Change A=added D=deleted M=modified	Domains	Regulatory activity	Content of the Regulation	Regulatory organisation	Target date for regulatory material publication	EASA UAS categories	Status	Standardisation activity	Short description of the deliverable	SDO	Target date for publication	Type of document (standard, supporting material etc.)	Status	Comments
1								Genera	ıl					
	Definition and classification							AS6969	This data dictionary provides a mathematically coherent set of definitions for quantity types used in data models for unmanned systems. In this data dictionary, a quantity is defined as a property of a phenomenon, substance, or body whose value has magnitude.	SAE AS-4UCS Unmanned Systems (UxS) Control Segment Architecture	Jun-18	standard	ongoing	
	Definition and classification							ARP6128 Unmanned Systems Terminology Based on the ALFUS Framework	This SAE Aerospace Recommended Practice (ARP) describes terminology specific to unmanned systems (UMSs) and definitions for those terms. It coloses only on terms under exclusively of the development, testing, and other activities requesting UMSs. Terms that are used in the commenty but can be understand with common discharge and the terminology are being planned. Further efforts to expend the scope of the terminology are being planned.	SAE AS-4JAUS Joint Architecture for Unmanned Systems Committee		recommended practice	published	
	Definition and classification							ASawaw UAS Propulsion System Terminology		SAE E-39 Unmanned Aircraft Propulsion Committee	May-19	standard	planned	
м	Definition and classification							F3341/F3341M-20 Standard Terminology for Unmanned Aircraft Systems	This terminology covers definitions of terms and concepts instant to memorate all oral registerine (MSR) is a terminology through the consistent case of terminology throughout all ASTM histernational USA standards: Audience Committee FSR, ASTM International that shadulty, and the global community, 1.2 This terminology contains a left of terms, althorousement, accompanies and public registering contains a left of terms, althorousement, accompanies and public registering example, see or companie) are for information only and provide support or partification.	ASTM F38 Unmanned Aircraft Systems	Mar-18	standard	published	
	Definition and classification							ISO 21895 - Requirements for the categorization and classification of civil UAS	Requirements for the categorization and classification of civil UAS. The standard applies to their industrial regulation, development and production, delivery and usage.	ISO TC20/SC16/WG1	Oct-19	standard	angoing	At DIS stage and publicly available first week of April 2019.
	Definition and classification							ISO 21384-1 - General requirements for UAS for civil and commercial applications, UAS terminology and classification	Provides the four-dation and common terms, definitions and references relevant to the whole Standard, the purpose of which is to provide a safety quality standard for the safe operation of all UAS Brough the provision of pyrangidic plandards for manufacturing and operations.	ISO TC20/SC16/WG1	May-20	standard	ongoing	At DIS stage and publicly available first week of April 2019.
								ISO 21348-4 - Unmanned aircraft systems – Part 4: Terms and definitions	Provides terms and definitions to support ISO/TC 20/SC 16 standards	ISO TC20/SC16/WG1	Jul-20	standard	ongoing	At DIS stage and publicly available first week of April 2019.
	Definition and classification							ASTM WK62744 General Operations Manual for Professional Operator of Light Unmanned Aircraft Systems (UAS	he actual of about the implamental to Contest Countries User and Contestional Copiest of the Universed Actual States (1985). The standard addresses the requirements and for heat practices for characteristic and expensional states (1985). The contestion and contestion and expensional states (1985) and the contestion of the productional extension of practice of the contestion by a CAA and productional extension of practice to wait or this orbit part of operation of a contestion of the contestion of production of the contestion of the contestion of production of the contestion of the contestion of the contestion of the contestion of the contestion of production of the contestion of the contestion of the cont	ASTM F38 Unmanned Aircraft Systems	Mar-19	standard	orging	
	Manuals							ASTM F3366-19 Standard Specification for General maintenance Manual (GMM) for small Unmanned Aircraft Systems (sUAS)	This specification provides the minimum requirements for a General Maintenance Manual (DMM) for an unmanned aircraft system (UAS) designed, manufactured, and operated in the small UAS category as defined by a Chill Aviation Authority (CAA).	ASTM F38 Unmanned Aircraft Systems		standard	published	
	Menualis	EU 2019/345	Part 18th. CO shall be gliced on the market with a user's INSR in its section. On the law behavior, the section of the law behavior of the Like section. On the control of the law behavior of the Like read the law behavior of the Like read the law behavior of the Like read to some of an about the law behavior of the Like read to law behavior of the law behavior of the Like read of a Solder operation described on the law behavior of Solder operation described on the law section Like Gosperation described on the law section Like Operations and the law behavior of the law section Like Operations and the law section Like Operations are the law section Like Operations and the law section Like Operations are the law section Like Operations and the law section Like Operations are the law section Like Operation Like Oper	EASA	Jun-19	open	Regulation applicable							Operan 05-2019 the characteristics of the LIA including but not firmed to the LIA class; — LIA class; — LIA class; — LIA mass (with a Macoription of the reference configuration) and the (AITOM); — general characteristics of silveed psyleodas in terms of mass, dimension; what reasons of the control the LIA remobally; — equipment and software psyleodas of the control the LIA remobally; are a description of the balanction of the UN in case of a loss of the command and control link;
	Manuals		Vart eq., dieder remote identification add-on shall be placed on the market with a user's manual providing the reference of the transmission protector used for the direct remote identification ensistent and the instruction to provide the provided on the UA; (a) install the models on the UA; (b) upload the UAS operator registration number.	EASA	Jun-19	open	Regulation applicable							
	Manualis		FACE SEA. All in class Ce I alread by placed on the market with a user's soll the characteristics of the Ush violating by and relimited by the I chair of the US. The characteristics of the USh violating by and relimited by the I chair of the USh and the marketing of the Market played and the second and the marketing has and the second of the second and the marketing has and the second of the second and the marketing has and the second of the second and the second of the second of the second of the second and the second of	EASA	Jun-19	open	Regulation applicable							

Jul-20

ASTM Test method - a definitive procedure that produces a test result.

Guide - information or series of options that does not recommend a specific course of action.

Practice - a definitive set of instructions for performing one or more specific operations that does not produce a test result.

Classification - a systematic arrangement or division of materials, products, systems, or services into groups based on similar characteristics such as origin, composition, properties, or use.

Terminology - a document comprising definitions of terms; explanations of symbols, abbreviations, or acronyms.

EUROCAE

Minimum Aviation Systems Performance Standards (MASPS) - describes and specifies the operational and/or functional requirements of a complete end-be-end system, which may include airborne, on-ground and space segments. It should provide a high-level architecture describing the inclinidation components, and should allocate between those components the performance, safely and interoperability requirements.

Operational Services and Environment Definition (OSED) - a document dedicated to the operational concept description: it provides the definition of the considered services and of the environment, in which they have to be provided. It is usually published as an arranex to the SPR.

Safety and Performance Requirements Standard (SPR) - a standalone document dedicated to operational safety and performance issues: it provides an allocation of the requirements between the segments for the different approval types.

Interoperability requirements standard (INTEROP) - a standalone document dedicated to interoperability issues between the different segments: for each of them, it identifies the technical interface and related functional requirements

Process Standard - specifies generic methods, which are not specific to individual components, e.g. software or hardware development, environmental testing

Minimum Operational Performance Standard (MOPS) - specifies the performance of a component (piece of equipment, protocols, exchange formats, ...), which is the minimum necessary performance to satisfy a regulatory requirement. In particular, it specifies the tests to be made to ensure that the specified performance is schewed.

Technical Standard - specifies performance of a component, which reflects the best industrial practice.

 i										 		
Marcata	EU 2019/945	Part 2019, 3/19 and 4/10 All or date CI, CZ and CZ shallbe pieced on the mended with All or dates CI, CZ and CZ shallbe pieced on the mended with a remaind provider of each shallding but not limited to the — classe of the a decoupletur of the endounces confliqued only — power of branch shallber of the endounces confliqued only — power of branch shallber of diseased polypoints in terms of mean descriptions of the confliction of	EASA	Jun-19	open	Regulation applicable						Contract Oncourts of the Management of the Indiana. Use management of the reference of the Indiana of Indi
Manualis	Opinion 05-2019	Part 16(7) USG cleans CS shall in addition to the information indicated in point (15(6)) of Part 4, include in the user's manual a description of the means to terminable the flight	EASA	Jun-20	Specific	Opinion published						
Manualis	Opinion 05-2019	Part 17(8) U.S. Glass Cs shall in addition to the information indicated in process (1)(3)(4) of Part 4, Include in the user's manual. (b)(4) of Secretary 1, Include in the user's manual. (b)(4) a description of the function that limits the access of the U.A. to certain singuine more or volumes, and (c); the discussor most limit you be superior by the U.A. after a part of the U.A. to certain singuine more limit you be superior by the U.A. after a part of the U.A. to certain singuine more similar to the U.A. after a part of the U.A. after	EASA	Jun-20	Specific	Opinion published						
Maryualis	Opinion 05-2019	Part 16 Unit Glass CG accessories At shall be accompanied by a user's manual provising: (a) the last of all class CG UAGS to which the kit can be applied, (b) instructions on how to install and operate the accessory M.	EASA	Jun-20	Specific	Opinion published						
Definition and classification	EU 2019/945	Part 2(11), 3(13), 4(8) and 6(2) UAS in class C1, C2, C3 and the direct remote identification add-on shall have a unique physical serial number compliant with standard ANSICTA-2063 Small Unmanned Aerial Systems Serial Numbers;	EASA	Jun-19	open	Regulation applicable						Opinion 05-2019: have a unique serial number of the UA compliant with standard ANSI/CTA-2063-A Small Unmanned Aerial Systems Serial Numbers
Definition and classification							ANSI/CTA - 2063 Small Unmanned Aerial Systems Serial Numbers	This standard outlines the elements and characteristics of a serial numbe to be used by small unmanned aerial systems.	CTA R6 Portable Handled and In- Vehicle Electronics Committee WG 23 Unmanned Aerial Systems	standard	published	
Definition and dassification	EASA Decision 2019/021/R	050#23 Environmental conditions for safe operations defined, measurable and adhered to (<u>Criterion #1 Defintion</u>).	EASA	Oct-19	Specific	published						
Operator organisations	EASA Decision 2019/021/R	GSO#1 Ensure the operator is competent and/or proven	EASA	Oct-19	Specific	published						
manufacturer organisation	EASA Decision 2019/021/R	050#2 UAS manufactured by competent and/or proven entity	EASA	Oct-19	Specific	published						
Maintenance organisation	EASA Decision 2019/021/R	050#3 UAS maintained by competent and/or proven entity (e.g. industry standards). (<u>Criterion #1 Procedure</u>)	EASA	Oct-19	Specific	published						
Maintenance organisation	EASA Decision 2019/021/R	GSO#3 UAS maintained by competent and/or proven entity (e.g. industry standards). (<u>Criterion #2 Training</u>)	EASA	Oct-19	Specific	published						
service provider	EASA Decision	OSO #13 - External services supporting UAS operations are adequate to the operation	EASA	Oct-19	Specific	published						

Guidance Document - supplements the information contained in the types of documents described above. Usually illustrative information to another EUROCAE document. Internal Report - represents the opinion of a WG on a certain technical topic. It is identified with a WG reference number and date only. EUROCONTROL Specifications - Define technical and/or operational procedures that advance ATM NOTE: Standards are developed and maintained as both harmonising standards and as means of compliance. Standards are used as reference material by ICAO and EASA, and continue to provide the basis of Community Specifications for the extant EU SES regulations in accordance with regulation EG 822/2004 [Interoperability Regulation]. International Standard - provides rules, guidelines or characteristics for activities or for their results, aimed at achieving the optimum degree of order in a given context. It can take many forms. Apart from product standards, other examples include: test nethods, codes of practice, guideline standards and management systems standards. ISO Technical Specification - addresses work still under technical development, or where it is believed that there will be a future, but not immediate, possibility of agreement on an international Standard. A Technical Specification is published for immediate use, but it also provides a means to obtain feedback. The aim is that it will eventually be transformed and republished as an international Standard. Technical Report - contains information of a different kind from that of the previous two publications. It may include data obtained from a survey, for example, or from an informative report, or information of the perceived * state of the art *. Publicly Available Specification - is published to respond to an urgent market need, representing either the consensus of the experts within a socking group, or a consensus in an organization external is 150. As with Technical Specifications, Publicly Available Specifications are published for immediate user and some as a means to obtain feedbad for an exhibit attandimentation into an international Standard Publicly Available Specifications have a maximum file of 6x years, after which they can be transformed tion an international standard or withdrawn. International Workshop Agreement - is a document developed outside the normal ISO committee system to enable market players to negotiate in an *copen workshop *environment. International Workshop Agreements are hypically administratively apposed by a member body. The published agreement includes an indication of the participating organizations revolved in its development. An international Workshop Agreement has a maximum lifespan of as years, after which it can be either transformed into another ISO development is automatically without page. Guides - help readers understand more about the main areas where standards add value. Some Guides talk about how, and why, ISO standards can make it work better, safer, and more efficiently.

