



Handout DA40 NG Systems

Version 5.2



INTENTIONALLY BLANK







































































Mass				
		Option "574"	Option "662"	
Empty (typical)	900 kg			
Max TKOF	1280 kg		1310 kg	
Max Ramp	+ 4 kg			
Max LDG	1216 kg	1280 kg		
Max ZFW	1200 kg	1265 kg		
Min flight	940 kg			
DA40 NG			36	
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Max. Ba	iggage L	oad		d G
	Standard	ions		
		Baggage Extension	"Short" Baggage Extension	
Standard compartment	30 kg	45 kg	30 kg	
Max in "tube" (if installed)	5 kg			
Baggage Extension		18 kg	15 kg	
Total	35 kg	45 kg	45 kg	
DA40 NG				38
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KIAS at	940 kg	1000 kg	1100 kg	1200 kg	1280 kg +above
VR Flaps T/O	56	58	61	65	67
V50 up to 50 ft Flaps T/O	62	65	67	70	72
VY up to safe altitude Flaps T/O			72		
V cruise climb Flaps UP			88		

Chara	cteri	stic S	Speed	s		GHT TRAINING
KI AS at	940 kg	1000 kg	1100 kg	1200 kg	1216 kg	1280 kg +above
Vref Approach Flaps LDG	66	68	72	76	76	77
Vref Approach Flaps T/O	68	70	74	77	77	78
Vref Approach Flaps UP	71	73	78	82	82	83
Minimum V Go Around Flaps T/O			7	2		
NG						4
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Engine	opera	ation		<i>*//></i> C	Diamond ELIGHT TRAINING
CHECK AFTER ENGINE START					
16 Oil and Cool 17 Parking brak Aft	ant tempera	ture	R r 50% uni	CHECKED ELEASED	16 17
End of Checklist; see next page for "During taxi" – items					
BEFORE TAKE OFF CHECK after line-up Available power check (see pg.6) PERFORMED					
10 sec. power MAX, RPM 2200 – 2300 (min. 2100 below -10°C), min. load acc. table below					
Altitude [ft]	25°C -20°C -10°C 31°F -4°F 14°F	0°C 10°C 32°F 50°F	20°C 30°C 68°F 86°F	40°C 50°C 104°F 122°F	
0 2000 4000	94%		95% 95% 95%	92% 90% 92% 92%	
6000 8000 10000	969 Г	% 94% 93%	95% 95% 94% 91% 88%	92% 91%	117
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F	Je		sy	st	e	m					4		Dia	GHT T	ON TRAININ	d vg
	DA 40 NG	AFM	*	Diam	ond	Tempon Alterna F	iry Revision e Means for uel Quantity]	DA 40 NG	AFM		Diam	end Eur	Temporar Alternate Fu	y Revision Means for el Guantity
	The tables	are added:							11	ong Rang	e Tank (If In	stalled) Co	flouration			
	I Standard 1	ank Config	uration]	Fuel 0	auantity Ind	loator II Pite	ih Angle Re	ading	Usable Fu	el Quantity
	t territori u	ant conne	at an other			-		.	i	10	20	3°	4 ²	6°	US gal	Liter
	Fuel	Suantity Ind	licator II Pit	oh Angle Re	ading	Usable Fi	el Guantity	+	- 33	up fo 5	un to 5	un to 6	un fo E	un to D		
	19	2°	3°	42	6°	US gal	Liter		- 11	35	25	16	8	1	1	3.8
	up to 5	up to 5	up to 5	up to 5	up to 5	0	0	1	i j	45	36	30	20	15	2	7.6
Conversion	25	21	16	12	6	1	3.8	4 I]	65	48	40	35	28	3	11.3
Conversion	47	37	28	20	10	2	7.6	+	- !!	75	68	55	47	39	4	15.1
tables in the AFM	83	58	45	48	30	3	11.3	+	- 34	92	80	72	66	55	5	18.9
CODIES IN THE AI M	90	87	78	71	55	5	18.9	†	- 11	110	108	78 95	70 87	77	7	22.7
	105	97	90	80	73	6	22.7	†	- ii	130	123	110	100	90	8	30.3
	112	107	98	92	83	7	26.5	II	- i j	140	132	115	102	95	9	34.1
	123	115	108	103	95	8	30.3	4 I]	148	136	129	122	113	10	37.8
	135	128	120	112	105	9	34.1	+	- !!	162	149	138	130	118	11	41.6
	160	152	145	137	130	11	41.6	†	- 11	174	158	150	138	131	12	45.4
	175	168	157	150	143	12	45.4	t I	- 11	185	180	175	166	156	14	53.0
	192	188	180	172	165	13	49.2	II	- ij	200	195	184	176	168	15	56.8
	225	215	208	202	192	14	53.0	↓]	217	205	195	189	181	16	60.6
									<u> </u>	232	220	215	204	196	17	64.4
	Doc.#0	5.01.15Æ	TR-M	4M-40-816	18-No	v-2015 P	age 7-34c	I]	Doc. # 6	238 01.15Æ	2.9U TR-MA	221 M-40-816	18-Nov	~2015 Pa	ed.1 ge 7-34d
DA40 NG																148
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DA40)NG [Diesel	Ор	era	ation		Dian FLIGHT	TRAINING
The fol	lowing item	is added to the	e Modific	ations	checklist:			
Modifi	cation		Sour	ce	Insta	alled		
Diesel	Operation		OÄM 40	0-370	□ yes		no	
Airplan	Airplane S/N: Registra		ation:		Date:	applicable		
NO.				NO.		YES	NO	
O04	Diesel Ope	ration		0	06-Dec-2013			
								160
			© Diamond F	light Trainir	ng			











