THE SLIPSTREAM

THE NEWSLETTER OF GREEN RIVER EAA CHAPTER 441 KENT, WA

INSIDE THIS ISSUE:

PRESIDENTS COL- UMN	1
ZENITH 750 UP- Date	3
GUESS THAT AIR- PLANE	4
GUESS THAT IN- Strument Panel	4
DARINS RV	5
ANDY'S ENGINE UPDATE	6
PIETENPLO UP- Date	6
EAA NEWS	6
EDITORS CORNER	7
GUESS THAT MOV- IE/AIRPLANE	9
LAST MONTHS Guess that air- Planes answer	10
LAST MONTHS GUESS THAT IN- STRUMENT PANEL	11
JULY'S PICNIC	12

SPECIAL POINTS OF Interest:

WE ARE HAVING ICE CREAM AND CAKE IN AUGUST.

PRESIDENTS COLUMN:

Presidents column:

I learned about flying from that

I've been flying IFR since 1992, and I keep learning new and different things. The return from OSH was a target-rich environment for learning. I'd always thought when IFR you needed to be on a defined route (preferably an airway) so that ATC knew where to expect you to be, importantly, for lost comm procedures.

When I left Great Falls for home, the weather was clear and 2-1/2. So I had to go IFR...over the mountains. I filed for 12,000, a good Westbound altitude. Clearance delivery gave me 13,000.

Just leaving Grant County Approach, SEA center told me there's significant weather West of Ellensburg, and most of the airlines are getting through a gap to the South. I expanded the view on the ipad and sure enough, West and Northwest of Ellensburg was clobbered with orange and red. I saw the gap he mentioned, but there are no airways Southwest out of Ellensburg. I began considering a strategy. I had lots of fuel (boy am I glad I replaced the aux fuel bladders last summer), so considered South to Yakima, then West. But the YKM firing range was active that evening. I asked where the bases were, perhaps I could get under it and pick my way through VFR. There was a C210 ahead of me, so the controller asked him. The answer: somewhere above 10,000. I asked if I

could get down to 10 and cancel. The controller said "you don't want to go VFR into the weather over the mountains. Just stay with me and I'll approve any deviation you want." Wow. Never heard of that before.

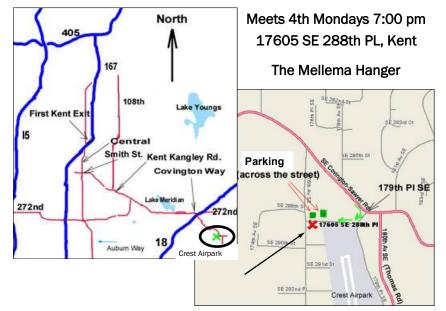
I drew a line on the i-pad from Ellensburg to Packwood (on the South side of Mt. Rainier), and watched the weather. I'm acutely aware that the Nexrad weather on the i-pad is fiction, maybe up to 20 minutes old. So I watched it. The cells were growing, but they did not move relative to my line. I asked the controller if I could have a 210 degree vector out of Ellensburg. He declined the vector request and only said all deviations are approved. So off I went, into the weather over the mountains, IFR. Never done that before.

At some point, Center called the C210 ahead and asked if he could see Mt. Rainier. His answer: "Not yet." SEA said: "I'd suggest you turn 30 degrees left, RIGHT NOW."

At that point, I had a brighter spot at 12:00, with dark areas left and right. While the i-pad is fiction, what's out the windshield is real, and coming at the speed of light. I went for the light. Pretty soon I could see the ridges below, and circled down over Enumclaw.

Behind me was a Convair water bomber. When I saw him on the fish finder, he was about 4 miles North of my line through the gap, and according to ADSB, he was well into the or-

WHERE DO WE MEET THIS MONTH?



AUGUST PROGRAM

Ice Cream, cake and tales of AirVenture 2021

Program

We will celebrate our return to in person get togethers on Monday AUGUST 23.

