

Welcome



The aim of this Post Season Symposium is to facilitate the identification of lessons by sharing 'top tips', 'gotchas' and experiences from DS18. It is also an opportunity to discuss forthcoming regulatory changes, generate feedback for the Regulators and contribute to the ongoing improvement of safety within the flying display environment.



Regulator Feedback

Chris Kidd - Civil Aviation Authority

Sqn Ldr Jez Case - Military Aviation Authority

Scope

- Context
- Facts, Figures, Safety Information and Trends
- Hot Topics
- Forward Look
- Regulator Priorities
- How you can help.



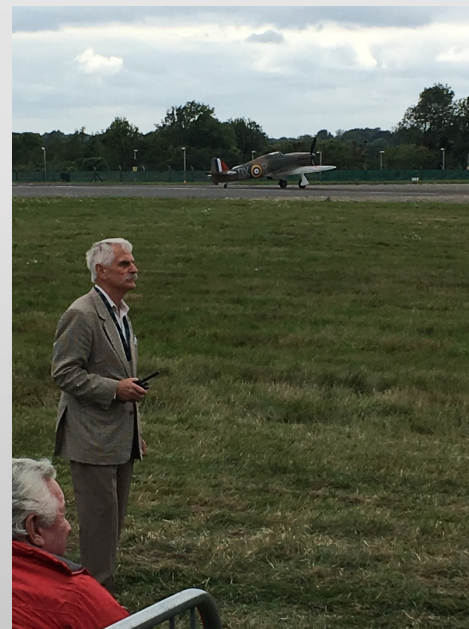
Context for Display Season 18

- Stable regulatory environment
- We were much more organised
- CAP 403 Edition 15 went out on public consultation in January and was issued in March
- FDD course completed early
- DAE standardisation began



Context for Display Season 18

- New performance based inspection regime
- Pre-Season presentations were made available on the CAA Website
- Mid Season Update released in July
- Greater use of web based forms and Skywise





Context for Display Season 18

- So what?
- Every single applicant that sent us an application with 42 days or greater, was issued a permission with 14 days or more to go
- Much quicker turnaround of DA initial issue, DAs and DA upgrades
- Considerably less last minute phone calls by members of the community
- Increased stability for FDDs and pilots in the run up to their displays



Context for Display Season 18

- But it wasn't perfect.....
- We dropped the ball on a number of occasions
- Some initial issue DAs took 3 months.....
- 3 Permissions were issued less than 7 days to go that were our fault
- CAP 403 wasn't specific enough in a some areas which created work for you and us
- On occasion our inspections got in the way of your Flying display

Context for Display Season 18 - Military

- Stable regulatory environment
- RA2335 Issue 8 published Dec 2017 with minimal changes
- Positive feedback on improved FDD course



Context for Display Season 18 - Military

- Room for improvement though.....
- Risk-based/performance-based assurance methodology still be developed/improved
- Risk-based assurance scheduling took longer than anticipated
- Lesson sharing needs improvement
- Flying Display Handbook



Facts and Figures for Display Season 18

- Military

	DS 17	DS 18
Number of Mil Regulated Fg Displays	46	43
Number of Mil only over non-MOD Property	15	8

- So what?
- Stakeholder engagement in the off-season
- Application numbers vs capacity vs military commanders decisions?

Facts and Figures for Display Season 18

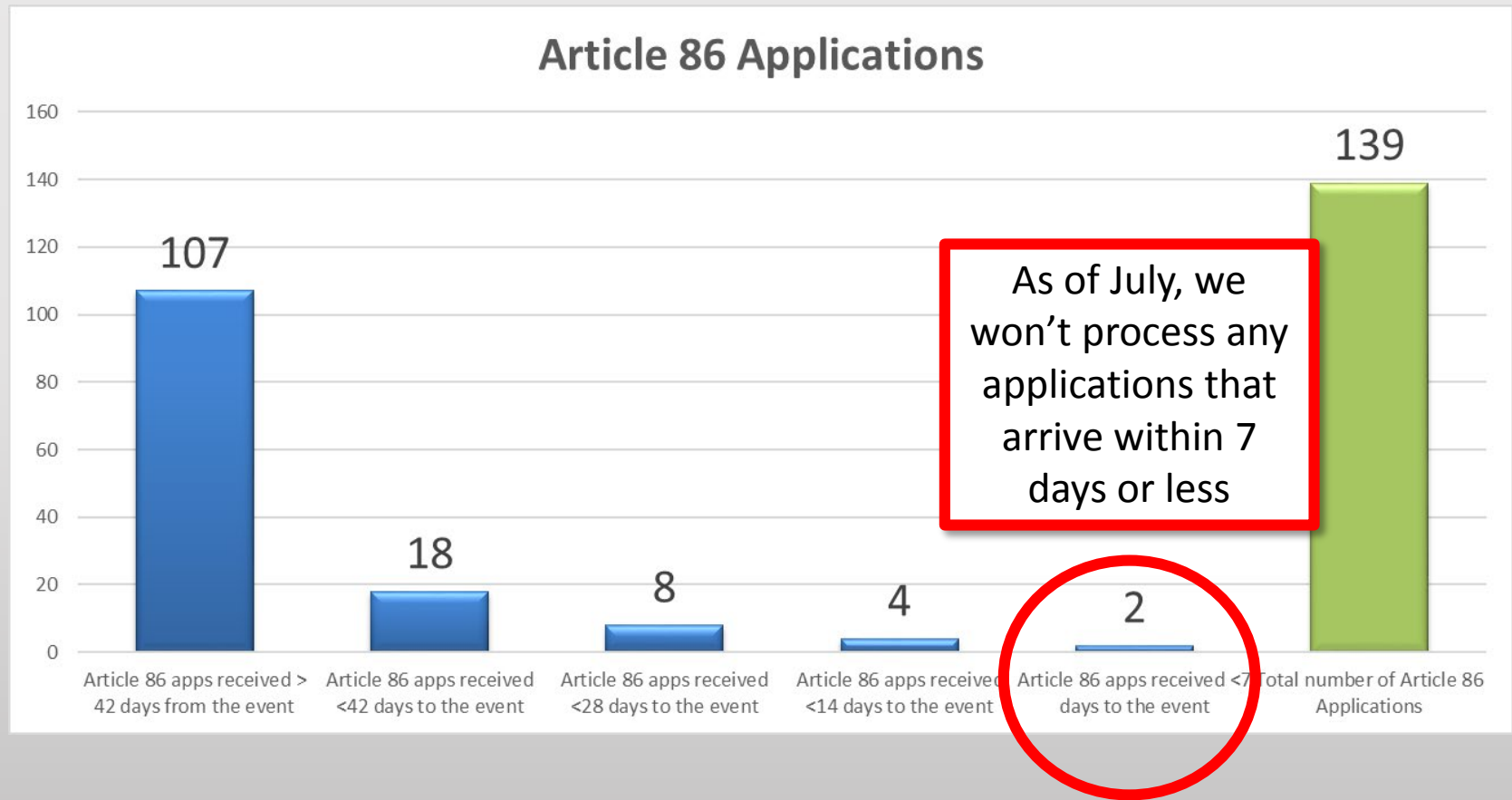
	DS 17	DS 18
Number of Article 86 Events	144	139
Number of SERA Flying displays	51	62
Applications arriving with less than 42 days to go	45%	36%
Applications arriving with less than 14 days to go	9%	9%
Permissions issued with less than 14 days to go	36%	20%
Permissions issued with less than 7 days to go	29%	9%

