31st May 2023

THE CHIRP CHARITABLE TRUST
AVIATION PROGRAMME REPORT FOR FY2022/23

Preamble

1.   The CHIRP Charitable Trust's role is to manage an independent, voluntary, confidential reporting programme for the aviation and maritime industries. Whilst there are clear environmental differences between the programmes, there are also common themes related to Human Factor actions that impact safety. Our Charitable Objects are to:

    a.   Gather information on the circumstances of incidents and accidents involving aviation and maritime modes of transportation through a confidential reporting system for the collection of Human Factors safety-related issues, to analyse data and identify trends; and,

    b.   Advise interested bodies on Human Factors issues relevant to air and maritime transport safety with the aim of the preservation of human life and the protection of the environment.

2.   Within these Charitable Objects, our desired strategic outcomes are:

    a.   Better leadership, awareness and attitude towards safety issues;

    b.   Improve the safety culture by changing behaviours, so that practices, processes and procedures are as safe as they can be; and,

    c.   Safety outcomes identified in CHIRP reports are adopted by regulators, managers and individuals.

3.   CHIRP's mission is to improve aviation and maritime safety and build a Just Culture by managing an independent and influential programme for the confidential reporting of Human Factors-related safety issues. We will do this by:

    a.   Receiving and considering reports that might not otherwise be submitted through formal reporting processes;

    b.   Analysing the data to identify issues and trends; and,

    c.   Disseminating safety-related reports and trends that we consider will be of public benefit.

4.   The UK State Safety Programme acknowledges the CHIRP Aviation Programme as UK's independent confidential voluntary reporting scheme. Broadly speaking, CHIRP provides a vital safety net as another route to promote change when all else fails, and for collecting reports that would otherwise have gone unwritten with associated safety concerns therefore not being reported. Reports generally fall into two broad categories: those indicative of an undesirable trend; and those detailing discrete safety-related events, occurrences or issues. We also often act as an 'Agony Aunt' for those who seek our 'wise' counsel or just want altruistically to share with others lessons from what may not have been their finest hour. Beyond that, we often provide information and point people to the right sources/contact points for them to resolve their own issues and, depending on the concern and our resource availability, we also champion causes and act as an advocate or the 'conscience' of industry and the regulator where we can.

5.   Information explaining CHIRP's role and function is formally communicated to aviation stakeholders within the current documents CAA IN-2016/30 Version 2 Issued: 8 February 2020, NATS AIC P 034/2020 Effective: 4 Jun 2020 and CAP2521.

Funding & Resources

6.   The CHIRP Aviation Programme is funded entirely from a CAA grant, whereas its sister Maritime Programme is funded by contributions from maritime industry and organisations that exist to promote the safety of seafarers, passengers and others working in maritime related industries.   The terms of each grant forbid cross-funding from the CHIRP Aviation to Maritime programmes and vice versa, but both programmes contribute 50:50 to the cost of central management overheads. The separation of funds is checked during an annual audit.

7.   **CHIRP Aviation Secretariat**.   The CHIRP Aviation Programme is delivered by a lean secretariat of part-time employees and contractors comprising the equivalent of two full-time employees (FTE):

Steve Forward   **Director Aviation** (Aviation Programme policy/management, Commercial Flight Crew, General Aviation, ATC, Display Flying) – 0.8FTE
Jennifer Curran   **Cabin Crew Programme Manager** (Cabin Crew, Aviation Programme admin) – 0.6FTE
Phil Young   **Engineering Programme Manager** (Engineering) – 0.2FTE
Rupert Dent   **Drone/UAS Programme Manager** (Drone/UAS) – 0.2FTE
Ernie Carter   **Ground Handling Programme Manager** (Ground Handling & Security) – 0.2FTE

8.   **CHIRP Advisory Boards**. Advisory Boards assist the Programme Director and Managers by providing subject matter expertise when reviewing reports. There are four Aviation Advisory Boards which cover:

   a.   Air Transport operations including Flight Crew, Air Traffic Control, Engineering, Ground Handling and security.
   b.   Cabin Crew issues.
   c.   General Aviation activities.
   d.   Drone operations.

The Advisory Boards are comprised of volunteer subject matter expert panellists who contribute significantly to the Charity's aims through their deep technical expertise in their respective fields. They assist in the determination and resolution of issues raised in reports and, through the Directors, provide the Trustees with feedback on the associated programme's performance.

Function

9.   Although the CAA Occurrence Reporting processes should always be the default method of reporting incidents, there are circumstances when a reporter may not wish to report through the normal process for personal reasons (for example if they fear that their identification will result in retribution) or if they have been unable to achieve a resolution through normal channels. The CHIRP Aviation Programme compliments the CAA Occurrence Reporting process and other formal reporting systems operated by many UK organisations by providing a means by which individuals are able to raise safety-related issues of concern without being identified to their peer group, management, or the Regulatory Authority. CHIRP Aviation Programme reporting is divided into 4 key streams that match the Advisory Board structure:

   a.   Air Transport (AT) reporting incorporates safety reports from professional flight crew, ATCOs, FISOs, licensed aircraft engineers, ground handling staff and security staff;
   b.   Cabin Crew (CC) reporting similarly provides an independent means by which cabin crew may report safety-related issues;
   c.   General Aviation (GA) reporting is encouraged with the principal objective of alerting the CAA to safety trends and to disseminate safety lessons identified from reported incidents as widely as possible among the GA communities;
   d.   Drone/UAS (DUAS) reporting fulfils the same function for drone pilots as the AT and GA programmes provide for manned aviation.

10.   After discussion within their associated Advisory Boards, reports with educational themes and identified value for wider dissemination are then published in the respective Air Transport, General Aviation, Cabin Crew, Drone/UAS and Ground Handling & Security FEEDBACK newsletters. In addition to email and hard-copy distribution, all our FEEDBACK newsletters are posted to the CHIRP website, highlighted using the CAA SkyWise alerting system and are also accessible using the CHIRP App.

11.   We also run media campaigns on social media to publicise our work; particularly Facebook, LinkedIn and Twitter.

12.   In return for CAA funding, and in addition to CHIRP's own safety promotion activities, CHIRP submits a monthly report to the CAA Safety & Business Delivery Department detailing received report subjects and matters of interest. Thematic, consolidated entity reports are also routinely sent to the CAA throughout the year in order to provide processed, anonymised intelligence relating to entities under review within the CAA IRM cycle. In addition, regular liaison meetings are conducted with CAA Head of Flight Operations, shortly to be supplemented with regular update meetings with AAA. *Ad hoc* issues are also passed to the CAA as matters arise so that timely action can be taken as appropriate. Finally, CHIRP Director Aviation attends SARG SRC meetings in order to pass on any relevant concerns and to understand CAA emerging policy, intent and matters of the moment.

13.   In addition to these CAA/CHIRP interactions, CHIRP also provides a portal for reporting Bullying, Harassment, Discrimination and Victimisation (BHDV) within aviation in UK. CHIRP staff do not have the expertise or competences to investigate such reports and so the information is simply collated and passed to the CAA in disidentified form so that CAA staff can consider whether any intervention might be warranted.

FY2022-23 Reporting Activity

14.   Annual reporting levels vary in response to events, company culture and policies, and changes in regulation. This reporting period embraced the general return to more normal levels of flying operations as COVID-19 travel and social restrictions were removed in UK. Commercial aviation activities continued their recovery started in Winter 2021/22 as the aviation industry started to benefit from reduced international travel restrictions and returned to more normal operations with fuller schedules being planned. The outstanding feature of the summer period was stress in the system that was induced by a shortage of staff to meet scheduling requirements as airlines attempted to maximise their commercial activities whilst staff were regaining currency and recency after having returned from redundancy or furlough. For its part, General Aviation activities were slightly later than usual in commencing the normal Spring/Summer emergence from Winter hibernation, and although there were also concerns about regaining currency and recency in this sector, for some pilots this was a normal feature of General Aviation flying and so there were often existing processes in place to mitigate the need for extra caution.

15.   During the FY2022-23 period, a total of 647 aviation reports were received and accepted for further progression (not including Bullying, Harassment, Discrimination and Victimisation (BHDV) reports which are counted separately as a special-case activity). This represents just over twice as many as in the previous FY reporting period when 282 reports were received and accepted. That being said, as shown in the table below, overall reporting levels remained slightly depressed compared to pre-COVID-19 years (84% of the FY2019/20 levels). In addition to the 647 reports accepted, a total of 96 reports were rejected on receipt as having either no safety context, incomplete material that could not be clarified/corroborated due to lack of further contact with the reporter, general complaints (such as drone complaints) terms of service complaints, or matters of personal conflict with managers/peers.

16.   The number of aviation programme reports received and accepted in the different sectors of reporting are as shown in Table 1 and Chart 1 below. COVID-19 years are shaded red in the table and represent skewed figures due to the lack of flying in those years. Note that BHDV reporting was only introduced in the latter stages of FY2021-22 and was not fully established across all sectors until FY2022-23.

