ACT ARC Recommendation 21-13
Identification of Cabin Misconduct Triggers

I. Submission

The recommendations below were submitted by the De-escalation Training Enhancement Workgroup (DTE WG) for consideration by the Air Carrier Training Aviation Rulemaking Committee (ACT ARC) Steering Committee at its November 17, 2021, meeting. The ACT ARC Steering Committee adopted the recommendations, and they are submitted to the Federal Aviation Administration (FAA) as ACT ARC Recommendations 21-12, 21-13, and 21-14.

II. Statement of the Issue

Title 14 of the Code of Federal Regulations (14 CFR), Part 121 requires each certificate holder to have approved initial and recurrent training programs that ensure each crewmember is adequately trained to perform his or her assigned duties.

III. Background

To support certificate holders' compliance with 14 CFR Part 121 regulations, the Federal Aviation Administration (FAA) has published guidance on developing, implementing, reinforcing, and assessing training for flight attendants. Detailed lists and summaries of most of the applicable regulations and available guidance for flight attendant training are provided by the FAA Flight Standards Information Management System (FSIMS). Detailed information for training relevant to managing onboard misconduct is provided by the FAA Safety Assurance System (SAS) Part 121 Flight Attendant Passenger Handling Element Design Data Collection Tool ED 5.2.4 121A OP Passenger Handling, and the FAA Element Performance Inspection Data Collection Tool 4.2.4, Training of Flight Attendants, Element Summary Information. This latter tool specifically collects the following training center inspector check data that are related directly or indirectly to a flight attendant's handling of abnormal passenger behavior:

> 1.1.15. … emergency training which includes instruction on the handling of illness, injury, or other abnormal situations involving passengers or crewmembers to include familiarization with the emergency medical kit, in accordance with the Certificate Holder's design. *Sources: 121.135(b)(15); 121.417(a); 121.417(b)(3)(iv)*
>
> 1.1.16. … instruction on the handling of hijacking and other unusual situations, in accordance with the Certificate Holder's design. *Sources: 121.135(b)(15); 121.417(a); 121.417(b)(3)(v)*
>
> 1.1.18. … initial ground general subject training of passenger handling in accordance with the Certificate Holder's design. *Sources: 121.415(a)(2); 121.421(a)(1)(ii)*
>
> 1.1.19 … initial ground general subject training approved crew resource management initial training, in accordance with the Certificate Holder's design. *Sources: 121.404; 121.415(a)(2); 121.421(a)(1)(iii)*

2.14. … instruction in passenger handling policies and regulations relating to flight attendant activities, in accordance with the Certificate Holder's design. *Sources: FAA Order 8900.1 Chap 23, Vol 3, Sec 3, Para 3-1769B3*

2.26. … joint pilot and flight attendant CRM and evacuation training in accordance with the Certificate Holder's design. *Sources: FAA Order 8900.1 Vol 3, Chap 23, Sec 4, Para 3-1792B1*

2.47. … training on passenger abuse of flight attendant in accordance with the Certificate Holder's design. *Sources: FAA Order 8900.1, Chap 23, Vol 3, Sec 4, Para 3-1798B8*

2.48. … training on passengers who appear to be under the influence of intoxicating substances, in accordance with the Certificate Holder's design. *Sources: FAA Order 8900.1, Chap 23, Vol 3, Sec 4, Para 3-1798B8*

2.49. … training on passengers who may jeopardize aircraft or passenger safety in accordance with the Certificate Holder's design. *Sources: FAA Order 8900.1, Chap 23, Vol 3, Sec 4, Para 3-1798B8*

2.58. … aircraft ground training that includes instruction on the crewmember general passenger handling responsibilities, in accordance with the Certificate Holder's design. *Sources: FAA Order 8900.1, Vol 3, Chap 23, Sec 5, Para 3-1828C*

2.60. … aircraft ground training that includes instruction on the crewmember passenger handling responsibilities for smoking and no smoking requirements, in accordance with the Certificate Holder's design. *Sources: FAA Order 8900.1, Vol 3, Chap 23, Sec 5, Para 3-1828C*