DA40NG Diesel C	Operation
Performance be	elow 10°C OAT
TKOF Ground Roll	
TKOF Distance	AUU 0 %
TKOF Climb	Doduce by EO ft/min
Cruise Climb	Reduce by 50 m/min
DA40 NG	166
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Condition	Annunciation	Description
Pitch Failure	PTCH	Pitch axis control failure. AP is inoperative.
Roll Failure	ROLL	Roll axis control failure. AP is inoperative.
AP TRIM Switch Stuck, or Pitch Trim Axis Control Failure	PTRM	If annunciated when AP is engaged, a failure has occurred in the pitch trim system. If annunciated when AP is not engaged, a failed or stuck switch is causing the annunciation
System Failure	AFCS	AP and manual electric trim (AP TRIM) are unavailable. FD may still be available.
Elevator Mistrim Up	†ELE	A condition has developed causing the pitch servo to provide a sustained force in the nose direction.
Elevator Mistrim Down	JELE	A condition has developed causing the pitch servo to provide a sustained force in the nose down direction.
Aileron Mistrim Left	←AIL	A condition has developed causing the roll servo to provide a sustained left force.
Aileron Mistrim Right	AIL→	A condition has developed causing the roll servo to provide a sustained right force.
Preflight Test	PFT	Performing preflight system test. Upon completion of the test, the aural alert will be heard.
	PFT	Preflight system test has failed.

	GFC 7	00 AFCS	n d NG
	When FD or <i>i</i>	AP is engaged:	
	Bank Angle	Flight Director Response	
	< 6°	Rolls wings level	
	6° to 25°	Maintains current aircraft roll attitude	
	> 25°	Limits bank to 25°	
DA40 NG			205
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GFC 700	AFCS				
	Vertical Mode	Control	Ann	Inciation	
	Pitch Hold	(default)		PIT	
	Selected Altitude Capture	*		ALTS	
	Altitude Hold	ALT Key	ALT	NNNN FT	
Vertical modes	Vertical Speed	VS Key	VS	NN NN FPM	
	Flight Level Change	FLC Key	FLC	NNN KT	
	Vertical Path Tracking	VNV Key		VPTH	
	VNV Target Altitude Capture	**		ALTV	
	Glidepath***	APR		GP	
	Glideslope	Key		GS	
DM0 NG	Go Around	GA Button		GA	
					211
	© Diamond Flight Training				

Vertical mod	de range	anc	l char	ige increme	ents
Pitch Mode	Control	Annunciatio		Reference Range	Reference Change Increment
Pitch Hold	(default)		PIT	-15° to +20°	0.5°
Altitude Hold	ALT Key	ALT	nnnnn ft		
Vertical Speed	VS Key	VS	nnnn fpm	-3000 to +1500 fpm	100 fpm
Flight Level Change	FLC Key	FLC	nnn kt	70 to165 kt	1 kt
Glideslope Arm/Capture/Track	APR Key		GS		
Go Around	GA Button		GA		