	Operator organisations	EASA Decision	OSO #07 - Inspection of the UAS (product inspection) to ensure consistency to the ConOpa	EASA	Oct-19	Specific	published							
	Operator organisations	EASA Decision	OSO #08 - Operational procedures are defined, validated and adhered to (to address technical issues with the UAS). Criteria 1, 2,3	EASA	Oct-19	Specific	published							
	Operator organisations	EASA Decision	OSO #11 - Procedures are in-place to handle the deterioration of external systems supporting UAS operation: Criteria 1, 2.3	EASA	Ost-19	Specific	published							
	Operator organisations	EASA Decision	OSO #14 - Operational procedures are defined, validated and adhered to (to address Human Errora): Oritoria 1, 2,3	EASA	Ost-19	Specific	published							
	Operator organisations	EASA Decision	OSO #21 - Operational procedures are defined, validated and adhered to (to address Adverse Operating Conditions): Criteria 1, 2,3	EASA	Ost-19	Specific	published							
	Operator organisations	EASA Decision	030#19 Safe recovery from Human Error (<u>Criterian #1</u> Procedures and shocklists)	EASA	Ost-19	Specific	published							
	Operator organisations	EASA Decision	OSO#16 Multi crew coredination. (<u>Criterion #1 Procedures</u>)	EASA	Oct-19	Specific	published							
	Operator organisations	EASA Decision	050#23 Environmental conditions for safe operations defined, measurable and adhered to (Criterion #1 Procedures)	EASA	Oct-19	Specific	published							
	Operator organisations	EASA Decision	M#1 An Emergency Response Plan (ERP) is in place, operator validated and effective (Criterion #1 Operational)	EASA	Oct-19	Specific	published							
2							UAS	Traffic Ma	nagement					
	U-space	Opinion 05-2019	Port 2009, J. S. M., and 417). Island in data of C. C. C. C. M. designed with a relationst named to all mid and control C. C. C. M. designed of the relationst named to all soft are the updated of the U.M. deposites regisplation number of the object of the policy of t	EASA	Jun-20	Open category and Specific	Opinion published							
								ISO TR 23829-1 - UAS Traffic Management (UTM) - Part 1: General requirements for UTh Survey results on UTM	This project intends to start a survey on UTMs in each country, which is expected to reveal hundreds of commercial applications already in place, so well as social systems as their background conditions. Based on those resourch, we will analyze benefits and ages for possible fixery standardization topics in consultation with authorities such as ICAO.	ISO/TC 20/SC 16/WG 4	Sep-22	Technical Report	angoing	Will be published before 2022; currently showing limit date
								ISO 23820-7 - UAS Traffic Management (UTM) - Part 7: UTM data and information transfer at interface of traffic managemen integration system and UAS service suppliers - Data model related to spatial data for UAS and UTM		190/TC 20/9C 16/WG 4	Jan-22	Standard	ongoing	Will be published before 2022; currently showing limit date
	Electronic Identification							MOPS for UAS e- identification	"Minimum Operational Performance Standard for UAS e-identification" defining minimum requirements for the e-identification function at the level of individual components.	EUROCAE WG-105	Dec-19	standard	planned	
	U-space							ASTM WK63418 Protocol for Service Provided under UAS Traffic Management (UTM)	Develop minimum requirements ensuring deconfliction of routes in the same operating region and develop inhabity agreed protocols that would promote the instruction and use of this between USS (LMS Service Suppliers) to enable aircraft separation in the same region. These protocols will unable also and efficient tra-settlive surgices operations by providing services such as airquived sergice, controlling, operating the service of the service of the service of the service of the suppliers of the services, requirements and the chariting, separation management, term solved, not provide and the chariting, separation management, services and the services are serviced as an experiment of the services of the services of the services are separation.	ASTM F38 Urmanned Aircraft Systems	TBD	standard	angoing	Draffiong of standard has begun.
M	U-space							F3411-19 Standard Specification for Remote ID and Tracking	identify the requirements and data transmission protocols for meeting the security and public satisfy needs of the law enforcement, homistion defence, and national security communities for the remote identification and tracking of UAS. Evaluate the need to provide information that could assist in threat discrimination and determination of host letters. We also inform equirement for roll and commercial operations to ensure appropriate compliance with regulations.	ASTM F38 Unmanned Aircraft Systems		standard	published	
	U-space							AIR6388 Remote Identification and Interrogation of Unmanned Aerial Systems	The information presented in this AIR is intended to provide information about current remain betterficial or mitteds and practical considerations about current remain betterficial considerations are included and present provides and provi	SAE AS-4UCS Unmanned Systems (UxS) Control Segment Architecture	Dec-18	information report	angaing	

Recommended Practices - these Technical Reports are documentations of practice, procedures and technology that are intended as guides to standard engineering practice. Their content may be of a more general nature, or they may propound data that have not yet gained broad acceptance.

Information Reports - these Technical Reports are compilations of engineering reference data or educational material useful to the technical community.

Aerospace Material Specifications - these Technical Reports identify material and process specifications conforming to sound, established engineering and metallurgical practices in aerospace sciences and practices.

									Defines a message structure allowing transmitting the identification of a					
	U-space								Defines a message structure allowing transmitting the identification of a UAS as well as its the aircontifs current position. This data is required in order to establish the basic principles of UTM (UAS Traffic Management) which shall enable the safe integration of UAS into non-segregated airspace.	EUROCONTROL	Apr-18	standard	published	
	Local E-identification	EU 2019/945	Part 2(12), 2(14) and 4(9) Abil in data C. C2 and C3 shall filture a direct remains Used in the Sec. C2 and C3 shall filture a direct remains In consider the significant filture (1) of the company of the consideration (10) by the registration registration (10) by the registration registration (10) by the registration registration (10) for the registration registration (10) for the registration registration (10) for the direct registration of the situation (10) for the direct registration of the situation (10) for the direct registration of the first discharge (10) for the direct registration registration (10) for the direct registration registration (10) for the direct registration registration (10) for the company of the direct registration registration (10) for the company of the direct registration of the seminal paint. (1) direction the direct registration of the seminal paint. (2) directions that the user current model) the data mentioned under passaggraph (1) plants (1), 1), 1 and 12.	EASA	Aun-19	open category and specific	Regulation applicable							spenial to July 2004 and selection of the control o
	Local E-identification	EU 2019/945	Per (§1, 3 and 4) A direct manula identification add-on shall corruptly with the A direct manula identification add-on shall corruptly with the A direct manula identification add-on shall corruptly with the A direct manula identification add-on shall be added to the College of the shall be added to the shall be added to the College of the shall be added to the shall be added of the shall be added to the Shall be added to the shall be added of the shall be added to the Shall be ad	EASA	Aun-19	open category and specific	Regulation applicable							And the second of the second o
	Marking and Registration	EU 2019/947	Art 14(8) The UAS operators shall display their registration number on every unmanned aircraft meeting the conditions described in paragraph 5	EASA	Jun-19	Open category and Specific	Regulation applicable from July 2020							attended ANDERTA 2003 A
	Marking and Registration							ASTM F2851-18 Standard Practice for UAS Registration and Marking (Excluding Small Unmanned Aircraft Systems)	This graction follows (CAO Annex 7 SARP)S except in areas where the unique aspects of UAS may not allow compliance. In these cases, this document will address the issue and recommend the need for an alternate compliance method.	ASTM F38 Unmanned Aircraft Systems		standard	published	Renewed 2018
	Geo-awareness	EU 2019/945	part \$133, 3416 and 4419. And to sear C/ CZ and CData be equipped with a gas- inances system that provides. But a instruction to large option that containing information are instruction to large option date containing information responsed by the georgetical zerose, as defined by Article for improved by the georgetical zerose, as defined by Article for improved by the georgetical zerose, as defined by Article for improved by the georgetical zerose, as defined by the Article for a second part for the georgetical zerose, but the formation of the georgetical zerose, and for a second part for the georgetical zerose, but poly defined to the second part of the georgetical zerose, for a second part for the processor part of the georgetical zerose produces and the proper fundationing of the georgetical zerose produces.	EASA	Jun-10	Open category and Specific	Regulation applicable							exposed 65-2019 for evolution of the pro- cession of the pro- markers for the pro- servation of the pro- position and distance imposed to the pro- tession of the pro- servation of the pro- servation of the pro- tession of the pro- ting
	Definition of zones	EU 2019/947	Institution confillation for USB group ground arrows. It When definity uSB group group fact zeros for study, security, privacy or environmental reasons, Memorine States inspirit, privacy or environmental reasons. Memorine States in security and confidence for certain or USB confidence for certain or USB group and privacy of the Confidence for certain or USB group and Confidence for the Confidence for Confidence for the Confidence for Con	EASA	Jun-19	Open category and Specific	Regulation applicable from July 2020							
D	U-space							MASPS for UAS Geo Fencing	"Minimum Aviation Systems Performance Standard for UAS geo-fencing" earling minimum system level end-to-end requirements for the implementation of the geo-fencing function for UAS.	EUROCAE WG-105	Nov-18	standard		
	U-space							MOPS for UAS Geo- Fencing	"Minimum Operational Performance Standard for UAS geo-fencing" defining minimum requirements for the geo-fencing function at the level of individual components.	EUROCAE WG-105	Dec-19	standard	angoing	
	U-Space							MOPS for UAS geo- caging	"Minimum Operational Performance Standard for UAS geo-caging" defining minimum requirements for the geo-caging function at the level of individual components.	EUROCAE WG-105	Dec-19	standard	planned	

м	U-space				ovEN41700.3 Aanopacs series - Unmained Alexant Systems (UAS) - Security Roquisemental Surveillance UTM Suryellance UTM Suryellance UTM Suryelmental Oats Service Provider (EDSP) Peuformance (EDSP) Peuformance	These Exercises an accurate and personal resums of complaints as yourse produced in the control and accurate and accurate and accurate and personal accurate and accurate and accurate and personal accurate and accurate accurate and accurate and accurate and accurate and accurate accurate and accurate accurate accurate and accurate and accurate accurate accurate and accurate and accurate and accurate and accurate and accurate accurate and accurate and accurate accurate and accurate and accurate accurate accurate and accurate and accurate accurate accurate and accurate and accurate and accurate and accurate and accurate accurate and accurate and accurate and accurate accurate accurate accurate and accurate and accurate accurate accurate and accurate and accurate accurate accura	ASD-STAN DSWG8 ASTM F38	Nov-20	preEN / European standard Standard	ongoing ongoing	tellement review prior to builted
3			Cor	nmand,	Control and	d Communication					
D	C3 datalink and communication				MOPS (Terrestrial LOS)	Minimum Operational Performance Standard for the terrestrial Line of Sight Command and Control Data Link	EUROCAE WG-105	Jun-20	standard		
	C3 datalink and communication				MOPS (SATCOM)	Minimum Operational Performance Standard for the satellite Command and Control Data Link	EUROCAE WG-105	Dec-20	standard	ongoing	Comment resolution
D	C3 datalink and communication				MASPS	Minimum Aviation System Performance Standard for the Command and Control Link	EUROCAE WG-105	Sep-19	standard		
	C3 datalink and communication				ASTM F3002-14a Standard Specification for Design of the Command and Control System for Small Unmanned Aircraft Systems (sUAS)	This specification is provided as a consensus standard in support of an application to a nation's governing aviation authority (CIAA) for a peimt to operate a small normalized action system (LIAAS) for commercial or peimt in the contraction of the commercial or commercial comm	ASTM F38 Unmanned Aircraft Systems		standard	published	Under revision
	C3 datalink and communication				AIR6514 UxS Control Segment (UCS) Architecture: Interface Control Document (ICD)	This interface control document (ICD) specifies all software services in the Unmanned Systems (UxS) Control Segment Architecture, including interfaces, messages, and data model.	SAE AS-4UCS Unmerned Systems (UxS) Control Segment Architecture		information report	published	
	C3 datalink and communication				AIR6514A Ux8 Control Segment (UCS) Architecture: Interface Control Document (ICD)	This interface control document (ICD) specifies all software services in the Unmanned Systems (US) Control Segment Architecture, including interfaces, messages, and data model. The UCS schrical overnance comprises a set of colicies, processes.	SAE AS-4UCS Unmarned Systems (UxS) Control Segment Architecture	Nov-18	information report	ongoing	
	C3 datalink and communication				AS6522A Unmanned Systems (UkS) Control Segment (UCS) Architecture: Architecture Technics Governance	development of architecture antifacts and documents. It provides guidance for the use of adopted industry standards and modeling conventions in the use of Unified Modeling Language (UML) and Service Oriented subchilecture Modeling Language (SoaML), including where the UCS Architecture deviates from normal UML conventions. This document	SAE AS-4UCS Unmarried Systems (UxS) Control Segment Architecture	Nov-18		angoing	
	C3 datalink and communication				AJR8515 Unmanned Systems (UkS) Control Segment (UCS) Architecture: EA Version of UCS ICD Model	Interface to a define printing, patients, and duration of Workhold And Land Land Land Land Land Land Land La	SAE AS-4UCS Unmarreid Systems (Unio Control Segment Architecture		information report	published	
	C3 datalink and communication				AJR8516 Unmainned Systams (UkS) Control Segment (UCS) Architecture: RSA Version of UCS ICD Model	PASA, Venico of the UCS Architectural Mobil and from the set than model affects for the Conference of the RSA venicor of the UCS Architectural Mobile and Comment (and the UCS Architectural Mobile and UCS Architectural Mobile and UCS Architectural Mobile and UCS Architectural Mobile and UCS Architectural Archite	SAE AS-4UCS Unmarned Systems (UKS) Control Segment Architecture		Information Report	published	
	C3 datalink and communication				AJR8517 Unmanned Systems (Ur.S) Control Segment (UCS) Architecture: Rhapsody Version of UCS ICD Model	C.S. A continuate thesis are five to use the model which is Prolingable. C.S. A continuate the second continuate the second which is Prolingable. The proposed of the Second varieties of the second continuate the Second varieties of the Second v	SAE AS-AUCS Unmarned Systems (UKS) Control Segment Architecture		information report	published	
	C3 datalink and communication				AIR8519 Un5 Control Segment (UCS) Architecture: UCTRACE	The this Case Tone (ICTRACE) is Indi production ARREST of the National Nati	20-Dec-16		information report	published	
	C3 datalink and communication				AIR6520 Unmanned Systems (UxS) Control Sagment (UCS) Architecture: Version Description Document	Communes of the Universed Aircraft System (UAS) Control Segrent (USS) Architecture was transferred from the Invest State	SAE AS-4UCS Unmanned Systems (UxS) Control Segment Architecture		Information Report	published	

