# 1953 RACING CARS to 1975





**BRIAN LONG** 

#### Other great books from Veloce -

d-cylinder Engane – Host To Skreprim & Build A Short Skock For High Performance (Herrer II) (prages li)
Alta Former DOHO High-performance Manual (Kartalamakis)
Alta Former Ve Englise High-performance Manual (Kartalamakis)
EMC 985cc A sense Engine — How To Power Tuna (Hammill)
1375cc A sense Engine — How To Power Tuna (Hammill)
Camphalite — How To Otocea & Tuna (Hammill)
Camphalite — How To Otocea & Tuna (Hammill)
Camphalite — How To State, Modify in Power Tuna (Hammill)
Cylinder Headir — How To State, Modify is Power Tuna (Indiana)
(Hammill — A Calain) (Burgains & Gollan) Distributor-type (green Bystems —How To Build & Rewer Tune (Hammit).
Prof. Road Car —How To Plan And Build Revised & Updated Colour New Edition. (\$16)24501 Ford \$CHS Pinto & Serra Cowworth DCHS Engrass — How To Power Ture Updated & Enlarged Editor (Harmill)
Ford VE – How To Power Tura Small Block Engree (Harmini)
Harley-Cavidson Enolution Engines – Host To Balld & Power Tura (Harmill)

Honey Cartis-record —How To Build & Paver Tune Revised & Updated Epition (Hammilis Juguar XK Engines — How To Power Tune Revised & Updated Colour Edition (Hermiti) MG Midget & Austin-Healey Sprite —How To Power Tune Updated & Revised Edition (Stepleton) MGGI d-cylinder Engine – How To Power Tune (Burgesk) MGS VE Power – How To Gree Your. Theri Golour Edition (Williams) MGG, MGC & MGE Vis – How To Improve (Williams) MGB, MGC A MGB Vite Hour To Improve (Villama)
Mint Engineti - Hoe To Power Tune Dr.A Smith Budget Colour Estillos (Hamnell)
Mintercycle-enginet Placing Car - Hoe To Build Pushley
Motorsport - Gerling Started in (Solins)
Nitrous Dotde High-performance Manual. The (Langfeld)
Rover Vib Engines - Haw Tip Payer Tipe (Nazural)
Sporthalm Vibrier Surpersech & British - How To Build & Modify Enlarged & Updated 2nd
Ill distant (Hammel)

STENDARD Condenses - Manual Starteger III

STENDARD Condenses - Manual Starteger III

STENDARD Condenses - Condenses

847 Claribusetter High-performence Manual Priemmill I Subukil dad - How To Modify For Serious Off-coad Action (Richardson) Tiger Alson Sportscar - How To Build Your Own Updated & Revised 3nd Edition (Budley)

TRS, 250 B TR6 - How To Improve (Williams)
TRS, 250 B TR6 - How To Improve (Williams) TRIT & TRIS - How To Improve (Millians)
V& lingine - How To Build A Short Block For High Performance (Hammill) Volumesigen Beetle Suspension, Briskes & Chilasirs - How To Modify For High

Volksweigen Bus Busperston, Brakes & Change - How To Modify For High Performance

Weber DCOE, & Deligino DHL & Carburetors - How To Build & Power Tune and Edition

Thase Were The Days . Series Apine Triuls & Raillen 1910-1975 (Phancher) Auditerly Motionig (Bobbit) Brighten National Speed Triuls (Gardiner) Brighten Rolling Gas (Maker) British Wooden (Neck)
Durie Buggy Plansomenous (Hale)
Durie Buggy Plansomenous (Hale)
Durie Buggy Plansomenous Volumer 2 (Hale)
Hot Bed & Stock Car Flacing in Britain in The 1960s (Nell)
Miss Assignon Factory (Maylan)
Mistor Flacing At Disninds Halton in The Seventies (Parker)
Motor Flacing At Disninds Halton in The Seventies (Parker)
Motor Flacing At Olymbia Parker (Collin)
Mistor Flacing At Napagu in The 1965 & 1965 (O'Nell)
Mistor Flacing At Olymbia Parker in The 1965 & 1965 (O'Nell)
Mistor Flacing At Olyton Park in The 1965 (Michalym)
Mistor Flacing At Olyton Park in The 1965 (Michalym)
Thee Wheelers (Botont) Eritish Wood an (Peck)

Enthusiast's Restoration Manual Series. CTITUMBEST & PRESTONATION MATURAL CHIEF Chroin SCH How To Residen (Printer) Classic Car Sociyayak How To Respons (Thaddeus) Classic Care, How To Paim (Thaddeus) Pielant Regal. How to Pieston (Payre) Triumph TRS/3/3A. How To Pieston (Williams) Triumph TRANA, How To Restore (Williams) Triumph TRANSO & S. How To Restore (Williams) Triumpe TRints. How To Restore (Williams) Volkswuger Beetle, How To Pentions (Tylen) VW Bay Window Bus (Paxtori) Yamaina fili 1-E. How fo Bestom (Watta)

Essential Buyer's Guide Series Afts GT (Backer) Afts Romeo Spider Grufa (Booter & Tarbott) ENW G5 (Henshaw) ESA Bantara (Henshaw)

Bita Twimi (Hemitery) Chrošn 2CV (Perton) Citrosn ID & DS [Herig) Plat 500 & 600 (Bobb81] Jaguar E-type 3 6 & 4.2-01± (Gres) [n] Jaguar E-type V12 5.5-litre [Crespin] Jaguar Dalmier XJe, Kutž & Sovereign (Grespin) Jagus XI-S (Craupin) MGG & MGB GT (Willams) Microsofon-Benz 20062-0000 St. Poudsterv (Bonn) Mercedes dieux "Pagode" 2305k, 2025k & 2605k Roadsters & Coupin (Ress) Morte Meer & 1000 Newelli Poruchu 905 (Hummerga) Polis-Rope Silver Shadow & Bentley T-Berles (Blobb) to Subseru Imprezza (Hobbo) Triumph (Borneville (Hermhavi) Triumph 1998 (Williami)

VW Beetle (Cseminka & Copping) VV Bus (Csemenka & Copping)

Auto-Graphics Series. First than ed Abartha (Bollenbw) Laguar MKI & Il Salcona (Sperrow) L'artinetta Li Series Spooters (Sparrow)

Rally Grants Series Auch Quatro (Potenti) Austin Healey (1)5-6 \$ 3050 (Pobson) Pref (31 Abarth (Robinsin) Parel Escart Mid (Robum) Ford Escart RS Cosworth & Wend Raily Car (Robsen) Pord Espect RS4800 (Robson) Laron Brates (Researd Paugeot 205 THI (Polestri) Subary Impresa (Robern)

General Torritre GP Flacing, 1961-1956 (Whiterook) AC Two-time Salourie & Buckland Sportscare (Archibald) Aria Portes Gusta Coupé ST & STA (Tjore) Aira Florres Montresi – The Essential Companion (Taylor) Afte Tipo 39 (McConpugh & Collins) Alpina & Planast – The Development Of The Revolutionary Turbo F1 Gaz 1955 to 1979 -Simahi)

