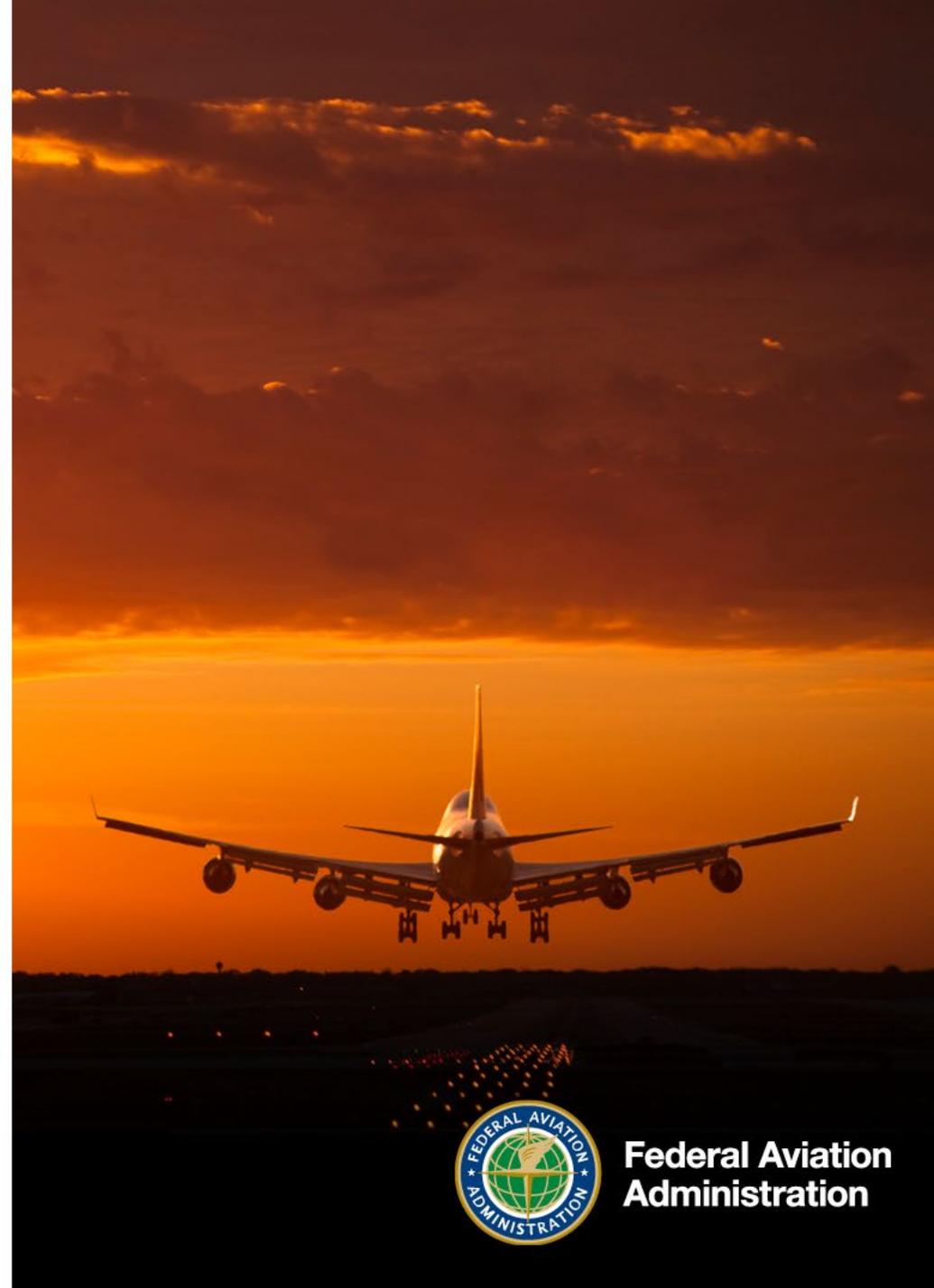


AJR-G Industry Class

Prepared by: AJR-G1 to facilitate Stakeholder
Engagement Team (SET) Tasking 134
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Motivation for Development of Industry Class

- Airports which have significant variations in unscheduled traffic can present challenges when implementing Traffic Management Initiatives (TMI) to control traffic flow to level out demand to meet airport capacity.
- In early 2022 runway construction at Dallas Love Field (DAL) presented such an issue and was successfully managed using a modified Airspace Flow Program (AFP) strategy that consisted of one AFP for scheduled traffic (airlines) and another AFP for unscheduled traffic (general aviation), which was referred to as a dual AFP.
 - While dual AFPs had been used in other instances, the multiple days of the DAL strategy provided an extended, consistent sample for analysis
- The dual AFP strategy was also used in Spring 2022 for Florida weather patterns along with high volumes of general aviation traffic



Motivation for Development of Industry Class

- In analyzing the impact of the increased use of dual AFP program strategies, questions such as “How many general aviation aircraft were captured in Florida AFPs in March 2022?” needed to be answered.
 - However, it became clear that these type of questions could not be answered using the Traffic Flow Management System (TFMS) aircraft user classification, due to its reliance on airframe/seat size. As such, a more sophisticated mapping mechanism of industry class related to the "aviation type/mission" was required.