			,							
C3 datalink and communication				AIR6521 Unmanned Systems (UxS) Control Segment (UCS) Architecture: Data Distribution Service (DDS)	This platform specific interface Control Document (ICD) provides an sample mapping the Doctor Management (Doctor) (MOM) Data Statistical Service (CDS) infrastructure middlessees. The mapping is the provided of the Control of the	SAE AS-4UCS Unmanned Systems (UxS) Control Segment Architecture		information report	published	
C3 datalink and communication				AS8512 Urmanned Systems (UrS) Control Segment (UCS) Architecture: Architecture Description	This document is the Archholuture Description (AU) for the SAE Unmone Systems (LMS) Control Segment (LOS) Archholuture. This AD serves as the official designation of the LOS Andreads—SAE ASSIST. The LOS Archholuture is expressed by a library of SAE politications are referenced ASSIST. ARRIVAT AMERICS APPROFILE. ARRIVATA ARRIV	SAE AS-4UCS Unmarned Systems (UKS) Control Segment Architecture		standard	published	
C3 datalisk and communication				AS6513 Unmanned Systems (UKS) Control Sagment (UCS) Architecture: Conformance Specification	This document is the authoritative specification within the SAE Unmanner to the authoritative specification within the SAE Unmanner conformation requirements for ICIS products. This ICIS products and received by this specification rest ICIS entitles components and ICIS exchange configuration is determined by assessing the confirmation of the ICIS product descriptor to ICIS exchange configuration than ICIS exchange configuration than ICIS exchange configuration to ICIS exchange configurat	SAE AS-AUCS Unmanned Systems (UxS) Control Segment Architecture		standard	published	
C3 datalink and communication				AS8518 Urmenned Systems (UKS) Ordered (UKS) Architecture (UKS) Architecture (UKS Architecture (UKS Architecture	This bod' bare Quales reagon the content of the ASSS IS UCS Annihilations. Description. The purpose of the UCS Annihilations blook is to provide the annihilations secure to the UCS Annihilations. Blook is the provide the annihilations secure to differ mobile and products with the UCS Description. Preventions for the UCS Description. Preventions for any law ASSIST IS About Include: Longitude of the Production of the Springer Company. Company and Company and Company and the UCS Descriptions and in for Springer Company. Annihilation of the Springer UCS BOOL and and in for Springer Company. Annihilation of the Springer UCS BOOL and and in for Springer Company.	SAE AS-AUCS Ummanned Systems (USS) Control Segment Architecture		standard	published	
C3 datalisk and communication				AS8522 Urmanned Systems (UKS) Cortrol Segment (UCS) Architecture (UCS) Architecture Covernance Technica Governance	The UCS between grammane comprises a set of policies, processes, and databased deficients to autoball contractively and quality in the set and autoball deficients to autoball contractively and quality in the set of a single all policies by a set of the set of a single all policies by a set of the set of a single all policies and of the set of the set of a set of the set o	SAE AS-4UCS Unmarried System (UKS) Curtrol Geymet Architecture		standard	published	
Navigation				WK58931 Evaluating Aerial Response RobotManeuvering: Maintain Position and Orientation		ASTM E54 Homeland Security Applications	Apr-18	standard	ongoing	Publication Delayed -Full Committee Meting Feb 28- Mar 2 2018 for adudication of comments
Navigation				WK58932 Evaluating Aerial Response RobotManeuvering: Orbit a Point	A suite of standard test methods has been developed to measure manusvenzibility, endurance.communications, durability, logistics, autonomy, and safety to guide purchasing decisions, support operator training and measure proficiency.	ASTM E54 Homeland Security Applications	Apr-18	standard	ongoing	Publication Delayed -Full Committee Meting Feb 28- Mar 2 2018 for adudication of comments
Navigation				WK58933 Evaluating Aerial Response RobotManeuvering: Avoid Static Obstacles	A suite of standard test methods has been developed to measure manus-versibility, endurance communications, durability, logistics, autonomy, and safety to guide purchasing decisions, support operator training and measure proficiency.	ASTM E54 Homeland Security Applications	Jun-18	standard	angoing	
Navigation				WK58934 Evaluating Aerial Response Roboth Maneuvering: Pass Through Openings	A suite of standard test methods has been developed to measure manusventibility, endurance communications, durability, logistics, autonomy, and safety to guide purchasing decisions, support operator training and measure proficiency.	ASTM E54 Homeland Security Applications	Apr-18	standard	ongoing	Publication Delayed -Full Committee Meting Feb 28- Mar 2 2018 for adudication of comments
Navigation				WK58935 Evaluating AerialResponse RobotManeuvering: Land Accurately (Vertical)	A suite of standards test methods has been developed to measure manusversibility, endurance, communications, durability, logistics, autonomy, and safety to guide purchasing decisions, support operator training and measure proficiency.	ASTM E54 Homeland Security Applications	Apr-18	standard	ongoing	Publication Delayed -Full Committee Meting Feb 28- Mar 2 2018 for adudication of comments
C3 datalink and communication				WK58942 Evaluating AerialResponse RobotRadio Communication Range: Line of Sight	A suite of standards test methods has been developed to measure manuseerability, endurance, communications, durability, logistics, autonomy, and safety to guide purchasing decisions, support operator training and measure proficiency.	ASTM E54 Homeland Security Applications	Apr-18	standard	ongoing	Publication Delayed -Full Committee Meting Feb 28- Mar 2 2018 for adudication of comments
C3 datalink and communication				WK58941 Evaluating AerialResponse RobotRadio Communications Range: Non Line of Sight	A suite of standards test methods has been developed to measure manuseventibility, endurance, communications, durability, logistics, autonomy, and safety to guide purchasing decisions, support operator training and measure proficiency.	ASTM E54 Homeland Security Applications	Apr-18	standard	ongoing	Publication Delayed -Full Committee Meting Feb 28- Mar 2 2018 for adudication of comments
C3 datalink and communication				STANAG 4660 - Interoperable Command and Control Datalink for Unmanned Systems	Common standard Line CL-Sight command and control data link for the safe and reliable operation of urmanned systems within a joint, coalition and controlled airspace operating environment.	NATO NNAGJICGUAS		standard	published	
Navigation				SAE6856 Improving Navigation Solutions Using Raw Measurements from Global Navigation Satellite System (GNSS) Receivers	This recommended practice provides users with the technical requirements and methods for accessing, viewing, and processing raw GNSS scolver massurements for improved unmanned whicle margation solutions.	SMCPNT Position, Navigation, and Timing Committee	Mar-19	standard	ongoing	

	Navigation							SAE6857 Requirements for a Terrestrial Based Position, Navigation, and Timing (PNT) System to Improve Navigation Solutions and Ensure Critical Infrastructure Security	This recommended practice defines the letchrical requirements for a terrestatic-lessed PMT system to improve vehicle (e.g. unmanned, asveil, ground, martitime) personning handson solarises and ensure critical inhabit	SMCPNT Position, Navigation, and Timing Committee	Mar-19	standard	ongoing	
м	C3 datalink and communication							MASPS on C3 Spectrum Management for the 5030/5091 MHz band	Minimun Aviation Systems Performance Standard defining requirements for the management of the 5030/5031 MHz band fir use by C2 Link Services	EUROCAE WG-105	Dec-20	standard	angoing	
	C3 datalink and communication							Guidance on Spectrum Access, Use and Managemen	Quidance material describing considerations for the use of spectrum for UAS purposes	EUROCAE WG-105	Mar-19	guidance	publised	
	Cyber security	EU 2019/945	Part 3(8) and 4(12) UAS in class C2 and C3 shall be equipped with a data link protected against unauthorised access to the command and control functions;	EASA	Jun-19	open	Regulation applicable							tethered, be equipped with a command and control link protected against unauthorised access to the command and control
м.	Cyber security							MASPS on RPAS C3 Security	Minimun Aviation Systems Performance Standard defining system level requirements for the application of Security measures to the UAS C3 Link	EUROCAE WG-105	Jun-19	standard	on hold	
м	C3 datalink and communication							Guidance on RPAS C3 security	Guidance material for the application of the MASPS listed above	EUROCAE WG-105	Dec-19	guidance	on hold	
	C3 datalink and	EASA Decision	OSO#6 C3 link performance is appropriate for the operation	EASA	Oct-19	Specific	published							
	C3 datalink and communication	EASA Decision	(050#16 Multi crew coordination. (<u>Criterios F3 Communication</u> decices)	EASA	Oct-19	Specific	published							
4								Detect and	Avoid					
	Detect and avoid							MASPS	Minimum Aviation System Performance Standard for DAA [Traffic] in class A-C airspaces under IFR	EUROCAE WG-105	Jun-20	standard	ongoing	
D	Detect and avoid							MOPS	Minimum Operational Performance Standard (Requirements at equipmer level) for DAA of IFR Flights in class A-C airspace	EUROCAE WG-105	Dec-19	standard		
	Detect and avoid							OSED	Operational Services and Environment Description for DAA for DAA in Class D-G airspaces under VFRIFR	EUROCAE WG-105	Jan-19	standard	published	
	Detect and avoid							MASPS	Minimum Aviation System Performance Standard (End-to-end Requirements at system level) for DAA against conflicting traffic for RPAS operating under IFR and VFR in all airspace classes	EUROCAE WG-105	Dec-21	standard	ongoing	
м	Detect and avoid							MOPS	Minimum Operational Performance Standard (Requirements at equipment level) for DAA against conflicting traffic for RPAS operating under IFR and VFR in all airspace classes.	EUROCAE WG-105	Jun-23	standard	planned	
	Detect and avoid							OSED	Operational Services and Environmental Description for DAA in very Low Level Operations	EUROCAE WG-105	Jun-20	standard	ongoing	under WG-105 peer review
м	Detect and avoid							MOPS	Minimum Operational Performance Standard (Requirements at equipment level) for DAA at Very Low Level (VLL)	EUROCAE WG-105	Dec-23	standard	planned	
	Detect and avoid							STANREC 4811 Ed. 1/ AEP-, 101 Ed. A Ver.1 "UAS sense and avoid"	To detail comprehensive guidance and recommended practice for the development of Sense and Avoid systems, referencing and providing guidance regarding application of existing standards and best practice.	NATO FINAS	Feb-18	guide	published	
м	Detect and avoid							F3443-20 Specification for Detect and Avoid Performance Requirements	Defines minimum performance standards Correprehensive DAA Standard under annex to define test methods ANK minimum performance standards for DAA systems and sensors applicable to smaller UAS BLVOS operations for the protection of manned aircraft is tower altitude airspace	ASTM F38 Unmanned Aircraft Systems	Jun-19	standard		Publication expected
	Detect and avoid							WK62969 Test Method for DAA	Covering systems and sensors Comprehensive DAA Standard under ennex to define test methods ANI minimum performance standards for DAA systems and sensors applicable to smaller LAB EU/OS operations for the protection of manned aircraft is tower altitude airspace.	ASTM F38 Unmanned Aircraft Systems	Jun-19	standard	ongoing	Working Group formed under terms of reference. Number changed to WKE2569 instead of WKG2568
5							F	RPAS Autor	nation					
	Development assurance (Software)							ASTM F3269 Standard Practice for Methods to Safety Bound Flight Behavior of Unmarmed Aircraft Systems Containing Complex Functions	This standard practice defines design and test best practices that if blowed, would provide guidance to an applicant for providing evidence it is a supplicant for providing evidence it exceed system (UAS) containing complete function(s) is constained exceed system (UAS) containing complete function(s) is constained and complete function (s) and constained function (s) and contained function (s) a	ASTM F38 Urmanned Aircraft Systems		standard	published	FAA Notice Of Availability (NOA) Pending approval of ASTM WK57659 as foundational document
	Automatic modes, takeoff, Landing, taxing							ASTM WK65056 revision to ASTM F3269 Standard Practice for Methods to Gafety Bound Flight Behavior of Unmarned Aircraft Systems Containing Complex Functions	Sea to the value the descript to it was not specifying that dates a very monotoning TRT and the control of the standard are with the control of the control of the standard are sufficient to allow the fact of the control of the con	ASTM F38 Urmanned Aircraft Systems	Spetember 2019	standard	ongoing	Draft Under Develment
	Automatic modes, takeoff, Landing, taxing							ED-252 OSED	Operational Services and Enfronment Description for Automatic Take-Off and Landing.	EUROCAE WG-105		standard	published	
	Automatic modes, takeoff, Landing, taxing							MASPS	Minimum Aviation System Performance Standard (End-to-end Requirements at system level) for Automatic Take-Off and Landing	EUROCAE WG-105	Jun-20	standard	ongoing	
	Automatic modes, takeoff, Landing, taxing							ED-251 OSED	Operational Services and Enfronment Description for Automatic Taxiling	EUROCAE WG-105		standard	published	
	Automatic modes, takeoff, Landing, taxing							MASPS	Minimum Aviation System Performance Standard (End-to-end Requirements at system level) for Automatic Taxling	EUROCAE WG-105	Jun-20	standard	angoing	
			l	·					l					