GFC 700 AFCS		
Roll Mode	Control	Annunciation
Roll Hold	(default)	ROL
Heading Select	HDG Key	HDG
Navigation, GPS Arm/Capture/Track		GPS
Navigation, VOR Enroute Arm/Capture/Track		VOR
Navigation, LOC Arm/Capture/Track (No Glideslope)	NAV Key	LOC
Navigation, Backcourse Arm/Capture/Track		BC
Approach, GPS Arm/Capture/Track		GPS
Approach, VOR Arm/Capture/Track		VAPP
Approach, ILS Arm/Capture/Track (Glideslope Mode automatically armed)	Arn Key	LOC
Go Around	GA Button	GA













AHRS	The Autopilot disconnects, Autopilot and Flight Director are inoperative. Manual electric trim is available.
HDG function of AHRS	The Autopilot will remain engaged with the loss of the HDG Mode.
MFD	The Autopilot will remain engaged with limited functionality.
PFD	The Autopilot disconnects, Autopilot and Flight Director are inoperative. Manual electric trim is available.
GIA No. 1	The Autopilot disconnects and Autopilot, Flight Director and manual electric trim are inoperative.
GIA No. 2	The Autopilot disconnects and Autopilot and manual electric trim are inoperative. Flight Director is available.
GPS No. 1 and 2	The Autopilot and Flight Director operates in NAV modes only (LOC, BC, VOR, VAPP) with reduced accuracy.
ADC	The Autopilot disconnects and Autopilot is inoperative. The flight director is available except for air data modes (ALT, VS, FLC). Manual electric trim is available.





















TKOF, LE	DG Perform	ance gener	al		Diamond
For temperatures the neighboring v	, altitudes and weights be alues.	tween those provided, use	a linear	interpola	ation between
For weights below	v 1100 kg (2425 lb), use d	lata for the lowest weight.			
For operation at o temperature show	outside air temperatures lo vn.	ower than provided in thes	e tables,	use data	a for lowest
Use extreme cau (areas are indicat	tion for operation at outsic ted with a diagonal line).	ae air temperatures higher	tnan pro	vided in	the tables
	Effect of wind	The effect of 50% of the component and 150% of component is already inc the head and tailwind fac	headwing the tailw corporate ctors.	d ind :d in	
		TKOF/LDG distance	TKOF	LDG	
	Headwind	minus 10 % for each	12 kt	20 kt	
	Tailwind	plus 10 % for each	2 kt	3 kt	
	Effect of slope		TKOF	LDG	
	Uphill	For each 1% increase	15%		
	Downhill	ground roll by		10%	
DA40 NG					232
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	Fuel Flow		
Power Setting [%]	Fuel Flow [US gal / h]	Fuel Flow [Liter / h]	
30	2.9	11.0	
35	3.3	12.5	
40	3.7	14.0	
45	4.0	15.5	
50	4.4	16.5	
55	4.7	18.0	
60	5.1	19.5	
65	5.6	21.5	
70	61	23.0	
75	6.6	25.0	6,6 USG/nr
80	7.1	27.0	
85	7.6	28.5	
90	8.1	30.5	
92	8.3	31.5	
100	94	35.5	

