

Aircraft Maintenance Programme template Annex VI to ED 2020/002/R

Part-ML aircraft maintenance programme (AMP)			
Aircraft identification			
1	Registration(s):D-KBKW	Type: Duo Discus XLT	Serial No (s):212
	Owner: Pieter van Vliet (and 5 others)		Motor Solo 2350D Ser. No.:202
Basis for the Maintenance Programme			
2	Minimum inspection programme (MIP) as detailed in the latest revision of AMC1 ML.A.302(d) <input checked="" type="checkbox"/> and DAH instructions for continued Airworthiness is used.		
Design Approval Holder (DAH) Instructions for continuing airworthiness (ICA)			
3	Equipment manufacturer and type	Applicable ICA reference (revision/date not required assuming the latest revision will always be used)	
3a	Aircraft	Duo Discus XLT Schempp Hirth	Wartungshandbuch für den Motorsegler DUO DISCUS T November 2011
3b	Motor Solo Type 2350D	SOLO Kleinmotoren GMBH	Handbuch für Motor 2350D, 22 Oct. 2014
3c	Propeller OEFL.5.110/83	Fa. Ingrid Oehler TB GmbH	Wartungshandbuch für den Motorsegler DUO DISCUS T November 2011
3d	Safety Harness	Gadringer	Bagu 5201/Schugu 2601, Gadringer, NEW, April 2012
3e	Airspeed indicator	2 x Winter 7FMS 421	Einbau und Wartungsanweisung für die Staudruck Fahrtmesser 6FMS 4 September 2016
3f	Altimeter	2 x Winter 4FGH20	Einbau und Wartungsanweisung für die Höhenmesser 4FGH10 (March 2016)
3g	Variometer	2 x Winter 5StV5 variometer	Einbau und Wartungsanweisung Winter , April 2016
3h	Radio	Becker	Operation Manual VHF-Transceiver AR6201-(022) 5 July 2013
3i	Transponder	Trig Avionics TT21/TT22	TT21/TT22 Mode S Transponder Installation Manual 00560-00-AQ 22 September 2017
3j	Safety Coupling	Tost G88 Tost E85	Betriebshandbuch G72, G73, January 1989, Revisions 3, Mrch 2001 LTA-1989-018/3
3k	FLARM	LX minibox	FLARM manual, sept. 2007
3l	LXNAV	LX8000	LX90xx Manual, 29 May 2020

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Certification statement																	
8	<p style="text-align: center;"><i>'I will ensure that the aircraft is maintained in accordance with this maintenance programme and that the maintenance programme will be reviewed and updated as required.'</i></p> <p>Signed by the person/organisation responsible for the continuing airworthiness of the aircraft according to ML.A.201:</p> <p>Owner/ operator: <input checked="" type="checkbox"/></p> <p>Name of owner/ operator: Pieter van Vliet</p> <p>Address: Thaborwei 10, 8633 WS Ysbrechtum</p> <p>Telephone +31652643007</p> <p>Email: pieterdirkvanvliet@gmail.com</p> <p>Signature/ date:</p>																
9	<p>Appendices attached:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">– Appendix A</td> <td style="width: 10%;">YES <input checked="" type="checkbox"/></td> <td style="width: 10%;">NO <input type="checkbox"/></td> <td style="width: 65%;">= Minimum Inspection Program</td> </tr> <tr> <td>– Appendix B</td> <td>YES <input checked="" type="checkbox"/></td> <td>NO <input type="checkbox"/></td> <td>= Maintenance Data</td> </tr> <tr> <td>– Appendix C</td> <td>YES <input type="checkbox"/></td> <td>NO <input checked="" type="checkbox"/></td> <td>= Maintenance alternative to DAH</td> </tr> <tr> <td>– Appendix D</td> <td>YES <input type="checkbox"/></td> <td>NO <input checked="" type="checkbox"/></td> <td>table deleted</td> </tr> </table>	– Appendix A	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	= Minimum Inspection Program	– Appendix B	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	= Maintenance Data	– Appendix C	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>	= Maintenance alternative to DAH	– Appendix D	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>	table deleted
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– Appendix C	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>	= Maintenance alternative to DAH														
– Appendix D	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>	table deleted														

Appendix A – Minimum inspection programme (MIP) (only applicable if a MIP different from the one described in AMC1 ML.A.302(d) is used – see Section 2 above)

Annex A: Minimum inspection programme (MIP) and DAH (manufacturer) instructions for continued Airworthiness is used.

