations – UK will use own national standards		Accepted	This Regulation also covers other aerodromes, not just those resourced by DFR personnel.
120	DFS R 04	GM 04, Para 17	This should be AMC and not GM	move	Not Accepted	Comment considered however, the 3rd & 4th order effects are who refuels vehicles & Makita Saw and other equipment used by the ARFF service. The intent of this sentence is to reduce possibility of an Extraneous Duty being refuelling tasks.

121	DFS R	AMC 05, Para 10	the word "should" cannot be met due to current legislation		Accepted	Agreed that this cannot be met. This is future proofing & SFRI will be supplying a waiver. It is an attempt to move Defence to use 3F and get Service Providers a 'push' to reviewing how they can deal with foam in the future. Moreover, this wording was agreed at a meeting with DIO/Project Aquatraine/Service Providers at DIO Sutton Coldfield, with DFR in attendance.
122	DFS R 05	AMC 05, Para 14	Consider adding 3 dimensional fires		Not Accepted	RRP considered Re-wording to reflect 3 dimensional fires, however we believe the original wording within JSP 426 Vol3 Lflt2 is sufficient. A running fuel fire is a 3-dimensional fire it is RRP belief that DFR are more familiar with the terminology, "running fuel fire".
123	DFS R 05	AMC Para 18	insert "where foam is utilised"		Noted	Direct lift from ICAO/EASA & CAP 168.
124	DFS R 05	AMC Para 24	This will change when 3% foam comes into use	future proof	Accepted	This Paragraph is future proofed as the requirement remains the same irrelevant of type of foam being used. But it is accepted that vehicle designers will probably fit a foam tank big enough to hold all of the foam required, including the 200% reserve.
125	DFS R 05	AMC 05, Table 1	Only covers Performance Level B Foam	Consider adding Performance Level C foam?	Accepted	Document to be updated to reflect comment
126	DFS R 05	GM, Para 31c	requires clarity, can Type B and Type C foam be used together?		Noted	Confirmation received from foam manufacturers that 2 grades of foam are compatible and would not break down

						each other at the same incident. Its the concentrate which should not be mixed.
127	DFS R 05	GM Para 32	Elsewhere in the document it states at category Special, 1 and 2 can replace foam with gaseous agent therefore principle agents are not present for these categories	requires clarity	Not Accepted	Throughout the document it makes reference to the provision of CO2 & Dry Powder.
128	DFS R 05	GM 05, Para 40	Should this not be AMC?		Accepted	Paragraphs 40-42 moved to AMC Documented updated to reflect comment
129	DFS R 06	AMC 06, Para 3&4	Direct repeat of DFSR 02 Response para 5&6	Remove from DFSR 06	Noted	Included here just in case this is the only regulation that is being read by the RC to check a specific task out.
130	DFS R 06	GM 06, Para 13&14	Consider rewording, may be deemed as confusing to reader	reword	Accepted	Reworded to avoid confusion.
131	DFS R 06	GM Para 16	The crash category does not change, the resources change through adjustments to WCS		Accepted	ARFF service provision included, crash category status removed.
132	DFS R 07	AMC Para 2	Should it not be the AO who has these procedures in place, not the ARFF Service Provider		Not Accepted	As ADH facing organisation a policy should be in place.

133	DFS R 07	Annex a Para A.1.1	The HoE cannot approve this activity?		Partially Accepted	Para A.1.1 updated and now states: "Where circumstances dictate that flying is conducted to/from aerodromes with reduced levels of ARFF services the ADHs/AM (MF) (Footnote *), in consultation with the Aerodrome Operator (AO), may approve such activity following a risk assessment informed by advice from the Defence ARFF Service Provider." Footnote * States: It is acknowledged that in some cases the roles of ADH/AM(MF)/HoE and AO will be the same individual(s); equally that in some cases the HoE will NOT be an ADH or the AO. The requirement is that in order to operate from an aerodrome at a lesser ARFF state than normally required by the Air System, the platform RISK OWNER (or empowered representative) is the only person who can accept the lower ARFF state and continue with ops. AO are to be consulted but can only advise/inform the risk owner, notwithstanding that they can ultimately decline to accept the air system

