15th May 94

Hi Dan,

That was a really SUPERB Event, our first CELEBRATION of 30 Years Diamant. in Winterthur.

7 Diamants where registered, 5 18 Meters and 2 16.5

In Detail:

Rolf Peter	Diamant	16,5	HB - 940	Faktory Nr ???
Jacob Hans	**	18	HB- 916	30
Schäublin Walte	r	16,5	HB - 893	17
Godek Martin	**	????	D - 4415	57
Dubois G	**	18	D - 6903	76
Broghammer G	**	18	D - 7730	77 (Famous Aircraft as it was HB-2020 !!!)
Gubser Willy	**	18	HB - 917	???

Saturday it first looked like raining, but everybody assembled the Ship, and the sun came out for a nice group-Picture

(to follow)

and in the afgternoon all ships where aloft, flying about 20 Houres all together.

Barbeque followed then film + a good thundershower, to bed at 1.30am.

Sunday was even better, a socalled HAMMERTAG, they flew up to 4 houers a ship and Distance to 200 km. A good sunburn, happy faces. I Videotaped it all, so you can see it overthere, DIAMANTBROTHERS!!

For the Occasion i created a PIN: 30 Years of DIAMANT HBV, and it is stamped with the Factory Number for Owners, and unstamped ones for relatives and Fans.

For our meeting in Tehachapi I reserved 60 Pins ungraved, and of course all US- Ownerpins (Unicates)

When you send your invitations, be sure to send them to ALL Owners, not only to the HBV. Please !!

Thomas Sides

Of course rhere was much talk about flying, but all owners agreed that it is still a very good ship, all arer well maintained and gee, it was just great.

Unstamped PIN for your INFO attached.

I will bring the others on my arrival 28th of august.

cincerely yours:



WINTERTHUR Swis \$30 SWISS	
March 1000 / 40.00 / HB-417 /	18M
	nuan
16.5 prantin GO Swiss #17 18.101 #57	
HB-893 / GENMAN #76 16.5	18M
WARTER SCHAU- 10-6903 / SWISS #60	
BLIN / G. DUBOIS / HB-940 /0-	or manufacture of the first section of the
WI" Penen ROCF #77	MANNER



July 30, 1993

We are attempting to find the current owners of "Diamant" sailplanes, from the eighty-three ships originally produced in Switzerland, from 1964 to 1971.

Almost half of these sailplanes were imported into the United States and Canada. And we have had an active owners network for almost 20 years. Now we want to contact the other owners scattered around the world.

In early September, 1994; the Diamants original designers, Thomas Bircher, and Jurg Von Voornveld, plus Rene Comte the chief construction sponsor are celebrating the 30th anniversary of the first flight of the prototype Diamant HBV!. This type became the first factory production model, and pioneered foam/fiberglass, composite sandwich construction (through out the entire fuselage), as the worlds first certified flight structure of this material!.

The 30th anniversary celebration will be at Skylark North Gliderport in Southern California, and all Diamant owners past or present are invited to be there. If a sailplane is no longer flyable, we would like to know who the last owner was, and what became of that sailplane. Otherwise please publish this letter in your organizations newsletter or magazine, to get the invitation out to your membership.

For further information, or to correspond with the "Diamant Owners network". Contact: Dan Pierson, 1480 W. Compton Boulevard, Compton, California, 90220. U.S.A.





PAT WE FIRM MET WITH THE FAR AND MEET COLITERIA TO BUGIN ROPAIN STATION CONTIFICATION, INCLUDING ROMOTE SITE RUPAIRS. WILL KEEP YOU INFORMED AS WE PROGRESS!

September 30. 1994

----* DIAMANT 30TH ANNIVERSARY A HISTORIC SUCCESS *----

The Diamant 30th anniversary of first flight celebration (September 4, 1994) was a resounding success. Memories of this first "Classic Glass" event will last a lifetime.

There were eight sailplanes in attendance with twelve owners, their friends and families during the three day weekend. We flew, were informed, entertained, wined, dined and "yakked" til the late hours of the evenings.

The opportunity to see so many Diamants together, came as a shock to most of us who are usually the only examples at our home fields. Meetings with the Diamant co-designers were capped by the humor of Tom Bircher recalling early construction stories. (Unfortunately, Rene Comte could not attend). And Jurg Von Voornveld flew the Ka-6 winged "Ka-Bi-Vo" 30 years after he last flew it at the University of Zurich. Thanks Tom, Jurg, Ruth Bircher and Hety Von Voornveld for coming over from Switzerland.