S	1000 kg (2205 lb) Flaps UP T/O LDG	KIAS 58 54 55	P ^e KCAS 56 53 52	3 KIAS 59 58 56	Bank 0° KCAS 60 57 55	Angle 4 KIAS 64 63 61	5° KCAS 66 63 61	6 KIAS 76 75 72	0° KCAS 79 74 73	
	1100 kg				Bank	Angle				
	(2425 lb)	0)°	3	0°	4	5°	6	0°	
	Flaps	KIAS	KCAS	KIAS	KCAS	KIAS	KCAS	KIAS	KCAS	
	UP	61	59	63	64	70	71	83	84	
	T/O	56	55	60	60	66	66	79	78	
	LDG	57	54	59	58	65	65	77	77	
	1200 kg				Bank	Angle				
	(2646 lb)	0)°	3	0°	4	5°	6	0°	
	Flaps	KIAS	KCAS	KIAS	KCAS	KIAS	KCAS	KIAS	KCAS	
	UP	64	61	67	66	73	73	86	87	
	T/O	60	57	64	62	69	68	82	81	
	LDG	59	56	62	61	68	67	81	80	
	1310 kg				Bank	Angle				
	(2888 lb)		0°	:	30°	4	l5°		50°	
	Flaps	KIAS	KCAS	KIAS	KCAS	KIAS	KCAS	KIAS	KCAS	
	UP	66	63	68	68	74	75	88	89	
	T/O	62	59	65	63	71	70	84	83	
DA40 NG	LDG	60	58	63	62	69	69	82	82	236
DIAMOND FLIGHT TRA				© Dia	amond F	light Tr	aining			Compiled by Peter Schmidleither

-	Tał	<e 0<sup="">.</e>	ff c	dis	tar	nce	Ç			
		Take-Off D	Distance	e - Norm	nal Proc	edure -	1310 k	g / 2888	lb 🗲	Available tables:
	We	eight: 1310 k	(g / 2888	lb			Fla	ps: T/(C	1310 kg
		v _R : 6	7 KIAS				Pow	ver: MA	х	1280 kg
		v ₅₀ : 72	2 KIAS			R	unway:	dry, pave	ed, level	1200 kg
	Press.	Distance	C	Dutside /	Air Temp	perature	- [°C] / [ˈ	°F]		1100 Kg
	[ft] / [m]	[m]	0 / 32	10 / 50	20 / 68	30 / 86	40 / 104	50 / 122	ISA	
	01	Ground Roll	365	385	410	430	460	495	397	1
	SL	15 m / 50 ft	550	580	610	640	680	720	590	
	1000	Ground Roll	390	410	435	465	500	535	418	
	305	15 m / 50 ft	580	610	640	680	730	770	616	
	2000	Ground Roll	415	440	465	500	540	575	439	
	610	15 m / 50 ft	610	640	680	730	780	830	646	
	3000	Ground R	leadw	/ind:		TKO	F dista	ance n	ninus 10	0% for each 12 kt
	914	15 m / 50 Ground P	ailwir	nd:		TKO	F dista	ance p	olus 10%	6 for each 2 kt
	Ļ	L	Jphill :	slope:		Grou	nd rol	l plus	15% for	each 1% of slope
	Up to 10000	ft V	Vithou	it whe	el fair	rings:	G T	round KOF d	roll plus listance	s 20 m plus 30 m
DA40 NG										237
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	TKOF on	Grass RWY	
	Length of grass	TKOF roll	Wet grass
	5 cm	+ 10%	
	5 - 10 cm	+ 30%	additional + 20%
	10 - 25 cm	+ 45%	
	> 25 cm	TKOF should not	be attempted
	+ !	50% on soft gro	und !
DA40 NG			238
		© Diamond Flight Training	238 Compiled by Peter Schwidleiter

		CI	im	ıb	р	er	foi	rm	าล	nc	e	4	
				C	ake -	Off Cli	imb •	laps	T/O			-	Available tables:
	Flaps: v _v : 72	T/O KIAS								Powe 2100	er: 92% RPM	or max.	Take-Off Climb, Flaps T/O
	[q]] / [6	Press.	Press.		Out	side Ai	Rate r Temp	of Clir eratur	nb - [ft e - [°C]	/min] / [°F]			1310 kg 1280 kg 1200 kg
	Veight [kç	Alt. [ft]	Alt. [m]	-20 -4	-10 14	0 32	10 50	20 68	30 86	40 104	50 122	ISA	1100 kg
		SL	-	660	650	640	630	620	615	590	550	629	
		2000	610	640	630	620	610	605	595	555	515	613	1
		4000	1219	620	610	600	595	585	560	520	475	597	
	œ	6000	1829	600	590	580	570	555	520	475	\sim	580	
	288	8000	2438	580	570	555	540	525	480	435	\leq	557	
	/ 0	10000	3048	555	540	525	510	480	435		\square	533	
	131	12000	3658	525	510	495	480	435	400		\sim	509	
		14000	4267	500	485	475	460	425	360			492	1
		16000	4877	490	470	440	385	325			\sim	487	
		16400	4999	475	450	420	370	305	\sim	\sim		471	
	I	9		675	665	655	645	635	625	1 600	1 560 l	643	1
DA40 NG					_								239
Peter-S	chmidleitne			2		1	© Diamo	ond Flig	nt Traini	ng			<u></u>
UTAMOND	J FLI	GHTT	KAIN	ING								Co	pmpiled by Peter Schmidleitner