Facts and Figures for Display Season 18

	DS 17	DS 18
FDD reports returned to the CAA	82%	100% (10% required chasing)
Number of 'Stop' calls	0	0
Number of 'Too low' calls	10	16
Number of 'Too Close' calls	8	19
Number of 'Terminate' calls	3	2

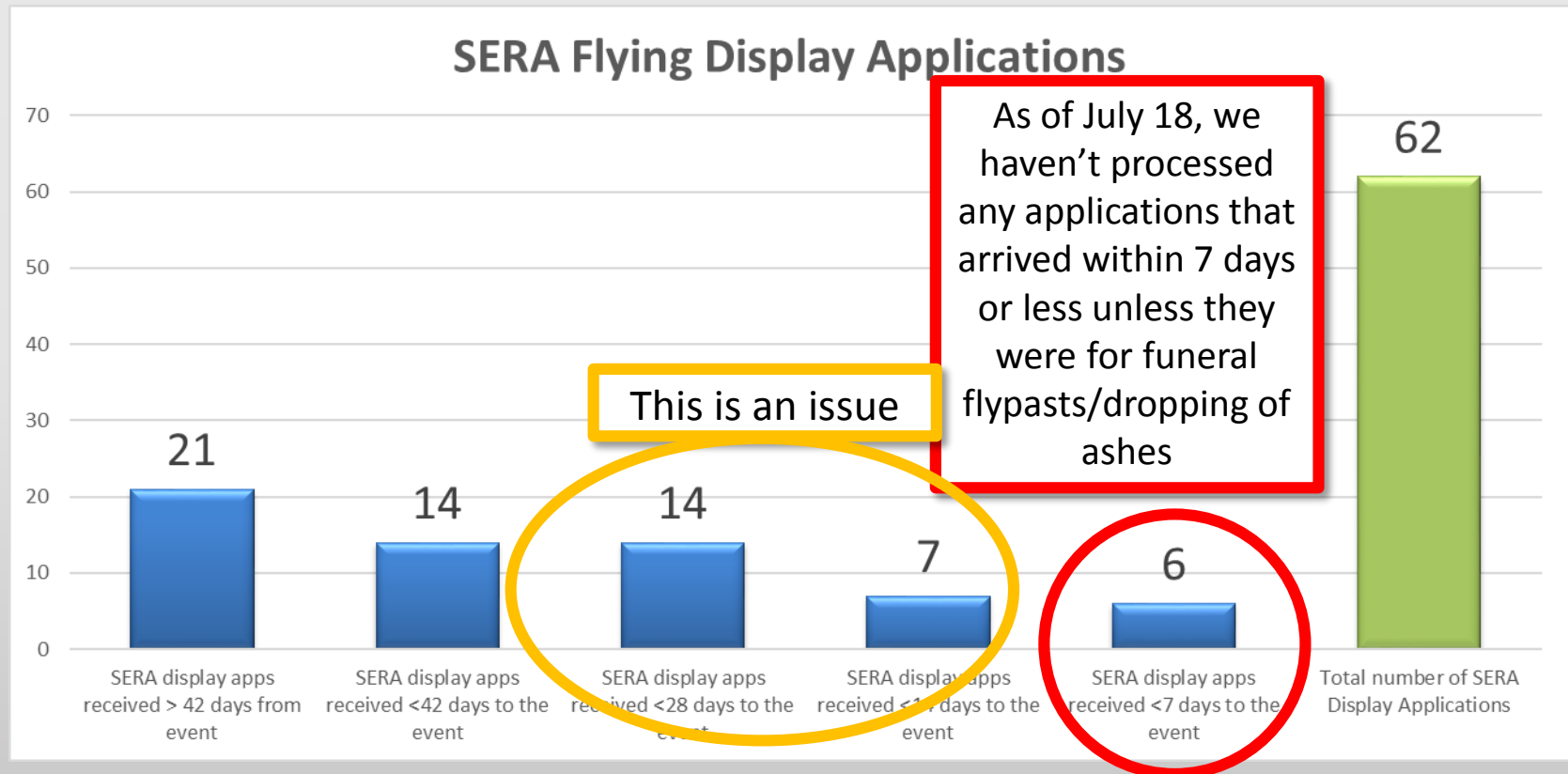
Facts and Figures for Display Season 18

- A generally good picture



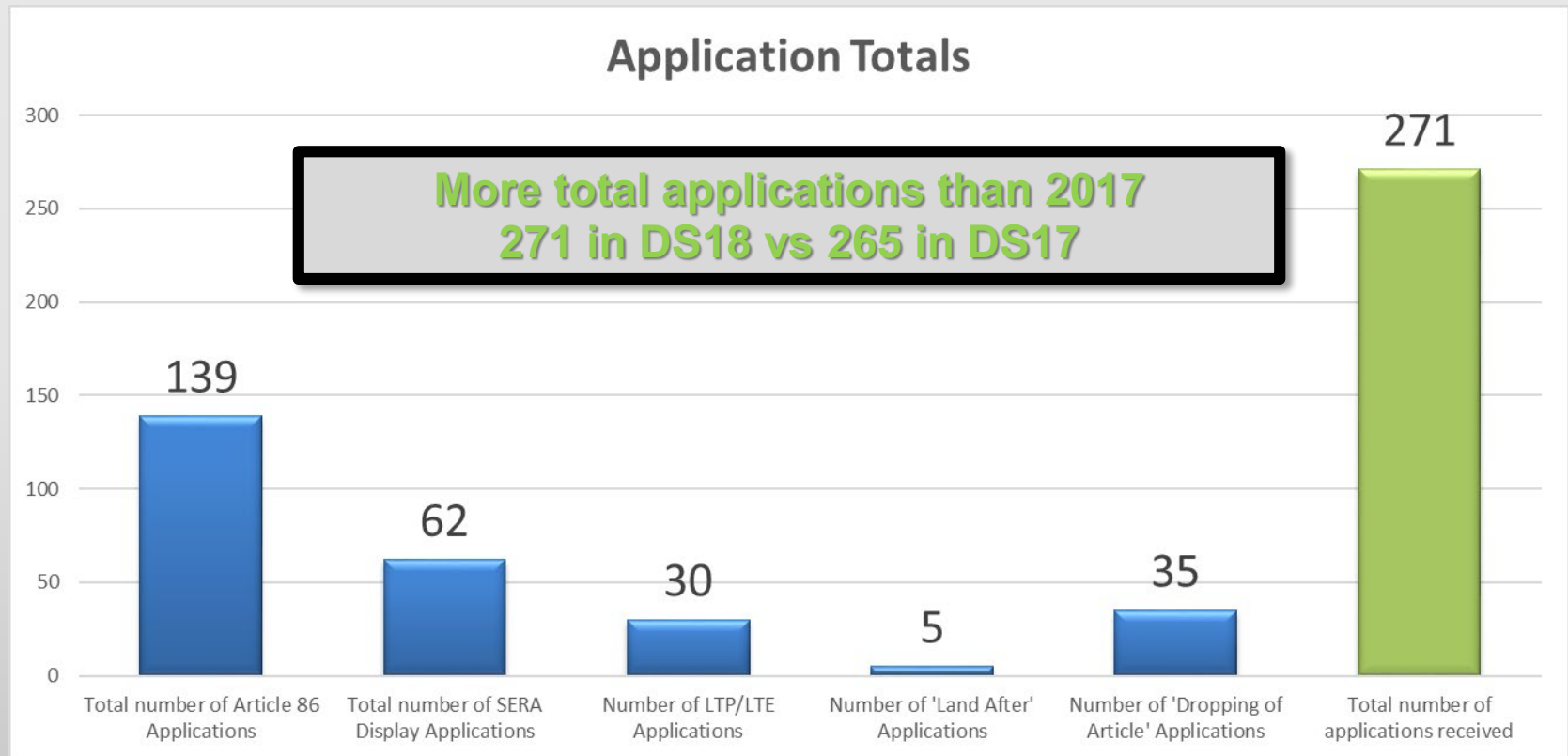
Facts and Figures for Display Season 18

