SIEMENS Gamesa
RENEWABLE ENERGY

Checklist 6Y PREVENTIVE MAINTENANCE WIK

Code:	ADIR017433
Date	2024/04/10
Rev.:	1
Applicability:	AW135505R01
Author	FLAVIO.FC.CASTILLO.EXT_WCH
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Approver	ILUEBKEN
WTG:	WK13

BEGINNING Date	2024/06/12	**OPERATIONNAL HOURS**	44.046,0
FINISH Date	2024/06/14	**SHUT-DOWN HOURS**	

1st visit		2nd visit		3rd visit		4th visit	
Permit to work:	17312	**Permit to work:**	17102	**Permit to work:**		**Permit to work:**	
Date:	2024/06/13	**Date:**	2024/06/13	**Date:**		**Date:**	
Work order:	608317	**Work order:**		**Work order:**		**Work order:**	
Foreman 1		**Foreman 2**		**Foreman 3**		**Foreman 4**	
Tech. 1:		Tech. 10:		Tech. 19:		Tech. 28:	
Tech. 2:		Tech. 11:		Tech. 20:		Tech. 29:	
Tech. 3:		Tech. 12:		Tech. 21:		Tech. 30:	
Tech. 4:		Tech. 13:		Tech. 22:		Tech. 31:	
Tech. 5:		Tech. 14:		Tech. 23:		Tech. 32:	
Tech. 6:		Tech. 15:		Tech. 24:		Tech. 33:	
Tech. 7:		Tech. 16:		Tech. 25:		Tech. 34:	
Tech. 8:		Tech. 17:		Tech. 26:		Tech. 35:	
Tech. 9:		Tech. 18:		Tech. 27:		Tech. 36:	

1st visit		2nd visit		3rd visit		4th visit	
Signature of SGRE DE SM:		Signature of SGRE DE SM:		Signature of SGRE DE SM:		Signature of SGRE DE SM:	
Signature of 3rd party SM:	[redacted]	Signature of 3rd party SM:		Signature of 3rd party SM:		Signature of 3rd party SM:	

Rev.	Author	Date	Record of changes
0	FLAVIO.FC.CASTILLO.EXT_WCH	2024/04/09	Initial version
1	FLAVIO.FC.CASTILLO.EXT_WCH	2024/04/10	Fromat of textboxes for sample codes corrected

TOWER

General House Keeping Tower platforms

Functionality, corrosion, cracks and/or deformations
ATD000615; ATD000312: Visually inspect the ligthing and the emergency lighting in the tower
Strange noises, damages, leakages:
ATD000429; ATD000704; ATD000395: Air treatment unit, trafo oil spill & tower
Dust, deformations, damages, signs of burnt, corrosion, loosen cables:
ATD000426; ATD000395: Visual inspection of the electrical cabinets
ATD000511: Heating/cooling systems

Comments:	MORS case ID	Measurement	Unit	Min	Max
Comment1	123456				

TD code	Checkpoint	Result	Comment (absloute necessary if NOK)	MORS case ID	Measurement	Unit	Min	Max
Transition CTV > TP / Techs & Tools								
ATD000313/ Tower system - General - Visual inspection of the outer platform						Tech:	F2,12	
ADIR010254.1	Outer Platform S3 floor checked (top and bottom side)? (Look for corrosion signal, fitting marks, deformations, burrs, painting defects and malfunctions).	OK						
ADIR010254.2	Outer Platform S3 fences checked? (Look for corrosion signal, fitting marks, deformations, burrs, painting defects and malfunctions).	OK						
ADIR010254.3	Outer Platform S3: Support steel structure checked? (Look for corrosion signal, fitting marks, deformations, burrs, painting defects and malfunctions).	OK						
ATD000521/ Converter system - Heating/cooling systems - Maintenance/Visual inspection of the external cooler						Tech:	3,4	
ADIR011695.0	External coolers visually checked? (no damages, no corrosion, no leakages, no blocked cooling lamellas)	OK						
ADIR011695.1	External coolers structure visually checked? (no damages, no corrosion, no loosen parts)	OK						
ADIR011695.2	External cooler fans operability checked? (n1 n2 n3 fan, operation, no abnormal noise)	OK						
ATD000311/ Wind Turbine System - General - Check Operability Emergency Stop Buttons						Tech:	10,11	
ADIR010163.3	Emergency stop button at cabinet TBC00 checked. (Optimum condition and operability).	OK						
ATD000319/ Tower system - General - Visual inspection of the grounding meshes between tower sections						Tech:	3,4	
ADIR010269.0	Ground meshes between TP and S3 visually inspected? (no damages, corrosion, fitting marks, screws)	OK						
ATD000498/ Equipotential bonding systems - General - Inspection of the tower lightning current measurement						Tech:	3,4	
ADIR011692.0	Lightning current measurement elements visually checked? (antennas and fixation system, no damages, no deformation no corrosion)	OK						
Transition TP > P7								
ATD000311/ Wind Turbine System - General - Check Operability Emergency Stop Buttons						Tech:	10,11	
ADIR010163.7	Emergency stop button at cabinet TBC200 checked. (Optimum condition and operability).	OK						
ATD000498/ Equipotential bonding systems - General - Inspection of the tower lightning current measurement						Tech:	F2,12	
ADIR011692.1	Control box visually checked? (battery on, LEDs, no damage)	OK						
ADIR011692.2	Lightning sensor system operability checked?	OK						
ATD000496/ Tower system - General - Visual inspection of the tower						Tech:	3,4	
ADIR010676.0	Platform 7: Fences and the platform floor checked? (any corrosion, deformation, dirtiness, fitting marks, cracks, loosen and missing screws)	OK						

TD code		Result	Comment (absloute necessary if NOK)	MORS case ID	Measurement	Unit	Min	Max
Transition P7 > P6								
ATD000496/ Tower system - General - Visual inspection of the tower						Tech:		
ADIR010676.1	Platform 6: Fences and the platform floor checked? (any corrosion, deformation, dirtiness, fitting marks, cracks, loosen and missing screws)	NOT DONE	Don't have access to this platform					
Transition P6 > P5								
ATD000311/ Wind Turbine System - General - Check Operability Emergency Stop Buttons						Tech:	10,11	
ADIR010163.5	Emergency stop button at converter cabinet checked? (Optimum condition and operability).	OK						
ATD000496/ Tower system - General - Visual inspection of the tower						Tech:	3,4	
ADIR010676.2	Platform 5: Fences and the platform floor checked? (any corrosion, deformation, dirtiness, fitting marks, cracks, loosen and missing screws)	OK						
Transition P5> P4								
ATD000319/ Tower system - General - Visual inspection of the grounding meshes between tower sections						Tech:	3,4	
ADIR010269.1	Ground meshes between S3 and S2 visually inspected? (no damages, corrosion, fitting marks, loosen screws,..)	OK						
ATD000311/ Wind Turbine System - General - Check Operability Emergency Stop Buttons						Tech:	10,11	
ADIR010163.4	Emergency stop button at cabinet TBC202 checked? (Optimum condition and operability).	OK						
ATD000719/ Ventilation Systems - General - Check The Ball Siphon Valves						Tech:	F1,1	
ADIR015152.0	Visually checked the condition of the ball siphon valves? (check their integrity with not damages and without leaks)	NOT OK	One ball in siphon is missing					
ADIR015152.1	Functionality of the balls in the siphons checked? (check they can move freely)	OK						
ATD000427/ Ventilation systems - General - Check the antivibration mounts						Tech:	F1,1	
ADIR010235.0	Anti-vibration mounts visually checked? (Look for corrosion signs, cracks, deformations, breakages and/or signs of abnormal wear)	OK						
ATD000429/ Ventilation systems - General - Sound inspection of the system						Tech:		
ADIR010679.2	Humidity of the air treatment intake air checked?	NOT DONE	Don't have access to scada			%	Around 60%	Around 60%
ADIR010679.3	Pressure differential with the state of the air treatment checked?	NOT DONE	Don't have access to scada			Pa	40	160