Anatomy GH the Works Minis (Moylan). Armatrus g-Giddeley (Smith) Autodrome (Cerlins & Ireland) Automotive A-Z. Lame's Dictionary Of Automotive Termin (Lame) Automotive Mascots of by & Barlingstee Barrams Speed Wesler. The (OTHell) Gernley Continental, Comiche And Arune (Gernler). Bertisy Mot. Rote Royce Silver Vireits. Caves & Cloud Bertisy R & S-Series (Autom). BMC Competitions Department Secrets (Turner, Chambers Browning). BMW 5-Series (Cranswisk) BWW Z Cars (Tajlor)
Britains Farm Model Balans & Combines real to 2001 (Pulses) British 250cc Recing Mistoropeles (Pereira) British Cars, The Complete Catalogue Ct, 1663-1675 (Culstree & Horrobin) SPM - A Mechanic S Tally Balmani SPM Vita Guddigson) SSA Sentern Blobs. The Prince Service Bugati Type 40 (Price) Bugati Type 40 (Price) Bugati SASO Updated Edition (Price & Arboy) Osgati 1963 FMD (Feet & Arten)
Sugati 1963 FMD (Feet & Arten)
Sugati 50 Sm Edition (Frior)
Censers: The Buttated History F919-1959 (Feekinson)
Catavars, The Buttated History Feom 1965 (Feekinson)

Cerrona Panamercuma, L. a (Tipflet) Chrysler SGB – America a Minst Powerful Car Shot Edition (Adversor) Chrysler PT Cruster (Adversor) Chrolen DG (Bobbil)
Calf Alispn – From The Feris To Ferrari (Davie)
Catra – The Reul Thing (Jugate)
Catra – The Reul Thing (Jugate)
Catra – The Reul Thing (Jugate)
Covernly Climia Récieg Engines Plazemili Calmier SP250 New Edition (Long)
Outsur Faintiety Reliabiter To 2802X – The Z-Car Story (Long) Diec – The Wil Ferreri (Long) Dodge Charger – Enduring Thunder (Ackerson) Dodge Dyeam hal (Grist)

Contrigion (Baddy)
Crise & Parti Clark - How To (Sentiniar)
Crise & Parti Clark - How To (Sentiniar)
Crise Dn The Wild Side A - 20 Extreme Crising Adversaries Faces Around The World (Wetver) Ducad JEG Bible, The (Fallace) Ducal 660, 600 And Mile Bible, The Falsoni Dura Sugger Building A – The Eccential Manual (Shakerpears) Oure Buggy Fles (Hare) Dure Buggy Handbook (Hale) Il durand Turner: The Man Behind The Motorcycles (Cleur) Field & Absentin 124 Sporter & Couple (Tipoler) Field & Absentin 50:0 & 600 Sind Hidnigal (Blobbatt) Feeth, Great Briefl (Wind)
From Art Of The Motorcycle Engine. The (Peeth)
Feeth Froit Title Motorcycle Engine. The (Peeth)
Feeth Froit Title Motorcycle Engine. The (Peeth)
Feeth Fib Philologus 1987-5006 (Arberton)
Feeth GT - Then And Now (Synapher) Ford of T40 (Legelor) Ford in Minadare (Olson) Find Model Y Floberto Pard Thursderbird Front Ni34. The Book Of The (Long) Forgs Mihandi (Viger) Punkji Mopecii (Switon) Gentleman Japa (Gauld) GM in Ministure (Classe) GT – The World's Bend GT Danc 1950-75 (Days son) HIROSIMBING & BOLINING - THE EXPENTER MADUR (Short & WIN-HED) Honds NSX (Long) Jeguin, The Rise Of (Rise) Jeguin XJ-5 (Long) Jeep CJ (Ackerson) Jivap Vinangiar (Actionnos) Karmarin-Ohla Coupé & Conventible Bobbit) Lansongni-HMura Biora. The (Backey)

Land Plover, The Half-fort Military (Cook) Layerds Twins & Triples Bible 1986-1998 (Falloon) Lea-Prance Story, The (Price) Leaus Story, The Long: (Die book of scraft, the (Jackson) Lola - The Bustraled Harony (1957-1977) (Starkey) Lola - As The Sports Fleeing & Single-seater Fleeing Care 1975-1997 (Starkey) Lola T7G - The Record History & Individual Chamin Record 4th Edition (Starkey) LOOJ, 44 George) Markefingsotilies. The Wonderful Vlacky World Of (Hale) Macels NOS S/Mars + 6 Enthusiashi, Workshop Manual (Grainger & Shoemani) Macels NOS S/Mars 1,6 Enthusiashi Workshop Manual (Shangar & Shoemani) Manda MW 5 Miletic The Block CH The World's Payourise Sportscar Londo Master Wile & Weste Roadster (Long) MIGA (Price Williams) MGB & MGB GT=Expert Guide (Auto-dos Series) (Williams) MDS Electrical Systems (Aution) Micro-Caravana (Jenkinson) Micro frucks (Mort) Microare At Large | Quellin)
Mini Gooper - The Rew Thingr (Tipre)
Minublish Lancar Evo. The Road Clar & WRIC Story (Long) Mentinery, The Story Of The Plans Autograms Boddy| Morgan Misselek II, awrence) Morris Miner, 60 Years On The Road (News))

Motor Stack Sport & Le Marca Bible (Fallborn) Motor Mydeje – The Postant (Mysel) Motor Mydeje – The Postant (Mysel) Motor Rischip – Referbors Of A Lest Ens (Carler) Motorgole Approaches (Calebrasia) Mototoper Proce & Pacing Charain Designs (Notes) Motorhomes. The Illustrated History (Jankinson) Motorsport in Below, 1920s (Welnewight)
Motorsport in Below, 1920s (Welnewight)
Nissan Stužik & 2002 – The 2-Car Story (Long)
Off-Flood Glams) – Henoes of 1980s, Majoroycke Glast (Welniske)
Pass The Theory And Practical Driving Tests (Glason & Stools)
Peacing To Paris 3500 (Westig)
Peacing To Paris 3500 (West Person (Boulet ), onto Person (Boulet ), onto Person (Boulet ), 203-2, 980 Bala Phile Dece Brasker (Sinarcher) Person (St.) (Sarrier — Thy Last Of The brokker) (Contell) Person (St.) (Barrier — Thy Last Of The brokker) (Contell) Person (St.) (Boulet ) Poseche 971 – The Delinders Hastery 1969-1971 (Long) Poseche 971 – The Delinders Hastery 1971-1977 (Long) Passpace 11 – The Delinders Hastery 1977-1987 (Long) Porce and the This Delinians History 1557-1559 (Long)
Paragraph 1 - The Delinians History 1557-1559 (Long)
Paragraph 1 - The Delinians History 1557-1559 (Long)
Porce and This Delinians History Of This Paragraph (Binestre)
Porce and the Side This Delinians History Of This Paragraph Companion Case (Long) Portiche 924 (Long): Powermant Along Powermant Along Pays newsy wing Of Porsone — The Estential Componion Stragmen Posethe 996 Supreme Porethe in The Economic Companion (Streether) Persone Roomy Care in 1652 To 1676 Longs

Posethe Recorp Gare - 1878 Dri Jung Posetse - The Rady Story (Meredally Posethe Times Generators Of General Meredally Rolls Auton (Sertimer)
Reily Action (Sertimer)
Reily Sport Fords The Inside Story Moneton)
Reilye Sport Fords The Inside Story Moneton)
Reilye Sport Fords The Inside Story Moneton)
Reilye-Royce Sine Strate World Motorcycle Champion: The Autobiography (Reinran)
Rolls-Royce Sine Stration-Reily Tiberies Comitme & Camergue Revised & Brianged