Report Sector	5yr Ave 2014-19	FY			
		2019-20	**2020-21**	**2021-22**	**2022-23**
Cabin Crew	635	560	71	203	431
Flight Crew	86	118	39	36	136
General Aviation	38	44	20	24	25
Engineering	18	18	17	8	21
ATC	10	12	5	1	13
Ground Handling & Security	7	11	5	6	12
Drone	0	4	3	4	9
Display	2	2	0	0	0
Total	**797**	**767**	**160**	**282**	**647**
BHDV	0	0	0	0	16

Table 1. Reports received and accepted by CHIRP Aviation in FY2022-23 by sector
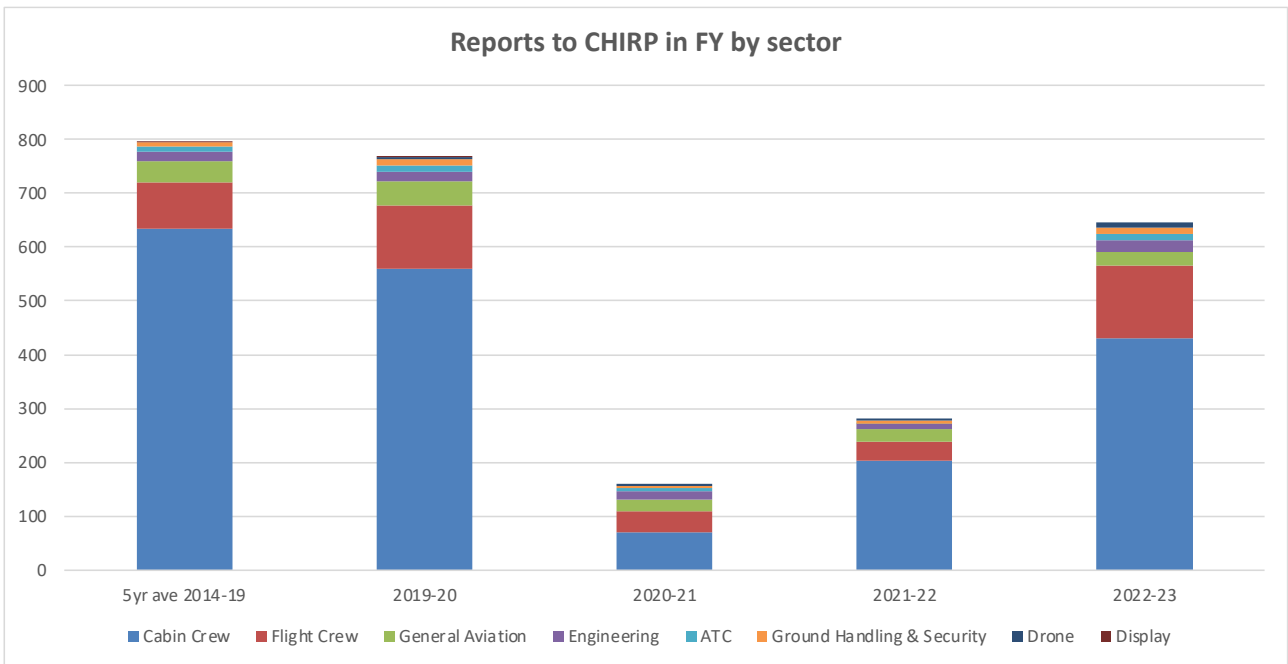
Reports to CHIRP in FY by sector

Chart 1. Reports to CHIRP in FY2022-23 by Sector

17. Accepting the usual peaks and troughs in reporting flows as the year progressed, Chart 2 below shows a generally steady level of reporting of 40-60 reports per month to CHIRP with 3 outlying exceptions: April 2022 saw a surge in Flight Crew reporting due to a specific issue in one airline associated with concerns about absence management policy; and the Autumn months of September, October and November 2022 saw suppressed levels of reporting for unknown reasons but thought potentially to be connected to commercial crews being worked hard and not being willing to take on the additional burden of voluntary reporting. The other notable peak in June 2022 from cabin crew coincided with the rapid expansion of commercial activity at the start of the Summer holiday season which generated a large number of fatigue reports to CHIRP as cabin crew availability was still recovering and those who were roster-able were being drawn on to meet demand.
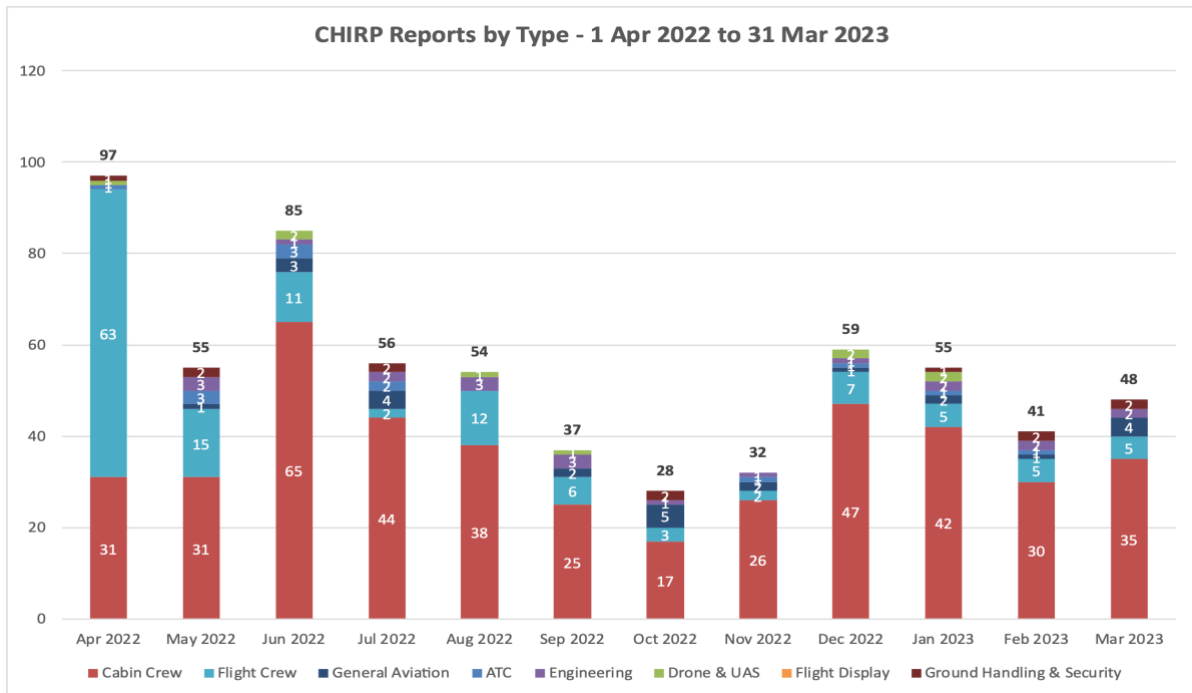

Chart 2. Reports received and accepted by CHIRP Aviation in FY2022-23 by sector and month

FY2022-23 Reporting Themes & Issues

18.   Previous annual analyses have focused solely on descriptive comments about reporting themes by sector that were largely drawn from textual analysis. In 2021-22, CHIRP Aviation commissioned a major upgrade of its database to provide greater fidelity of statistical analysis and improved data entry taxonomy handling. This enables richer reporting of key issues and themes as below. Statistical analysis is presented based on 2 taxonomies:

   a.   Key Issues and subcategories provide a high-level view of the overall reporting concerns;
   b.   ICAO ADREP statistics reflect much the same trends but provide greater granularity of insights in some respects.

Both sets of statistics add their own value in understanding the underlying issues. In reviewing the statistics, it should be noted that a single report may have multiple Key Issues and ADREP entries hence the numerical counts shown greatly exceed the number of reports received. Also, care should be taken when extrapolating some statistics due to the small numbers of reports in some sectors that can skew interpretations.

19.   As shown in Charts 3 and 4 below, 'Duty' and 'Fatigue' represented the two most prominent issues reported to CHIRP across all sectors in FY2022-23 by a large margin. 'Pressures/goals' was the next most reported issue, followed by 'Company Policies', 'Internal Communications' and 'Relationship Management'. These last 3 issues reflected a sense of distrust of management by the workforce due to their perception that the company cared more about securing profitability than in caring for the workforce. This loss of trust was manifest in comments about lack of Just Culture in some companies as some reporters were concerned to raise their heads above the parapet and report issues for fear of a negative reaction by line managers.

