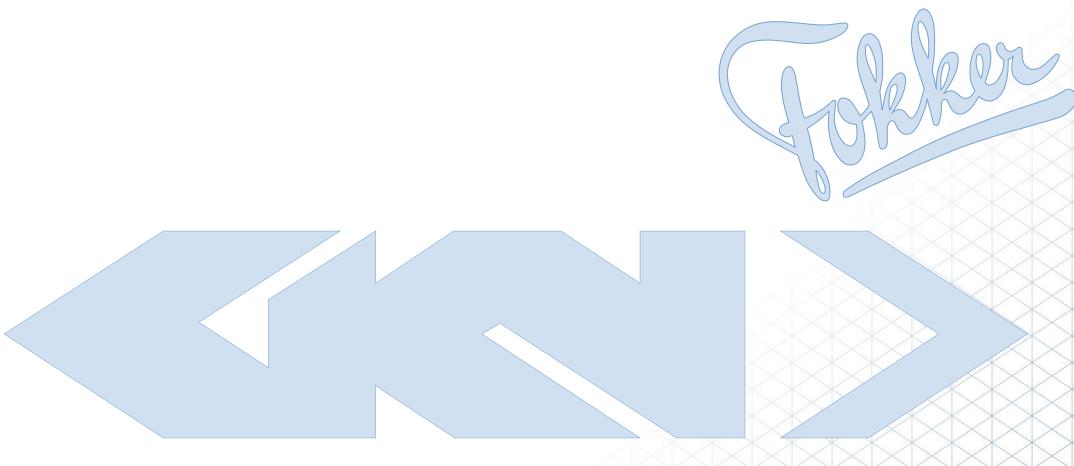




Learning Development



03 November 2021 Bert Folkers





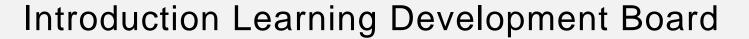
Opening (Introduce LDB)

Fokker Training & Authorization From current to future

AMS / LMS (History until Status)

Questions





- January 2020 Originated from VSM / Makigami "Training & OSV"
- Team:
 - Quality Systems representative Papendrecht;
 - Operations representative Papendrecht);
 - Learning & Development representative GKN Aerospace);
 - Quality Systems representative Hoogeveen;
 - Manufacturing Engineering representative Hoogeveen;
- Meeting frequency once every two weeks;
- Activities related to education, training, development and authorization
- Project AMS/LMS in one system





Opening (Introduce LDB)

Fokker Training & Authorization From current to future

AMS / LMS (History until Status)

Questions

Jokkoc

Fokker Aerostructures - Training & Authorization From commencement to fully authorized (Grow path)

Commencement of employment (Introduction training)

Procedure:

HRM-0030

Instruction new employees

Details:

<u>HRM-1010</u> = Summary of ...

"Education Package – General"

<u>OP-ALG-000</u> = Specific for ...

"All employees"

Complete at start of employment

Education Package (Function specific)

Procedure:

HRM-0010

Education and training

Details:

HRM-1xxx = Summaries of ...

"Education Package – Commodity"

OP-XXX-xxx = Function specific

Part completed within 3 months

Part completed within 1 year

Example:

HRM-1040 ".. Composites"

OP-CMP-050 "Assembly operator"

Authorization(s) Perform / Release (Activity specific)

Procedure:

QMS-3010

Authorizations

Details:

AH22 "Authorizations Manual"

AxxxB – Perform

= "Certificate of Competence"

AxxxM – Inspect and Release

Example:

A183B "Processing adhesives" A030M "OSV - Assembly"





