



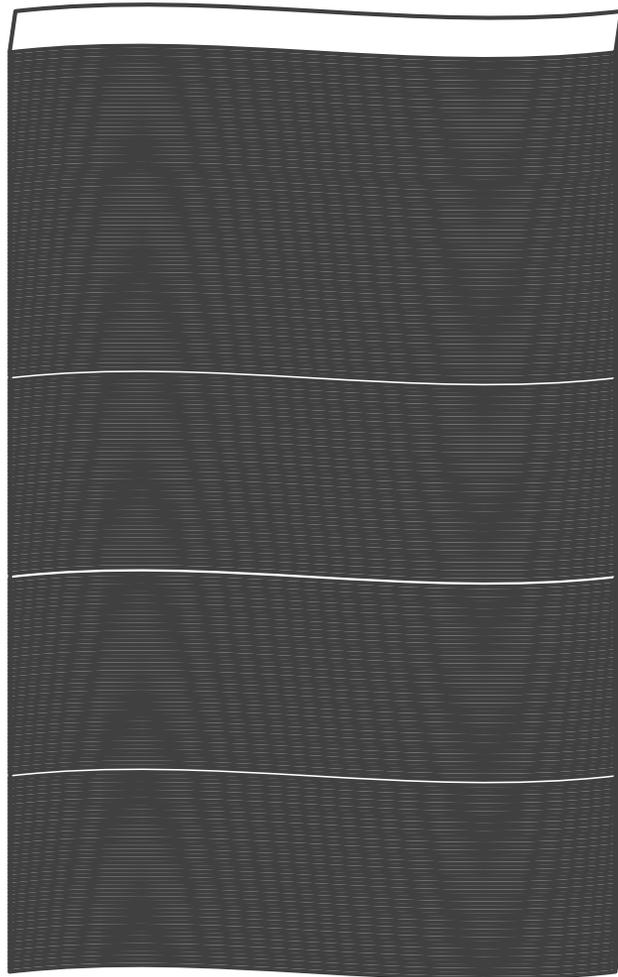
CS-23 Normal, Utility, Aerobatic and Commuter Aeroplanes



19 OCTOBER 2015

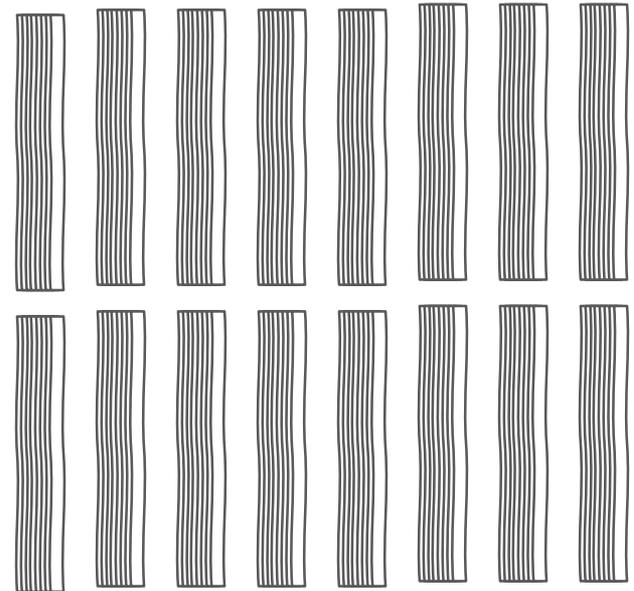


The Draft CS-23



Current CS-23 (170 Pg.)

Consensus Stds.

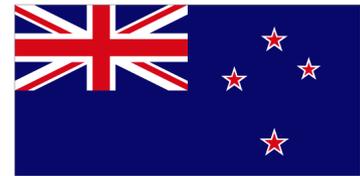


Future CS-23 (19Pg.)

ASTM F44 General Aviation Aircraft



- ◆ Internationally Accepted Standards for GA Aircraft
- ◆ 290 International Members
 - Regulators
 - Aviation Manufacturers
 - Operating Groups
- ◆ Next Meeting Tampa, U.S.