20.   Note that as a function of the CHIRP database taxonomies, some Key Issues may not have an associated subcategory entry in some reports. As a result, the ordering of Chart 3 (Key Issues alone) varies slightly at the lower levels compared to the second sunburst Chart 4 that is ordered by pure subcategory count.
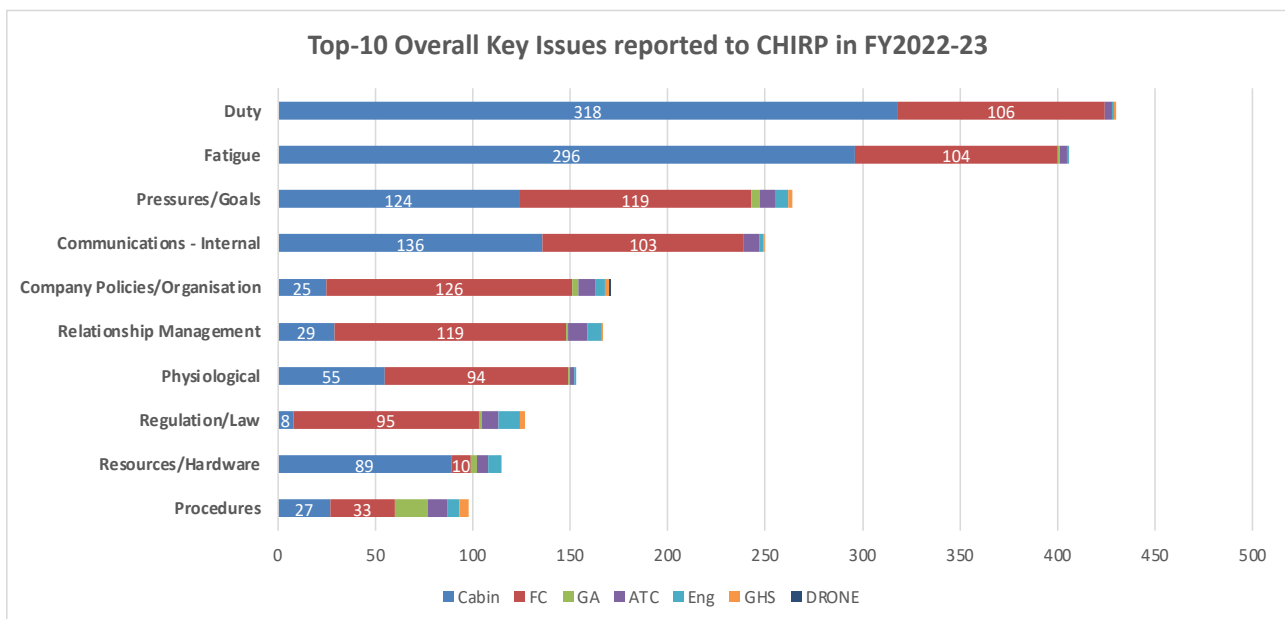

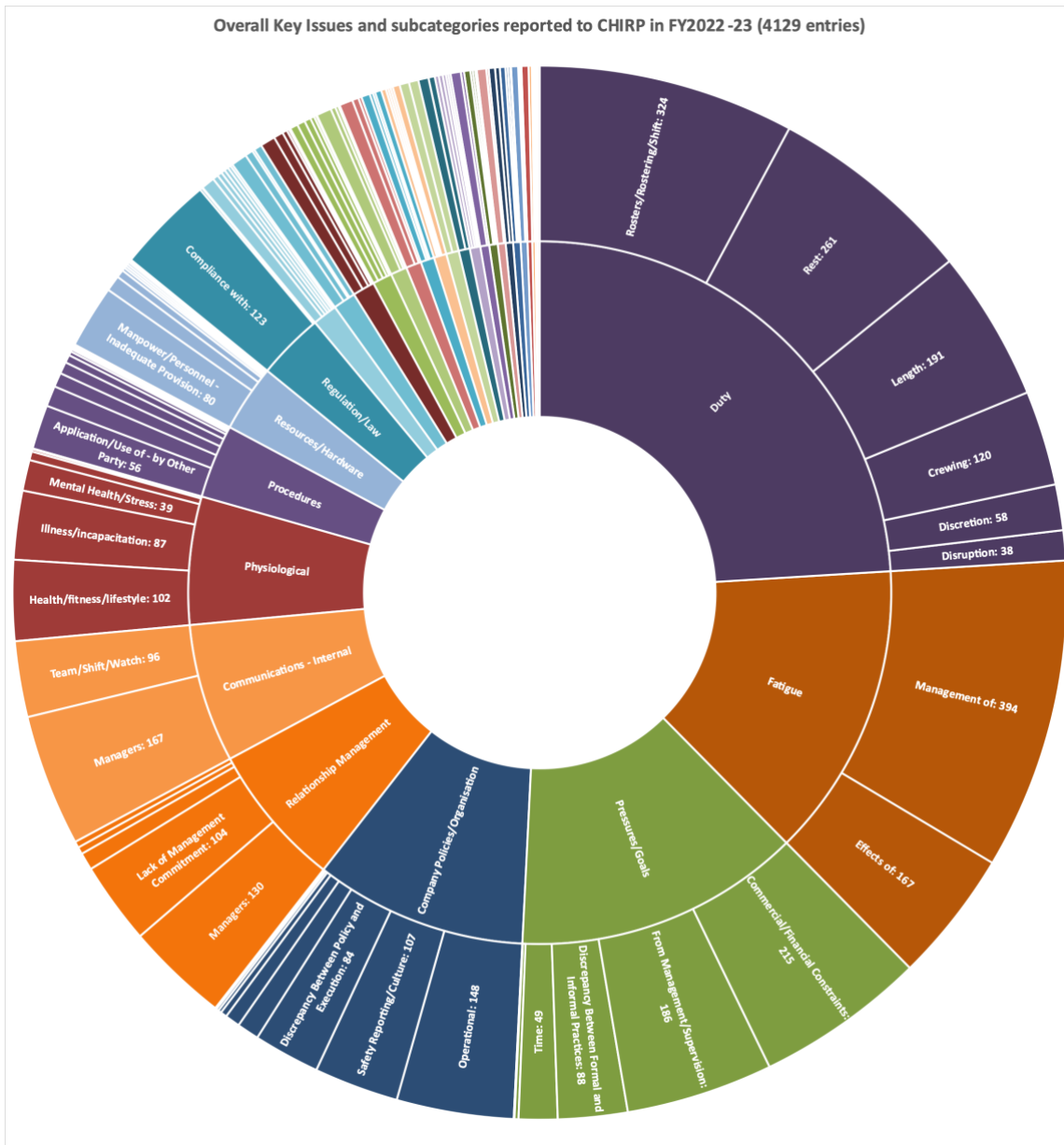**Chart 3. Top-10 Overall Key Issues reported to CHIRP in FY2022-23**

Chart 4. Overall Key Issues and subcategories reported to CHIRP in FY2022-23
(Key Issues in inner ring and their respective subcategories with entry count in the outer ring)

21.   Whilst the overall statistics shown provide an interesting aggregated perspective across all sectors of aviation reporting, the predominance of some sectors can mask the relative importance of issues within other less-reported sectors. Detailed Key Issue/subcategory sunburst charts for each sector are therefore shown at Annex A to show what is being reported in each sector, and headline 'Top-10 Key Issue charts' are shown within the narrative for each sector below to showcase their respective important themes.

a.   **Cabin Crew Reporting**.   Because of their generally more basic knowledge of formal safety management reporting processes and more limited understanding of regulations, cabin crew are often more inclined to report issues to CHIRP as their primary conduit. As a result, Cabin Crew reports usually represent the bulk of CHIRP reporting activity and this was again the case in FY2022-23. Cabin Crew primarily reported concerns about

Cabin Crew Key Issues FY2022-23
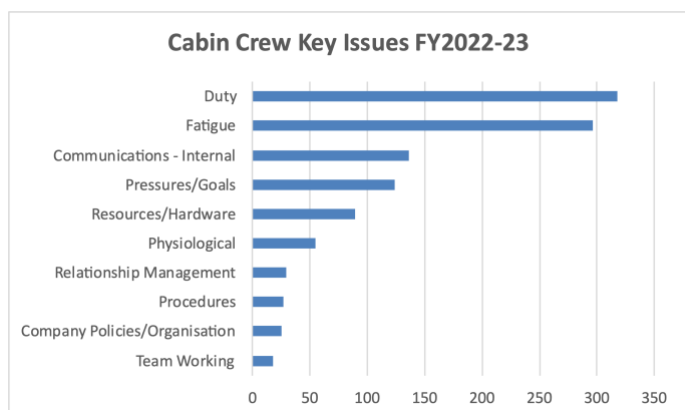
duty, fatigue, internal communications, pressures/goals, resources and physiological concerns (mostly related to contact with customers during COVID-19 but also mental health due to fatiguing rosters).