AMS / LMS (History until Status) Authorizations Management & Learning Management

Current state

Future state

Transition

Pilots





Current systems

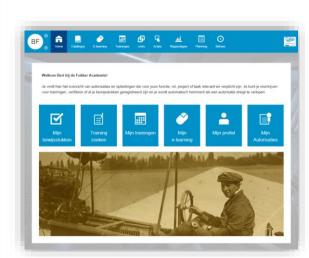
Education package(s): Train

QMS

GKN AEROSPACE OP-CMP-050 / 29.nov.2019/05 [terus mear / back to HRM-1040] SPECIFICATIE SPECIFICATION In dit pakket zijn de opleidingseisen vastgelegd voor In this package the training requirements are in all pakket zijn de operangseisen vasigelege voor Samenbouwers binnen de Composieten afdelingen, die zich bezighouden met het samenbouwen van onderdelen waarin thermoptast en/of thermoharder Dit pakket is opgesplitst in trainingen die dienen te zijn vollooid binnen 3 maanden en 1 jaar na indienstreding, aangevold met programma specifieke indienstreding, aangevold met programma specifieke This package is split into trainings that must be VOORORI FIDING PREI IMINARY TRAINING LBOMMBO niveau Level of lower vocational education BINNEN 3 MAANDEN WITHIN 3 MONTHS Structurele Composeten - Basis
Foreign Object Damage Elimination (FOD)
Afhandelen productiedocumentatie Basics Sarety (Vca) Basics in Structural Composites Foreign Object Damage Elimination (FOD) Handling production documentation Golden Rules Production Gouden Regels Productie Praktikgerichte theorie Samenbouw 1) Practically-oriented theory Assembly ¹ FP specifications BINNEN 1 JAAR Description Reading blueprints / drawings - Basics Elementary measuring Praktijkprogramma samenbouw 1) Practical program assembly 1 PROGRAMMA SPECIFIEK PROGRAM SECIFIC Omschrijving Industriële robots Kranendonk ⁵) Description Industrial robots "Kranendonk" 2) 5) Industrial robots "Kranendonk" (*)*) Industrial robots (*)*] Industrial robots (*)*] Industrial robots (*)*] Industrian robots Industriële robots 2) Inductielassen G650 en AAP Rudder en F6X Rudder & Elevator 5) Inductielassen G650 Rudder en Elevator 2) Weerstandslassen J-Nose A380 3) Weerstandslassen D- en J-Nose A340 4) Induction weiding of Gulfstream G650 Elevators and Rudde Resistance weiding of Airbus A380 J-Nose Resistance welding of Airbus A340 D-Nose and J-Nose Induction weiding Gulfstream AAP Rudder and Dassault F6X Elevator on Rudder Apache AH64 and F36 Lightning II ssen Guffstream AAP Rudder en Dassault

Training registration

- Fokker Academy (LMS)
- GKN Wilbur (not linked)

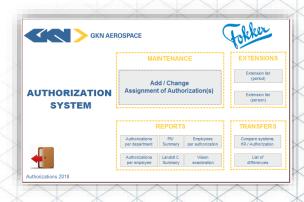


Authorization requirements: Authorization registration:

• AH-22



Access Database



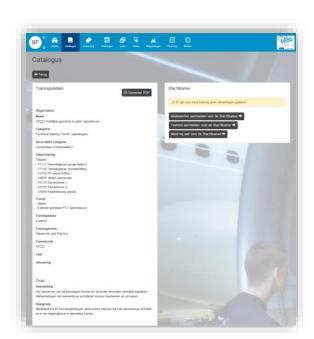




Current Forms

Request for training:

- LMS
- Via portal / catalogue



Request for exemption:

According HRM-0010

Hardcopy



Request for authorization: Practical matrix(TotJ):

- According QMS-3010
 Via Quality Systems
- Hardcopy



via gaanty Cyclon

Hardcopy

PRAKTIJKMATRIX: O PRACTICAL MATRIX: F	ONTVANGSTCONTROLE (E RECEIVING INSPECTION (E	I- EN C-INSPECTIO	N)	
Employee :		Em	ployee number	
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Current reports

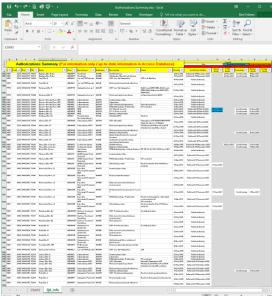
Training summary

• LMS



Autorizations summary:

Excel



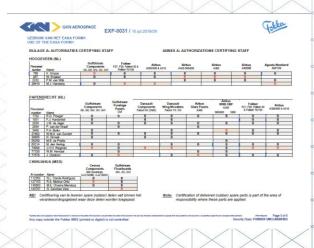
Equivalents list:

Excel

		Substituten	
Cursuscode	Cursusnaam	Equivalenten	Cursusnaam2
IC054	Catia solid	XA307	Catia solid
IC055	Catia basis	XA301	Catia basis
IC058	Catia NC	XA303	Catia NC
IC080	Catia drafting	XA309	Catia drafting
IC216 PV008	Catia V5 o verview	IC220 PM001	Catia V5 Manufacturing
PV008	Veilig hijsen	PV005	Machinist mobiele kranen Veilig hilsen allround
PV006 PV006	Veilig hijsen		Last verplaatsen
PV008	Veilig hijsen Veilig hijsen	XL151 XL152	Intern transport A380 panels
PV016	Basis veiligheid Fokker	PV018	Basis veiligheid VCA
PV016 PV016	Basis veiligheid VCA	PV016	Veiligheid voor leidinggevenden VCA
T0023	Oppervlakte Techniek Algemeen	XG071	Elementaire Galvanotechniek
TC015	CNC freesmachines (bewerkingsoentra)	W47B4	mach, Versoanen
TG001	Galvanotechniek A1	XG071	Elementaire Galvanotschniek
TG 003	Galvanotechniek A	XG071	Elementaire Galvanotechniek
W16B2	VMBO	W18B2	LTS -A
W16B2	VMBO	W16B2	LBO A
W10B2	VMBO	W10B2	LTS - B/C
W16B3	VMBO	W16B3	LBO B/C
XA432	Aluminium en aluminiumlegeringen	XA431	Aluminium en aluminiumlegeringen
XA504	Proces auditeur, praktisch	BA094	Lead auditor
XA504	Proces auditeur, praktisch	XA501	Auditing (abc-a)
XA504	Proces auditeur, praktisch	XA501 XA502	Auditing Systeem
XB081	Beve stigings middelen	V28B4	Vieo triab ouver metaal
XB121	Badeninstallate, bediening en werking	V2084 WP132	Operator B
XC071	Composieten structurele, basis	V28B4	Vileg trigbouwer Kunststoffen
XC071 XC081	CNC basiskennis	W28B4	Drazier IW pbo
XC081	CNC basiskennis	W2884 W2984	Frezen IIw pbo
XC081	CNC basiskennis	W2584 W3084	Verspanend bewerken
XC081	CNC basiskennis	W47R4	mach, Versoanen
XC081	CNC basis kennis	WW030	Machinaal verspanen
XC081	CNC basis kennis	WV035	Verspanen A
XC081	CNC basis kennis	XC082	CNC programmeren
XC081	CNC basis kennis	X F015	Erozen CNC
XC081	CNC basis kennis	XG923	gereedschapsmaker basis
XC081	CNC basiskennis	XM 104	Metaalbewerken Verspanen praktikgerichte theorie
XC081	CNC basiskennis	XP038	Praktijkprogramma Frezen
XC081	CNC hasiskennis	XP037	Praktijkprogramma Bankwerkeniber fab.
XD161	Afval- en demiwater	WP132	Operator B
XE163	Massaverbindingen en weerstandsmeting	XS805	Samen bouwen Boeing 747-8
XF015	Frezen CNC programmeren	W47B4	mach. Verspanen
XF015	Frezen CNC programmeren	WWW.	MTS Werktuigbouw
XF032	POD Programmeren	XS805	Samen bouwen Boeing 747-8
XG071	Galvanotechniek elementair	T0023	Oppervlakte Teichniek Algemeen
		TG001	
XG071 XG071	Galvanotechniek elementair Galvanotechniek elementair	TG003	Galvanotechniek A1 Galvanotechniek A
XG071 XG071	Galvanotechniek elementair Galvanotechniek elementair	TO023	
XG071 XG071	Galvanotechniek elementair Galvanotechniek elementair	TO023 WP132	Oppervlakte techniek algemeen
XG071 XG071	Galvanotechniek elementair Galvanotechniek elementair	WP132 XO044	Operator B Oppervlakte behandeling
XG0/1 XG500		XO044 XM301	
XG500 XID71	Basistraining A380 Glare	XM301 XI071	Metaallijmen
XID71 XK005	Aftandelen van productedocumenten	X1071 XS805	Identificatiekaart Ontvangstoontrole Samenbouwen Boeing 747-8
XK005 XK022		XS805 XL211	
XK022 XK022	Kunstharsen, afwegen en mengen	XL211 XP224 + XK133	Lijmen koolstofvezelversterkte Kunststoffen Praktijk en Theorie Lamineren
	Kunstharsen, afwegen en mengen		
XK024 XK049	Kunststoffen, vezelversterkte	V28B4	Vileg trigbouwer Kunststoffen
	Basiscursus kwaliteitszorg	BK003	Kwaliteitskunde, voortgezet Post HBO
XK049	Basiscursus kwaliteitszorg	BK007	Integrale Kwa liteitszorg Post HBO
XK049	Basiscursus kwaliteitszorg	BK026	Kwaliteitsuitvoering
XK049	Basiscursus kwaliteitszorg	XK040	KA organisatie en werkmethoden
XK049	Basiscursus kwaliteitszorg	XK080	Integrale Kwa liteitszorg MBO
XK049	Basiscursus kwaliteitszorg	XK913	Kontrole ur meetkamerikalibrate
XK049	Basiscursus kwaliteitszorg	XK920	Kontroleur, ontvangst opl.traject MS
XK049	Basiscursus kwaliteitszorg	XK923	Kontroleur verspaning
XK049	Basiscursus kwaliteitszorg	XK928	Kontoleur sabo f16
XK049	Basiscursus kwaliteitszorg	XK929	Kontrole ur pla atwerk
XK049	Basiscursus kwaliteitszorg	XK930	Kon tole ur lassen
XK049	Basiscursus kwaliteitszorg	XK932	Kon toleur, gereedschap
XK049	Basiscursus kwaliteitszorg	XK933	Kon trole ur op per vlaktebeh andelingen
XK049	Basiscursus kwaliteitszorg	XK934	Kontroleur, schilder
XK049	Basiscursus kwaliteitszorg	XK944	Kon trole ur mechanisch la boratorium
XK049	Basiscursus kwaliteitszorg	XK957	Kon tole ur meetkamer/kalibrate
XK049	Basiscursus kwaliteitszorg	BK008	Kwalteitszorg, integrale orientatie
XK132	Kunststoffen samenbouw prakt.ger.th.	V28B4	Vlieg tuigbouwer Kunststoffen
XK132	Kunststoffen samenbouw praktiger.th.	XK130	Praktijkgerichte theorie kunststoffen samenbouw PPD
XK133	Kunststoffen lamineren prakt ger.th.	V28B4	Vileo tulobouwer Kunststoffen
	Werking en bedienig frees-robotn stallatie	TR022	Industriele robots