We will have Ice Cream and anything else you would like to bring

Where: Back to Mellema Hanger 17605 SE 288th Pl. Kent

When: Monday August 23rd

You are welcome to wear masks and bring something to share or just visit if you are not comfortable eating together.

Chapter will provide ice cream, cake, dishes and utensils etc. If you want pop please bring for yourself. No alcohol please.

Look forward to visiting and enjoying everyone's company!!!!!

2021 **OFFICERS President: Brian Lee** (253)-639-0489 Vice-President: Mark Owens Secretary: To be determined **Treasurer: Steve Crider Tech Counselors/ Flight** Advisors: **Brian Lee** (253)-639-0489 **Dave Nason** Jonathan Lee (253) 508-1376 **Newsletter Editor: Roger Schert** (206)713-9910windridershaman@gmail.com

Page 3

PRESIDENTS COLUMN CONTINUED, ZENITH 750 UPDATE:

ange. He called center and said "I don't have weather radar and I don't like this. I'm going to do a 180 and go back to Moses Lake". Pure heroism. He made a command decision based on what he saw out his windshield, and it was the correct decision. I might have suggested he just go 4 miles South into the gap, but he did not need any confusion. He'd made a safe decision, and I left it at that.

Certainly lots of learning for me on that day.

Other OSH tidbits:

Seen at OSH. A couple of things got my attention. One was a twinengine RV-7A. The builder claimed to not be an engineer, but clearly, some engineering had been done. Two Corvair engines. Cute.



I've been familiar with Click-Bond products for a long time. Mostly,





small adhesive pads useful for hanging tie-wraps to. What caught my eye was an adhesive nutplate. Glue it on and you're ready to go. More importantly, it's certified as a replacement for riveted nutplates. I was talking to the manufacturer, not the vendor, so I have no idea what they cost (probably a lot), but they might save a lot of time.

Finally, Chapter 26's Ron Borovic was inducted to the Memorial Wall. I attended the ceremony.

Brian



Zenith 750 Update:

Chapter 441 member Jason Fish is building a Zenith CH-750. He's got the wings and the tail done, and ordered the quick-build fuselage kit from Zenith. It was due to be delivered this week, and he put out a call to chapter members to help him unload. Between Chapter 441 folks and some of Jason's neighbors, he had about eight people there to help.



The shipment included the fuselage itself, plus all the "goodies" that went inside of it. It traveled by flatbed trailer. The fuselage itself wasn't that heavy, but the "goodie" crate weighed an estimated 700 pounds.

The fuselage itself was pretty easy, but of course folks had to know where to grab. The Zenith has a steel tube safety cage around the cockpit; between that and the steel main landing gear mounts, the men didn't have much difficulty.



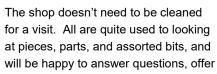
The crate, of course, was different. It was slid to the edge of the trailer, then pivoted until one corner could touch the ground. Then it was pivoted back, and the other end lowered to the driveway. No pictures, here, because even the photographer had to help!

TECH COUNSELORS AND FLIGHT ADVISORS



Chapter 441 is fortu nate to have two Feel free to call Brian

(253)-369-0489, or Dave Nason any time. You don't need to wait for some significant milestone in your project. Remember, this is not an "inspection".



advice, and generally talk about projects, building, flying, or whatever.





GUESS THAT AIRPLANE; GUESS THAT INSTRUMENT PANEL

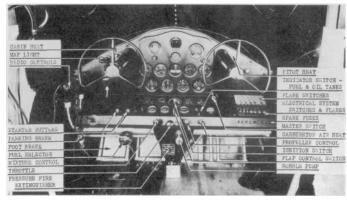
This months entry:

Go to Page 10 for Julys 2021 airplane



This months entry:

Go to Page 11 for Julys 2021 Instrument Panel



DISCLAIMER: The "SLIPSTREAM" Newsletter is published as a clearing house for ideas, opinions, experiences and member information. No responsibility or liability is expressed or implied. Anyone using or purchasing parts or product is doing so at his or her own risk, and is

VOLUME 23, ISSUE 8

ZENITH 750 UPDATE CONTINUED, DARIN'S RV ADVENTURES:

One of Jason's neighbors had a pair of small dollies. These were slipped under each end, and the crew rolled it into the shop. Then Jason set up a pair of sawhorses, and the fuselage was brought in at an angle, with the tail hanging over the crate.