ASTM F44, General Aviation Aircraft



ASTM F44
Main Committee

ASTM F44.90
Executive Subcommittee

ASTM F44.91
Terminology Subcommittee

ASTM F44.92
Regulatory Liaison Subcommittee

ASTM F44.93
Industry Liaison Subcommittee

ASTM F44.10
General Subcommittee

ASTM F44.30
Structures Subcommittee

ASTM F44.50
Systems Subcommittee

ASTM F44.20
Flight Subcommittee

ASTM F44.40
Propulsion Subcommittee

ASTM F44, General Aviation Aircraft



ASTM F44.10
General Subcommittee

WK41139 Guide for the
Application of General
Aviation Design Standards

WK41140 Specification for
Airworthiness Design
Standard for General
Aviation Aircraft

WK41141 General
Guidelines for Standard
Specifications in F44

WK43889 Specification for
Crew Interface for Small
Airplanes

WK43890 Specification for
Icing Protection for Small
Airplanes

Draft Standard

Published Standard

ASTM F44, General Aviation Aircraft



ASTM F44.20
Flight Subcommittee

WK49876 Specification for
Establishing Operating
Limitations and
Information for Aeroplanes

WK49697 Specification for
Handling Characteristics of
Aeroplanes

WK50590 Specification for
Performance of
Aeroplanes

WK41068 Specification
for Airworthiness Design
Requirements
Associated with Proof of
Compliance, Load
distribution and Weight
Limits of General
Aviation Airplanes.

WK41075 Specification for
Low-Speed Flight
Characteristics of
Aeroplane

Draft Standard

Published Standard

ASTM F44, General Aviation Aircraft



ASTM F44.30 Structures Subcommittee

F3093 Standard
Specification for
Aeroelasticity
Requirements

F3083 Standard
Specification for
Emergency Conditions,
Occupant Safety and
Accommodations

F3115 Standard
Specification for Structural
Durability for Small
Airplanes

WK41325 Specification for
Design and Construction of
Small Airplanes

F3116 Standard
Specification for Design
Loads and Conditions

WK46913 Specification for
Burn Testing Of Materials
for General Aviation
Airplanes

Draft Standard

Published Standard

ASTM F44, General Aviation Aircraft



ASTM F44.40 Powerplant Subcommittee

F3062 Standard Specification for Installation of Powerplant Systems

F3063 Standard Specification for Design and Integration of Fuel/Energy Storage and Delivery System Installations for Aeroplanes

F3064 Standard Specification for Control, Operational Characteristics and Installation of Instruments and Sensors of Propulsion Systems

F3065 Standard Specification for Installation and Integration of Propeller Systems

F3066 Standard Specification for Powerplant Systems Specific Hazard Mitigation

WK41135 Specification for designing to mitigate potential hazards generated from propulsion systems installed on General Aviation Aircraft

WK41136 Specification for Integration of Electric and Hybrid-Electric Propulsion Units for General Aviation Aircraft

WK46999 Specification for Control, Operational Characteristics, and Installation of Instruments and Sensor of Propulsion Systems Installed on Small Aeroplanes

Draft Standard

Published Standard

ASTM F44, General Aviation Aircraft



ASTM F44.50
Systems Subcommittee

ASTM F44.91
Terminology
Subcommittee

F3061 Standard
Specification for Systems
and Equipment in Small
Aircraft

F3060-15a Standard
Terminology for Aircraft

ASTM F44.92
Regulatory Liaison
Subcommittee

WK42303 Guide for
Coordination and
Communication Between
Authorities

Draft Standard

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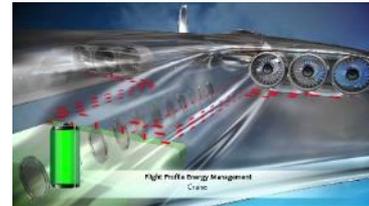
Initial Technology Enhancements



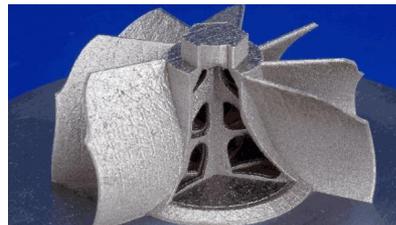
◆ Electric Propulsion



◆ Hybrid Propulsion

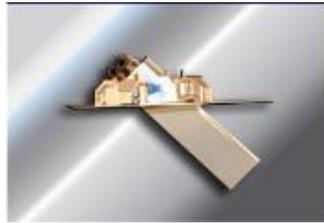


◆ Additive Manufacturing

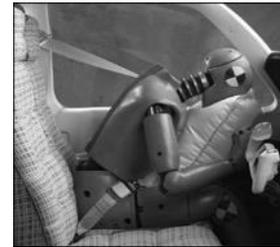
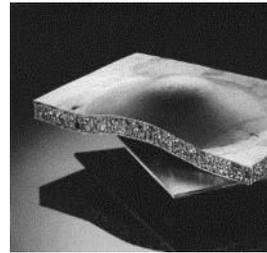


