WINDS

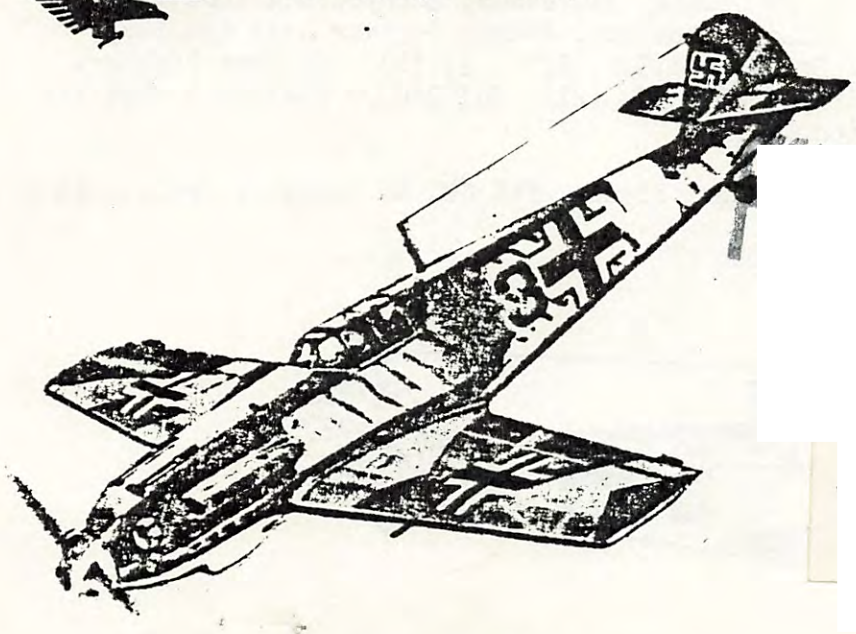
57

'80 INDOOR WICH

WEST BADEN·USA

CLEVELAND FREE FLIGHT SOCIETY

TRW T/M 2833
23555 EUCLID AVE.
CLEVELAND, OH 44117



MESSERSCHMITT Bf 109E

2

1980 CALENDAR

Sun July 27 — CFFS FAC Scale Scramble at Lorain County CC 10AM-5PM C.D. G-8, 582-0257 Peanut GHQ*, Walnut FAC, FAC Rubber Scale, O/T FAC Rubber Scale, (No. Cal. & Schneider Profile), Greve Race, Thompson Race, WW I Biplane, WW II Peanut, Battle of Britain, O/T CO_2 Replica Target Time, R.O.G. (J)(S), All Fly (J). * Feature Event of Day for Golden Age Reproductions Kit Prize CFFS Meeting to follow 8 PM at Todd Allens 2221 Garden Dr. Avon Ohio. Detroit Balsa Bugs C'H, P-30, A-1, HLG, Rub SC, Jumbo Scale. J. Macay.

Aug 8-10 Fri Sat Sun — FAC NAT'S MK II at WPAFB DAYTON OHIO. CD Frank Scott (513) 890-5989 Full FAC Peanut, WW I Peanut, WW II Peanut, Jet Cat, Jr.Tour, Jr. R.O.G. Schneider, WW I Dogfight, WW II Combat, No.Cal., FAC Power, FAC Jumbo. Thompson, Greve, Aerol, GHQ Peanut, FAC Rub. Sc., Embryo Endurance U.D. Housing : Donna Meixell 5467 Colrain Dr. Dayton 45424 (513) 233-4173 FAC Banquet Saturday night. Full Dress Uniform Req'd for Blue Max Aces. 14th S.A.M. CHAMPS WPAFB with FAC NAT'S. Mgr. Bob Larsh (317) 244-2354 Bean Feed Thurs. Banquet Sun.

Mon Aug 12 — AMA Ind. U. of Cin. Peanut, Scale, HLG, EZB, Penny P., MANHATTAN, 'Copters.

Tue Aug 12 — FAC O/T Rubber Scale and Battle of Britain Combat Russ Brown CD WPAFB

Wed Aug 13 — WPAFB Rubber Speed, Rubber Distance, Helicopter, Autogiro, Ornithopter J,S,O.

Thu Aug 14 — WPAFB Korda A.M. Rubber, P-30. (R.O.W. Rub, Gas dates to be posted.)

Sun Aug 24 — CFFS Fall Scale Scramble at L.C.C.C. 10 AM- 5 PM. (Advance of 9/28 LCCC) Peanut full FAC, FAC Rub. SC., O/T FAC Rub., Embryo Endurance (JS)(O) WW II Peanut*, Battle of Britain, Jet Catapult Scale, O/T CO_2 REPLICA for target time (any O/T), HLG (J)(S)(O),. R.O.G. 24" (J)(S). All Fly (J). CD Tom Majestic 251-4176 / Info Russ Brown (216) 382-4821. * Feature Prize COFFC Meet at WPAFB, Dayton OH. CFFS MEETING PM. AT DEL BALUNEKS 2227 GARDEN DR.

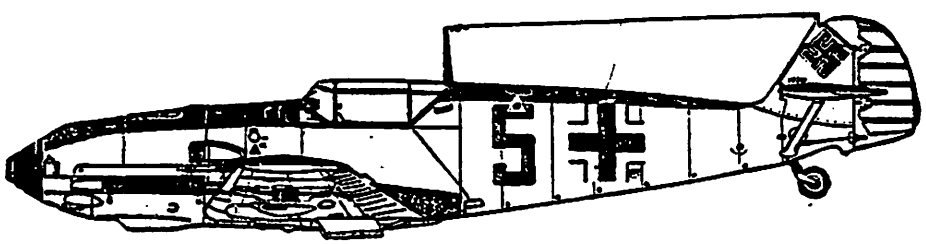
Aug 30-9/1 — Cleveland Lk.Ft. Apt. Air Races. Hansen F-1, F-Vee, & Biplane Races,Show. Eastern Region USARA Membership $7 , Jim Vliet, 32 Wesley St. Monmouth Beach NJ 07750. Info Jack Dianiska 26726 Henry Rd. Cleve. Oh 44140.

Sun Sept 7 — Canton Ohio FAC Date Pending. Don Assel CD. Peanut, FAC, WWII ,T,T., Greve, Jet Cat., HLG. COFFC WPAFB Dayton OH Fun Fly & Trim Date.

Sun Sept 21 — WPAFB Dayton OH. GREATER STORKVILLE & DETROITEN GESCHWADER FAC RHUBARB 10-5PM. Peanut GHQ, FAC Rub Sc.*, FAC Jumbo, FAC Power, Embryo Endurance (JS)(O) Shell Dash Qual, Greve Inline, Thompson, Hansen Postwar Race Handicap, WW I Biplane, Battle of Britain, R.O.G. 24" , (J)(S) . CD Dave Pishnery 29323 Grand Blvd. Wickliffe, Oh 44092 (216) 943-2640 * Feature G. Age Kit. CIA date at WPAFB, Dayton Oh.

Sun Oct 5 — FAC Fall Meet, Durham Ct. Pinkham Field. FAC GHQ 66 Bankside Bridgeport Ct.

Sun Oct 12 — COFFC date at WPAFB, Dayton OH.



CROSSWINDS QUARTERLY

THE JOURNAL OF THE CLEVELAND FREE FLIGHT SOCIETY

ISSUE FOR APRIL, MAY,
AND JUNE, 1980
VOL. 7, NO. 2
ISSUE NO. 57

EDITOR: DENNIS O. NORMAN
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LAKEWOOD, OHIO 44107 USA
TELEPHONE: 1-216-228-7531

EDITORIAL COMMENT:

The dates are August 8, 9, and 10th, 1980. This trio offers you a bonanza of flying fun and a most rare opportunity to meet and visit with many of the best free flight scale modelers in the world. We expect talent not only from across the United States, but also from Canada, England, and pernaps France and Czechoslovakia.

Even if you have not glued a stick in years, come and be a part of this rare event. There will be hundreds of beautiful models and the sky should be filled daily with masterpieces. The 18 official events will provide a captivating variety of subjects and the several mass launch events will present you with unforgetable bursts of colorful models filling the crystal mid-summer blue. Being held on Wright Field Area B, the Second FAC Nationals will literally be in the back yard of the magnificant U.S. Air Force Museum. The displays, movies, and facilities of the Museum afford an air conditioned change of pace for contestants, spectators and their families. Information on local amusement parks, etc. will be provided by Contest Director Frank Scott and his staff.

On the evening of Saturday, August 9, 1980, there will be a banquet for contestants and their families and friends. The program is still being organized, but one of our guest speakers will be author Robert Hull whose new book September Champions details the glamour and excitement of the Cleveland National Air Races. Hull's program "Jimmy, Roscoe, and All Those Boys!" will be a delightful sampling of some of the stories upon which September Champions is based. On display at the time of the banquet will be over a hundred photos and other memorabilia from the Cleveland Air Races and, of course, autographed copies of September Champions will be available as mementos of the occasion.

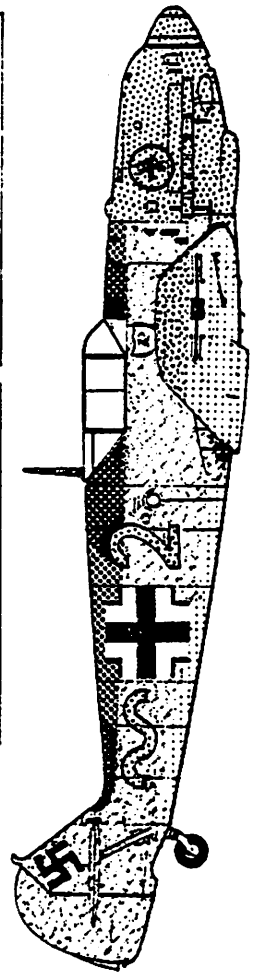
In addition to Robert Hull, it is hoped that we will also have a speaker at the banquet who is famous for his work in model aviation. I personally nominate Model Aviation Hall of Fame Member Edward T. Packard, founder of the Cleveland Model and Supply Co. Ed Packard started selling balsa wood before my father was born and he has persisted as a noble, sometimes craggy, rock in the modeling world. His products touched literally millions of lives and untold numbers of present day modelers (in all phases), pilots, and people in many other walks of life shared the unique thrill and, for many, frustrations of building Cleveland Models. Even such famous political persons as Senator Barry Goldwater knew the joys and challenges

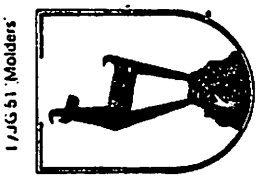
RLM Colours Equivalents

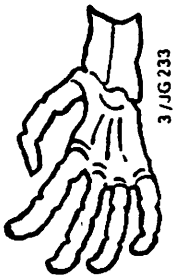
No	Name	Description	Colour equivalents
01	SILBER (Silver)	Undercarriage components etc, Overall finish on early aircraft.	o Humbrol No 11. Gloss.
02	R.L.M GRAU (Air Min Grey)	Internal colour for wheel wells, cockpits, etc. Early one as exterior finish, also used for "overspray" mottle.	o " " No.8.
04	GELB. (Yellow)	Identification colour only. Coverings, undersides.	o " " No. 24. Gloss.
21	WEISS (White)	Identification colour, Numerals & Letters. Winter camouflage.	o " " No. 34. Matt.
22	SCHWARZ. (Black)	Identification colour, Numerals & Letters. Night camouflage.	o " " No.33. Matt.
23	ROT (Red)	Identification colour, Numerals & Letters.	o " " No.19. Matt.
24	DUNKELBLAU (Dark Blue)	Identification colour, Numerals & Letters.	o " " No.25. Matt.
25	HELLGRUN. (Light Green)	Identification colour, Letters.	M — 3parts RLM No.106; 1part No.29; 1part No.34.
26	BRAUN (Brown)	Special camouflage.	M — 5parts No.29; 3parts RLM No.122.
27	GELB. (Yellow)	Identification colour, Numerals & Letters.	o Humbrol No.24. Matt.
28	WEINROT (Dark Red)	Special identification colour.	M — 2parts RLM BLACK COL: 1part RLM No.123; + 1part No.23.
61	DUNKELBRAUN (Dark Brown)	Camouflage colour. Used with 62; 63.	M — 1part No.33: 1part No.28.
62	GRUN. (Green.)	Camouflage colour. Used with 61; 63.	M — 1part No.30 : 1part No.31.
63	HELLGRAU (Light Grey)	Camouflage colour. Used with 61; 62.	M — 1part No.31 : 1part RLM No.126.
65	HELLBLAU (Light Blue)	Camouflage colour. General Undersurfaces.	o Humbrol No.8.
66	SCHWARZGRAU (Black-grey)	Camouflage colour.	o RLM No.105.
70	SCHWARZGRUN (Black-green)	Camouflage colour. Used with 71. Also Propeller blades.	o Humbrol No.1.
71	DUNKELGRUN. (Dark Green.)	Camouflage colour. Used with 70.	o " " No.2.
72	GRUN. (Green.)	Camouflage colour. Used with 73.	M — 2parts RLM No.105: 2parts RLM No.104; + 1part No.33.
73	GRUN. (Green.)	Camouflage colour. Used with 72.	M — 2parts RLM No.104 : 1part No.25 1part No.33.
74	DUNKELGRAU (Dark Grey)	Camouflage colour. Used with 75; 76.	o Humbrol No.A.
75	MITTELGRAU (Med. Grey)	Camouflage colour. Used with 74; 76.	These three shades superseded : 61,62,63
76	HELLGRAU (Light Grey)	Camouflage colour. Used with 74 ; 75.	
79	SAND-GELB. (Sand Yellow)	Camouflage colour. Tropical desert finish.	o Humbrol No.6.2.
80	GRUN. (Green.)	Camouflage colour. Sometimes mottled over 79.	
81	DUNKELGRUN (Dark Green.)	Camouflage colour. Used with 82.	
82	DUNKELGRUN (Dark Green.)	Camouflage colour. Used with 81.	

M = Denotes shade to be mixed from given formula.
o = Denotes suitable equivalent available from Standard, Railway, or Aeroclassic 'AIRMIX' Ranges.





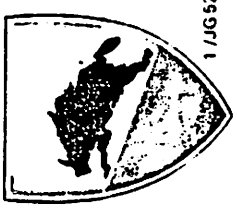




I/JG 51 'Molders'

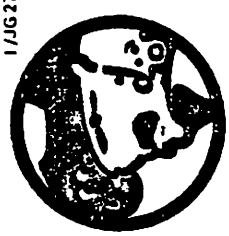
3/JG 233

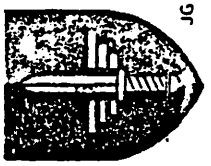




IV/JG 132 I/JG 77

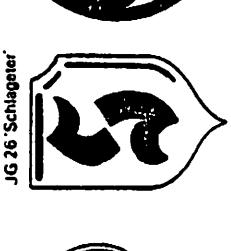
1/JG 52

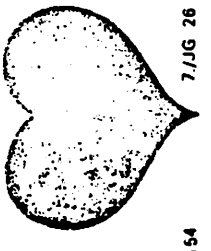




I/JG 27

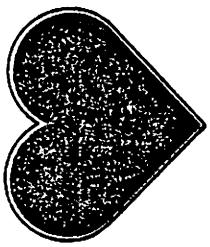
JG 52





JG 26 'Schlageter'

7./JG 26



JG 54 'Grunherz'

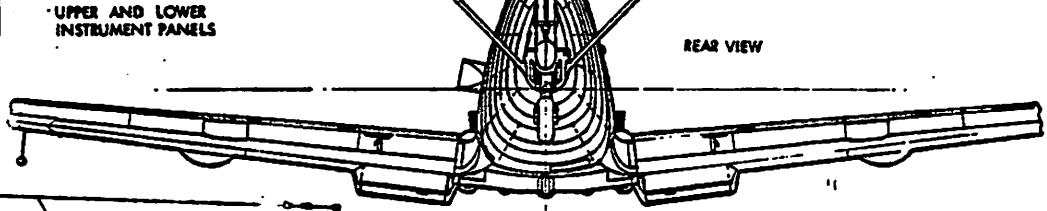
II/JG 54



B 2
Bf.109E,
9/JG2 ' Richthofen '.
Luftflotte 3.
Le Havre, France.
Yellow wing tip above
and below 'H'
Uppers splinter scheme.

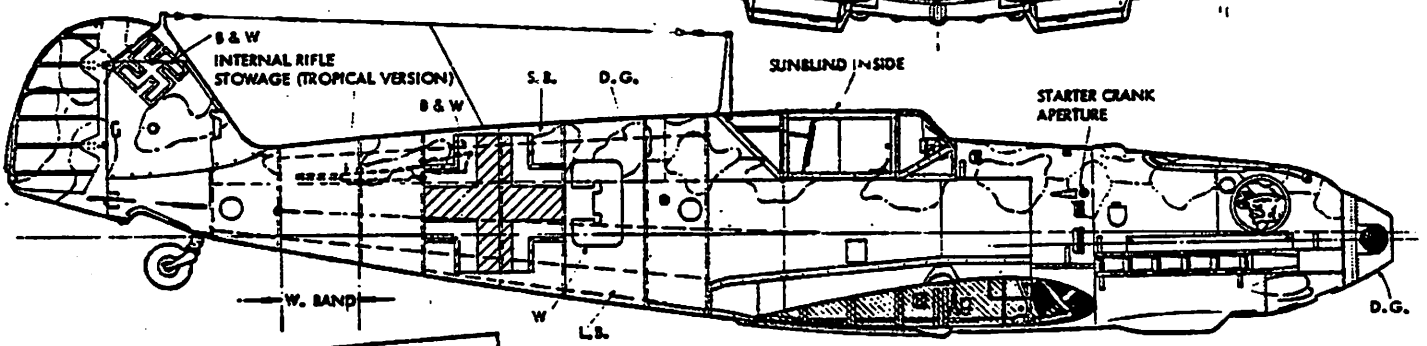


UPPER AND LOWER INSTRUMENT PANELS



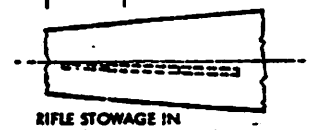
REAR VIEW

achtung!



ALL FLYING SURFACES ARE FABRIC COVERED





RIFLE STOWAGE IN DESERT VERSION (PLAN)

ABOVE AND SCRAP VIEWS DEPICT Bf E-4/N OF 1/JG 27 AS EMPLOYED IN NORTH AFRICA

of building Cleveland kits. (I do not know why I threw that in, may be it is because its an election year!) At any rate, Ed Packard might well make an interesting speaker. He has already been honored by the U.S. Air Force Museum in that a permanent display has been installed there as a tribute to Ed and Cleveland Models.

For those coming to the FAC Nationals as spectators, I recommend that you bring folding chairs, lots of sun tan lotion,broad brimmed hats, and comfortable walking shoes. The field is without trees. Portable canopys, large sun umbrellas, etc. may provide some relief, but you should be prepared to spend a great deal of the time in bright sun light.

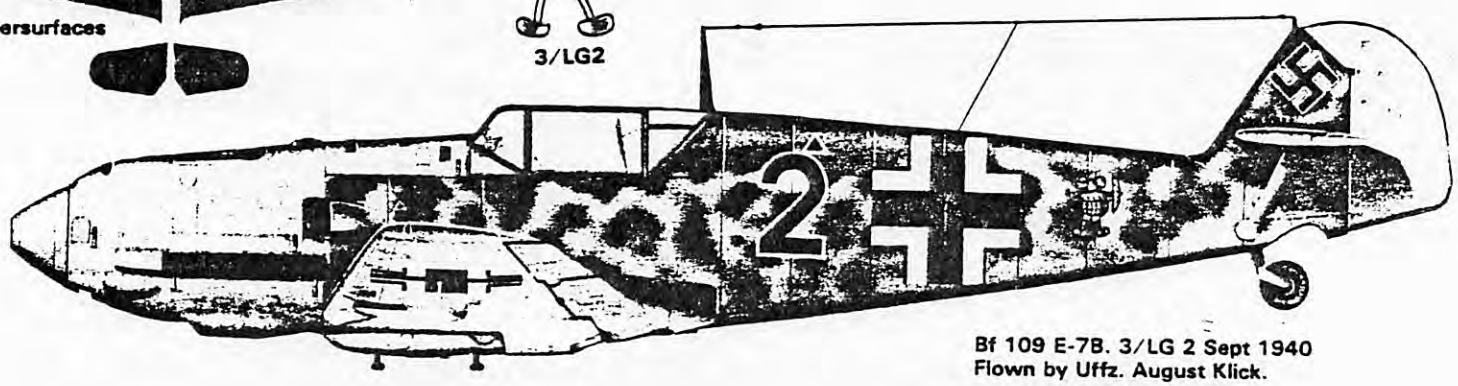
The success of the FAC Nationals depends upon there being models entered in competition. Even if you feel you cannot finish "in the money", please, please bring and enter models. There were 252 models entered in the First FAC Nationals held July 15, 16, 1978 and we hope to see at least 350 or more models at this meet. With 18 official events, you have a wide range of subjects to consider. As for the subjects you chose, you would be wise to start with a review of the Flying Aces Club Rules so as to avail yourself of various handicaps and bonus points available.

For those of you in need of silver tissue, I still have a reasonable supply on hand. A mailing tube with 12-14 sheets will cost you $6.00, postage included. I will, of course, plan to bring some of the silver tissue to the FAC Nationals. Also, I am having "offical" Flying Aces National T-shirts prepared. They will bear the logo "The Flying Aces Club Nationals" and the dates August 8, 9, and 10th, 1980, plus an appropriate aviation logo for the tummy. The T-shirts may be ordered in advance from Dennis O. Norman. The estimated cost is $5.00 each and if your order is placed in advance, please advise as to the number of shirts and also the size (small, medium, large or extra large) desired. Those of you wishing to place a club order might want to bring this up at your next meeting. In doing so, if you want some special feature, such as red or blue sleeves, please be sure to let me know. If possible, advanced orders for Flying Aces T-shirts should be in not later than July 15, 1980.