The whole process took about 35 minutes. As one might expect, Jason was a bit surprised at how much the crate and fuselage filled up his shop!

This was an amazing day, and I couldn't have done it without such great helpers. I forgot to show everyone the huge shop being built out back. I'll soon have PLENTY of space to continue the build, and Kimberly can have her garage back.

Ron and Jason

Darin's RV adventures:





Phase 1 is complete!

Amy finally got her ride in the 10 this past weekend. It was her birthday and she wanted to go to the San Juan islands for the day so I had a goal to meet in getting phase 1 complete in time. I met it but only just...if you look at the picture above Amy is actually sitting in the passenger seat (in the reflection) when I took the picture of the Hobbs meter. :-)

Lots of work on the 10 in the past several weeks. I've been working on a few squawks, such as the Comm2 antenna relocation, rear seat belt installation, wheel fairing finishing and installation, and of course flying when I can to finish up the testing.

One of the biggest projects I ended up with was moving the backup battery off of the firewall and back to

DARIN'S RV UPDATE CONTINUED, ANDY'S ENGINE UPDATE, PIETENPOL UPDATE, EAA NEWS:

the tail cone to sit beside the main battery. It was just too hot under the cowl for that battery. It has a temperature sensor that was alerting during flights longer than about 15-20 minutes. So I decided to move the battery aft. That took a lot of time but it was worth it. It also helped my CG just a little.

One of the drawbacks to flying out of Fall City airport is that I have to tug my airplane to the road. The gravel driveway with a slight incline has too much resistance for me to pull the airplane alone. This is Ben's tug that he is letting me use until I can get one of my own.



Speaking of making my own tug, Harry gave me this old electric wheel chair base so I could use the motors to make an electric tug. I started down that path but found that the motors run a little too fast. I will



have to gear them down or find a way to adjust the controller to slow the motors.

Page 6

To Read More: Click Here

Andy RV Engine Update:

This last month I finished re-installing the rebuilt engine with the new crankshaft. I also had the cylinders rebuilt with new rings and exhaust valves / guides so I got to do another engine break in. The new Hartzell propeller worked great and wow does this RV-8 get up and move now. These first 10 hours when you run it hard to break in the engine really gets you hooked. 180kts at 1000ft makes the world go by quickly. At 10 hours I changed the oil, checked compressions (79/80 across all) and took a look with the camera. Everything is clean and new inside now. Then after doing a month of work to get the plane back together on the last flight of the 10 hours after I take off and pull back the throttle, the throttle cable binds up with a bunch of friction. Sigh, so I got to order new throttle and mixture cables and get those installed. Hopefully the next set last longer. I tried to encase them in firesleeve where they go near the exhaust etc. Next up is to do a dynamic propeller balance and see if it can be made smoother. That's it for now.

Andy

Pietenpol Update:

Really busy between life in Oregon and commuting to in-person work at Boeing. Working to get qualified in the Swift. Hope you all are doing well....

Jake

EAA News:

Critical Flight Training Issue:

Earlier this year, a federal court determined that compensated flight instruction in experimental, limited, and primary category aircraft, even instruction obtained in an individual's own aircraft, was contrary to FAA regulation. While the FAA has used letters of deviation authority (LODAs) and exemptions to temporarily address the issue, a long-term fix is years away under the normal rulemaking process.