2.62. … procedures to handle passenger disturbances involving alcoholic beverages, passenger noncompliance with FAR's, and situations that may result in interference with crewmembers, in accordance with the certificate holder's design. *Sources: FAA Order 8900.1, Chap. 23, Vol 3, Sec 6, Para 3-3546*

2.69. … training in regulatory smoking prohibitions, signage and passenger briefings, and procedures to follow when passengers do not comply with smoking regulations, in accordance with the certificate holder's design. *Sources: FAA Order 8900.1, Chap 23, Vol 3, Sec 6, Para 3-1851D1*

Taken together, the above documents, in combination with various regulations, policies, and guidance materials developed by the FAA; Departments of Transportation (DOT), Justice (DOJ), and Homeland Security (DHS); and Transportation Security Administration (TSA) identify many of the passenger behaviors that have the potential to adversely affect aviation safety and security. While certificate holders must train crewmembers to recognize, evaluate, and manage these behaviors, the existing guidance is inconsistent and fails to identify many current, specific types of passenger misconduct. In most cases the available guidance lacks recommendations for training employees to de-escalate, effectively manage, and appropriately report incidents. While many certificate holders develop these detailed training elements on their own, a proactive collaboration between regulators and industry would improve the consistency in reporting and effectiveness of the procedures, lead to widespread adoption of best practices, and ultimately enhance aviation safety and security.

For these reasons, the DTE WG was formed to recommend the development of and/or updates and improvements to de-escalation training guidance. Specifically, the Steering Committee tasked the DTE WG to study and address the specific topic of de-escalation techniques and the current methodologies used to deliver de-escalation training to flight attendants, as noted in the Workgroup Terms of Reference.

Although the FAA notes the need for procedures to manage unruly or disruptive behavior in the aircraft cabin, current industry and FAA guidance does not address many recent abnormal or disruptive behaviors, such as onboard use of personal electronic devices to record incidents, refusal to wear masks, etc. The proposed recommendations suggest methodologies that can be used to deliver de-escalation training based on the specific training objectives and are products of the DTE WG's in-depth review of current certificate holder training methodologies.

Spielfogel and McMillen define de-escalation as a "verbal or nonverbal communication strategy that can help a person regain a sense of calm and self-control." They go on to note that two "common elements of de-escalation are (1) the attempt to reduce the use of heightened, disproportionate, or harsh responses to perceived conflict, and (2) the attempt to reduce heightened negative emotions present in the situation."

The ACT ARC agrees that airline de-escalation training should develop the ability of each employee to utilize, with appropriate competence, effective verbal/nonverbal communication strategies when confronted with situations that involve perceived conflicts or negative emotions that could jeopardize the safety or security of flight or the health or safety of other employees or the traveling public.

The ACT ARC further agrees that there is no "one size fits all" solution for de-escalation training, which must be tailored to the individual air carrier's operation. Guidance on de-escalation training should incorporate industry best practices to provide as much information as possible for an air carrier developing such training. Each air carrier meets de-escalation training requirements by incorporating those requirements in its approved programs under 14 CFR part 121, subparts N and O; 14 CFR part 121 subpart Y (Advanced Qualification Program (AQP)); 49 U.S.C. §44918 Crew training; 49 U.S.C. §44734 Training of flight attendants; or its Employee Assault Prevention and Response Plan (EAPRP), which is required by Section 551 of Public Law 115-254 (FAA Reauthorization Act of 2018).

The ACT ARC also agrees that AC 120-65, *Interference with Crewmembers in the Performance of their Duties*, contains useful terms and definitions related to de-escalating incidents. As noted in its purpose statement, this AC "provides information … which may be used to manage and reduce the instances of passenger interference with crewmembers." The current threat environment goes beyond terrorist actions to include other forms of interference in the cabin, and some terms and definitions from this AC have become relevant again. A copy of AC 120-65, published in October 1996 and canceled following the creation of the Transportation Security Administration (TSA) and a shift from managing hijackings to counter-terrorism after 9/11, is included with this report as Appendix A.