TD code		Result	Comment (absloute necessary if NOK)	MORS case ID	Measurement	Unit	Min	Max
ATD000701/ Ventilation systems - General - Visual inspection of the air treatment system structure						Tech:	F1,1	
ADIR015018.0	Air treatment system housing´s condition visually inspected? (No loosen parts, damages)	OK						
ADIR015018.1	Covers of the filters housing external condition visually inspected? (No loosened or damaged handles)	OK						
ADIR015018.2	Integrity of the covers of the motors and the air ducts inspected?	OK						
ATD000523/ Ventilation systems - General - Visual inspection of the filters						Tech:	F1,1	
ADIR011286.0	Pockef filters checked? (Free of holes, tears, objects, dust, or swamped, thickness and condition of the seals)	OK						
ADIR011286.1	Cassette filters checked? (Free of holes, tears, objects, dust, or swamped, thickness and condition of the seals)	OK						
ADIR013140.2	Filters of the air treatment system replaced?	OK						
ATD000496/ Tower system - General - Visual inspection of the tower						Tech:	3,4	
ADIR010676.3	Platform 4: Fences and the platform floor checked? (any corrosion, deformation, dirtiness, fitting marks, cracks, loosen and missing screws)	OK						
ATD000428/ Ventilation systems - General - Check the compensators						Tech:	F2,12	
ADIR010231.3	Inspect visually the compensator on P5 (S3). (Look for corrosion, breakages, deformations and/or lack of insulation).	OK						
Transition P4> P3								
ATD000319/ Tower system - General - Visual inspection of the grounding meshes between tower sections						Tech:	3,4	
ADIR010269.2	Ground meshes between S2 and S1 visually inspected. (no damages, corrosion, fitting marks, loosen screws,..)	OK						
ATD000496/ Tower system - General - Visual inspection of the tower						Tech:	3,4	
ADIR010676.4	S2-Platform 3: Fences and the platform floor checked? (any corrosion, deformation, dirtiness, fitting marks, cracks, loosen and missing screws)	OK						
ATD000428/ Ventilation systems - General - Check the compensators						Tech:	F2,12	
ADIR010231.2	Inspect visually the three compensators on P4 (S3). (Look for corrosion, breakages, deformations and/or lack of insulation).	OK						

TD code		Result	Comment (absloute necessary if NOK)	MORS case ID	Measurement	Unit	Min	Max
Transition P2> P1								
ATD000496/ Tower system - General - Visual inspection of the tower						Tech:	F2,12	
ADIR010676.5	S1-Platform 1: Fences and the platform floor checked? (any corrosion, deformation, dirtiness, fitting marks, cracks, loosen and missing screws)	OK						
ADIR010676.6	S1-Platform 2: Fences and the platform floor checked? (any corrosion, deformation, dirtiness, fitting marks, cracks, loosen and missing screws)	OK						
ADIR010676.7	Seams of the entire tower (between the tower body and the flanges and between the different shells) visually checked? (no corrosion or damages, use binoculars if needed)	OK						
ADIR010676.8	The entire tower visually checked? (no leakages (oil, water-glycol. grease or others))	OK						
ATD000428/ Ventilation systems - General - Check the compensators						Tech:	F1,1	
ADIR010231.0	Inspect visually, from the ladder, the compensator located between P1 & P2 (S1). (Look for corrosion, breakages, deformations and/or lack of insulation).	OK						
ADIR010231.1	Inspect visually the compensator on P3 (S2). (Look for corrosion, breakages, deformations and/or lack of insulation).	OK						

LOWER DECK

General House Keeping LOWER DECK

General cleaning
Corrosion, cracks, deformations, leakages, damages, wear, painting defects:
ATD000302; ATD000339; ATD000516; ATD000583: Lubrication storage tanks; oil suply system; yaw gear motors; lubrication system of the yaw gear
Functionality, corrosion, cracks and/or deformations:
ATD000615: Visually inspect the emergency lighting in the tower

Comments:	MORS case ID	Measurement	Unit	Min	Max
We can not change the filters of yaw callipers because don't have in stock on vessel					

TD code	Checkpoint	Result	Comment (absloute necessary if NOK)	MORS case ID	Measurement	Unit	Min	Max
Transition CTV > TP > Lower Deck / Techs & Tools								
ATD000286/ Drive train system - Auxiliary systems - Oil sample of the oil supply system						Tech:	4	
ADIR010171.0	Gearbox oil sample taken (190.1)? (at 40ºC and releasing 1 liter)	OK			532567	sample code		
ATD000311/ Wind Turbine System - General - Check Operability Emergency Stop Buttons						Tech:	10,11	
ADIR010163.2	Emergency stop button at lat cabinet TBC300 checked?. (Optimum condition and operability).	OK						
ATD000336/ Drive train system - Auxiliary systems - Replacement of the oil filter of the oil supply system						Tech:	F1,1	
ADIR010208.3	Oil filters 171.1, 171.2 and 171.3 (Hydac) or 170.1, 170.2 and 170.3 (Hydratech) replaced? (no oil spills remaining)	OK						
ATD000337/ Drive train system - Auxiliary systems - Replacement of the air filter of the oil supply system						Tech:	4	
ADIR010203.0	Air filter oil supply system replaced? (Hydac or Hydratec)	OK						
ATD000341/ Drive train system - Auxiliary systems - Maintenance of the oil level of the oil supply system						Tech:	F1,1	
ADIR010694.0	Oil level between the established values?	OK			915.00	l	875	1100
ATD000335/ Drive train system - Auxiliary systems - Visual inspection of the magnets						Tech:	4	
ADIR010152.0	Magnets visually checked?	OK						
ATD000431/ Drive train system- Auxiliary system- Apply DINITROL coating to the nacelle arm crane						Tech:	4	
ADIR010161.2	Did you apply the Dinitrol 977 (two different cases)?	OK						
ATD000583/ Yaw system - Yaw drive system - Visual inspection of the lubrication system of the yaw bearing						Tech:	4	
ADIR012971.2	Lubrication system (x2) visually checked? (no grease leaks, no parts damaged, joint elements not loosened, broken or damaged)	OK						
ADIR012971.3	Grease level checked? Write down the level (in %), correct level is up to 50% (distance between maximum and minimum marks) (refill the grease if necessary)	OK	Refill to 95%. Level found 5%					
ATD000300/ Yaw system - Yaw drive system - Visual inspection of the bearings						Tech:	4	
ADIR10160.2	Yaw bearing (inside) checked? (look for damages on the bearing seal like fitting marks, corrosion, deformations, burrs or grease leakages)	OK						
ADIR10160.5	Yaw bearing (Outer side) checked? (look for fitting marks, damages on the bearing seal, corrosion, burrs or grease leakages)	OK						