- Many of the < 14 day applications were for funeral flypasts



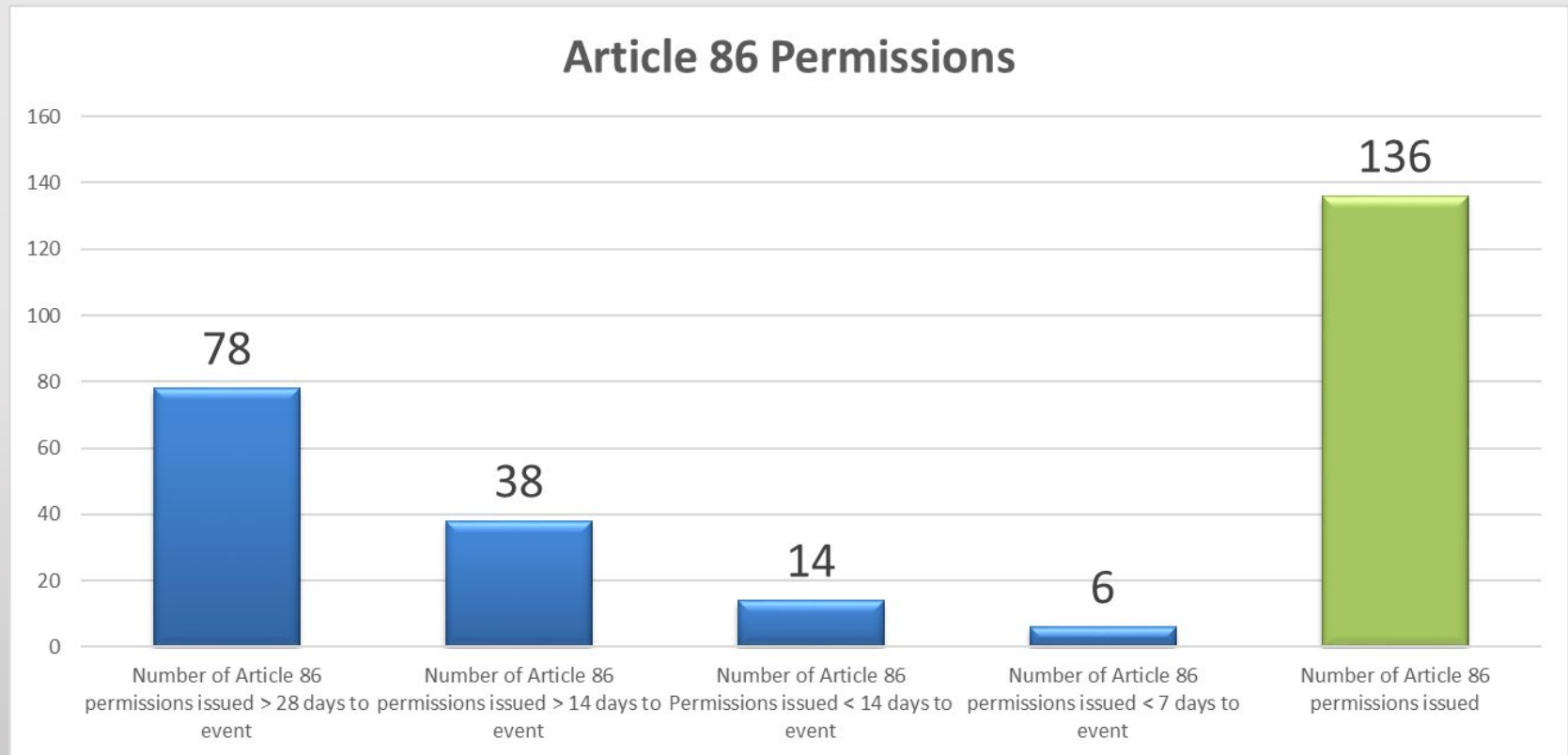
Facts and Figures for Display Season 18

- Total Number of all applications received this year



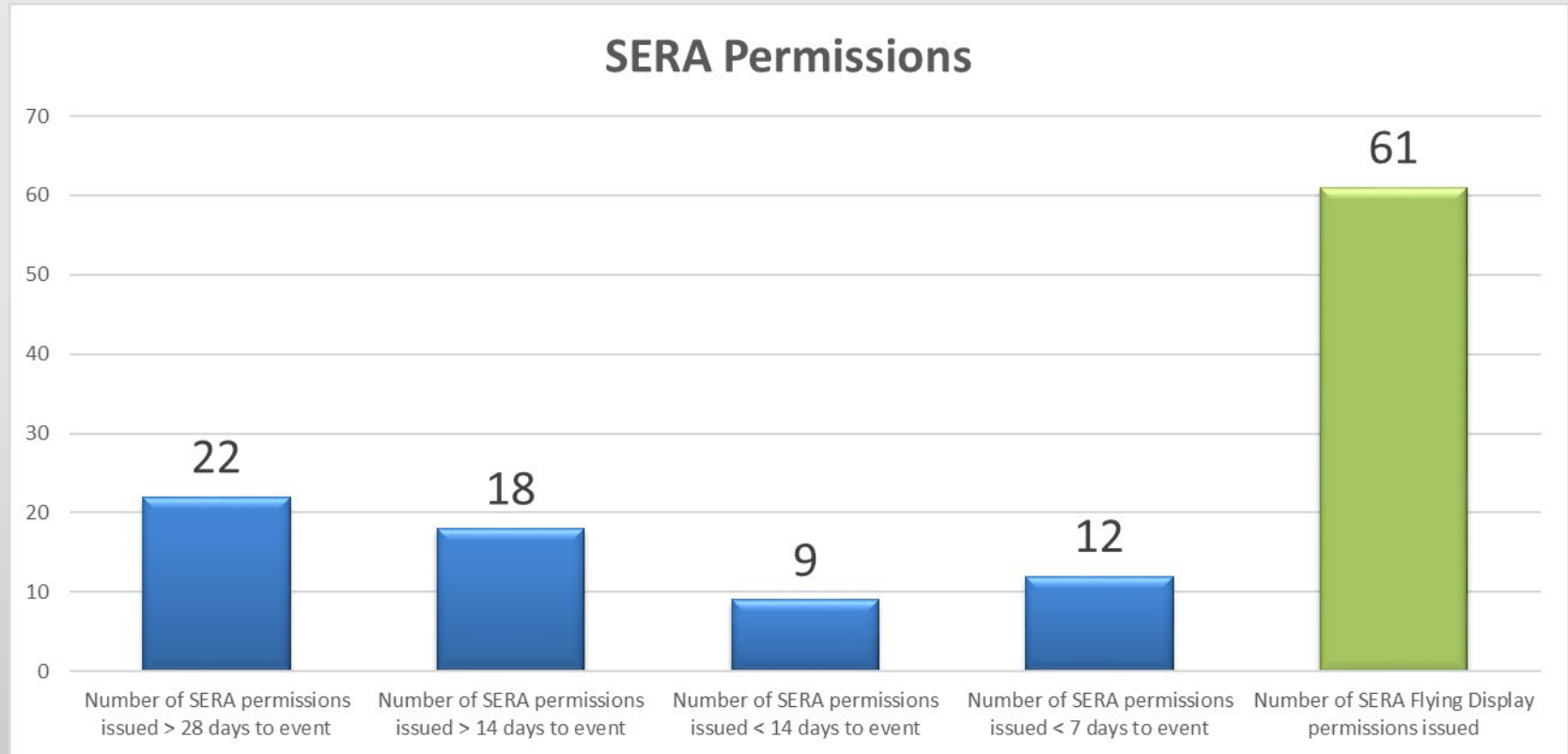
Facts and Figures for Display Season 18

- Total numbers of Article 86 Permissions



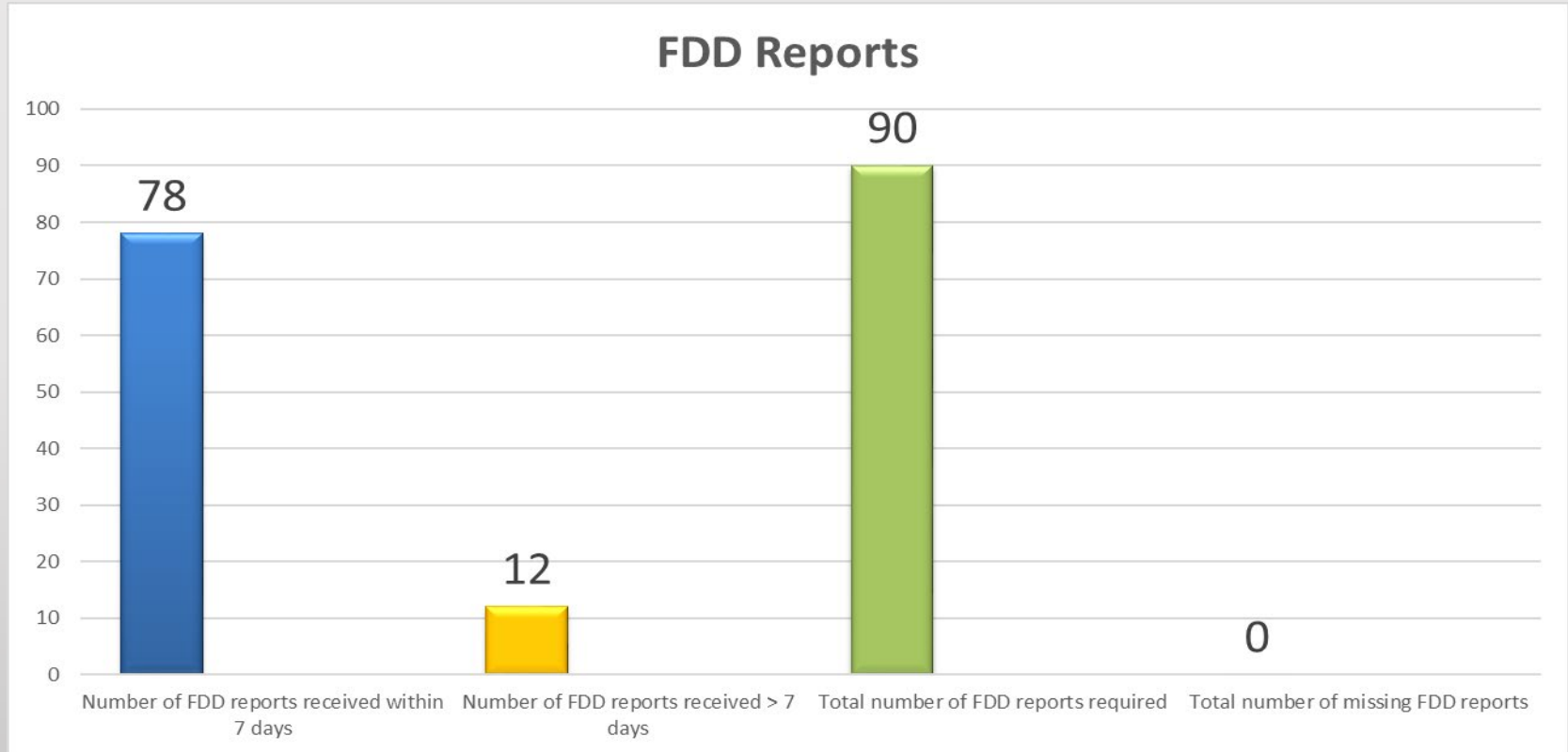
Facts and Figures for Display Season 18