The ACT ARC further encourages incorporating elements of de-escalation training, as appropriate, into Crew Resource Management (CRM) training. As described in AC 120-51E, CRM provides one way of "optimizing the human/machine interface and accompanying interpersonal activities. These activities include team building and maintenance, information transfer, problem solving, decision-making, maintaining situational awareness, and dealing with automated systems. CRM training is comprised of three components: initial indoctrination/awareness, recurrent practice and feedback, and continual reinforcement." It should also be noted that AC 120-65, which as discussed above has been canceled, is referenced in AC 120-51E:

> l. Training for crewmembers in appropriate responses when passengers intimidate, abuse, or interfere with crewmember performance of safety duties. Training should address crew coordination and actions, which might defuse the situation. **See AC 120-65, Interference with Crewmembers in the Performance of their Duties, dated October 18, 1996.** Training should include specific communication topics, such as conflict resolution, with particular attention to the most serious passenger interference, attempted hijack. (*Emphasis added, excerpted from AC 120-51E, p. 2 of Appendix 3*)

IV. Recommendations

The ACT ARC recommends the FAA consider the following action:

> ***Recommendation 21-13:*** *The ACT ARC recommends the FAA develop new advisory guidance and update it periodically to identify triggers that lead to or contribute to misconduct by one or more cabin occupants. The FAA should continuously monitor data streams such as ASRS for current and relevant situations likely to become volatile or escalate, especially in the cabin, and share them with carriers. The FAA should provide quick, regular, and robust data and analysis to the air carriers, and encourage them to combine this data with data collected by the air carriers through a number of streams such as SMS, for use in the creation of memorable, relevant training scenarios.*

Training programs tend to repeat particular scenarios that are informed by regulations and guidance, but the ACT ARC determined these scenarios can be repetitive, unrealistic, or no longer relevant. Therefore, the ACT ARC recommends that the FAA develop guidance to airlines that encourages and supports the identification and analysis of trigger events that lead to or contribute to onboard incidents involving misconduct by one or more occupants. Some trigger events may be common to multiple airlines and operations (one example of this are incidents linked to the mandatory wearing of face masks during the Covid–19 pandemic emergency); others may be specific to one airline segment (e.g., mainline, regional, discount). Trigger events may also vary in nature and prevalence with current events, time of year, location, etc. The guidance to airlines should suggest one or more appropriate methods to obtain and evaluate incident reports to determine misconduct triggers. The FAA should also obtain and publish regular updates to quickly disseminate information on the most prevalent misconduct triggers; these updates could be based on data obtained from FAA investigations of misconduct incidents, crewmember voluntary reports, or other equivalent methods.

To illustrate one potential method for determining misconduct triggers, the DTE WG reviewed crewmember reports obtained through a search of the NASA Aviation Safety Reporting System (ASRS) database. This analysis enabled the WG to identify triggers that have contributed to onboard incidents of passenger misconduct. The ASRS database includes "narratives submitted by reporters (after they have been sanitized for identifying details) … [that] provide an exceptionally rich source of information for policy development, human factors research, education, training, and more." The ASRS reports searched by the DTE WG spanned the years 2003 through 2020 and were limited to 14 CFR Part 121 flights. Search parameters also limited reporters to Flight Attendant (On Duty), Flight Attendant In Charge, Captain, First Officer, Pilot Flying, or Pilot Not Flying. All report narratives included the word passenger, and at least one of the following words: alcohol, drunk, intoxicated, assault, strike, unruly, or attack. Of the 136 reports that resulted from these specific search terms, 67 involved clear evidence of onboard misconduct; the other 69 reports included one or more of the text search terms but described a category of incident (i.e., equipment malfunction, medical emergency, etc.) that did not include onboard misconduct.