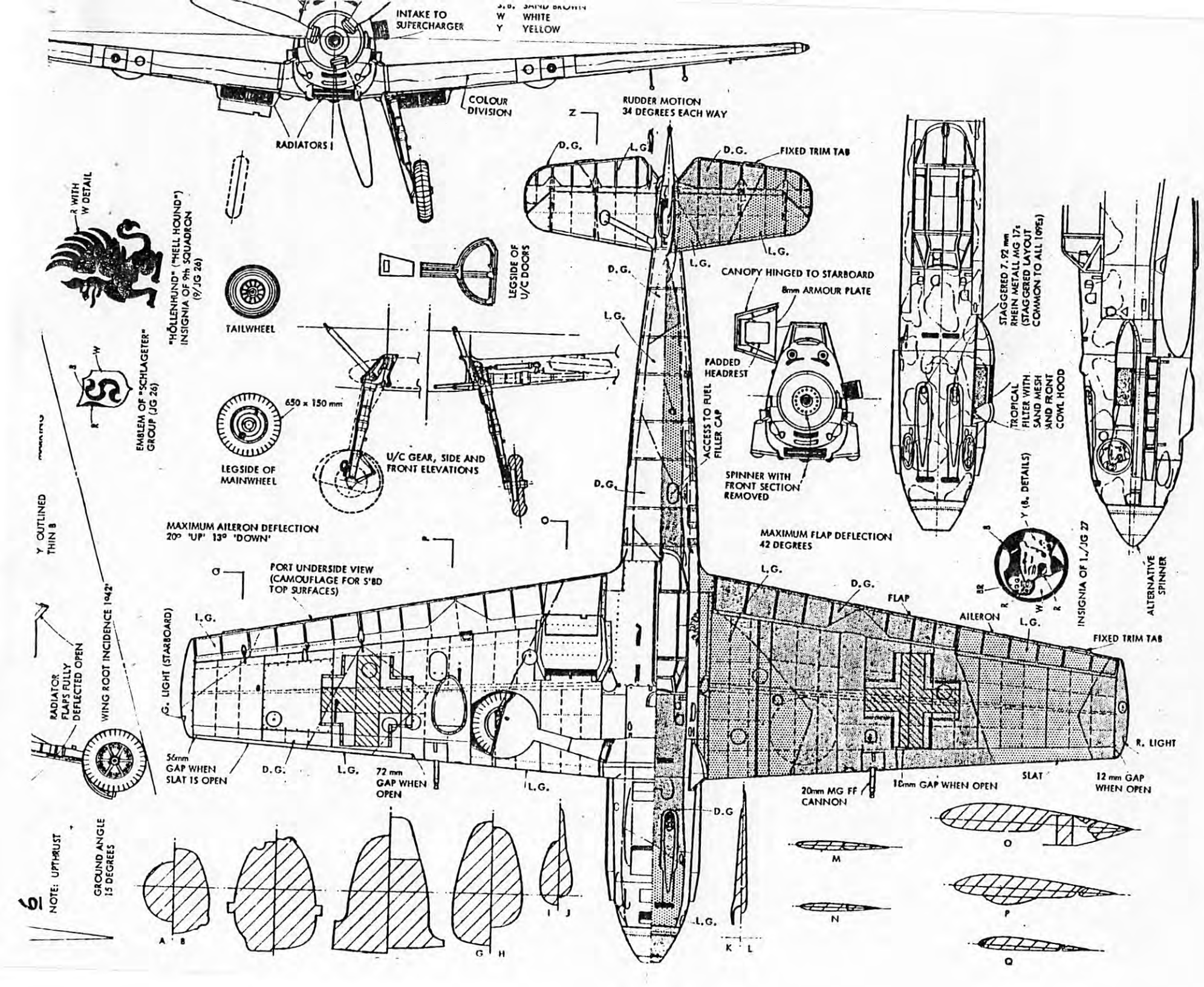
In addition to the Flying Aces National T-shirts being offered by Dennis O. Norman, colorful badges will be offered by the Washington, D. C. Maxecuters. Any one wishing to swap old magazines, kits, tissue, etc. will find a warm reception. Keep gluing those sticks! and remember to fly and win with FAC!







Bf 109 E-7B. 3/LG 2 Sept 1940
Flown by Uffz. August Klick.


INTAKE TO SUPERCHARGER
W WHITE
Y YELLOW
COLOUR DIVISION
RADIATORS
RUDDER MOTION 34 DEGREES EACH WAY
D.G.
L.G.
FIXED TRIM TAB
CANOPY HINGED TO STARBOARD
8mm ARMOUR PLATE
PADDED HEADREST
ACCESS TO FUEL FILLER CAP
SPINNER WITH FRONT SECTION REMOVED
STAGGERED 7.92 mm RHEIN METALL MG 17s (STAGGERED LAYOUT COMMON TO ALL TYPES)
TROPICAL FILTER WITH SAND MESH AND FRONT COWL HOOD
ALTERNATIVE SPINNER
INSIGNIA OF I./JG 27
Y (8 DETAILS)
LEGSIDE OF U/C DOORS
TAILWHEEL
"HÖLLENHUND" ("HELL HOUND") INSIGNIA OF 9th SQUADRON (9/JG 26)
EMBLEM OF "SCHLAGETER" GROUP (JG 26)
650 x 150 mm
LEGSIDE OF MAINWHEEL
U/C GEAR, SIDE AND FRONT ELEVATIONS
MAXIMUM AILERON DEFLECTION 20° 'UP' 13° 'DOWN'
MAXIMUM FLAP DEFLECTION 42 DEGREES
PORT UNDERSIDE VIEW (CAMOUFLAGE FOR S'BD TOP SURFACES)
FLAP
AILERON
FIXED TRIM TAB
R. LIGHT
G. LIGHT (STARBOARD)
56mm GAP WHEN SLAT IS OPEN
72 mm GAP WHEN OPEN
SLAT
12 mm GAP WHEN OPEN
20mm MG FF CANNON
18mm GAP WHEN OPEN
Y OUTLINED THIN B
RADIATOR FLAPS FULLY DEFLECTED OPEN
WING ROOT INCIDENCE 1½°
GROUND ANGLE 15 DEGREES
NOTE: UPTHRUST
A B
G H
I J
K L
M
N
O
P
Q

Designer's Notebook

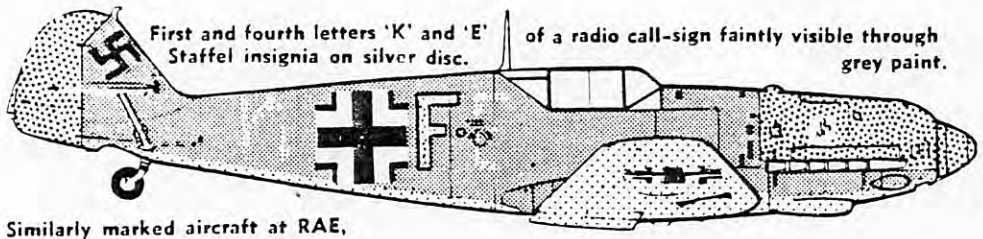
After the tribute to England in the last issue of Crosswinds Quarterly, it seems only fitting that we give a nod to Germany. At the April, 1980 club meeting, it was suggested that this issue be devoted to presenting four peanut scale plans of the Battle of Britain subjects, but the club was less enthusiastic about this than devoting an issue to the Messerschmitt Bf 109E. To the recollection of those present,it seemed that the only acurate plan of the Bf 109E around is the 1/2" scale one offered by a J.D. McHard in "Flying Scale Models of WW II" published by Model Builder Magazine a few years ago. To be sure the Messerschmitt has been kitted by numerous manufacturers over the years including Cleveland, Comet Models, and Guillow's to name a few, but each of these offerings suffers from serious deviations from scale making the resultant offerings "semi-scale" at best.

In the hope of providing you with acurate plans in peanut and also 3/4" scale, we began with the excellent drawings by J. D. Carrick which were published in Aero Modeller Magazine (Aircraft described number 142). As these drawings were prepared from measurements and photographs of actual 109's (many of the drawings upon which earlier plans had been based were the result of conjectural sketches made during the Second World War) we believe the accuracy of the drawings is unmatched.

With a span of 32' 5/34" and a length of 28' 8", the Bf 109E was a fierce little rasper whose place in aviation history was secured by the titanic struggle with the RAF in the Summer and Fall of 1940. As a modeling subject, the Bf 109E has been virtually run into the ground as almost any manufacturer of plastic aircraft kits has an offering and 109E's are to be found in abundance at 1/72, 1/48, 1/32, and 1/24 scales. The 1/32 offering is slighting under the peanut size and the colorful decals available in that scale make decorating a peanut "109" a painless process. Also, the 3/4" Guillow kit provides a reasonably good looking canopy, plus a set of decals which appear to be just about right.

Although not finished at this time, we have assembled the frames for both the 3/4" and peanut scale versions so the "fit" of most parts should be reasonably good. We must, of course, leave the fine detailing to you, but we have tried to provide you with ample information in this issue. Certainly the 3/4" version should make an impressive opponent for the Boulton-Paul Defiant presented in the last issue.

Finally, numerous references for the Bf 109E are available. Among them we suggest Profile Publications, No. 40 "The Messerschmitt Bf 109E," Aircam Aviation Series No. 43 (Vol. 4) Messerschmitt Bf 109B,C,D,E,F,and G; Famous Fighters of the Second World War by William Green, Hanover House, New York; the Messerschmitt 109 A Famous German Fighter by Heinz J. Nowarra, a Harleyford Publication, Augsburg Eagle by William Green, Doubleday and Co., Inc., Garden City, N. Y; Luftwaffe Colors, Vol. 1, 1935-1940 by K. A. Merrick, Arco Publishing Co., Inc.,"Sale Models Magazine", April, 1980 issue (pages 196-199),"Scale Models Magazine", February, 1972;"Scale Models Magazine", December, 1979 and Arco Aircam Aviation Series No. 13, "Battle of Britain.



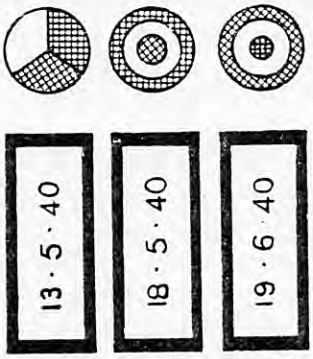
Similarly marked aircraft at RAE, Farnborough, on 2nd October.

F6 Bf.109E.
6./II(S)/LG2, Luftflotte 2.
St. Omer, France.
Shot down 8th October, 1940.
F in Staffel colour yellow outlined black.
Uppers medium grey oa.
Under surface cross 'F'.

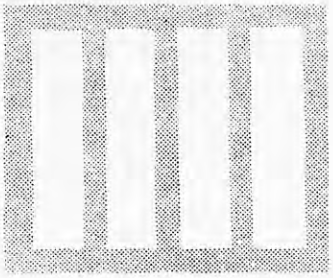


D5
2/JG52,
two black victory tabs with RAF roundel above.





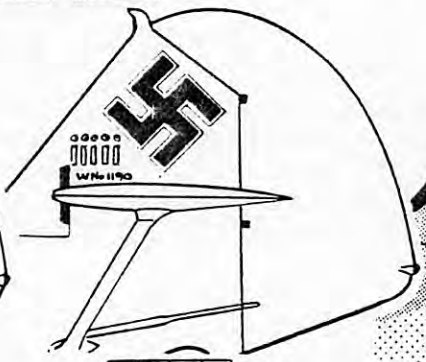
C2 2/JG3,
Five white outlined black victory tabs with roundel above each and date in rectangle. Two Dutch dated 13-5-40, one French, 18-5-40 and two RAF, 24-5-40 and 19-6-40. Beneath the light blue finish on this aircraft could be seen the earlier dark green camouflage and a Gruppe Commander's chevrons. Nearly all stencilling intact.

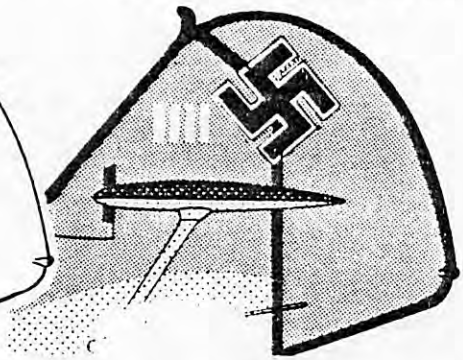


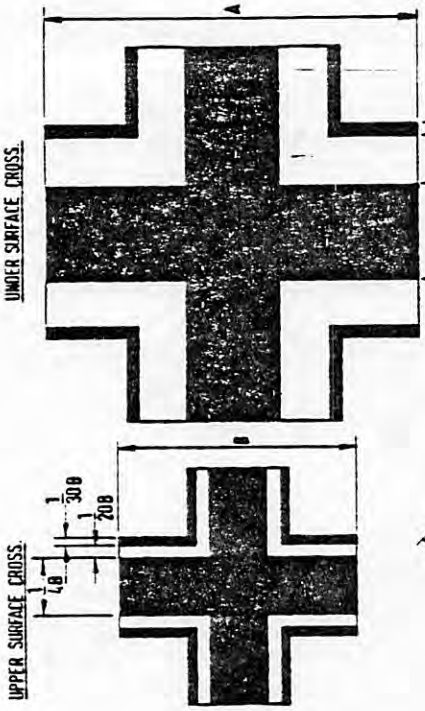
E2 1/JG53. Four white victory tabs, typical presentation in white or black. Fin and rudder outlined in red.



VICTORY TAB DETAILS



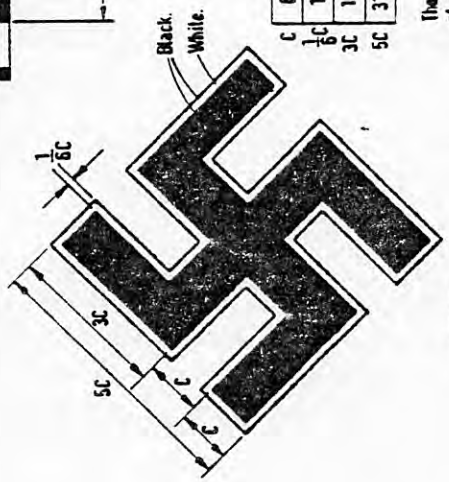




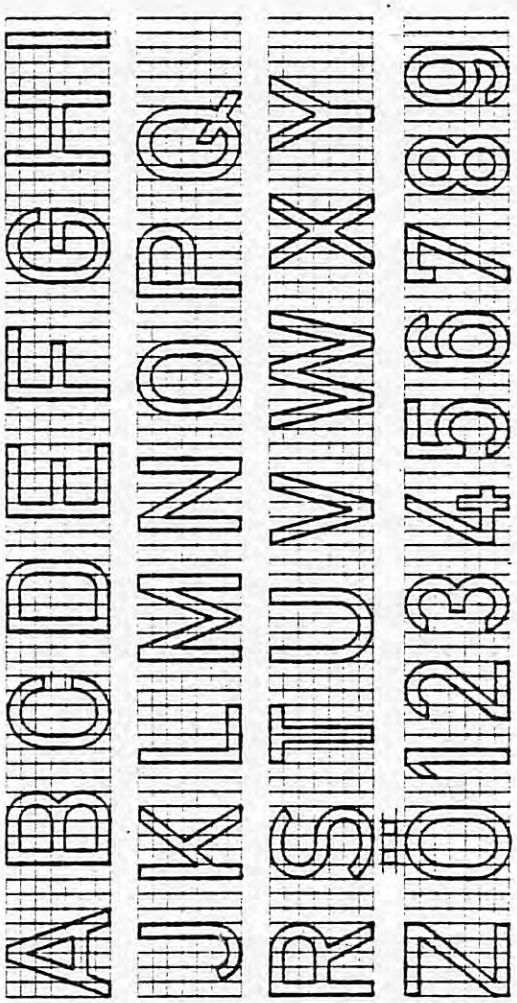
Dimension table for Swastika.

C	63	80	100	126	160
1/6C	10	13	17	21	27
3C	189	240	300	378	480
5C	315	400	500	630	800

The above table gives 5 varying sizes of Swastika and intermediate dimns. for each of these sizes.
(All dimensions in millimetres.)



SWASTIKA



GENERAL PROPORTIONS AND STYLE OF GERMAN ALPHABET & NUMERALS.

1. The overall height of letter was expressed as being $\frac{6}{10}$ths of the height of the adjacent fuselage cross.
2. Then the determined height was again divided into seven units : As per the grid above.
3. Individual letters & numerals are then drawn using the grid. Most letters are five height units wide. Exceptions are wide or narrow letters, e.g. 'A','J','M','T','W,' etc. and numerals excepting '0.'
4. Examples from the grid are : 'A' width = $\frac{5}{7}$th. height. 'W' = $\frac{8}{7}$ths.h. '1' = $\frac{2}{7}$ths h.

MESSERSCHMITT Bf 109E

CREATING A CLASSIC FIGHTER--Even if there had not been a German Air Ministry specification issued in 1934 (a year after Hitler came to power) it is highly probable that Professor Dipl.Ing. Willy Messerschmitt would have gone ahead and evolved the classic Bf 109. But the Germans knew that Britain was designing the Hurricane and the Spitfire . . . and round the world designers were in trend towards the monoplane single-seater with retractable undercarriage and seeking speeds a 100 m.p.h. faster than the contemporary biplane interceptors.

Willy Messerschmitt set out to create the smallest practical airframe round the most powerful aero-engines which were then in the development stage. He settled for a slim fuselage, tiny cockpit and compact, blunt wings of minimal area. The tail too, was diminutive and the tailplane was strut-braced and adjustable for take-off and landing. To further assist low-speed handling he incorporated Lachmann leading-edge wing slats and fully-slotted flaps and drooping ailerons. The powerplant, unusually, was given upthrust (see g.a. drawings). The fully retracting main undercarriage was long, to assist take-off—but meant landings had to be more tail down than most pilots of the time would have preferred. As with the Hurricane and Spitfire, the Bf 109 underwent progressive development, exchanging fixed-pitch wooden propeller for early 2-blade variable pitch (U.S. Hamilton licence-built) and ultimately 3-blade v.p. VDM propellers. Armament was too light to begin with and was increased to approximate to that of its chief adversaries, especially after the Bf 109 was "blooded" in Spain during the Civil War (1937-39) and groomed for the big battles to come.

From the first prototype of 1935 to the last of the infinite variety of Bf 109s, the German war industry turned out the fantastic quantity of some 33,000 of these tough little warplanes. They served on every front and with Germany's European allies. But it is the Battle of Britain one-o-nine, the Bf 109E for "Emil" which is perhaps best remembered. Although the Hurricane was more manoeuvrable in turns, the Bf 109E could outclimb and outdive. So while the Hurricanes sought to down the He 111s, the Do 17s, the Ju 87s and Ju 88s they had to be protected from the "Emils" by the faster Spitfires. Yet it is proof both of the bravery of the opposing pilots and the magic of the Bf 109 that quite recently, 25 years after, veterans of the Battle of Britain can still speak in high praise of the product of Willy Messerschmitt. Had the Bf 109 been capable of greater duration who knows how the Battle of Britain might have been altered? As it was, to protect the Luftwaffe day bombing raids with adequate "cover" the "Emils" could not stay to "mix it" for fear of running out of fuel before reaching the safety of advance bases in Northern France. Perhaps, far above the skies of Kent, there still echoes the urgent warnings of "Bandits! Angels-one-five" and "Achtung! Spitfeuer" and the battle cries of "Tallyho!" and their counterpart "Horrido!"

From V for Versuchs to E for "Emil"—Ironically, the very first Bf 109, the V1 (Versuchs—experimental) was powered by a British aero-engine, a 695 h.p. Rolls-Royce Kestrel V liquid-cooled 12-cyl. Vee. The Bf 109V1 was first flown in September 1935 and won the German Air Ministry competition in the following month at Travemünde. Its rivals were two Kestrel-powered prototypes, the He 112V of Ernst Heinkel, the Arado Ar 80V, and the Kurt Tank designed Fw 159 which was powered by the still experimental Junkers Jumo 210A-0 of 610 h.p. The He 112 was put into limited production and fought in the Spanish Civil War.

Messerschmitt lost no time in forcing the Bf 109 into large-scale production and in the remarkably short time which elapsed got the fighter into squadron service with JG.2 "Richthofen" Gruppe early 1937. Almost immediately Bf 109Bs with Jumo 210A engines joined the Condor Legion (Staffeln 1 & 2 of J/88). These were joined by Bf 109Cs in 1938 to replace the He 51 biplanes of 3 Staffel of J/88. When the war ended in March '38 the Luftwaffe pilots returned, leaving various equipment. (See later "*Deutsche Museum Bf* 109*E*").

Just prior to the outbreak of World War 2 the Luftwaffe had in service some 235 Bf 109Ds and 850 Bf 109Es. After the Polish campaign the Luftwaffe found that just under one-fifth of its battle force had been destroyed or seriously damaged and the need was for replenishment and further build-up. The resultant "Sitzkrieg" or "Phony War" was most welcome. Then on April 9th "Operation Weser" involved an initial 30 "Emils" out of a strike force of 500 bombers and other warplanes and some 500 troop and airborne carriers. First Norway, then Denmark . . . then Holland, Belgium, France and the epic of Dunkirk. In France and the Low Countries the RAF met the Bf 109E in strength. But the Hurricanes were thinly spread and the Spitfires were retained in the U.K. There was a brief respite.

In July 1940 the Emils were seen over south-east England for the first time. The Battle of Britain was about to commence. Unfortunately it would require more space than is available to do complete justice to the Bf 109E either as in-fighting arm of the Luftwaffe or its part in the Battle of Britain. Suffice to say that it also served in the Russian campaigns.

Deutsche Museum "Emil"—Although the personal biography of the "Emil" really started in mid-1938 when the Bf 109V14 (D-IRTI) was first flown, the first pre-production Bf 109E-0s (1,100 h.p. Daimler Benz DB 601A-1) were coming off the assembly line at Augsburg only a few months later and still in '38. Although it is not generally known, Bf 109E-1s were battle tested in the Spanish Civil War because one (WNr.790) must surely be in line for "the longest serving 109" in that it was still flying with the Spanish Air Force as late as 1954. In 1960 this (redesignated SpAF C-4E (serial 6-106) was refurbished by Hispano-Aviacion, Seville and acquired by the Deutsche Museum, Munich, where it can be seen today. Unfortunately it has been repainted in rather dubious markings of Jagdgeschwader (Wing) JG.26 'Schlageter'. (Schlageter was the name of the first commander of JG.26, ca 1937) and the shiny crosses give it a plastics model look. Pity!