- Quite a few of the < 14 day and < 7 day permissions were funeral flypasts



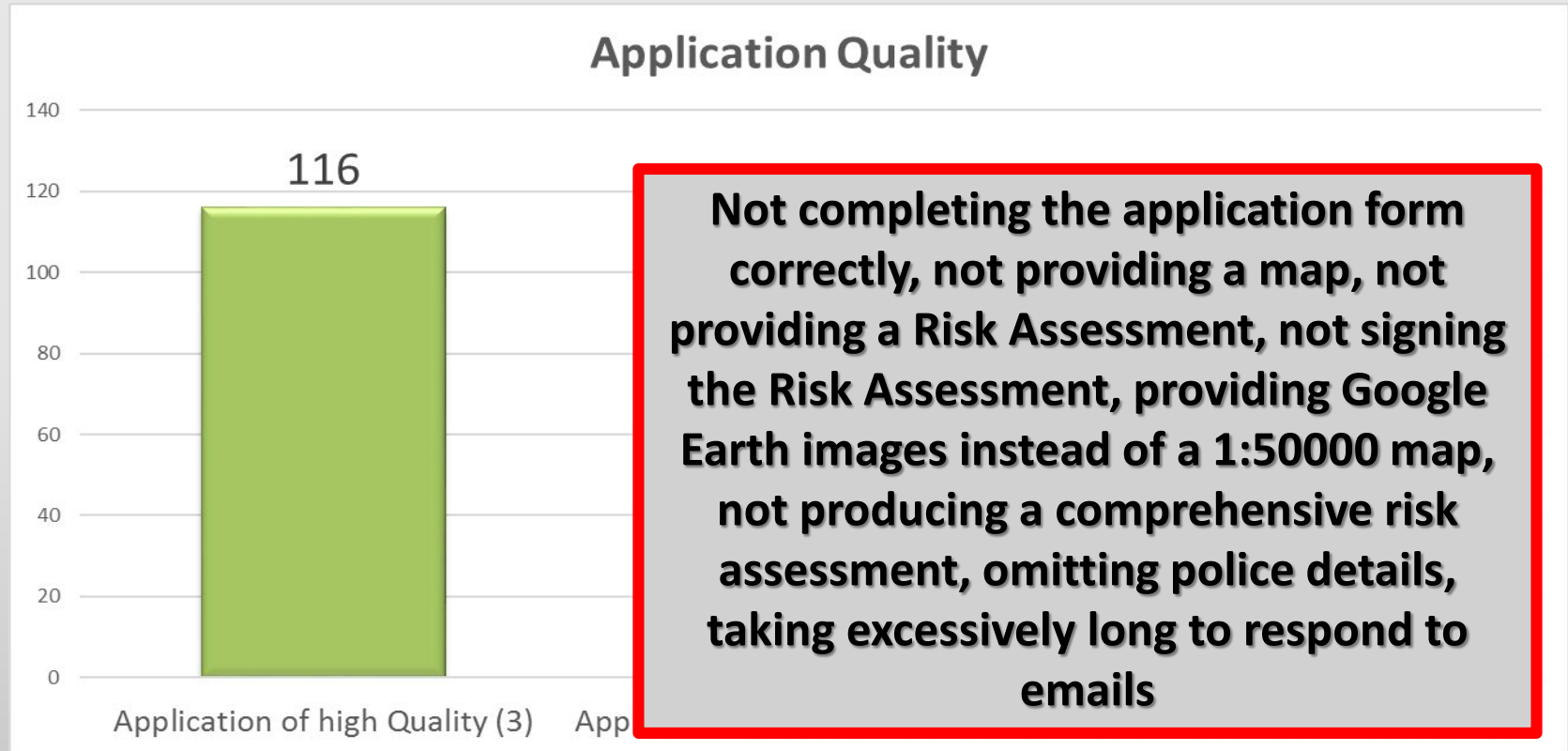
Facts and Figures for Display Season 18

- 10% of FDDs didn't return a FDD report within 7 days of the display

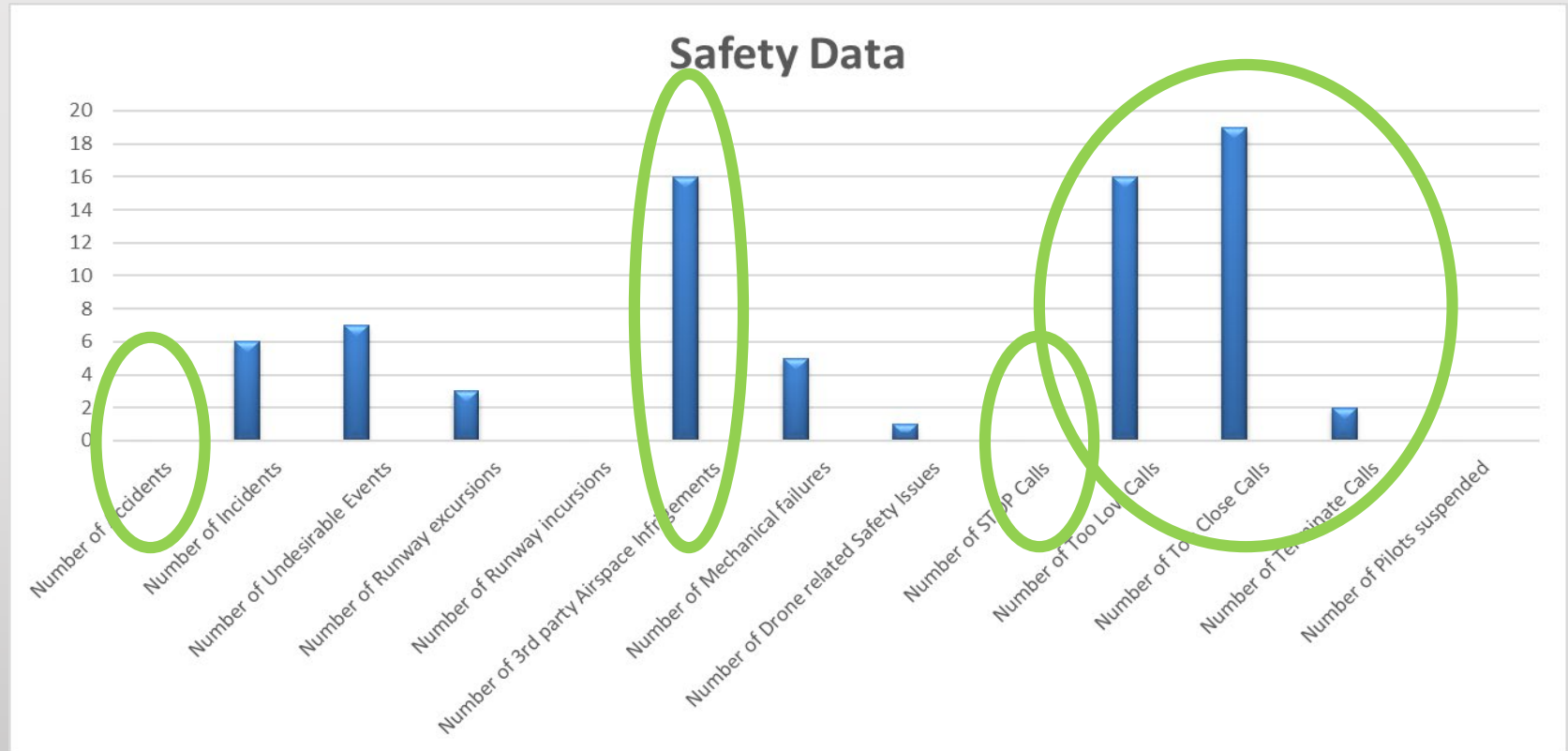


Facts and Figures for Display Season 18

- 58% of applications were considered to be of average or poor quality

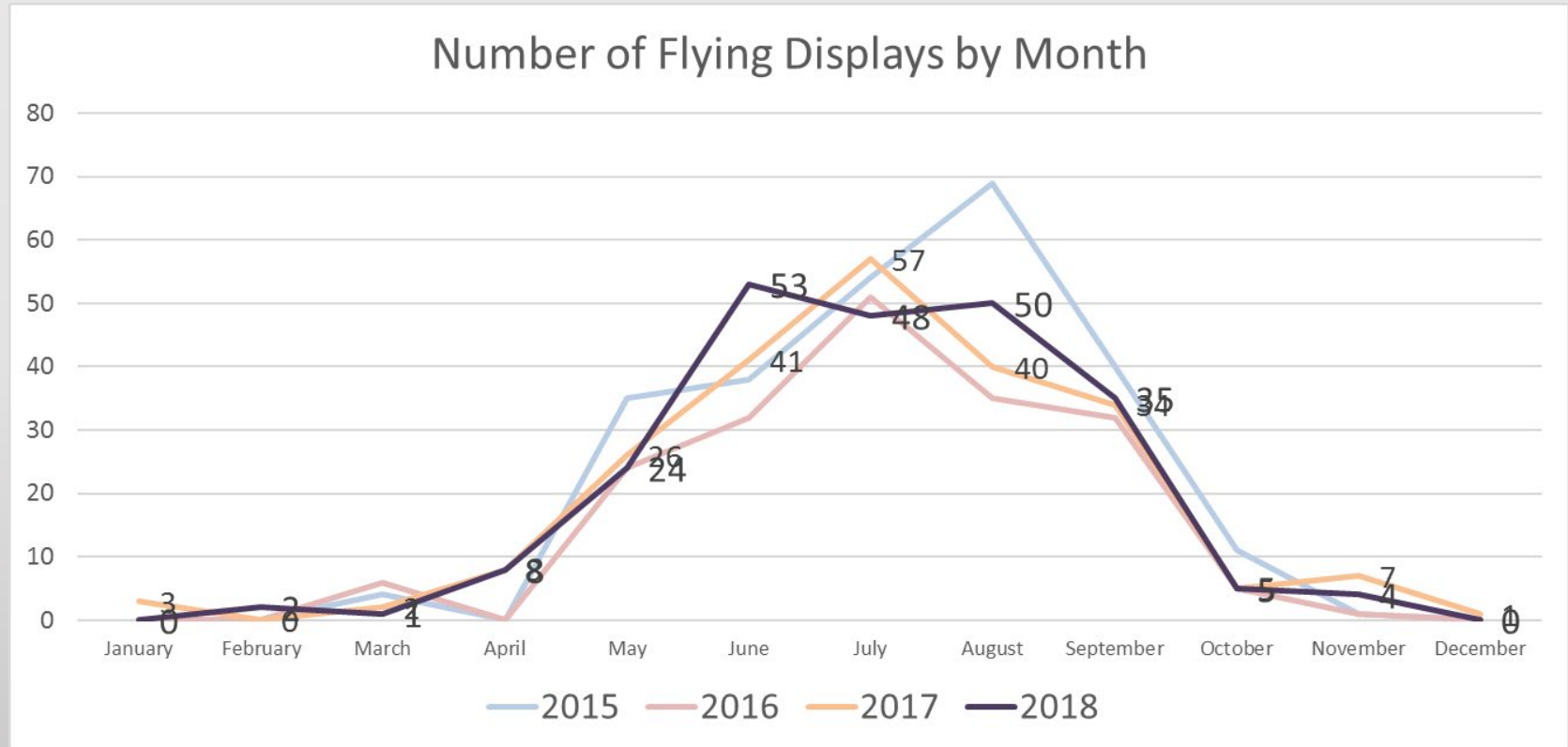


Facts and Figures for Display Season 18



Facts and Figures for Display Season 18

- Seasonal norms (data for 2015 and 2016 is of low confidence)





Best Practice

- We saw some really great things over the course of this DS
- Some FDDs/FCCs were excellent, pre-briefing the next item, minima, what line, who is looking at what etc.
- Minima matrices so that all FCC know what each item is cleared to
- FDD use of Dropbox for pilot documents
- FDDs producing clear TORs for the FCC
- Positive pilot / FDD pre display interactions - breaks down barriers and puts people at ease

Best Practice

- Early FDD planning
- Suitably large display areas
- Simple A and B display areas
- Display areas that were free of avoids



Prevents pilots having to worry about multiple heights and multiple avoids and allows them to concentrate on flying a good safe display



Trends

- Quite a few errors were picked up in the Pilots Written brief, such as:
 - Wrong contact numbers
 - Incorrect terminology
 - Omission of minima
 - Giving contradictory information to the verbal briefing
- Exemptions
 - Quite a few Too Close calls were given pilots holding 75 metre Exemptions
- Many GA pilots not involved in the display unaware of RA(T) or NOTAM, same as DS17.