For this same period of time (2003 to 2020), the FAA conducted 2823 unruly passenger enforcement actions. Clearly, the 67 ASRS onboard misconduct incidents are only a tiny fraction of all incidents that occurred over that time. These 67 incidents are also unlikely to be a representative sample; therefore, it should be assumed that any data based on this report set is not statistically significant. However, the reports collected and stored by ASRS are thoroughly vetted and anonymized, which makes them a useful, publicly available proxy for the type of reports collected and analyzed by airline inflight and safety departments. While many of the

DTE WG team members have access to their individual airline's incident reports, for purposes of this analysis, the use of such data by the DTE WG would raise significant privacy concerns and was therefore ruled out from the beginning.

The DTE WG manually reviewed each report narrative to define misconduct trigger and incident outcome categories and estimate occurrence rates. Misconduct trigger rates are summarized below in Table 2, and incident outcome rates, which are specific only to these 67 incidents and do not represent current or historical rates for the industry, are summarized in Table 3.

Table 1. Summary of Incident Triggers from 67 ASRS Misconduct Reports

Trigger	Number of Reports	Percentage
Alcohol or Drugs	**43**	64%
Unsafe Behavior	**33**	49%
PEDs	**13**	19%
Masks	**8**	12%
Lavatory	**7**	10%
Delay	**7**	10%
Stress, Anxiety	**7**	10%
Smoking or Vaping	**6**	9%
Cabin Temperature	**4**	6%
Race, Ethnicity, Culture	**4**	6%
Carry-on Items	**3**	4%
Illness	**3**	4%
Animal	**2**	3%

Table 2. Summary of Incident Outcomes from 67 ASRS Misconduct Reports

Outcome	Number of Reports	Percentage
Verbal Altercation	**44**	66%
LEO or ABP Involved	**25**	37%
Disagreement or Misunderstanding between Employees	**22**	33%
Physical Altercation	**22**	33%
Passenger-Passenger Conflict	**14**	21%

In Table 1, the two most common triggers of misconduct in the 67 ASRS incidents are alcohol/drug intoxication and some form of unsafe behavior, e.g., portable electronic device (PED) use, assault, disobeying crew instructions. Note that while unsafe behavior could be considered either a trigger or an outcome, for purposes of this analysis it is categorized as a trigger. Various other triggers identified from the report narratives occur at lower rates, including lavatory use, smoking/vaping, flight delays, cabin temperature, etc. In addition, misconduct triggers can change with time—some triggers such as alcohol and drugs are perennial, other triggers such as PEDs evolve with technology, and some triggers may come and go with changing circumstances, such as mask use, which became culturally sensitive during the COVID-19 pandemic.

