Flug- und Fahrzeugwerke AG, Altenrhein (Switzerland)

General Conditions of Sale and Guarantee

for **DIAMANT** sailplanes and accessories

1. Offers

Our offers are without engagement. Prices and deliveries are subject to change without prior notice.

2. Orders and purchase agreements

Orders and modification of orders must be in writing. An order is valid when the down payment is received by us. It becomes a binding purchase agreement only after our Confirmation of Order has been received by the purchaser.

Unless specifically stated by us to the contrary, the legal status between the purchaser and us shall be governed by and subjected solely to the present General Conditions of Sale and Guarantee and the relevant articles of Swiss law.

3. Prices and terms

a) Prices

The agreed prices cover the supply of goods and work as laid down in the Confirmation of Order. Additional work or materials are to be paid for extra.

Agreed-upon prices are firm as far as the ex factory value is concerned. All other costs or levies for transportation, handling or storage etc., as well as the rate of exchange, are subject to adjustment to the actual costs at the time when due.

b) Terms of Payment

All payments have to be made in Swiss Francs to our domicile as follows:

- Swiss Francs 2 000.— when placing the order.
- Balance before despatch upon our notification that goods are ready for delivery.

If the purchaser desires, he may open an irrevocable letter of credit for payment against shipping documents.

4. Deliveries

Delivery periods or delivery dates indicated in our Confirmations of Order are given in good faith and will be kept to the best possible. We are not liable for any losses to the purchaser resulting from delays.

Unless stated to the contrary, our deliveries are always ex factory and goods despatched from the factory are considered as delivered.

If, for any reason, we shall not be in the position at all to fullfill the purchase agreement, we shall repay the net down payment to the purchaser who thereupon has no further claims upon us.

5. Cancellation

Since we want to discourage the placing of speculative orders, there is no standard cancellation procedure. If a purchaser wishes to cancel an order, the terms will have to be settled in each case.

6. Conditions of acceptance

As a rule our planes are delivered with an airworthiness certificate from the Swiss Air Office (government department).

If the purchaser desires to have the goods inspected or tested before delivery, details of such inspection or tests are to be included in the order and Confirmation of Order.

7. Despatch and transportation

Despatch and transportation as well as storage between delivery and receipt of the goods by the purchaser are at the latters risk and costs.

8. Liability and insurance

We are not liable for accidents which may occur to the purchaser or other persons who are present or participating in delivery inspections or tests at our factory or elsewhere.

The full liability for damages on supplied goods after acceptance or delivery remains with the purchaser, unless he can prove major negligence on our part. We shall have the goods covered by insurance on behalf and for the account of the purchaser if this was specified in the order and Confirmation.

The purchaser is liable for any damage to himself, to third parties or properties caused by his plane.

9. Warranty

a) Extend of warranty

Faulty manufactured or faulty assembled parts will be repaired or replaced by us free of charge. Shipping costs of such parts will be paid by us. The replaced parts become our property.

This warranty applies in the same manner to parts which have been replaced or repaired by us under the warranty.

The warranty on parts which are not manufactured by us is limited to the warranty given to us by the supplier.

The above covers the full extend of our warranty and liability. We are not liable for any other damages, in particular not for damages which may ensue as a consequence of faulty goods.

b) Duration of warranty period

Our warranty is limited to 6 months from date when the goods are ready for despatch.

Our warranty expires if parts are modified or repaired without our consent.

c) Claims

No warranty claim may be made if the purchaser is in arrears with payments.

payments.

Claims must be made in writing immediately upon discovery of the faulty part.

Claims are only accepted if our operating and maintenance instructions have not been violated.

A claim based on the above conditions does not entitle the purchaser to alter or cancel his order, to demand a price reduction or to claim damages of any kind.

d) Resale and Dealership

Our warranties are for the initial purchasers only, or in the case of officially appointed dealers to them. Owners who resell their planes or dealers are liable to their buyers. They may pass these same General Conditions of Sale and Guarantee on to the ultimate buyers, however the latter have no claims upon us; our contract is exclusively with the dealers or initial purchasers who order directly from us.

10. Place of fullfillment and jurisdiction

Place of fullfillment of our purchase agreements is Altenrhein (Switzerland).

Any dispute between purchasers and us in connection with DIA-MANT sailplanes or accessories shall be judged and settled according to Swiss law in the courts which have jurisdiction for Altenrhein.