The "Hell-hound" Bf 109*E*-4--Doug Carrick's fine general arrangement drawing pleased the writer because it is recorded in a wartime scrapbook by way of an excellent photograph of the same "pancaked" fighter which appeared in the London "Daily Telegraph" for September 3, 1940. It bears the "S" for "Schlageter" and the red "Hell-hound" (fiend says the dictionary!) but a soldier hides the individual number '10'. The pilot was believed to have been Oberleutnant Eckhardt Roch of 9 Staffel/III Gruppe/JG.26. This "Emil" was later put on public display but its ultimate fate is unknown.

The Biggin Hill Bf 109*E*-4—The RAF Historical Branch maintains a redecorated Bf 109E-4 at Biggin Hill. Apart from the dubious markings "12 + GH" and an indifferent paint scheme, this Bf 109E-4 lacks an authentic canopy (see g.a. for the accurate details) which probably stems from a late production (1944) Bf 109 of the K-series which had a revised "Galland hood" to assist the K-series' pressure cabin. For a time it was at C.F.E. Duxford as RAF serial DG200 and is not to be confused with AE 479 captured by the French in 1940 and shipped to the U.S. in 1942.

Data—(*Messerschmitt Bf* 109*E*-4)—*Span*, 32 ft. 5⅞ in.; Length, 28 ft. 8 in.; Height (to prop tip) 12 ft. ½ in.

There are several excellent sources of detailed information which should be examined to get the full flavour of this classic fighter. These include : "Famous Fighters of the Second World War" by William Green (Macdonald). "The Messerschmitt 109" by Heinz Nowarra (Harleyford). The Official History of the R.A.F. and the series of markings and pictorial books by Karl Ries (Verlag Dieter Hoffman, Germany).





I./JG 54 'Grünherz'.

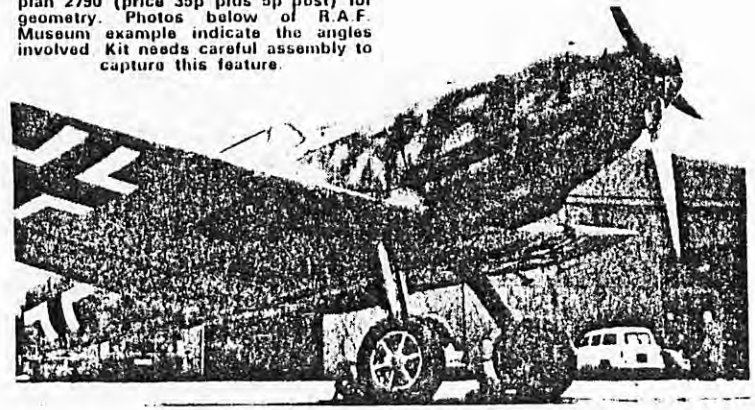


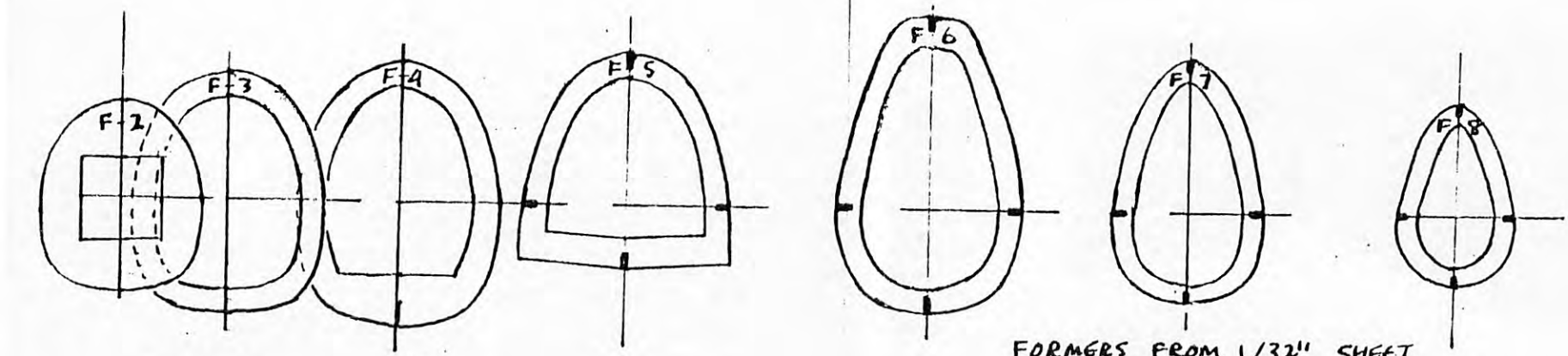
II./JG 54 'Grünherz'.



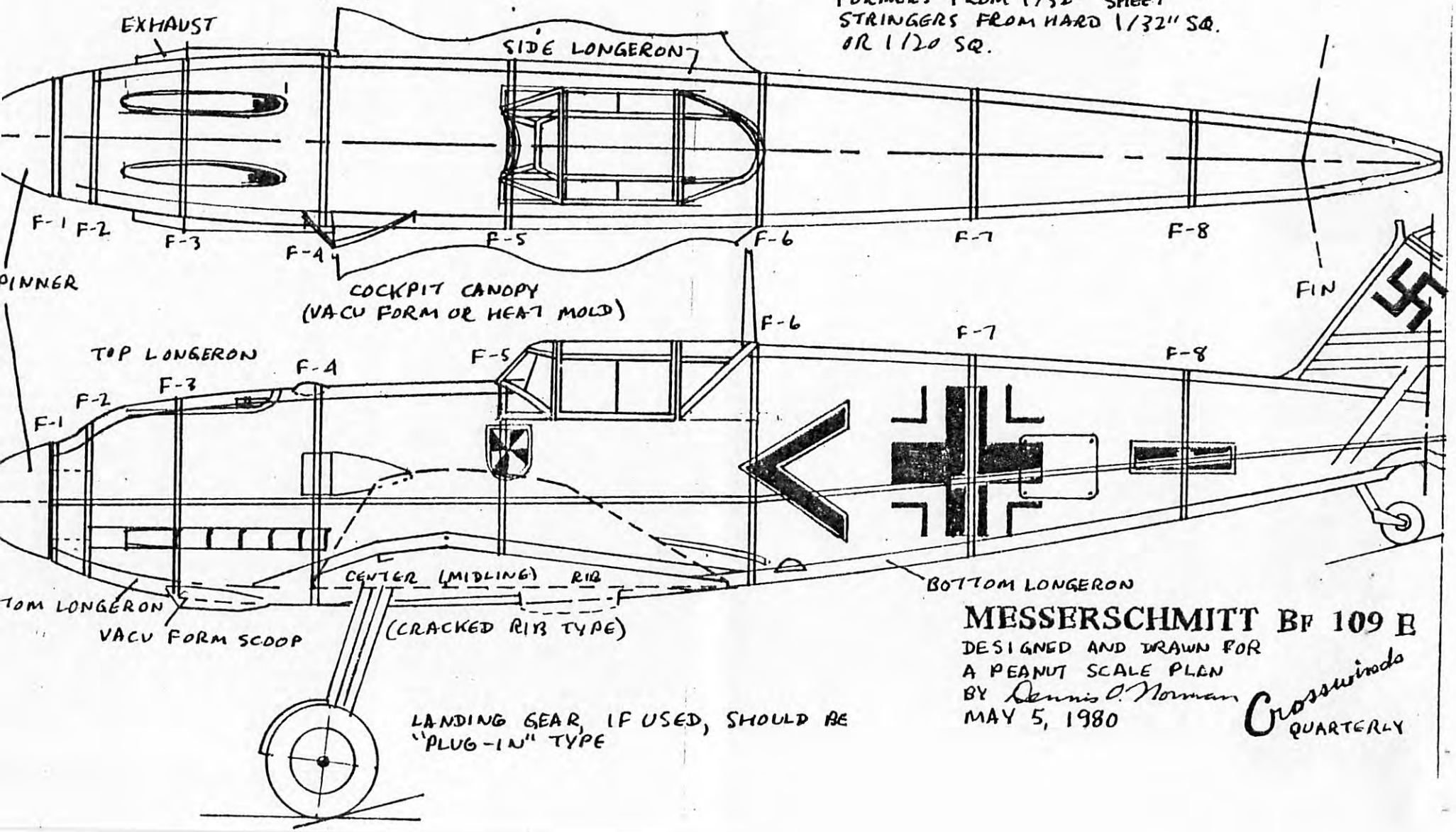
III./JG 54 'Grünherz'.

A characteristic of all Messerschmitt Bf 109 and Me 109 derivations was their 'sit' on the narrow tracked landing gear, often criticised for the outward folding arrangement which met engineering rather than practical field operational requirements. See drawings on opposite page from the Aeromodeller plan 2790 (price 35p plus 5p post) for geometry. Photos below of R.A.F. Museum example indicate the angles involved. Kit needs careful assembly to capture this feature.





FORMERS FROM 1/32" SHEET
STRINGERS FROM HARD 1/32" SQ.
OR 1/20 SQ.



MESSERSCHMITT Bf 109 E

DESIGNED AND DRAWN FOR
A PEANUT SCALE PLAN
BY Dennis O. Norman
MAY 5, 1980

Crosswinds QUARTERLY

'80 INDOOR WICH FAI

WEST BADEN·USA

1W§GP

FLAT HATIN' UNDERCOVER

BLUE FOX BASE
4909 N. SEDGEWICK
LYNDHURST OH 44124

7/JULY 1980

WEIGHT WATCHERS DIET SPECIAL: PEANUT UNDER GLASS

Good flying weather finally blew in to FAC Central Sector in time for the Formula FAC Wright Races at WPAFB Dayton Oh. Here, a small Stork Club patrol tangled with local Buzzard Bob Heywood, and the big sweeper from North Canton, Don Assel plus Big and li'l lightnin' Roger Wathen from checker board squadron, Indy city. Big raider vonWathen and Lt. Alex Derkaschenko were most helpful flying the desk, and had some flight time fun too. Roger Sr. got some long overdue trim flights in on his O1 Ironsides. Lt. Alex put up Gordon Roberts Fike E and worked with Max duBlue to trim out Gordons Ole Tiger Peanut for the Hansen Handicap Post War Racer event. Ole Tiger had never really been "tuned up" so we got to have some extra fun with it. Up elevator shims and a long clear plastic rudder tab, and we worked into a flat left power climb topping 40 seconds. Not bad for a 25 gm Peanut. The fixed gear handicap of another 5 pts. forced the Unlimited King Cobra to go all out to take the Hansen Handicap . Flying of Ole Tiger was cut short by a coughed out and lost nose assembly.

Gordon Roberts Fike E Peanut, en route to 1st Worlt Peanut Gran Prix was then unlimberd for action. It handled well, but just didn't want to get up enough for a long hop. Odd, as it had climed quite well at times for Gordon in '79. Just as well this time, as we needed it to fly in the Indoor Proxy Peanut Meet, and Gen. Normans High scale point P-51D put up a real long flight to close in tight on Dan Briehl s' Peck Cougar total.

In FAC Rubber Scale, Bob Heywood finally got his Sig Mr. Mulligan going well, only to come down with the Messerschmitt plague. Gen. Norman had restored Emil the ½ inch scale 109E back to flying trim by skinning the top surface (to save the rivet rash below) and un - twisting the excess washout warps. This 109E will be tough to beat in the Battle of Britain event if the 3/4" scale feature of this issue isn't ready.

The Thompson and Greve races were combined due to a shortage of ready racers. The whole Detroiten Geschwader was grounded by Sir Regginald Percys' spiked punch after his daughters wedding Saturday. Congratulations, and a medal to Sir Percy! Bob Heywood took the Shell Dash time trials with Mr. Mulligan. No official GHQ directive has revised the Mr. Mulligan and Curtiss Page high wing restrictions to date. But as a local option, we can test Mr. Mulligan in the Thompson and the Curtiss Page parasol in the Greve. The demonstrated good flights of gear up, strutless racers; even with low wings, makes a ban on well detailed Mulligans and Pages seem unnecessary. We will make room on the starting line and send race results to GHQ for review. In the combined Greve & Thompson Race, Don Assel out lasted the field in a Cloudbuster Racewings Plan Chambermaid. One last look for the Ole Tiger prop with no luck, and into the Zeppylite gondola ('73 Pyl. s.w.) for a hop via Louisville Kintuc. Art Hall Box 485 Winter Park Fl 32789 sent '39 Marcoux Bromberg, Firecracker & Jeep plans!

OPERATION 1W§GP

11 p.m. on a sunday in the rolling farm lands of southern Indiana, and the sidewalks of West Baden are rolled up for the night. But inside the VNART Hilton the sun never sets on flying machines. The C.I. A.(Central In. Aeromod') still denies this 5 story dome was cut from the leaning tower of Pizza Pies with out the tomatoes in the bar under the tower. This section was imported by the Chicago Mob to brew Pirelli for the '80s prohibition of brown gum brew. Now, C.I.A. claims this historical site was built for Col. Lee Sinclair and daughter in just 200 days in 1901 as the then worlds largest domed building (before Linstrum). Blown motors is proof enough!

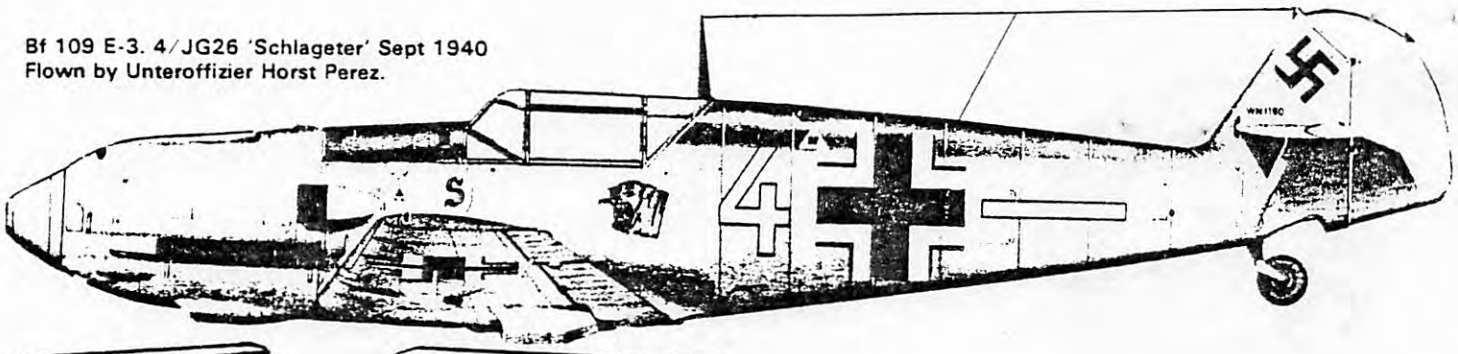
Academy of Model Aeronautics

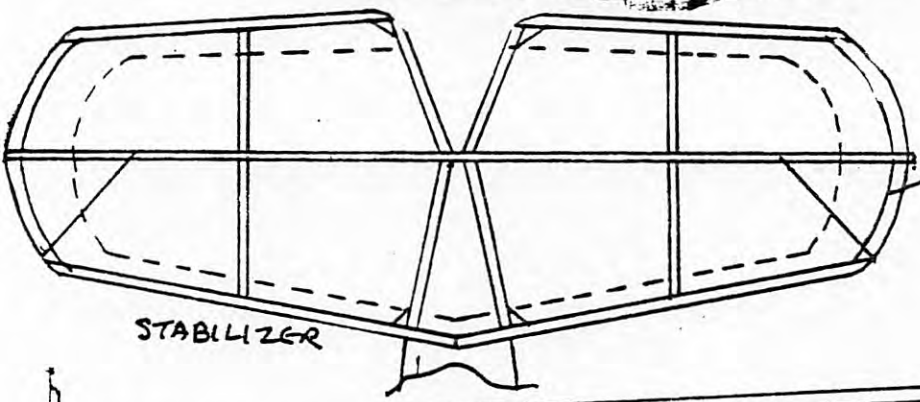
AMA

NATIONAL HEADQUARTERS • 815 FIFTEENTH STREET, N.W., WASHINGTON, D.C. 20005 • TELEPHONE: AREA CODE 202/347-2757

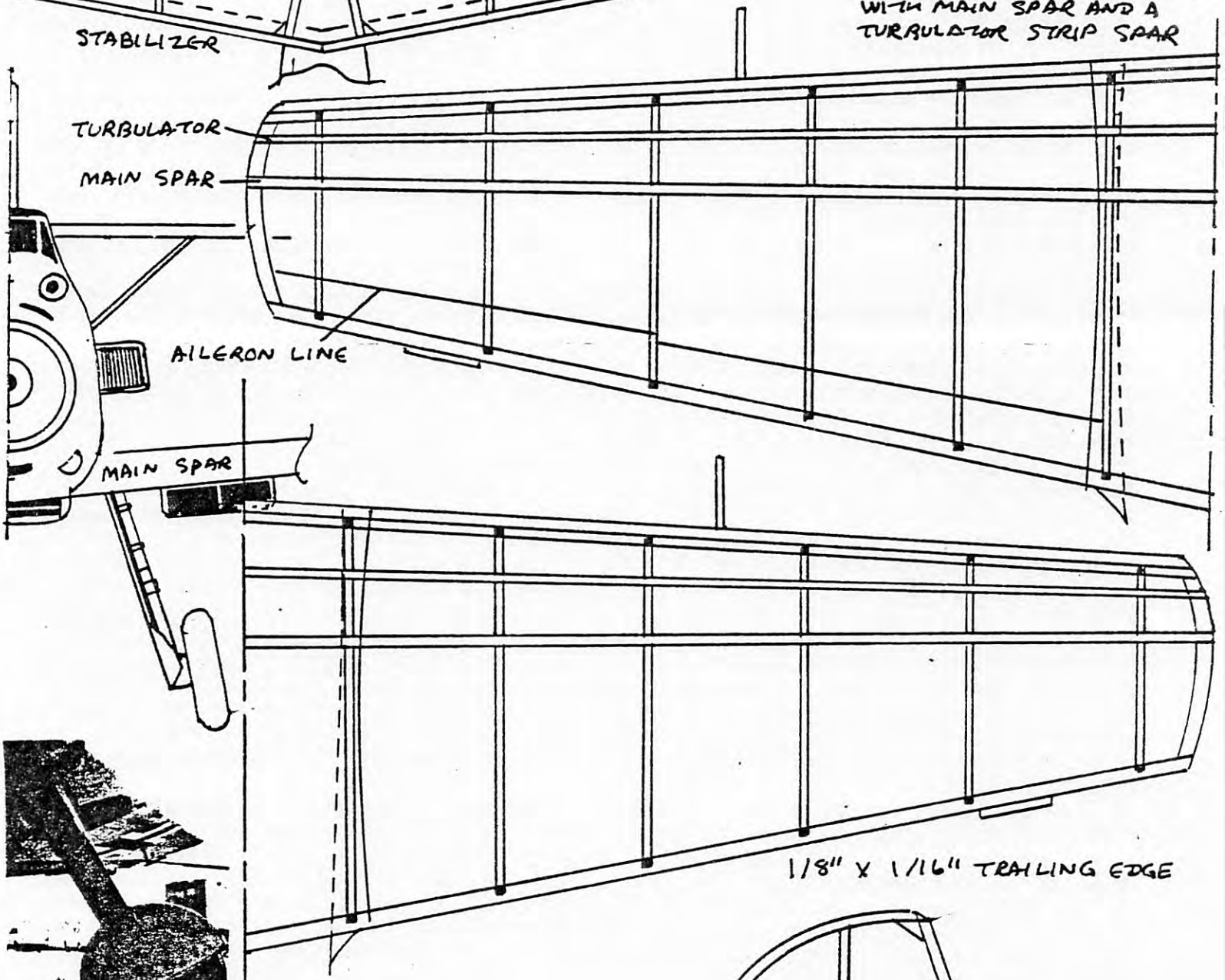
is not responsible nor pleased with the content of this undercover report.

Bf 109 E-3. 4/JG26 'Schlageter' Sept 1940
Flown by Unteroffizier Horst Perez.





NOTE: ALL RIBS ARE FLAT BOTTOMED USING "CRACKED RIB" TECHNIQUE WITH MAIN SPAR AND A TURBULATOR STRIP SPAR



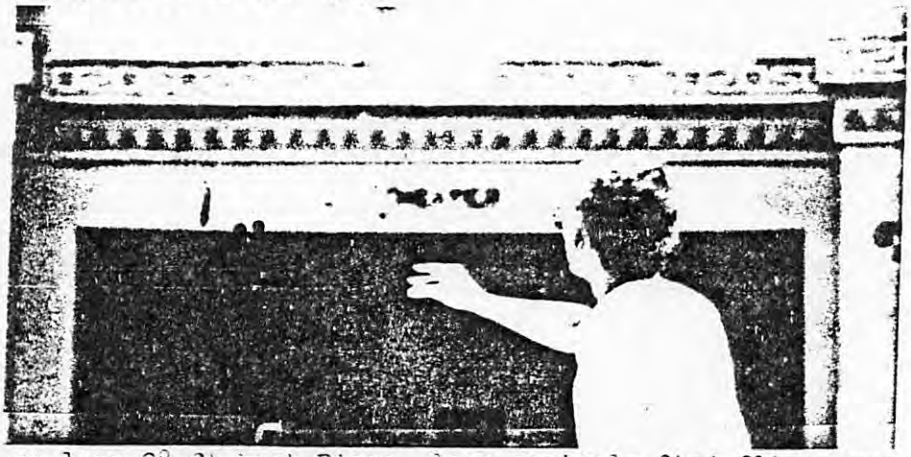
SUGGESTED POWER:
1 LOOP 1/8" - 18" LONG



'80 INDOOR WICH

WEST BADEN·USA

MARCOS J. MOLLO IL2



Inside the 200 ft. diameter, more or less 98 ft. high Pizza, late arrivals find fliers putting up gossamer webs (stringy cheese) and the welcome committee at Club Miami, the local VNART watering hole. Here with a quick flex of the elbow (liquid macaroni?) we were saluted by Doc Martin and Officer of the ALL DAY and ALL NIGHT, all everywhere Roy White. Hanging 'round 'till Monday AM, we got officially sacked in all ways.