Appendix B – Additional maintenance requirements (include only if necessary – see Section 4 above)

This appendix is supposed to include only the tasks which are included in the AMP, either at the recommended interval or at a different one.

~~*(All repetitive maintenance tasks not included here, or the interval differences should be kept by the CAMO/CAO (when contracted) in their files with their corresponding justifications. Appendix D may optionally be used.*~~

Nevertheless, the owner/CAMO/CAO is responsible for taking into account all instructions, even if they are not adopted and listed here. The person performing the AR, if reviewing the AMP, is not responsible for the completeness of this appendix, but may do some sampling as part of the investigations and the findings discovered during the physical review).

Task Description	References	Interval (tick box if the selected interval differs from that required in the referenced document)

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Maintenance due to specific equipment and modifications		
Leaktest+ operational check Altimeter	Einbau und Wartungsanweisung Winter, May 2017 Winter leaktest, TN 3/81	Operational check annually Leak test every 24 months
Leaktest+ operational check Airspeed indicator	Einbau und Wartungsanweisung Winter, Sept 2016 Winter leaktest, TN 3/81	Operational check annually Leak test every 24 months
Transceiver Becker	Operation Manual VHF-Transceiver AR6201-(022) 5 July 2013	Operational check of installation, Transceiver = maintenance free
Transponder Trig TT21/TT22	Trig Operation and installation manual, September 2017	Operational check of installation, Transceiver = maintenance free
Maintenance due to repairs, NOT APPLICABLE		
Maintenance due to life-limited components (This should be only if the MIP is used. Otherwise, this data is already part of the DAH's data used as the basis for the AMP.)		
Safety belt Harness	Gadringer	12 years
Maintenance due to Mandatory Continuing Airworthiness Instructions (ALIs, CMRs, specific requirements in the TCDS, etc.)		
Maintenance recommendations, such as TBO intervals, issued through service bulletins, service letters, and other non-mandatory service information		
FLARM Anti Collision	LX Minibox FLARM manual	Annual software update
Maintenance due to repetitive ADs		
Tost Coupling	LTA-1989-018/3	Annual operational check and cleaning, TBO 2000 cycles
Maintenance due to specific operational/airspace directives/requirements, NOT APPLICABLE		
Maintenance due to the type of operation or operational approvals, NOT APPLICABLE		

Appendix C – Maintenance tasks alternative to the DAH's ICA (not less restrictive than the MIP) (include only if necessary – see Sections 5 above)			
Task Description	Recommended interval	Alternative inspection/task (if adopted with deviations)	Amended interval (if adopted with deviations)
<i>When the DAH's ICA are used as the basis for the AMP, this appendix is used to include the tasks alternative to the DAH's ICA, which are included in the AMP.</i>			
<i>(When a CAMO/CAO is contracted, all elements justifying the deviations from the DAH's ICA should be kept by the CAMO/CAO and the organisation should provide a copy of these justifications to the owner)</i>			
NOT APPLICABLE			

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INSPECTIE PROGRAMMA versie 06-07-2020

Fabikant: Schempp-Hirth	Blad 1 van 3 bladen
Eigenaar: Pieter van Vliet	Type: Duo Discus XLT
Reg.nr.: D-KBKW	Motor Solo 2350D

Algemeen		
Act.	Omschrijving	Paraaf+No.
1	Onderzoek of er klachten of defecten zijn vermeld en of deze op de juiste wijze zijn afgehandeld.	
2	Controleer eventuele tijdelijke voorzieningen of reparaties; werk deze definitief af.	
3	Controleer de uitvoering van eventuele niet verplichte en verplichte wijzigingen ook in de onderhoudsmap en/of vlieghandboek van het vliegtuig.	