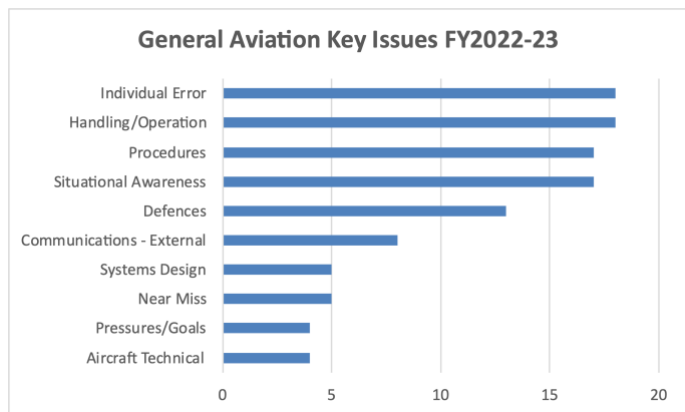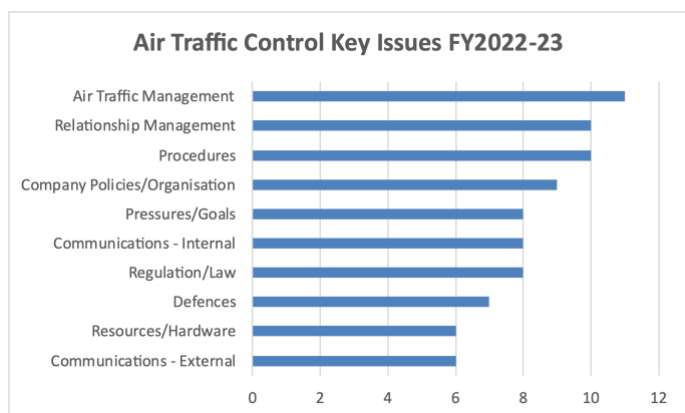b. **Flight Crew Reporting**. Flight Crew reported a wider set of issues which, although embracing those of Cabin Crew, interestingly rated Company Policies as their most reported concern. This was associated with a number of changes to procedures post-COVID, many of which saw crews complain of rostering-related issues and a perception that companies were not following their own procedures as they maximised rosters with reduced resources due to post-COVID

Flight Crew Key Issues FY2022-23

Issue	Value
Company Policies/Organisation	~128
Pressures/Goals	~120
Relationship Management	~120
Duty	~106
Fatigue	~104
Communications - Internal	~103
Regulation/Law	~95
Physiological	~94
Procedures	~33
Defences	~15
Resources/Hardware	~9

recency requirements. There was also significant concern about company sickness/absence policies which, in 2 companies in particular, might have induced crews to fly when sick due to financial imperatives, contrary to regulations.
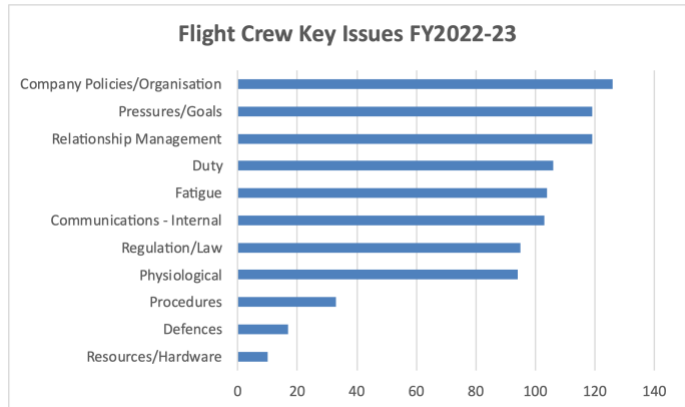
c. **General Aviation Reporting**. In contrast to flight crew and cabin crew reporting, GA reporting often takes the form of requests for guidance/information and *mea culpa* reports of incidents from pilots wishing to share their own experiences when things did not go as well as they might have for the benefit of other pilots. This flavour of reporting reflects the fact that few GA pilots are part of a formal Safety Management System and so CHIRP is often seen as the only outlet for

General Aviation Key Issues FY2022-23

Issue	Value
Individual Error	~18
Handling/Operation	~18
Procedures	~17
Situational Awareness	~17
Defences	~13
Communications - External	~8
Systems Design	~5
Near Miss	~5
Pressures/Goals	~4
Aircraft Technical	~4

reporting more minor near-miss incidents beyond formal AAIB accident/serious-incident procedures. Although a relatively small reporting sample size, the main themes within the FY2022-23 General Aviation reports were reduced situational awareness and being 'rusty' following the extended hiatus in flying that resulted from COVID-19 lockdowns. All of these largely reflect pilots returning to the air with comparatively little capacity remaining to think ahead of the aircraft as opposed to having to focus on the physical flying task.

d. **Air Traffic Control Reporting**. Although fewer in number, Air Traffic Control reports reflected those of Cabin and Flight Crew by focusing on duty lengths, breaks and management relations. There were a number of reports of managers not abiding by the regulations for breaks (SRATCOH as was), and this was exacerbated by insufficient numbers of controllers being trained due to there being lack of opportunities with the reduced levels of aviation traffic during the COVD-19 lockdown period.

Air Traffic Control Key Issues FY2022-23

Issue	Value
Air Traffic Management	~11
Relationship Management	~10
Procedures	~10
Company Policies/Organisation	~9
Pressures/Goals	~8
Communications - Internal	~8
Regulation/Law	~8
Defences	~7
Resources/Hardware	~6
Communications - External	~6

e. **Engineering and Ground Handling & Security Reporting**. Engineering, Ground Handling and Security key issues are shown for completeness but report numbers were low in all three sectors and so it is not sensible to draw too many conclusions other than to comment that, similar to all

other sectors of aviation reporting, resource pressures played a role in all three areas. This was particularly true in the engineering sector, which had the dual pressures of maintaining 'moth-balled' aircraft during the hiatus in flying and then returning those aircraft to operational duty in short-order when flying resumed. With agreement of CAA, CHIRP initiated a pilot programme to re-invigorate Ground Handling reporting in FY2022-23 and this was initiated at Luton Airport in late November 2022. However, results have been disappointing, despite numerous engagements at Luton. We are unsure as to why uptake is so slow (1 report to date) but a combination of relatively healthy reporting cultures at Luton, the Christmas period, and difficulties/obstacles to reporting (sector employees are not permitted to take mobile devices onto the ramp and these are the best entry point for CHIRP reporting) may have conspired to reduce our penetration in this pilot. Notwithstanding, CHIRP has plans to attempt a further pilot at a larger airport in FY2023-24 to see if we can improve reporting rates.
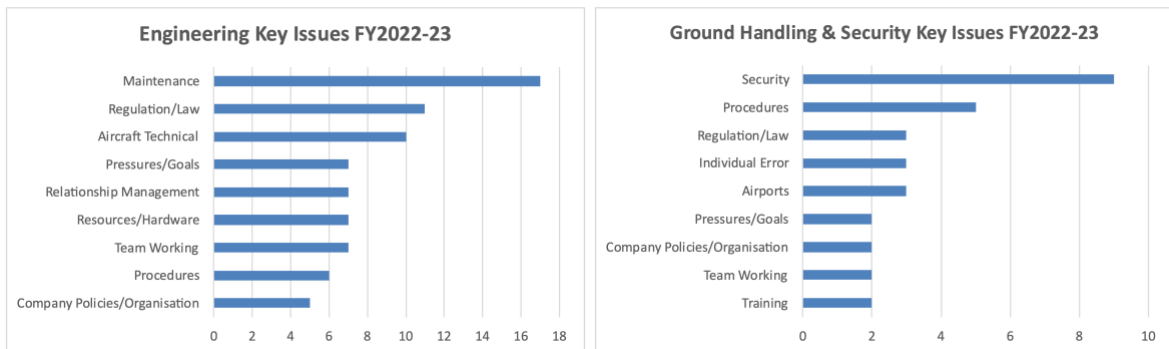
f. **Drone/RPAS Reporting**. The CHIRP Drone/UAS Programme was initiated in its own right in November 2019 and has now become an embedded activity within the CHIRP Aviation Advisory Board schedule. Although Drone/RPAS reporting is a growing sector for CHIRP, the small numbers of reports to date (20 since its introduction and 9 in FY2022-23) mean that meaningful trends and issues have yet to emerge. Notwithstanding, it is encouraging that FY2022-23 saw reporting rates double from previous years as the message gets out about the value of CHIRP's confidential reporting activities. Even more encouraging, the CAA has embraced CHIRP reporting in this sector and our programme is mentioned in a number of CAA drone regulations and publications.

g. **BHDV Reporting**. At the request of the CAA, CHIRP developed a BHDV reporting portal in FY2021/22 to facilitate confidential reporting of associated incidents within the aviation community. The portal went live on 27th October 2021 as a pilot-programme for Flight Crew and Cabin Crew only, whereby reporters were able to submit BHDV concerns through an automated process. Initial interest in the CHIRP BHDV website and portal saw a spike in activity, with a number of people initiating reports but not following through to submission. Notwithstanding, this level of interest was taken as an indication that there appeared to be a need for the service. Since its inception in FY2021-22, BHDV reporting has shown a steady growth in numbers with there being 16 reports in FY2022-23. This reporting rate reflected the widening of the BHDV programme from the initial Cabin and Flight Crew pilot programme in FY2021-22 to embrace all sectors other than Ground Handling & Security (at CAA's request) in FY2022-23. CHIRP does not engage in resolution or analysis of BHDV reports, our function is simply to provide a reporting portal for aggregated reports to be sent to CAA. As a result, there are no Key Issue or ADREP statistics for this reporting type.