134	DFS R 07	Annex A, A.2.1 Aircraft Type	(a) what relevance does this have (h) Falls under aircraft operations not aircraft type	Review title - Aircraft Type Move (h) to Aircraft Operations	Partially Accepted	This is a direct lift from JSP 426 Vol3 Lflt2. a. 'Sub Para a will remain as a necessary consideration when conducting this risk assessment, this is because of the following: In accordance with DFSR 01 ARFF Response, one of the principle objectives of Aerodrome Rescue Fire Fighting (ARFF) Service is to 'Create and maintain survivable conditions. When considering the many different aircraft types operating by Defence, consideration must be taken regarding the type of aircraft, including the different operating systems and the hazards presented by these systems. Ejection Seats and other Aircraft Assisted Escape Systems (AAES) when 'live' present a myriad of hazards not only to aircraft occupants but, also to ARFF Service personnel. Before it can be considered that survivable conditions have been created, these systems must be 'made safe'. It is essential that the risk assessment process takes this in to consideration when looking at the possibility of operating at reduced levels of ARFF Service provision. b. Accepted - updated accordingly
135	DFS R 07	Annex A, A.2.1 Location	What is deemed an acceptable timeframe?	Provide definition - without creating an unacceptable gap	Noted	This is subjective as it is within the TRA process. Hence it forms part of the RA & must meet the satisfaction levels of the DH conducting their own RA, this is a direct lift from JSP 426 Vol 3 lflt 2

136	DFS R 08	AMC Para 2c		replace training information with technical information	Accepted	Documented updated to reflect comment
137	DFS R 08	AMC 08, Para 3	Para 3 c. does not fall under NATO ST 7145		Accepted	Documented updated to reflect paragraph.
138	DFS R 08	AMC Para 4a-d	DFR HQ are responsible for ensuring procedures in place		Accepted	DFR are included as an ADH-F Organization, however, DFR HQ do not provide all ARFF Services covered by this Regulation. Which is written for Defence.
139	DFS R 08	GM 08, Para 11	DFSR 08 is about Training Requirements, Para 11 is about Medical Standards and is covered in DFSR 04 para 14.	Remove from DFSR 08	Accepted	Changed 'medical' to 'physical fitness'
140	DFS R 08	GM Para 13	revisit TRA delegations		Not Accepted	These are the agreed 1* TRAs - no requirement to re-visit as the paragraph is accurate.
141	DFS R 8	GM 08, Para 16	Define ‘sufficient’		Noted	This is defined in AMC Para 8.
142	DFS R 8	GM 08, Para 17		Change "Local" aerodrome training…. To "Site Specific"….	Accepted	Documented updated to reflect comment
143	DFS R 8	GM 08, Para 19	Does this include initial training by external training providers?		Noted	This is about MOCS and not about initial training. Personnel are to receive initial training that meets the satisfaction of the 1* TRA against the Role PS. If necessary, this would be followed by 'conversion to type' training.

144	DFS R 8	GM 08, Para 24 (c)	ICAO objective - water requirement for external firefighting (Q1 & Q2). No provision for additional water for internal firefighting.		Noted	
145			From an Operators position, we felt that the document layout was a little cumbersome. Regulation 01 dictates the Service Level of Protection, however, in order to ascertain which category is relevant to MOD Fleetlands, we must first deduce the required category for specific aircraft types operating at the HLS. This resulted in having to browse through the whole document to find aircraft categorisation and then returning to Table 1 in order to ascertain the correct figures from Table 1. It was thought that aircraft data may be better presented as the starting point for ascertaining the operating category of the HLS.		Noted	This Regulation was written to make it easier for the aircraft operators to understand the requirement, as it had been highlighted during the initial review of JSP 426 Vol3 Lflt2 that it was a difficult document to navigate. To highlight this please note that table 1 (although updated to include 'H' categories) within the DFSR 01 Regulation also appears within JSP 426 on page 8. Furthermore, DFSR 01 Table 3 appears within the JSP on page 10. However, the actual Defence requirement for Chinook operations within JSP 426 Vol3 Lflt2 does not appear until page 29. So far, during the roadshow that we are conducting across Defence, the aircraft operators have all confirmed that this new document is easier to navigate.