December 10, 1966

FLUG- & FAHRZEUGWERKE AG 9422 Altenrhein Switzerland

DEALER BULLETIN No. 1

January 31, 1967

1.) Dealerships established as of January 31:

Dealerships	established as of January 31 :	
	Territory	Dealer's address
USA	Washington D.C. Delaware Virginia Maryland West Virginia North Carolina Part Tennessee (NE Knoxville)	G.W. Church Caroll Manor Baldwin, Maryland
	Florida Georgia Alabama Mississippi Part Tennessee (except Knoxville and NE	R. Delafield 3581 E. Glencoe Str. Miami, Florida 33133
	Northern California (North of Bakersfield) Northern Nevada (North of U.S. 6) Utah	Joseph H. L o r b e r D.V.M. Lafayette Veterinary Hospital 3703 Mount Diabolo Boulevard Lafayette, California
	Arizona Southern California (incl. Bakersfield and S) Southern Nevada (S. of U.S. 6) Mexico	Gordon A. Wheeler Sailplane Associates Inc. 1023 Kirkwall Road Azusa, California 91702
	Louisiana Texas Oklahoma Arkansas	R. Scott Royce JILSCO 816 Shorewood Dr. Seabrook, Texas 77586
	Colorado Kansas Nebraska Missouri	Robert S. Tucker 222 North Knasas Ave. Liberal, Kansas 67901

USA	Illinois Indiana Ohio Michigan Kentucky	MIDWEST SOARING Division of Wabash Valley Soaring Association Inc. Wallace G. Brown President Box 287 Lawrenceville, Ill 62439					
CANADA	Canada	George Adams & Partners 292 Westgate Drive Rosemere, Quebec					
GREAT BRITA	IN England Scotland Wales	Thorpe Aviation Ltd. 177 Lincoln Road Peterborough England					

Several dealerships in other territories are still pending.

2.) Orders received and Production Capacity:

As of this date, the total number of DIAMANTs sold is 28 (we are only counting firm orders with down payments received and confirmed delivery dates. In addition, a number of orders are promised).

At the end of our first production year, which will end in March, we shall have 13 machines delivered, all of the HBV type with 15m Libelle wings. Our production capacity so far depended mainly on the deliveries of these wings.

Development of our new 16.5m and 18m wings is progressing according to schedule. The negative moulds are completed and we shall shortly build the first 16.5m prototype wing, which will be used for extensive load tests. Regular deliveries of the 16.5m ships will commence in April at the rate of 2 ships per month. It is scheduled that 4 of these ships will fly in National Competitions this summer, namely 2 in the U.S. (by a top American pilot and by René Comte), 1 in England and 1 in Switzerland. Several DIAMANT HBV (15m span) will also be present.

In late summer we plan to build the test prototype of the 18m wings, production of which will start in fall with first deliveries in December.

All 15m Libelle wings which we had at disposal for this spring are now sold and we are only able to supply new 15m ships by spring 1968, due to the long deliveries of the Libelle wings. If the demand for 15m ships keeps up, we shall consider building our own 15m wings as well. This, however, will involve a certain amount of development work, so that the earliest date of delivery would again be in the spring of 1968.

We plan to gradually increase our production capacity to satisfy demand. If necessary we may build a second set of moulds (8 large moulds for the entire ship!) and step up production to 5 or 6 machines per month. It will take about one year to reach this capacity because the workers need a thorough training.

Our aim is to adjust production so that we are later in a position to offer steady deliveries of about 6-9 months.

Right now, with the initial surge of orders, they may temporarily become somewhat longer.

3.) Present delivery position:

ex	factory	DIAMANT	16.5	November	1967
		DIAMANT	18	February	1968
		DIAMANT	15	March	1968

FLUG- & FAHRZEUGWERKE AG.
ALTENRHEIN

BULLETIN

regarding instruments on DIAMANT Price List 1967 dated November 1966

In our price list dated November 1966 we have listed two instruments. The word "compulsory" has raised questions from dealers and customers. We therefore wish to clarify this point.

As far as we are concerned, clients may install all instruments of their own choice.

However, we are applying for a Swiss as well as U.S. Type certificate for the DIAMANT sailplanes, which imposes the following conditions:

The minimum instrumentation needed for obtaining the type certificate includes a sensitive altimeter and an approved type of speed indicator. These must not be the ones offered by us, but must be equivalent. As far as the altimeter is concerned, there is no problem as most instruments used are adequate.

For the air speed indicator the regulations say that it must have

- a) a range to cover all speeds up to placard speed.

 We are tentatively applying for a placard limit of 270 km/h = 169mph.

 There are not many indicators on the market which cover that range and still give clear reading at 70 km/h = 44 mph.
- b) be calibrated for position error
- c) be marked with colors according to general practice (flap range, normal flying range, caution range, limits)

All this is of no importance as long as the ships fly in the experimental category (and for the time being they must), However, if later a type certificate is approved and owners want to register their ships in same, they might perhaps be asked to have the instruments adapted.