22. As mentioned earlier, ADREP taxonomy statistics show similar outcomes to that of the Key Issue charts above but with some greater granularity in some areas that are worthy of record. The associated ADREP Statistics are shown within Chart 5 below in an aggregated form and for individual sectors.
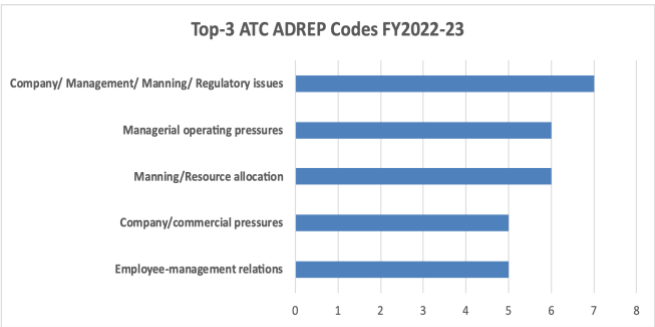
Overall Top-20 ADREP Codes reported to CHIRP - FY2022-23

ADREP Code	Cabin	FC	GA
Rest/duty time	272	100	3
Shiftwork/Rosters/Duty time	307	43	4
Fatigue/alertness	211	31	4
Company/commercial pressures	80	110	5
Managerial operating pressures	45	113	6
Flight Time Limitations / Out-of-hours	64	93	
Manning/Resource allocation	32	87	6
Company communications	50	70	
Scheduling	107	51	
Staffing	33	78	
Employee-management relations	19	88	5
Operational policies	2	98	
Temporary or unexpected staff shortages	20	78	
Management/personnel policies	4	91	4
Manning	2	76	3
Instructions/directives/orders	1	78	
Company/ Management/ Manning / Regulatory issues		66	7
Cultural issues	2	68	
Sleep deficit	55	11	
Pressures	13	43	1
Chronic fatigue	52		

Legend: Cabin, FC, GA, ATC, Eng, GHS, Drone

Top-10 Cabin Crew ADREP Codes FY2022-23

ADREP Code	Value
Shiftwork/Rosters/Duty time	307
Rest/duty time	272
Fatigue/alertness	211
Scheduling	107
Company/commercial pressures	80
Flight Time Limitations / Out-of-hours	64
Sleep deficit	55
Chronic fatigue	52
Company communications	50
Managerial operating pressures	45

Top-10 Flight Crew ADREP Codes FY2022-23

ADREP Code	Value
Managerial operating pressures	113
Company/commercial pressures	110
Rest/duty time	100
Operational policies	98
Flight Time Limitations / Out-of-hours	93
Management/personnel policies	91
Employee-management relations	88
Manning/Resource allocation	87
Staffing	78
Temporary or unexpected staff shortages	78
Instructions/directives/orders	78
Manning	76

Top-6 GA ADREP Codes FY2022-23

ADREP Code	Value (approx)
Airmanship	17
Action/ error	12
Situational awareness	10
Complacency	9
Assumption incorrect	8
Lapse/ omission/ memory failure	6

Top-3 ATC ADREP Codes FY2022-23

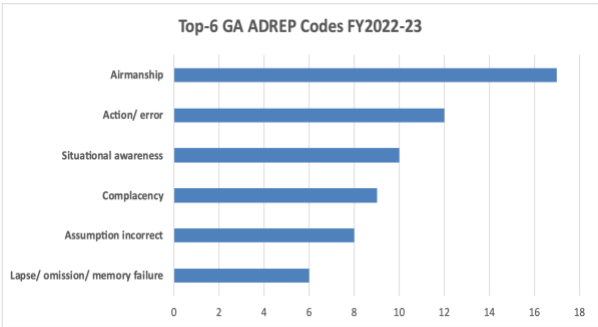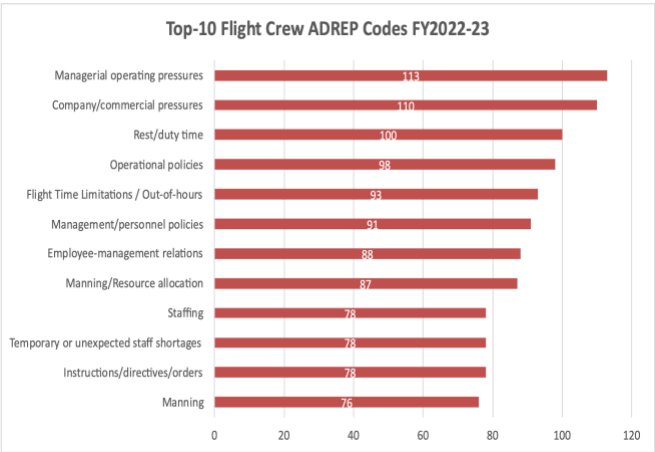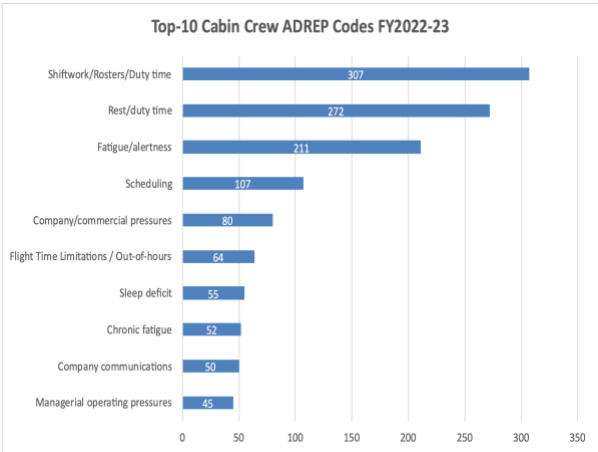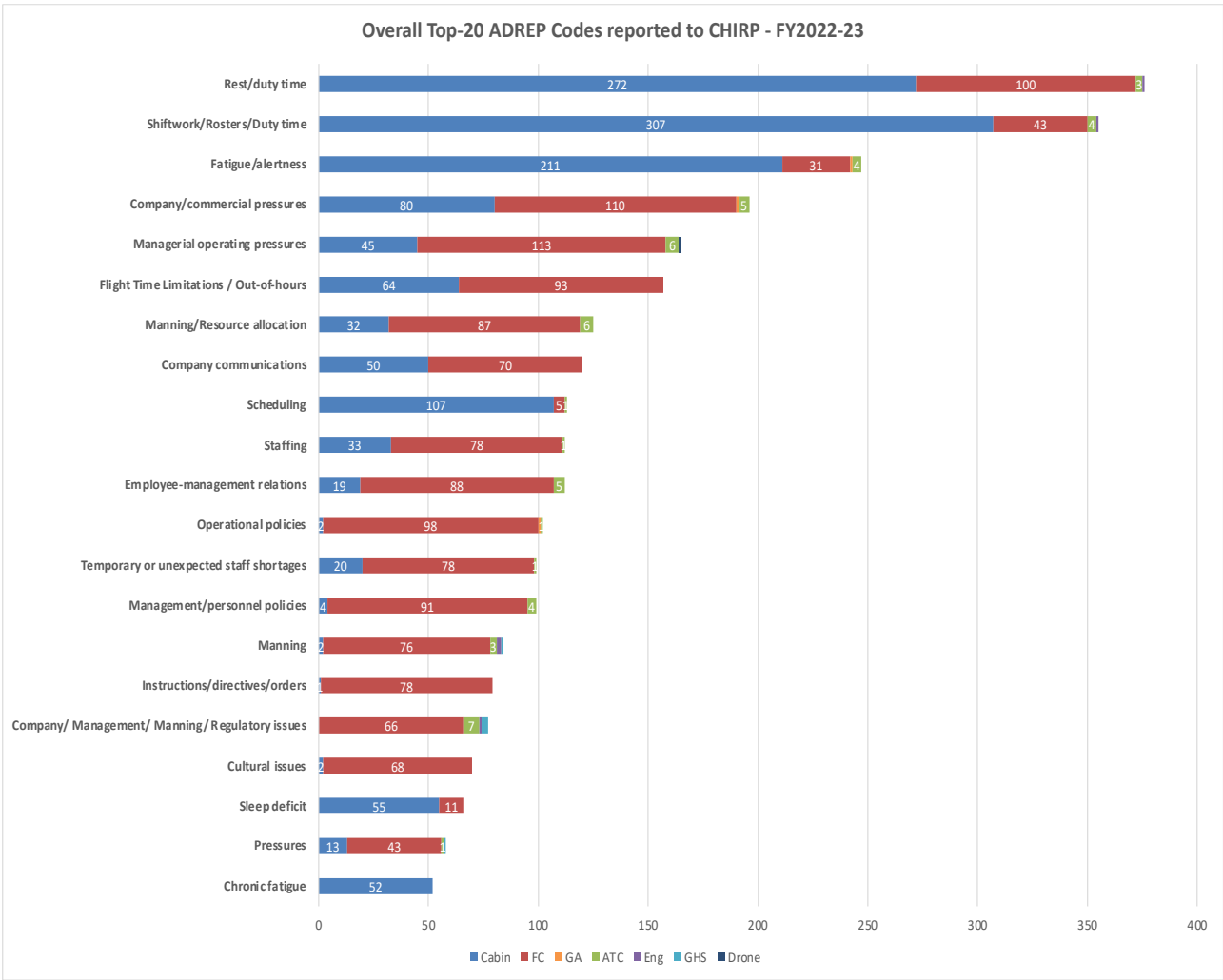| ADREP Code	Value (approx)
Company/ Management/ Manning/ Regulatory issues	7
Managerial operating pressures	6
Manning/Resource allocation	6
Company/commercial pressures	5
Employee-management relations	5