	Emergency		Parts 2(7), 3(7) and 4(5) A UAS Class C1, C2 and C3 shall: In case of a loss of data link, have a reliable and predictable method for the UA to recover the data link or terminate the light in a way that reduces the effect on third parties in the air			men ratering and	Regulation							Opinion 05-2019: in case of a loss of the command and control link, have a reliable and predictable method for the LIA to recruse the
	recovery/terminations systems	EU 2019/945	or on the ground	EASA	Jun-19	open category and specific	Regulation applicable							the UA to recover the command and control link or terminate the flight in a way that reduces the effect on third parties in the air or on the ground;
	Emergency recovery/terminations systems							ED-253 OSED	Operational Services and Enironment Description for Automation and Emergency Recovery	EUROCAE WG-105	Dec-18	standard	published	Currently nder Council approval
	Emergency recovery/terminations systems							MASPS	Minimum Aviation System Performance Standard (End-to-end Requirements at system level) for automation and Emergency Recovery	EUROCAE WG-105	Jun-20	standard	planned	
6							Des	ign & Airw						
	Development assurance (Software)							ASTM F3151 Standard Specification for Verification of Avionics Systems 1	This specification provides a process by which the intended function and compliance with safety objectives of solutions systems may be verified by system-level stating. Software and furnises development assurance are not in the scope of this specification and this specification should not be used if a development assurance process is required.	ASTM F39 Aircraft Systems		standard	published	This will be reference in AC for Special Class §21.17(b) To be uses where appropriate in lieu of DO 178. NEW DELIVERABLE
	UA Design and Airworthiness							AS6009A JAUS Mobility Service Set	This document referes, see of a facilitate application to per interfaces using MAILS MARING STROMM, AMILS SERVICE (STROME TO make the confined settled in it in unmarried system or system of unmarried system to communicate and conformate their activities. The Mobility Services represent the wholes justiments or system of unmarried systems to communicate the wholes justiments endopmented capabilities commonly Services represents the wholes justiments capabilities commonly Services (AVI). Appresent, over 15 services are defined in this document transprise shifts), were updated in this revision to support Ulmanned Underweiter Versices (LUVI).	SAE AS-4 JAUS Joint Architecture for Unmanned Systems Committee		standard	published	
	UA Design and Airworthiness							ASS684B JAUS Service Interface Definition Language	The BLE Americans Information Report ARSISTS - Current Copies (Architecture (Dick)) services to Science (Science Science (Science Science Scie	SAE AS-4JAUS Joint Architecture for Unmanned Systems Committee		standard	published	
	UA Design and Airworthiness							AS6062 JAUS Mission Spooling Service Set	This discontinuous data is and it standard approach to per described and continuous data of the continuous data of	SAE AS-4JAUS Joint Architecture for Unmanned Systems Committee		standard	published	
	UA Design and Airworthiness							AS8060 JAUS Environment Sensing Service Set	The document debines a self of standard application layer infections salted to document admines a self of standard application layer infections as self-self-self-self-self-self-self-self-	SAE AS-4JAUS Joint Architecture for Unmarried Systems Committee		standard	published	
	HMI							AS8040 JAUS HMI Service Set	This document defines a set of standard application layer interfaces called MUSI Bell Bell service. AMIS Services provide the means for software written in an unmanuful system of system of unmanuful systems to write the provided systems to write the system of the particle of the system of the system of the particle of the system of the particle of the system of the particle of the system of	SAE AS-4JAUS Joint Architecture for Unmanned Systems Committee		standard	published	
	UA Design and Aireofthness							ASS710A JAUS Core Service Set	An decimal officials as not desirable application has to train our desirable and application for the factor provided in the following provided provided in the following provided provided in the following provided in the follow	SAE AS-4JAUS Joint Architecture for Unmarried Systems Committee		standard	published	
	UA Design and Ainworthiness							ARP6012A JAUS Compliance and Interoperability Policy	This document, the JAUS Compliance and Interoperability Policy (ARP6012), recommends an approach to documenting the complete interface of an unmanned system or component in regard to the application of the standard set. While now 25A-26A-3MUS documents are stretened in this ARP they are not within the scope of this document and should be viewed as examples only.	SAE AS-4JAUS Joint Architecture for Unmarried Systems Committee		recommended practice	published	
	UA Design and Airworthiness							AIRS845A JAUS Transport Considerations	This SAE Aerospace Information Report (AIR) discusses characteristics of data communications for the Joint Architecture for Unmanned Systems (JAUS). This document provides guidance on the aspects of transport media, unmanned systems and the characteristics of JAUS Seef that are	SAE AS-4 JAUS Joint Architecture for Unmanned Systems Committee		information report	published	
	UA Design and Airworthiness							ASS669A JAUS/SDP Transport Specification	To file disregione liberate (Al) agentia e also communications for the harmonic framework file and file disreduction for the harmonic filescent for their filescent file disreduction for the filescent filesc	SAE AS-4JAUS Joint Architecture for Unmarried Systems Committee		standard	published	
	UA Design and Airworthiness							AS8001 JAUS Unmanned Ground Vehicle Service Set	This document defines a set of standard application layer interfaces called JAMS Demonred Control Verkick Services, JAMS Services provide the JAMS Demonred Control Verkick Services, JAMS Services provide the summer of several commercial systems to commercial services for commercial services. The JAMS Services of Control Verkick Services represent the platform-specific services of the JAMS Services of Services of Services S	SAE AS-4JAUS Joint Architecture for Unmanned Systems Committee		standard	published	

UA Design and AirectThress			AS6057A JAUS Manipulator Service Set	This document defines a set of standard application layer interfaces calle JAUS Manipulation Services. JAUS Services provide the means for software entires in an unmanned system or system of unmanned system to communicate and coordinate their activities. The Manipulation Services speriesest platform-independent capabilities commonly found across domains and types of unmanned systems. All present, twenty-five (25) services are defined in this document.	AS-4JAUS Joint Architecture for Unmarried Systems Committee		standard	published	
UA Design and Airworthiness			ARP6227 JAUS Messaging over the OMG Data Distribution Service (DDS)	This document defines a standard representation of JAUS ASSBAA necessage data in DOS ICL defined by the Object Management Group (DMC) CORBA 3.2 specification. This document does NOT address how JAUS transport considerations or JAUS service protocols are replanmented on OMG DOS platforms.	SAE AS-4JAUS Joint Architecture for Unmanned Systems Committee		recommended practice	published	
UA Design and Airworthinesa			AIRS665B Architecture Framework for Unmarried Systems	This SEE Americans Information Report (ART) describes the Architecture This SEE Americans Information Report (ART) describes the Architecture Conceptual View, a Capitalities View, and an interspensibility View in Competion View (and Capitalities View, and an interspensibility View in the conceptual View in the unmanned systems domain. The Capitalities View in the unmanned systems domain. The Capitalities View in the C	SAE AS-4JAUS Joint Architecture for Unmanned Systems Committee		information report	published	
UA Design and Airworthiness			AIRS664A JAUS History and Domain Model	The purpose of this S&E Aerospace information Report (AIR) is two-fold; to inform the reader of the extent of effort that work into the development of the Joint Architecture for Urmanned Systems (JAUS); and to capture for postently the domain analysis that provides the undespinnings for the work by the AS-4 Committee (Urmanned Systems).	SAE AS-4JAUS Joint Architecture for Unmanned Systems Committee		information report	published	
UA Design and Airworthiness			AS8062A JAUS Mission Spooling Service Set	The document defines a set of standard approximating an infection selection and the control of t	SAE AS-4JAUS Joint Architecture for Unmarked Systems Committee		standard	published	
UA Design and Aireorthiness			AS6111 JAUS Unmanned Maritime Vehicle Service Set	This document defines a message-passing interface for services representing the platform-specific capabilities common across unmanned maritime vehicles.	SAE AS-4JAUS Joint Architecture for Unmanned Systems Committee	Jun-19	standard	ongoing	
UA Design and Altracitiness			AS8071 Test Protoco for UAS Reciprocating (Perferancy Throat An Principle Throat Mechanism	The activate of the state of the provision is made of or metacolity to distinct operations and orientative between the state of the complex performance and durability in customer. Behavioral the metacolitic and presented and durability in customer. Behavioral confidence introducing provision and control and confidence in the confidence of the control and confidence in the confidence in t		May-19	standard	angaing	
UA Dissign and Afrecethresis			ASARRA Ground support equipment (preheaters, staters, fuel pumps, sud couplings, fuel moint weightbullares, portigist weightbullares, boresighting of payhoad, storage containers, alignment hardware, wheal chocks, "remove before fight larms, electronic and software links."		SAE E-39 Unmanned Aircraft Propulsion Committee	Jun-19	standard	planed	
UA Design and Ainworthiness			AS### Propeller hubs		SAE E-39 Unmanned Aircraft Propulsion Committee	Jul-19	standard	planned	
UA Design and Airworthiness			ARPSSSS Propeller Information Report		SAE E-39 Unmanned Aircraft Propulsion Committee	Aug-19	information report	ongoing	
UA Design and Airworthiness			AIR6962 loe Protection for Unmanned Aerial Vehicles	A review of icing materials that would be educational to a designer of a UAV lice protection system is provided. Additionally, the differences between unmended and manned ice protection systems are explored along with a discussion on how these differences can be addressed.	SAE AC-9C Aircraft loing Technology Committee	Dec-18	information report	ongoing	
UA Design and Afrecethiness			ARP94910 Aerospace - Vehicle Management Systems - Flight Control Design, Installation and Test of, Military Unmannec Aircraft, Specification Cuide For	пами с втарасе.	SAE A-6 Aerospace Actuation, Control and Fluid Power c Systems		recommended practice	published	
UA Casign and American			ARPST24 Aerospace Tealings Electromechanical Electromechanical Cuidelines For Oxidelines For	This document provision are necessary of the lasts, and issues stalled to sending that are unique to flasternomethous Amustine (Made). The water of the last the sending and the last of the last sending that are level to the sending of the last sending of the discount of the last sending of the last sendin	A-6 Aerospace Actuation, Control and Fluid Power Systems		recommended practice	published	
UA Design and Airworthiness			AJR744 TM Aerospace Ausliary Power Sources	This SAE American Information Report (ART) is a review of the general integration of planes increase that may be used in yourselve and increase and	A-6 Aerospace Actuation, Control and Fluid Power Systems		information report	published	