The following pilots brought their sailplanes: co-owners Bob and Doug Fronius, (with Ka-Bi-Vo, "White Knight"), from San Diego, California; Dan Pierson of Compton, California, (who planned and coordinated the events) bringing his HBV #5 and 19 meter #54. Dan also brought 18M ship #27, from L.A. (Owned by Jon Svendsen, JAL pilot from Anchorage, Alaska, who could not attend; #27, is the oldest existing 18M Diamant). Steve and Paul Calderon, brothers and co-owners came from the San Francisco Bay area with wives, children, and #11 the first 16.5 made. 16.5 owner Steven Hundley brought father Wayne, and a additional ground crewman and #45 all the way from Dallas, Texas. John Weis from El Centro, California, had his 16.5 #50 delivered the weekend before and flew in for the weekend by Beechcraft. The eighth Diamant in attendance is permanently based at Mountain Valley Airport. Owner Phil Glass, of Camarillo, California, had to remind himself where he parked 16.5 #51, as his is normally the only Diamant

There were other Diamant owners who visited or stayed for the whole weekend, without sailplanes:

around and easy to spot!.

Los Angeles Skyline

Bill Williams, of Redlands, California; owner of 18M ship #31. Jack and Sharron Emery, Santa Ana, California, owners of clip winged (15M) 16.5 #13. Ray and Paula Poquette from Grass/Valley, California (owners of 19M #56). And Art Babiarz Jr. and dad Art Sr. came the furthest of all.... from Mohrsville, Pennsylvania!. (Art proudly owns #12, the ex- George Moffat owned 16.5 Diamant; the second one made and first to be purchased by a U.S. owner!).

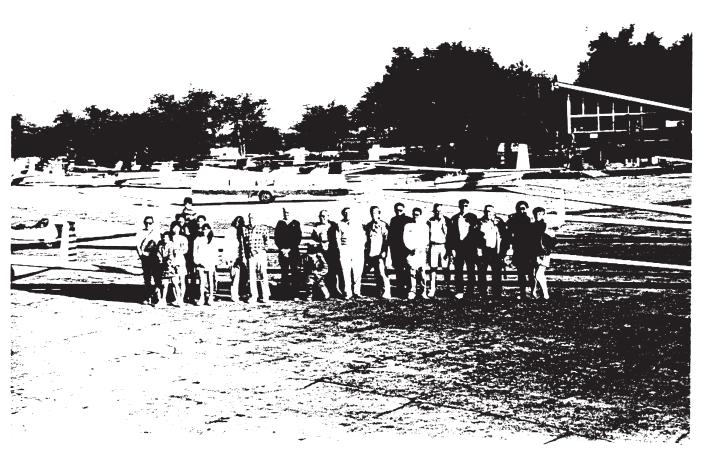
Providing their own point of view, on 30 years, Ruth Bircher and Hety Von Voornveld, assured us that lives with their husbands has never been dull!. They both met and married their husbands during their student-days and the development of the Diamant prototypes, and have remained married since.

Special thanks to Larry and Jane Barrett for making the facilities at Mountain Valley Airport available for our special group to park and the Sunday morning runway photo session; the organizers of the Sailplane Homebuilders Western Workshop, who provided space in the "Bird-House" hangar for our Diamant historical displays and information table. Donna Joe and husband Bob who handled registration, informational and general support to anyone who needed it. And special honors to Bill Boulton, from Austin, Texas, who tirelessly helped out everywhere, took lots of photos and assisted new Diamant owner Mike Bryan get ready to trailer home. (Mike came down from Royal City, Washington, for the anniversary celebration and went home six days later with his own Diamant 16.5, #41). Our deepest appreciation to partners Gus McCarthy and Andy Anderson, for attending the celebration with their 1966 Libelle H-301, especially to get photographs of the Libelle and HBV Diamant #5, together. Sharing the same "Huetter" designed 15 meter wings, both sailplanes were developed during the period 1963-64; and til now, no photos of the two posed together are known to exist!. (Our photos are spectacular).