Edition Blobbits Rolle-Royce Siner Spire Spur & Benney Muleanne 2nd Edition (Soubits) ROLT - Material Roller Engris Sportscar (Jackshild & Reveed New Edition) (Lang) Scotters & Microcyn. The A-Z Of Popular (Dan)

Scoother & Microcans, The A-Z Of Popular (Blan)
Scoother Lifettyre (Snikryet)
Songer Sony, Clarin, Commercial Vehicles, Bioycles & Microcycle (Abkmoon)
SM - Ctroen's Masterar- engined Supercar (Long & Clarerol)
Submour Improve: The Flood Car And WHO Story (Long)
Submour, How To Suid your own (Thompson)
Tasil The Story Of The London Toxicals (Botteri)
Tinglate Toy Clare Of The 1930s & 1980s (Reinton) Toyota Casos & Supra, The Book Of Toyota's Sports Coupes (Long) Toyota MRS Goupsia & Spipelera (Long) Trumph Metorcycles & The Meriden Factory (nanotx) Trumph Speed Twin & Thunderbird Sible (Woolnige)

Triumph Tiger Cub Bilder (Birall) Trumph Trophy Ellole (Woolridge) Trumph TR6 (Kimberley)

Unaced County
Velocatis Molorcycles - MSS To Thruston Updated & Revised (Burris)
Vego Exite - Velocatis To Gifford Bography Ol Virgil M Exiter Designer Extraordinase

Volkswagen Bus Book The (Bobleht) Volkse agen Stus Dr Ven To Camper, How To Gorwert (Porter) Volkswagens Of The World (Slerb VW Seets Centroled Excelent VW Seets - The Clim Of The 20th Century (Copping) VW Seets - St Years Of Section, Beys & Weages (Copping) VW Bur Book. The (Sobbirt)
VW Gotf, Five Generations Of Fun (Coopers & Cooperso) VW - This Air-cooked Ena [Coppleg] VW TJI Camper Convention Manual (Porter) VW Campers [Copping] Works Mins, The Lau (Furves & Brenchley) Works Harry Mechanic (Moylan)

#### www.veloce.co.uk

First published in August 2006 by Welcox Publishing Limited. 35 Trindy Street. Donobester DT 1 1TT. England. Fix: D1305 2088649-mail info@veloox.co.ux/iveb away-veloos.co.ux is a synw-veloodbooks.com.

Lambretta Bible. The Davies

Lancia Seta HF Integrale (Blaedel & Wegner)

Fig. 19.4-19.04 (P.-4.5.U.P.C. 6.35947-0.0344) -0

© Strian Long and Veloce Publishing 2009. Minigrap seemen. With the exception of special one, the hard processor of the purpose of review in pract of this publishing at 19.5 Air ignores to book upon inverse and designations, to, have been seen the other throughout the purpose of designations from the purpose of designation for the purpose of designations from the purpose of designation for the purpo

## Contents

Introduction & acknowledgements	4	VIV 1960	77	XVII 1968	177
		The RS60	<b>77</b>	New car bonanza	177
I Setting the scene	6	The Italian connection	<u>78</u>	1968 – a bitter pill to	
The VW project & WWII		Sports car review	81	swallow	<u>178</u>
aftermath.	8	Other races	83	Other events	190
The Spyder's predecessors	11	The 1960 single-seater		XVIII 1969	192
II 1953	15	season	83	"A new broom sweeps	
A return to first principles	15	X 1961	89	<u>clean"</u>	193
Birth of the Spyder	19	1961 upgrades	89	A new weapon	197
Race record	19	The 1961 sports car season	91	The season continues	201
The 1953 Carrera		The 1961 Grand Prix season	98	The Can-Am Challenge	205
<u>Panamericana</u>	21	XI 1962	102	XIX 1970	208
III 1954	26	The 1962 season	102	The 917K	208
Competition in 1954	26	The end of Grand Prix		The moment of truth	210
The customer cars	32	racing	111	XX 1971	223
IV 1955	36	XII 1963	117	1971 review	223
Competition in 1955	36	The DKS	120	The other races	232
V 1956	44	The classic races	122	XXI 1972	236
The 550A	44	XIII 1964	124	The World Championship	236
The Mille Miglia & beyond	48	The Type 904	126	The Interserie season	237
Specials	49	1964 season review	132	The Can-Am Challenge	238
VI 1957	52	The Flva-Porsche	136	XXII 1973	243
The 718 RSK	52	XIV 1965	138	The RSR	243
The season continues.	55	The races	138	The season starts	244
The European Hillclimb		The European Hillclimb		The Interserie races	246
Championship	57	Championship	142	Can-Am update	248
The F2 campaign	59	XV 1966	148	XXIII 1974	252
VII 1958	60	The Carrera 6	148	The Martini cars	252
The RSK era	60	Season reflections	153	1974 review	254
The F2 programme	65	XVI 1967	162	The big bangers	259
VIII 1959	68	Porsche's new gladiators	162	XXIV 1975	261
Competition in 1959	68	1967 – a good year	163		
Porsche single-seaters	72			Index	269

## Introduction & acknowledgements

his is a book that I've wanted to do for a very long time – a couple of decades, in fact! Although the brief has changed along the way – with Veloce publishing another volume on the 911 rally cars before I could get started on this project – and other Porsche titles of my own containing a lot of the information relating to the road cars used in competition, I hope, nonetheless, that this new format concentrating on the exploits of the pure racers will please enthusiasts of the marque.

This is actually the first of two volumes covering the Porsche competition models, beginning with the 550 Spyders and taking us up to the mid-1970s when the face of racing changed forever. The cars looked at in-between are motorsport icons and design icons; vehicles the like of which, sadly, we will never see again. These are the cars that inspired a generation, driven by heroes who mixed easily with enthusiastic fans. Join me in soaking up the atmosphere in each and every image ...







s always on Porsche projects, I find myself indebted to my good friend, Jens Torner, at the factory – a gentleman I've known for many years, who has an immense knowledge of the cars he loves so much. It's so nice for a writer to deal with an automotive company driven by enthusiasm and a healthy respect for recording history, especially in an era when it gets harder by the day to find like-minded people within the car industry, wherever one is based.

Brian Long Chiba, Japan



## Setting the scene

he Porsche family had always been heavily involved in the field of motorsport, almost from the dawn of motoring itself, but the story starts with Ferdinand Porsche.

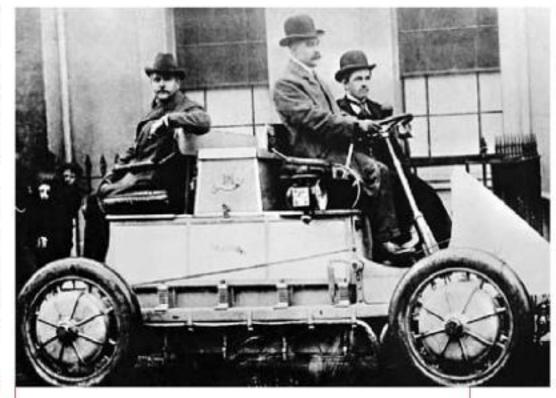
Born on 3 September 1875, the son of a tinsmith, Ferdinand Porsche grew up in the village of Maffersdorf, receiving his early education there before moving on to the Reichenberg State Technical School to study electrical technology. Shortly after his 18th birthday, he left the family home for Vienna, and, by 1897, had already built himself an electric-powered bicycle whilst in the employ of Bela Egger AG.