Certifying Staff (EASA):

EXP-0031 (in QMS)





AMS / LMS (History until Status) Authorizations Management & Learning Management



Current state

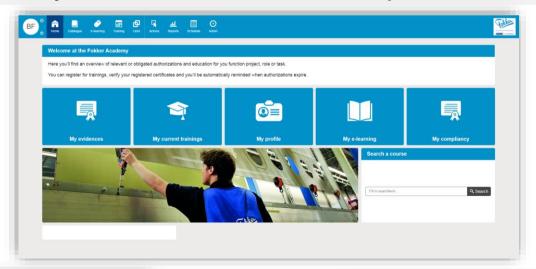
Future state

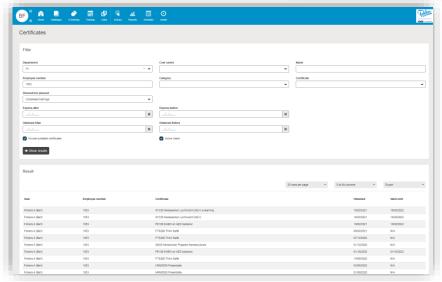
Transition Pilots





Future state – system, forms and reports

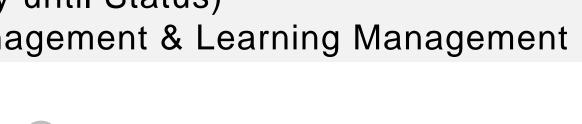




Request for company authorisation				
				×
Personal information				^
Department				
Name of person				
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Qualifications				•
Type/component qualification				
Rating				
Remarks				
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Applicant				~







Current state
Future state
Transition
Pilots



Transition

Select pilot(s)