	UA Design and Airworthiness				AS50881F Wiring Aerospace Vehicle	This specification covers all aspects in electrical wire interconnection systems (EWIS) from the selection through installation of wiring and wirin devices and optical cabling and termination devices used in senspace vehicles. Aerospece vehicles include manned and runnamed airplanes, halicopters, lighter-than-air vehicles, missiles and external pods.	SAE AE-8A Elec Wiring and Fiber Optic Interconnect Sys Install Committee		standard	published	
	UA Design and Airworthiness				AS50881G Wiring Aerospace Vehicle	This specification covers all aspects in electrical wire interconnection systems (EWIS) from the selection through installation of wring and wirin devices and optical cabling and termination devices used in senspace whichies. Aerospece vehicles include manned and runnamed airplanes, fullicopters, lighter-than-air vehicles, missiles and external pods.	SAE AE-8A Elec Wiring and Fiber Optic Interconnect Sys Install Committee	Dec-18	standard	angaing	
	UA Design and Airworthiness				AS#### Artificial simulant standards for drone or FOD impact/ingestion	planned	SAE G-28 Simulants for Impact and Ingestion Testing	Dec-19	standard	planned	
	Emergency recovery/terminations systems				F3322-18 Standard Specification for Smal Unmanned Aiscraft System (sUAS) Parachutes	This specification covers the design and manufacture requirements for designipation parameter of small commands carried (LAIA). This specification defines the design, individuos, and sets requirements of statisticies, designing parameters for a sulf-to incount the impact energy of the designed to be integrated into a sulf-to incount the impact energy of the Compliance with this specification is immediate to support an applicant in obtaining permission from a civit avisation authority (CAA) to fly a SUA over people.	ASTM F38 Unmanned Aircraft Systems	Sept-18	specification	Published	
	UA Design and Ainworthiness				F2490-05(2013) Standard Guide for Aircraft Electrical Load and Power Source Capacity Analysis	This guide covers how to prepare an electrical load analysis (ELA) to meet Federal Aviation Administration (FAA) requirements.	ASTM F39 Aircraft Systems		standard	published	Light Sport Aircraft guidance will be revised to apply to UAS.
	maintenance				F2799-14 Standard Practice for Maintenance of Aircraft Electrical Wiring Systems	Damaged wiring or equipment in an aircraft, regardless of how minor it may appear to be, cannot be tolerated. It is, therefore, important that maintenance be accomplished using the best techniques and practices to minimize the possibility of failure.	ASTM F39 Aircraft Systems		standard	published	
	UA Design and Ainworthiness				ASTM WK62670 New Specification for Large UAS Design and Construction	To develop an ASTM design and construction standards for larger mass indeeding luminaring Annii Systems (IAS), basign and Construct Standards are currently in existence for Piet 23 General Manned Account seed last for Facility Assessment (Assessment Manned Account seed last for Facility Assessment Assessmen	ASTM F38 Urmanned Aircraft Systems	Jun-19	standard	under development	
	UA Design and Airworthiness				(stras)	This specification establishes the design, construction, and test requirements for a small unmanned aircraft system (BUAS). It is intended to all SUAS that see paremitted to operation over a defined seas and in simpuse suthorized by a nation's governing available suthority (DAA). Unless otherwise specified by a nation's GAA, this specification applies only to UA that have a maximum takeoff gross weight of 55 th/25 kg or less.	ASTM F38 Urmanned Aircraft Systems		standard	published	This will be reference in AC for Special Class §21.17(b)
u	UA Design and Airworthiness				F3298-19 Standard Specification for Design, Construction, and Verification of Lightweight Unmanned Aircraft Systems (UAS)	This specification covers the airworthness requirements for the design of faed-wing urmanned aircraft systems. This specification defines the baseline design, construction, and verification requirements for an urmanned aircraft system (UAS)	ASTM F38 Urmanned Aircraft Systems		standard	published	Title change
	UA Design and Airworthiness				ASTM WK69678' WK64619 Revision of F3286 - 18 Standard Specification for Dasign, Construction, and Verification of Fixed-Wing Unmanned Aircraft Systems (UAS)	The initial standard only administed Fasal Ming IASS. Response from the FAA required both vertical III and fined-sking in order to be accepted as weather of compliance for UAS alreadminess certification in his few informating askings required for 21-170, Initia sequelar a replia-deposition for 1-170, Initia sequelar a replia-deposition of the standard, inclusion of VTCC-specific items and a title change.	ASTM F38 Urmanned Aircraft Systems	19-Nov	standard	In progress	Ballot pending Sub- Committee approval
	Manufacturer organisation				ASTM F2911-14e1 Standard Practice for Production Acceptance of Small Unmanned Aircraft System (sUAS)	This standard defines the production acceptance requirements for a small unmanned aircraft system (sIARS). This standard is applicable to sIARS that comply with design, construction, and last requirements identified in Specification F2310. No sIARS may enter production until such compliance is demonstrated.	ASTM F38 Urmanned Aircraft Systems		standard	published	
	Manufacturer organisation				ASTM F3003-14 Standard Specification for Quality Assurance of a Small Unmarrned Aircraft System (sUAS)	This standard definesthe quality assurance requirements for the design, manufacture, and production of a small unmanned aircraft system (sUAS)	ASTM F38 Urmanned Aircraft Systems		standard	published	
	Batteries/fuel cell power generating system				WKWK60937 Standard Specification for design of Fuel Cells for Use in Unmanned Aircraft Systems (UAS)	This standard will outline specification for the use of fuel cell power generatishing systems for application in UAS.	ASTM F38 Unmanned Aircraft Systems	TBD	standard	ongoing	
	Development assurance (Software)				ASTM F3201-16 Standard Practice for Ensuring Dependability of Software Used in Unmanned Alicraft Systems (UAS)	This concluded practice is found to service the dependation of USA Confirment Coper-industry includes both the study, and an only expected of the software. This practice will found on the Solowing service (a) Operaziationis controls for example, management, basingly in place during software development; (b) Use of the software is the system, charge software development; (b) Use of the software is the system, software development (b) Use of the software will be a software of the software of the software of the software of the system charge software of the software of the software of the software of the software of the software of the software of the software of the software of the software of the software of the property of the software of the software of the software of software of soft	ASTM F38 Urmanned Aircraft Systems		standard	published	
	UA Design and Ainsorthiness				ASTM WK16285 New Specification for Design and Performance of an Unmanned Aiscraft System-Class 1320 (550# Gross Weight to 1320# Gross Weight)	The specification covers airworthiness requirements for an acceptable powered fixed wing aircraft UAS.	ASTM F38 Urmanned Aircraft Systems	TBD	standard	ongoing	This work item will be continued using guidelines from ASTM F37 Light Sport Aircraft Committee
	maintenance				ASTM F2009-14 Standard Practice for Maintenance and Continued Airworthiness of Smal Unmanned Aircraft Systems (sUAS)	This standard is within for all sUAS that are permitted to operate over a defined size and in airspace authorized by a railors or governing easition authority (CAAL). It is assumed that is varied developed by a relative process of the properties of provide by the manufacture large product of the transition marge and atthicks at which the sUAS can be form will be proported by the matterior. CAAL thisses software specified by a matterior CAAL thisses software specified by an other continuation of the second of the specified or th	ASTM F38 Urmanned Aircraft Systems		standard	published	Updated revision underway under WK WK63991
a a	UA Design and Airworthiness				prEN4709-1 Astropace series - Unmarned Aistraft Systems (UAS) - Product and Verification Requirements	This European standard will provide means of compliance to cover Part 1 to 5 of the delegated and areas. In 5 of the delegated areas. In 5 of	ASD-STAN D5WG8	Nov-20	preEN / European standard	ongoing	

м								Guidelines	Applicability of suite design standards for UAS in Specific Operations category 'Low-Medium robustnesse'	EUROCAE WG-105	Jun 20	Guidance	ongoing	
	Ground control station							MASPS	Minimum Aviation System Performance Standard (End-to-and Requirements at system level) for the Remote Pilot Station interface to Air Traffic Control (ATC).	EUROCAE WG-105	Jun-20	standard	ongoing	
м								Guildelines	Guidelines on the use of muts-QNSS for UAS low robustness	EUROCAE WG-105	Mar-20	standard	ongoing	
м								Guildelines	Guidelines on the Automatic protection of the flight envelope from human errors for UAS	EUROCAE WG-105	Dec-20	standard	ongoing	
	Emergency recovery/terminations systems	Opinion 05-2019	Part 15(d) and 16(7) LNS in class CS and CS shall provide the remote plot with means to confinousely moritor the quality of the command and control link and receive an alert when it is likely that the link is going to be lost or degraded to the extent of compromising the safe conduct of the operation, and another alert when the link is Part 1(3).	EASA	Jun-20	Specific	Opinon publisher							
	UA Design and Airworthiness	EU 2019/945	(Part 1(3)) UAS in Class CO shall have a maximum attainable height above the take-off point limited to 120 m;	EASA	Jun-19	open	Regulation applicable							
	UA Design and Airworthiness	EU 2019/945	sure 12(3, 32) and 4(2). MS in Class C1, C2 and C3 shall have a maximum attainable neight above the tabout the surface or above the tabout the profit to 120 m or to a value selectable by the surface place. If the value is selectable, other information about the height of the UA above the surface or tabout the height of the UA above the surface or tabout the profit of the UA above the surface or tabout the point of the tabout the profit of the UA above the surface or tabout the point of the tabout the profit of the UA above the surface or tabout the point of the tabout the profit of the tabout the tabout the tabout the profit of the tabout the profit of the tabout the	EASA	Jun-19	open	Regulation applicable							
	UA Design and Airworthiness	EU 2019/945	Parts 1(7) and 2(17) UAS in Class CO and C1 shall, if equipped with a follow-me mode and when this function is on, be in a range not exceeding 30 in from the remote pilot, and make it possible for the remote pilot to regain control of the UA;	EASA	Jun-19	open	Regulation applicable							
	Manufacturer organisation							ISO 21384-2 - Requirements for ensuring the safety and quality of the design and manufacture of UAS	Requirements for ensuring the quality and safety of the design and manufacture UAS. It includes information regarding the UA, any associated remote control station(s), the C2 links, any other required data links and any other system elements as may be required.	ISO TC20/SC16/WG2	May-20	standard	angoing	
	UA Design and Airworthiness							STANAG 4671 "UAV System Arworthiness Requirements (USAR)". (Fix wing UAV, MTOW>1 50Kg).	Set of technical airworthiness requirements intended primarily for the airworthiness certification of fixed-wing military UAS with a macimum take off weight between 150 and 20,000 kg that intend to regularly operate in non-segregated airspace	NATO FINAS			published	
	UA Design and Airworthiness							STANAG 4702 "Rotary Wing Unmanned Aerial Systems Airworthiness Requirements" (Rotocraft UAV, 150Kg-MTOW< 3125Kg	set of technical airworthiness requirements intended for the airworthiness coeffication of rotary-wing military UAV Systems with a maximum take-off weight between 150 and 3175 kg that intend to regularly operate in non-se	NATO FINAS			published	
	UA Design and Airworthiness							STANAG 4703 'Light Unmanned Aircraft Systems Airworthiness Requirements'. (Fix wing UAV, 150Kg-MTOW).	Minimum set of technical airworthiness requirements intended for the airworthiness certification of fixed-wing Light UAS with a maximum take- off weight not greater than 150 kg and an impact energy? greater than 60 J (40 &-b) that intend to regularly operate in non-segregated airspace.	NATO FINAS			published	
	UA Design and Airworthiness							STANAG 4748 "Unmarmed Aerial Vehicle System Airworthiness Requirements for Light Vertical Take Off and Landing Aircraft"	Set of technical airworthiness requirements intended for the airworthiness certification	NATO FINAS	2018		ongoing	
	UA Design and Airworthiness	EU 2019/945	Parts 1(5), 3(9) and 4(9) IAS in Class OC, 1 and C2 shall be designed and constructed in such a way as to minimize injury to people during operation, sharp edges shall be avoided, urties technically nameable under good design and menufacturing practice. If equipped with propellers, it shall be designed in such a way as to first any njury that may be inflicted by the propeller blades;	EASA	Jun-19	open	Regulation applicable							
	UA Design and Airworthiness	EU 2019/945	Parts 2(15), 3(17) and 4(13) A UAS Clase C1, C2 and C3 shall provide the remote pilot with clear warning when the battery of the UA or its control station reaches a low level so that the remote pilot has sufficient time to safely land the UA;	EASA	Jun-19	open	Regulation applicable							
	UA Design and Airworthiness	EU 2019/945	Parts 2(5) and 3(4) UAS in class C1 and C2 shall have the requisite mechanical strength, including any necessary safety factor, and, where appropriate, stability to withstand any stread to which it is subjected to during use without any treakage or deformation that might interfere with its safe flight;	EASA	Jun-19	open	Regulation applicable							
	UA Design and Airworthiness	EU 2019/945	harts 21/68, 21/69 and 4(1/4). MSA in Clase of I.C aimed C3 shall be equipped with lights for the purpose of: (8) The controllability of the UA, (9) The controllability of the UA at right, the design of the lights shall allow a person on the ground, to distinguish the UA from a manned aircraft;	EASA	Jun-19	open	Regulation applicable							Operand observed the content and requirement also to specific category when operated in VLL: the equipped: (a) with lights for the purpose of controllability of the UA; and (b) with at least one green facilities light for the green facilities light for the facilities light for facilities light for facilities faciliti
	UA Design and Airworthiness							ARP6336 Lighting Applications for Unmanned Aircraft Systems (UAS)	This SAE Aerospace Recommended Practice (ARP) provides technical recommendations for the application, design and development of lighting for Urmanneal Auroral (UIA). The seconomisations set from in this document are to aid in the design of UIA lighting for the type or size of sizeral and the operation in the National Aerospace System for which the sizeral it of intended.	SAE A-20 Aircraft Lighting Committee	Dec-18	Recommended Practice	ongoing	ongoing
	UA Design and Airworthiness	EU 2019/945	Part 2(1) UAS in class C1 shall be made of materials and have portformance and physical characteristics such as to ensure that in the venet of an impact at luminal velocity with a human hand, the energy transmitted to the human hand, the energy transmitted to the human hand, the energy transmitted to part hand, the senety presented to the present hand is less than 500 g, including payload;	EASA	Jun-19	open	Regulation applicable							
	UA Design and Ainsorthiness	EU 2019/945	Parts 1(6) and 2(10) UAS in class CD and C1 shall be powered by electricity and have a romainal violage not exceeding 24 V direct current (DC) or the equivalent alternating current (AC) voltage. It is accessible another in the control of the con	EASA	Jun-19	open	Regulation applicable							