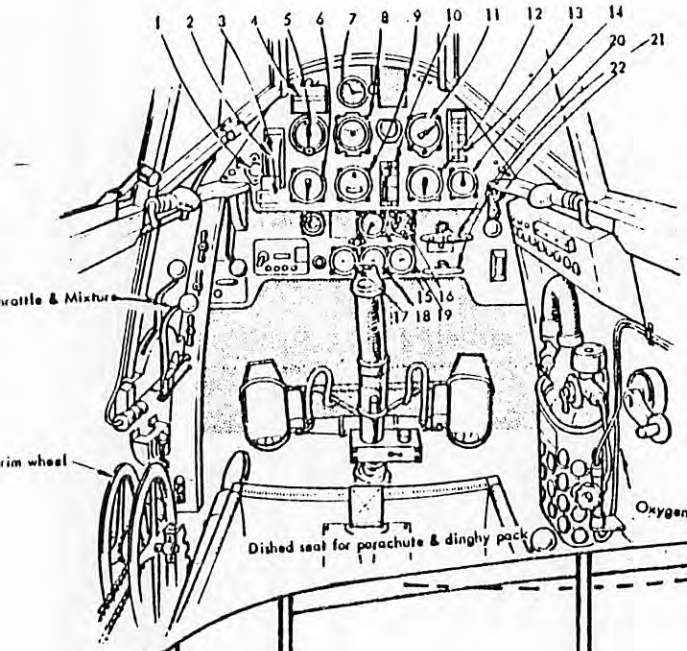
Early round postings of Fld World Indoor Competition has the Swiss team on top, England and Poland next. The U.S.A. team is 5th, just ahead of Argentina in their 1st shot at FlD.

Late that evening, we have a Peck silver 6" dia. plastic prop hung with a Micro X thrust button picked up from Jerry Skrjanc and his on site shop. Into a nose block, and Ole Tiger is ready for a trim hop. No Mic fliers up this late, so we can fly. Down to the runway-the worlds first circular runway!- Look! over there; a slim indoor ace flying a winter white Strumovik IL2 and a canard Santos Dumont 14bis. Too slim for Doc Martin or even Don Srull. May be Clarence Mather in disguise. A very verry verrry good disguise it is too, as "Clarence" has made the Argentine Team as Marcos J. Mollo, mild mannered musician from Capitale Argentina, and authority on Santos Dumont. Ah So Mather! Like Orville Reddenbacher, them Flightmasters just pop out all over. So clever of Clarence to make the World Champs by extending California to the tip of South America. Is there no limit to Flightmaster skul duggery? WE have it on good authority from the Detroit Mob (soon to hide out in District III) that Ronnie will appoint a Count Alex Pissaña as ambassador to Prillitanno along with one Clarence de Canardo as Charge de affairs to divert the best Pirilli strip to California. Them Taft Republicans with their "Two Prairie Birds in every box" will be flying high the next four years 'Nest Paw? O.K. we will humor Clarence-er Marcos and send CROSSWINDS to Argentina! The Mollo Santos dumont 14bis flew quite well and even R.O.G.'d off the tile tarmac. Getting the wound up motor bunch back through a small mount hole was a chore. The long nose Russky can opener (Mather plan IL2) buzzed around in flat circles like Ivan looking for a Kraut pussycat (Panther or Tiger tank) to pet (open up).

Back to gossamer wings in the morning. as the Swiss team continues to lead into middle rounds, and the stars and bars team got a couple good flights logged. World Champ Jim Richmond aborted an apparently good flight when his big swept tip FlD was rafter banging on top and crumpeled a stab. More bad luck when U S. team member Erv Rodemsky had a real good flight cockin' with the model surviving the high torque phase ceiling walk, and settling down to the flat criuse slope at 24 minutes, when a mid-air with a hot climbing model knocked him out of the air. Microfilm flying is a perilous adventure.

BUD AND BUTCH MAX OUT

The technical seminar featured Bud Tenny on Indoor Performance and Butch Hadland on Peanut Scale plus a mystery guest speaker who was a master of both extremities of flying craft. But the stateside team was in for a tough strugle, so American Airlines Pilot and FlD team flier Erv Rodemsky waived the speakers honorarium (a can of Michelob beer from Roy White) as duty called him to test fly. Bud and Butch were a tough act to follow as the M.C. Mr. VTO Linstrum was left holding the "Bud" out to catch a Fox.





JG2

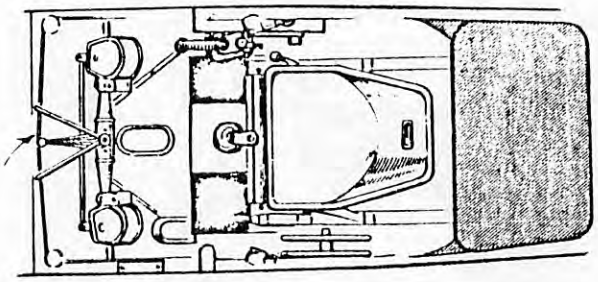


4/JG26

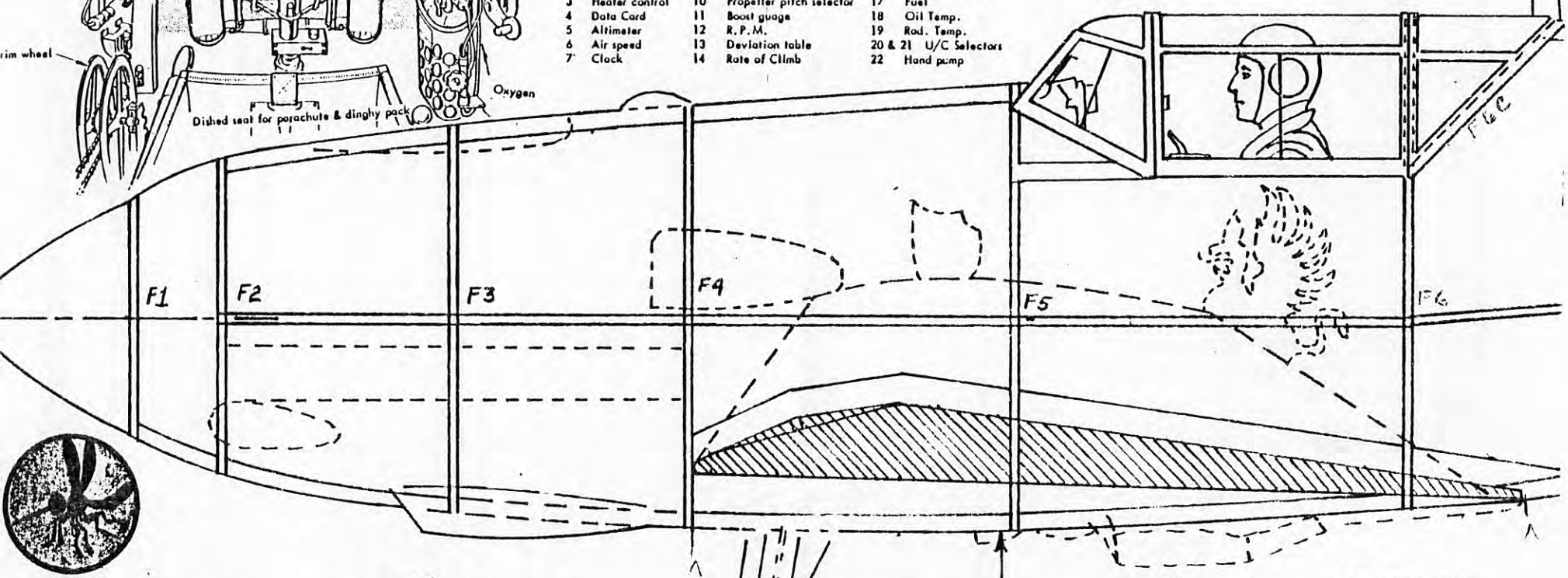


9/JG3

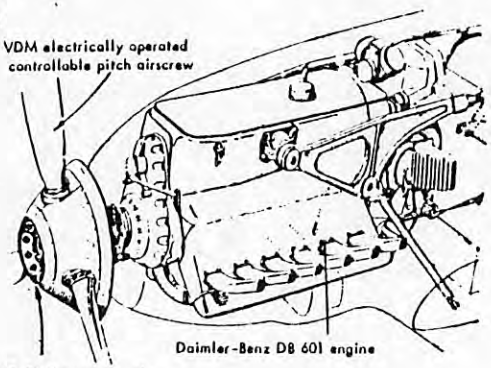
1	Cut off switch	8	Compass	15	Oil Pressure
2	Gun selector	9	Turn & Bank	16	U/C Indicator
3	Heater control	10	Propeller pitch selector	17	Fuel
4	Data Card	11	Boost guage	18	Oil Temp.
5	Altimeter	12	R.P.M.	19	Rad. Temp.
6	Air speed	13	Deviation table	20 & 21	U/C Selectors
7	Clock	14	Rate of Climb	22	Hand pump



PLAN

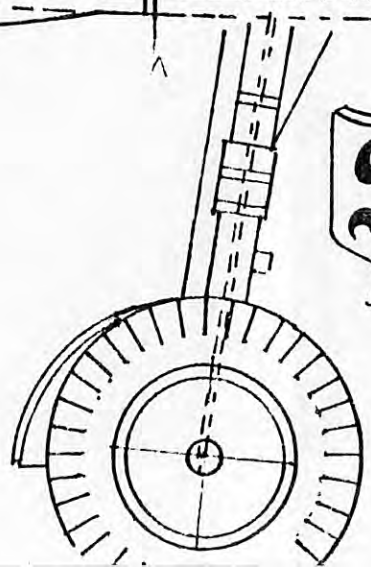


9/JG2



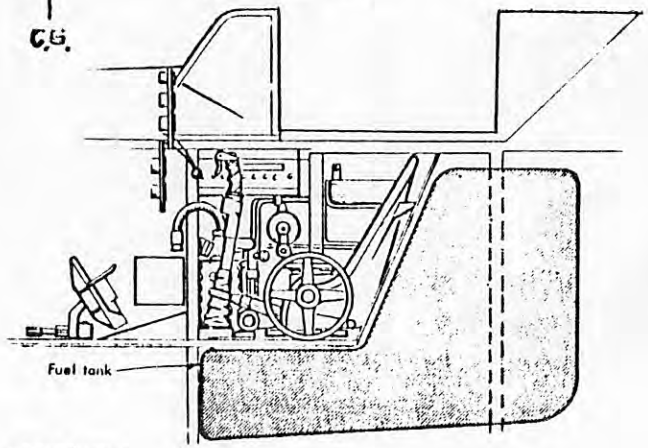
ner hole for 20mm MG FF Cannon
g between cylinder banks
d on early E-3 only and
quently employed for
rator air cooling inlet)

ENGINE DETAIL





JG26



COCKPIT VIEWS SIDE



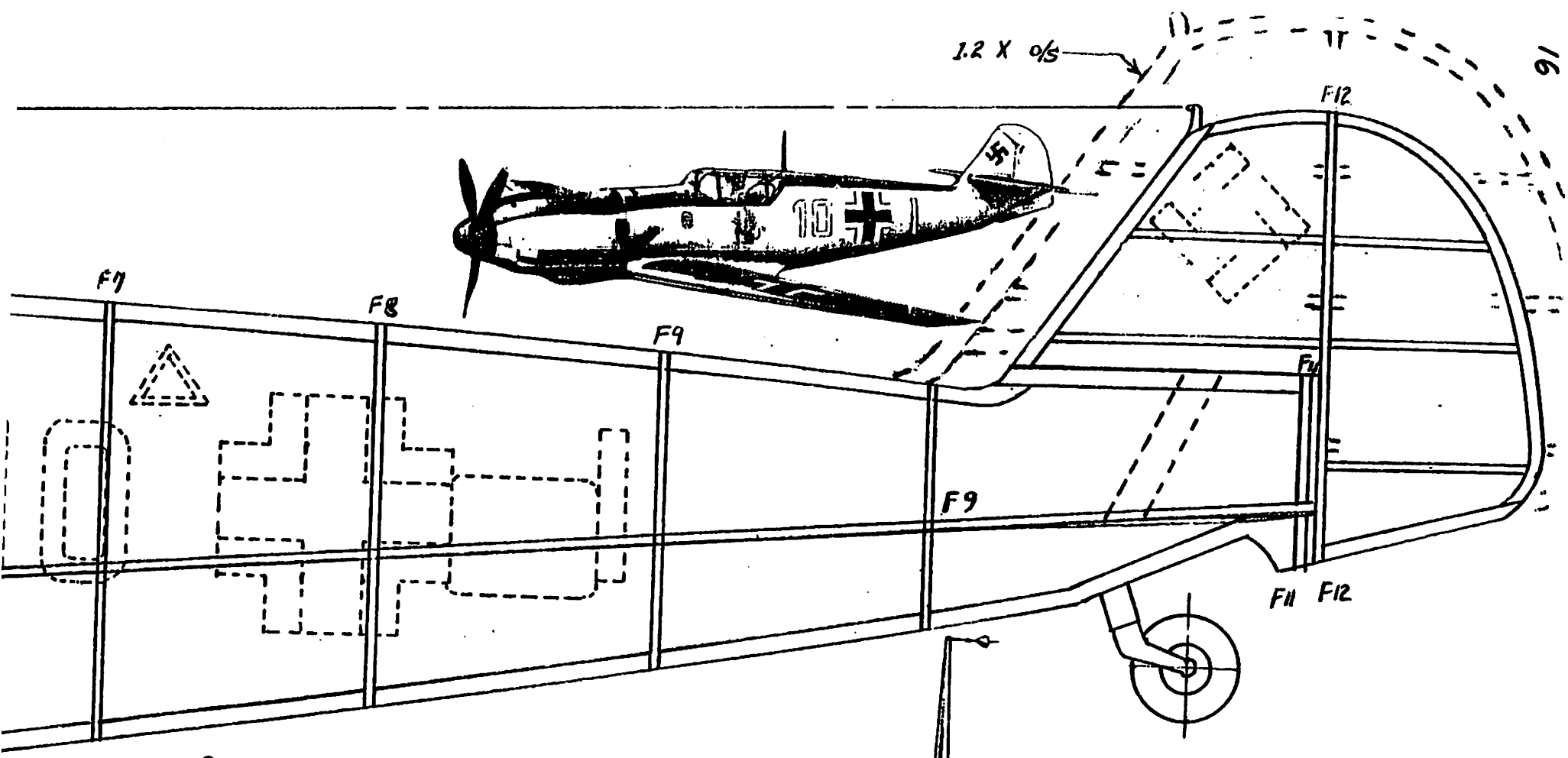
U.S.A.	1	2	3	4	5	6	2T
Erv Rodemsky	9:57	36:23	7:35	24:28	11:37	35:36	71:59
Ray Harlan	11:36	35:49	11:56	8:33	32:13	10:28	68:02
Pete Andrews	33:15	11:58	22:37	33:23	30:52	0:46	66:38
Reigning W. Champ							
Jim Richmond	7:29	32:54	7:56	20:58	36:17	35:12	71:29
Switzerland							
Rene Butty	35:34	33:24	21:01	34:11	33:23	35:06	70:40
Dieter Siebenmann	11:57	31:20	19:25	34:54	32:25	19:21	67:19
Andreas Vogel	14:54	34:38	32:06	19:29	24:44	26:46	66:44

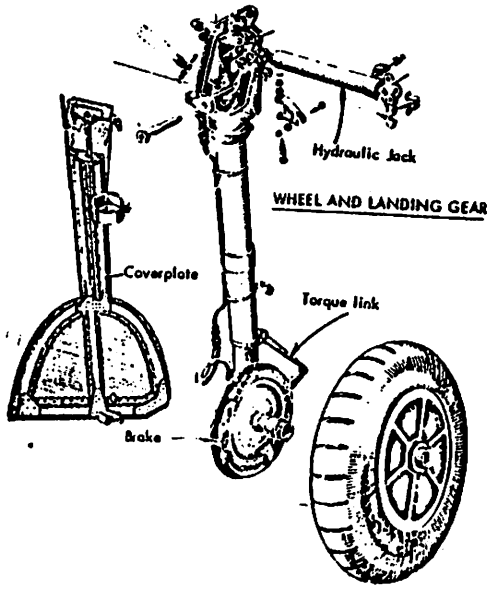
As mystery speaker, Gen. Max duBlue did enjoy ERVs' Michelob and the honor of reviewing the Flying Aces Club developments inspired by Dave Stott and Bob Thompson plus Lin Reichels contribution to Air Race events and the Blue Max medal award. This symbol of flying excellence was first awarded in the WW I dogfight mass launch event and now is presented at the 16th Kanone in the tradition of WW I. Gnats directs FAC aces of Pour Le Merite rank to attend the FAC Nat's Banquet Sat. Aug.9 in full dress uniform (wear the medal hot shot!) A comment by duBlue on the stability of FAC scale rules vs a batch of new ideas every year brought a round of spontaneous applause. Roger der Raider von Wathen presented a slide show to get me off the hook.Thank you Roger.

As the world champs FID flew into the final round, the Swiss team held the lead with Rene Butty on top at 69:45 and U.K. right behind with Dave Pymm posting a 68:51 back to back in the first two rounds. Reighning World Champ Jim Richmond was second at 69:11 but not counted toward the U.S. team. Both England (U.K.) and the U.S. (us) had a shot at first. Can a flying jelly fish be exciting floating by at a foot per second for over half an hour? Read on and be hooked by time lapse free flight.
In the final round 6, Jim Richmond put up a 35:12 for 71:29 and the lead. applause breaks out. For the U.S. Pete Andrews and Ray Harlan are in and no better . Swiss leader Rene puts up yet another long flight and climbs to 70:40. Dieter Siebenmann looked good in 4 *1) and 5, but is an average 19:21. Andreas Vogel peaked in 2 and 3. For the U.K. Laurie Barr can't back up his round 1 35:26. Bernard Hunt scores 34:31 and Dave Pymm is yet to fly. Erv Rodemsky waits for clear air. In round 2 Erv had the best flight of the meet at 36:23. Now a 35:07 will top Richmond. At last Erv winds. Bam, Kaplewie, splat! the motor doesn't. No harm to the model, as motors are wound off stick. Tension mounts as Erv winds, hooks up, and shuffles out to mid floor. A good launch, and the model climbs out smoothly on the high torque zoom. No fatal tail slide to the floor out of a stall. Just the right climb up to the rafter banging phase. Off the 98 ft. bandstand plastic wrap, off the steel rafter beams, Will it? won't it? Ah! into the long flat criuse phase. It Does! Applause breaks out as Erv tops 35:07 and on to 35:36. Now only Dave Pymm of U.K. can top Erv. Dave has a tscret wepon working for him. A Prop pitch control, using prop shaft to twist the prop blades into high pitch , and then back it off for a potential longer flatter climb phase. On drones the gossamer Union Jack. Those weak of flesh break for food. It is tough on Dave here in the colonies; no cold fog, no warm beer, and the I-ty rubber " done lapped out of snap."' Now dropping off the torque flat. Dave logs a good 32:58. The U.K. team grabs third. The U.S. took over first, and Erv Rodemsky is World champ. Quite a finish. Good thing American Airlines put in a stop at West Baden. Poland, Netherlands, Canada, Finland, Japan, and Argentina fielded 3 man teams. Italy, Australia and W. Germany flew also.

On to the Great 1st World Peanut Grand Prix bash. Peanut Scale , as we read in Bill Hannans' Handbook PEANUT POWER was developed " with the accent on simplicity and fun". The Miama command operates at ease in a low pressure zone. A good time flying Peanut Scale is the Miami peanut credo, and even this International Class competition put flying fun first.

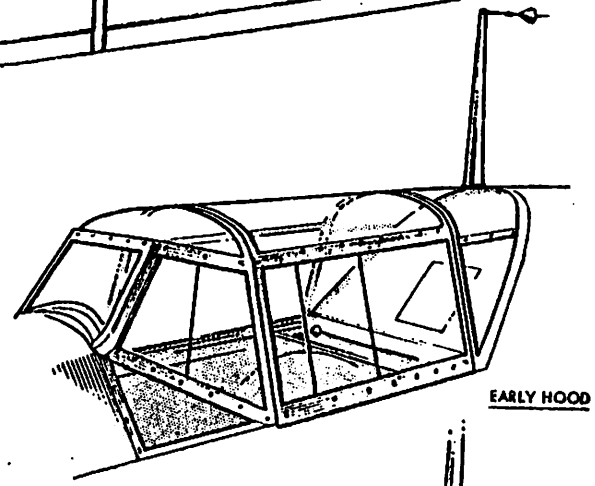
*1.)Thanks Dieter for the Swiss Bf 109 data, Dewoitine D.27 material for CRUD, and color pics. Swiss Bf 109 markings are not shown with the B.O.B. theme, but are most vivid, with red and white stripes all over a dk. green & lt. blue factory paint. See Prifile No. 40 or write Blue Fox Base for 3-V. No charge for data. Back issues of CROSSWINDS are available at $2 ea., or $3 ea. for Quarterlys. Thanks to all for $10 contributions.