This is unacceptable to EAA and the rest of the general aviation community. That is why we are backing the Certainty for General Aviation Pilots Act to quickly address the issue. With the help of EAA, twin bills have been introduced in the Senate and House that

VOLUME 23, ISSUE 8

EAA NEWS CONTINUED, EDITORS CORNER:

would require the FAA to recognize flight training and the Additional Pilot Program for homebuilt flight testing as permitted activities not requiring any special authorization. The Senate bill is S.2458, introduced by Senators James Inhofe (R-OK), John Boozman (R-AR), and Angus King (I-ME), and the House bill is H.R.4645, introduced by Representative Sam Graves (R-MO).

To Take Action: Click Here

One Week Wonder is back for 2022:

Thanks to the support of Sonex Aircraft, we're excited to announce the return of the One Week Wonder for AirVenture Oshkosh 2022. Starting on Sunday, August 24, at 8 a.m., a group of volunteers will build a Sonex Waiex, to be completed and ready to taxi one week later, on Sunday, August 31.

"The One Week Wonder event brings excitement and enthusiasm to others in the community by showing what it looks like and feels like to build an aircraft from a kit," said Charlie Becker, EAA's director of chapters and homebuilding.

To Read More: Click Here

GoFly Inspires 14-Year-Old to Design Her Own Flying Machine:

My name is Gia Keiper. The article that Christina Basken wrote about the GoFly competition has been an amazing inspiration to me, and has really had an influence on me.

I'm 14 years old, and I live in California. I've always been interested in airplanes but we have no flying history in our family. Five years ago, my brother Taris (he's 16 years old now) learned about the EAA workshops and convinced my dad to take the EAA composites class with him at Aircraft Spruce & Specialty. I was too young at the time and massively mad that I couldn't go with them. My dad and my brother became EAA members at the time, so we started receiving EAA Sport Aviation. I read every issue cover to cover but flying myself or owning an airplane was just a distant dream.

To Read More: Click Here

2021 ArVenture Lindy Awards Announced:

Hundreds of gorgeous, striking airplanes arrive at EAA AirVenture Oshkosh each and every year in hopes of winning a Lindy Award. Only a handful come away with any sort of award. Fewer still come away with a Lindy.

Awards are given out across six categories: Homebuilts, Warbirds, Vintage, Ultralights, Seaplanes, and Rotorcraft. Entrants can only be considered for one category in a given year, and are not eligible for the same or any lower-tier awards if they have won in the past.

Looks are considered in award judging, but the quality of craftsmanship inherent in the aircraft is a crucial factor as well. Careful construction and/or restoration, as well as tireless maintenance, is essential in winning a Lindy.

With all of that said, congratulations to all the 2021 award winners!

To Read More: Click Here

EAA AirVenture Oshkosh 2021: Facts and Figures for an Outstanding Year

Comment from EAA CEO and Chairman Jack Pelton:

"This was perhaps the most challenging set of circumstances we've ever faced as an organization to make the event happen. I could not be more proud of our volunteers, staff, and participants on the way they came together to exceed our expectations and make AirVenture 2021 a truly memorable experience."

Attendance: Approximately 608,000 – Only the third time attendance has surpassed 600,000 and within 5 percent of 2019's record total. Comment from Pelton:

To Read More: Click Here

Editors Corner:

I want to thank Mark Owens for helping me get the Sportsman 2+2 to my house in July. It took a lot of patience with my crankiness, so I really appreciate his assistance. I haven't cleaned out my carport yet to fit it in there, but for now, the fuselage is under a tarp and the tail feathers are hanging in the car port.