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UA Design and Airworthiness							WK58939 Evaluating Aeria/Response RobotEnergy/Power: Endurance Range an Duration	A suite of standards test methods has been developed to measure measurerability, endurance,communications, durability, logistics,sutnormy, and safety to guide purchasing decisions, support operator training and measure proficiency.	ASTM E54 Homeland Security Applications	TBD	standard	angoing	E54 Full Committee adjudication February 26 to March 2, 2018
UA Design and Airworthiness	EU 2019/945	Parts 3(12) and 4(7). UNS in class C2 and 23 shall be powered by electricity and have a reminish orbitage and exceeding 43 V D2 or the equivalent have a reminish orbitage interesting 43 V D2 or the equivalent A2 v VD2 or the equivalent	EASA	Jun-19	open	Regulation applicable							
UA Design and Airworthiness							WK58940 Evaluating Aerial Response RobotEnergy/Power Endurance Dwell Time	A suite of standards test methods has been developed to measure manuseerability, endurance.communications, durability, logislics, autonomy, and safety to guide purchasing decisions, support operator training and measure proficiency.	ASTM E54 Homeland Security Applications	TBD	standard	angoing	E54 Full Committee adjudication February 26 to March 2, 2018 ongoing. Delayed till Apr -18
UA Design and Airworthiness							WKS8043 Evaluating Aeria/Response RobotSafety: Lights and Sounds	A suite of standards test methods has been developed to measure measuremability, endurance,communications, durability, logistics,subnormy, and safety to guide purchasing decisions, support operator training and measure proficiency.	ASTM E54 Homeland Security Applications	TBD	standard	ongoing	E54 Full Committee adjudication February 28 to March 2, 2018 ongoing. Delayed till Apr -18
UA Design and Airworthiness							F2639-15 Standard Practice for Design, Alteration, and Certification of Aircraft Electrical Wiring Systems	This practice covers design configuration procedures for aircraft electrical wiring systems.	ASTM F39 Aircraft Systems		standard	published	
UA Design and Airworthiness							F2696-14 Standard Practice for Inspection of Aircraft Electrical Wiring Systems	This practice covers basic inspection procedures for electrical wiring interconnect systems for aircraft electrical wiring systems.	ASTM F39 Aircraft Systems		standard	published	
Batteries/fuel cell power generating system							ASTM F3005-14a Standard Specification for Batteries for Use in Small Unmanned Aircraft Systems (sUAS)	This standard defines the requirements for batteries used in small Unmanned Aircraft Systems (sUAS Small Urmanned Aircraft System	ASTM F38 Urmanned Aircraft Systems		standard	published	Currently being reviewed for updates FAA Notice Of Availability (NOA) Pending approval of ASTM WK57659 as foundational document
UA Design and Airworthiness							F2490-05(2013) Standard Guide for Aircraft Electrical Load and Power Source Capacity Analysis	This guide covers how to prepare an electrical load analysis (ELA) to meet Federal Aviation Administration (FAA) requirements.	ASTM F39 Aircraft Systems		standard	published	
UA Design and Airworthiness	EU 2019/945	Part 5(3) UAS in class C4 shall not be capable of automatic control modes except for flight stabilisation assistance with no direct effect on the trajectory and lost link assistance provided that a pre-determined tixed position of the flight controls in case of lost link is pradiable.	EASA	Jun-19	open	Regulation applicable							
UA Design and Airworthiness	Opinion 05-2019	Part 17(6) UAS in class C4 shall provide means to programme the UA trajectory;	EASA	Jun-20	Specific	Opinon publishe	d						
UA Design and Airworthiness	EU 2019/945	Part 3(9) UAS in class C2 shall unless it is a fixed-wing UA, be equipped with a tow-speed mode selectable by the remote pilot and limiting the maximum cruising speed to no more than 3 m/s.	EASA	Jun-19	open	Regulation applicable							
UA Design and Airworthiness	Opinion 05-2019	Part 16(4) UAS in class CS shall be equipped with a low-speed mode selectable by the remote pilot and limiting the ground speed to not more than 5 m/s	EASA	Jun-20	Specific	Opinon publishe	4						
UA Design and Airworthiness	Opinion 05-2019	Part 16(5) and 17(5) UAS in class CS and CS shall be provide means for the remote pick to terminate the flight of the UA, which shall (a) be reliable, predictable and independent from the automatic flight control and gloidance system; this applies also to the activation of this means; the control and the control of the second of the control of the second of the UA and prevent its powered.	EASA	Jun-20	Specific	Opinon publishe	c						
UA Design and Ainworthiness	EU 2019/945	Parts 3(5) and 4(4) UAS in diss C2 and C3 shall in the case of a tethered UA, Iwas in class C2 and C3 shall in the case of a tethered UA, Iwas a branish length of the stether that is less than 50 m and a mechanical strength that is no less than; Isal for heave-there aircraft, 10 froms the weight of the associym at maximum maxim, associated and the strength of the combination of the maximum static hours three of the maximum and lowed wind speed in flight;	EASA	Jun-19	open	Regulation applicable							
UA Design and Airworthiness	EU 2019/945	Parts 2(14), 3(16) and 4(11) UAS in class C1 C2 and C3 shall, if the UA has a function that shall be access to motival engages are or volume, this factors that operate in such a moment that it interacts smoothly with the fifty control system of the UA without solveway stacking fight safety, in addition, class information shall be provided to the remote pict with this function prevents the UA from entering these airspace areas or volumes;	EASA	Jun-19	open	Regulation applicable							
UA Design and Airworthiness	EU 2019/945	Parts 1(2) and 2(2) UAS in class CO and C1 shall have a maximum speed in level tight of 19 mix	EASA	Jun-19	open	Regulation applicable							
UA Design and Airworthiness	Opinion 05-2019	Part 17(1) UAS in class C6 shall have a maximum ground speed in level flight of not more than 50 m/s;	EASA	Jun-20	Specific	Opinon publishe	4						
UA Design and Airworthiness	EASA Decision	(ISO#4 UAS developed to authority recognized design standards (e.g. industry standards)	EASA	Oct-19	Specific	published							
UA Design and Airworthiness	EASA Decision	(ISO#5 UAS is designed considering system safety and reliability	EASA	Oct-19	Specific	published							
UA Design and Airworthiness	EASA Decision	(ISO#10 Safe recovery from technical issue /	EASA	Oct-19	Specific	published							
UA Design and Airworthiness	EASA Decision	(ISO#12 The UAS is designed to manage the deterioration of external systems supporting UAS operation	EASA	Oct-19	Specific	published							
UA Design and Airworthiness	EASA Decision	QSO#18 Automatic protection of the flight envelope from human errors	EASA	Oct-19	Specific	published							

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	UA Design and Ainworthiness	EASA Decision	050#19 Safe recovery from Human Error (<u>Criterian #3 UAS</u> dest <u>en</u>)	EASA	Oct-19	Specific	published							
	нмі	EASA Decision	OSO #20 - A Human Factors evaluation has been performed and the HMI found appropriate for the mission	EASA	Oct-19	Specific	published							
	нмі	Opinion 05-2019	Part 16(3) and 17(3) UAS Class CS and OS during flight shall provide the remote pilot with clear and concine information on the height of the UA above the surface or take-off point;	EASA	Jun-20	Specific	Opinon publishe	4						
	нмі	EU 2019/945	Part 1(4) and 2(4) UAS in class CO and C1 shall be safely controllable with regards to stability, manneuvrability and data link performance, by a remote pilot following the manufacturer's instructions, as necessary under all anticipated operating conditions including	EASA	Jun-19	open	Regulation applicable							Opinion 05-2019:: be safely controllable with regard to stability, manoeuvrability and the command and control link performance, by a
	нмі	EU 2019/945	Situation the failuse of one or if senonoviste, more outterns. Part 5(2) UAS in class C4 shall be safely controllable and manoeuvrable by a remote pilot following the manufacturer's instructions, as accessary under all anticipated operating conditions including following the failuse of one or, if appropriate, more systems;	EASA	Jun-19	open	Regulation applicable							semate nilet following the
	нмі	EU 2019/945	resowing the sature or one or, is appropriate, make systems, Part 3(3) and (3) a shall be safely controllable with sagards to stability, manoeuvability and data link performance, by a remote pilot with adequate competency as defined in the same stability of the sa	EASA	Jun-19	open	Regulation applicable							Opinion 05-2019: be safely controllable with regard to stability, menocurvability and the command and control link performance, by a remote olicit with adequate
	UA Design and Ainworthiness	EASA Decision	The manufacturer's instructions, as necessary under all OSO #24 - UAS designed and qualified for adverse environmental conditions (e.g. adequate sensors, DO-160 qualification)	EASA	Oct-19	Specific	published							remote pilot with adequate
	UA Design and Ainworthiness	EASA Decision	050#24 UAS designed and qualified for adverse environmental conditions (e.g. adequate sensors, D0-160 qualification)	EASA	Oct-19	Specific	published							
	UA Design and Airworthiness	EASA Decision	M#2 Effects of ground impact are reduced. A category. Measures reducing the effect of the UAS impact dynamics (e.g. emergency purachate).	EASA	Oct-19	Specific	published							
			A class CS UAS may consist in a class C3 UAS fitted with an accessories left that ensures the conversion of the UAS into a dear C5 UAS. In this case, the dear C5 UAS is affected as the											
	UA Design and Ainworthiness	Opinion 05-2019	construction to the state of th	EASA	Jun-20	Specific	Opinon publishe							
	UA Design and Airworthiness	EASA Decision	M#3 Technical containment in place and effective (e.g. tether)	EASA	Oct-19	Specific	published							
								ASTM WK67357 New Specification for Light Ummanned Arcraft System Manufacturers Quality Assurance System		ASTM F38 Unmanned Aircraft Systems	Mar-19	specification	ongoing	
								ASTM WK 63407 Standard Specification for Required Product Information to be Provided with a Smal Unmanned Aiscraft System	has appointed or cover the recovers the covers the cove	ASTM F38 Urmanned Aircraft Systems	Oct-19	standard	ongoing	currently under ballot
A								WK70877New Practice for Showing Durability and Reliability Means of Compliance for Unmanned Aircraft Systems	opposed in fail com in amountainous ceresciance in commanda per De CORDER 2017, PAPA released DUMPABILITY A RELIABELITY ARREST TYPE CERTERCATION PROCESSO FOR LOW RISKS ASSALLER TO CORDER 2017, PAPA RELIABELITY ARREST PAPA RELIABELITY ARREST PAPA RELIABELITY ARREST PAPA RELIABELITY ARREST FAIL SECTION PAPA RELIABELITY FAIL SECTION PA	ASTM F38 Unmanned Aircraft Systems		standard	ongoing	
7								Operation	ons					
	Operations							AS8062 - Mission Spealing Service Set	This accuming between a set of selection appropriate style manuscus cases AMB Mission Spooling Services. AMB Services provide the means of these entities in an unmanned spoiled or ground provide and to communicate and coordinate that activities. The Mission Spooling to communicate and coordinate that activities. The Mission Spooling sorrious represents the platform-independent capabilities commonly found across all domains and types of unmanned systems. All present, if service defined in this document (more services are planned for future version) and defined in this document (more services are planned for future version).	SAE AS-4JAUS Joint Architecture for Unmanned Systems Committee		standard	published	published
	Qualified entities							ASTM F3384-19 Standard Practice for Independent Audit Program for Unmanned Aircraft Operators	Minimum requirements, responsibilities, qualifications for entities conducting internal audits against ASTM standards on Unmanned Aircraft Systems	ASTM F38 Urmanned Aircraft Systems		standard	published	
	Qualified entities							F3365-19 Standard Practice for Compliance Audits to ASTM Standards on Unmarned Aircraft Systems	-Hee to conduct, third party and program for those who execute and to meet the consensus self of minimum requirements and qualifications.	ASTM F38 Urmanned Aircraft Systems		standard	published	
	Qualified entities							ASTM WK62744 General Operations Manual for Professional Operato of Light Unmanued Aircraft Systems (UAS)	Basel practices to support professional entities receiving operator conflictation by a CAA, and provide practice for self- or third-parity audit of operators of UAS.	ASTM F38 Unmanned Aircraft Systems	TBD	Best practice	ongoing	Druft
	Manualis							ASTM F2908-16 Standard Specification for Aircraft Fright Manual (AFM) for a Small Unmanned Aircraft System (sUAS)	This specification provides the minimum requirements for an Aircraft Flight Manual (APA) for an unminered aircraft system (UAS) designed, which is a specific and aircraft system (APA) designed, of the system of t	ASTM F38 Urmanned Aircraft Systems		standard	published	published
	Automatic modes, takeoff, Landing, taxing							WKS8031 Evaluating Aerial Response Robothlaneuvering: Maintain Position and Orientation	tres purpose de seu seu interco a la sipoció y seu apparetazione, recondurar, and profremance metrica recossari y lo quantifacilivol; evaluali tra e y sitem capability lo accustady maintain position and orientation (sopa) in que na page en salativo la on cident of interaction in test method applies to antial systems operated menotoly from a standoff distance proporçatate for the internade mission. The system includes a remote operator in control of all functionality and any assistive features or production.	ASTM E54 Homeland Security Applications	TBD	standard	ongoing	E54 Full Committee adjudication February 26 to March 2, 2018. Delayed till Apr-18