In 1899, with the blessing of Bela Egger, Porsche joined Jakob Lohner, whose interest in electric automobiles and vast experience in the carriage trade led to the Lohner-Porsche motor car. This novel machine (first shown at the 1900 Paris Exhibition), featuring an electric motor in each front wheel hub, would set Porsche on a path of automobile design. The Lohner-Porsche made an unlikely competition car, but its turn of speed was quite remarkable, and a stripped down version was successfully campaigned by Porsche on a number of prominent hillclimb events.

Porsche married in 1903, and, in 1905, he left Lohner to take up the appointment of Technical Director at Austro-Daimler, the Austrian arm of the Daimler Motoren Gesellschaft. Porsche designed a number of vehicles for the company (including the famous car which later became known as the 'Prince Henry' model, following its great success in the 1910 trials of that name) and also steered it toward aero-engine production.

Porsche remained at Austro-Daimler until 1923, then went to Stuttgart to become the Technical Director of Daimler. His last celebrated design for Austro-Daimler was the Sascha, a small sports car that made its mark during the 1922 Targa Florio when Alfred Neubauer came in 19th overall and took victory in the Coppa Florio section. (The paths of Porsche and Neubauer were to cross again when the German driver joined the Mercedes team.)

In 1926, Daimler became Daimler-Benz AG following the merger of Daimler and Benz – the two concerns had already worked together on technical and commercial fronts for a number of years – and, from this date, the vehicles that the company produced became universally known as Mercedes.



The Lohner-Porsche of 1900, which enjoyed a surprising amount of competition success.

Porsche stayed on until 1928, by which time the Mercedes had firmly established a sporting image through various Porschedesigned racing and road cars, such as the SSK.

By now, Porsche's reputation as a designer was unrivalled in Germany, but, following a disagreement with the Daimler-Benz board, he decided to return home to Austria to join the Austrian Steyr concern. The history of Steyr can be traced back to the early nineteenth century, although the car manufacturing side of the business was not founded until 1920. Unfortunately, the depression which followed the Wall Street Crash left this company in financial difficulties, and, with a merger between Steyr and his old employer, Austro-Daimler, on the cards, Porsche resigned.

Although offered a number of positions within the



One of the surviving 'Sascha' Austro-Daimlers, as used on the 1922 Targa Florio, pictured here at the Porsche works at the end of the 1950s.

Christian Werner drove a Mercedes just like this to victory on the 1924 Targa Florio (this is a sister car driven by Alfred Neubauer, who was best known as a racing team manager during the Silver Arrows era). Porsche had vastly improved the Mercedes, and, as an acknowledgement of his achievements, was awarded an honorary doctorate by the Stuttgart Institute of Technology.





Porsche also designed the highly advanced V16 Auto Union Grand Prix car, one of the vehicles that formed the origins of the Silver Arrows legend.

industry, Porsche felt it was time to establish his own company, and so, with financial help from ex-colleague, Adolf Rosenberger (a driver for the Mercedes team), design studio was established Stuttgart in

December 1930 and officially registered the following April.

A team of engineers and designers was put together from the various firms with which Porsche had been involved; Professor Porsche's son, Ferry, was also employed. Ferry Porsche had been born on 19 September 1909, when his father was still heavily involved with the Austro-Daimler company. He was to be Ferdinand Porsche's only son and began driving when still very young, carrying out the routine maintenance on the cars his father had built him from the age of ten. Ferry was educated in Weiner-Neustadt, and, later, in Stuttgart after Porsche's move to Daimler in 1923.

By 1928, Ferry Porsche had entered an apprenticeship with Bosch. After a year's thorough training, he followed his father to Steyr, where he trained in mechanical engineering, mathematics, and technical drawing. Ferry Porsche inherited much of his father's natural flair for engineering, a talent which gave him a solid platform on which to build so that others would soon recognize him as a gifted engineer in his own right.

At this time Ferry was also becoming something of a racing driver, having driven for Wanderer and being involved with the testing of the Auto Union Grand Prix car. However, his father put an end to his competition days, saying: "He might get to like this sort of thing and want to become a racing driver, but his job is to design." It is perhaps fortunate for today's motoring enthusiasts that Ferry Porsche did stop racing because, pre-war, it was a very



Ferry Porsche had been brought up around cars, so it came as no surprise that the motor industry was his chosen profession. Few could have foreseen the impact his company would have on the world scene, though, with Porsche becoming a household name. He is seen here driving the second Volkswagen prototype, his wife, Dorothea, beside him.

dangerous sport indeed, when many people had been killed in their quest for speed. The world could well have been denied the genius of Dr Ing h c Ferry Porsche, without whom the Porsche company would never have evolved.

Naturally, in view of the financial climate, times were very hard for the fledgling business, but a steady flow of consultancy work at least ensured the company's survival. From just 13 employees in 1930, the number had risen to well over a hundred by the start of the Second World War. The list of companies that approached Porsche for his engineering knowhow is quite staggering, and includes Steyr, Wanderer, Horch, Zundapp, Auto Union, Mathis, NSU, Morris, Citroën, Standard, Volvo, Triumph, ERA, Rochet-Schneider, Delaunay-Belleville, Austro-Fiat, Daimler-Benz, and Volkswagen.

#### The VW project & WWII aftermath

When Adolf Hitler was elected the new Chancellor of Germany, he was very supportive of German industry and financed the Mercedes-Benz and Auto Union racing programmes (Auto Union had been formed in 1932, and consisted of the old Audi, DKW, Horch and Wanderer companies, now trading under one banner) to show the world how strong the German nation was when it came to technical innovation. It should be noted that Auto Union's V16 Grand Prix car was a Porsche design, and one that was destined to be hugely successful in both racing and record



breaking. However, while motorsport was still an important part of Porsche family philosophy, it's perhaps one of the later pre-war projects – the complete design of the Volkswagen (again funded by Hitler's Nazi Party) – that provided the basis for the Porsche success story.

The new car was designed to meet some difficult criteria: it would have a one litre, 26bhp engine with a cruising speed of around 60mph (100kph), very good fuel economy, and a remarkably low selling price. After a 1934 meeting, in which Hitler approved the plans for the so-called people's car (volkswagen), Porsche set about building three prototypes by hand, duly completed behind the closed doors of the garage at his home in Stuttgart.

The Volkswagen Beetle was ultimately a natural progression from former Porsche small car designs, the Type 12 (built for Zundapp) providing the basic mechanical layout, the body shape defined by the Erwin Komenda-styled Type 32 of 1933. A further 30 prototypes were built by Daimler-Benz, whilst Porsche visited various factories in America and the Austin plant in England to glean ideas on modern mass-production methods.

Just as Hitler was passing the final plans for the Volkswagen, after 1.8 million miles of testing with the prototypes, the Second World War broke out. The largest car factory in the world was then, One of the Porsche Berlin-Rome racers, seen here competing in 1952 with Otto Mathé at the wheel. The lightweight aluminium body was constructed by Reutter of Stuttgart.

for the duration of the war, mainly given over to the production of military vehicles based on the VW design. The Wolfsburg factory was badly damaged by Allied bombing, to the extent that, at the end of the war in Germany, the Volkswagen project could easily have died alongside the fallen dictator, had not help come from an unexpected quarter ...

Mention must be made at this stage of the three Type 64 Berlin-Rome racers. The race, due to take place in September 1939 and devised by Hitler's aides as a political statement to show the partnership of the German Nazi and Italian Fascist parties (and seen as the ideal launching platform for the new Volkswagen), was naturally cancelled after the 'phoney war' turned into a fully-fledged conflict.