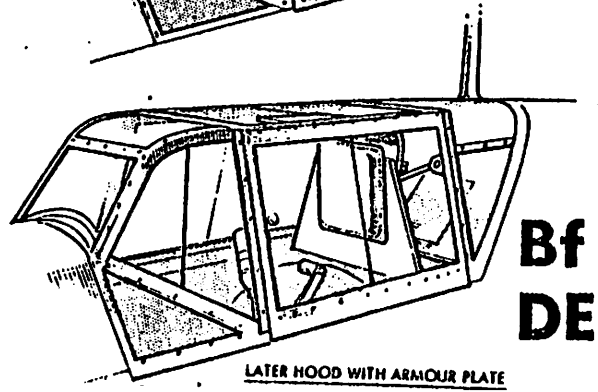


WHEEL AND LANDING GEAR

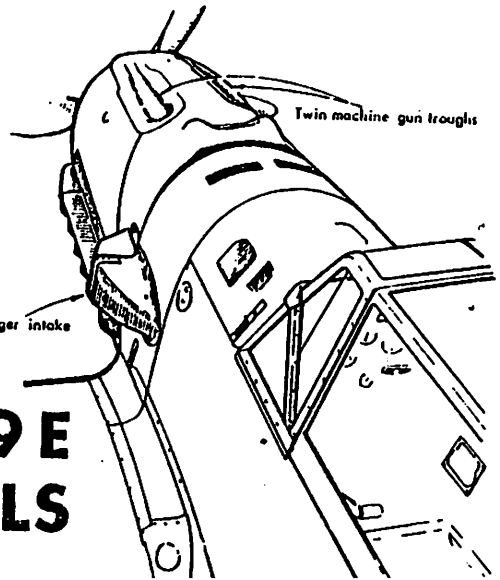
Note tyre tread



EARLY HOOD



LATER HOOD WITH ARMOUR PLATE



Bf 109 E DETAILS



United Kingdom	1	2	3	4	5	6	2T
Bernard Hunt	31:26	7:50	24:37	34:46	30:44	34:31	69:17
Dave Pymm	33:04	35:47	14:41	9:52	9:15	32:58	68:51
Laurie Barr	35:26	15:37	18:39	30:08	9:27	17:59	65:34

Poland		Canada	
Edward Capala	69:45	Ronald Higgs	65:24
Ryszard Czechowski	61:34	Jack McGillivary	58:57
Sylwester Kujawa	61:10	Chris Thomas	52:56
Netherlands			
Otto Rodenburg	65:16		
Edmund Liem	63:05		
Cornelius Wolthoorn	54:24		

Contrast Doc Martins' "Nickel" late entry fee vs. a $50 late entry at the AMA Nat's! It is immediately apparent that this contest is for the fliers. Sea level strategy is best for old salts Nes Paw? Maybe AMA should move headquarters to Miami? Or go farther maybe even Puerto Rico? Too far, as MODEL AVIATION reads so well in english - to all the AMA membership, for sure.Here we digress further to note several District V-Ps; I, III,VI, and X plus 4 voted " optional" that all members need not not be enlightened of the many facets and skills that are part of AMA. Such tunnel vision economy is not good for an overall awareness and expansion of skills. If YOU have convictions on this issue, see to it that your district V-P is advised prior to Aug 5 by brief note or petition. Bill Winter departs MODEL AVIATION, but leaves a most impressive 5 year treasure. May his total dedication be sustained and his works savored. His truth goes marching on! All editors need a bit of R & R , so lets toast Bill and then, lets go flying!

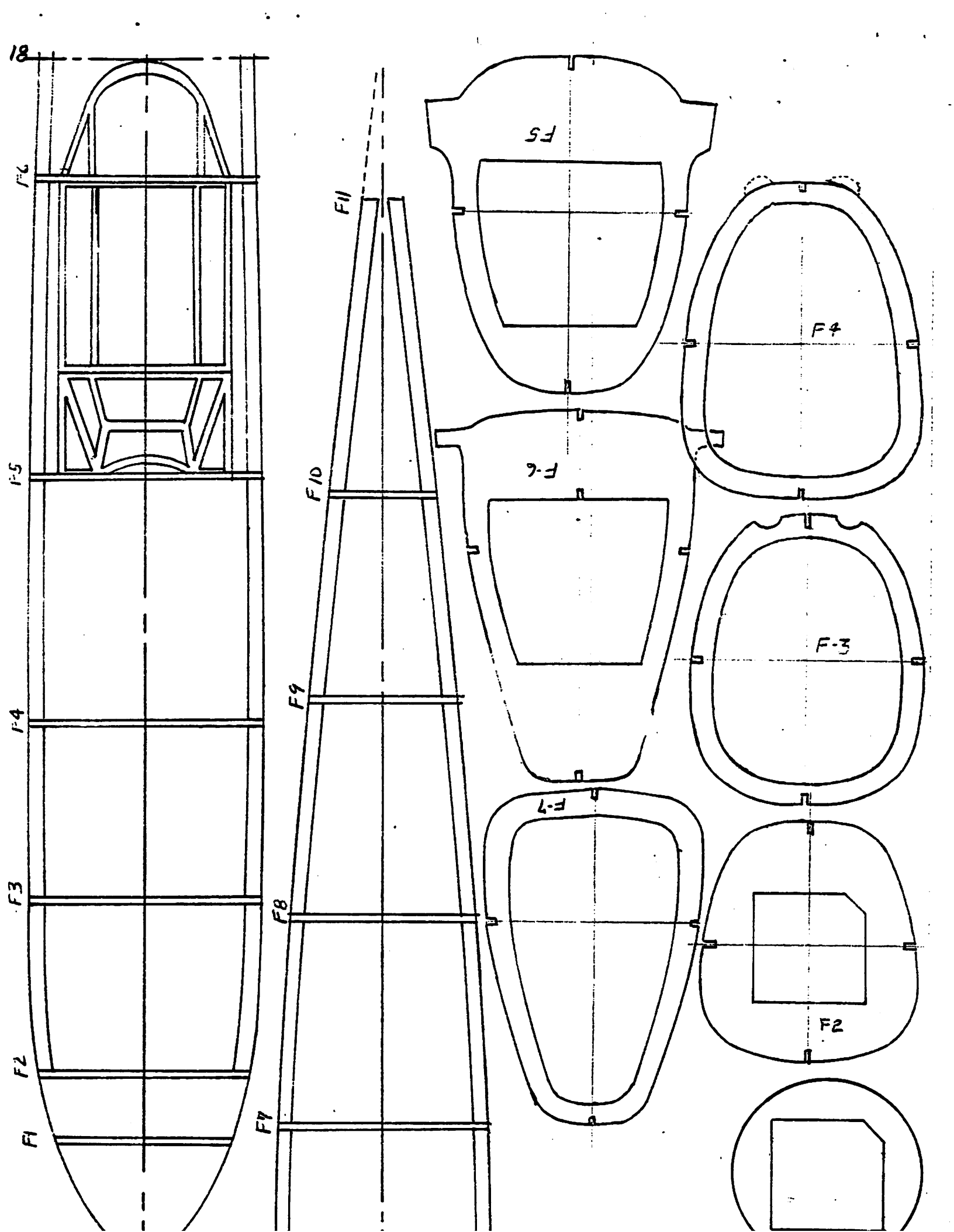
Oh yes,a nickel late entry. no fuss, no hassel, just get in and fly. Just enough trace nitrous oxide in the air to keep the partial pressure at an entertaining level. " that's the flavor of Peanuts". Taste'bout the same indoors or outside. Static display and entry attracts over 60 entries spread over Pioneer, WW I(1914-18), Golden Age(1919-39), WW II (1939-45) and modern. So many, we can't describe 'em all. Leave that to Doc! But, let's munch on these:

Pioneer- All pioneers look good to me. Even the Motorcycle Monoplane by Yammagotcha shop instructor and specialist in oriental serial numbers Count Arexson Pissanna. "More than equally" well detailed were a 1910 Henri Farman by Paul Briggs, 3 Santos Dumont 14bis canard bipes, a Demoiselle by Marcos Mollo, the 1909 Clerget by Benno Sabel, and the slick racing green clip wing Morane H racer by Butch Hadland.

WW I- Was lightly entered. Paul Briggs again had a beauty in the form of a Fok. DVIII with lozenge flake on the fuse'. Doc Martin cliped half a wing off his Ansaldo SVA Ridotto (the bottom half) for an attractive biplane of good flying potential. A great Morane monoplane, and an entry by Farmin' Bill Hannan, who is never at a loss for Farmans. Jim Miller, Sin-sin-natty Ohio inner ozone ace had a neat Bristol Scout. Jim and Doc will continue this dogfight Friday Aug. 8 at the FAC Nat's!

Golden age(1919-39) A mighty category. Mind blowers here include Mike Colling of England with a Cierva C.6C Autogyro. Saw 2 Bellancas, 3 Watterman Racers, and a Poineer in a pear tree. Hang on readers here I go again. Farmer Hannan had a Ford E-I-E-I-Oh! All three of the Wattermans looked great. Bernard Aslett with scale rib space drew top points. Bob Clemens Farman Moustique looked ready to race in the color of Hannans eyeball- now flag red. Looked as good as the Jumbo size FLY LINE Farman Moustique Hurst Bowers and Herb Clukey had at the Toleds W/S Show. A Wittman by Doc Martin and a deH Gipsy Moth drew praise. J-3 Cubs attract fond inspection, but somehow seem too much competition for '20s era classics. Maybe two classes Golden Age 1919-34 and Pre War-Civil & Observation 1935-45 would split the Cub types out. Just a thought.

WW II- Could have more entries from the hundreds of WW II Peanuts flying . Give Bob Peck a Zero in Navy Scale. Haw-aw-w-w. Betcha 5 turns to one he was back home playing with his new winder! Jack Little sent a down and dirty gear Berra' that looked real salty (realistic) Mike Araks Olive (Vodka Thinner?) YO-59 was the best prospect for a puddle jump.


18
F6
F5
F11
F4
F10
F-6
F9
F-3
F-7
F8
F3
F2
F2
F1
F1

'80 INDOOR WICH

WEST BADEN·USA

Lt. ALEX DERKASCHENKO & ROBERTS FIKE E AT WPAFB



Modern- another super category with 2 Ganagobies, 3 Fikes, 4 Lacys, 5 Pipers, but so few Cougars! Lots of nice stuff. Character types included a Jungster parasol, an Andreason BA4-B, McGillivrays I.Fury, a clip wing Monocoupe, and Roger Aimes nicely restored yellow Bernard 191 GR. A yellow and black Leningradnik from Eastern Eruope resembled a military Cessna 180 type; on an outdoor weight frame- might be good for 50 seconds. Butch Hadland flashed his famous Wittman Tailwind in white paint, but took mercy on competition by a declaration of retirement.

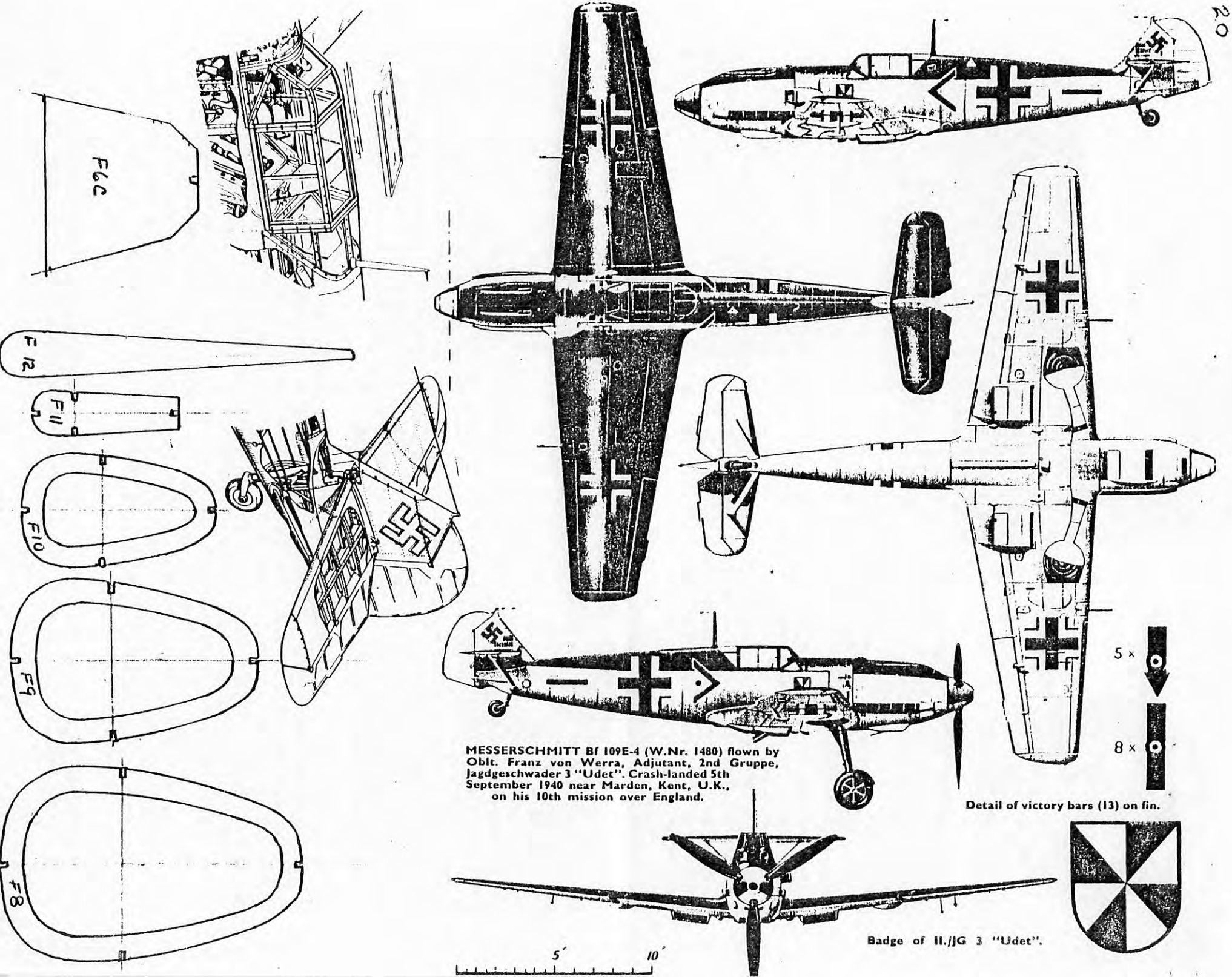
Jack Adams and Jack Niederhauser of Indiana (the CIA is watching your Peanut) did a good job judging, and C.D. Butch Hadland added blessings and merit points.

Out on the flight line, Lou Leifer of Toronto enjoyed every evening flying a Fike E for altitude. Lous goal of hitting the 98' bandstand wrap stimulated many flights.

On with the show; proxy pilots man your planes! Our Ole Tiger with a new prop ass'y R.O.G. 'd in a realistic flat left climb. Not bad. but at altitude went X country into a 3rd floor window and slid down inside the iron grate. Charge! up to the third floor, peering in over door empty room windows, but no #14. Over to the bookstore for room keys. Nope. see no Tiger, get no Tiger. Break for lunch still lost. Back to the third floor boondocks. Spot the flight path from all around- just has to be there in that 2nd window from the balcony. The one we can't open without a master key, Could use Spiderman or better yet Roy White, the phantom of the bandstand up in the sky, who climbs all over the rafters for hung up models. Other help is on the way. A brave Northwood fellow climbs out window 3 and swings over to two. Ole Tiger is back to the races! More flights. more winds. A short rear peg in a loose hole works out and tears out some left tissue and bits if frame. The hard site shakes up the landing gear too. But still in flying trim. More flights; up to 28 seconds, and to borrow from the late great Bill Falck, "bit by bit she got faster". A bit of a stall on flight 6. Don't want to tighten up the turn, so off with a pinch of tail weight. Crank in 190 X 9:1 of 1/8" uX X 24". That's it! A 52 second hop. Lets back that one up. Flight 7 is up good, but look there straight into a second floor room at 17 sec. O.O.S. twice at an indoor. Too much. Security has a key, and its back to fly the needed good hop. Got it. That was a whole lot of fun. Later the shakeout of flight and static standings puts Ole Tiger tied for third with Butch Hadland and his Lacy M-10. Not bad company for a 25 gm hot rod with a proxy rookie at night flying. *2)

On and on into the night Jack Adams and Roger Wathen logged the ever so many flight times. Proxy flying the Roberts Fike E was also a challenge to scrt out. It flew fine, but just didn't out fly Ole Tiger by much. Should climb much better. Keep adding power with larger motors and fussin' with thrust shims. About flight 5 we find the problem is a sticking prop shaft in the aluminum tube. lousy bearing material. There; give it a shot of oil and it's free. But now with all that power, ker-splat, the hot left turn blast on the rudder is too tight, and the port wing smacks the hard tile floor. Um-ugh! cracked bones. C.A. glue bond it , inspect, and maybe it will hold up. Worked up to 1:17 by flight nine. More like a Fike should fly. Brand new this Spring, Gordon had about 30 seconds a flight at the EMAA Edinboro Pa. Indoor meet. O.K. were getting it in trim; but the landings stress the lame wing. Out of flights about 1:00 AM. What the 'ell. Re-enter it's still early!

*2) Weight with about 3 gm of 1/8" X 24" FAI. The original peanut flew about 30 seconds at 29 gm. Lots of wing area on this Little Gem (Jim Miller Racer) to carry the load.



MESSERSCHMITT Bf 109E-4 (W.Nr. 1480) flown by Oblt. Franz von Werra, Adjutant, 2nd Gruppe, Jagdgeschwader 3 "Udet". Crash-landed 5th September 1940 near Marden, Kent, U.K., on his 10th mission over England.

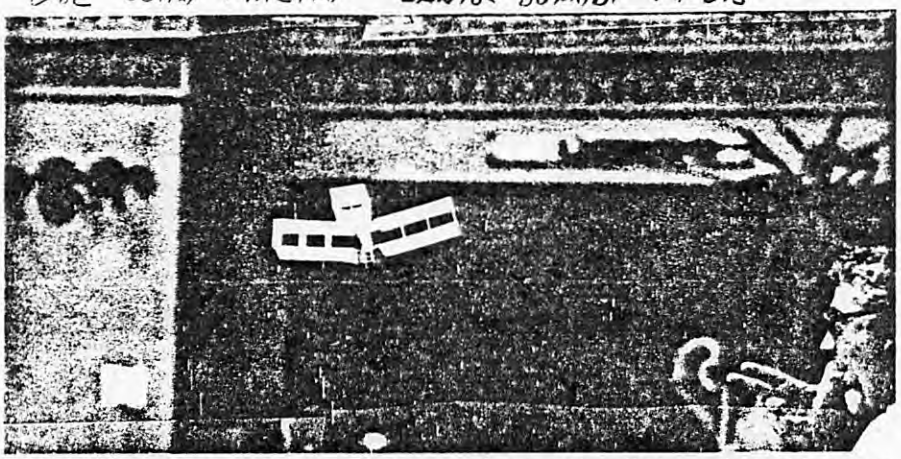
Detail of victory bars (13) on fin.

Badge of II./JG 3 "Udet".

'80 INDOOR WICH

WEST BADEN·USA

Doc John Martin Santos DuMont 14 bis



Put up a 1:19. O.k. still gaining, but the rear peg is loose and short. Out spits the peg. Twice too often. Lets use longer rear pegs for us rookie pilots! Another hop, and the wing is looking weak. Lets knock off flying and save the pieces for builders repair options. On and on into the night wee hours the flights go up. Mike Colling must have the most. Re-enter on and on; he came a long way from Lancs and makes the most of flying fun. Proxy pilot Doc Martin makes a valiant try to get the Bleriot Canard to fly. With a new larger and dihedraled fw'd vane, it goes up great hand launched. But the narrow gage wheels just duck walk on all R.O.G. attempts. Bernard Hunt of U.K. Team winds Jack McGillivray of Team Canada Issacs Fury as Jack eyes the motor knots building up. It flies smoothly up on a long hop. The Berracuda doesn't get off well, but the Chuck Marcos P-51 is trimmin' out. Butch logs times on the Lacy and Morane. Marcos Mollo is putting up the best 14bis flights as Doc also flies his S.D. 14bis. The Argentine team mates fade away into the night. duBlue takes over holding and timing. Marcos keeps winding the motor back through the bearing hole. Jack Adams goes to the aid of Paul Briggs and birds. Roger Wathen is still neatly marking times on the big chart. Butch gets his flights in and hits the sack. Shame only 3 AM! Doc is still going strong; Bonzo blisters the air ways. Missed Jim Millers flights with the Bristol and Vagabond. so much going on. Briggs, Adams and Kristin King work on. Colling switches planes to the WW I Siemens SSW. Mollo and stooge keep throwing up flights. Re-enter and onward. Where have all the flowers (fliers) gone? Almost 4 AM and Adams tries to shut down CIA surveillance. No way! Mollo is still flying. Mather would still be flying too. We arm wrestle Jack for the data chart. The motor shaft on the 14bis tosses a prop, and Adams makes a dash for the sack. All Clear sounds from Roy Whites Beer cooler. Didn't make it to a 24 hr. Gran Prix, but the dawn patrol will be up soon and want to fly. What a ball! See what you missed. Can the excuses; get buildin' and get it up. Straighten up and fly Rt. 1W & GP Class leaders:

PIONEER		Pts.
1 Butch Hadland	Morane	5
2 Marcos Mollo	S.D. 14bis	5
3 Paul Briggs	1910 Farman	8

WW I		
1 Jim Miller	Bristol Scout	3
2 John Martin	Ansaldo SVA Ri.	5
3 Paul Briggs	Fok D VIII	6
4 Mike Colling	Siemens Sch. SSW	6

GOLDEN AGE		
1 Bill Hannan	Ford Stout 2A	4
2 Bernard Aslett	Watterman	6
3 Jim Miller	Piper J-3 Cub	7