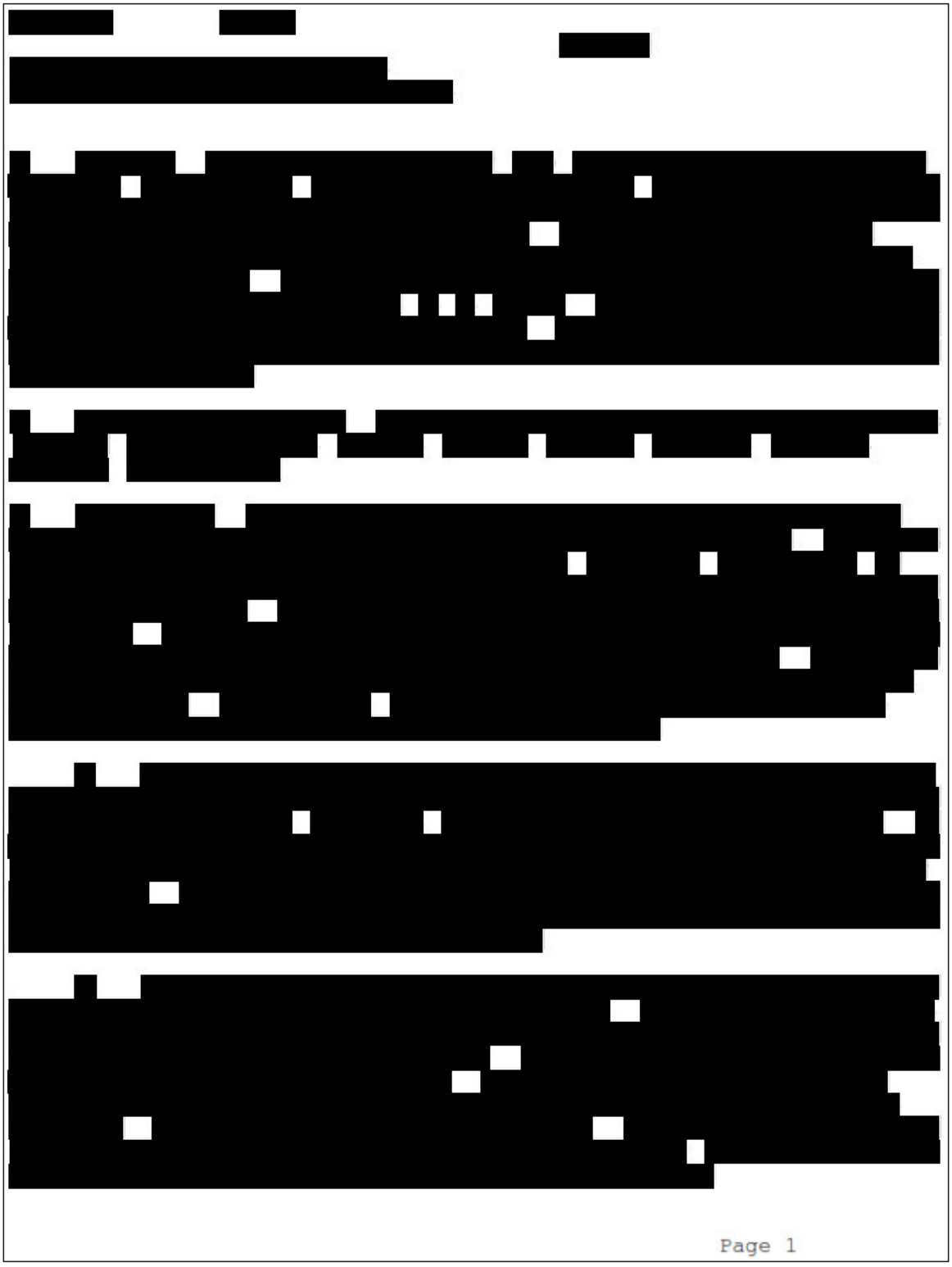
Table 2 lists numbers and rates of reported incident outcomes. The most common outcome category is verbal altercations, identified in about 2/3 of the reports. Involvement by a law enforcement officer (LEO) or able-bodied passenger (ABP), disagreements between airline employees (for example when a gate agent allows boarding of a passenger the crew believes should not have been boarded due to perceived intoxication), and physical altercations are each noted in about 1/3 of the reported incidents, and conflicts between passengers occur in about 1/5 of the reported incidents.

Quantitative analysis of incident report narratives has the potential to support development and continuous improvement of crewmember de-escalation training programs. This data-driven approach can be applied to identify triggers of behavioral misconduct, recent misconduct trends, and incident outcomes. In addition, selected report narratives and incident outcomes can be integrated into scenario-based de-escalation training programs for crewmembers that are timely and relevant.

V. References

- Spielfogel, J.E. and McMillen, J.C. *Current use of de-escalation strategies: Similarities and differences in de-escalation across professions*. Social Work in Mental Health, 2017, 15:3, 232–248. https://doi.org/10.1080/15332985.2016.1212774

Appendix A. AC 120-65. INTERFERENCE WITH CREWMEMBERS IN THE PERFORMANCE OF THEIR DUTIES (10/18/96, canceled after 9/11/2001)



Page 1