Chart 5. Aggregated ADREP Taxonomy Statistics and by Individual Sector

FY2022-23 Outputs

23.   **Entity Assessments**.   In addition to regular engagement on specific issues with CAA Flight Ops, AAA, GA/RPAS Unit and whistleblowing staff, CHIRP also participates in CAA entity assessments by providing processed, anonymised intelligence about entities for CAA formal safety reviews and audits in support of the Regulatory Safety Management System (RSMS). In FY2022-23, CHIRP provided 19 entity assessments to CAA as detailed in Annex B. Entity assessments are drawn from reports to CHIRP over the year and represent a consolidated view of an entity's safety performance and response to CHIRP enquiries. As such, they provide an independent perspective of an entity's activities, albeit focussed wholly on the particular issues that have been raised to CHIRP's attention by reporters.

24.   **International Engagement**.   CHIRP is a founding member of the International Confidential Aviation Safety Systems (ICASS)[1] group. In addition to sharing safety information with ICASS members, a key aim of this organisation is to assist nations to develop their own confidential reporting programmes; this aim is coherent with the ICAO policy of "no nation left behind". The group meets annually on a formal basis but, unfortunately, this year's conference was again somewhat curtailed by COVID-19 restrictions and took place as a hybrid event with Australia hosting the conference. CHIRP Director Aviation attended the event and played an active part in engaging with the other members through presentations and workshops during which he was able to articulate key messages regarding our perspective on associated Human Factors issues.

25.   **Outputs related to meeting CHIRP's Strategic Outcomes**. Recognising the imperfect nature of 'Just Culture' aspirations, especially against the backdrop of the post-COVID return to full commercial aviation operations, CHIRP's unique and important contribution to the UK safety system provides safety data that would not otherwise be available. More specifically, our outputs in relation to our desired strategic outcomes have included the following elements.

    a.   **Strategic Outcome No1 – Better leadership, awareness, and attitude towards safety issues**. Having been forced to adopt virtual means of engagement during the COVID-19 pandemic, the CHIRP Aviation Programme was able to reinvigorate and extend its physical networking activities this year. Face-to-face liaisons and engagements with airlines, the CAA, other safety groups, individual clubs and entities were supplemented by attendance at air shows and aviation gatherings to raise awareness of CHIRP and our safety concerns and themes.   We also participated in a number of aviation webinars and virtual meeting activities to engage with aviation leaders, stakeholders and practitioners to raise awareness of CHIRP, resolve specific reported concerns and champion wider safety issues.

    b.   **Strategic Outcome No2 – Improved safety culture by changing behaviours, so that practices, processes, and procedures are as safe as they can be**. CHIRP Aviation engaged with the CAA to highlight concerns about practices, policies, processes and procedures relating to*, inter alia*: Air-Ground Communication Service providers exceeding their remit and responsibilities; Air Traffic Control Officer (ATCO) training and availability; provision of lower airspace radar services; addressing risks generated by foreign carriers in UK airspace; airline passenger cabin luggage weight limits; General Aviation pilots' personal assessments of fitness to fly; in-cockpit equipment mounts (for Go-pro etc); and CAA publications and advice to pilots during radio communications failures. In order to ensure regular visibility between the CAA and CHIRP, Dir Avn now attends the CAA SARG quarterly internal Safety Review Committee meetings which provide an opportunity for two-way information flow and alignment.

    c.   **Strategic Outcome No3 – Adoption of safety outcomes identified in CHIRP reports by regulators, managers and individuals**.   As a result of companies seeking to maximise their schedules and workforce usage, CHIRP Aviation received numerous reports over the year about sickness, fatigue and rostering policies. International aviation rules recognise that there are significant risks from aviation practitioners conducting their activities when fatigued or unfit to do so through sickness; maximum duty times are set, and these are intended to be approached only with caution. CHIRP highlighted concerns in these areas to CAA Flight Operations staff relating to a number of airlines and they were able to conduct focused oversight activities that resulted in some companies modifying their behaviours, policies and processes to meet best practice.

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[1] ICASS Membership: Australia, Brazil, Canada, Japan, Korea, Peoples Republic of China, Taiwan, South Africa, Singapore, Spain, UK and US.

Delivering our messages in FY2022-23

26. **Engagements**. We have conducted numerous external engagement events in FY2022-23 to increase our penetration of the various sectors. We regularly contribute to General Aviation Safety Council (GASCo) council meetings; UK Flight Safety Committee (UK FSC) safety information exchanges and Flight Safety Officer foundation courses; Ground Handling Operational Safety Team (GHOST) meetings; and General Aviation Partnership (GAP) meetings. CHIRP also participates with GASCo and the UK Airprox Board (UKAB) in forming a 'Safety Village' at large-scale General Aviation annual events such as AeroExpo and the Light Aviation Association (LAA) Rally. *Ad hoc* contributions and participations are also made in other forums such as British Airline Pilots' Association (BALPA) webinars, CAA/MAA display symposia, and other individual flying club and aviation organisation presentation opportunities.

27. **Publications**. Maintaining awareness of CHIRP is vital in encouraging individuals to submit discretionary reports. After discussion within their associated Advisory Boards[2], reports with educational themes and identified value for wider dissemination are then published in the respective Air Transport, General Aviation, Cabin Crew, Drone/UAS and Ground Handling & Security FEEDBACK newsletters. In addition to email and hard-copy distribution, all our FEEDBACK newsletters are advertised on the CAA SkyWise alert notification service, posted to the CHIRP website and are also accessible using the CHIRP App.

    a. Our Air Transport FEEDBACK newsletter is distributed exclusively via electronic means to circa 40k Flight Crew, engineering and Air Traffic Controller email addresses largely provided by the CAA. For its part, General Aviation FEEDBACK is emailed to all known GA pilots, engineers and Air Traffic Controllers (also circa 40k addressees) and, in addition, circa 2000 hardcopy GA newsletters are sent to flying clubs, flying schools and ATCUs. Very few email addresses are held for cabin crew; therefore, Cabin Crew FEEDBACK is circulated both electronically and in hardcopy to operators for them to distribute in crew rooms and via company communications methods - several operators cooperate with distribution by adding electronic versions of FEEDBACK to their intranets. The Drone/UAS version of FEEDBACK is also distributed by email to registered drone operators and a small number of hardcopies are produced for use at networking events.

    b. Overall, during this reporting period a total of 77 aviation reports were formally published in our FEEDBACK newsletters: 24 reports in 4 editions of Air Transport FEEDBACK, 26 reports in 4 editions of General Aviation FEEDBACK, 13 reports in 3 editions of Cabin Crew FEEDBACK and 14 reports in 3 editions of Drone/UAS FEEDBACK. There were no editions of Ground Handling & Security FEEDBACK published during the period due to a paucity of reports meaning that a standalone publication was not viable. Instead, the reports we were able to publish were included in Air Transport FEEDBACKs.

    c. Within these FEEDBACK newsletters, other aggregated issues were also raised in their respective editorials for those reports that could not be sufficiently disidentified and so the actual number of reported issues publicised this year was close to 100. Aviation FEEDBACKs also usually contain a series called 'I Learned About Flying From That (ILAFFT) which takes stories from the aviation community and publishes them as narratives reflecting events that were perhaps not the contributors' finest hours but which highlight useful safety themes drawn from their actions, observations or simply good fortune.

    d. The nature of CHIRP's work is such that it is difficult to know for sure how many people are reached by the organisation. This is because the work is distributed across many different contexts and communities. However, our intention over the last year was to reach out to a range of new audiences and this was achieved through campaigns on social media; particularly Facebook, LinkedIn and Twitter.

28. **Beneficiaries and Partners**. Our beneficiaries are a large and diverse community that, in the broadest sense, include all those whose lives are touched by the aviation industry and who benefit from CHIRP's mission. The community includes:

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[2] The Advisory Boards are comprised of volunteer subject matter expert panellists who contribute significantly to the Charity's aims as they have deep technical expertise in their respective fields. They assist in the determination and resolution of issues raised in reports and, through the Directors, provide the Trustees with feedback on the associated programme's performance.

a. Individuals who are directly affected by improved safety: aviation practitioners (flight crew, cabin crew, air traffic controllers, engineers, ground handlers, security staff, drone operators and private pilots), mariners, and the public;

b. Individuals and organisations that could or do play a role in improving safety; and,

c. Regulators who set safety policies, approved means of compliance and guidance material.