I have had the Sportsman 2+2 home now for almost a month and I have been assessing where the airplane really is construction wise, studying the drawings and putting together a list of things to do to complete the fuselage, at least up to the point of hanging an engine. I still need to decide on what engine to use and then plan to get it. There were a bunch of

EDITORS CORNER CONTINUED:



things I didn't see when I first looked at the airplane, so I had a nice surprise when I got more things than I expected. I have the control columns, rudder pedals and primary landing gear. I want to get it onto the gear, but need to get wheels and brakes and a tail wheel. Since I need to get wheels, I should just get a

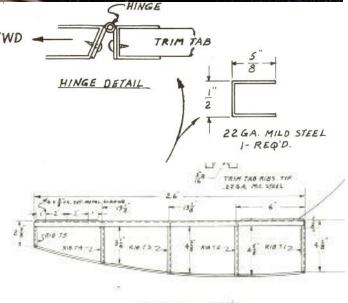


set of wheels and compatible brakes at the same time. But I worry about how long the tires will last, I don't want to have an expired tire when I start to fly it.

One of the considerations I need to make is Do I just get a tail wheel and spring leaves for the interim and replace it later with what I really want to put on (the Airframes Alaska twin shock tailwheel suspension)?

I have a few issues with the plans, The drawings show the trim tab in a cross section with a part that goes over the leading edge of the trim tab but it does







not describe whether it goes on the whole length of

Page 8

Page 9

EDITORS CORNER CONTINUED, GUESS THAT MOVIE AND AIRPLANE:

the trim tab or just where the attach points are. It looks like I will have to form it in a brake. I only have an 18 inch brake, so may need to find one larger if it is the full length. If it is really needed, it allows me to fix the off center holes drilled for the hinge attach points.

I will bring the trim tab to the gathering this Monday along with excerpts of the associated drawings. More to follow over the next months.

Does anyone have a Scott Tail wheel that they replaced or just hanging around that needs a good home? How about Steam (not Punk) Gauges?

We are having ice cream and cake this Monday provided by the Chapter. If you want to bring something else, that is fine. We return to the 7:00 PM timeframe this month. I am looking forward to hear tales of Oshkosh and your adventures in the last month.

Build Straight

Roger

Guess that airplane and Movie:

Last months Movie and airplane:

Der Rote Baron:

The Red Baron (also known by its original German title, Der rote Baron) is a 2008 German-British biographical action war film written and directed by Nikolai Müllerschön about the World War I fighter pilot



Manfred von Richthofen, known as the "Red Baron". The film stars Matthias Schweighöfer, Joseph Fiennes, Til Schweiger and Lena Headey. The Red Baron was filmed entirely in English to improve its international commercial viability.

Plot

In 1916, Manfred von Richthofen is serving as a fighter pilot with the Imperial German Air Service along the Western Front. After dropping a wreath over the funeral of an Allied pilot, Richthofen and his fellow pilots Werner Voss and Friedrich Sternberg encounter a squadron of enemy aircraft led by Captain Lanoe Hawker.

To Read More: Click Here:

Airplanes:

Albatross D.V Handley Page O/400 Sopwith F.1 Camel

This months Movie and an Airplane:

Comedy





GUESS AIRPLANE:

DFS-230 Glider

The DFS 230 was a German transport glider operated by the Luftwaffe in World War II. It was developed in 1933 by the Deutsche Forschungsanstalt für Segelflug (DFS - "German Research Institute for Sailplane Flight") with Hans Jacobs as the head designer. The glider was the German inspiration for the British Hotspur glider and was intended for airborne assault operations.

In addition to the pilot, the DFS-230 glider had room for nine men who sat close together on a narrow bench located in the middle of the fuselage (half facing port, half facing starboard). Entry and exit to the cramped interior was by a single side door. The front passenger could operate its only armament, a machine gun. It was an assault glider, designed to land directly on top of its target, so it was equipped with a parachute brake. This allowed the glider to approach its target in a dive at an angle of eighty degrees and land within 20 metres (60 ft) of its target. It could carry up to 1,200 kg (2,600 lb) of cargo.

It played significant roles in the operations at Fort Eben-Emael, the Battle of Crete, and in the rescue of Benito Mussolini. It was also used in North Africa. However, it was used chiefly in supplying encircled forces on the Eastern Front such as supplying the Demyansk Pocket, the Kholm Pocket, Stalingrad, and the defenders of Festung Budapest (until February 12, 1945). Although production ceased in 1943, it was used right up to the end of the war, for instance, supplying Berlin and Breslau until May 1945.