Statistics: There were two earlier Diamant first flight 30th anniversary gatherings, in May 94 in Switzerland, and a third European event around September 16th, in Germany. Our group of sailplanes represented 25% of the active U.S. Diamant fleet and with twelve pilots, over one third of the owners. We flew a combined total of approximately 16 hours under moderate soaring conditions. And this event marks the first time that a U.S. sailplane owners group has celebrated the pride of owning a first generation "Classic Glass" composite sailplane.

Information from: Inner-City Soaring and the Diamant 2-31 Video crew Los Angeles, California





N1193

from the desk of

Art Babiarz, Jr.



1. Reference "Maximum Gross Weight":

As stated in the Flight Manual (Section 2, Page 3, dated 04-December-1968) the maximum gross weight of the **16.5** without ballast is **860#**, with ballast the maximum gross weight is increased to **900#**. Is this still current?

I have seen published specifications on the *Diamant* indicating that the maximum gross weight is **970**#!

What is the current maximum gross weight?

If the figures as stated are correct, using ship SN 012 as an example, the empty weight is 693#. To stay within the maximum gross weight (without ballast), this would allow for a pilot and chute combination of 167#! This figure is approximately 13# under the minimum pilot weight (180#) that the ship can be flown without adding ballast weights! If this is true, this ship can not legally be flown under the "STANDARD AIRWORTHINESS CERTIFICATE"! However, it is under the maximum gross weight allowed for carrying ballast. If one were to use this figure, a combination pilot and chute weight would be 207#. Why are there two gross weights, if I am allowed to use the ballasted gross weight as my total?

The second part of this question, is in reference to the maximum allowable non-lifting weight of **485#**. Again using 012 as an example, the actual non-lifting weight equals **259#**. This would allow for a pilot and chute combination of **226#**, which is **19# over** the maximum gross weight with ballast! Why are the design limits so close, as to cause all of this confusion?

2. Reference "Wing Tip Extensions":

Evidently several **16.5's** (including S/N 012) have been modified by having the wingtips from its **18 meter** brother grafted in place.

Was this a factory authorized change?

As I or the F.F.A. have <u>no</u> copies of any "337's" indicating these modifications, are there any known records of this modification being accomplished on this ship?

In reference to this modification, until I acquired the ship, the aircraft was operated under the "STANDARD AIRWORTHNESS CERTIFICATE". I had to place it in the "EXPERIMENTAL" category. As I am the 8th owner, the ship has almost 800 hrs. on it and it is all but 25 years old, Why was this change suddenly required?

I also understand that not all ships with this modification are in the "EXPERIMENTAL" category. Are there any detrimental properties associated with this modification?

Can you explain some of the history and theory behind this modification?

(Continued)

N1193

from the desk of

Art Babiarz, Jr.

3. Reference Service Bulletins No. 6, 7, 8, 8A and U.S. A.D.'s 80-18-09 and 81-16- 01 and Maximum Gross Weight:

I have heard reports of individuals "contest flying" with 900# of water in the wings! (This is double the maximum certified gross weight with ballast.) I have no way of knowing if my ship was one of these, additionally I do not believe that all the "airtime" of this ship has been accurately logged. How concerned should I be over the logged hours vs. the above referenced Service Bulletins and Airwothiness Directives?

Also, if my ship was flown at double the M.G.W. would this affect the structural integrity of the wings?

4. Reference the Canopy:

My *DIAMANT* has what I am told is referred to as a "COWLEY CANOPY". Does this style offer any advantages/disadvantages over the stock canopy?

What is the history behind this style of canopy?

When I placed 012 into the "EXPERIMENTAL" category, I had to install several placards identifying "Emergency Access Instructions", due to the fact that one would not be able to gain access from the outside should the pilot be unable to unlock the canopy from the inside. The "Type Certificate" makes no reference to these placards.

Did the original canopy have external access?

The flight manual indicates that periodic lubrication to the seal around the canopy is required. It does not appear that this seal ever existed on my canopy. Could this be true, or has time and (misuse) deteriorated this seal?

5. Reference Surface Finish:

I understand that my ship was "rolled over" in its trailer while coming home from a flying session. This necessitated some rework to the forward fuselage. Currently there are many "blisters" over the forward fuselage, which if punctured ooze a clear brown liquid. The actual structure seems solid, but I can not help but wonder if this could present any structural problems until I can have the area sanded and refinished. Would your experience lead you to believe that this to lead to structural failure?