TD code		Result	Comment (absloute necessary if NOK)	MORS case ID	Measurement	Unit	Min	Max
ATD000292/ Yaw system - Yaw drive system - Grease sample of the yaw bearing						Tech:	4	
ADIR010213.0	Yaw bearing grease sample taken? (between 8 and 10gr)	OK			5311609	sample code		
ATD000308/ Yaw system - Yaw drive system - Visual inspection of the condition of the lubrication collection trays of the yaw gear and yaw bearing						Tech:	4	
ADIR010189.0	Lower deck: Yaw gear grease collection trays checked? (Look marks, corrosion, deformations, burrs and remove old grease)	OK						
ADIR010189.1	Cellar platform: Yaw bearing grease collection trays checked? (Look marks, corrosion, deformations, burrs and remove old grease)	OK						
ATD000576/ Yaw system - Yaw drive system - Visual inspection of the lubrication system of the yaw gear						Tech:	4	
ADIR012923.0	Foam rubber layers of the pinion lubricator inspected?	OK						
ADIR012923.1	condition of the lubrication system elements verified? (look for leaks, corrosion, loosen or breakage elements).	OK						
ADIR012923.2	grease tank and pump inspected? (look for loosen elements, damage in cables, connections and contacts; inspect the mechanical campling system)	OK						
ADIR012923.3	grease level checked? (refill the grease if necessary)	OK						
ADIR012923.4	Pump auditively checked? (abnormal sounds)	OK						
ADIR012923.5	Leakages inspected? (pump, hoses, connectors, distributor, tanks, collectors and joint elements)	OK						
ADIR012923.6	Teeth of the lubrication pinion inspected? (check if they are worn)	OK						
ATD000721/ Yaw system - Yaw drive system - Inspection of the air gap of the yaw motor brake						Tech:	1,4	
ADIR015148.0	Motor gear A: The gap of the motor brake checked?	OK			0.5	mm	0.5	0.8
ADIR015148.1	Motor gear B: The gap of the motor brake checked?	OK			0.5	mm	0.5	0.8
ADIR015148.2	Motor gear C: The gap of the motor brake checked?	NOT OK			0.4	mm	0.5	0.8
ADIR015148.3	Motor gear D: The gap of the motor brake checked?	OK			0.5	mm	0.5	0.8
ADIR015148.4	Motor gear E: The gap of the motor brake checked?	OK			0.5	mm	0.5	0.8
ADIR015148.5	Motor gear F: The gap of the motor brake checked?	OK			0.5	mm	0.5	0.8
ADIR015148.6	Motor gear G: The gap of the motor brake checked?	NOT OK			0.4	mm	0.5	0.8
ADIR015148.7	Motor gear H: The gap of the motor brake checked?	OK			0.5	mm	0.5	0.8

TD code		Result	Comment (absloute necessary if NOK)	MORS case ID	Measurement	Unit	Min	Max
ATD000342/ Yaw system - Yaw brake system - Inspection of the trays of the yaw brake callipers						Tech:	4	
ADIR010259.0	Yaw brake pads collector trays inspected? (no corrosion, deformations, craks, burrs,…)	OK						
ADIR010259.1	Yaw brake collector trays cleaned?	OK						
ATD000332/ Yaw system - Yaw brake system - Check brake linings, lines and seals						Tech:	4	
ADIR010256.1	No oil at the brake disc area (to verify the seals are not damaged or broken)	OK						
ADIR010256.2	All hose and hose connections visually checked? (deformations, leakages, damages and/or his correct fixation)	OK						
ADIR010256.4	Yaw brake callipers' pads visually checked? (according to ADWEN5-A-A3-20-0000-02AAA-913A-A)	OK						
ATD000277/ Yaw system - Yaw drive system - Oil sample of the yaw gear						Tech:	4,13	
ADIR010157.0	Yaw gear A oil sample taken? (write down the code)	OK			5382540	sample code		
ADIR010157.2	Yaw gear B oil sample taken? (write down the code)	OK			5382539	sample code		
ADIR010157.4	yaw gear C oil sample taken? (write down the code)	OK			5382538	sample code		
ADIR010157.6	Yaw gear D oil sample taken? (write down the code)	OK			5382537	sample code		
ADIR010157.8	Yaw gear E oil sample taken? (write down the code)	OK			5382536	sample code		
ADIR010157.10	Yaw gear F oil sample taken? (write down the code)	OK			5311611	sample code		
ADIR010157.12	Yaw gear G oil sample taken? (write down the code)	OK			5382656	sample code		
ADIR010157.14	Yaw gear H oil sample taken? (write down the code)	OK			5382566	sample code		

TD code		Result	Comment (absloute necessary if NOK)	MORS case ID	Measurement	Unit	Min	Max
ATD000278/ Yaw system - Yaw drive system - Visual inspection of the oil level on the yaw gears						Tech:	4	
ADIR010170.0	Yaw gear (A) oil level checked? Drain or refill oil if neccessary	OK	Refill to 120mm.(Level found 65mm)					
ADIR010170.1	Yaw gear (B) oil level checked? Drain or refill oil if neccessary	OK	Refill to122mm.(Level found 75mm)	75mm				
ADIR010170.2	Yaw gear (C) oil level checked? Drain or refill oil if neccessary	OK	Refill to 120mm.(Level found 0)	0mm				
ADIR010170.3	Yaw gear (D) oil level checked? Drain or refill oil if neccessary	OK	Refill to 120 mm. (Level found 0)	0mm				
ADIR010170.4	Yaw gear (E) oil level checked? Drain or refill oil if neccessary	OK	Refill to 121 mm. (Level found 55mm)	55mm				
ADIR010170.5	Yaw gear (F) oil level checked? Drain or refill oil if neccessary	OK	Refill to 120mm. (Level found 70mm)	70mm				
ADIR010170.6	Yaw gear (H) oil level checked? Drain or refill oil if neccessary	OK	Refill to 122mm. (Level found 60mm)	60mm				
ADIR010170.7	Yaw gear (I) oil level checked? Drain or refill oil if neccessary	OK	Refill to 120mm. (Level found 90mm)	90mm				
ATD000298/ Yaw system - Yaw brake system - Visual inspection of the yaw brake disc						Tech:	4	
ADIR010230.0	Yaw brake disc inspected, no defects?	OK						
ATD000726/ Yaw system - Yaw brake system - Replacement of the filter of the yaw callipers circuit						Tech:		
ADIR015178.0	Both filters of the yaw caliper circuit replaced?	NOT DONE	Don't have filters in stock on OSV					
ATD000443/ Equipotential bonding systems - General - Visual inspection of the equipotential bonding of the yaw slip ring						Tech:	4	
ADIR010236.0	Carbon brushes #1 mechanical part visually checked? (structural body, spring, grounding strap, no corrosion, no cracks, no loosen connections)	OK						
ADIR010236.1	Carbon brushes #2 mechanical part visually checked? (structural body, spring, grounding strap, no corrosion, no cracks, no loosen connections)	OK						
ADIR010236.2	Carbon brushes #3 mechanical part visually checked? (structural body, spring, grounding strap, no corrosion, no cracks, no loosen connections)	OK						
ADIR010236.3	Carbon brush #1 visually checked and wear measured? (replace if necessary, no corrosion, no dirt, in contact with yaw ring)	OK			63	mm	26	-
ADIR010236.4	Carbon brush #2 visually checked and wear measured? (replace if necessary, no corrosion, no dirt, in contact with yaw ring)	OK			63	mm	26	-
ADIR010236.5	Carbon brush #3 visually checked and wear measured? (replace if necessary, no corrosion, no dirt, in contact with yaw ring)	OK			64	mm	26	-