			(Cruis	e Clin	nh JE	anell	P			-	Available tables:
Flaps v _y : 88	: UP KIAS			oruit			upo o		Powe 2100	er: 92% RPM	or max.	Cruise Climb Flaps UP
[q]] / [6;	Press.	Press.		Outs	ide Air	Rate Temp	of Clin erature	nb - [ft ə - [°C]	/ min] / [°F]			1310 kg 1280 kg 1200 kg
Weight [k	Alt. [ft]	Alt. [m]	-20 -4	-10 14	0 32	10 50	20 68	30 86	40 104	50 122	ISA	1100 kg
-	SL	-	665	660	655	650	645	645	620	585	651	
	2000	610	655	650	645	640	635	630	595	555	644	
	4000	1219	645	640	635	630	620	605	565	525	633	
	6000	1829	635	630	620	615	605	580	540	\sim	621	
8			620	615	605	600	590	550	505	\sim	609	
2888	8000	2438	020									
10 / 2888	8000 10000	2438 3048	605	600	590	580	555	510	\langle	\sim	596	
1310 / 2888	8000 10000 12000	2438 3048 3658	605 590	600 580	590 570	580 560	555 520	510 480	\leq		596 581	
1310 / 2888	8000 10000 12000 14000	2438 3048 3658 4267	605 590 575	600 580 565	590 570 555	580 560 540	555 520 500	510 480 445	\leq		596 581 568	
1310 / 2888	8000 10000 12000 14000 16000	2438 3048 3658 4267 4877	605 590 575 560	600 580 565 550	590 570 555 520	580 560 540 470	555 520 500 405	510 480 445			596 581 568 561	



Flaps: v _y :	UP 88 KIAS	;	Tim	e, Fuel a	and Dist	ance to (Climb Power: RPM	92% or	max. 21	00	Available t Flaps UP 1310
Weight [kg] / [lb]	Press. Alt. [ft]	Press. Alt. [m]	OAT [°C]	OAT [°F]	TAS [kt]	RoC [ft/min]	RoC [m/s]	Time [min]	Fuel [US gal]	Dist- ance [NM]	1280 1200 1100
-	s	L	15	59	87	650	3.3	0	0.0	0	
	2000	600	11	52	88	645	3.3	3	0.4	5	
~	4000	1219	7	45	90	645	3.3	6	0.9	9	
	6000	1829	3	38	91	640	3.2	9	1.3	14	
88			-1	30	92	630	3.2	13	1.8	19	
0 / 288	8000	2438	- 1					16	22	25	
1310 / 2888	8000 10000	2438 3048	-5	23	94	625	3.2	10	2.2	20	
1310 / 2888	8000 10000 12000	2438 3048 3658	-5	23 16	94 95	625 620	3.2	19	2.7	25 31	
1310 / 2888	8000 10000 12000 14000	2438 3048 3658 4267	-5 -9 -13	23 16 9	94 95 97	625 620 615	3.2 3.2 3.1	19 23	2.7	25 31 37	