Set up AMS/LMS:

- Education Package(s)
- Teams & Roles
- Add existing (archived) evidence
- Automated assignment authorization(s) based on evidence

Process yet unchanged – registration in AMS AND Authorizations database

Future options: Link to Fokker 4.0 (Industry 4.0 / MES)



AMS / LMS (History until Status) Authorizations Management & Learning Management



Current state
Future state
Transition
Pilots

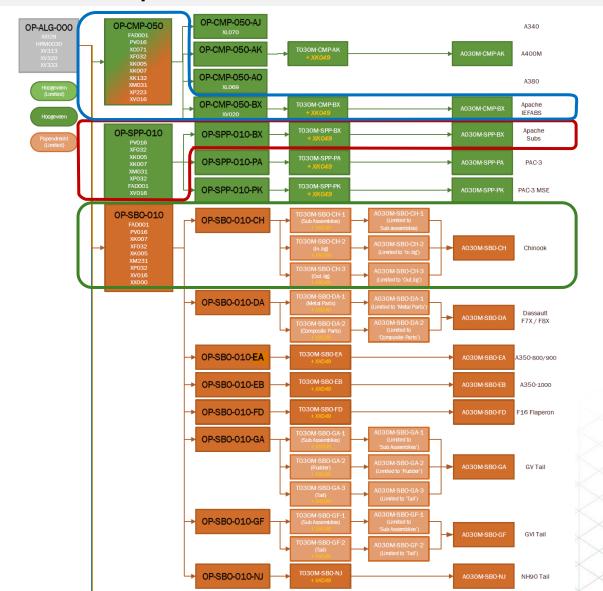


Pilots Assembly (A030M)! Operator Self Verification Schematic representation



Hoogeveen: Subs Assembly Apache shelf

Papendrecht: **Assembly Chinook**







Pilot Assembly Composites - Hoogeveen Coverage requirements

		Authorization to Perform Authorization to Release (USV) Certificate of attendence (Verklaring)								C	ertificate of	t qualificati	ion			Irwing on the Job															
Calcrusher	Beh::annheid	ADST B-Cen M ling and apply	A183 B M sing and processing	A301B Hoisting	A350 B'Vorking with ha andou	Q220 Bin stelling bu shes by	Q22 18 Locking of bearings a	AGOMACARA EX OEV Acembir		FA0019 Gewartike machines	X B500 bergen vin lagers	X 1032 Foreign Object Damage	XI300 in orte zen van bussen	XK006 athandelen van produc	XV016 FP Regulation s	XV020 Verbindingen, Click Bond	f D001 Reading Blue Prints	PV006 Vellg hijsen ? Holsting	core de safety	XOX 1 Studdini Composites	XK007 Golden Fales Froduction	XK049 Quality Assumance Bristo	XK 132 Kun stato fikn samenbou	X1211 il jmen kool stofvezel v	XM031Men suring Bernentury	X P223 prakt jkprogramma kun	X 5062 Scaling	T030M-CMP-BX Training on th	T097B-Gen Training on the J	T 1838 Training on the Job	T320B Training on the Job T321B Training on the Job
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Arsian M (Mehmet) ①	71%							×				*		~	·	×			~	~	~	~	~		~	~		×			
Barelds RJ (Jeroen) ①	60%	×	×					×					4	•		×	×		¥	~	¥	4	4	*		4	4	×	×	×	
Bosman B (Björn) ①	95%	~	~					~				V.				×	~		V	~	4	V	×	~	~	~	~	~			
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Kikkert JB (Jordie) ①	7196		×											~	V	×	V		V	~	¥	V	~	~	~			×		X	
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Pot H (Harry) ①	90%	~												4	×	4	~		V	~	4	~	4		~	~	×	~	~		
Schaap P (Peter) ①	95%	~						~						4	V	4	~		V	~	4	V	4				×		~		
Schmaltz L (Laurenz) ①	95%			4				~						4	V	×	V	~	V	V	4	V	4			4	~			4	
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Ymker K (Klaas) ①	65%		4					×						¥	×	×	V		V	¥	4	V	8	×	¥	=		×		4	





Opening (Introduce LDB)

Fokker Training & Authorization

AMS / LMS (History until Status)

Questions