					The purpose of this test method is to specify the apparatuses,					
	Automatic modes, takeoff, Landing, taking			WK58932 Evaluating Aerial Response RobotManeuvering: Orbit a Point	The purpose of this last method is to specify the apparishase, percedures, and performance metrics necessary to quantifatively evaluate the system capability to accurately orbit an object of interest. Results should be considered within the context of related sets methods in the Maneuvering sales when comprehensively evaluating peckel system capabilities. This sets method applies to serial systems operated removiby from a standorff distance accreaists for the intended mission. The system	ASTM E54 Homeland Security Applications	TBD	standard	ongoing	
	Detect and avoid			WK58933 Evaluating AssistResponse RobotManeuvering: Avoid Static Obstacles	The purpose of this liest metrical is to specify the appearatuses, proceeders, and performance metrics recovary to quantitatively evaluate the system capability to avoid later's chestacies.	ASTM E54 Homeland Security Applications	TBD	ständard	ongoing	E54 Full Committee adjudication February 26 to March 2, 2018. Delayed till Apr-18
	Detect and avoid			WK58034 Evaluating AerialResponse RobotManeuvering: Pass Through Openings	The purpose of this lost method is to specify the apparatuses, procedures, and performance metrics necessary to quantitatively evaluate the system capability to pass through openings of various sizes and orientations.	ASTM E54 Homeland Security Applications	TBD	standard	ongoing	E54 Full Committee adjudication February 26 to March 2, 2018. Delayed till Apr-18
	Automatic modes, takeoff, Landing, taxing			WKS8035 Evaluating AustraResponse RobotMansuvering: Land Accurately (Vertical)	The purpose of this last method is to specify the apparationer, investigate, and particularly revisional feet professional and the secondary of controlled a secondary to account of the system country to account yet the secondary secondary account of the system country to account yet the secondary account of the system country account of the secondary accountry acc	ASTM E54 Homeland Security Applications	ТВО	standard	angoing	E54 Full Committee säjudication February 28 to March 2, 2018. Delayed 81 Apr-18
	UAS-ATM			Specifications for the Use of Military Unmanned Aerial Vehicles (UAV) as Operational AE Traffic (OAT) outside segregated airpsace specification, v 1.0, 2007	This specification addresses expents of rillary UM ATM, dealing briefly with motion regulations that impact upon the UM approximations and their expensioning the rules or UM arrayone requirements. It also committees a will be a substantial or UM arrayone requirements. Each committees we will be a substantial to a substantial into EUROCOHITOS, specifications	EUROCONTROL		spacification	published	
	UAS-ATM			Air Traffic Management Guidelines for Global Hawk in European Airspace, v 1.0, 2010	occupied by manned aviation.	EUROCONTROL		guidance material	published	
м	Local E-identification			Systems (UAS) -	The European student of spreads many of compliance is soon what the sevenet registeries below part 2 to 4 of the seguest and except some 20 to 4 of the seguest and except some 20 to 4 of the seguest and except some 20 to 4 of the seguest and except some 20 to 4 of the seguest and except some 20 to 4 of the seguest and except some 20 to 4 of the seguest and except some 20 to 4 of the seguest seguest seguest some 20 to 4 of the seguest	ASD-STAN D5WG8	Nov-20	preEN / European standard	ongoing	
	Standard scenarios			ASTM F3196-18 Standard Practice of Seaking Aproval for Extended Visual Line or Sight (EV.V.O.B.) Beyond Visual Line of Sight (EV.V.O.B.) Sight (EV.V.O.B.) Sight (EV.V.O.B.) Characteristic of the Control of Seaking (EV.O.B.) Characteristic of Seak		ASTM F38 Umanned Akcraft Bystems		standard	published	Body of damated revised myland published melospotating old published melospotating old published melospotating old published melospotating old published results, appendix is prinding. To be revised and summended for include use cases scenarios: package delivery, infrastructurate inspection, lienar inspection, lienarios postations, approximate, Part of these specifications (and the published
	Standard scenarios			ASTM WK 62344 BVLOS Package Delivery as an Appendix to F3196-17	Appendix to to ASTM F3198-17. The main purpose of this revision is to add an Appendix that can be used in developing proposed risk mitigation strategies for package delivery sUAS BVLOS operationsy	ASTM F38 Unmanned Aircraft Systems	Jun-19	standard	ongoing	Working group formed and continues
	Operations			ASTM F2849-10 Standard Practice for Handling of Unmanne Aircraft Systems at Divert Airfields		ASTM F38 Unmanned Aircraft Systems		practice	published	
	Operations			ISO 21384-3 - Requirements for safe civil RPAS/UAS operations and applies to all types, categories, classes.	Requirements for safe commercial UAS operations and applies to all types, categories, classes, sizes and modes of operation of UAS.	ISO	Dec-18	standard	ongoing	
	UAS-ATM			ARPWWW Access to controlled airspace		SAE G-30 UAS Operator Qualifications Committee SAE	May-19	recommended practice	planned	
	Standard scenarios			ARPstess Right beyond visual line of sight		G-30 UAS Operator	May-19	recommended practice	planned	
	Standard scenarios			ARPssss Night operations		Committee SAE G-30 UAS Operator Qualifications Committee SAE	May-19	recommended practice	planned	
	Standard scenarios			ARP#### Aerial photography		SAE G-30 UAS Operator Qualifications Committee	Jun-19	recommended practice	planned	
	Standard scenarios			ARP#### Power line inspection		G-30 UAS Operator Qualifications Committee	Jul-19	recommended practice	planned	

	Standard scenarios				ARP#### Precision agriculture		SAE G-30 UAS Operator Qualifications Committee	Aug-19	recommended practice	planned	
	Standard scenarios				ARPessus Bridge inspection		SAE G-30 UAS Operator Qualifications Committee	Sep-19	recommended practice	planned	
	Standard scenarios				ARP#### Train right- of-way's		SAE G-30 UAS Operator Qualifications Committee	Oct-19	recommended practice	planned	
	Standard scenarios				ARP#### Flare stack inspections		SAE G-30 UAS Operator Qualifications Committee	Nov-19	recommended practice	planned	
	Standard scenarios				WK58243 New Guide for Visual Inspection of Building Facade using Drone	This standard consists of guidelines for utilizing drones with cameras to document facade conditions with video and still photography. The purpose of this standard is se establish procedures and methodologies for conducting visual inspections of building facades via drone, and documenting such inspections.	ASTM E06 Performance of Buildings	Jan-18	guide	angoing	
	Navigation				WKS8677 Evaluating AerialResponse RobotSensing: Visual Image Acuity	The purpose or sits less mismorion is to specify the apparentance, procedures, and performance metrics necessary to quantitatively evaluate the visual (electro-policial) image accessly of the system as viewed through a control station. This text method applies to aerial systems operated emotely from a standed disables appropriate for the intended mission. The system includes a remote operator in control of all functionality and see societies features or authorogeness helphase.	ASTM E54 Homeland Security Applications	Apr-18	standard	angoing	E54 Full Committee adjudication February 26 to March 2, 2018. Delayed till Apr-18
	Ground control station				WK58925 Evaluating AerialResponse RobotSensing: Visual Color Acuity	The purpose of this test method is to specify the apparatuses, procedures, and performance metrics necessary to quantitatively evaluate the visual (electro-optical) color acuity of the system as viewed through a control station.	ASTM E54 Homeland Security Applications	Apr-18	standard	angeing	E54 Full Committee adjudication February 26 to March 2, 2018. Delayed till Apr-18
	Ground control station				WKS8026 Evaluating AnfalResponse RobotSensing: Visual Dynamic Range	The purpose of this test method is to specify the apparatuses, procedures, and performance metrics necessary to quantitatively evaluate the visual (electro-optical) dynamic range of the system as viewed through a control station.	ASTM E54 Homeland Security Applications	Apr-18	standard	angoing	E54 Full Committee adjudication February 26 to March 2, 2018. Delayed till Apr-18
	C3 datalink and communication				WKS8927 Evaluating AuriarResponse RobotSensing: Audio Speech Aculty	The purpose of this test method is to specify the apparatuses, procedures, and performance metrics necessary to quantitatively evaluate the audio speech acuty of the system as heard bi-directionally between a control station and serial robot in flight.	ASTM E54 Homeland Security Applications	Apr-18	standard	angoing	E54 Full Committee adjudication February 26 to March 2, 2018. Delayed till Apr-18
	Ground control station				WKS8028 Evaluating AerialResponse RobotSensing: Thermal Image Aculty	The purpose of this test method is to specify the apparatuses, procedures, and performance metrics necessary to quantifatively evaluate the thermal image acuity of the system as slewed through a control station. This test method applies to senial systems operated remotely from a standoff distance appropriate for the intended mission	ASTM E54 Homeland Security Applications	Apr-18	standard	angoing	E54 Full Committee adjudication February 26 to March 2, 2018. Delayed till Apr-18
	Ground control station				WK58929 Evaluating AerialResponse RobotSensing: Thermal Dynamic Range	The purpose of this test method is to specify the apparatuses, procedures, and performance metrics necessary to quantitatively evaluate the thermal dynamic range of the system as viewed through a control station.	ASTM E54 Homeland Security Applications	Apr-18	standard	angoing	E54 Full Committee adjudication February 26 to March 2, 2018. Delayed till Apr-18
	Ground control station				WK58030 Evaluating AerialResponse RobotSensing: Latency of Video, Audio, and Control	The purpose of this test method is to specify the apparatuses, procedures, and performance methics necessary to quantitatively evaluate the littletey of video, audio, and control sub-systems as viewed through a control station.	ASTM E54 Homeland Security Applications	Apr-18	standard	angoing	E54 Full Committee adjudication February 26 to March 2, 2018. Delayed till Apr-18
	Detect and avoid				WKS8036 Evaluating Aeria/Response RobotSituational Awareness: Identify Objects (Point and	The purpose of this test method is to specify the apparatuses, procedures, and performance metrics necessary to quantitatively evaluate the system capability to identify objects of interest in the environment using cameras (electro-optical and thermal) from defined altitudes in open space.	ASTM E54 Homeland Security Applications	Apr-18	standard	angoing	E54 Full Committee adjudication February 26 to March 2, 2018. Delayed till Apr-18
	Standard scenarios				WK58937 Evaluating Aeria/Response RobotSituational Awareness: Inspect Static Objects	The purpose of this test method is to specify the apparatuses, procedures, and performance metrics necessary to quantifatively evaluate the system capability to inspect objects of interest in close proximity.	ASTM E54 Homeland Security Applications	Apr-18	standard	ongoing	E54 Full Committee adjudication February 26 to March 2, 2018. Delayed till Apr-18
	Standard scenarios				WK58038 Evaluating AnnaResponse RobotSituational Awareness: Map Wide Areas (Stitched Images)	The purpose of this test method is to specify the apparatuses, procedures, and performance metrics necessary to quantitatively evaluate the system capability to accurately map wide areas with objects of interest in the environment.	ASTM E54 Homeland Security Applications	Apr-18	standard	angeing	E54 Full Committee adjustication February 26 to March 2, 2018. Delayed till Apr-18
	Standard scenarios				ASTM WK52858 Small Unmanned Aircraft Systems (sUASa) for Land Search and Rescue	This classification defines small unmanned aircraft system (oLLAS) land learn't and rescue resources in terms of their capabilities. It provides a means by which resource management and LLAS plant-operators can capable of parforming.	ASTM F32 Search and Rescue	TBD	standard	angoing	
	Standard scenarios				ASTM WK54228 sUAS Operations in Search and Rescue Operations	This guide establishes a framework within which sUAS search and rescue (SARY) operations shall be conducted so part of the National Incident Management System (MMS)/incident Command System (CSS): 1.2 The sequirements of this guide shall apply to individuals, agencies, and organizations that respond to SAR operations, including those not segulated by government manadats.	ASTM F32 Search and Rescue	TBD	standard	angoing	
	Standard scenarios				ASTM WK65042 New Specification for Operation over People	Recent research conducted on risk, safety, design, operations and impact to inform development of standard with supporting documentation from Partificiar studies. Using results of the Partificial Program, impact sesting and mitigations such as deployable SUAS parachutes to be incorporated into standard.	ASTM F38 Urmanned Aircraft Systems	Mar-19	specification	angoing	Final draft for ballot in October 2018, adjudicating comments
u	UA Design and Airworthiness				ASTM F3389-20 Test Methods for Assessing the Safety of Small Unmanned aircraft System Impacts	Develop a cell sizurated for product making of USS weighing 200 green was. Never good and standard for Calleyy 2.5, and a USS free (C) year or was. Never good and standard for Calleyy 2.5, and a USS free (C) year for an and common and make her has a sound a speciety in the most production for the production of th	ASTM F38 Unmanned Aircraft Systems		standard	published	
	Risk Assessment				ASTM F3178-16 Standard Practice for Operational Risk Assessment of Small Unmanned Aircraft Systems (sUAS)	Preparation of an ORA in accordance with this practice is intended to reduce, the risk of an operation in which system complexity is minimal, the operation is conducted in a lower risk environment, and the likelihood for harm to people or properly, though present, it is reduced to an acceptable level. A mission comprisity increases, the operational environment may become less risk tolerantA.	ASTM F38 Unmanned Aircraft Systems		standard	published	This will be reference in AC for Special Class §21.17(b)
	Manuals				ASTM WK60938 New Practice for General Operations Manual for Professional Operator of Light Unmanned Aircraft Systems (UAS)	This standard defines the requirements for General Operations Manual for Professional Operator of Light Unmanned Aircraft Systems (UAS). The standard addresses the requirements and/or best practices for documentation and organization of a professional operator (i.e., for compensation and thire).	ASTM F38 Unmanned Aircraft Systems	Sep-18	specification	ongoing	Draft Complete - will be belioted Jun 2018