Industry Class Introduction

- The AJR-G Industry Class grouping is based on the “mission” of the flight and aligns with operational practices and operator trade associations
 - Easily aggregates to Scheduled and Unscheduled operations for assignment in a dual AFP strategy
 - Removes the ambiguity of TFMS seat-based definition of user class
 - TFMS user class, which is based on aircraft size, does not reflect the operational character of the aviation industry



Industry Class Definitions

- **C** is the Category for Schedule Passenger Carriers - DOT, Airlines for America (A4A)
- **F** captures Freight/Cargo – Cargo Airline Association (CAA)
- General Aviation category (**G**) is subdivided into business and non-business general aviation
 - Add a '**B**' Industry Class to include Business general aviation Operations such as NetJets & ExecuJet – National Business Aviation Association (NBAA)
 - Non-business general aviation, primarily “N#####” call signs, will be classified as **N**
 - Canadian & Mexican GA traffic with call signs like 'C#####' and 'X#####' are included in **N**
- **M** includes all Military and Civilian Government, both U.S. and International
- **O** represents anything that doesn't fit in the above categories, such as MedEvac flights



AJR-G Industry Class Development

- In developing the Industry Class identification scheme, extensive research was done on the operators regarding their corporate missions/business models and their trade associations
- Discovered the FAA/APL Office of Policy and Rulemaking sponsors an Industry Class mapping in its Air Traffic Services Business Model (ATSBM).
 - Used for Requirements under FAA Re-Authorization to address Tax Policy by NAS Service by Industry Class.
 - ATO Costs and Estimated Revenue Model (CAREM) utilizes ATSBM Industry Class to allocate costs and revenue of air traffic service.
 - Product already available within the Agency with a usage track record that extends back to 2005
 - No changes to FAA orders were ever required



AJR-G Industry Class Subcategory Aggregation

- ATSBM is disaggregated into dozens of user classes that AJR-G can aggregate to Schedule Passenger Carrier, Freight, Business and General Aviation, Military, Government and Other
 - See next slide for ATSBM/AJR-G mapping table
- Based on the mapping table, the Industry Class summation categories are as follows:
 - General Aviation (G) = Business general Aviation (B) + Private (non-business) general aviation (N)
 - Business general aviation (B) = 14.PAX + 15.PAX + 17.PAX + 32.GEN
 - Non-business general aviation (N) = 30.GEN + 33.GEN
 - Commercial (C) = 11A.PAX + 11B.PAX + 11C.PAX + 12.PAX + 13.PAX
 - Freight (F) = 21.FRT + 22.FRT + 23.FRT + 26.FRT
 - Military (M) = 41.MIL + 42.MIL + 43.MIL
 - Other (O) = 36.GEN



Mapping Table: ATSBM User Class/AJR-G Industry Class

ATSBM User Class		ATO (AJR-G) Industry Class
11A.PAX	U.S. Network Carriers	C
11B.PAX	U.S. Low-Cost Carriers	C
11C.PAX	U.S. Ultra-Low-Cost Carriers	C
12.PAX	Foreign Passenger Carriers	C
13.PAX	U.S. Regional Carriers	C
14.PAX	Fractional Ownership	B
15.PAX	Part 125	B
17.PAX	Part 135	B
21.FRT	U.S. Commercial Freight Carriers	F
22.FRT	Foreign Freight Carriers	F
23.FRT	U.S. Regional Freight Carriers	F
26.FRT	Part 135 Freight	F