To Read More:

WikiPedia: <u>Click Here</u> Deense Media Network: <u>Click Here</u> WW2 Wrecks: <u>Click Here</u> Fiddlers Green: <u>Click Here</u>

Specifications (DFS 230 B-1)

DFS-230.svg Data from Aircraft of the Third Reich. German Aircraft of the Second World War General characteristics Crew: 1 Capacity: 9 equipped troops + 270 kg (600 lb) cargo Length: 11.24 m (36 ft 11 in) Wingspan: 21.98 m (72 ft 1 in) Height: 2.74 m (9 ft 0 in) Wing area: 41.3 m2 (445 sg ft)



Empty weight: 860 kg (1,896 lb) Gross weight: 2,040 kg (4,497 lb) Max takeoff weight: 2,100 kg (4,630 lb) **Performance**

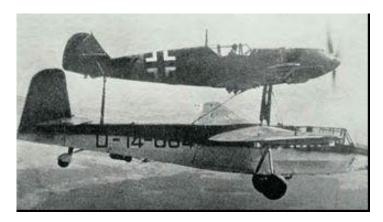
Never exceed speed: 290 km/h (180 mph, 160 kn) Maximum towing speed: 209 km/h (130 mph) Normal towing speed: 180 km/h (112 mph) Maximum glide ratio: 1:18 (empty), 1:11 (fully loaded)

Armament

Guns:

Optional

1 x 7.92 mm (0.312 in) MG 15 machine gun on a manually aimed mounting aft of the cockpit 2 x 7.92 mm (0.312 in) MG 34 fixed forward firing machine guns attached to the forward fuselage sides.



Page 10

GUESS THAT INSTRUMENT PANEL:

Arado AR 234B

The Arado Ar 234 Blitz (English: lightning) was the world's first operational jet-powered bomber, built by the German Arado company in the closing stages of World War II.

Produced in limited numbers it was used almost entirely in the reconnaissance role. In its few uses as a bomber it proved to be nearly impossible to intercept. It was the last Luftwaffe aircraft to fly over the UK during the war, in April 1945.

In late 1940, the Reich Air Ministry (German: Reichsluftfahrtministerium, abbreviated RLM) offered a tender for a jet-powered high-speed reconnaissance aircraft with a range of 2,156 km (1,340 mi). Arado was the only company to respond, offering their E.370 project, led by Professor Walter Blume.[2] This was a high-wing conventionallooking design with a Junkers Jumo 004 engine under each wing.

Background

Arado estimated a maximum speed of 780 km/h (480 mph) at 6.000 m (20.000 ft), an operating altitude of 11,000 m (36,000 ft) and a range of 1,995 km (1,240 mi). The range was short of the RLM request, but they liked the design and ordered two prototypes as the Ar 234. These were largely complete before the end of 1941, but the Jumo 004 engines were not ready, and would not be ready until February 1943. When they did arrive they were considered unreliable by Junkers for in-flight use and were cleared for static and taxi tests only. Flight-qualified engines were finally delivered, and the Ar 234 V1 made its first flight on 30 July 1943 at Rheine Airfield (presently Rheine-Bentlage Air Base).