									To support the design of civil vertiports and vertistops for the landing and					
	Take off Landing zones							ASTM WK59317 Versport Design	to suppose nei ceaps of a lowi versipora and vertisops or one sentrary amil- staked of VTOL alerciant bourding and dischanging passengers or cargo. The proliferation of electric-powered VTOL should be carefully considered in the development of this document. The standard must be scalable to saddress aircraft ranging in size and kinetic energy, including urmanned and optionally bridded aircraft.	ASTM F38 Unmanned Aircraft Systems	TBD	specification	ongoing	New draft in work
	UAS-ATM							STANAG 7234 Remotely Piloted Aircraft Systems (RPAS) Airspace integration (A) - AATMP-51		NATO FINAS	2018	standard	ongoing	Under development
	C3 datalink and communication							STANAG 7232 Unmanned Aerial Systems Tactics Techniques and Procedures -ATP- 3.3.8.2 Edition A	Provide standardized faction, techniques, and providera 217 for the planning commend and cutotic (CD, and employment of unmanned execut systems 218 (UAS) in NATO operations	NATO MCASBUCGUAS OS	2018	standard		
								Operations Manual for Professional Operator of Light	This standard defines the requirements for General Operations Manual for Professional Operator of Light Unmanned Aircraft Systems (UAS). The standard addresses the requirements and/or best gractices	ASTM F38 Unmanned Aircraft Systems	Mar-19	standard	ongoing	Under development
								Uperator of Light International Australia WK69035 Framework for Using ASTM Standards for UAS	In a content of section of the content of the conte	ASTM F38 Urmanned Alecraft Systems	Mar-19	guide	ongoing	
м								prEN4709-4 Aerospace series - Unmanned Aircraft Systems (UAS) - Security requirements	Into European Maridan's was provide means of comparate to cover sighten stated requirements for part 2 to 4 for belagated act. The purpose is to be able to verify that an UA is equipped with sights which: variate controllability of the LUA variate controllability of the aircraft at right, the design of the light shall allow a person on the ground to distinguish a UA from a manned aircraft. The statedness had address:	ASD-STAN D5WG8	Nov-20	preEN / European standard	angoing	
8		T	UNBLUFER, 1019; the performed by a namote pilot: (a) familiation with the user's manual provided by the				Regulation	FCL						
	Remore pilot competence	EU 2019/947	(a) intrinsingue was in the table of table of the table of table	EASA	Jun-19	open and specific	applicable from July 2020	ISO 23665 -						
								Unmanned aircraft systems – Training for personnel involved in UAS operations	The purpose of this intermational standard is that the persons who work for UAS operation receive appropriate education and obtain required knowledge and skill. Persons or educational organizations qualified according to this standard will be internationally regarded, it will enhance intermational operation of UAS, personal exchange and international trade	ISO/TC 20/SC 16/WG 3	01/01/2022	Standard	ongoing	
	Remore pilot competence							ARPS707 - Pilot Training Recommendations to Unmanned Aircraft Systems (UAS) Chill Operations	This document provides an approach to the development of training topic tor plots of Unmanned Avicrat Systems (LMS) for use by operators, remarksturies, and regulators. The identification of taining topics is based inhally on Practical Test Standard (PTS) sports for manned aircrafts. Since The Practical Test Standard (PTS) sports for manned aircraft sports. The typics desirated could be used for the construction of a PTS for a UAS pict instrument string. The LMS commercial pict region would contain recitors on or the string. The LMS commercial pict region sould contain recitors on or the string. The LMS commercial pict regions.	G-30 UAS Operator Qualifications Committee & G- 10U Unmanned Aerospace Vehicle		recommended practice	published	
	Remore pilot competence							ARP#### Common operator qualifications		SAE G-30 UAS Operator Qualifications Committee	May-19	recommended practice	planned	
	Remore pilot competence	EU 2019/947	UAS_OPEN.509(2) by a remote plot who is familiar with the user's manual provided by the manufacturer of the UAS and hoiss a conflictant of remote plot competency issued by the competent surfocity or by an entity recognised by the competent sutherity or of the Member Start of registration of the UAS quester. This surfocities shall be obtained after complying with all of the Noticeng conditions and in the color includated the criteria all competing an ordinar basing course and passed surfocities and control to the control of the control of the theoretical transluled amendation as most gassed services.	EASA	Jun-19	open and specific	Regulation applicable from July 2020							
м	maintenance							ASTM WK76061 New Quide for Lightweight UAS Maintenance Technician Qualification	The purpose of this guide is to address the basic fundamental subject licrowiselps, task performance, and task knowledge activities and function for ULS maintenance professionals to be titled ULS Maintenance Tachricians	ASTM F38 Unmanned Aircraft Systems and F46 Aerospace Personnel	Jun-18	standard	ongoing	Undergoing revisions prior to belief
м	Remore pilot competence							F3379-20 Guide for training Public Safety Remote of Unmanner Aircraft Systems Endorsement	To develop a sundfaul that defines the requirements for Training for Public Safety Remote Plot of Umenand Aircraff Systems (ILAS). Endorsement. The guide discribes the Innovincips, alkits, and abilities apquired to operative americand sizeroff the public safety purposes. A CAA say, at their discription, use this guide to aid the development of applications. An approved ASTRI guide but discribes required advantation, taking, and confining professional development for these performing as	ASTM F38 Unmanned Aircraft Systems		standard	published	
	Remore pilot competence							ASTM F3266 Standard Guide for Training for Remote Pâct in Command of Unmanned Aiscraft Systems (UAS) Endorsement	Establish chiefe for Training and Certification of sUAS Plots, Instruction, and Stocke I Notice. This practice defines the broadelph, LBHs, and Stocke I Notice Could be supported by the Suar Stocke I Notice Could be supported by the SuAS. The Training are Certification of sUAS Plots, Instructions, and Stocke I Notice Institute over Certification of sUAS Plots, Instructions, and Stocke I Notice Institute from the Suar Stocke I Notice I Notic	ASTM F38 Urmanned Aircraft Systems	Apr-18	standard	published	
								ASTM WK61763 Training for Remote Pilot Instructor (RPI) of Unmanned Ascraft Systems (UAS) Endorsement	To develop an ASTM standard that defines the requirements for Training Remote Pilot Instructor (RPI) of Unmanned Aircraft Systems (UAS) Endorsament. The guide describes the knowledge, skills, and abilities	ASTM F38 Unmanned Aircraft Systems	Jul-19	standard	angoing	

								ASTM WK62733 Training and the Development of Training Manuals for the Unmanned Aircra Systems (UAS) Operator	development of training manuals for the unmanued aircraft systems (LAS operator. 1-2 This specification aidensess the requirements or best operator. 1-2 This specification aidensess the requirements or best operator (that is, or compensation and they is.) a This specification supports professional errollies that will receive operator certification by all or aircraft aircrafts and continued on the compensation of the continued or certification for supports professional errollies that will receive certification for such aircraft a	ASTM F38 Unmanned Aircraft Systems	Sep-19	standard	angoing	
	Remore pilot competence							ASTM F3330-18 Standard Specification for Training and the Development of Training Manuals for the UAS Operator	This specification defines the requirements for training and the development of training manuals for the unmanned aircraft systems (UAS operator.	ASTM F38 Urmanned Aircraft Systems	Nov-19	standard	publiked	
	Remore pilot competence							ARP5707 Pilot Training Recommendations to Unmanned Aircraft Systems (UAS) Civil Operations	To the specification addresses the requirements or best practices, or both, for documentation and organization of a professional operator (that is, for compensation and hins) for the purposes of internal training programs and for programs offered to the general public.	G-30 UAS Operator Qualifications Committee & G- 10U Unmanned Aerospace Vehicle Committee		recommended practice	published	
	Remore pilot competence							STANAG 7192 Ed: 1 Principles Underpinning Medica Standards for Operators of Unmanned Aerial Systems (UAS) - AAMedP-1 25, Edition A	Highlight the medical factors involved in the medical aspects of Figit Cleve Licensing to enable individual nations to further their own medical standards for safe UAS operation.	NATO		standard	published	
	Remore pilot competence	EASA Decision	GOD 800 - Remote crew trained and current and shir to control the absormal and emergency situations (i.e. Technical issue with the UAS)	EASA	Ost-19	Specific	published							
	Remore pilot competence	EASA Decision	050 #15 -Remote crew trained and current and able to control the absormal and emergency situations (i.e. Human Error)	EASA	Ost-19	Specific	published							
	Remore pilot competence	EASA Decision	050 #22 - The remote crew is trained to identify critical servironmental conditions and to avoid them	EASA	Oct-19	Specific	published							
	Remore pilot competence	EASA Decision	OSO#16 Multi crew coordination. (<u>Criterian #2 Training</u>)	EASA	Oct-19	Specific	published							
	Remore pilot competence	EASA Decision	050#17 Bernote crew is fit for the operation	EASA	Oct-19	Specific	published							
	Remore pilot competence	EASA Decision	OSO#19 Safe recovery from Human Error (<u>Criterion #2 Training</u>)	EASA	Oct-19	Specific	published							
	Remore pilot competence	EASA Decision	OSO#23 Environmental conditions for safe operations defined, measurable and adhered to (Criterion #1 Procedures)	EASA	Oct-19	Specific	published							
	Remore pilot competence	EASA Decision	M#1 An Emergency Response Plan (ERP) is in place, operator validated and effective (Criterion #2 Remote Crow Computences)	EASA	Oct-19	Specific	published							
								WK62741 Training UAS Visual Observer	The purpose of this guide is to address the basic fundamental subject knowledge, task performance, and task knowledge activities and functions for visual observers of unmanned aircraft systems operations.	ASTM F38 Unmanned Aircraft Systems	Mar-19	guidance material	ongoing	
9								Environn	nent					
	Noise&Environment	EU 2019/945	Parts 2(8) and 3(10) UMS in class C1 and C2 shall have, unless it is a fixed-wing UA a guaranteed A-weighted sound power level LWA determined as per Part 13 not exceeding the levels established in Part 15	EASA	Jun-19	open	Regulation applicable							
10							Auto	onomous o						
	Autonomous operations							AS6386 JAUS Autonomous Behaviors Service Se	This document, the AUS Automated Behaviors and Diagnostics Service Set, disfines a message-passing inferface for services commonly forcial include urmanned systems. These services represent the platform- ndependent capabilities common across all domains. Additional appainties are specified in the JAUS Core Service Set (ASS710) and are termentified approach baseline.	SAE AS-4JAUS Joint Architecture for Unmanned Systems Committee	May-19	standard	angoing	
	Autonomous operations							ASTM Aviation Autonomy Roadmas ASTM F3269	representation for successful the successful to	ASTM	TBD	standards and practices	ongoing	Task Group Formed
	Development assurance (Software)							Standard Practice for Methods to Safely Bound Flight Behavio of Uhmanned Aircraft Systems Containing Complex Functions	This standard practice defines design and test best practices that if followed, would provide guidance to an applicant for providing evidence the over overlanding evidence the overlanding control (CAA) that the fight behavior of our unreamed aircraft system (UAS) containing complex functions) is constrained through a non-time assurance (RTA) anti-blackure to maintain an acceptable level of flight safety.	ASTM F38 Urmanned Aircraft Systems		standard	published	
	Autonomous operations							AS8024 JAUS Autonomous Behaviors Service Se	This document, the JAUS Automated stellaroris and Dagrostics Service Set, defines a message-passing inferface for services commonly found in mobile urmanned systems. These services represent the platform- ridependent capabilities common across all domain. Additional appailities are specified in the JAUS Core Service Set (ASS710) and are Separatrix selectioned harsin.	AS-4 JAUS Joint Architecture for Unmanned Systems Committee	May-19	standard	angoing	The title will change to "JAUS Autonomous Capabilities Service Set"
	Noise&Environment	EU 2019/945	Parts 2(9) and 3(11) UAS in class C1 and C2 shall have, unless it is a fixed-wing UA the indication of the guaranteed A-weighted sound power level affixed on the UA and/or its packaging as per Part 14;	EASA	Jun-19	open	Regulation applicable							

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Noise&Environment	EU 2019/945	Part 4(6) UAS in class C3 shall have, unless it is a fixed-wing UA, the indication of the guaranteed A-weighted sound power level UWA determined as per Part 13 affixed on the UA and/or its seckeating as per Part 14.	EASA	Jun-19	open	Regulation applicable				