Vliegtuig		
Act.	Omschrijving	Paraaf+No.
1	Gewicht- en zwaartepuntbepaling na reparaties of wijzigingen	
2	Roeruitslagen bepalen <u>Metten van roeruitslagen:</u> Rolroeren links \uparrow 71 mm \pm 5 mm (is 70) en \downarrow 36 mm \pm 5 mm (is 36 mm) Rolroeren rechts \uparrow 71 mm \pm 5 mm (is 72) en \downarrow 36 mm \pm 5 mm (is 32 mm) Hoogteroer \uparrow 52 mm \pm 4 mm (is 55) en \downarrow 52 mm \pm 4 mm (is 55 mm). Richtingsroer \rightarrow 190 mm \pm 20 mm (is 210mm) en \leftarrow 190 mm \pm 20 mm (is 210 mm) Remkleppen naar beneden: 95 mm \pm 10 mm (is links 90 en rechts 90 mm). Remkleppen open: 24 cm uitslag aan beide kanten.	
3	<u>Metten van speling op de roeren WHB 2.3 :</u> Rolroeren max. 3 mm / Hoogteroer max. 3 mm / Richtingsroer max. 0 mm	
4	Speling vleugels controleren. Speling in de vleugel(s) mag alleen op aanwijzing van de constructeur gerepareerd worden.	
5	Verticale en horizontale speling op de hoofdverbindingen WHB 2.4. max. 30 mm	
6.	Hoogteroeraansluiting speling controleren (eventueel bijstellen zie WHB 2.4)	
7.	Metten remkleppen in geopende stand, links (241 mm) en rechts (240 mm)	

Cockpit		
Act.	Omschrijving	Paraaf+No.
1	Cockpit schoonmaken en inspecteren	
2	Zitkuip uitbouwen, schoonmaken en inspecteren (beschadigingen)	
3	Kabel ontkoppelhaak inspecteren, evt. vervangen	
4	Zwaartepunthaak controleren op roest, beschadiging en werking	
6	Kabel voetenstuur verstelling inspecteren, evt. kabel vervangen	
7	Voetenstuur verstelling schoonmaken, smeren met vaseline (WHB 3.2.3)	
8	Kabels voetenstuur controleren (S-geleiding!) smeren met teflonspray (WHB 3.1)	
9	Trimmechanisme inspecteren	
10	Veiligheidsgordels schoonmaken en inspecteren	
11	Gordelsluitingen op roest inspecteren (datum controleren, reviseren na 12 jaar)	
12	Controleer de cockpitkap, het touwtje aan de kap, de kapvergrendeling, het noodafwerpsysteem en de kapscharnieren op conditie en werking.	
13	Opschriften in de cockpit controleren	
14	Besturing controleren op roest en beschadiging, smeren	
15	Controleer de goede werking en bevestiging van het kap vergrendelingmechanisme. Controleer de cockpitkap scharnieren (in romp en kap) op vastzitten in het laminaat.	
16	Controleer, d.m.v. simulatie, de goede werking van het kapafwerp-mechanisme.	

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Fabikant: Schempp-Hirth	Blad 2 van 3 bladen
Eigenaar: Pieter van Vliet	Type: Duo Discus XLT
Reg.nr.: D-KBKW	Motor Solo 2350D

17	Controleer de goede werking van het schuifraampje.	
18	Controleer de staat en werking van de wielremhendel.	
19	Controleer de conditie van de kabels en de juiste werking van het waterbalastlosingsmechanisme.	
20	Controleer de werking en juiste kleur van alle bedieningsknoppen en handvatten. (Zie vlieghandboek)	

Instrumenten		
Act.	Omschrijving	Paraaf +No.
1	Hoogtemeter: lektest uitvoeren,	
2	Snelheidsmeter: lektest uitvoeren	
3	Zend/ontvanginstallatie Trig functietest	
4	Mechanisch vario controleren	
5	Elektronische vario controleren	
6	Instrumentenpaneel inspecteren op beschadigingen.	
7	Aansluitingen en slangen controleren op lekkage, doorgankelijkheid	
8	Trig transponder operationele check	

Romp		
Act.	Omschrijving	Paraaf +No.
1	Romphuid controleren op beschadigingen zoals scheuren, krassen, gaten, deuken en delaminatie	
2	Romp in- en uitwendig reinigen	
3	Beslagen controleren op vrijgang en montage in de kunststof constructie (delaminatie)	
4	Alle toegankelijke metaaldelen controleren op beschadigingen en roest	
5	Neuswiel, hoofd wiel en staartwiel demonteren: Wiel en wiellagers reinigen en smeren	
7	Wielkast en -ophanging schoonmaken en controleren wiel-intrek-systeem	
8	Wielas en -ophanging controleren op verbuiging, speling en beschadiging	
9	Bandenspanning (neus 3 Bar, hoofd wiel 4 Bar en staartwiel 3 Bar),- toestand en -profiel controleren	
10	Remwerking en toestand remkabels controleren. Remschijven vervangen bij een dikte van 1,5 – 2 mm. WHB 5.4.1.2	
11	Remolie controleren eventueel bijvullen met DOT 3 tot DOT 5 op glykolbasis. (ontluchten zie WHB 5.4.2)	
12	Paspunten vleugels reinigen en smeren.	