6. Possible Weak Areas in the fuselage:

At the gliderport that I am now flying, another *DIAMANT* was based there in the early 70's. evidently this *DIAMANT* was subjected to some "non-standard occurrences"! One example of which I am constantly reminded, is this other *DIAMANT* suffered a broken tailboom from what should have been considered a "normal landing"! My first question would be is there any knowledge a tail boom separation on any of the ships? (Is this a true story, and if so is there a potentially a "weak area" in the tail boom to be cautious of?)

DIAMANT 16.5 S/N. 012

N1193 from the desk of Art Babiarz, Jr.

7. Reference the Flight Manual:

What is the current date of the "Flight Manual"?

I have received several updates to mine, however those updated pages in my copy have later issue dates!

8. Reference the Service Bulletins:

Are there any "Service Bulletins" issued after Number 10, dated April 1981?

9. Reference Braking on the Ground:

The "Flight Manual" states that the wheel brake is capable of being operated independently from the spoilers. How is this achieved?

10. Reference Pushrod Noise (Chatter):

Is there any way to eliminate the noise (chatter) generated by movement in the elevator control?

11. Reference the Tail Wheel /Skid Assembly:

The "Flight Manual" makes reference to a tail wheel bracket assembly being available separately. I believe I have this on my ship. Are there any <u>Tail Skid</u> assemblies available for grass fields (as originally equipped)?

12. Reference the "Wing Cuffs" Required by Service Bulletin No.8 & F.A.A. A.D. 81-16-01:

Service Bulletin No. 8 makes reference to Repair Kits SK HBV-191 and SK HBV-194. I am told that these kits are no longer available, however "cuffs " and other necessary parts are available from "Intercity Soaring". Are these replacement parts certified by the F.F.A. and the F.A.A.?

13. Reference Pilot Restraints:

Is there a significant advantage on going to a "five-point restraint "system as opposed to the standard "four-point" restraint system?

14. Reference Stock Control Column:

When acquired, my *DIAMANT* had a straight control column. I have since replaced it with the "S" style "stock control column. Was the straight version the "original equipment on this early ship?

Also, is there any way to obtain additional clearance between the full up position of the control column and one's groin area?

(Continued)

DIAMANT 16.5 S/N. 012

N1193 from the desk of Art Babiarz, Jr.

15. Reference the "Standard Issue" Pitot pick-up arrangement:

When acquired, my *DIAMANT* was equipped with a piece of brass tubing protruding from the lower half of the "cup" to serve as the Pitot pick-up and did not have the vent cover baffle attached to the rear of the cup. I have since had the "standard issue" specimen cup style Pitot pick-up and vent cover installed. As there was no evidence of these items being removed from my ship, could it have been possible that they were factory installed (not- installed) in this manner?

16. Reference Official F.F.A. Documentation on Aircraft Serial No.12:

I understand the 3 basic versions of the *DIAMANT* (HBV, 16.5 & 18). However until I owned this ship it was registered under the "Standard Airworthiness Certificate" as an HBV-16.5. This Type certificate matched certain documentation issued by F.F.A. Could you explain why the cross-over in terminology?

Also, according to the "Type Certificate G13EU" only the HBV and the 16.5 versions of the aircraft have been type certified! Does this mean that all 18's must be in the "Experimental" category?

17. Reference Aerial Photographs of SN. 012 Indicating Degree of Flex in the Wing:

Recently I have been looking over many old photos of my ship taken while Mr. Moffat and Mr. Talalas were the pilots. As I can not determine the actual flying weight at the time of the photographs, I can only surmise that they are at or below maximum gross weight. I fly the ship at approximately 898-900#. This would place the wing loading at or about the same. Now, when I compare these photo's to photo's of me in flight there is a noticeable increase in the amount of flex in the wing! I thought that perhaps this could be from a difference in speed, but I can not recall ever flying faster than 80 miles per hour, during a photo session. Is this a possible indication of "future concern"?

18. Reference Rigging/Derigging the Ship:

In the letters from Mr. Moffat and many times from the previous owner I have been told how much of a "BEAR" this sailplane was to assemble. I need every bit of a three person ground crew to set-up and put-away! Has anyone ever designed any systems to assemble/break-down with only one or two people? Where can I obtain one?