	Landing	Distanc	e - Flaps	: LDG - 1	1310 kg	/ 2888 lb		ł	Available table
Weight: v _{REF} :	1310 kg / 288 77 KIAS	8 lb			Flaps: Power: Runwa	LDG IDLE y: dry, pa	ived, leve		Flaps LDG 1310 kg 1280 kg
Press. A	lt. Distance		Outside	Air Tem	perature	- [°C] / [°F	-]		1200 kg
[ft] / [m] [m]	0/32	10 / 50	20 / 68	30 / 86	40 / 104	50 / 122	ISA	1100 kg
SL	Ground Roll	305	315	325	335	355	375	318	Flans T/O or LIP
	15 m / 50 ft	620	650	670	680	720	760	650	1310 ka
1000	Ground Roll	315	325	335	350	370	395	327	1280 kg
305	15 m / 50 ft	640	660	680	700	740	790	660	1200 kg
2000	Ground Roll	325	335	350	370	390	415	336	1100 kg
610	15 m / 50 ft	650	670	690	730	770	810	670	5
3000	Ground Roll	335	350	365	385	410	435	345	
914	15 m / 50 ft	670	690	710	750	800	840	681	
4000	Ground Roll	350	360	280	//05	/130	/55	356	l
Ļ	Hea	adwin	d:	LD)G dis	tance	minus	s 10%	for each 20 kt
Up to 10000	n Tai ft	Iwind:		LD)G dis	tance	plus 1	0% f	or each 3 kt
	Dov	wnhill	slope	: Gr	ound	roll pl	us 10%	% for	each 1% of slope
									24

Paved RWY WET+ 15%Length of grassWet grass or soft ground- 5 cm+ 30%additional		LDG roll	
Length of grassWet grass or soft ground- 5 cm+ 30%additional	Paved RWY WET	+ 15%	
- 5 cm + 30% additional	Length of grass		Wet grass or soft ground
	- 5 cm	+ 30%	additional
> 5 cm min + 45% + 15%	> 5 cm	min + 45%	+ 15%

				Go	5 2	aro	ou	nc	k				
	Go-Around Climb Performance							Available tables:					
	Flaps: LDG Power: MAX v _{REF} : 77 KIAS at 1280 kg (2822 lb) and 1310 kg (2888 lb) 76 KIAS at 1200 kg (2645 lb) 72 KIAS at 1100 kg (2425 lb)						Flaps LDG 1310 kg 1280 kg						
	[q]]					F	Rate of	Climb	- [ft/mir	ןי			1200 kg 1100 kg
	/ [6)	Press.	Press.		Out	side Ai	r Temp	erature	• - [°C] /	[°F]			, i i i i i i i i i i i i i i i i i i i
	ght [J	[ft]	[m]	-20	-10	0	10	20	30	40	50	ISA	
	Weig			-4	14	32	50	68	86	104	122		
		5	SL.	410	405	395	390	385	375	360	335	388	1
	œ	2000	610	395	390	380	375	370	360	340	310	376	
	288	4000	1219	380	375	365	360	350	340	315	285	364	
	/01 6000		1829	365	360	350	345	335	315	285		351	
	13		2438	350	345	335	320	310	280	250		336	
		10000	3048	330	320	310	295	275	240			315	
		S	SL .	425	415	410	400	395	385	370	345	400	
	2	2000	610	410	400	395	385	380	370	350	320	387	
	282	4000	1219	395	385	380	370	365	350	325	295	375	
	80 /	6000	1829	380	370	360	355	345	325	295	\square	361	
DA40 NC	12	8000	2438	360	355	345	330	320	290	260		346	247
DAHU NG													247
						¢	Diamo	nd Flight	Training	1			
DIAMOND	FLIC	GHT T	RAIN	ING									Compiled by Peter Schmidleitner

Glide	
Best gliding Flaps UP, prop windmilling	88 KIAS
1:9,7	1,59 NM / 1000 ft
Without wh	eel fairings:
1:9,4	1,54 NM / 1000 ft
DA40 NG	248
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1	Moment Arms				
	Item	Lever Arm (m)			
	Front seats	2.30			
	Rear seats	3.25			
	Wing tanks	2.63			
	Standard baggage	3.65			
	Baggage tube	4.32			
	Short bagge extension	3.97			
	Extended baggage FWD	3.89			
	AFT	4.54			
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	M&B Cal	culatio	on		nd ^{ING}		
	Lever Mass (kg) Moment arm (kgm)						
	Empty mass	2.42	900	2180.8			
	Front seats	170 x 2.30 = 391.0		391.0	1		
	Rear seats	80 x 3.25 = 260.0		260.0			
	Fwd baggage	3.89	10	38.9			
	Aft baggage	4.54					
	Zero Fuel Mass		1160	2870.7			
	Fuel ~20 USG		60	157.8	1		
DA40 NG	Total TKOF Mass		1220	3028.5))))		
DIAMOND FLIGHT TRAINING							