WW II		Pts.
1 Mike Arak	YO-59	3
2 Chuck Marcos	P51D	4
3 Jack Little	Barracuda	5

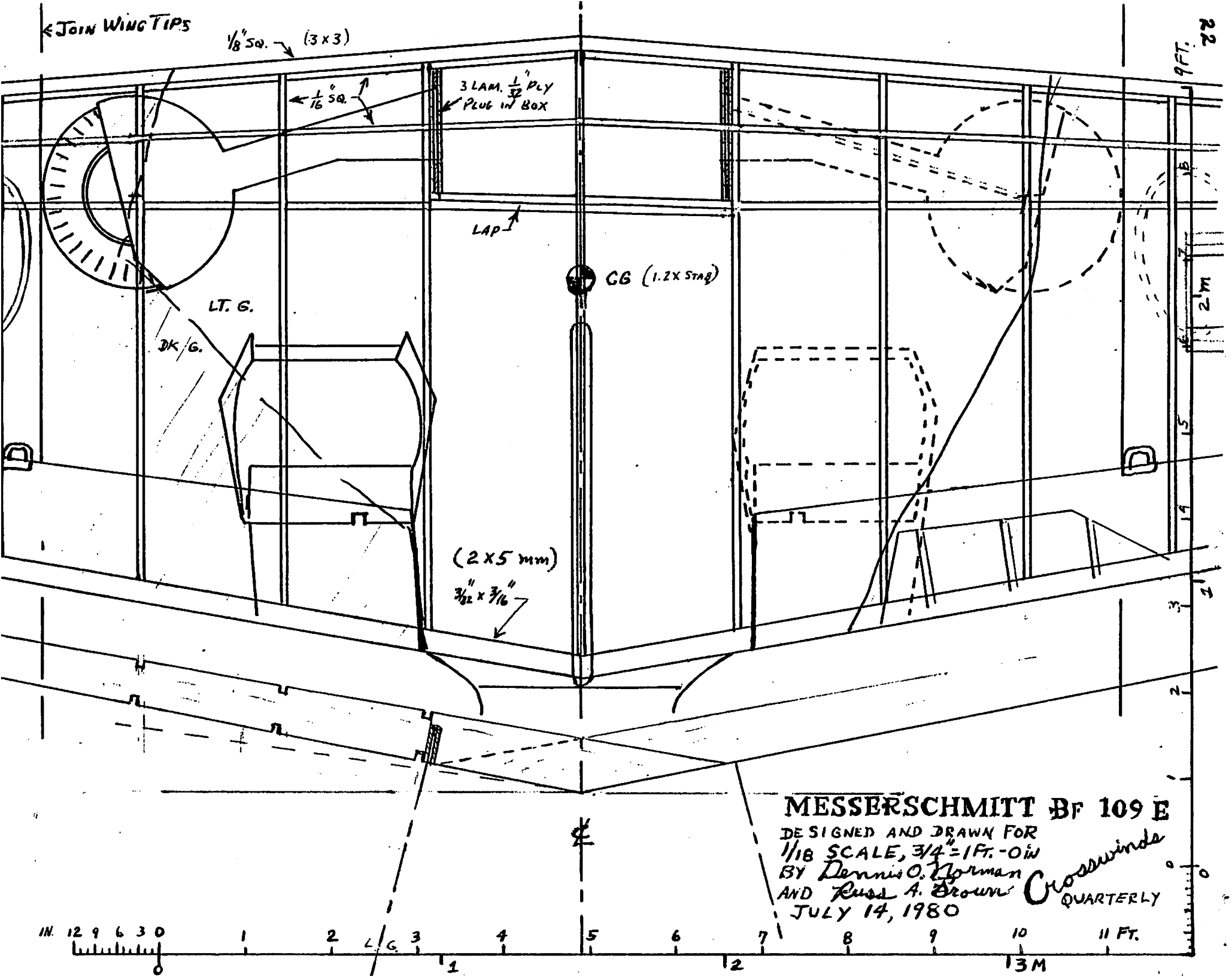
MODERN		S-	F	T
1 Jim Miller	Piper Vagabond	3	3	6
2 Jack McGillivray	Issacs Fury	4	5	9
3 Butch Hadland	Lacy M-10	1	10	11
4 Gordon Roberts	Ole Tiger	2	9	11
5 Gordon Roberts	Fike E	7	5	12
6 Bob Clemens	ED-4	6	8	14

Longest Bernard Aslett Cougar (2) 2:28
Best Scale Paul Briggs Farman 1910

My regrets to Bill Hannan for the length of this report, which must be explained to Ichiro and the Flightmasters in California.

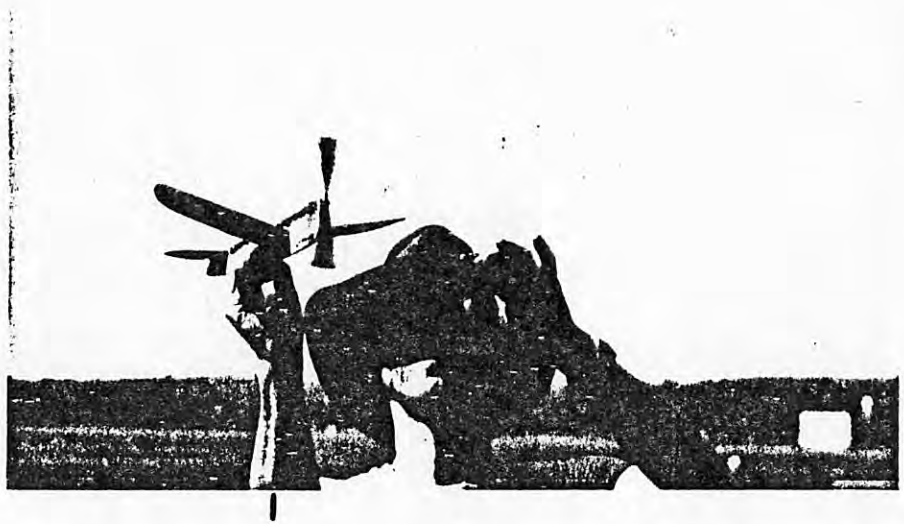
Max duBlue

Academy of Model Aeronautics

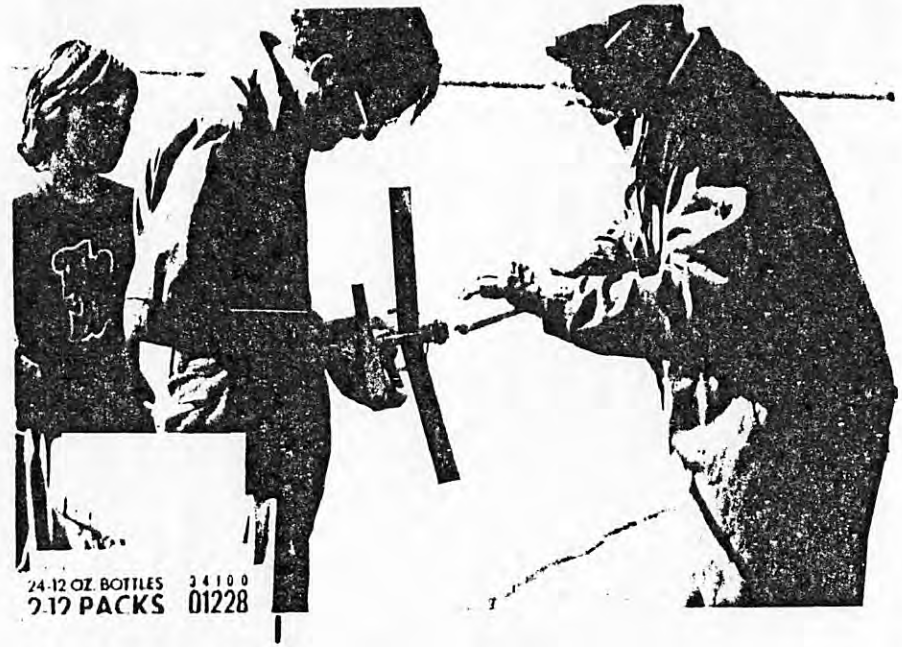

JOIN WING TIPS
1/8" SQ. (3 x 3)
1/16" SQ.
3 LAM. 1/32" PLY PLUG IN BOX
LAP
CG (1.2X STAB)
LT. G.
DK. G.
(2 x 5 mm)
3/32" x 3/16"
MESSERSCHMITT Bf 109 E
DESIGNED AND DRAWN FOR
1/18 SCALE, 3/4" = 1 FT.-0 IN
BY Dennis O. Norman
AND Russ A. Brown
JULY 14, 1980
Crosswinds
QUARTERLY
IN. 12 9 6 3 0
1 2 3 4 5 6 7 8 9 10 11 FT.
1 2 3M
9FT.
2M

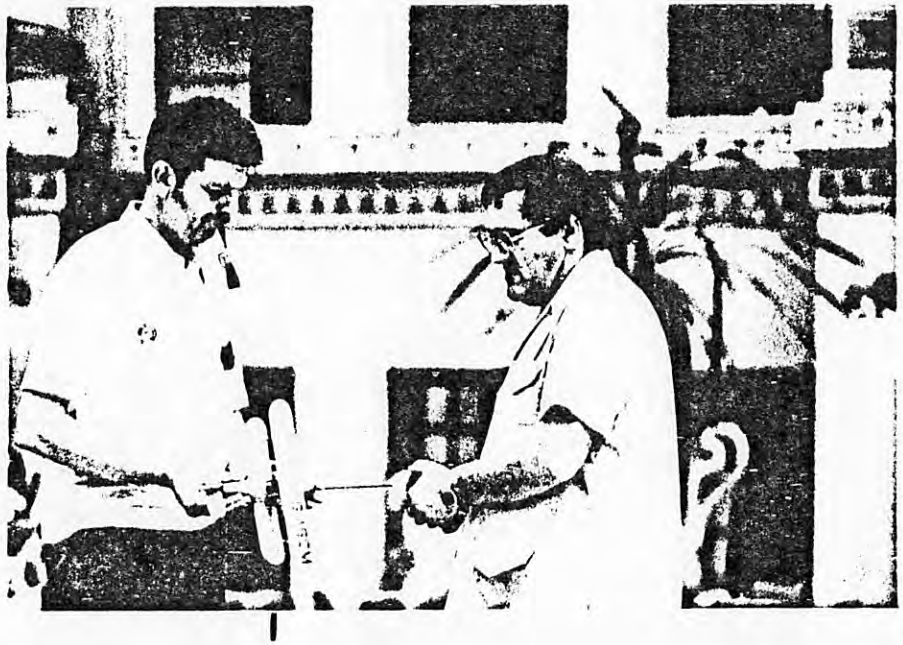


L. Cris Norman Hi-flier Bellanca. Rog. Wathen and Dennis Norman foam profile T-38 trainer.

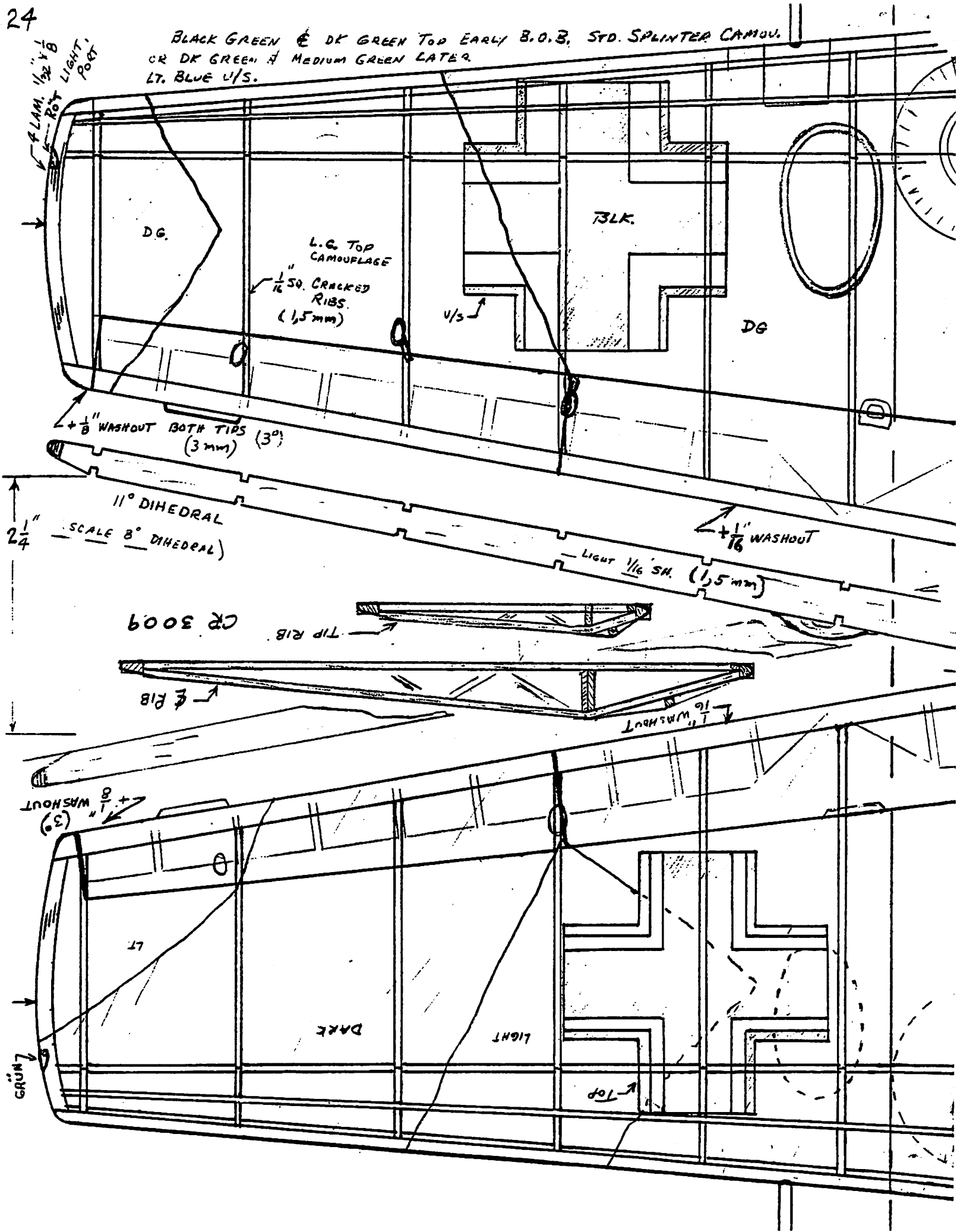


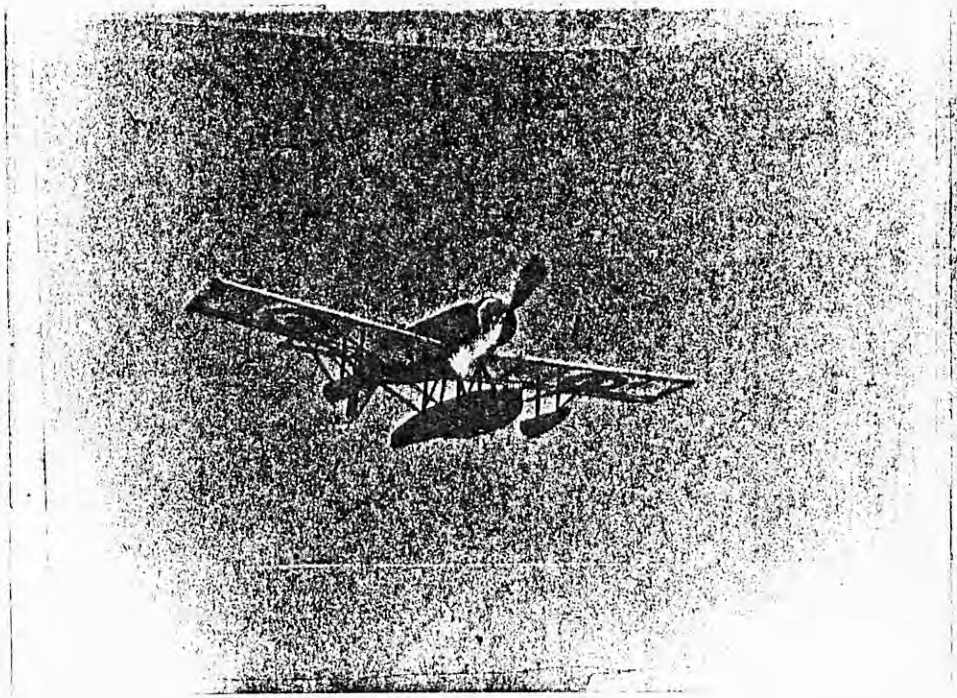
GOON onthe loose! Bob Heywood launches No. Cal.

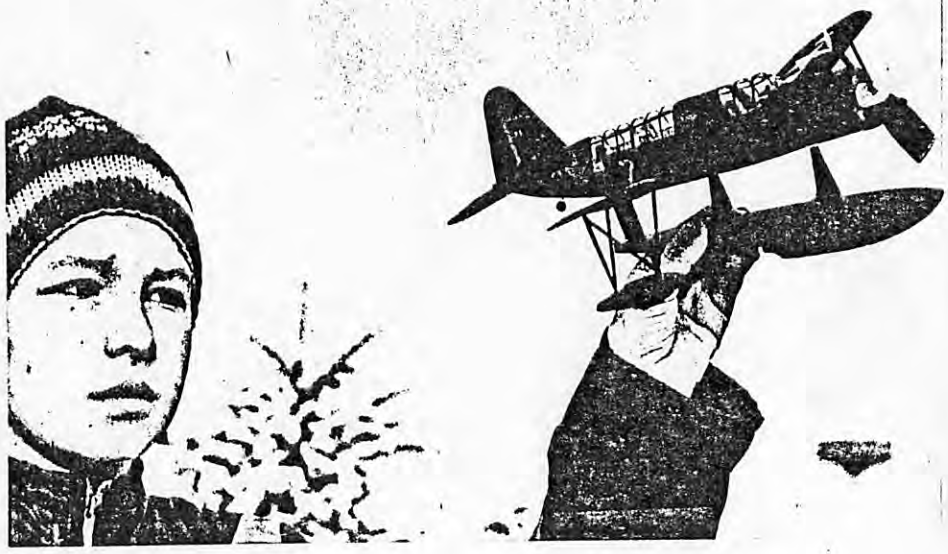




Prop tasters; L. Don Assel at V.P. winding tube. R. Jack McGillivray. Bernard Hunt cranks Issacs Fury


BLACK GREEN & DK GREEN TOP EARLY B.O.B. STD. SPLINTER CAMOU.
OR DK GREEN & MEDIUM GREEN LATER
LT. BLUE U/S.
4 LAM. 1/32 x 1/8 PORT LIGHT.
D.G.
L.G. TOP CAMOUFLAGE
1/16 SQ. CRACKED RIBS. (1,5mm)
BLK.
U/S
DG
+1/8" WASHOUT BOTH TIPS (3mm) (3°)
11° DIHEDRAL
2 1/4" (SCALE 8° DIHEDRAL)
+1/16" WASHOUT
LIGHT 1/16 SQ. (1,5mm)
CR 3009
TIP RIB
RIB
+1/16" WASHOUT
+1/8" WASHOUT (3°)
LT
DARK
LIGHT
GRÜN
TOP







Saltwater Peanuts from Ing. Lubomir Koutny flying in BRNO CZECHOSLOVAKIA. Son Peter flies a Besson above and holds Lubomirs Kingfisher.

Pavel Stranik Macchi MC-72 on right is geared up for Schneider plane wash with counter drive props! Egg beater action has merit with scale prop and float locations. Winding is fun too!

COLOURS AND MARKINGS

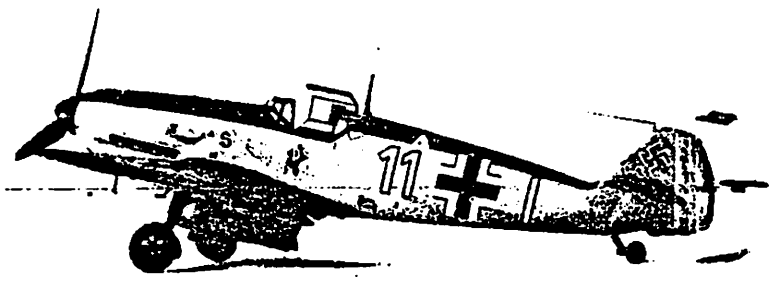
DURING the invasion of France and the Low Countries in the spring of 1940, it was noticed that many Bf109E's had adopted a revised colour scheme, which included the repainting of the black-green *Schwarzgrun 70* (Humbrol *HG15 RFC Green* plus a dash of *HB1 Dark Green* and *HU2 Olive Drab 41*) areas with the lighter grey-green *Grau 02* (Humbrol *HG6 RLM Grau 02*). The pale grey-blue *Hellblau 65* (5 parts Humbrol *HG3 Hellgrau 76* plus two parts *MC12 Prussian Dragoon Blue*) undersurface colour was extended up the fuselage sides onto a line level with the canopy sill, and entirely covered the fin and rudder. Spinners generally remained in *Schwarzgrun 70*, or *Dunkelgrun 71* (Humbrol *HG2 Dunkelgrun 71* plus a dash of *HB8 Dark Slate Grey*).

National insignia had also gone through a change. The fuselage and underwing *Balkenkreuze* received wider white borders, and the *Hakenkreuz* was repositioned onto the fin from its previous location centrally across the fin and rudder hinge line.

None of these changes were effected overnight, there being evidence to suggest that 71/02/65 finished Bf 109E's were operational shortly after the fighting in Poland had ceased, and certainly the scheme was in fairly widespread use before the 1940 "Blitzkrieg" offensive, as contemporary photographs taken in the rather cold early spring show.

By the time of the opening stages of the Battle of Britain, 70/71/65 finished Bf 109E's were the exception, and the 71/02/65 scheme was firmly established, albeit with minor variations and additions. The large areas of the light grey-blue *Hellblau 65* fuselage sides was obviously too conspicuous for some units, who covered these areas with mottles of various depths and colours, usually permutations of 70, 71 and 02.