TD code		Result	Comment (absloute necessary if NOK)	MORS case ID	Measurement	Unit	Min	Max
ATD000551/ Yaw system - Yaw brake system - Measurement of the yaw pads						Tech:	10	
ADIR012468.0	PAD thickness caliper #1 measurement? (With Svendborg write down the measure); With Stromag the visible colour of the feeler (Red=NOT OK)) Check the correct position of the pads.	OK			8	mm/ Color	2	-
ADIR012468.1	PAD thickness caliper #2 measurement? (With Svendborg write down the measure; With Stromag the visible colour of the feeler (Red=NOT OK)) Check the correct position of the pads.	OK			8	mm/ Color	2	-
ADIR012468.2	PAD thickness caliper #3 measurement? (With Svendborg write down the measure; With Stromag the visible colour of the feeler (Red=NOT OK)) Check the correct position of the pads.	OK			8	mm/ Color	2	-
ADIR012468.3	PAD thickness caliper #4 measurement? (With Svendborg write down the measure; With Stromag the visible colour of the feeler (Red=NOT OK)) Check the correct position of the pads.	OK			7	mm/ Color	2	-
ADIR012468.4	PAD thickness caliper #5 measurement? (With Svendborg write down the measure; With Stromag the visible colour of the feeler (Red=NOT OK)) Check the correct position of the pads.	OK			8	mm/ Color	2	-
ADIR012468.5	PAD thickness caliper #6 measurement? (With Svendborg write down the measure; With Stromag the visible colour of the feeler (Red=NOT OK)) Check the correct position of the pads.	OK			8	mm/ Color	2	-
ADIR012468.6	PAD thickness caliper #7 measurement? (With Svendborg write down the measure; With Stromag the visible colour of the feeler (Red=NOT OK)) Check the correct position of the pads.	OK			8	mm/ Color	2	-
ADIR012468.7	PAD thickness caliper #8 measurement? (With Svendborg write down the measure; With Stromag the visible colour of the feeler (Red=NOT OK)) Check the correct position of the pads.	OK			8	mm/ Color	2	-
ADIR012468.8	PAD thickness caliper #9 measurement? (With Svendborg write down the measure; With Stromag the visible colour of the feeler (Red=NOT OK)) Check the correct position of the pads.	OK			8	mm/ Color	2	-
ADIR012468.9	PAD thickness caliper #10 measurement? (With Svendborg write down the measure; With Stromag the visible colour of the feeler (Red=NOT OK)) Check the correct position of the pads.	OK			8	mm/ Color	2	-
ADIR012468.10	PAD thickness caliper #11 measurement? (With Svendborg write down the measure; With Stromag the visible colour of the feeler (Red=NOT OK)) Check the correct position of the pads.	OK			8	mm/ Color	2	-
ADIR012468.11	PAD thickness caliper #12 measurement? (With Svendborg write down the measure; With Stromag the visible colour of the feeler (Red=NOT OK)) Check the correct position of the pads.	OK			8	mm/ Color	2	-
ADIR012468.12	PAD thickness caliper #13 measurement? (With Svendborg write down the measure; With Stromag the visible colour of the feeler (Red=NOT OK)) Check the correct position of the pads.	OK			8	mm/ Color	2	-
ADIR012468.13	PAD thickness caliper #14 measurement? (With Svendborg write down the measure; With Stromag the visible colour of the feeler (Red=NOT OK)) Check the correct position of the pads.	OK			8	mm/ Color	2	-

TD code		Result	Comment (absloute necessary if NOK)	MORS case ID	Measurement	Unit	Min	Max
ADIR012468.14	PAD thickness caliper #15 measurement? (With Svendborg write down the measure; With Stromag the visible colour of the feeler (Red=NOT OK)) Check the correct position of the pads.	OK			8	mm/ Color	2	-
ADIR012468.15	PAD thickness caliper #16 measurement? (With Svendborg write down the measure; With Stromag the visible colour of the feeler (Red=NOT OK)) Check the correct position of the pads.	OK			8	mm/ Color	2	-
ADIR012468.16	PAD thickness caliper #17 measurement? (With Svendborg write down the measure; With Stromag the visible colour of the feeler (Red=NOT OK)) Check the correct position of the pads.	OK			8	mm/ Color	2	-
ADIR012468.17	PAD thickness caliper #18 measurement? (With Svendborg write down the measure; With Stromag the visible colour of the feeler (Red=NOT OK)) Check the correct position of the pads.	OK			7	mm/ Color	2	-
ATD000302/ Yaw system - Yaw drive system - Inspection of the lubrication storage tank of the yaw bearing						Tech:	F1	
ADIR010165.0	All the lubrication stogare tanks of the yaw bearing checked? (under 75%, replaced if need, no damage)	OK			90.00	%	75	-

HUB

General House Keeping HUB

General cleaning
Corrosion, cracks, deformations, leakages, damages, wear, painting defects, strange noises:
ATD000378; ATD000493; ATD000488: Outside the hub an lateral structure; Fan of the converter of the pitch drive; Central lubrication of the blade bearing
ATD000695; ATD000382: Visual inspection of the pitch motor; blade bearing central lubrication system; hub lights
Cable defects, functionality, corrosion, deformations or loosen parts