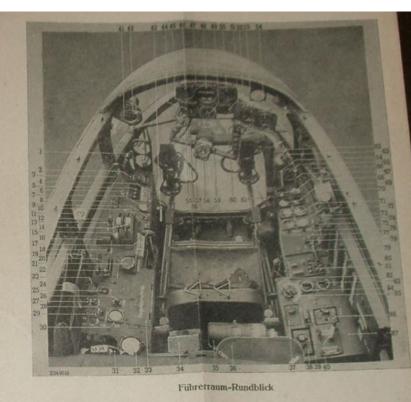
To Read More: Click Here



Abwurfschalter für Rauchveräte geräte Abwurlschaltkasten Anlaßschalter Anzeigegerät für Außenluft-81 temperatur 30 Anzeigegerät für Funknavigation Atemgerät Atendange Atenlunge Auslöseknopf für Bomben ... Bedienbank, linke Bedienbank, rechte Bediengerät BG 25 12 86 Bedienhebel für Höhenflossenverstellung Behälter für Handlampe 17 Blindfluggerätetafel 47 Bombennotzug Borduhr 64 Boschhorn Drehschalter für Handöl-31 pumpe Drehzahlunschalter 22 27 für Bordulir-Druckknopf 59 anlage Feststellhebel Feuerwarnanzeiger FT-Anschlußdose PT-Betriebsartenschalter 15 83 PT-Prequenzwahlschafter . Führertochterkompaß 84 40 Funksprengung Gashebel 14 Gastemperaturmesser 71 Geräteleuchte 1, 19, 42, 63, 73

owurfschalter für Rauch-	Griff zum Ausklinken der
geriite 25	Steversäule 61
wurfschaltkasten 81	Handhebel für Behälter-
haßschalter	schaltung 22
nzeigegerät für Außenluft-	Handkurbel für Fernsteue-
	rung u. Bildgeräteklappen 40
temperatur 30	Handölpumpenhebel
nzeigegerät für Punknavi-	Handrad für Seitentrimmung 21
gation	Höhenmesser 44
temgerät 74	
tendunge	Kartentasche 24
uslüseknopf für Bomben 55	Kontakthöhenmesser 32
edienbank, linke 12	Kraftstollvorratsmesser 72
edienbank, rechte	Lampe für Zündung 18
ediengerät BG 25 86	Landeklappenschalter 5
edienlichel für Höhen-	Lenchtpistole 66
flossenverstellung 17	Libelle U
chälter für Handlampe 36	Nalikompaß 41
lindfluggerätetafel 47	Navigationsmaterial 33
ombennotzug 64	Nebengerätetafel 52
ordulir 58	Netznotausschalter 9
oschhorn	Reststandswarnlampe 76, 77
relischalter für Handöl-	Richtungsgeber 60
pampe 85	Schalter für Dreischsen-
rehzahlumschalter 27	steuerung 8
ruckknopl für Bordulur-	Schalter für Düsenverstellung 28
beleuchter 59	Schalter für Heizung 43
Irnekmesser für Drucköl-	Schulter für Scheinwerfer 10, 13
anlage 7	Schalter für Zielanllug 6
inspritzdruckmesser 62, 65	Schalter für Zusatzbehälter 20
It-Drehzahlmesser 53, 54	Schultkasten für Rauchgeräte 23
abrimesser 46	Schalttafel 80
abrwerkschalter 4	Schmierstoffdruckmesser 69
ernbediengerät FBG 16 37	Spannungsregler 34
eststellhebel 15	Sprechknopf 57
enerwarnanzeiger	Stanrohr-Schauzeichen 45
T-Auschlußdose	UV-Leuchte 3, 56, 67, 79
"T-Betriebsartenschalter 83	Variometer
"T-l'requenzwalilschalter 84	Verdunkler 26, 75
"ührertochterkompaß 49	Wendehorizont 48
⁷ unksprengung	Zünderschaltkasten
Gashehel 14	Zündschalter 16
	Zündumformer
Gastemperaturmesser 71	Zwöllampengerät 2
Geräteleuchte 1, 19, 42, 63, 73	z.womampengerat
Legende zum Führerraumrund	blick alphabelisch geordnel

97





JULY GATHERING MINUTES:

July was our first get together in person in a long while. There was lots of good food and every was happy to see each other.

While we were having our picnic a few balloons lifted off and went on their journey.

See you on Monday for our next Gathering.





Page 13

JULY GATHERING MINUTES CONTINUED:

