**DCT Title:** SMS–Safety Assurance Design Validation(AW)

**DCT Type:** National/Divisional **Specialty:** Airworthiness

**Assessment Type:** DA

DCT Revision: 5.0 on 01/14/20

(Released)

## Summary Information

Purpose (Certificate Holder Responsibility):

Incorporate processes that ensure effective safety risk controls which meet or exceed safety objectives through the collection, analysis, and assessment of data.

Objective (FAA Responsibility):

Validate that the CH has effectively designed processes that ensure effective safety risk controls which meet or exceed safety objectives through the collection, analysis, and assessment of data.

Questions	Answers	Comments
1 Does the certificate holder's SMS have processes to acquire and monitor data within the operational environment to detect changes related to the safety performance of the organization including:	○ Yes ○ No	
#1 Products and services; and #2 Operational processes?	Not Applicable	
REFERENCES: 5.71(a)		
Safety Attribute: Process Measurement, Question Type: Output Validation,		
<b>Scoping Attribute:</b> FAR PART = "121" OR "135" OR "145" OR "141" OR "147", <b>Rev.</b> 3 1/14/2020 3:17:19 PM,		
QID: 00048572, Response Details: EP & ED DCTs (Both OP and AW), Status: Released		
2 Does the certificate holder's SMS have processes to audit the safety performance of its operational processes, systems, products, and services?	<ul><li>○ Yes</li><li>○ No</li><li>○ Not Applicable</li></ul>	
REFERENCES: 5.71(a)		
Safety Attribute: Process Measurement, Question Type: Output Validation,		
Scoping Attribute: FAR PART = "121" OR "135" OR "145" OR "141" OR "147", Rev. 2 1/14/2020 3:17:19 PM,		
QID: 00048575, Response Details: EP & ED DCTs (Both OP and AW), Status: Released		
3 Does the certificate holder's SMS have processes to evaluate the safety performance of its operational processes, systems, products, and services?	<ul><li>○ Yes</li><li>○ No</li><li>○ Not Applicable</li></ul>	
REFERENCES: 5.71(a)		
Safety Attribute: Process Measurement, Question Type: Output Validation,		
<b>Scoping Attribute:</b> FAR PART = "121" OR "135" OR "145" OR "141" OR "147", <b>Rev.</b> 2 1/14/2020 3:17:19 PM,		
QID: 00048576, Response Details: EP & ED DCTs (Both OP and AW), Status: Released		
4 Does the certificate holder's SMS have processes to investigate its operational processes, systems, products and services that include:	○ Yes ○ No	
#1 Incidents and accidents; and #2 Reports regarding potential regulatory non-compliance or non-compliance with safety risk controls established in subpart C?	O Not Applicable	
REFERENCES: 5.71(a)		
Safety Attribute: Process Measurement, Question Type: Output Validation,		
Scoping Attribute: FAR PART = "121" OR "135" OR "145" OR "141" OR "147" , Rev. $3\ 1/14/2020\ 3:17:20\ PM$ ,		
QID: 00048577, Response Details: EP & ED DCTs (Both OP and AW), Status: Released		
Does the certificate holder's SMS have a confidential reporting system(s) to monitor safety performance that allows employees to:	○ Yes ○ No	
#1 Report hazards, issues, concerns, occurrences, and incidents; and #2 Propose solutions and safety improvements?	O Not Applicable	
REFERENCES: 5.71(a)		
Safety Attribute: Process Measurement, Question Type: Output Validation,		
<b>Scoping Attribute:</b> FAR PART = "121" OR "135" OR "145" OR "141" OR "147", <b>Rev.</b> 3 1/14/2020 3:17:20 Printed: 04/21/2020 08:10:56		Page 1 of 4