Presumably because of spending much of its flying time over the



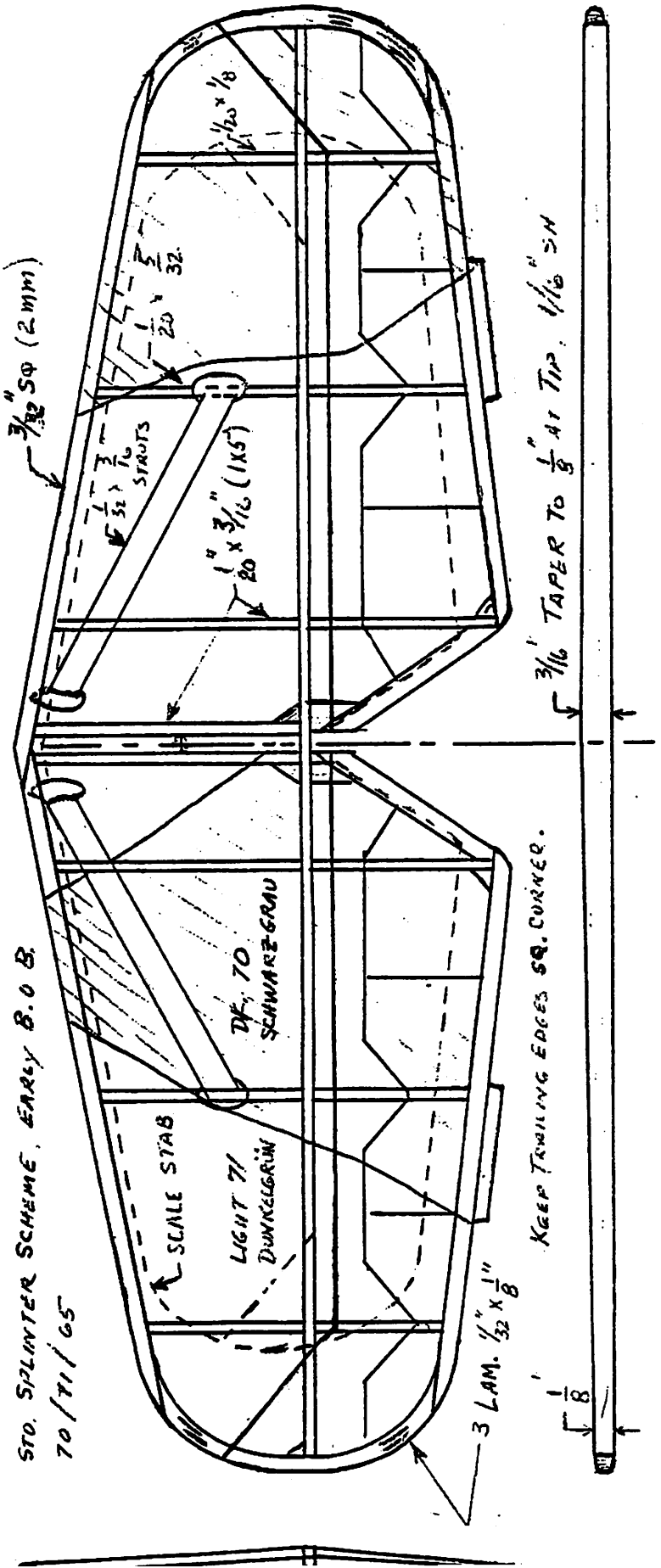
Channel and requiring a suitable 'over water' camouflage, the introduction of the three 'mid-war' fighter greys on Luftwaffe fighters appears to have occured much earlier than had previously been thought. These greys consisted of dark grey *Dunkelgrau 74* (Humbrol *HG4 Dunkelgrau 74*) and medium grey *Mittelgrau 75* (3 parts Humbrol *HG4* plus 1 part *34/M10 White*) uppersurface colours, with light blue-grey *Hellgrau 76* (Humbrol *HB4 Duck Egg Blue* plus a dash of *34/M10 White*) for the undersurfaces.

A mixed assortment of colours from the existing green shades and the new grey shades was not uncommon; wing and tailplane upper-surfaces in 71/02 and the fuselage spine in 74/75, or just one of these colours, being a frequent variation. Even when the upper-surfaces were entirely repainted in 74/75 over the 71/02, the original *Hellblau 65* undersides were often retained.

70/02/65 was still the predominant scheme throughout the Battle of Britain period, but as the summer passed into autumn, and autumn into winter, the percentage of 74/75/76 (or 65) finished *Emils* increased, although it was not until the November 1941 issue of the L Dv 521/1 camouflage manual that the official use of 74/75/76 was promulgated.

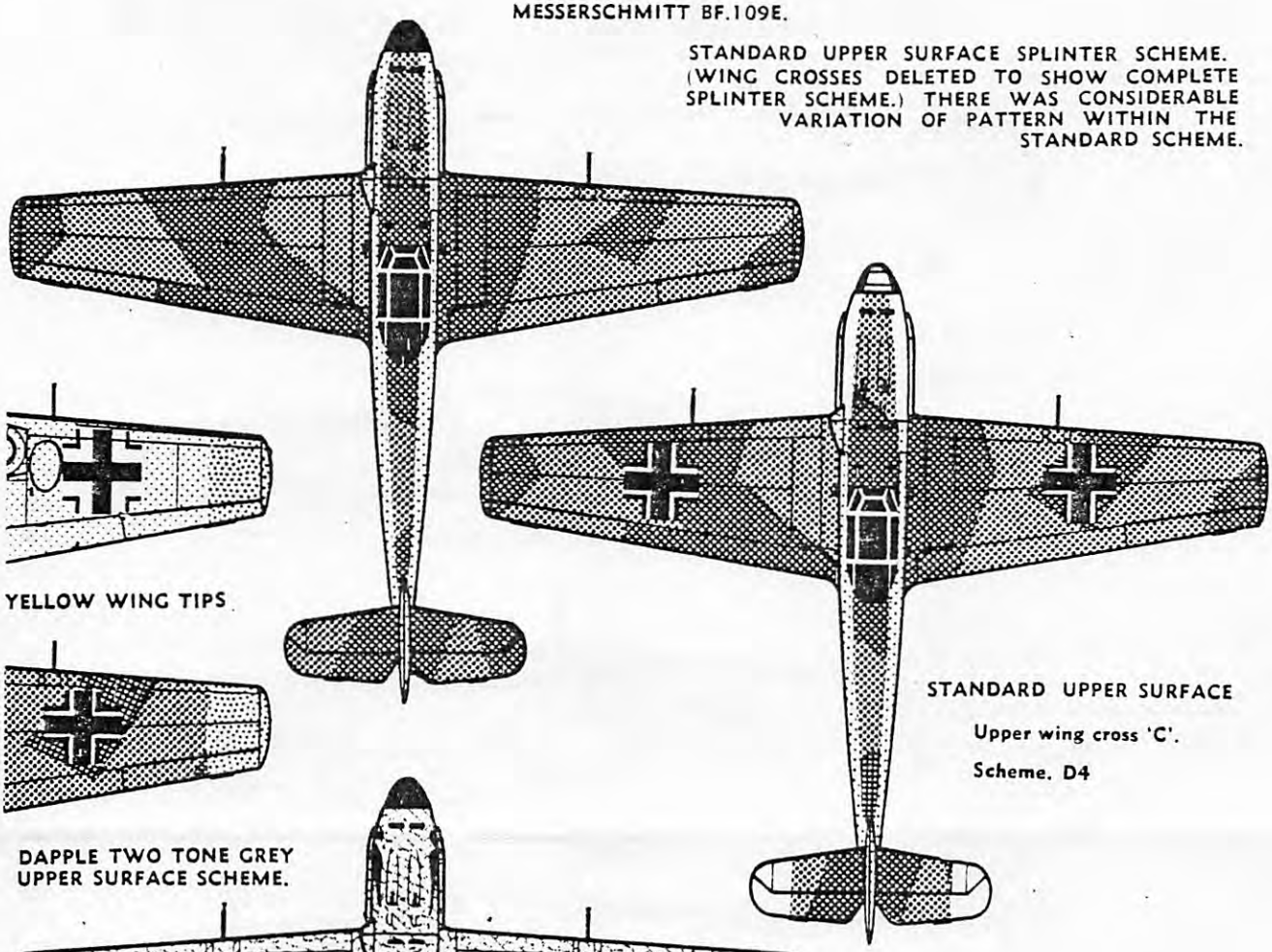
Unlike the RAF's system of code letters, Luftwaffe single engined fighters carried coloured numerals and *Gruppe* symbols for identification purposes. As it is not intended to go into the *Jagdgeschwader* structure and markings systems in this particular series of articles, it must suffice to say that the numerals and *Gruppe* symbols followed closely a specific colour code, although the inevitable variations did occur. *Geschwader, Gruppe,* and/or *Staffel* badges were also an integral part of the Bf 109E's markings, but as the Battle continued it was realised that some form of instant recognition of friend from foe was needed.

Yellow, *Gelb 04* (10 parts Humbrol *24/M15 Trainer Yellow* plus 1 part *HM10 Scarlet*) or, white *Weiss 21* cowlings and rudders were the most common instant identification features, but spinners, wingtips and even tailplane tips came under the painter's spray gun



MESSERSCHMITT BF.109E.

STANDARD UPPER SURFACE SPLINTER SCHEME. (WING CROSSES DELETED TO SHOW COMPLETE SPLINTER SCHEME.) THERE WAS CONSIDERABLE VARIATION OF PATTERN WITHIN THE STANDARD SCHEME.



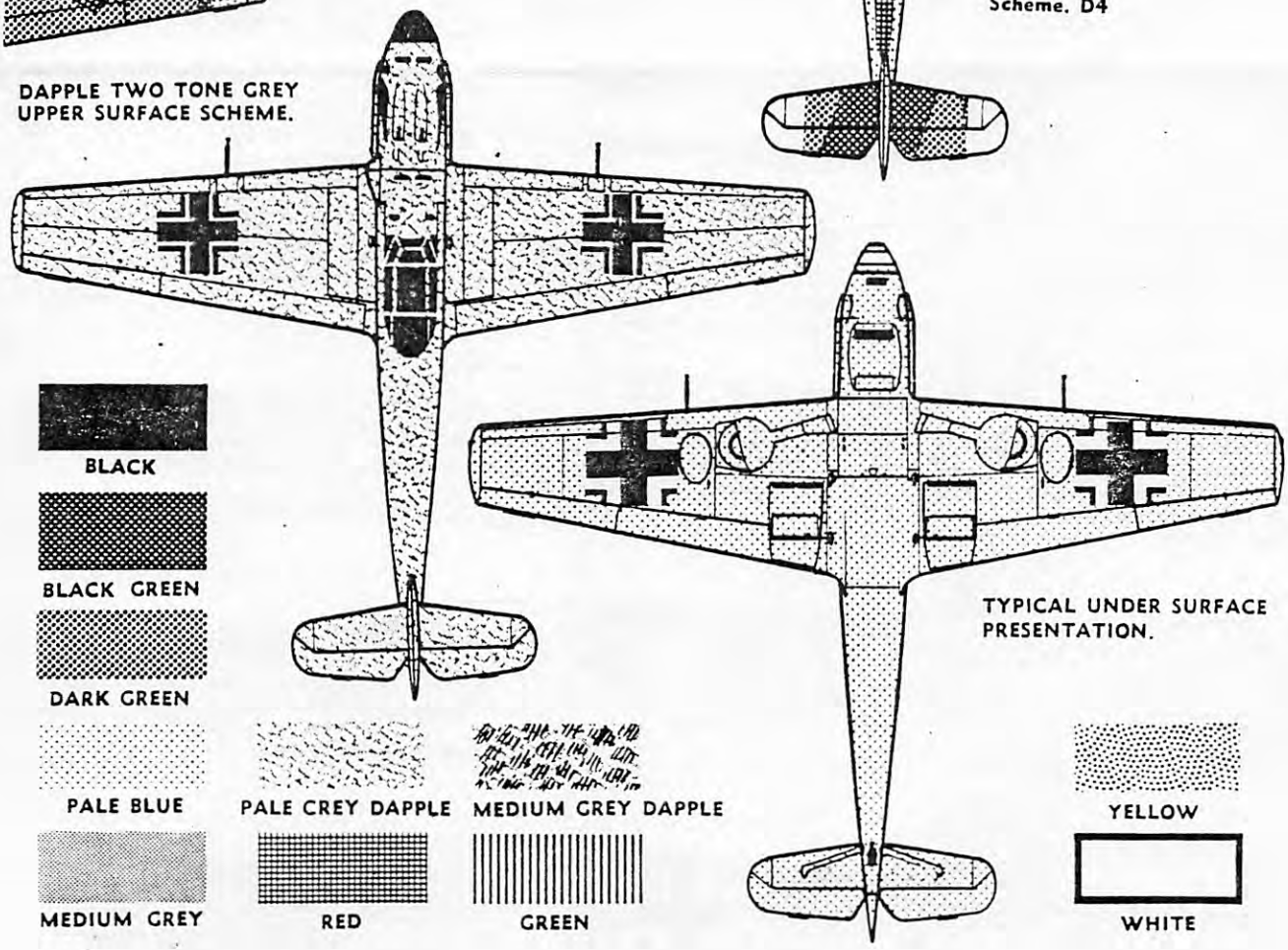
YELLOW WING TIPS

STANDARD UPPER SURFACE

Upper wing cross 'C'.

Scheme. D4

DAPPLE TWO TONE GREY UPPER SURFACE SCHEME.



TYPICAL UNDER SURFACE PRESENTATION.

BLACK

BLACK GREEN

DARK GREEN

PALE BLUE

PALE GREY DAPPLE

MEDIUM GREY DAPPLE

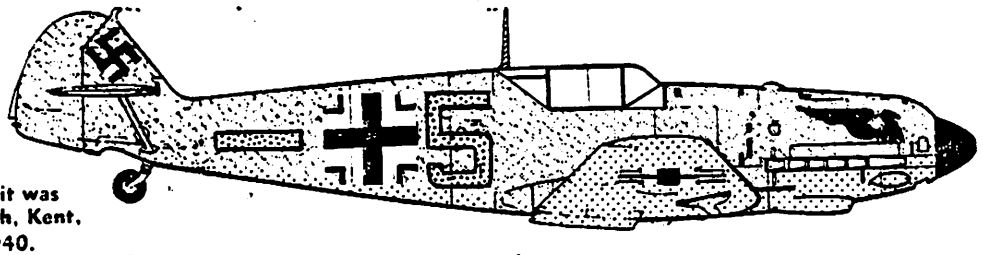
YELLOW

MEDIUM GREY

RED

GREEN

WHITE

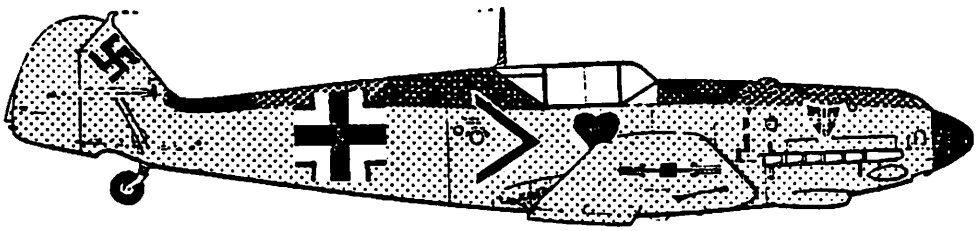


E 1
Bf.109E,
6/JG52,
Luftflotte 2.
Peuplingne, France.
Uppers mottle oa.
Another Bf.109 of this unit was shot down at Bexley Heath, Kent, Sunday, 20th October, 1940.
W.Nr.2780.

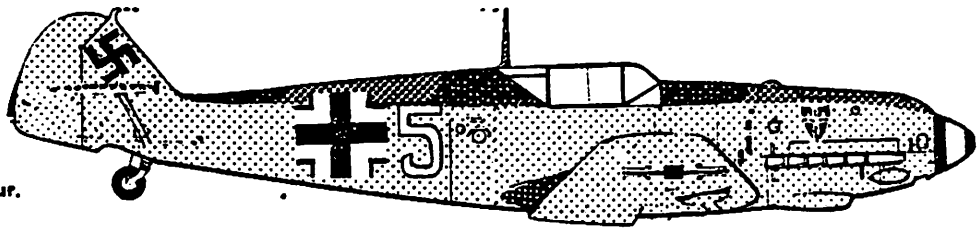
Note position of swastika is that usually used by non-operational types.
E2



E 2
Bf.109E,
1/JG53,
Luftflotte 2.
Dinan/Trelivan, France.
Uppers splinter scheme.
Grey paint on cowl had streaky appearance.

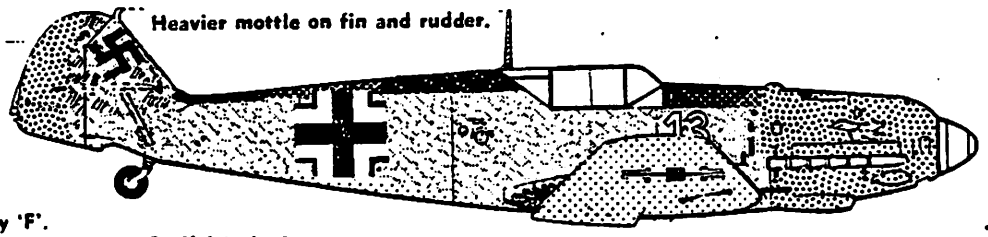


E 3
Bf.109E,
Gruppe Stab./III/JG54
'Grünherz'.
Reputed shot down late December 1940.



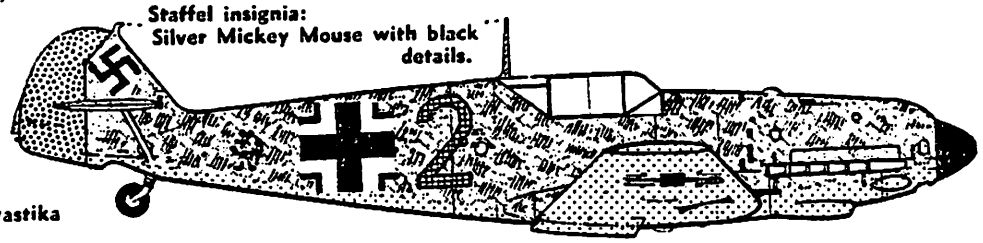
E 4
Bf.109E,
7/JG54,
Luftflotte 2.
Guines, Holland.
Uppers splinter scheme.
Ring on spinner in Staffel colour.

Heavier mottle on fin and rudder.

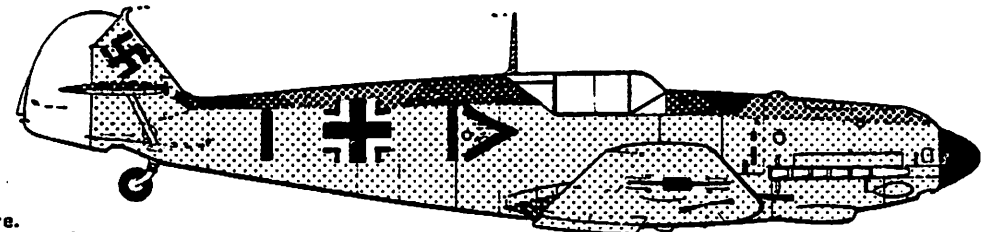


E 5
Bf.109E.
7/JG54,
Guines, Holland.
Luftflotte 2.
Note white spinner.
Uppers splinter scheme.
Upper wing cross 'B'.
Under wing cross probably 'F'.

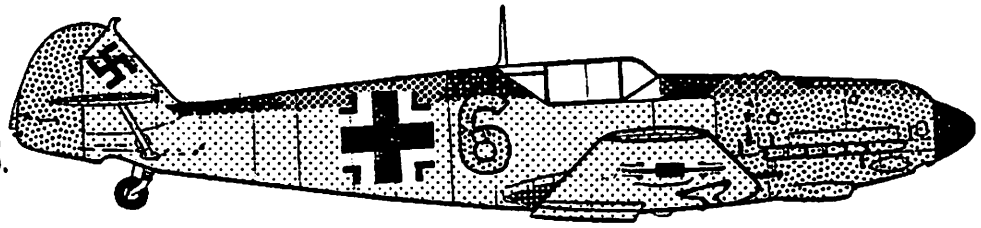
Staffel insignia:
Silver Mickey Mouse with black details.



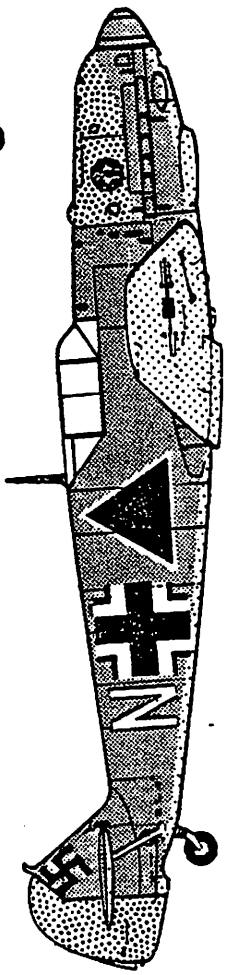
E 6
Bf.109E,
3/JG77,
N. France. Aircraft at RAE, Farnborough, October 1940.
Heavy mottle oa. Note swastika on pale blue rectangle free from mottle.



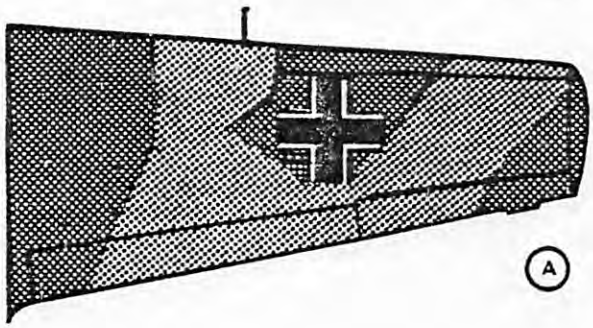
F1
Bf.109E,
Geschwader Stab. unit unknown.
Uppers splinter scheme.
Upper wing cross 'B'.
Under wing cross 'E'.
One third of spinner white.
30913 painted in white on crankcase.



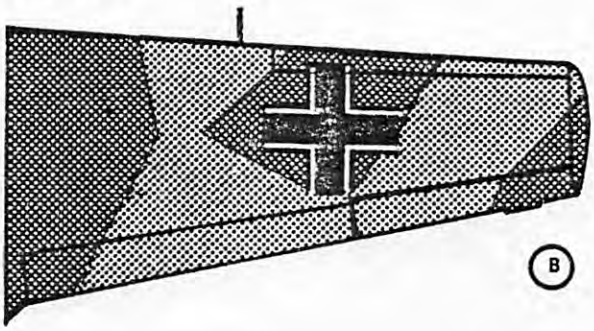
F 4
Bf.109E,
Unit unknown,
Farnborough, 2nd October 1940.
Uppers splinter scheme.