	M&B Cal							
	Lever Mass (kg) Moment arm (kgm)							
	Empty mass	2.42	900	2180.8				
	Front seats	2.30	170	391.0				
	Rear seats	3.25	80	260.0				
	Fwd baggage	3.89	10	38.9				
	Aft baggage	4.54						
	Zero Fuel Mass	2.47	2870.	1160 = 2.47				
	Fuel	2.63	60	157.8				
DA40 NG	Total TKOF Mass	2.48	3028.5	1220 = 2.48				
DIAMOND	DIAMOND FLIGHT TRAINING							



















For daytime VFR flightsIn addition for night VFR flightsIn addition for IFR flightsFlight & naviga- tion instru- ments• Airspeed indicator • Altimeter• Vertical speed indicator (VSI) • Attitude gyro • Turn & bank indicator • Directional gyro • VHF radio (COM) • VOR receiver • Transponder (XPDR) • GPS receiver (part of G1000 intercom is installed)• Second airspeed indicator (on PFD and backup, if G1000 is installed) • Second altimeterVHF radio (COM) • VOR receiver • Transponder (XPDR) • GPS receiver (part of G1000, if installed) • Second headset (if PM 1000 intercom is installed)• Second VHF radio (COM) • VOR-LOC-GP receiver • Second GPS receiver (part of G1000, if installed)	inds o	f Operation KOE	Equipment L	List	Diamond Flight training
Flight & Airspeed indicator naviga- Altimeter Magnetic compass Attitude gyro Attitude gyro Turn & bank indicator Directional gyro VHF radio (COM) VOR receiver G1000 is installed) Second airspeed indicator (on PFD and backup, if G1000 is installed) Second attitude gyro (on PFD and backup, if G1000 is installed) Second attitude gyro (on PFD and backup, if G1000 is installed) Second headset (if PM 1000 intercom is installed) Second headset (if PM 1000 intercom is installed) Second GPS receiver (part of G1000, if installed) Second GPS receiver (part of G1000, if installed) 		For daytime VFR flights	In addition for night VFR flights	In addition for IFR flights	
	Flight & naviga- tion instru- ments	 Airspeed indicator Altimeter Magnetic compass 1 headset, used by pilot in command 	 Vertical speed indicator (VSI) Attitude gyro Turn & bank indicator Directional gyro VHF radio (COM) VOR receiver Transponder (XPDR) GPS receiver (part of G1000, if installed) Second headset (if PM 1000 intercom is installed) 	 Second airspeed indicator (on PFD and backup, if G1000 is installed) Second altimeter Second attitude gyro (on PFD and backup, if G1000 is installed) Second VHF radio (COM) VOR-LOC-GP receiver Second GPS receiver (part of G1000, if installed) 	

Kinds	of Operation KOEI	Equipment L	ist 🏀 Di	amond LIGHT TRAINING
	For daytime VFR flights	In addition for night VFR flights	In addition for IFR flights	*
Engin instru- ments	 Fuel qty. Oil press. Oil temp. Coolant temp. Coolant level indicator Gearbox temp. Load Prop. RPM Fuel temp. left & right tank Fuel flow Fuel pressure warning ECU A/B Caution 	Ammeter Voltmeter		
DA40 NG				269
DIAMOND FLIGHT	TRAINING	© Diamond Flight Training	Compiled by	/ Peter Schmidleitner

Kind	ls of	f Operation KOE	Equipment L	List	
		For daytime VFR flights	In addition for night VER flights	In addition for IER flights	
L	ighting	ingino	 Position lights Strobe lights (anti collision lights) Landing light Instrument lighting Flood light Flashlight 		
C o tiu m e m	Other opera- ional nini- num equip- nent	 Stall warning system Alternate means for fuel quantity indication (see Section 7.9) Safety belts for each occupied seat Airplane Flight Manual 	Pitot heating system Alternate static valve	Emergency battery (for backup attitude gyro and flood light)	
DA40 NG				•	. 270
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Moment Arms				
	Item	Lever Arm (m)		
	Front seats	2.30		
	Rear seats	3.25		
	Wing tanks	2.63		
	Standard bagge	3.65		
	Short baggage extension	3.97		
DA40 NG			303	
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