Questions	Answers	Comments
PM,  QID: 00048580, Response Details: EP & ED DCTs (Both OP and AW), Status: Released		
Does the certificate holder's SMS have procedures to analyze data acquired from their safety assurance processes, described in part 5.71(a)(1 through 7), and any other relevant data with respect to its operation, products and services, including at a minimum:	<ul><li>○ Yes</li><li>○ No</li><li>○ Not Applicable</li></ul>	
#1 Monitoring of operational processes; #2 Monitoring of the operational environment to detect changes; #3 Auditing of operational process and systems; #4 Evaluations of the SMS and operational processes and systems; #5 Investigations of incidents and accidents; #6 Investigations of reports regarding non-compliance with regulations or risk controls established under subpart C, SRM; and #7 Confidential safety reporting from employees on hazards, concerns, incidents, etc.?		
<b>REFERENCES</b> : 5.71(a), 5.71(b)		
Safety Attribute: Process Measurement, Question Type: Output Validation,		
<b>Scoping Attribute:</b> FAR PART = "121" OR "135" OR "145" OR "141" OR "147", <b>Rev.</b> 3 1/14/2020 3:17:20 PM,		
QID: 00048583, Response Details: EP & ED DCTs (Both OP and AW), Status: Released		
7 Does the certificate holder's SMS require the organization to regularly review and report on the system's safety performance and does the Accountable Executive review these reports to:	○ Yes ○ No	
#1 Ensure compliance with their established safety risk controls; #2 Evaluate the performance of the SMS; #3 Evaluate the safety risk control effectiveness established under 5.55(c) with identification of ineffective controls; #4 Identify changes to the organization's operational environment that may introduce new hazards; and	O Not Applicable	
#5 Identify new hazards? <b>REFERENCES:</b> 5.75, 5.73(a), 5.25(b), 5.25(c)		
Safety Attribute: Process Measurement, Question Type: Output Validation,		
Scoping Attribute: FAR PART = "121" OR "135" OR "145" OR "141" OR "147", Rev. 3 1/14/2020 3:17:20 PM,		
QID: 00048588, Response Details: EP & ED DCTs (Both OP and AW), Status: Released		
3 Does the certificate holder's organization define accountability for assuring the effectiveness of safety risk controls for all managers in their areas of responsibility?	<ul><li>○ Yes</li><li>○ No</li><li>○ Not Applicable</li></ul>	
REFERENCES: 5.23(a)	0	
Safety Attribute: Management Responsibility, Question Type: Output Validation,		
<b>Scoping Attribute:</b> FAR PART = "121" OR "135" OR "145" OR "141" OR "147", <b>Rev.</b> 2 1/14/2020 3:17:21 PM,		
QID: 00048594, Response Details: EP & ED DCTs (Both OP and AW), Status: Released		
9 Do the certificate holder's processes and procedures ensure that for ineffective controls or hazards identified during safety performance assessments, safety risk management is applied as described in subpart C?	<ul><li>○ Yes</li><li>○ No</li><li>○ Not Applicable</li></ul>	
REFERENCES: 5.73(b)		
Safety Attribute: Process Measurement, Question Type: Output Validation,		
Scoping Attribute: FAR PART = "121" OR "135" OR "145" OR "141" OR "147", Rev. 2 1/14/2020 3:17:21 PM,		
QID: 00048689, Response Details: EP & ED DCTs (Both OP and AW), Status: Released		
10 Does the certificate holder's SMS designate management personnel who, on behalf of the accountable executive, are responsible for:	○ Yes ○ No	
#1 Coordinating implementation, maintenance, and integration of the SMS throughout their organization; #2 Facilitating hazard identification and safety risk analysis; #3 Monitoring the effectiveness of safety risk controls; #4 Ensuring safety promotion throughout their organization as required in subpart E; and #5 Regularly reporting to the accountable executive on the performance of the SMS and on any need for improvement?	O Not Applicable	
REFERENCES: 5.25(c)		
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	Questions	Answers	Comments
Safety	Attribute: Management Responsibility, Question Type: Output Validation,		
Scopii PM,	ng Attribute: FAR PART = "121" OR "135" OR "145" OR "141" OR "147", Rev. 2 1/14/2020 3:17:21		
<b>QID</b> : 00	0048595, <b>Response Details:</b> EP & ED DCTs (Both OP and AW), <b>Status:</b> Released		
	s the certificate holder have a process to ensure that the accountable executive directs actions early to address substandard safety performance in the system?	○ Yes ○ No	
REFER	<b>ENCES:</b> 5.25(b), 5.75	Not Applicable	
Safety	Attribute: Management Responsibility, Question Type: Output Validation,		
Scopii PM,	ng Attribute: FAR PART = "121" OR "135" OR "145" OR "141" OR "147", Rev. 2 1/14/2020 3:17:21		
<b>QID:</b> 00	0048601, Response Details: EP & ED DCTs (Both OP and AW), Status: Released		
	s the certificate holder have a process to develop and maintain SMS documentation that describes afety assurance processes and procedures?	○ Yes ○ No	
REFER	<b>ENCES</b> : 5.95(b)	Not Applicable	
Safety	Attribute: Procedures, Question Type: Output Validation,		
Scopir PM,	ng Attribute: FAR PART = "121" OR "135" OR "145" OR "141" OR "147", Rev. 2 1/14/2020 3:17:21		
<b>QID:</b> 00	0048602, Response Details: EP & ED DCTs (Both OP and AW), Status: Released		
13 Does the certificate holder's SMS contain a process to maintain records of their safety assurance process outputs for a minimum of 5 years?		○ Yes ○ No	
REFER	<b>ENCES:</b> 5.3(b), 5.97(b)	Not Applicable	
Safety	Attribute: Procedures, Question Type: Output Validation,		
Scoping Attribute: FAR PART = "121" OR "135" OR "145" OR "141" OR "147", Rev. 2 1/14/2020 3:17:21 PM,			
<b>QID:</b> 00	0048603, Response Details: EP & ED DCTs (Both OP and AW), Status: Released		
Respons	ee Details List EP & ED DCTs (Both OP and AW) (Released, 1.0)		
1	Unclear procedure(s)		
2	Conflicting procedure(s)		
3	Used workaround(s)		
4	Skipped process step(s)		
5	Personnel failed to follow process (procedures, guidance, etc)		

1	Unclear procedure(s)	
2	Conflicting procedure(s)	
3	Used workaround(s)	
4	Skipped process step(s)	
5	Personnel failed to follow process (procedures, guidance, etc)	
6	Procedures/guidance not available	
7	Procedures/guidance not current	
8	Inconsistent procedure(s)	
9	Undocumented procedure(s)	
10	Minor typographical error(s) (i.e. record entries)	
11	Information missing	
12	Communication failure(s)	
13	Personnel failed to perform task	
14	Process failed to meet desired outcome	
15	Process oversight failure	
16	Equipment/tools not available	
17	Equipment/tools not adequate	
18	Equipment/tools not calibrated	
19	Facilities not adequate	
20	Other	
Response Details List N/A Response Detail (Released, 2.0)		
1	Not applicable or authorized for the certificate holder or applicant	

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