We do not know when the ATC will be issued but wish to draw the client's attention to the fact.

We shall make this point more clear in future price lists.

January 1967

FLUG- & FAHRZEUGWERKE AG.
ALTENRHEIN

TECHNISCHE DATEN FUER NEUE DIAMANT SEGELFLUGZEUGE

TECHNICAL DATA FOR NEW DIAMANT SAILPLANES

Beschreibung der neuen 15, 16.5 und 18 m Segelflugzeuge DIAMANT, soweit diese vom gedruckten blauen Prospekt abweichen:

Description of new 15, 16.5 and 18 m sailplanes DIAMANT, where they deviate from printed blue leaflet:

FLUEGEL:

16.5 und 18m Flügel mit Wortmann Profil werden von uns entwickelt und hergestellt. They have a Wortmann airfoil. The camber Die Wölbklappen sind denen des DIAMANT Rumpf-Flügelverbindungen sind bei allen Austausch von Flügeln eine besondere Anleitung zu befolgen ist). Die Bodenfreiheit der 16.5 und 18m Flügel and 18m wings will be more than of the wird grösser als bei dem HBV sein. Die Bremsklappen sind bei den neuen DIAMANT Segelflugzeugen ähnlich wie und etwas grösser als bei den Ka-6.

COCKPIT

Schiebehaube mit Notabwurf Verstellbare Rückenlehne Steuerknüppel in der Mitte Seitliche Steuerstangen tiefer unten, um mehr Ellbogenfreiheit zu gewährleisten.

RUMPF

Grundsätzlich wird am Schwanz ein eingebautes Heckrad aus Nylon geliefert. An dessen Stelle kann ein Gleitschuh montiert werden.

WINGS:

16.5 and 18 meter wings are built by us. changing flaps are similar to those on HBV wie im Prospekt beschrieben, ähnlich. the DIAMANT HBV describedainathe leaflet. Wing-fuselage connections will be identi-Modellen gleich (wobei allerdings für den cal on all models (however, for switching wings, special instructions have to be followed). Ground clearance of the 16.5 HBV.

The air brakes on the new DIAMANT sailplanes are similar to those on the Ka-6, somewhat larger.

COCKPIT

Sliding canopy with emergency release Adjustable back rest. Control stick in center. Lateral control rods lower down to give more elbow room.

FUSELAGE

Basically the glider will have a built-in fixed tail wheel in Nylon. It may be replaced by a skid.

		DIAMANT 15	DIAMANT 16.5	DIAMANT 18
Spannweite	m	15	16.5	18
span	ft	49•2	54.2	59
Länge	m	7.56	7.56	7.56
length	ft	24.8	24.8	24.8
Höhe am Leitwerk	m	1.35	1.35	1.35
height (elevator)	ft	4.43	4.43	4.43
Flügelfläche	m ²	9.72	13.3	14.4
wing area	sq.ft	104.5	143	155
miggistreckung aspect ratio		23.15	20.5	22.5

		DIAMANT 15	DIAMANT 16.5	DIAMANT 18
Rüstgewicht empty weight	kg 1bs	190 420	230 507	250 55 1
Zuladung useful load	kg 1bs	110 240	120 - 180 * 264 - 396 *	120 - 190 * 264 - 419 *
Fluggewicht all-up weight	kg lbs	300 660	350 - 410 771 - 904	370 - 440 815 - 979
Flächenbelastung wing loading	kg/m ² lbs/sq.ft	28.5 5.6	26.3-30.8 5.4-6.3	25.6-30.5 5.2-6.3
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Flugleistungen bei Fluggewicht	kg	300	350	400
performance at weight	lbs	660	771	882
Beste Gleitzahl bei L/D at	km/h mph	39 100 62	42 100 62	45 295 59
Geringstes Sinken min. sink	m∕s f h⁄a	0.60 2.0	0.55 1,8	0.52 1.7
bei at	km/h mph	72 45	70 44	69 43
2 m/s Sinken bei ? m/s sink at	km/h mph	157 98	160 100	165 103
Geringste Fluggesc digkeit beim Kreis min circling speed	en km/h	70 43,5	67 41.6	66 41
Berechnete max. Fl geschwindigkeit	km/h	270	270	270
calculated placard speed	mph	168	168	168

^{*} je nach Ballast

^{*} depending on ballast (water)