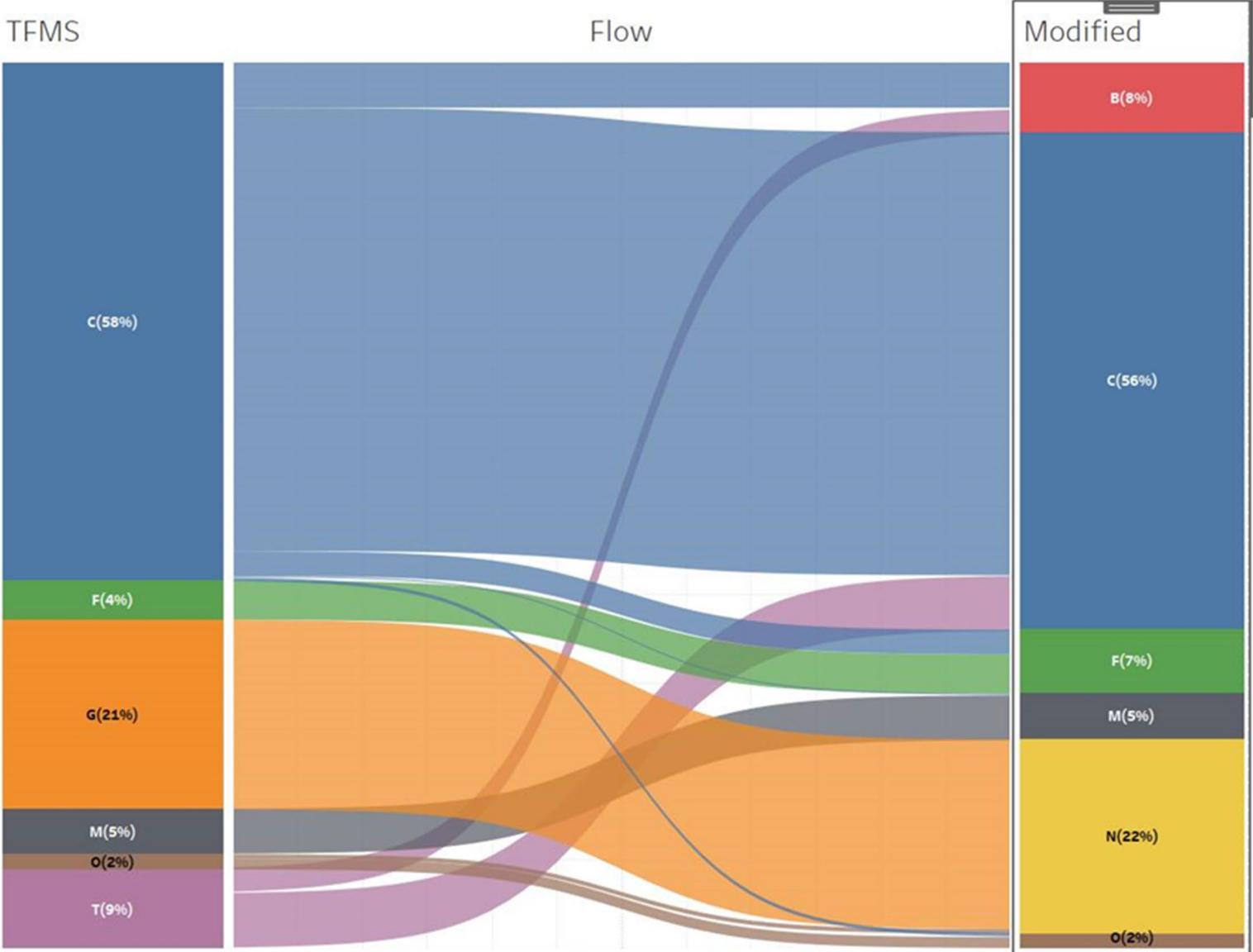
Mapping Table: ATSBM User Class/AJR-G Industry Class

Industry Class (continued)

ATSBM User Class		ATO (AJR-G) Industry Class
30.GEN	General Aviation: Part 91 & non-commercial operators, including flight schools (unless at a public university), aircraft manufacturers (test flights), etc.	N or B
32.GEN	Part 136 (Air Tour)	B
33.GEN	Part 137 (Agricultural)	N
36.GEN	Air Ambulance	O
41.MIL	U.S. Civilian Government	M
41.MIL	Public Universities and Colleges	B
42.MIL	U.S. Military operators	M
43.MIL	Foreign Civilian Government & Military	M



TFMS User Class to AJR-G Industry Class Redistribution Flow



- A visual of the user category distribution shift from TFMS to the AJR-G industry class methodology is shown to the left
- The redistribution graph highlights that the TFMS user class categorization scheme underrepresents general/business aviation and the cargo/freight categories

FAA Reporting and Industry/User Class Categories

- The Industry Class grouping will create alignment between Performance Reporting and CDM Stakeholders
 - Consistent with other FAA reporting under Reauthorization, e.g. CAREM
 - Consistent with DOT (Scheduled Passenger Carriers)
- OPSNET Aircraft Category remains in OPSNET Flight Tables
 - OPSNET AC Category is available if required
 - Same with TFMS User Class
 - Industry Class will be an **additional** variable included in AJR-G datasets