146			Having deduced that the helicopter types operated at MOD Fleetlands fall into H3 we return to Table 1. The contents of Table 1, as both the HLS Manager and aircrew, we found to be misleading. Noting that H3 required 1600Ltrs of water with 800Lpm discharge rate (Level B Foam) we assumed that our single RIV (2750Lts water with 1000Lpm discharge rate) would be suitable to provide Cat H3 coverage for the HLS. However, when returning to Table 3 we find that the requirement for Chinook H3 is actually 224% more (3585Ltrs) than the figures quoted at Table 1(1600Ltrs). We found this both confusing and misleading. As aircrew, if I were to operate Chinook (Cat H3) to a H3 classified aerodrome, I would assume that I was suitably covered for ARFF requirements. However, it appears that an aerodrome deeming itself as H3 under Table 1, is not necessarily H3 for Chinook. We felt the need to amplification within Cat H3, an amendment to		Noted	Table 1 updated to ensure RC understand how individual ac are classified within ICAO moreover a link to Table 3 has been inserted.

			Table 1 to take into account ALL H3 aircraft or the addition of H4, if Chinook falls outside of Table 1, H3 requirements.			
147			Based on the statement at Table 2, Notes Para 2. If aircraft categorisation is based on dimensions alone, we question the Categorisation of Wildcat to H3, especially considering a Dauphin of comparable size or a Puma, which is larger than a Wildcat, is Cat H2.		Noted	When conducting the review of JSP 426 Vol3 Lflt2 we worked very closely with JHC. We highlighted that many Defence RW aircraft were wider than their civilian counterparts. Moreover, the previous version of CAP 168 contained a maximum width factor for each aircraft category. This is also the case with NATO STANAGs to which the new regulation is also aligned. Therefore, it was decided that we would utilise the maximum width factor when re-introducing H categories. If an aircraft is wider than the maximum permitted width in a given category, it is moved to the next higher category. This information was provided to DDH for acceptance

148			We query the individual aircraft media requirements for Chinook, although it is understood the calculations are likely taken rotor tip to rotor tip, a Chinook is disproportionate in overall length, with 2 main rotor heads, way exceeding the actual fuselage size. However, by comparison it appears hugely over compensated that a Chinook requires over 200% more media than a Merlin, especially when considering a Chinook has a fuselage length of 52ft compared to that of a Merlin, being 63ft. Additionally we note that at Annex D, a CH53 (Length 30.2mtrs/99.5ft) which has effectively the same overall length of a Chinook (30mtrs/99ft) it states that the required media is only 68% of that stated for a Chinook 2459Ltrs vs 3585Ltrs). Accordingly, we request a review of the media requirement for Chinook.		Noted	Further to response to Question 4 (Serial 146). RRP have used aircraft manufacturers specifications to recalculate individual aircraft categories. Where these have also provided direction on the required aircraft category, this has also been used. Therefore, RRP consider that there is no requirement to re-calculate the CH-47, moving against industry standards, would expose the Aircraft Duty Holder (ADH) to unnecessary risk. Regarding, individual aircraft sizes. You will be aware of the various models of chinook used within UK Defence and the differing widths. To ensure that further confusion did not enter this area, it was agreed with the DDH that we would calculate water requirements on the largest airframe within the UK fleet. This ensures that the correct water requirements are provided, irrelevant of the individual aircraft being tasked. Please also note that the specifications, provided by Boeing, for CH-53 (Length 26.97m, Width 2.29m). And, Leonardo Helicopters for Merlin (Length 22.4m, width 2.49m) are considerably smaller than the CH-47 (Length 30.18m, width 4.8m).