D I A M A N T PRICE LIST FOR 1967

Prices e	х та	C LOLY

		Swiss francs	equivalent US \$ (at rate of ex- change 4.3) (informative)
DIAMANT 15	without instruments	24 ' 500	5 ' 690
DIAMANT 16,5	without instruments	26'500	6'155
DIAMANT 18	without instruments	32'000	7
OPTIONALS	spare tail skid	60	14
	separate tail whe el for ground handl ing	190	43,2
	thermometer indi- cating structure temperature	60	13,9
	support for oxygen bottle	70	16,3
	Built-in radio an- tenna, inclcable	185	43
	Cockpit upholstered (nylon)	280	65
	Registration marks painted on	205	47,6
	Repair kit (incl. spare tail skid)	375	87
INSTRUMENTS	air speed indicator (compulsory) mounted Please specify if de sired in km/h, mph cknots	-	52,1
	sensitive altimeter (compulsory) mounted in feet/mb.	410	95 , 5

Other instruments can be supplied and installed; offers on request with specification. Because of the multitude of personal desires, it is preferred, however, that customers have instruments built in themselves. The entire instrument panel with battery holder can be sent adead for instrument installation and can afterwards be mounted in a few minutes.

TRAILERS

Closed metal trailers are offered upon request (Swiss trailers are very good, but expensive).
A special box-come-trailer is in development.

CONDITIONS

Prices are in Swiss Francs for delivery ex factory, without packing. Approx. corresponding values indicated in foreign currency are indicative and subject to change with the rate of exchange. Our General Conditions of Sale and Guaranty form part of this offer. Prices are subject to change without prior notice.

DELIVERY

A customers order is regarded as definite as soon as the down payment of sfr. 2'000.-- (\$ 465) is received.

A firm delivery date, subject to the Conditions of Sale and Guaranty, is then given to the customer.

DELIVERY POSITION

ITION	as	per	• • • • • • • • • • • • • • • • • • • •	15	m	:	• •	•	•	 •	•	 •	•	• •	•	•	
				16,5	m	:	• •	•	•	 •	• •	 •	•		•	• •	,
				18	m	:		•			•					• (

SUPPLEMENT TO PRICE LIST 1967

SHIPPING COSTS TO U.S.A. AND CANADA

	DIAMANT	15 m	16.5 m	18m
Shipping costs for one sai	lplane	Sw	iss francs	
from Altenrhein, Switz to c.i.f. Port of dest including seacrate and without import duty	ination,			
to	shipping time days			
New York and Baltimore		2516 (\$ 585)	2868 (\$ 667)	3427 (\$ 797)
Boston	17 - 21	2748 (\$ 639)	3126 (\$ 727)	3715 (\$ 864)
Houston	25 - 33	3049 (\$ 709)	3466 (\$ 806)	4089 (\$ 951)
Norfolk	21 - 31	(2516) (\$ 585)	2868 (\$ 667)	3427 (\$ 797)
Miami	25 - 29	3049 (\$ 709)	3466 (\$ 806)	4089 (\$ 951)
Los Angeles and San Francisco	27 - 35	2442 (\$ 568)	2786 (\$ 648)	3337 (\$ 776)
Portland	35 - 41	2799 (\$ 651)	3186 (\$ 741)	37 80 (\$ 879)
Montreal (winter)	17 - 23	2120 (\$ 493)	2834 (\$ 659)	2937 (\$ 683)
Vancouver	ė	2600 (\$ 606)	2970 (\$ 690)	3 540 (\$ 823)
Chicago		2350 (\$ 547)	2680 (\$ 6 24)	3220 (\$ 749)
Detroit		2340 (\$ 542)	2650 (\$ 619)	3190 (\$ 743)
Toronto		2270 (\$ 530)	2590 (\$ 600)	3100 (\$ 721)

Shipping costs in trailer on request (approx. 50% more)

Normally there is a boat departing from Europe to above ports every 2 weeks.

Import Duty is to be paid by purchaser. As far as we know, it amounts to 10.5 (sports equipment) or 11% of the factory price.

The above Charges in U.S. \$ are given for reference only, based on rate of exchange 4.3. Prices are subject to change without prior notice. We must invoice the actual costs at time of shipment. Charges are net, without discount.

ERGAENZUNG ZUM DIAMANT PROSPEKT DIAMANT SUPPLEMENT T OLEAFLED

Beschreibung der neuen 15, 16.5 und 18 m Description of new 15, 16.5 and 18 m Segelflugzeuge DIAMANT, soweit diese vom sailplanes DIAMANT, where they deviate gedruckten blauen Prospekt abweichen:

from printed blue leaflet:

FLUEGEL:

16.5 und 18 m Flügel mit Wortmann Profil Die Wölbklappen sind denen des DIAMANT HBV changing flaps are similar to those on wie im Prospekt beschrieben, ähnlich. Rumpf-Flügel-Verbindungen sind bei allen Austausch von Flügeln eine besondere An- wings, special instructions have to be leitung zu befolgen ist). Die Bodenfreiheit der 16.5 und 18m Flügel and 18m wings will be more than of the wird grösser als bei dem HBV sein.