Vleugels		
Act.	Omschrijving	Paraaf+ No.
1	Vleugel huid controleren op beschadigingen zoals scheuren, krassen, gaten, deuken en delaminatie. Tussen vleugel en rolroer moet een naad van minstens 1,5 mm zitten.	
2	Laklaag schoonmaken en beschermende laag aanbrengen	

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Fabikant: Schempp-Hirth Eigenaar: Pieter van Vliet Reg.nr.: D-KBKW	Blad 3 van 3 bladen Type: Duo Discus XLT Motor Solo 2350D
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3	Controleer de vleugel-romp bevestigingsbeslagen op conditie, en vastzitten in het laminaat. (delaminatie). Controleer de vleugel-romp speling. Teveel speling (>30mm) dient te worden weggewerkt met shims.	
4	Alle toegankelijke metaaldelen controleren op beschadigingen en roest	
5	Aansluitpunten ailerons en remkleppen controleren en smeren	
6	Aileronscharnieren en aandrijving controleren en smeren	
7	Spleetafdichting rolroeren evt. vervangen	
8	Controleer de water dump valves op voldoende open gaan. Controleer of de ontluuchtings- en afwateringsgaatjes vrij zijn en controleer aan de onderzijde van de romp en achterzijde van de vleugel of de verlijmingen in goede staat zijn.	
9	Controleer of niet meer dan 10 mm verschil zit tussen de water dump valves in de open stand.	
10	Watertanks inspecteren op lekkage (bij lekkage naar fabriek) WHB 3.2.3	
11	Controleer de remklephendels en de remklepkasten op conditie en vastzitten. Remkleppen inspecteren, smeren, gasveerkracht achterlijst meten (WHB 3.1.2) > 15 daN)	
12	Hoofdbout controleren op conditie en speling	
13	Vleugelwieletje op aanwezigheid en conditie	

Stabilo, Richtingsroer en Hoogteroer		
Act.	Omschrijving	Paraaf +No.
1	Huid controleren op beschadigingen zoals scheuren, krassen, gaten, deuken en delaminatie	
2	Laklaag schoonmaken en beschermende laag aanbrengen	
3	Beslagen controleren op vrijgang en montage in de kunststof constructie	
4	Alle toegankelijke metaaldelen controleren op beschadigingen en roest	
5	Hoogteroer / stabilo controleren op reinheid, speling en conditie; smeren	
6	Aansluitpunten hoogteroer controleren	
7	Richtingsroer inspecteren, scharnieren smeren	
8	Richtingsroer controleren en kabelbevestiging	

ELEKTRIEK, PITOT-STATIC EN KOMPAS		
Act.	Omschrijving	Paraaf +No.
1	Controleer de bedrading op slijtage, bevestiging en op sporen van kortsluiting. Ook de accu's.	
2	Controleer de bedrading op slijtage, bevestiging en kans op kortsluiting. Ook de accu's.	
3	Controleer de stekkers en schakelaars.	
4	Controleer de aarding van besturingssysteem en zwaartepuntshaak.	

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Motor / propeller inspectie	
INSPECTION INTERVALS: Date of annual inspection:	
Inspection after an engine time ofhours	
1. Engine mount (pylon), pivoting mechanism and cooling baffles	