However, Porsche had already built three lightweight, streamlined coupés for the event, powered by VW flat-four engines tuned to give 40bhp. Based on the Beetle, the Type 64 (or 60K10, to give it its official designation) was definitely the forerunner of the Porsche 356. Sadly, six years of global warfare would delay any further development (the same was true of the Type 116 racer, which was also scuppered. It was essentially similar to the Type 64 except that its 1.5 litre power unit was mounted in the mid-engined position). According to an article in Classic Cars in 1982, of the three Type 64s, one was used by the American military and later broken up, another was used by Dr Bodo Lafferentz of the German Labour Front, and the third was saved by the Austrian racing driver, Otto Mathé, who obtained it from Professor Porsche and used the car competitively with a good deal of post-war success.

Professor Porsche (he was awarded the title of honorary Professor in 1940) was interrogated by the British and American authorities following the war, after arrest at the family estate in Zell am See, Austria. He was released quickly and eventually went to Renault where he was asked to suggest a number of modifications for its 4CV model. Whilst there, Porsche and his son-in-law, Anton Piech, were arrested and imprisoned by the French on war criminal charges, with bail set at one million francs. Ferry Porsche had also been imprisoned for a short time, but Porsche's daughter, Louise Piech, had managed to negotiate the release of her brother. However, with the Porsche offices in Stuttgart occupied by the United States Army, Ferry Porsche had little chance of raising the ransom money.

By an amazing stroke of luck, Ferry Porsche was approached by Carlo Abarth (the famous engine tuner) and his partner, Piero Dusio, a rich Italian industrialist and motoring enthusiast who, among other things, wanted to build a Grand Prix car. The



The elegant Cisitalia – a four-wheel drive Grand Prix car designed for Piero Dusio.

Cisitalia, as it was known, drew heavily on the Auto Union of the 1930s, and was very complex. Although a V12 had been specified in the original drawings, it was powered by a rear-mounted, 1.5 litre flat-12, with a dohc set-up on each bank of cylinders and twin superchargers. An ingenious four-wheel drive system (in which power to the front wheels could be switched off during the race) was devised for the Type 360, to make the most of the car's estimated 350bhp.

The Cisitalia project, sadly, was destined to fail, as escalating development costs put a potentially successful car out of the reach of even Dusio's wealth. However, it did provide Ferry Porsche



How the legend began. This is Porsche Number One ...

Ferry Porsche reunited with Number One, which is now an exhibit in the Porsche Museum. Note the mid-engined layout on this first prototype.

with enough money to release his father from the French prison – his contract with Dusio (which included the patent rights for diesel-powered Porsche tractors and hydraulic turbines) was worth a combination of 900,000 Austrian shillings, \$11,000 (US) and 10,000,000 Italian lire. Ultimately, after some negotiations, the Professor was allowed back to Austria in August 1947, and duly cleared of all the charges levelled against him.

In the meantime, the Volkswagen factory had been taken out of the hands of the Germans, but, instead of letting the Volkswagen project die, its management was taken over by British officials. After a slow start getting production under way in less than ideal conditions, the Volkswagen Beetle became one of the most successful cars ever built, if numbers alone are anything to go by.

Professor Ferdinand Porsche died on 30 January 1951, having suffered a stroke a couple of months earlier. His health had never

Professor Porsche pictured in 1950, pointing out a detail on the drawing board. His son, Ferry, can be seen kneeling by the engine in the bottom right-hand comer.

been the same following his imprisonment in France, but at least he was able to see his son develop a new automobile bearing the family name, and fruition of his ideas for a 'people's car' in the shape of the successful VW Beetle.

Meanwhile, Ferry Porsche's first road car, based on the Volkswagen Beetle and built in the Gmünd factory in Austria, to where the Porsche operation had been moved during the war, was known as the Type 356. This machine was the foundation stone of the Porsche legend – a legend that achieved almost mythical proportions once the German marque went racing with purpose-built cars such as the 550 Spyder.

#### The Spyder's predecessors

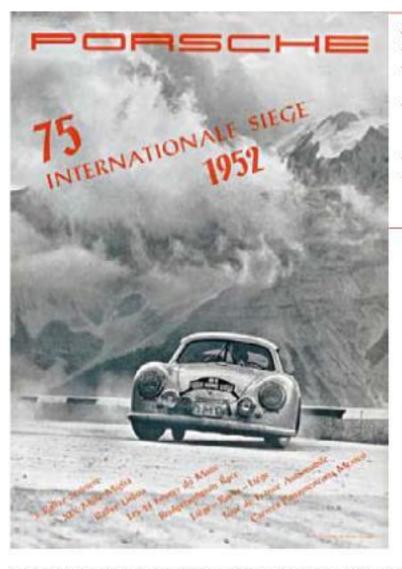
Long before the 550 Spyder made its debut, Porsche was already having an impact on post-war motorsport. The 356 was entered

A Porsche 356 ready to tackle the 1951 Le Mans 24-hour Race. It ultimately came away from the Sarthe with a Class win in the smallest engine category, thanks to the spirited driving of Veuillet (right), and Mouche, seen standing by the vehicle.









A Gmünd car in a piece of 1952 advertising. The Gmünd-built machines were often used in competition, as they were lighter than the Stuttgart coupés.



The second Glöckler being made ready for a round of the 1951 German Sports Car Championship.

in numerous races and rallies, chalking up Class wins in top flight events around the world on an almost weekly basis. Various Porsche specials were also keeping the company in the headlines via enthusiast publications.

The Denzel first appeared as a Volkswagen-based special in 1948, but, as it was developed over the years, Wolfgang Denzel moved toward the use of Porsche components, particularly the Stuttgart concern's engines. This development produced the winner of the 1300cc Class of the Austrian Alpine Rally in 1954, and a series of fine machines, including some pretty two-seater road cars. The Denzel marque (with some of its early models badged as WDs), ultimately faded away in 1960.

Heinrich Sauter, a Stuttgart businessman, was the originator of another special. The Sauter-Porsche was a lightweight roadster bodied by Hans Klenk and powered by a tuned Porsche 1500 engine. Appearing early in 1951, it failed to finish in the Liège-Rome-Liège Rally in August of that year. By the end of 1951, however, Sauter decided that the car was not producing the desired results, so he sold it to Francois Picard. Picard duly named

it 'Le Petit Tank' and repainted it in French racing colours; the car was last seen in Europe in the early part of 1952, before it went to America. By far the most successful and significant special, however, despite excellent results garnered by others, was the Glöckler.

Walter Glöckler, Frankfurt's Volkswagen dealer, had raced pre-war, and had his garage build a Volkswagen special to enable him to compete in the German Sports Car Championship. A 58bhp, 1.1 litre machine was duly produced, giving Glöckler a Class win in 1950. The car also excelled in the German Hillclimb Championship, with Hermann Kathrein taking the 1100 Class in 1951, and Hans Breadel in the following year.

Naturally, as Volkswagen dealers handled the Porsches in those early days, Glöckler soon made good use of his contacts, and an informal agreement was struck which brought works support for his competition exploits. For the 1951 season, a Weidenhausen-bodied Glöckler-Porsche, powered by a Type 502 1.5 litre engine, made its debut. Sadly, although it was an excellent sprint car, setting a number of records in Europe during



A Glöckler captured in an atmospheric shot taken at Palm Beach in December 1951, with a rather more common Jaguar XK120 in the background. Max Hoffman, the gentleman who handled Porsche and other German car imports in the United States, is the chap at the wheel.