We believe it is important where feasible, to work in partnership with others to build networks of organisations seeking to improve safety in the aviation industries. CHIRP brings a unique combination of 5 key features to this: we focus on the underlying human factors of reports; we are confidential; we are independent; we are impartial; and we follow up reports with the organisations concerned where possible. Whilst it is important therefore to seek collaborative partnerships, it is also important that we retain our independent and confidential approach. The CAA is the sole funding agency for CHIRP Aviation and represents our primary partner. Independence from the CAA is ensured by CHIRP having its own autonomous, secure and confidential IT and database systems to which the CAA have no access or oversight. Any interaction with the CAA is conducted using only disidentified information to provide processed, anonymised safety intelligence, concerns and themes. CHIRP Aviation also works with the aviation industry and other entities to resolve specific problems as and when they arise. Engagement with these organisations is only conducted with the express agreement of reporters, and is also in a disidentified manner to ensure that reporters' identities are not compromised.

Planning for FY 2023-24

29. FY2022-23 saw CHIRP Aviation celebrate its 40th year of operation and our sister organisation, CHIRP Maritime, its 20th year. Historically CHIRP's programmes have been delivered at arms-length from each other but, in line with CHIRP Trustees' direction and by working together, the two programmes have worked towards bringing a holistic concept to life by creating common strategic themes. Some of these common themes are:

a. Achieve greater penetration of our mission;

b. Become a lead participator in delivering "safety-first thinking" to our sectors;

c. Encourage the use of CHIRP as a forum for debating safety issues emerging from our reports and associated analyses;

d. Maintain relevance and effectiveness;

e. Encourage a greater volume of actionable reports;

f. Improve marketing and communications posture including our brand and digital footprint;

g. Make greater use of academic input to generate *Insight* articles;

h. Continue to upgrade databases to ensure excellence in enabling and tracking reports.

30. In planning the associated CHIRP Aviation programme, last year the CHIRP Chair of Trustees, Exec Dir and Dir Avn met virtually with the CAA Chair and CEO to ensure that CHIRP was meeting their expectations. This year, CAA Chair agreed to provide the keynote address at our AGM in order to publicly acknowledge CHIRP's activities as trust in overall aviation reporting systems is rebuilt and CHIRP maximises its penetration by developing opportunities to engage with all elements of the aviation community through better digital products with wider access and delivery. CAA Chair noted that, as an important part of the UK safety system, CHIRP's voice was more relevant than ever and needed to be heard as an important but independent partner to the CAA.

31. Alongside our core reporting, analysis and information-sharing activities, CHIRP's funding bid to CAA for FY2023-24 included an option to expand and reenergise CHIRP's activities in four aspirational areas:

a. British Skydiving had approached CHIRP with their desire to initiate a CHIRP confidential reporting strand. This will initially be piloted at the end of Jun 2023 using modified GA reporting processes but investment will be required to update the CHIRP database so that a fully-formed Skydiving reporting process is fielded.

b. Develop confidential reporting in the emerging UK Space sector to embed CHIRP's role and remit at the very start of this potentially rapidly blossoming sector. This would involve developing Space sector confidential reporting processes, CHIRP database upgrades and, potentially, a Space Programme Manager as and when the programme develops momentum.

c. Engineering confidential reporting is sporadic at best (historical average about 2 reports per month). CHIRP aspires to develop much more penetration of the engineering, manufacturing and maintenance sectors in order to tap into what is perceived to be a grossly under-represented reporting sector.

d. Likewise, although GA reporting provides a steady stream of reports (historical average about 3-4 reports per month), this probably under-represents the incidents and lessons that are likely to have actually occurred. CHIRP Maritime has a group of 'CHIRP Ambassadors' who proselytise CHIRP and the ideals of Just Culture etc. CHIRP Aviation aspires to replicate this in the GA world (and potentially in engineering, drone, ground handling and ATCO environments) as a way of improving our visibility and promoting reporting through face-to-face presentations and engagement activities. Although these Ambassadors would probably be unpaid volunteers as in the Maritime model, there will be support costs involved depending on the structure and regional disposition of the Ambassador Group and any associated administrative and travel expenses to cover their activities.

32.   The subsequent agreed CAA grant for FY2023-24 provided £20K resource for development of two of these aspirations. Subsequent discussions with CAA Head S&BD, Head Flt Ops and Lead Advanced Air Mobility Challenge identified that the two most productive areas for development were thought to be initiating contact with the emerging UK Space sector and in expanding the existing CHIRP Engineering programme to more fully embrace the design and development of the emerging advanced air mobility sector and associated new technologies. Both of these initiatives should be focused on promotion and integration of confidential reporting schemes: for the Space sector, although already focused on 'failing safely', there was thought to be a niche for promoting confidential reporting of concerns that might not otherwise be reported or where those involved did not wish to be identified; and for the advanced air mobility sector, there were numerous pioneering start-up companies that were employing cutting-edge technologies and who might be tempted to cut corners in the race to achieve market share or employ people with relatively little experience in the aviation sector, both aspects likely to profit from confidential reporting processes.

Summary

33.   CHIRP's role is to manage an independent, voluntary, confidential reporting programme for the aviation and maritime industries. Within this, The UK State Safety Programme acknowledges the CHIRP Aviation Programme as UK's independent confidential voluntary reporting scheme. The CHIRP Aviation Programme compliments the CAA Occurrence Reporting process and other formal reporting systems operated by many UK organisations by providing a means by which individuals are able to raise safety-related issues of concern without being identified to their peer group, management, or the Regulatory Authority.

34.   The FY2022-23 reporting period embraced the general return to more normal levels of flying operations as COVID-19 travel and social restrictions were removed in UK. Commercial aviation activities continued their recovery started in Winter 2021/22 as the aviation industry started to benefit from reduced international travel restrictions and returned to more normal operations with fuller schedules being planned. The outstanding feature of the summer period was stress in the system that was induced by a shortage of staff to meet scheduling requirements as airlines attempted to maximise their commercial activities whilst staff were regaining currency and recency after having returned from redundancy or furlough.

35.   During the FY2022-23 period, a total of 647 aviation reports were received and accepted by CHIRP Aviation for further progression. This represents just over twice as many as in the previous FY reporting period when 282 reports were received and accepted. Overall reporting levels remained slightly depressed compared to pre-COVID-19 years (84% of the FY2019/20 levels). In addition to the 647 reports accepted, a total of 96 reports were rejected on receipt as having either no safety context, incomplete material that could not be clarified/corroborated due to lack of further contact with the reporter, general complaints (such as drone complaints) terms of service complaints, or matters of personal conflict with managers/peers.

36.   'Duty' and 'Fatigue' represented the two most prominent issues reported to CHIRP across all sectors in FY2022-23 by a large margin. 'Pressures/goals' was the next most reported issue, followed by 'Company Policies', 'Internal Communications' and 'Relationship Management'. These last 3 issues reflected a sense of distrust of management by the workforce due to their perception that the company cared more about securing profitability than in caring for the workforce. This loss of trust was manifest in comments about lack of Just Culture in some companies as some reporters were concerned to raise their heads above the parapet and report issues for fear of a negative reaction by line managers. CHIRP highlighted concerns in these areas to CAA Flight Operations staff relating to a number of airlines and they were able to conduct focused oversight activities that resulted in some companies modifying their behaviours, policies and processes to meet best practice.

37.   Having been forced to adopt virtual means of engagement during the COVID-19 pandemic, the CHIRP Aviation Programme was able to reinvigorate and extend its physical networking activities this year. Face-to-

face liaisons and engagements with airlines, the CAA, other safety groups, individual clubs and entities were supplemented by attendance at air shows and aviation gatherings to raise awareness of CHIRP and our safety concerns and themes. CHIRP Aviation also engaged with the CAA to highlight concerns about practices, policies, processes and procedures relating to*, inter alia*: Air-Ground Communication Service providers exceeding their remit and responsibilities; Air Traffic Control Officer (ATCO) training and availability; provision of lower airspace radar services; addressing risks generated by foreign carriers in UK airspace; airline passenger cabin luggage weight limits; General Aviation pilots' personal assessments of fitness to fly; in-cockpit equipment mounts (for Go-pro etc); and CAA publications and advice to pilots during radio communications failures.

38.   Maintaining awareness of CHIRP is vital in encouraging individuals to submit discretionary reports. After discussion within their associated Advisory Boards, reports with educational themes and identified value for wider dissemination are then published in the respective Air Transport, General Aviation, Cabin Crew, Drone/UAS and Ground Handling & Security FEEDBACK newsletters. In addition to email and hard-copy distribution, all our FEEDBACK newsletters are advertised on the CAA SkyWise alert notification service, posted to the CHIRP website and are also accessible using the CHIRP App. The nature of CHIRP's work is such that it is difficult to know for sure how many people are reached by the organisation. This is because the work is distributed across many different contexts and communities. However, our intention over the last year was to reach out to a range of new audiences and this was achieved through campaigns on social media; particularly Facebook, LinkedIn and Twitter.