SUBJECT OF INSPECTION	KIND OF INSPECTION	DATE	SIGNATURE + NO.
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1.1	Engine mount (pylon) and pivot bearing	Check for cracks, check bearing		
1.2	Spindle drive	<ul style="list-style-type: none"> o Function o Play and proper attachment in mounting brackets o limit switches and their mount for proper attachment and condition 		
1.3	Gas strut	Disconnect spindle drive and check that the mass of the power plant is about counterbalanced by the gas strut while pylon swings up and down.		
1.4	Arresting wires	<ul style="list-style-type: none"> o condition of arresting wires, protecting tubes, Nicopress sleeves and guides for arresting wires o tension of arresting wires: with extended power plant the arresting wires should be equally taut o Is the retaining rubber hooked up and secured? o While retracting, the arresting wires must slide around the exhaust without jamming 		
1.5	Engine stop block	Check that retracted power plant rests firmly against its stop block at the bot-tom of the engine compartment. Rubber pad firmly adhering to stop block?		
1.6	Engine suspension	<ul style="list-style-type: none"> o Check for proper spacing of the annular rubber engine shock mounts (vibration isolators). o Condition of rubber elements on lower engine suspension o Condition of rubber stops (O-rings) at the pylon 		
1.7	Diaphragm fuel pump	<ul style="list-style-type: none"> o Check that the fuel pump is clear from engine doors while pylon swings up and down. o Attachment of the lines 		
1.8	Engine door actuating mechanism	<ul style="list-style-type: none"> o Check linkage for free movement, check for low friction in the system. o Condition of rubber cord at the actuating cable 		
1.9	Engine doors and door hinges	Check for damage and proper fit		
1.10	Decompression valve control	When releasing the "DECO" handle, the lever on the pylon must return to its stop so that a gap of at least 2 mm (0.08 in.) exists between the metal link on the decompression valves and the lever. With the "DECO" handle pulled fully back, the prop must rotate with ease.		
1.11	Cooling baffles	Check all three cooling baffles for cracks and proper attachment. Wires and fuel lines mustn't rub against edges of the cooling baffles. The left cooling baffle mustn't touch the fixing bolt of the engine arresting wire.		

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1.12	Propeller blades	It must be impossible, that propeller blades jam against the rear edge of the front engine doors while extending the power plant.		
1.13	General	Check that all power plant accessories, wires, lines etc. are properly connected and secured. Check that cables, wires and lines do not get caught while power plant extends/retracts.		

2. Fuel system

SUBJECT OF INSPECTION	KIND OF INSPECTION	DATE	SIGNATURE + NO.
2.1	Fuel tank o Check tank for external damage and leaks o Check for proper ground connection.		
2.2	Tank mounts Check for damage		
2.3	Fuel line / vent line o Check lines for proper connection, chafing marks and leaks. o Check that tank vent line is clear. o Expansion tank: check for leaks and proper fixing		
2.4	Fuel shut-off valve Check valve for proper function.		
2.5	Fuel filter Replace CARCOMA fuel filter element.		

3. Electrical system power plant, engine test run

SUBJECT OF INSPECTION	KIND OF INSPECTION	DATE	SIGNATURE + NO.
3.1	Wiring of engine accessories o Check for chafing marks and proper attachment of plugs and switches. o Check for loose bolts and safe connections.		
3.2	Engine control unit o Check unit for proper function – see Flight Manual, page 7.3.2 through 7.3.4. o Check limit switches for proper function.		
3.3	Ignition switch o Trigger guard in place? o With ignition “ON” there must be no green or yellow RPM signal (engine stopped)		
3.4	Engine test run (flight test) o Check for proper starting behavior. o Check for oscillations and vibrations. o Check RPM indicator: 115 km/h Up to VH = approx. 71 kt GREEN 62 mph SIGNAL o Check ignition switch for proper function. o Check fuel shut-off valve for proper function.		

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Onderhoudsprogramma
Duo Discus XLT, W.Nr. 212, D-KBKW
Revisie -, März 2017
Inspectie Motor 25 uurs/jaarijks



3. Powerplant unit (ref MM cpt 4.2.2, solo MM cpt 5)

Every 12 months or 25 operating hours, whatever comes first, check the following points in addition to the daily checks:

Performed

- _____ Clean engine
- _____ Remove Decompression valves and clean
- _____ Check entire engine for loose parts and bolts
- _____ Check all fuel lines
- _____ Check wires and electrical connections
- _____ Check Exhaust
- _____ Remove and check ignitors
- _____ Disassemble, wash and check the decompression – valves
- _____ Check belt tension. Apply a test load of 120N right angled in the middle of the belt drive. Measure the displacement of the belt. It should be 4mm. If necessary open the clamping screws of the propeller axle and tighten the belt by rotating the propeller axle. Secure the screws with Loctite 243.

Inspectie uitgevoerd door: Naam

 Datum

 Handtekening

 AML nr:

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Onderhoudsprogramma
Duo Discus XLT, W.Nr. 212, D-KBKW
Revisie -, März 2017
Inspectie propellor 25 motoruren/jaarlijks



4. Propeller inspectie (referentie Oehler MM cpt 5, Handbuch rev 14.06.99)

Performed

_____ Inspecteer de propeller op beschadigingen

_____ Inspecteer de propeller naaf op beschadigingen

Inspectie uitgevoerd door:

Naam

Datum

Handtekening

AML nr:

[List of Pilot owner tasks is according to Annex Vb \(Part ML.A.803\)](#)