Hoffman's car in action at Bridgehampton, New York, in 1952.

its short life, and also gave Walter Glöckler the 1500 Class title in the German Hillclimb Championship, its handling was not a match for the 85bhp engine and 130mph (208kph) performance. The machine was quickly sold on to a gentleman called Max Hoffman, who was particularly fond of the styling. Hoffman, who became Porsche's American importer, duly raced the car in the United States with some success.

The third Glöckler model was made ready for the 1952 season, this time closely based on the 356. Helm Glöckler drove this example to a maiden victory and duly won his Class in the German Sports Car Championship, encouraging his cousin, Walter, to build more cars. (As it happens, this vehicle also ended up in the States in Hoffman's possession.)

The fourth model was campaigned by Hans Stanek and shown on the Porsche stand at both the Geneva and Frankfurt Shows of 1953. The final Glöckler (a roadster with a 1.1 litre engine, also completed in 1953) was bought and raced with a great deal of success by Richard Trenkel. Trenkel ultimately dominated the 1100 Class in the German Sports Car Championship.

The fourth version of the Glöckler-Porsche, seen here with Hans Stanek in the cockpit and an early 356 in the foreground. The 1.5 litre car was bought and raced by Stanek, a gentleman heavily involved with the AMAG import concern, though was eventually returned to its creator.



The fifth Glöckler pictured after winning its Class at the 1953 Eifelrennen at the Nürburgring. Richard Trenkel accepts the applause, while Huschke von Hanstein (winner of the 1940 Mille Miglia, and Porsche's head of PR and racing manager) can be seen to his left.



Tail of the fifth Glöckler.

It has been said that the Glöckler-Porsches were the impetus behind the works deciding to build its own Spyder (the Type 550), and there is an undeniable similarity in the design of the two cars. Nevertheless, Glöckler would continue to be linked with the Porsche marque for a number of years to come!



## $\mathbf{II}$

## 1953

orsche was first and foremost a car manufacturer once the business moved back to Stuttgart, but the spirit within the company – its driving force, if you like – was its interest in motorsport. This is not simply a statement taken from some overzealous copy on the firm's advertising, as it's obvious from the way the 356 power units were developed, one after the other in quick succession, to take advantage of international rules governing classes separated by engine displacement, that Ferry Porsche and his team always had competitive racing in the back of their minds ...

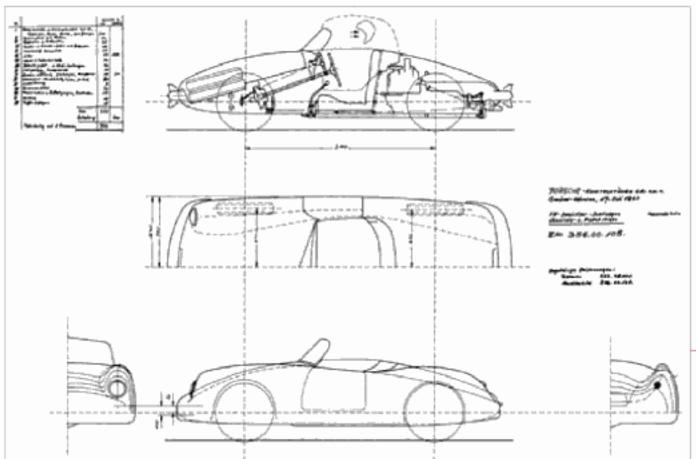
#### A return to first principles

In studying the history of Porsche, one can see that 'evolution' is a key word at the factory: nothing ever goes to waste, and

the gentle refinement of ideas takes precedence over making headlines with revolutionary concepts at odds with traditional notions and theories established by Ferry Porsche and his father before, during, and just after the war. Nothing proves this statement better than the styling and basic engineering principles of Porsche's first pure racer (the Type 550), as, looking at the first design drawing for the 356, dated 17 July 1947, one can almost see the production Spyder leaping off the paper.

It will be remembered that Porsche Number One was a midengined machine, and, only after taking practical considerations into account, did Porsche adopt a rear-engined layout for its road cars. The beauty of mounting the engine just behind the driver was its superior weight distribution and traction characteristics, and, whilst this has proved ideal on countless racing machines,

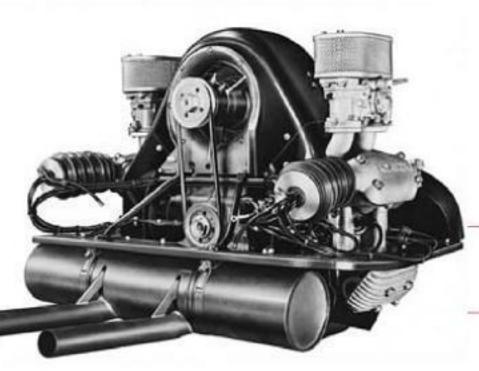
> designers of mainstream automobiles have tended to shy away from the MR (mid-engine, rear-wheeldrive)idea, preferring, instead, to go for the enhanced packaging and servicing offered by other layouts. Therefore, most cars from the period used an FR (front engine, rear-wheel drive) set-up, with some - particularly the Porsche and Volkswagen - going down the RR (rear engine, rear-wheel drive) route. Nowadays, of course, the FF (front engine, front-wheel drive) configuration is the most widely adopted, largely specialist vehicles continuing with FR, MR and RR layouts.



The first design drawing for the Type 356, dated 17 July 1947. Note the similarity to the 550 Spyder, both in layout and shape.



Before the arrival of Porsche's pure racer, the so-called America Roadster could be seen as the bridge between the standard 356s and a lightweight open car suitable for competition work. Here's John von Neumann pushing hard in a race at Reno in 1953.



Anyway, when Porsche decided to produce a purpose-built racing car, there was no hesitation in opting for an MR layout, and designing the vehicle around it. For sure, having the weight at the back of the machine called for a good driver to get the best from the set-up, but, in the right hands, the inherent oversteer could be made to work wonders in the corners, and handling was therefore generally superior in racing applications.

The body was like that seen in the July 1947 technical drawings, too, with smooth contours, minimal openings, and a small frontal area to help the car cut through the air, and lines vaguely reminiscent of the 356, particularly around the headlights. In any case, there was little doubt that this delicate-looking, lightweight machine was a Porsche, even if the 'Porsche' script was taken off the front cover.

Good aerodynamics and a small kerb weight could overcome the reduced performance that usually accompanied smaller engine displacements (one has only to look at Goldie Gardner's contemporary record-breaking feats with his 350cc MG Special for proof of that fact), but there was never any harm in having a little more power in the racing world, assuming the chassis is capable of handling it.

For 1952, Porsche offered the 1.1 litre Type 369 and 1.3 litre Type 506 engines for the 356 range, although the 1.5 litre Type 527 was about to be superceded by the Type 546, sold alongside the new and more powerful Type 528, the latter introduced with the America Roadster. The 527, 546 and 528 air-cooled fours all had an 80 x 74mm bore and stroke giving 1488cc, although a combination of different compression ratios and carburettors varied output from between 55bhp to 70bhp. The new generation will probably scoff at such figures, but Porsches were fairly lightweight machines, so were certainly spritely with this kind of power; it should also be remembered that, even in the sports car arena, this was the norm back then, while the 3.4 litre Jaguars were still only rated at 160bhp, despite their great advantage in displacement. As for American machines, outputs were a joke compared to the best Europe had to offer, with 190bhp (gross, not nett) used as a proud boast in Cadillac adverts from the time, developed by a mere 5.4 litre lump!