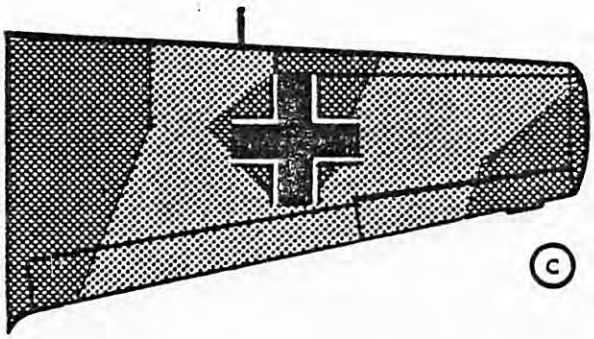
F5
Bf.109E,
4.(I(S)/LG2,
Luftflotte 2.
St. Omer, France.
Uppers medium grey oa.



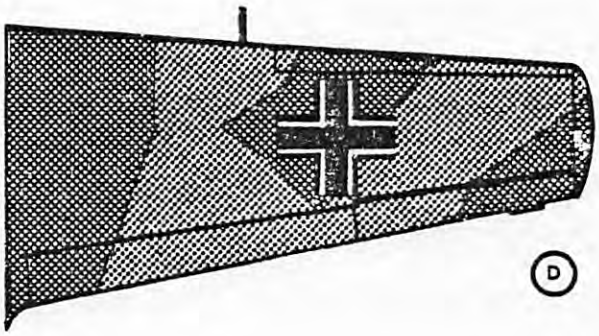
A



B



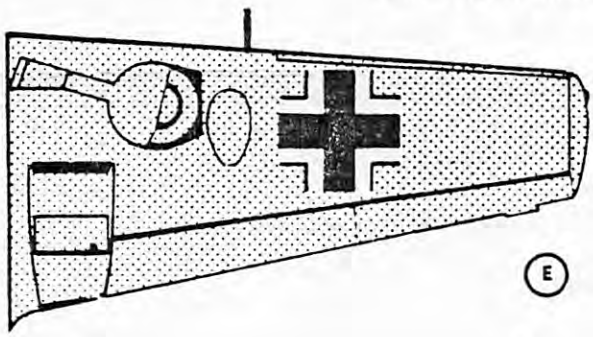
C



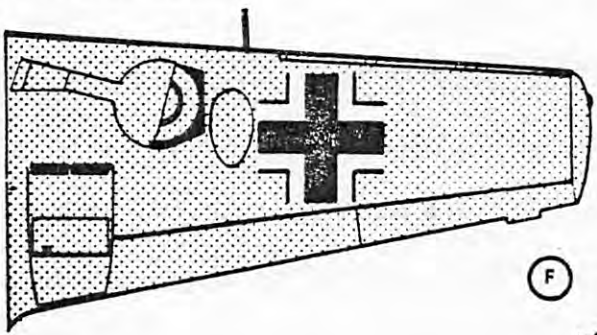
D

VARIATION IN UPPER SURFACE BALKENCREUZ

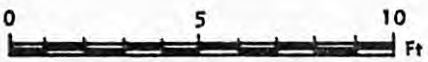
VARIATION IN UNDER SURFACE BALKENCREUZ

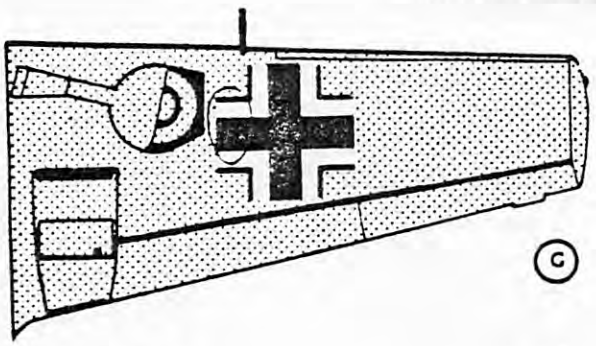


E

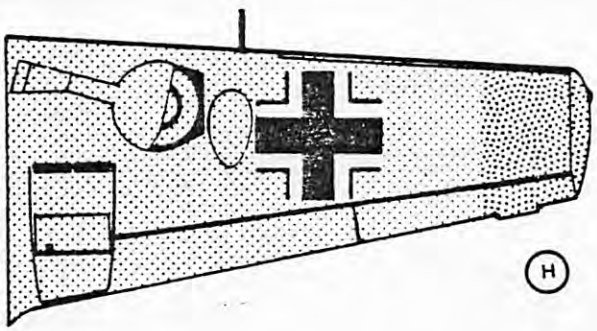


F

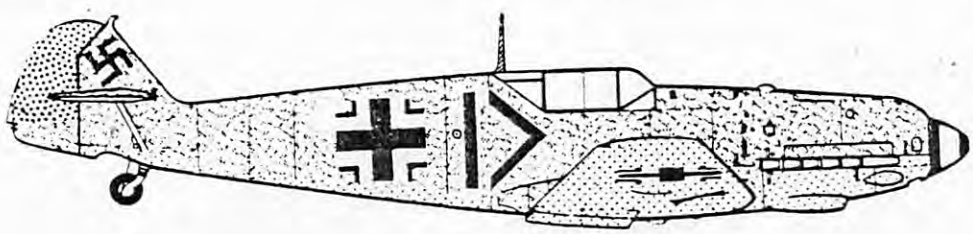




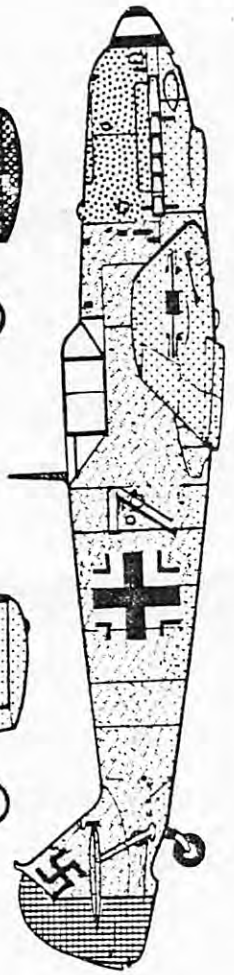
G



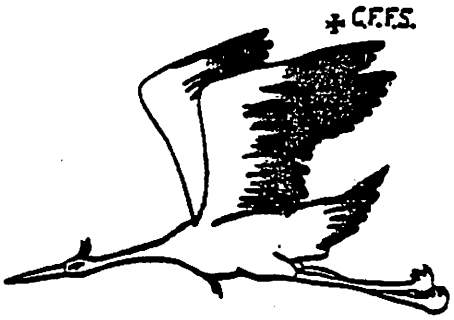
H



F 3
Bf.109E,
Unit unknown, shot down during October, 1940.
Uppers mottle oa.
One third of spinner white.



F 2
Bf.109E.
Geschwader Stab.
unit unknown.
Uppers mottle oa.
Note yellow on rudder extends to bottom rib only.





CFFS FAC SCALE SCRAMBLE AT LORAIN COUNTY COMMUNITY COLLEGE
SUNDAY AUGUST 24, 1980 10AM-5PM. CFFS MEETING TO FOLLOW PM.

1. PEANUT SCALE. Full FAC Scale points.

2. FLYING ACE RUBBER SCALE.

3. OLD TIMER FAC RUBBER SCALE.

4. OLD TIMER CO_2 REPLICA TARGET TIME. Pre 1943 Kit or Plan Subject.

5. EMERYO ENDURANCE. Sporty rubber duration FAC event.(JS)(O).

6. WW II PEANUT COMBAT. Feature Event for Golden Age Reproduction Kit Bonus.

7. BATTLE OF BRITAIN. Mass launch FAC Combat for B.O.B. subjects.

8. JET CATAPULT SCALE. Profile Scale Glider event for handicap plus time.

9. HAND LAUNCH GLIDER. (J)(S)(O).

10. R.O.G. STICK 24 INCH MAX. A P-24 Event, Plastic props. card table R.O.G. (J)(S).

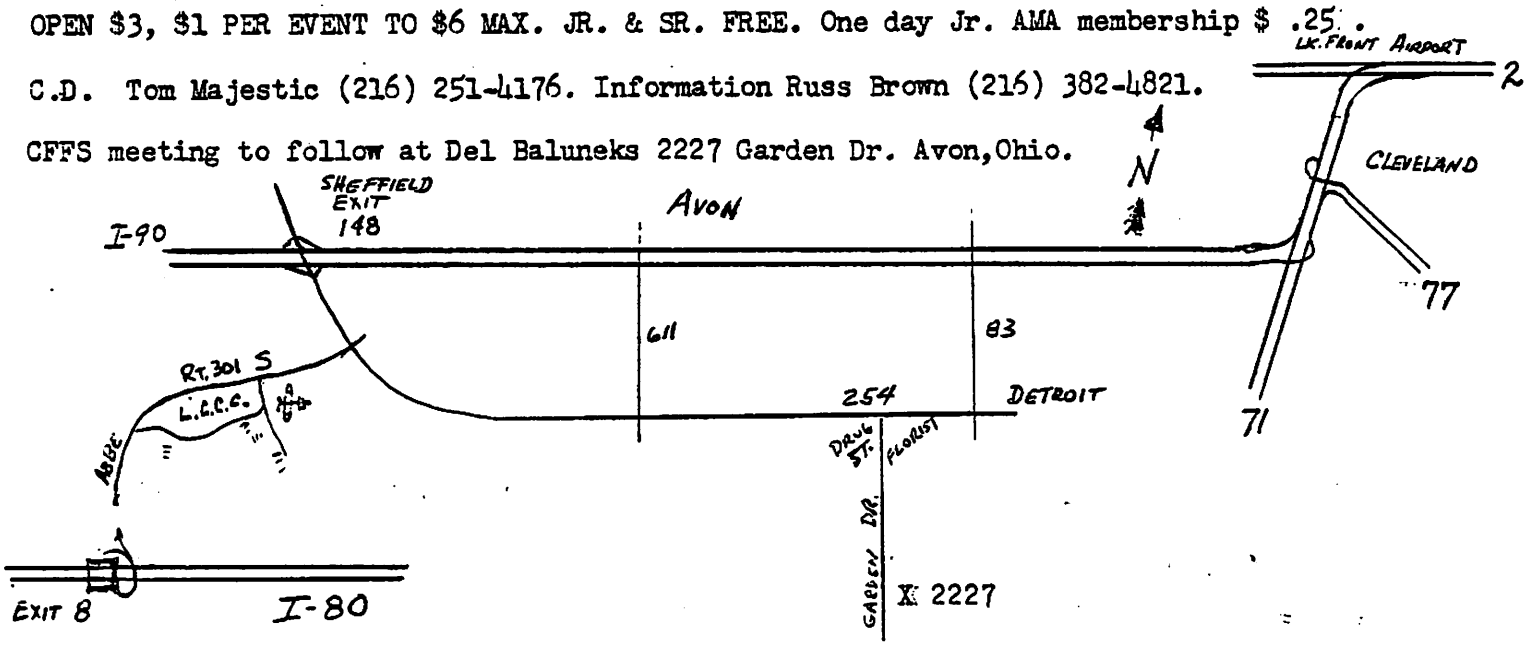
11. ALL FLY. Junior event for rubber power or glider .

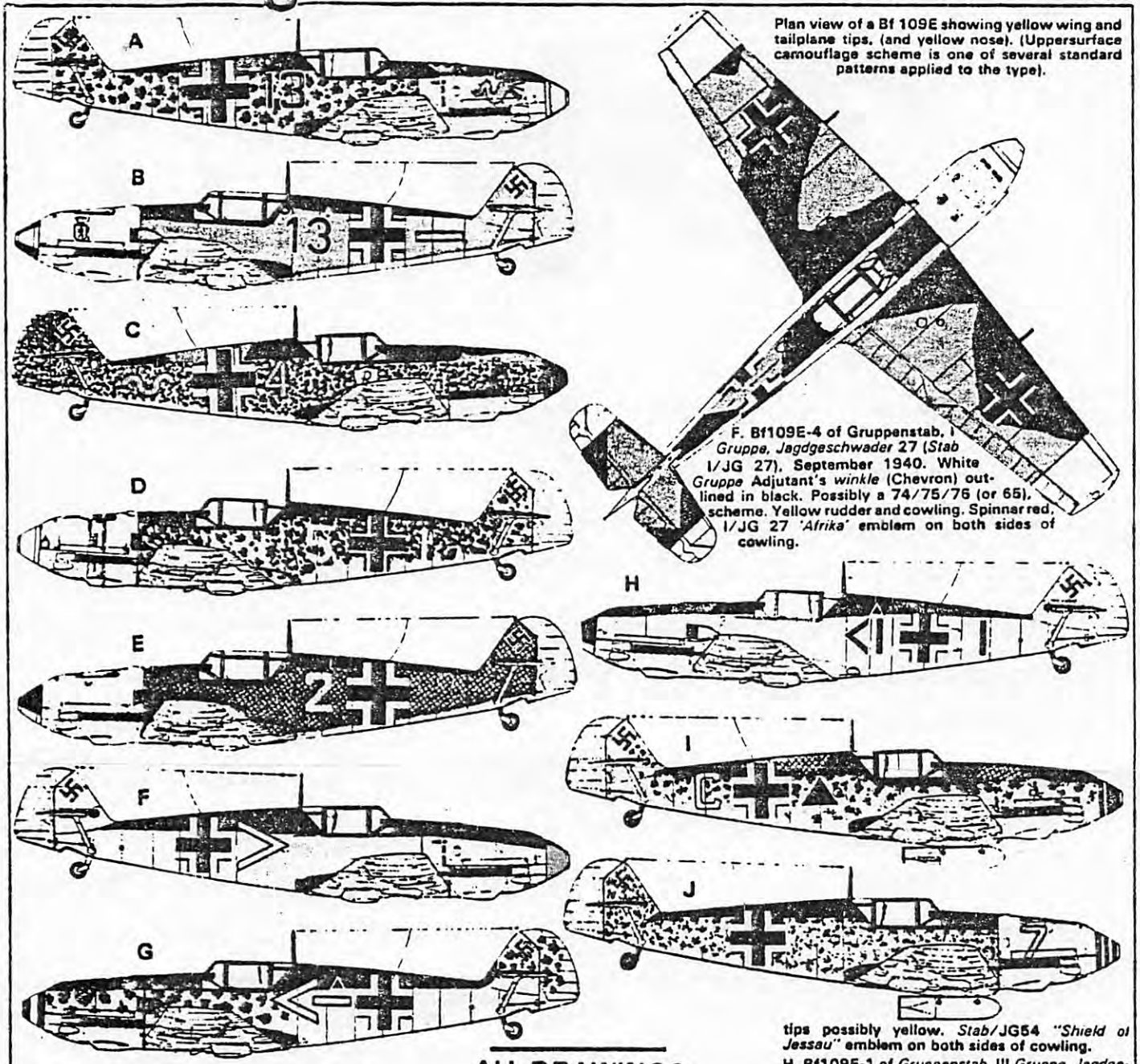
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OPEN $3, $1 PER EVENT TO $6 MAX. JR. & SR. FREE. One day Jr. AMA membership $ .25 .

C.D. Tom Majestic (216) 251-4176. Information Russ Brown (216) 382-4821.

CFFS meeting to follow at Del Baluneks 2227 Garden Dr. Avon,Ohio.





Plan view of a Bf 109E showing yellow wing and tailplane tips, (and yellow nose). (Uppersurface camouflage scheme is one of several standard patterns applied to the type).

F. Bf109E-4 of Gruppenstab, I *Gruppe, Jagdgeschwader* 27 (*Stab* I/JG 27), September 1940. White *Gruppe* Adjutant's *winkle* (Chevron) outlined in black. Possibly a 74/75/76 (or 65), scheme. Yellow rudder and cowling. Spinnar red. I/JG 27 *'Afrika'* emblem on both sides of cowling.

ALL DRAWINGS BY NEIL ROBINSON

A. Bf109E- of *Staffel*, I *Gruppe*, *Jagdgeschwader* 3 (2/JG3), August 1940. Black '13' outlined in white.
71/02/65 scheme with mottled fuselage sides. No mottle on nose area. Yellow top segment on rudder, with yellow wing and tailplane tips. Red *"Tatzelwurm"* (dragon) emblem on both sides of cowling. White spinner with three (or four) yellow concentric rings.

B. Bf 109E-1 of 5 *Staffel*, II *Gruppe*, *Jagdgeschwader* 27 (5/JG27), September 1940. Black '13' outlined in white, with original red outlined in white, II *Gruppe* horizontal bar.
71/02/65 scheme with very smooth spray of 02 mottle on fuselage sides giving a monotone effect.
Yellow rudder and cowling. Spinner 70 with white segment. *"City of Berlin"* coat of arms, bear emblem, of II *Gruppe* JG27 on port cowling side only.

C. Bf 109E-4 of 8 *Staffel*, III *Gruppe*, *Jagdgeschwader* 2 (8/JG2). Red '4' and III *Gruppe* wavy bar outlined in white. 71/02/65 scheme with very densely stippled 71 mottle on fuselage sides including fin and rudder.
Spinner either 70 or red. JG2 "Richthofen" emblem under cockpit, with 8 *Staffel 'Wolf'* emblem on nose, both sides.

D. Bf 109E-4 of 7 *Staffel*, III *Gruppe*, *Jagdgeschwader* 53 (7/JG53), September 1940. White '5' and III *Gruppe* vertical bar without any contrasting outline. 71/02/65 scheme with fairly heavily mottled fuselage sides, (slightly lighter under the cockpit area, on the fin and under the tailplane). Note earlier style, narrow bordered, fuselage cross. White rudder, cowling and spinner. Traces of a red cowling band, peculiar to certain aircraft from all three *Gruppen* of JG 53, faintly visible through white cowling distemper.

E. Bf 109E-4 of 4 *Staffel*, II *Gruppe*, *Jagdgeschwader* 52 (4/JG52), September 1940. One of the exceptions that proves the rule! White '2' without any contrasting outline and no II *Gruppe* horizontal bar applied, a feature apparently not uncommon amongst II *Gruppe* machines of JG52. 71/02/65 scheme with heavy overspray of 71 on fuselage sides. Yellow rudder and cowling. Spinner 70 with white segment. Red, arched back, "Cat" emblem on a white disc on starboard fuselage side immediately in front of windscreen.

G. 109E-4 of *Geschwaderstab*, *Jagdgeschwader* 54 (*Stab*/JG 54), August 1940. White *Geschwader* 1A Operations Officer's *winkel* and bar marking outlined in black. 71/02/65 scheme with fairly sparse mottling over forward fuselage and tail areas. Spinner 70 with white ring. Wing tips possibly yellow. *Stab*/JG54 *"Shield of Jessau"* emblem on both sides of cowling.

H. Bf109E-1 of *Gruppenstab*, III *Gruppe*, *Jagdgeschwader* 26, (*Stab* III/JG26), July 1940. Despite the application of the black *Geschwader* Adjutant's *Winkel* and bar marking, outlined white, it is thought that this machine (*Oberleutenant* Werner Bartlet), was in fact from the *Stab* of III *Gruppe* which would seem to lend weight to the theory that demarcation between *Gruppen* and *Geschwader Stabe* was perhaps not quite as rigid as previously thought.
The black III *Gruppe* bar outlined in white, 71/02/65 scheme. Yellow rudder. Spinner 70, or *Stab* green with white quarter segment. Note smaller than usual fuselage cross, based on a 650mm square rather than the standard size 900mm square.

I. Bf109E-7/B of 6 *Staffel*, II *(Schlacht) Gruppe*, *Lehrgeschwader* 2 (6/II (S) LG2), September 1940. Black *schlacht* triangle with white outline and yellow 'C' outlined in black. 74/75/76 (or 65) scheme with mottling over fuselage sides and fin. Yellow rudder. Spinner 70, with yellow tip and thin white ring. 6 *staffel* emblem on both sides of cowling.

J. Bf109E — 1/B of 9 *Staffel*, III *Gruppe*, *Jagdgeschwader* 27 (9/JG27), September 1940. Brown, (a colour occasionally used as an alternative to yellow), numeral '7' without a contrasting outline, positioned on the cowling — a practice common to many III/JG27 aircraft. Wings 74/75, solid 75 spine, 76 fuselage sides with 75 mottle, and 65 undersurfaces. Yellow cowling. Brown spinner with three yellow concentric rings.



THE GREATER STORKVILLE AND DETROITENGESCHWADER FAC RHUBARB AT WPAFB, DAYTON OHIO

SUNDAY 21 SEPT. 1980 10AM-5PM ENTER GATE 19, NATIONAL RD. OBSERVE TRAFFIC DIRECTION.

1. PEANUT SCALE GHQ FACTORED POINTS X 0.1 BEST 3 FLIGHT TOTAL PLUS 3 FLIGHT TIME.
2. FLYING ACE RUBBER SCALE. FEATURE EVENT OF DAY FOR GOLDEN AGE REPRODUCTION KIT.
3. FAC JUMBO SCALE OVER 36 INCH WINGSPAN MONOPLANES OR 30 INCH MULTIPLANES WITH PILOT.
4. FAC POWER SCALE FOR GAS, CO_2 PLUS 5 POINTS, OR ELECTRIC PLUS 10 POINTS.
5. EMERYO ENDURANCE (JS)(O).
6. R. O. G. 24 INCH STICK. A P-24 EVENT. PLASTIC PROPS , CARD TABLE R.O.G.(J)(S).
7. SHELL DASH RACE QUALIFIER. TWO FLIGHT TOTAL BY 2PM FOR GREVE AND THOMPSON RACES.
8. GREVE TROPHY RACE FOR PRE 1940 INLINE ENGINE U.S. RACE PLANES. MASS LAUNCH.
9. THOMPSON TROPHY RACE FOR PRE 1940 U.S. RACE PLANES WITH RADIAL ENGINES.
10. HANSEN HANDICAP POSTWAR RACE FOR BIPLANE, FORMULA, OR UNLIMITED TYPES IN RACE COLORS. FAC TIME POINTS FOR BEST OF 3 FLIGHTS PLUS 10 FOR BIPLANES AND 5 FOR L.G. DOWN RACER.
11. WW I BIPLANE DOGFIGHT. FAC TYPE MASS LAUNCH ELIMINATION. NO LAUNCH DELAYS.
12. BATTLE OF BRITAIN. MASS LAUNCH COMBAT FOR FAC B.O.B. SUBJECTS.

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OPEN $3, $1 EACH EVENT, $6 MAX. SR. AND JR. FREE. ONE DAY JR. $.25 .
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