Comments:	MORS case ID	Measurement	Unit	Min	Max

TD code	Checkpoint	Result	Comment (absloute necessary if NOK)	MORS case ID	Measurement	Unit	Min	Max
Transition CTV > TP > Nacelle / Techs & Tools								
Lock Rotor / Rotor 120º / Blade1 facing down								
Transition Nacelle > HUB / Rotor 120º / Blade1 facing down / Techs & Tools								
ATD000609/ Rotor system - Blades - Inspection of the general condition of the pitch gear						Tech:	10	
ADIR013193	Blade1: Fill in Test Protocol ADIR013193	OK						
ATD000642/ Rotor system - Blades - Inspection of the angle encoder						Tech:	10	
ADIR014073.0	Blade 1: Encoder, encoder support, wires, teeth and connector checked? (no damages, no dirt, no corrosion, no loosen bolts, correct position)	OK						
ATD000692/ Rotor system - Blades - Maintenance of the carbon brushes of the pitch motor						Tech:	10	
ADIR014925.0	Blade 1: Brushes visually inspected and smooth slide of the brushes in the brush-holder checked?	OK						
ADIR014925.1	Blade 1: Measure the wear of the carbon brushes checked? (if it is out of tolerance replace it)	OK			31	mm	13	-
ADIR014925.2	Blade 1: Slip ring traces checked? (signs of wear, dust and/or deformations, if necessary clean it)	OK						
ATD000693/ Rotor system - Blades - Clean the collector room of the pitch motor						Tech:	10	
ADIR014928.0	Pitch motor collector room #1 cleaned?	OK						
ATD000720/ Rotor system - Blades - Inspection of the air gap of the pitch motor brake						Tech:	10	
ADIR015145.0	Blade 1: Gap of the pitch motor brake checked?	OK			1	mm	0	3
ATD000234/ Rotor system - Blades - Extraction of oil sample of the pitch gear						Tech:	F2	
ADIR010159.0	Pitch gear 1: oil sample extracted? (100ml)	OK			3819467	sample code		
ATD000233/ Rotor system - Blades - Checking of the oil level of the pitch gear						Tech:	F2	
ADIR010167.0	Pitch gear 1: oil level checked? (refill if necessary)	OK			3819467	sample code		
ATD000236/ Rotor system - Blades - Inspection of the limit switches of the pitch						Tech:	10	
ADIR010173.0	Limit switches blade1 visually checked? (Correctly position and firmly fixed)	OK						
ADIR010173.1	Activation plate blade1 visually checked? (Roller lever free)	OK						
ADIR010173.2	Mechanical support blade1 visually checked? (Good aligned, rusty, cracks, deformation or loss of coating material/paint)	OK						
ATD000243/ Rotor system - Blades - Inspection of the cabinets of the pitch						Tech:	11,12	
ADIR010207	Fill in Test Protocol ADIR010207	OK						

TD code		Result	Comment (absloute necessary if NOK)	MORS case ID	Measurement	Unit	Min	Max
ATD000241/ Rotor system - Blades - Extraction of grease sample of the blade bearing						Tech:	13	
ADIR010188.0	Blade 1: Bearing grease sample position A taken? (write down the sample code)	OK			5166265	sample code		
ADIR010188.1	Blade 1: Bearing grease sample position B taken? (write down the sample code)	OK			5166266	sample code		
ADIR010188.2	Blade 1: Bearing grease sample position C taken? (write down the sample code)	OK			5166267	sample code		
ATD000643/ Rotor system - Blades - Maintenance of the central lubrication of the pitch pinions						Tech:	11,12	
ADIR014076	Blade 1: Fill in Test Protocol ADIR014076	OK						
ATD000488/ Rotor system - Blades - Maintenance of the central lubrication of the blade bearing						Tech:	11,12	
ADIR010201.1	Blade1 bearing central lubrication level grease checked? (refilling if necessary)	OK						
ADIR010201.2	Blade1 bearing central lubrication system operation checked? (VISU, proper operation, no noises or vibration)	OK						
ADIR010201.3	Blade1 bearing central lubrication pinion shows grease externally checked?	OK						
ADIR010201.4	Blade1 bearing pinions area of work is greased checked? (Positions between 0º and 90º approx.)	OK						
ATD000242/ Rotor system - Blades - Inspection of the lubrication storage tank of the blade bearing						Tech:	13	
ADIR010204.00	Each blade has 32 grease storage tanks?	OK						
ADIR010204.01	Bottles replaced in blade 1 due to breakage or filling	OK			7	Units		
ATD000700/ Rotor system - Blades - Check the blade bearing seals						Tech:	3,4	
ADIR015001.6	Blade 1: Seal 1 (Sika 521 UV) inspected? (continuity, integrity, clean	OK						
ADIR015001.0	Blade 1: Seal 2 (rubber) inspected? (continuity, integrity, clean, leaks)	OK						
ADIR015001.7	Blade 1: Seal 3 (Sika 521 UV) inspected? (continuity, integrity, clean)	OK						
ADIR015001.8	Blade 1: Seal 4 (Sika 521 UV) inspected? (continuity, integrity, clean)	OK						
ADIR015001.1	Blade 1: Seal 5 (rubber) inspected? (continuity, integrity, clean, leaks)	OK						
ATD000446/ Equipotential bonding systems - General - Check of the surge arresters						Tech:		
ADIR010241.0	All surge arresters in the UPS cabinet visually checked and not triggered?	NOT DONE	Don't have checkmaster					
ADIR010241.2	VAL-MS 320/3+1/FM surge arrester in pitch1 cabinet visually checked and not triggered?	NOT DONE						
ADIR010241.3	PT 3-PB-ST surge arresters (x2) in pitch1 cabinet visually checked and not triggered? (use CHECKMASTER tester)	NOT DONE						

TD code		Result	Comment (absloute necessary if NOK)	MORS case ID	Measurement	Unit	Min	Max
Transition HUB > INSIDE BLADE1 / Rotor 240º / Blade2 facing down / Techs & Tools								
ATD000609/ Rotor system - Blades - Inspection of the general condition of the pitch gear						Tech:	10	
ADIR013193	Blade2: Fill in Test Protocol ADIR013193	OK						
ATD000642/ Rotor system - Blades - Inspection of the angle encoder						Tech:	10	
ADIR014073.1	Blade 2: Encoder, encoder support, wires, teeth and connector checked? (no damages, no dirt, no corrosion, no loosen bolts, correct position)	OK						
ATD000692/ Rotor system - Blades - Maintenance of the carbon brushes of the pitch motor						Tech:	10	
ADIR014925.5	Blade 2: Brushes visually inspected and smooth slide of the brushes in the brush-holder checked?	OK						
ADIR014925.6	Blade 2: Measure the wear of the carbon brushes checked? (if it is out of tolerance replace it)	OK			31	mm	13	-
ADIR014925.7	Blade 2: Slip ring traces checked? (signs of wear, dust and/or deformations, if necessary clean it)	OK						
ATD000693/ Rotor system - Blades - Clean the collector room of the pitch motor						Tech:	10	
ADIR014928.1	Pitch motor collector room #2 cleaned?	OK						
ATD000720/ Rotor system - Blades - Inspection of the air gap of the pitch motor brake						Tech:	10	
ADIR015145.1	Blade 2: Gap of the pitch motor brake checked?	OK			1	mm	0	3
ATD000234/ Rotor system - Blades - Extraction of oil sample of the pitch gear						Tech:	F2,11	
ADIR010159.1	Pitch gear 2: oil sample extracted? (100ml)	OK			5108387	sample code		
ATD000233/ Rotor system - Blades - Checking of the oil level of the pitch gear						Tech:	F2	
ADIR010167.1	Pitch gear 2: oil level checked? (refill if necessary)				5108387	sample code		
ATD000236/ Rotor system - Blades - Inspection of the limit switches of the pitch						Tech:	10	
ADIR010173.3	Limit switches blade2 visually checked? (Correctly position and firmly fixed)	OK						
ADIR010173.4	Activation plate blade2 visually checked? (Roller lever free)	OK						
ADIR010173.5	Mechanical support blade2 visually checked? (Good aligned, rusty, cracks, deformation or loss of coating material/paint)	OK						
ATD000241/ Rotor system - Blades - Extraction of grease sample of the blade bearing						Tech:	13	
ADIR010188.3	Blade 2: Bearing grease sample position A taken? (write down the sample code)	OK			5166268	sample code		
ADIR010188.4	Blade 2: Bearing grease sample position B taken? (write down the sample code)	OK			5166269	sample code		
ADIR010188.5	Blade 2: Bearing grease sample position C taken? (write down the sample code)	OK			5166270	sample code		
ATD000643/ Rotor system - Blades - Maintenance of the central lubrication of the pitch pinions						Tech:	11,12	
ADIR014076	Blade 2: Fill in Test Protocol ADIR014076	OK						

TD code		Result	Comment (absloute necessary if NOK)	MORS case ID	Measurement	Unit	Min	Max
ATD000488/ Rotor system - Blades - Maintenance of the central lubrication of the blade bearing						Tech:	11,12	
ADIR010201.6	Blade2 bearing central lubrication level grease checked? (refilling if necessary)	OK						
ADIR010201.7	Blade2 bearing central lubrication system operation checked? (VISU, proper operation, no noises or vibration)	OK						
ADIR010201.8	Blade2 bearing central lubrication pinion shows grease externally checked?	OK						
ADIR010201.9	Blade2 bearing pinions area of work is greased checked? (Positions between 0º and 90º approx.)	OK						
ATD000242/ Rotor system - Blades - Inspection of the lubrication storage tank of the blade bearing						Tech:	13	
ADIR010204.02	Bottles replaced in blade 2 due to breakage or filling	OK			11	Units		
ATD000700/ Rotor system - Blades - Check the blade bearing seals						Tech:	3,4	
ADIR015001.9	Blade 1: Seal 1 (Sika 521 UV) inspected? (continuity, integrity, clean	OK						
ADIR015001.2	Blade 1: Seal 2 (rubber) inspected? (continuity, integrity, clean, leaks)	OK						
ADIR015001.10	Blade 1: Seal 3 (Sika 521 UV) inspected? (continuity, integrity, clean)	OK						
ADIR015001.11	Blade 1: Seal 4 (Sika 521 UV) inspected? (continuity, integrity, clean)	OK						
ADIR015001.3	Blade 1: Seal 5 (rubber) inspected? (continuity, integrity, clean, leaks)	OK						
Transition Inside blade1 > HUB / Rotor 0º / Blade3 facing down / Techs & Toolss								
ATD000609/ Rotor system - Blades - Inspection of the general condition of the pitch gear						Tech:	10	
ADIR013193	Blade3: Fill in Test Protocol ADIR013193	OK						
ATD000642/ Rotor system - Blades - Inspection of the angle encoder						Tech:	10	
ADIR014073.2	Blade 3: Encoder, encoder support, wires, teeth and connector checked? (no damages, no dirt, no corrosion, no loosen bolts, correct position)	OK						
ATD000234/ Rotor system - Blades - Extraction of oil sample of the pitch gear						Tech:	F2	
ADIR010159.2	Pitch gear 3: oil sample extracted? (100ml)	OK			5277805	sample code		
ATD000233/ Rotor system - Blades - Checking of the oil level of the pitch gear						Tech:	F2	
ADIR010167.2	Pitch gear 3: oil level checked? (refill if necessary)	OK			5277805	sample code		
ATD000236/ Rotor system - Blades - Inspection of the limit switches of the pitch						Tech:	10	
ADIR010173.6	Limit switches blade3 visually checked? (Correctly position and firmly fixed)	OK						
ADIR010173.7	Activation plate blade3 visually checked? (Roller lever free)	OK						
ADIR010173.8	Mechanical support blade3 visually checked? (Good aligned, rusty, cracks, deformation or loss of coating material/paint)	OK						

TD code		Result	Comment (absloute necessary if NOK)	MORS case ID	Measurement	Unit	Min	Max
ATD000241/ Rotor system - Blades - Extraction of grease sample of the blade bearing						Tech:	13	
ADIR010188.6	Blade 3: Bearing grease sample position A taken? (write down the sample code)	OK			5311606	sample code		
ADIR010188.7	Blade 3: Bearing grease sample position B taken? (write down the sample code)	OK			5311607	sample code		
ADIR010188.8	Blade 3: Bearing grease sample position C taken? (write down the sample code)	OK			5311608	sample code		
ATD000692/ Rotor system - Blades - Maintenance of the carbon brushes of the pitch motor						Tech:	10	
ADIR014925.10	Blade 3: Brushes visually inspected and smooth slide of the brushes in the brush-holder checked?	OK						
ADIR014925.11	Blade 3: Measure the wear of the carbon brushes checked? (if it is out of tolerance replace it)	OK			31	mm	13	-
ADIR014925.12	Blade 3: Slip ring traces checked? (signs of wear, dust and/or deformations, if necessary clean it)	OK						
ATD000693/ Rotor system - Blades - Clean the collector room of the pitch motor						Tech:	10	
ADIR014928.2	Pitch motor collector room #3 cleaned?	OK						
ATD000720/ Rotor system - Blades - Inspection of the air gap of the pitch motor brake						Tech:	10	
ADIR015145.2	Blade 3: Gap of the pitch motor brake checked?	OK			1	mm	0	3
ATD000643/ Rotor system - Blades - Maintenance of the central lubrication of the pitch pinions						Tech:	F2	
ADIR014076	Blade 3: Fill in Test Protocol ADIR014076	OK						
ATD000488/ Rotor system - Blades - Maintenance of the central lubrication of the blade bearing						Tech:	11,12	
ADIR010201.11	Blade 3 bearing pinions area of work is greased checked? (Positions between 0º and 90º approx.)	OK						
ATD000242/ Rotor system - Blades - Inspection of the lubrication storage tank of the blade bearing						Tech:	13	
ADIR010204.03	Bottles replaced in blade 3 due to breakage or filling	OK			8	Units		
ATD000700/ Rotor system - Blades - Check the blade bearing seals						Tech:	2-3	
ADIR015001.12	Blade 1: Seal 1 (Sika 521 UV) inspected? (continuity, integrity, clean	OK						
ADIR015001.4	Blade 1: Seal 2 (rubber) inspected? (continuity, integrity, clean, leaks)	OK						
ADIR015001.13	Blade 1: Seal 3 (Sika 521 UV) inspected? (continuity, integrity, clean)	OK						
ADIR015001.14	Blade 1: Seal 4 (Sika 521 UV) inspected? (continuity, integrity, clean)	OK						
ADIR015001.5	Blade 1: Seal 5 (rubber) inspected? (continuity, integrity, clean, leaks)	OK						

TD code		Result	Comment (absloute necessary if NOK)	MORS case ID	Measurement	Unit	Min	Max
Transition Nacelle > HUB / Rotor 30º / Blade1 horizontal / Techs & Tools								
ATD000670/ Equipotential bonding systems - General - Visual inspection of the lightning protection of the blade from inside						Tech:	2-3	
ADIR014727.0	Blade 1: The sheath of LPS cable checked (looking for any damage)?	OK						
ADIR014727.1	Blade 1: The connection point of the LPS cable in the bearing checked (looking for signs of overheating, deformation, discoloration)?	OK						
ADIR014727.2	Blade 1: The bolted joint of the electrical connections checked?	OK						
Transition HUB > Inside blade3 / Rotor 150º / Blade2 horizontal / Techs & Tools								
ATD000670/ Equipotential bonding systems - General - Visual inspection of the lightning protection of the blade from inside						Tech:	2-3	
ADIR014727.3	Blade 2: The sheath of LPS cable checked (looking for any damage)?	OK						
ADIR014727.4	Blade 2: The connection point of the LPS cable in the bearing checked (looking for signs of overheating, deformation, discoloration)?	OK						
ADIR014727.5	Blade 2: The bolted joint of the electrical connections checked?	OK						
Transition Inside blade3 > HUB / Rotor 0º / Blade3 horizontal / Techs & Tools								
ATD000670/ Equipotential bonding systems - General - Visual inspection of the lightning protection of the blade from inside						Tech:	2-3	
ADIR014727.6	Blade 3: The sheath of LPS cable checked (looking for any damage)?	OK						
ADIR014727.7	Blade 3: The connection point of the LPS cable in the bearing checked (looking for signs of overheating, deformation, discoloration)?	OK						
ADIR014727.8	Blade 3: The bolted joint of the electrical connections checked?	OK						

NACELLE

General House Keeping NACELLE

General cleaning
Corrosion, cracks, deformations, leakages, damages, wear, painting defects:
ATD000638; ATD000394; ATD000391: Complete drive train; Cooling water system- Pipes, pumps, compensator, heat exchange, helihoist platform and fences
ATD000355; ATD000282; ATD000280, ATD000289: Drive train- Brake system, rotor lock, bearing pipelines
ATD000393; ATD000492: Visual inspection of the internal platform for roof access, Nacelle cover
Dust, deformations, damages, signs of burnt, corrosion, loosen cables:
ATD000425; ATD000398: Visual inspection of the electrical cabinets
Functionality, corrosion, cracks and/or deformations:
ATD000615; ATD000387: Visually inspect the emergency lighting and the nacelle lights

Comments:	MORS case ID	Measurement	Unit	Min	Max

TD code	Checkpoint	Result	Comment (absloute necessary if NOK)	MORS case ID	Measurement	Unit	Min	Max
ATD000311/ Wind turbine system - General - Check the operability of the emergency stop buttons						Tech:	10,11	
ADIR010163.0	Emergency stop button at cabinet NC300 checked. (Optimum condition and operability).	OK						
ADIR010163.1	Emergency stop button at cabinet NC320 checked. (Optimum condition and operability).	OK						
ATD000405/ Central hydraulic system - General - Maintenance of the hydraulic accumulator						Tech:	1(TL)-1	
ADIR010279.0	acumulator rotor lock 570.1 precharge pressure checked (20ºC)? (system depressurized)	OK	Refill to 50 bar		40.0	bar	47.5	52.5
ADIR010279.2	acumulator rotor lock 570.2 precharge pressure checked (20ºC)? (system depressurized)	OK	Refill to 50 bar		40.0	bar	47.5	52.5
ADIR010279.4	acumulator yaw brake 740.1 precharge pressure checked (20ºC)? (system depressurized)	OK	Refill to 120 bar		116.0	bar	117.5	122.5
ADIR010279.6	acumulator yaw brake 740.2 precharge pressure checked (20ºC)? (system depressurized)	OK	Refill to 120 bar		114.0	bar	117.5	122.5
ADIR010279.8	acumulator yaw brake 740.3 precharge pressure checked (20ºC)? (system depressurized)	OK	Refill to 120 bar		111.0	bar	117.5	122.5
ADIR010279.10	acumulator yaw brake 740.4 precharge pressure checked (20ºC)? (system depressurized)	OK	Refill to 120 bar		110.0	bar	117.5	122.5
ADIR010279.12	acumulator rotor brake 920.1 precharge pressure checked (20ºC)? (system depressurized)	OK	Refill to 90 bar		82.0	bar	87.5	92.5
ADIR010279.14	acumulator rotor brake 920.2 precharge pressure checked (20ºC)? (system depressurized)	OK	Refill to 90 bar		78.0	bar	87.5	92.5
ADIR010279.16	No leakages at the o-ring and/or the connections verified?	OK						
ADIR010279.17	Presence of the following damages checked? (Gas leakages at the precharge valve; Corrosion at the accumulators' body and its connections; Degradation at the coating protection; Mechanical damages at the accumulators' body, poppet valve and/or connections)	OK						

TD code		Result	Comment (absloute necessary if NOK)	MORS case ID	Measurement	Unit	Min	Max
ATD000361/ Central hydraulic system - General - Replacement of the filter elements						Tech:	1(TL)-1	
ADIR010271.0	Tank breather filter (x1) replaced? (spin-on air filter in case of Hydratech)	OK						
ADIR010271.1	Pressure filters (x2) replaced?	OK						
ADIR010271.2	Return line filter (x1) replaced?	OK						
ATD000362/ Central hydraulic system - General - Visual inspection of the hydraulic oil level						Tech:	1(TL)-1	
ADIR010276.0	Oil level checked and under stablished values?	OK			190.0	l	160	200
ATD000357/ Drive train system - Rotor bearing system - Visual inspection of the seal of the rotor bearing						Tech:	1(TL)-1	
ADIR010183.0	All bearing seals checked? (no leaks, no deformations, no cuts, no defects)	OK						
ATD000297/ Drive train system - Brake system drive train - Visual inspection of the brake disc						Tech:	1(TL)-1	
ADIR010178	Fill in Test Protocol ADIR010178	OK						
ATD000309/ Drive train system - Brake system drive train - Visual inspection if there is oil in the drainage circuit/ reservoir of the rotor caliper						Tech:	1(TL)-1	
ADIR010158.0	Drainage pipes checked, no defects?	OK						
ADIR010158.1	Oil presence inside the pipes detected?	OK						
ATD000285/ Drive train system - Brake system drive train - Visual inspection of the wear of the brake pads of the rotor brake callipers						Tech:	1(TL)-1	
ADIR010211.0	Functionality of the calipers checked?	OK						
ADIR010211.1	Rotor brake pads checked?	OK						
ATD000283/ Drive train system - Brake system drive train - Visual inspection of callipers						Tech:	1(TL)-1	
ADIR010197.0	Check the brake calipers: look for painting defects, loosen components, external leakages, deformations, fitting marks, signals of hot points, joint bolts movement and corrosion.	OK						

TD code		Result	Comment (absloute necessary if NOK)	MORS case ID	Measurement	Unit	Min	Max
ATD000614/ Drive train system - Brake system drive train - Measurement of the wear of the rotor brake pads						Tech:	F2	
ADIR016787	Fill in Test Protocol ADIR016787	OK						
ATD000638/ Drive train system - Speed conversion system - Visual inspection of the complete drive train						Tech:	F2	
ADIR014030.5	Surface of the hollow shaft inspected from the hub? (Look for damages, dirtiness, corrosion or leakages).	OK						
ADIR014030.12	The rotor hollow shaft and the center tube interface visually checked? (no leakages)	OK						
ADIR014030.7	O-ring between the gearbox housing and the calipers plate inspected? (Look for leakages).	OK						
ADIR014030.8	O-ring between the brake disc and the calipers plate inspected? (Look for leakages).	OK						
ATD000359/ Central hydraulic system - General - Inspection						Tech:	F1,1	
ADIR010250.0	All hoses and fittings of the hydraulic system checked? (no leaks, no corrosion, no painting defects, no damage)	OK						
ADIR010250.1	All mechanical components (metallic structure, lower tray) checked? (no damages, no corrosion, no painting defects)	OK						
ADIR010250.2	All hydraulic components (accumulators, filter cover, oil tank etc.) checked?	OK						
ATD000360/ Central hydraulic system - General - Oil sample						Tech:	F2	
ADIR010251.0	Hydraulic system oil sample taken? (100ml sample; write down the sample code)	OK			5311610	sample code		
ATD000691/ Equipotential bonding systems - General - Visual inspection of the equipotential bonding of the brake disc						Tech:	2,3	
ADIR014922.0	Upper grounding reels checked? (grounding cable and connections, contact with disc, spring functionality)	OK						
ADIR014922.1	Right grounding reels checked? (grounding cable and connections, contact with disc, spring functionality)	OK						
ADIR014922.2	Left grounding reels checked? (grounding cable and connections, contact with disc, spring functionality)	OK						

TD code		Result	Comment (absloute necessary if NOK)	MORS case ID	Measurement	Unit	Min	Max
ATD000401/ Obstacle warning systems - General - Maintenance/visual inspection of the helicopter beacon						Tech:	F2	
ADIR010257.0	Helicopter beacon #1, checked? (no dirt, damages, humidity)	OK						
ADIR010257.1	Helicopter beacon #2 checked? (no dirt, damages, humidity)	OK						
ADIR010257.2	Helicopter beacon #1 lights operation checked? (use visu-parameters 15018, 15019)	OK						
ADIR010257.3	Helicopter beacon #2 lights operation checked? (use visu-parameters 15018, 15019)	OK						
ATD000402/ Obstacle warning systems - General - Maintenance of the navigational lighting						Tech:	F1,1	
ADIR010253.0	Inspect the navigational lights of both masts. (Look for damages, broken parts and/or dirt).	OK						
ADIR010253.1	Lightening is working properly?	OK						
ATD000490/ Common cooling systems - General - Maintenance of the equalization tank generator of the cooling water system						Tech:	F1	
ADIR010673.0	Equalization tank visually checked? (no damages, no anomalies, no deformation)	OK						
ADIR010673.1	Check and write down the nitrogen charging pressure value? (no tension, tank drained)	OK			1.5	bar	0	1.5
ADIR010673.2	Refilling the nitrogen pressure ? (IF APPLY)	OK			1.5	bar	1.5	1.5
ADIR010673.4	Concentration of the lubricant checked?	OK			50.0	%	40	60
ADIR010673.3	Refilling cooling water done?	OK			2.1	bar	1.8	2.2
ATD000723/ Environmental measuring system - General - Replacement of the sinter filter						Tech:	F1	
ADIR015161.0	Sinter filter properly replaced?	OK						
ATD000436/ Nacelle system - Main frame and nacelle - Inspection of the roof sealing						Tech:	F2,11	
ADIR010272.0	Rear transversal roof seals visually inspected? (head bolts sealed, no cracks, no deformations, no loosen parts, adjust if it is necessary)	OK			0	mm	0	5
ADIR010272.1	Front transversal roof seals visually inspected? (head bolts sealed, no cracks, no deformations, no loosen parts, adjust if it is necessary)	OK			0	mm	0	5
ADIR010272.2	Corner roof seals visually inspected? (no gaps, in case of no conformity report to supervisor)	OK						
ADIR010272.3	Flaps seals visually inspected? (no gaps, position, orientation)	OK						
ADIR010272.4	Longitudinal flaps seals visually inspected? (check gaps, position, orientation)	OK						
ATD000389/ Nacelle system - General - Check the fences for access to the brake disc area						Tech:	1,2	
ADIR010266.0	Sides drivetrain fences and bolts checked? (no corrosion, no damage, no loose parts, clean)	OK						
ADIR010266.1	Upper drivetrain fences and bolts checked? (no corrosion, no damage, no loose parts, clean)	OK						
ADIR010266.2	Correct performance of the security fence checked? (rotor locked and the safety valve 590 opened)	OK						

TD code		Result	Comment (absloute necessary if NOK)	MORS case ID	Measurement	Unit	Min	Max
ATD000480/ Wind turbine system - General - Check the operability of the switchgear of the safety sensors for overspeed						Tech:	F2,12	
ADIR010168.0	Overspeed sensor of rotor operability checked? (reaching 4rpm, safety chain opens and the blades drive to end position 90.5º)	OK						
ADIR010168.2	Error list for status code "Rotor over speed, safety chain" checked? (no deviations, no abnormalities)	OK						
ADIR010168.1	Overspeed sensor of generator operability checked? (reaching 40rpm, safety chain opens and the blades drive to end position 90.5º)	OK						
ADIR010168.3	Error list for status code "Rotor over speed, safety chain" checked? (no deviations, no abnormalities)	OK						
ATD000375/ Power generation system - Generator cooling system - Maintenance/visual inspection of the generator						Tech:	F2,12	
ADIR010227.0	Check the fans and their damper actuators: look for damages, dirtiness or corrosion signs.	OK						
ADIR010227.1	Check the ventilation flaps in the air conduct of both fans (A&C): look for damages or corrosion signs.	OK						
ADIR010227.2	Any unusual noise? (in VISU select “Generator Nacelle ventilation” and press over fans A).	OK						
ADIR010227.3	Any unusual noise? (in VISU select “Generator Nacelle ventilation” and press over fans C).	OK						
ATD000445/ Equipotential bonding systems - General - Visual inspection of the grounding system (external nacelle and heli hoist)						Tech:	F2	
ADIR010226.0	Handrail visually inspected? (no damages, corrosion, dents, craks..)	OK						
ADIR010226.1	Nacelle´s grounding straps inspected? no corrosion, burnts	OK						
ADIR010226.2	Upper nacelle lightning rods inspected? (no corrosion, burnts)	OK						
ADIR010226.3	Lateral nacelle lightning rods inspected? (no corrosion, burnts)	OK						
ADIR010226.4	Lower nacelle lightning rods inspected? (no corrosion, burnts)	OK						
ADIR010226.5	Nacelle´s back side lightning rods? (no corrosion, burnts)	OK						
ADIR010226.6	Cellar platform lightning rods inspected? (no corrosion, burnts)	OK						
ADIR010226.7	Grounding strap bolted connection visually inspected? (no corrosion, bolted connections lost and/or loosen)	OK						
ATD000839/ Drive train system - Speed conversion system - Replacement of the air filter of the gearbox						Tech:	F1	
ADIR016544.0	Air filter of the gearbox replaced?	OK						