However, for racing applications, Porsche engineers decided more power was required if the marque was to both remain competitive in the 1500cc Class and make an impact in the newly formed World Sports Car Championship. In the 1950s, Porsche had to contend not only with Italian manufacturers like

The jewel-like Carrera engine, seen here in Type 547/1 guise, ready for the 1956 season in the showrooms. Carrera, by the way, is the Spanish word for race, subsequently adopted by Porsche following its success on the Carrera Panamericana.

OSCA (formed by the Maserati brothers after leaving the highly respected company bearing their name) and the myriad of small-engined British and French machines, but also some homegrown competition in the shape of EMW and Borgward.

EMW was actually the East German branch of BMW, but the marque had disappeared by 1955 and its cars were raced outside Europe only once. Borgward, on the other hand, came about when Carl Borgward bought the Goliath and Hansa-Lloyd concerns in the late 1920s. From 1939, he amalgamated his various companies to form Borgward, but, despite some heavy involvement in motorsport, never really used his track successes to promote a sports car, deciding, instead, to concentrate on saloons and coupés. On German circuits, though, EMW and Borgward put up some formidable competition in the smaller engine categories.

One of the main problems faced by Porsche in the search for more horses was the distinct lack of extra space in the 356's engine bay, so the brief was to design a unit of a similar size to the current production four, but which would produce roughly twice the power to enable the company to stay ahead in the world of motorsport. Christened the Carrera engine (but known internally by the Type 547 designation), it was largely the work of Dr Ernst Fuhrmann, with help from Ferry Porsche and Karl Rabe (Porsche's Chief Engineer).

Tackling the project in earnest during the summer of 1952, Fuhrmann decided he wanted twin-overhead camshafts on each bank of the flat-four, and, in order to keep down the physical size of the engine, devised an ingenious system incorporating no fewer than nine shafts, fourteen bevel gears, and two spur gears. He also designed an efficient dual entry fan to cool the unit.

The complexity of the new engine made it a difficult unit to develop, but Fuhrmann wanted to see his project finished as quickly as possible. Bruno Trostmann, who was under Fuhrmann at the time, remembers: "For the first six or eight months, he hardly ever let us go home before ten or eleven o'clock at night. He didn't know about holidays."

The 1498cc engine was deliberately designed with oversquare dimensions (bore and stroke of 85 x 66mm) in order to make it a high revving unit suitable for racing. The crankcase was of aluminium alloy, as were the cylinder barrels (bores coated with chrome) and cylinder heads. Twin distributors and coils were employed for the two-sparkplug-per-cylinder head design. On production models, roller-bearings were used for both the crankshaft's main and big-end bearings, and a dry sump lubrication system was adopted with an oil cooler (situated in the nose of the 550).

There was, of course, a price to pay in terms of power loss through so many moving parts, and it could take a specialist mechanic up to 120 hours to build the engine, but the unit's



Ferry Porsche (left) with Walter Glöckler.

beauty lay in the fact that overall dimensions were little changed from the standard powerplant.

The first new engine was up and running in April 1953. Initially, 112bhp was recorded on the testbed (at 6400rpm, although it was later proved possible to extract around 180bhp from the Type 547). It was right virtually from the start, though, to begin with, had a very narrow power band, with peak performance coming at between 5000 and 7000rpm.

As part of the testing and development regime, the new Carrera engine made its racing debut at the Nürburgring shortly after Le Mans. The event was the sports car race before the German Grand Prix (held 2 August), in which Hans Herrmann and Helm Glöckler were entered by the works in the Le Mans cars (minus hardtops). The third car was the Carrera machine, but it only appeared in practice, Huschke von Hanstein and Hans Herrmann doing the driving.



The very first Porsche 550 pictured at the Stuttgart works. The coachwork was refined slightly after this picture was taken, before gaining a hardtop, but the vehicle's resemblance to the 356 and the Glöckler racers is obvious at this stage.

Writing for MotorSport, Denis Jenkinson observed: "In the Porsche lock-ups was a very special open two-seater with fully enveloping body and fitted with an experimental ohc engine, still on the same principle as the standard Porsche, but, as on the normal works cars, the power unit is in front of the rear axle instead of behind. The engine was fed by two enormous Solex carburettors but further details were well covered up, though







Various views of chassis 550-01 after it was prepared for the 1953 Le Mans 24-hour race. On Von Hanstein's orders, as Racing Manager, the hardtop was added to the open body as the regulation screen height dictated that a closed car would be more aerodynamic than a roadster. It was later given driving lights up front, and cooling slits ahead of the rear wheels to match 550-02.



the exhaust note was no longer Porsche, having a very healthy and crisp four-cylinder note in place of the usual Porsche 'bag of nails' sound."

A week later, the car was loaned to Hans Stuck, the great Grand Prix driver of pre-war days, for the Freiburg-Schauinsland Hillclimb. Hans Herrmann won the event in one of the original 550s, Stuck managing third only. However, despite these early trials, the Carrera engine was not officially announced until the 1954 Mille Miglia, when it was fitted in a 550. For this event,

Herrmann was partnered by Herbert Linge, and the pair took sixth overall – not bad at all for what was officially, if not actually, the Carrera's maiden race.

#### Birth of the Spyder

While there were only a couple of 356s at Sebring, the Mille Miglia attracted a massive field of Porsche drivers, led home by the works car of Hans Herrmann and Erwin Bauer. Already, though, a new Porsche was taking shape in the background – the Type 550.

The project was overseen by Karl Rabe, although a lot of outside help was enlisted, Hermann Ramelow designing the tubular ladder frame chassis, for instance. Ramelow had worked for Adler pre-war before joining Glöckler and building a number of specials for his new masters. Given the recent experience with the racing Glöcklers, and the good relationship between Walter Glöckler and Ferry Porsche, it made a lot of sense to take this shortcut rather than have a wasted season spent climbing a steep learning curve.

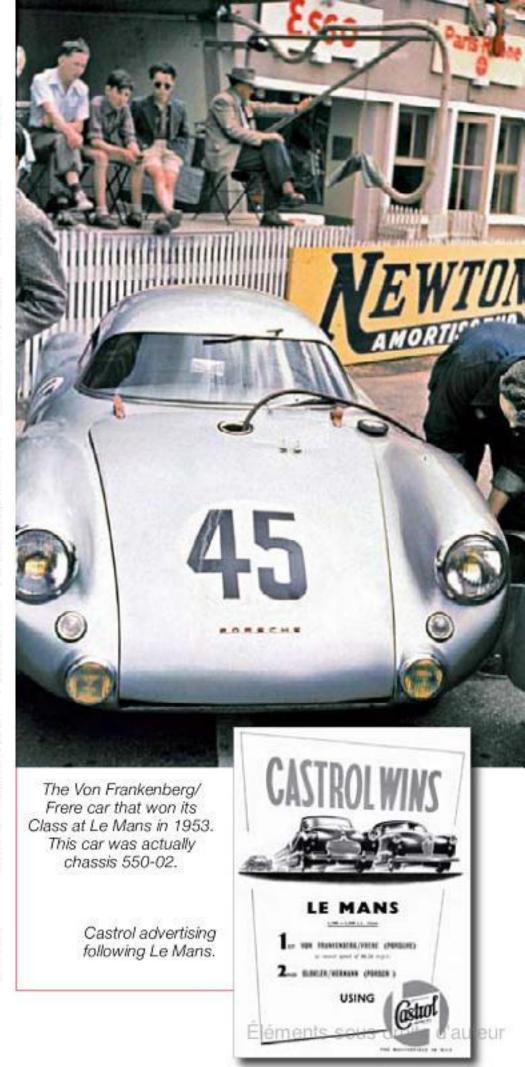
Other than the rear suspension changes made necessary by Ramelow's frame design, which had the same wheelbase and track dimensions as the standard 356 production road cars, most of the mechanical components were drawn from the regular 356 parts bins, including a tuned version of the Type 528 (1500 Super) engine, four-speed transmission (albeit modified as the clutch was given hydraulic actuation, and a ZF limited-slip differential was added to the specification list), front suspension, steering and braking systems, and the wheels.

