

**AEEEC**

*Together "We Set the Standard."*



**ARINC Project Paper 660C  
CNS/ATM AVIONICS ARCHITECTURES  
SUPPORTING NEXTGEN/SESAR CONCEPTS**

**Systems Architecture & Interfaces (SAI) Subcommittee**

**November 30, 2022**

Jessie Turner  
Technical Fellow  
Boeing  
ARINC 660C Industry Editor

# ARINC Project Paper 660C – Work Plan

- ▶ Industry Editor: Jessie Turner (Boeing)
- ▶ Section Owners/Focals – coordinate inputs from committee members

Section	Title	Owner	Review
1.0	Introduction	Jessie Turner (Boeing)	2/7/23
2.1.1	Performance-Based Navigation	Mike McDowell (Collins)	10/18/22
2.1.2	Trajectory Based Operations	Mike Jackson (Honeywell)	11/30/22
2.1.3	Approach and Landing	Kevin McBride (American)	9/21/22
2.1.4	Surface Operations	Paulina Piatkowska (Airbus)	11/30/22
2.1.5	Air Traffic Services Datalink Communications	Stéphane Tamalet (Airbus)	11/30/22
2.2	Improved Safety and Environment	Jessie Turner (Boeing)	10/18/22
2.3	Airborne Collisions Avoidance Systems (ACAS)	Jessie Turner (Boeing)	7/13/22
2.4	ADS-B	Jessie Turner (Boeing)	7/13/22
2.5	System Wide Information Management (SWIM)	Jay Crossman (L3Harris) Zach Ladd (L3Harris)	9/21/22* 11/30/22
2.6	Airborne Information Management	Jessie Turner (Boeing)	10/18/22

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Section	Title	Owner	Review
3.6 (new)	Avionics Architecture – 2020's	Jessie Turner (Boeing)	10/18/22
3.7	Integrated Modular Avionics (IMA)	Jessie Turner (Boeing)	10/18/22
4.1.1	Performance-Based Navigation	Mike McDowell (Collins)	10/18/22
4.1.2	Trajectory Based Operations	Mike Jackson (Honeywell)	11/30/22
4.1.3	Approach and Landing	Kevin McBride (American)	10/18/22
4.1.4	Surface Operations	Paulina Piatkowska (Airbus)	11/30/22
4.1.5	Air Traffic Services Datalink Communications	Stéphane Tamalet (Airbus)	1/12/23
4.2	Improved Safety and Environment	Jessie Turner (Boeing)	2/7/23
4.3	Airborne Collisions Avoidance Systems (ACAS)	Jessie Turner (Boeing)	10/18/22
4.4	ADS-B	Jessie Turner (Boeing)	1/12/23
4.5	System Wide Information Management (SWIM)	Zach Ladd (L3Harris)	11/30/22
4.6	Airborne Information Management	Jessie Turner (Boeing)	10/18/22
4.7	Summary Table	Jessie Turner (Boeing)	2/7/23

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Section	Title	Owner	Review
5.0	RECOMMENDED AVIONICS ARCHITECTURES TO SUPPORT NEXTGEN/SESAR	Jessie Turner (Boeing)	2/7/23
5.1	Mandate Summary	Jessie Turner (Boeing)	10/18/22
5.2	Retrofit Requirements to Support NextGen/SESAR Avionics Architecture – 1980's	Jessie Turner (Boeing)	2/7/23
5.3	Retrofit Requirements to Support NextGen/SESAR Avionics Architecture – 1990's	Jessie Turner (Boeing)	2/7/23
5.4	Retrofit Requirements to Support NextGen/SESAR Avionics Architecture – 2000's	Jessie Turner (Boeing)	2/7/23
5.5	Retrofit Requirements to Support NextGen/SESAR Avionics Architecture – 2010's	Jessie Turner (Boeing)	2/7/23
5.6 (new)	Retrofit Requirements to Support NextGen/SESAR Avionics Architecture – 2020's	Jessie Turner (Boeing)	2/7/23
6.0	IMPACTS ON STANDARDS	Jessie Turner (Boeing)	2/7/23
APDX A/B	LIST OF ACRONYMS & GLOSSARY	Jessie Turner (Boeing)	2/7/23

# ARINC Project Paper 660C – Logistics

- ▶ How will proposed changes be made? Sam setup a MSTeams site where latest draft document will reside
- ▶ A660B Airbus Comments – Excel file distribution
- ▶ Monthly MSTeams meetings
  - Nov. 30, 2022, 9am-11am ET
  - January 12, 2023, 9am-11am ET (proposed)
  - March 9, 2023, 9am-11am ET (proposed)
  - April 6, 2023, 9am-11am ET (proposed)
  - May 4, 2023, 9am-11am ET (proposed)
- ▶ SAI Meeting February 7-9, 2023 (Coral Gables, FL)

# Schedule

## Meetings

2022  
AEEC  
General  
Session

June  
2022  
SAI

Online  
Meetings

Oct 18-19  
2022  
SAI

Online  
Meetings

Feb 7-9  
2023  
SAI

Online  
Meetings

June  
2023  
SAI

Online  
Meetings

Oct  
2023  
SAI

Online  
Meetings

Feb  
2024  
SAI

2024  
AEEC  
General  
Session



May  
2022  
APIM  
Approved

June  
2022

June-Oct  
2022

Oct  
2022

Oct - Jan  
2022 2023

Feb  
2023

Feb-May  
2023

June  
2023

Jun-Oct  
2023

Oct  
2023

Oct--Feb  
2023 2024

Feb  
2024

May  
2024



## Document Production

**Draft #1**  
(Dec 2022)

**Draft #2**  
(May 2023)

**Draft #3**  
(Nov 2023)

**Draft #4**  
(March 2024)

## NOTES:

- Monthly meetings held online. Will switch to bi-weekly meetings if needed.
- Final draft of ARINC Report 660C expected by end of March 2024.

# ARINC Project Paper 660C – Links

- ▶ ARINC IA Teams channel for ARINC 660C development:

<https://teams.microsoft.com/l/team/19%3avJe90E6qMBS8tC1SxNv5qo5M6lbbOEVwtz4sQjMOLaM1%40thread.tacv2/conversations?groupId=38518395-5937-413a-a73b-1225b772b759&tenantId=fcbfc6fa-e20b-4a1d-b629-1b8e17697dbc>

- ▶ FAA NextGen Website: <https://www.faa.gov/nextgen>

NextGen Architecture Roadmaps: <https://www.faa.gov/nextgen/nas-enterprise-architecture-infrastructure-roadmaps>

Minimum Capabilities List:

[https://www.faa.gov/sites/faa.gov/files/about/office\\_org/headquarters\\_offices/ang/Minimum\\_Capability\\_List\\_to\\_Achieve\\_Optimal\\_NextGen\\_Benefits.pdf](https://www.faa.gov/sites/faa.gov/files/about/office_org/headquarters_offices/ang/Minimum_Capability_List_to_Achieve_Optimal_NextGen_Benefits.pdf)

- ▶ SESAR Joint Undertaking Website: <https://www.sesarju.eu/>

European ATM Master Phasing Plan: <https://www.sesarju.eu/masterplan2020>