Appendix



Air Traffic Services Business Model (ATSBM)

User Classification Definitions

- **11A.PAX – U.S. Network Carriers (Industry Class C)**
 - Large scheduled U.S. commercial passenger carriers, classified as Network Airline or Other Carrier by the Bureau of Transportation Statistics
 - Source – BTS Passenger Airline Employment Data Press Release, Table 9
- **11B.PAX – U.S. Low-Cost Carriers (Industry Class C)**
 - Scheduled U.S. commercial passenger carriers classified as low-cost carrier by the Bureau of Transportation Statistics, except those identified as ultra-low-cost carriers by GRA
 - Source – BTS Passenger Airline Employment Data Press Release, Table 12
- **11C.PAX – U.S. Ultra-Low-Cost Carriers (Industry Class C)**
 - Scheduled U.S. commercial passenger carriers classified as low-cost carrier by the Bureau of Transportation Statistics that are also identified as ultra-low-cost carriers by GRA
 - Source – BTS Passenger Airline Employment Data Press Release, Table 12
- **12.PAX – Foreign Passenger Carriers (Industry Class C)**
 - All foreign passenger carriers
- **13.PAX – U.S. Regional Carriers (Industry Class C)**
 - U.S. regional scheduled commercial passenger carriers
 - These carriers operate aircraft with fewer than 100 seats, often under contract to network passenger carriers
 - Regional Airlines Association website (www.raa.org) used as one of the sources for identifying regional carriers



Air Traffic Services Business Model (ATSBM)

User Classification Definitions (continued)

- **14.PAX – Fractional Ownership (Industry Class B)**
 - Operators that provide fractional ownership programs
 - List of programs available from NBAA at <http://data.nbaa.org/prodsvcs/directory/search.cfm>.
 - Use “Products & Services” search feature to search for “Fractional Share Provider”
- **15.PAX – Part 125 (Industry Class B)**
 - The charter operation of a US commercial carrier aircraft
 - OPSS identifies Part 125 operators
- **17.PAX –Part 135 (Industry Class B)**
 - Commercial operators that provide mostly passenger charter operations, as declared on operators’ websites
 - The N-Number prefix “TN” indicates a non-scheduled commercial operator
 - OPSS identifies Part 135 operators and operation configuration (“passenger”, “combi”, and “PAX and cargo” used to identify 17.PAX operators)
 - It should be noted that many charter carriers offer both passenger and freight transportation, sometimes on the same flight; for tax purposes, such carriers are classified as and treated as 17.PAX
 - “Charter” in operator name is also used to identify Part 135 passenger operators



Air Traffic Services Business Model (ATSBM)

User Classification Definitions (continued)

- **21.FRT – U.S. Commercial Freight Carriers (Industry Class F)**
 - U.S. commercial freight carriers operating aircraft with equivalent of 60 or more seats
- **22.FRT – Foreign Freight Carriers (Industry Class F)**
 - All foreign freight carriers
- **23.FRT – U.S. Regional Freight Carriers (Industry Class F)**
 - U.S. commercial freight carriers operating aircraft with equivalent of less than 60 seats.
- **26.FRT- Part 135 Freight (Industry Class F)**
 - Commercial operators that provide cargo charter operations, as declared on operators' websites
 - The N-Number prefix "TN" indicates a non-scheduled commercial operator
 - OPSS identifies Part 135 operators and operation configuration (all-cargo used to identify 26.FRT operators)



Air Traffic Services Business Model (ATSBM)

User Classification Definitions (continued)

- **30.GEN – General Aviation (Industry Class N)**
 - This group includes FAR Part 91 and other non-commercial operators, including flight schools (unless at a public university), aircraft manufacturers (test flights), etc.
- **32.GEN – Part 136 (Air Tour) (Industry Class B)**
 - Part 91 operators in OPSS where Section 119 = “119.1(e)(2) – Air Tour (91.147)” or “119.1(e)(2) – 135.1(c)”
- **33.GEN – Part 137 (Agricultural) (Industry Class N)**
 - Part 137 operators in OPSS
- **36.GEN - Air Ambulance (Industry Class O)**
 - All flights with “LN” prefix are classified as air ambulance flights
 - Other flights by air ambulance operators are identified using the operator name



Air Traffic Services Business Model (ATSBM)

User Classification Definitions (continued)

- **41.MIL – U.S. Civilian Government (Industry Class M)**
- **42.MIL – Military (Industry Class M)**
 - All U.S. military operators
- **43.MIL – Foreign Civilian Government and Military (Industry Class M)**
 - All foreign civilian government and military operators