39.   Whilst it is important to seek collaborative partnerships, it is also important that we retain our independent and confidential approach. The CAA is the sole funding agency for CHIRP Aviation and represents our primary partner. Independence from the CAA is ensured by CHIRP having its own autonomous, secure and confidential IT and database systems to which the CAA have no access or oversight. Any interaction with the CAA is conducted using only disidentified information to provide processed, anonymised safety intelligence, concerns and themes. CHIRP Aviation also works with the aviation industry and other entities to resolve specific problems as and when they arise. Engagement with these organisations is only conducted with the express agreement of reporters, and is also in a disidentified manner to ensure that reporters' identities are not compromised.

40.   In FY2022-23 CAA Chair provided the keynote address at our AGM in order to publicly acknowledge CHIRP's activities as trust in overall aviation reporting systems is rebuilt and CHIRP maximises its penetration by developing opportunities to engage with all elements of the aviation community through better digital products with wider access and delivery. CAA Chair noted that, as an important part of the UK safety system, CHIRP's voice was more relevant than ever and needed to be heard as an important but independent partner to the CAA. In planning the forthcoming FY2023-24 CHIRP Aviation programme alongside our core reporting, analysis and information-sharing activities, the CAA grant provided £20K resource for initiating contact with the emerging UK Space sector and in expanding the existing CHIRP Engineering programme to more fully embrace the design and development of the emerging advanced air mobility sector and associated new technologies. Both of these initiatives should be focused on promotion and integration of confidential reporting schemes: for the Space sector, although already focused on 'failing safely', there was thought to be a niche for promoting confidential reporting of concerns that might not otherwise be reported or where those involved did not wish to be identified; and for the advanced air mobility sector, there were numerous pioneering start-up companies that were employing cutting-edge technologies and who might be tempted to cut corners in the race to achieve market share or employ people with relatively little experience in the aviation sector, both aspects likely to profit from confidential reporting processes.

Note prepared by Steve Forward, CHIRP Dir Avn
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Annex A. Individual Aviation Sector charts depicting Key Issues and sub-categories

Cabin Crew Key Issues and subcategories reported to CHIRP in FY2022-23 (1883 entries)
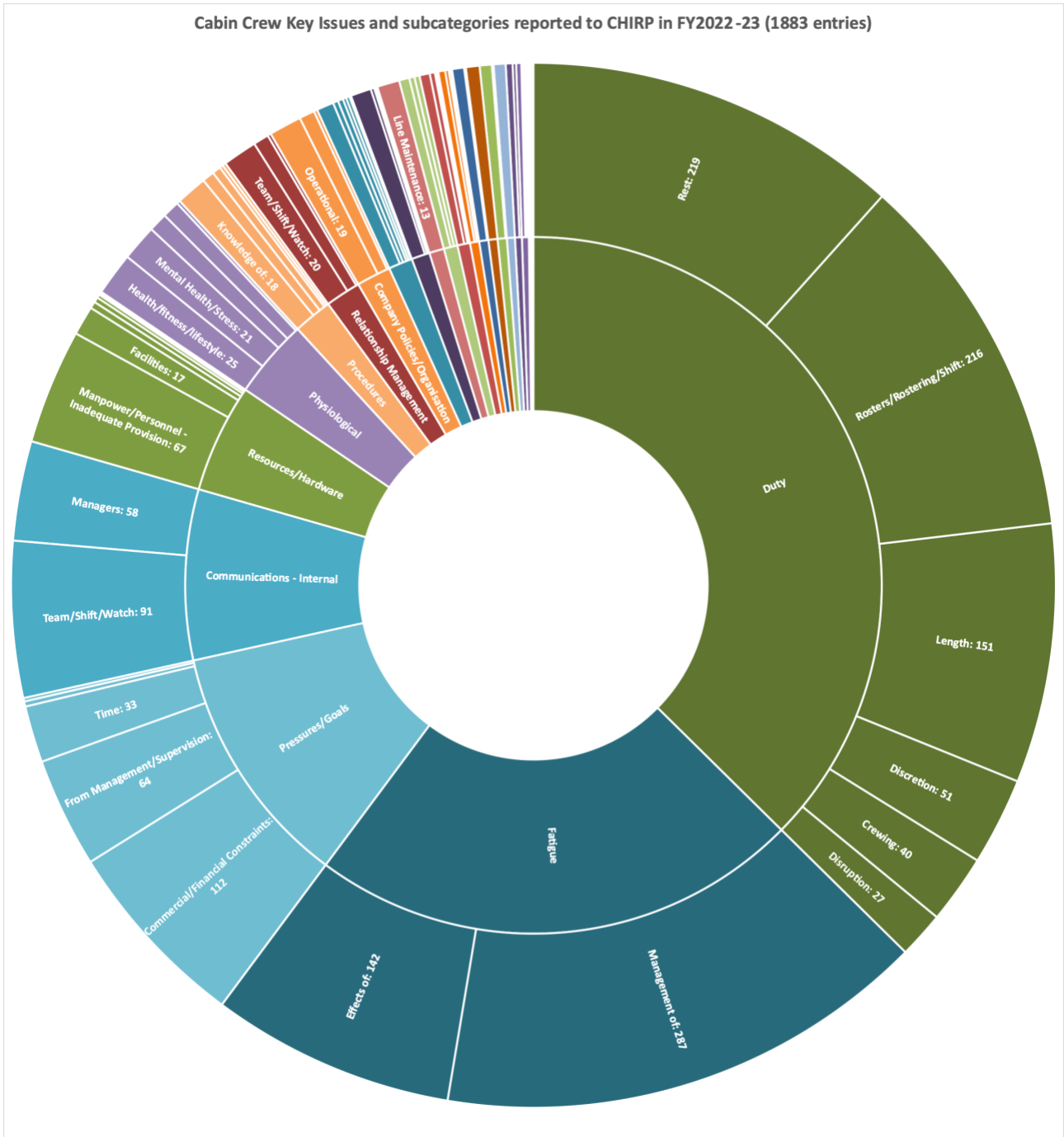
Flight Crew Key Issues and subcategories reported to CHIRP in FY2022-23 (1748 entries)

General Aviation Key Issues and subcategories reported to CHIRP in FY2022 -23 (182 entries)

Engineering Key Issues and subcategories reported to CHIRP in FY2022-23 (109 entries)

Maintenance
- Base Maintenance: 10
- Line Maintenance: 7
- Insufficient/Unqualified Staff: 3
- Standards/Workmanship: 2
- Poor/Missing Documentation: 2
- Insufficient Planning: 2
- Fault Isolation Error: 2
- Insufficient Supervision: 1

Aircraft Technical
- Airworthiness: 6
- Systems: 3
- Propulsion: 2
- Cabin Equipment Deficiencies: 1

Regulation/Law
- Compliance with: 10
- Knowledge of: 1

Team Working
- Lack of Leadership/Assertiveness: 5
- Working in Conflict: 2
- Unrealistic Expectation: 1

Pressures/Goals
- Time: 5
- Commercial/Financial Constraints: 2
- From Management/Supervision: 1

Resources/Hardware
- Manpower/Personnel - Inadequate Provision: 4
- Tools/Equipment - Unsafe: 1
- Tools/Equipment - Unavailable: 1
- Facilities: 1

Relationship Management
- Managers: 3
- Lack of Management Commitment: 2
- Team/Shift/Watch: 1
- Planning/Organisation of Task: 1

Procedures
- Application/Use of - by Other Party: 3
- Inadequate: 2
- Incorrect/Conflicting: 1

Company Policies/Organisation
- Operational: 3
- Bad Planning or Coordination: 1

Documentation
- Availability (Lack of): 2
- Inadequate Handover: 1

Licensing
- Engineering: 2

Individual Error
- Reckless Behaviour: 2

Communications - Internal
- Managers: 2
- Poor Ergonomics: 1
- Abuse or Addiction: 1

- Towing: 1
- Management of: 1
- Length: 1
- Infrastructure: 1

Air Traffic Control Key Issues and subcategories reported to CHIRP in FY2022 -23 (160 entries)

Annex B. CHIRP Entity Assessments – FY2022-23

1.   The CHIRP Aviation Programme contributed 19 entity assessments to the CAA Internal Review Team in FY2022-23 as follows:

      Aer Lingus UK
      London Luton Airport
      Glasgow Airport
      GA Parachuting
      GA British Microlight Aircraft Association
      London Gatwick Airport
      London Heathrow Airport
      Virgin Atlantic
      Newquay Airport
      Air Charter Scotland
      Ryanair
      Isles of Scilly Skybus
      Gloucestershire Airfield
      Edinburgh Airport
      Loganair
      Airtanker
      Isle of Man Airport
      Manchester Airport
      Newcastle Airport