Initial Safety Enhancements

◆ Prevent Loss of Control



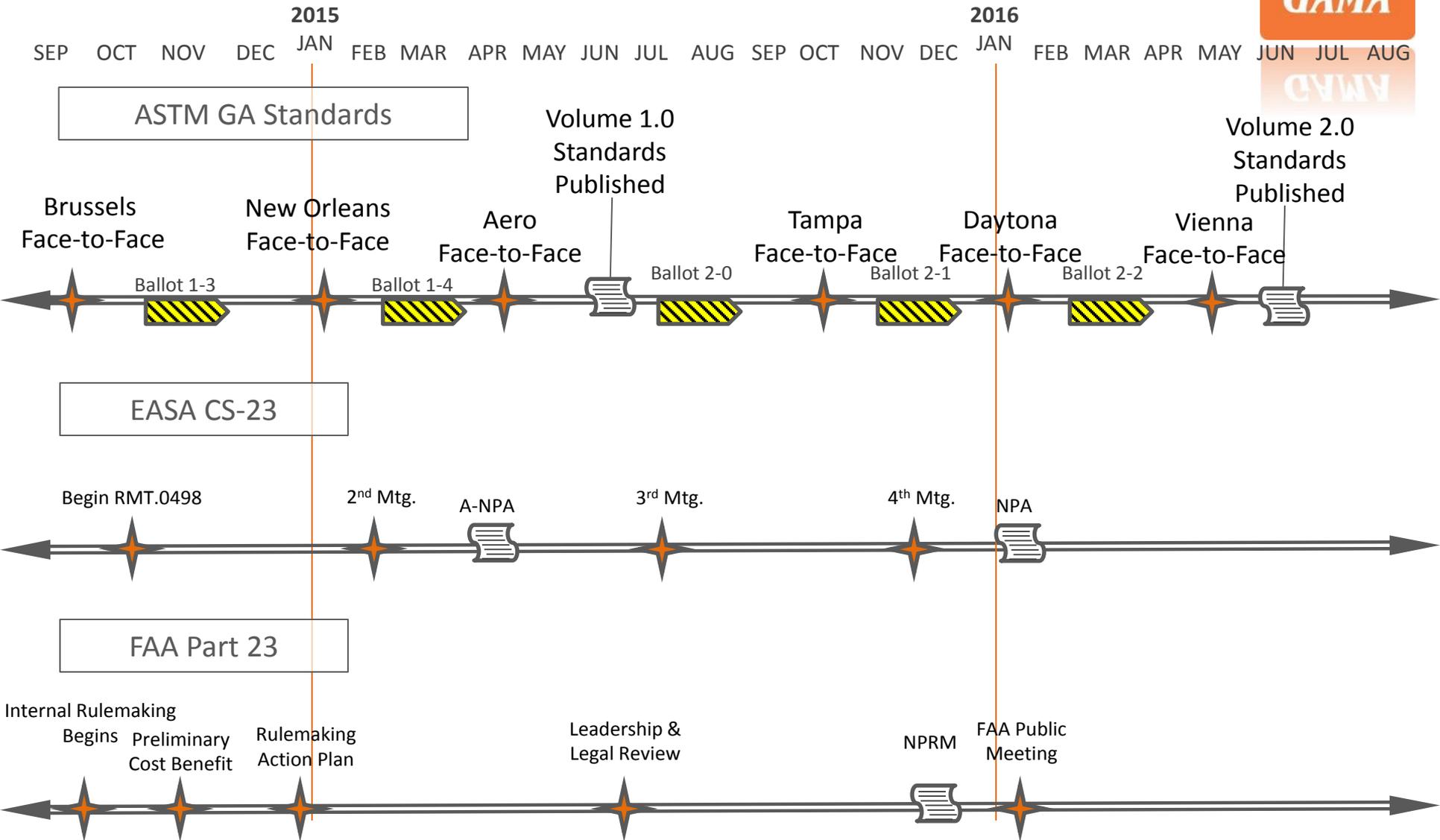
◆ Improve Crashworthiness



◆ Improve Pilot Interface



Timelines of Change



The Way Forward



A black and white photograph of a large aircraft, possibly a turboprop, in a vast manufacturing facility. The aircraft is the central focus, with its wings spread wide. Two workers in light-colored shirts are standing near the cockpit area, looking at a large panel. The background is filled with industrial equipment, tools, and other aircraft parts, creating a sense of a busy manufacturing environment. The lighting is bright and even, highlighting the metallic surfaces of the plane.

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