149			Annex B reductions are based on non-aerodrome locations. It should be noted that whilst MOD Fleetlands is a permanent HLS, we are also referred to as a Heliport and additionally, as an Aerodrome. Therefore, whilst ascertaining the requirement for MOD Fleetlands, we dis-regarded Annex B on the belief that this was aimed at those sites not classified as Aerodromes. It is requested that further clarification be given regarding the use of the term 'Non-Aerodrome'.		Noted	It has become apparent during the Roadshow, despite working closely with JHC that DFSR 01 Annex B is not quite right. Therefore, there will be further work carried out to correct this annex to ensure that it can be taken full advantage of by the Regulated Community. This work will be conducted with representatives from within JHC. Once done, I see no reason why, if Fleetlands fits within the requirements of Low Intensity Operations, why you could not take advantage of this annex. As ever, this would need to be risk assessed and endorsed by your AM (MF).
150	2	A1-2 (Table 1 & 2)	Why does the recommended firefighters in Table 1 & 2 change for ICAO 5 and H3 for 13+ maximum aircraft on the ground?		Noted	See response to Serial 37
151	2	Chpt 5 Para 6	"Air transport incidents will highly likely involve a multi-agency response, therefore it is important that the Defence ARFF Service provider ensures collaboration with civil emergency responders forming the Pre-Determined Attendance		Noted	https://www.ukfrs.com/guidance/search/intraoperability-and-interoperability

			(PDA) for incidents at individual aerodromes. To support Interoperability and Interoperability it will be necessary to embed the basic principles of the JESIP in to the Unit MIP". What does Interoperability mean?			
152	1	Chpt 10	The line stating that reduced hazard is currently for people within the cockpit.	I suggested words to the effect '..... or the area immediately surrounding the designated forward exit' .	Accepted	Definition amended to ensure that all aircraft capable of operating under Reduced Hazard Profile Category are able to take advantage of this GM. 2 Gp AS Assurance are content with the revised wording.
153	6	Chpt 8	DG rules for loading/unloading require a ARFF vehicle near the ac but not for engine start? What is the rule trying to achieve?		Noted	Para 8 Reads: "The minimum operating category for aircraft carrying Dangerous Goods (DG) should be maintained. ARFF Services should be at Readiness State 3 (in accordance with DFSR Regulation 02: ARFF Response) for air transport movements carrying DG 1.1, 1.2 and 1.3. During unloading / loading of all UN class 1 (except 1.4) a manned ARFF vehicle should be located near the operation for optimum response." This is expected to include engine start-up and close down. It should be noted that MTSR did not question this during iNPA. Moreover, as a result of this being raised the paragraph has been submitted to HQ Air A4 OpsMovs DG who is also content with current wording.

154	All	All	DFSR 02 onwards - GM in all regulations should be consecutively numbered from the AMC part to follow the template used on the MAA 1000 - 5000 RAs, this would also make referencing parts of the regulations easier.		Accepted	Corrected document updated
155	2	Footnote 2	Footnote 2 (the number) font size needs changing from 10pt to 8pt		Accepted	Corrected document updated
156	1	Table 1	Font size for sub para 2a and sub para 6 need changing, currently 8 and 9pt rather than 10pt. Table 2 Note 2, number needs font size amending from 11 to 10pt. Note 6 needs hard return removed so text falls on to 5 lines rather than 6.		Accepted	Corrected document updated
157	1	Para 8	Following AMC Para 8, the GM text needs to be moved to the same page, currently it starts on a different page for no reason.		Accepted	Corrected document updated