



To FOS **Date** August 11, 2017

From Scott L. Smith
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Subject **Meeting Announcement**
Fiber Optics Subcommittee (FOS)

Chairman Robert Nye, The Boeing Company

When October 3-4, 2017 Tuesday and Wednesday from 0900 to 1700
October 5, 2017 Thursday from 0900 to 1300

Host COTSWORKS is hosting the FOS meeting. They have made arrangements for the meeting space. A special hotel rate is available.

Where Meeting and Hotel Location
Hyatt Regency Cleveland at the Arcade
420 Superior Avenue
Cleveland, Ohio 44114 USA
tel + 1 216 575-1234
fax + 1 216 575-1690
<https://cleveland.regency.hyatt.com/en/hotel/home.html>
Travel information is provided later in this AEEC meeting announcement.

Hotel COTSWORKS, the meeting host, has arranged for meeting space and a preferred hotel rate for meeting attendees at the Hyatt Regency Cleveland at the Arcade Hotel. COTSWORKS has also arranged for complimentary continental breakfast and Wi-Fi.
To make hotel reservations, use this link: <https://aws.passkey.com/go/cotsworks>. Alternatively, contact the hotel directly and use the code "COTSWORKS" to obtain their preferred rate.
Note: The hotel group rate of **\$127** is available to those who make reservations before **September 18, 2017**.

Instruction Please notify ARINC Industry Activities of your intention to attend by registering online at: <http://www.aviation-ia.com/events/>

The meeting is open to all interested parties. Individuals requesting time on the agenda should contact Scott Smith. Any material intended to be circulated prior to the meeting should be submitted before September 22, 2017. The agenda will be finalized one week prior to the meeting.

Activity Scope

The Fiber Optics Subcommittee (FOS) will meet to continue the development of ARINC Fiber Optic Standards used in air transport aircraft and other aircraft with similar requirements. The subcommittee's current work projects include documenting Mechanical Transfer (MT) technology in airborne fiber optics.

This project is intended for future aircraft programs as well as the retrofit of existing airframes. Applications for this technology include avionics, in-flight entertainment systems, and other uses.

Meeting Objectives

Main Objective

The FOS will review inputs intended for Draft 2 of **ARINC Project Paper 846: Fiber Optic Ferrule, Mechanical Transfer (MT)**.

This project intends to define a new fiber optic Mechanical Transfer (MT) contact for use in high-density applications with less weight and a smaller area footprint. It is expected that the first implementation of the MT will be incorporated into an EN 4165 connector.

The FOS will continue work on this project with discussion on physical characteristics, optical performance, qualification requirements, maintenance procedures, and testing for MT contacts.

The goal for this meeting is to evaluate existing MT ferrule designs for features that meet the specifications of ARINC Project Paper 846 and achieve consensus on all technical material concerning the MT ferrule design.

Existing FOS Standards

The FOS may review inputs for the existing ARINC Fiber Optic Standards Set, and prepare a schedule for producing mature supplements as follows:

- **Supplement 4 to ARINC Specification 801: Fiber Optic Connectors**
 - References to Expanded Beam and Mechanical Transfer information will be added.
- **Supplement 3 to ARINC Specification 802: Fiber Optic Cables**
 - The MT termini will need a new cable type added to the standard. A draft APIM from Boeing and OFS will be reviewed to propose adding new cable types to the document.
- **Supplement 4 to ARINC Report 803: Fiber Optic Design Guidelines**
 - The use of Mechanical Transfer, Expanded Beam, and 10 GBase technology will be documented for additional guidance.
- **Supplement 2 to ARINC Report 804: Fiber Optic Active Device Specification**
 - The use of Mechanical Transfer, Expanded Beam, and 10 GBase technology will be documented for additional guidance.
- **Supplement 5 to ARINC Report 805: Fiber Optic Test Procedures**

- Material to be added specific to Expanded Beam and Mechanical Transfer termini.
- **Supplement 6 to ARINC Report 806: *Fiber Optic Installation and Maintenance***
 - Material to be added specific to Expanded Beam and Mechanical Transfer termini.
- **Supplement 4 to ARINC Report 807: *Fiber Optic Training Requirements***
 - Material to be added specific to Expanded Beam and Mechanical Transfer termini.

New Technology

The FOS may discuss the need for new airborne fiber optic technology to satisfy new or retrofit aircraft programs. Any new project will require an ARINC Project Initiation/Modification (APIM) to be drafted for review by industry.

Travel Information

The meeting site is located ~ 15 miles from the Cleveland Hopkins International (CLE) Airport by automobile. The estimated fare for a taxi is ~\$45 USD.

If you plan on renting a car, note that parking at the hotel is either ~\$30 USD (valet only), or at various garages and parking lots in the area (price will vary).

The meeting site is accessible by train via the Red Line in roughly 40 minutes. See the Cleveland RTA webpage for more information: <http://www.riderta.com/>

Please make your own air and ground transportation arrangements.

cc

SAI, CSS Subcommittees