SetPoint command

Requirement ID	Req. Rev	Covered Requirement	Requirement Title
[SRS_CSA_1201]	01		CAN Recall Requests acquisition

Skill(s)	Mandatory Verification	Allocation / Variant	Iteration	Safety
SW	YES	Ultimate / Premium	Proto-A	ASIL-QM(QM)

The System shall acquire states of the following inputs called "CAN Recall Requests":
- ForeAft Recall Order
- Recline Recall Order
- Tilt Recall Order
- CommandArm ForeAft Recall Order
- CommandArm Height Recall Order

~~The state of these signals is considered if received 3 consecutive times in less than 200ms.~~

Commenté [WB7]: The signal for recall requests shall send just one time

Verification	Method & Skill	TESTSYS	Criteria	

Requirement ID	Req. Rev	Covered Requirement	Requirement Title
[SRS_CSA_1202]	02		Recall Vs Command priority

Skill(s)	Mandatory Verification	Allocation / Variant	Iteration	Safety
SW	YES	Ultimate / Premium	Proto-A	ASIL-QM(QM)

The system shall consider Recall request only if physical switches are released and CAN requests are equal to "No Command".

When Motor Position is "Not Available" the recall request is not considered
Reception of physical Switch or CAN motors request interrupts an ongoing recall request execution.

Verification	Method & Skill	TESTSYS	Criteria	

Requirement ID	Req. Rev	Covered Requirement	Requirement Title
[SRS_CSA_1203]	02		Track Recall command

Skill(s)	Mandatory Verification	Allocation / Variant	Iteration	Safety
SYS	YES	Ultimate / Premium	Proto-A	ASIL-QM(QM)

The system shall consider the inputs **Track Recall Order** to define **Motor Track Command**

CAN Motors Request (Cab.i.x)	Motor command outputs (Mot.o.x)
Track Recall Order > Track Position	Motor Track Command = "CW"
Track Recall Order < Track Position	Motor Track Command = "CCW"
Track Recall Order = Track Position	Motor Track Command = "Stop"

If Track Recall Order = "FF" Motor Track Command is set to "Stop"

Verification	Method & Skill	TESTSYS	Criteria	

Requirement ID	Req. Rev	Covered Requirement	Requirement Title
[SRS_CSA_1204]	02		Recline Recall command

Skill(s)	Mandatory Verification	Allocation / Variant	Iteration	Safety
SYS	YES	Ultimate / Premium	Proto-A	ASIL-QM(QM)

The system shall consider the inputs **Recline Recall Order** to define **Motor Recline Command**

CAN Motors Request (Cab.i.x)	Motor command outputs (Mot.o.x)
Recline Recall Order > Recline Position	Motor Recline Command = "CW"
Recline Recall Order < Recline Position	Motor Recline Command = "CCW"
Recline Recall Order = Recline Position	Motor Recline Command = "Stop"

If Recline Recall Order = "FF" Motor Recline Command is set to "Stop"

Verification	Method & Skill	TESTSYS	Criteria	

Requirement ID	Req. Rev	Covered Requirement	Requirement Title	
[SRS_CSA_1205]	02		Tilt Recall Command	
Skill(s)	**Mandatory Verification**	**Allocation / Variant**	**Iteration**	**Safety**
SYS	YES	Ultimate / Premium	Proto-A	ASIL-QM(QM)

The system shall consider the inputs **Tilt Recall Order** to define **Motor Tilt Command**

CAN Motors Request (Cab.i.x)	Motor command outputs (Mot.o.x)
Tilt Recall Order > Tilt Position	Motor Tilt Command = "CW"
Tilt Recall Order < Tilt Position	Motor Tilt Command = "CCW"
Tilt Recall Order = Tilt Position	Motor Tilt Command = "Stop"

If Tilt Recall Order = "FF" Motor Tilt Command is set to "Stop"

Verification	Method & Skill	TESTSYS	Criteria	

Requirement ID	Req. Rev	Covered Requirement	Requirement Title	
[SRS_CSA_1206]	02		CommandArm Recall Command	
Skill(s)	**Mandatory Verification**	**Allocation / Variant**	**Iteration**	**Safety**
SYS	YES	Ultimate / Premium	Proto-B	ASIL-QM(QM)

The system shall consider the inputs **CommandArm ForeAft Recall Order** and **CommandArm Height Recall Order** to define **Motor ComArm Height Command** and **Motor ComArm Fore/Aft Command**

The setpoint motion of Track, Recline and Tilt motors need to be finished before performing CommandARm setpoint motion.
If CommandArm Height Recall Order > CommandArm Height Position
First, CommandArm Heigh setpoint motion is performed

CAN Motors Request (Cab.i.x)	Motor command outputs (Mot.o.x)
CommandArm Height Recall Order > CommandArm Height Position	Motor ComArm Height Command ="CW"
CommandArm Height Recall Order < CommandArm Height Position	Motor ComArm Height Command ="CCW"
CommandArm Height Recall Order = CommandArm Height Position	Motor ComArm Height Command ="Stop"

Then, CommandArm ForeAft setpoint motion is performed

CAN Motors Request (Cab.i.x)	Motor command outputs (Mot.o.x)
CommandArm Fore/Aft Recall Order > CommandArm Fore/Aft Position	Motor ComArm Fore/Aft Command ="CW"
CommandArm Fore/Aft Recall Order < CommandArm Fore/Aft Position	Motor ComArm Fore/Aft Command ="CCW"
CommandArm Fore/Aft Recall Order = CommandArm Fore/Aft Position	Motor ComArm Fore/Aft Command ="Stop"

If CommandArm Height Recall Order <= CommandArm Height Position
First, CommandArm ForeAft setpoint motion is performed
Then, CommandArm Height setpoint motion is performed

If CommandArm Height = "FF" Motor ComArm Height Command is set to "Stop"
If CommandArm Fore/Aft = "FF" Motor ComArm Fore/Aft Command is set to "Stop"

Verification	Method & Skill	TESTSYS	Criteria	