Trends

- Arrivals / Departures
 - Many pilots were using the privileges of their DA upon arrival and departure at an airshow
 - This is in breach of the ANO, SERA and the Rules of the Air!
 - CAP 403 Edition 16 will be updated to provide guidance on this
- Adherence to:
 - CAP 403 requirements
 - Weather minima
 - Currency requirements



Trends

- FDD and FCC monitoring
- Warning calls
- Use your judgement, an opportunity may present itself to make the call to the pilot during the display, other times it may have to wait until the debrief.
- You are there to help the pilot get their eye in, they might be having a bad day and they just need a little bit of help

Remember, CAP 403 states: *FDDs should consider **the safest and most appropriate time** to make a warning, terminate or STOP call and to not jeopardise safety by causing an unnecessary distraction for the pilot at a critical point during their display.*



Trends

- Declarations (old Appendix B)
- For DS 19 the declaration has been simplified
 - Split in two
 - Part one for the pilot
 - Part two for the aircraft
 - New declaration: “as a responsibility of the pilot in command, I will satisfy myself that the documentation concerning the aircraft I will fly will be current and valid, and that the aircraft is in an airworthy condition”.

Best Practice - Military

- Event organisation:
- Early designation of Display Area with minimal or no avoids
- Early interaction with pilots/crews/teams
- Pro-active coord with RAFRLOs
- Taking a 'fresh-look' at an event
- Real consideration of the hazards and how to manage them
- Good briefing of FCC



Best Practice - Military

- Display Pilots and Crews:
- Early look at events
- Early consideration of the hazards
- Sharing of concerns with the FDD
- Proactively working with FDDs





Trends and Lessons - Military

- Sometimes poor standard of hazard identification and management
 - Risk assessment workshop at the pre-season
 - The MAA/CAA are not consultants - companies offer this training
- Limited sharing of *relevant* parts of risk assessments
 - Communicate with each other!
- Warning and Stop calls - they are to help the pilot
 - FDD and FCC can and should apply their judgement!
 - There are no consequences for warning calls!



Foreign Military Approvals

- Really positive interaction from you
- Early applications were appreciated
- Better understanding of the role of the MAA and FDD
 - MAA approves the participants as appropriate to display in the UK
 - FDD (and HoE for mil) decides whether the participant is appropriate for *their* event
- Better guidance for FDDs in DS19 regarding validation criteria to aid planning



Forward Look

- CAP 403 Ed 16
 - Will continue to be reviewed annually
 - Planned issue date for consultation with you is **December 2018**
 - No major changes to affect DS 19
- New Display Standards Document, CAP 1724
 - DAE, DA, Aerobatic categories, Formation and tailchasing and Useful Guidance for Display Pilots chapters moved from CAP 403
 - Provides guidance for DAEs and DAs
 - Planned issue date for consultation with you is **early 2019**
- CAP 1047 (Civil Air Displays, A guide for pilots) planned issue date **28 February 2019**

Forward Look

- Alignment of SERA flying displays with Article 86
 - SERA flying displays will now require a DA (AFDD) and a Risk Assessment
- Complete review of DA and DAE system
- Complete review of all the application forms for everything!
 - Tweaks to the online application form
 - Amalgamation of DA re-issue and upgrade forms
 - Revision of Behaviour and Attitude form
- Risk Assessment tool
 - We will upload a template for use while we work on reviewing it



Forward Look

- Alignment of LTEs to calendar year
 - We will reissue you your LTEs/LTPs in December and make them valid until December 2019
- Dates for FDD and Pre- Season Symposium already agreed:
 - FDD course **29 – 30 Jan 2019**
 - Dates for Pre-Season Symposium **5 – 6 March 2019**
- Analysis of the recently issued Safety Survey Results is ongoing
 - Thank you to those of you who participated!
- Working on Events Radio rating

Forward Look

- Human Factor training syllabus is coming your way!
 - Should be ready for the Pre-Season Symposium
 - Consists of several modules which will be rolled out over the next 3 years
 - Keep an eye Skywise and the HF repository on the CAA website
- Flying Display Focus Group
 - I would like to generate a roughly quarterly CAA led Focus group to discuss and debate Flying Display issues
 - Should be 2 face to face sessions and 2 remote sessions per year
 - I would like 6 volunteers from across the breadth of the flying display community
 - Please let me know if you would be willing to volunteer your time!

Forward Look - Military

- RA2335 Issue 9
 - Will continue to be reviewed annually
 - Priority this year: further alignment, where possible and appropriate, with limits in CAP 403
 - On NPA by Dec
- Improvement of lesson sharing
- Display Flying Handbook - too much 'Reg', not enough guidance and advice? Volunteers needed though....
- Foreign mil validation criteria



MAA Priorities

- Continue to work together with the display community and the CAA to develop and deliver an appropriate and consistent approach to Flying Display regulation
- Deliver minimal change to RA2335 in a timely manner
- Improve dissemination of LIs
- Continue to improve the FDD training



CAA Priorities

- Continue to work together with the display community
- Get CAP 403 and the DSD to you early and make them useable documents
- Continue to work hard to gain your trust



How you can help

- Apply for your Flying Display 42 days or greater from the date of the event
- Continue to provide us with FDD feedback within 7 days
- Feedback through whatever means you can, email, telephone etc
- Engage with the CAP 403 and DSD consultations, we want your inputs!
 - Send your suggestions to GA@caa.co.uk marked 'CAP 403 Comments' or 'DSD Comments'.
- Volunteer to be part of the CAA Flying Display Focus Group, be part of the solution!
- Sign up to Skywise

Final points

- We want you all, and the public, to have a safe DS19. How do we **all** achieve this?
- It needs EOs and FDDs to consider the hazards associated with their event and do their best to minimize them
- It needs FDDs to understand what affects a pilot during a display
- It needs pilots to stick to their limits and understand the pertinent risks at events

..... and finally

- It needs pilots to be able to concentrate on flying their display and not focus on avoids
- It needs the CAA and MAA to support you through active engagement
- If, in the run up to, or during DS 19, we are not supporting you, then please let us know



Any Questions?

GA@caa.co.uk