WINGS:

16.5 and 18 meter wings are built by us. werden von uns entwickelt und hergestellt. They have a Wortmann airfoil. The camberthe DIAMANT HBV described in the leaflet. Wing-fuselage connections will be identi-Modellen gleich (wobei allerdings für den cal on all models (however, for switching followed). Ground clearance of the 16.5 HBV.

Cockpit:

Klapphaube mit Notabwurf Verstellbare Rückenlehne Steuerknüppel in der Mitte Spitliche Steuerstangen tiefer unten, um mehr Ellbogenfreiheit zu gewährleisten.

COCKPIT:

Hinged canopy with emergency release Adjustable back rest. Control stick in center. Lateral control rods lower down to give more elbow room.

GEWICHTE:

Gesamtfluggewicht

16.5 m = 350 kg18 m = 400 kg

WEIGHTS:

All-up weight

16.5 m = 770 lbs = 880 lbs 18 m

FLUGLEISTUNGEN:

16.5m Beste Gleitzahl 42 b.100 km/h Kleinst.Sinken 55 cm/sb.70 km/h Sinken bei 160 km/h 2 m/s 18m Beste Gleitzahl 45 b.95 km/h Kleinst.Sinken 52 cm/sb.69 km/h 2 m/s Sinken bei 170 km/h

PERFORMANCES:

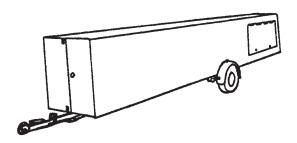
16.5m max. L/D 42 at 62 mph min. sink 1.8 f/s at 44 mph6,6 f/s at 100 mph2 m sink max. L/D 45 at 59 mph 18m min. sink 1,7 f/s at 43 mph 6,6 f/s at 105 mph 2 m sink

Alle anderen Angaben an sich gleich wie im Prospekt.

All other data basically as in leaflet

November 1966

FLUG- & FAHRZEUGWERKE AG. ALTENRHEIN



B i b o x for DIAMANT 16.5 (metal crate for sea transport which can be converted into a trailer)

The Bibox is a rectangular totally enclosed crate. It is built up of large aluminium sheets riveted together with reinforcing light metal profiles. The sheets themselves are built in sandwich construction consisting of an outer and inner aluminium skin with a 1/2 inch epoxy foam filling. Thus the sandwich sheets provide high strength and rigidity and have a tremendous heat insulating capability.

The outer dimensions of the box are: 28' - 8" long, 4' wide and 4' high. The box has one hinged acces door with lock (on the completed trailer the door is towards the car).

The box is fully equipped with fittings for quick loading and unloading the DIAMANT sailplane. Fuselage, wings and elevator are held in place by fittings and formers which slide in and out on rails. Thus the whole sailplane can be loaded without a person entering the crate.

The Bibox is used by us as a sea crate. Upon arrival it can be completed by the customer into a first class trailer by mounting the box onto an axle with draw bar (with 5 bolts) according to drawings which will be provided by us, and by fitting an electrical installation.

Empty weight of the box is about 800 lbs.

Price of Bibox for DIAMANT 16.5, ex factory Swiss Francs 5'960.- (approx. \$ 1'376)

The shipping costs of a DIAMANT with Bibox are approximately the same as in normal sea crates (refer to supplement to price list). The saving of a wooden sea crate is compensated by the higher shipping volume of the Bibox.

OPTIONALS

<u>Lateral door</u> which permits access to the cockpit of the loaded sailplane and which can be useful for storing equipment etc. in the trailer.

Price for lateral door sfr. 200.-

(approx. \$ 46.50)

Complete axle with wheels, mud guards and draw bar, dismantled and stored inside the box, without electrical installation and fittings

Price

sfr. 1'460.-

(approx. \$ 338)

Complete Trailer for DIAMANT 16.5 made of Bibox with axle, wheels, draw bar and complete electrical installation

Price

sfr. 7'600.-

(approx. \$ 1'756)

The shipping costs in a complete trailer are considerably higher than in the box, due to the large shipping volume. Shipping rates upon request.

Self-acting brakes

Price

sfr. 180.-

(approx. \$ 42)

Conditions: same as on main Price list for sailplanes.

Delivery: 3 months.

March 1967

FLUG- & FAHRZEUGWERKE AG.

ALTENRHEIN