The first two prototypes were built by Weidenhausen (a Frankfurt firm that had also built the Glöcklers), with final preparation the responsibility of Wilhelm Hild, who ran the small Porsche Competition Department from the new workshop established when Werk II was completed in 1952 – a much grander area than that reserved for motorsport activities in 1950.

The 550 duly made its debut on 31 May 1953 for the Eifelrennen at the Nürburgring. On this occasion, the car was powered by a 1500 Super engine tuned to give around 95bhp, thanks to the use of special fuel, a hike in the compression ratio, and different carburettors; an oil cooler was added behind the slit in the vehicle's nose to keep the lubricant in good condition during harsh racing conditions. Driven by Helm Glöckler, it narrowly beat the Borgwards to take a maiden Class victory (15th overall). This event provided the Porsche company with the foundation stone on which to build a racing legend.

#### Race record

Chassis 550-01 was the car used at the Nürburgring in May, which, in the following month, gained a hardtop similar to that fitted to the second car. These two 550 models were then





Hans Hermann leading the field at the Nürburgring on 2 August 1953. As well as claiming fastest lap (at an average of 77.5mph/124.0kph), he went on to win the race, and is seen here being followed by Glöckler. Cars from EMW, Borgward, and OSCA can also be picked out.

entered by the works for the 1953 Le Mans 24-hour Race, which started on the afternoon of 13 June. Chassis 550-02 was driven by Richard von Frankenberg and Paul Frere (who finished 15th, 1st in Class), with the other car piloted by Hans Herrmann and Helm Glöckler (who came home in 16th). Neither vehicle had the Carrera engine at this stage, so only 78bhp was available on regular fuel. Nevertheless, this still allowed a top speed of around 125mph (200kph) down the long Mulsanne Straight, bagging a 1500 Class record for Porsche.

These cars were then entered in a minor event at AVUS before turning up in roadster guise for the sports car race at the Nürburgring on 2 August. As well as a win for Herrmann in 550-02, this event also marked the debut of chassis 550-03 and the Carrera engine. This third vehicle was kept pretty much in the background until Stuck used it for the Freiburg-Schauinsland Hillclimb.

Not long after, the 550s were brought back to Stuttgart for maintenance and preparation for sale to Jaroslav Juhan, a Czech garage owner and enthusiast based in Guatemala. Juhan wanted to buy 550-01 and 550-02 to enter in the Carrera Panamericana, so Porsche decided to ship four cars to Central America at the same time – the two original 550s bought by Juhan, and two works machines (550-03 and 550-04), both with open coachwork.

Chassis 550-03, only completed in July 1953, was the vehicle tested with the Carrera engine, of course, whilst chassis number 550-04 was a sister car. These had a far more familiar silhouette.



Hans Stuck behind the wheel of 550-03 on the Freiburg-Schauinsland Hillclimb. This historic picture, dated 9 August 1953, also shows race mechanic, Eberhard Storz, (left) and Ernst Fuhrmann in the background.

Helm Glöckler about to blast up the Freiburg-Schauinsland course in 550-01.







A wooden scale model of the Type 550 sports racer for testing aerodynamics – the Porsche team had still to determine the final shape of the 'production' car. Internally, this body style was christened the 'humpback,' for obvious reasons, although the majority of 550s were far more elegant in appearance. The fourth car built had a similar rear section, briefly, and another was built with this arrangement for the 1954 Brussels Show.

styled by Erwin Komenda, and bodied by Weinsberg of Stuttgart on a slightly modified frame that allowed a trailing-arm rear suspension to be fitted (the original models had leading arms combined with torsion bars). At one point, 550-04 was tried with a raised, bolt-on rear section and full-width screen, as seen in the wooden scale model, but was then made to match 550-03 and sent to compete alongside it as works entries in the Mexican race.

While this decision left Porsche with no official representation in the Nürburgring ADAC 1000km event, at least a Glöckler-Porsche came home in fourth, and every other car seemed to be a 356 making up the numbers. A works 550 was also due to be at Dundrod, but the German maker did not compete in the TT either, banking on a good result in Mexico.

In the gap between the cars being shipped westward and their racing debut on US soil on 25 October, the fifth car (550-05) was completed. This Weinsberg-bodied machine was equipped for fast road use, beautifully finished with blue paintwork. First displayed at the 1953 Paris Salon, it was basically a prototype of the 1954 production models, with a Carrera engine (provisionally rated at 110bhp at 7000rpm), a new nose profile that was definitely more Porsche than Glöckler, and refinements to the rear wing shape. At this stage, there was still a large cover over the engine bay, but the final 550/1500RS design was certainly starting to show through ...

#### The 1953 Carrera Panamericana

The Carrera Panamericana race was instituted in 1950 to celebrate the opening of the Pan-American highway, planned to run from Alaska to Tierra del Fuego in Mexico. Although it did not initiate much attention in Britain (even when it became a round of the World Sports Car Championship), it was very well publicized in America.

Porsche's link with Mexico came about through an exhibition in Stuttgart during the summer of 1952. Count Berckheim had

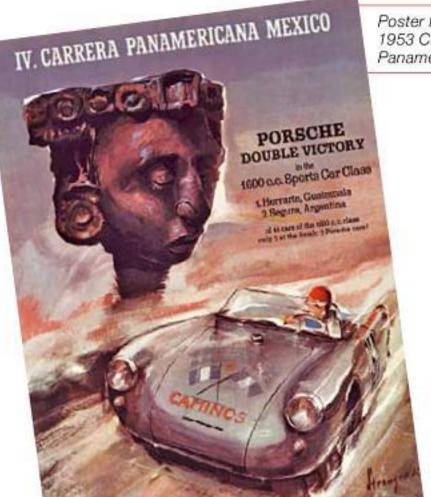
Porsche stand at the 1953 Paris Salon, showing 550-05 on display.



The Paris Salon car captured in contemporary colour at the factory. Note the Carrera engine, making its public debut at the French exhibition, and the special finish applied to the dashboard. It also featured knock-off wheels, although it was found that, with the 550 being so light, tyre wear was minimal, and frequent changes were therefore unnecessary - regular bolt-on wheels were thus the norm.



Poster from the 1953 Carrera Panamericana.



The works cars for the 1953 Carrera Panamericana at the Von Hohenlohe garage. Sadly, both cars failed to finish.





Hans Herrmann and Karl Kling (seated) ready to tackle the Mexican road race.



Jaroslav Juhan (right) waiting patiently as 550-01 takes on fuel.

just returned from the Mille Miglia, and managed to acquire Porsche distribution rights for Mexico for his cousin, Prince Alfonso von Hohenlohe, already a distributor for Volkswagen in Mexico City. The 356s used on the 1952 Carrera were the first two Porsches to arrive in Mexico. For 1953, though, there would be a more determined effort from both privateers and the factory.



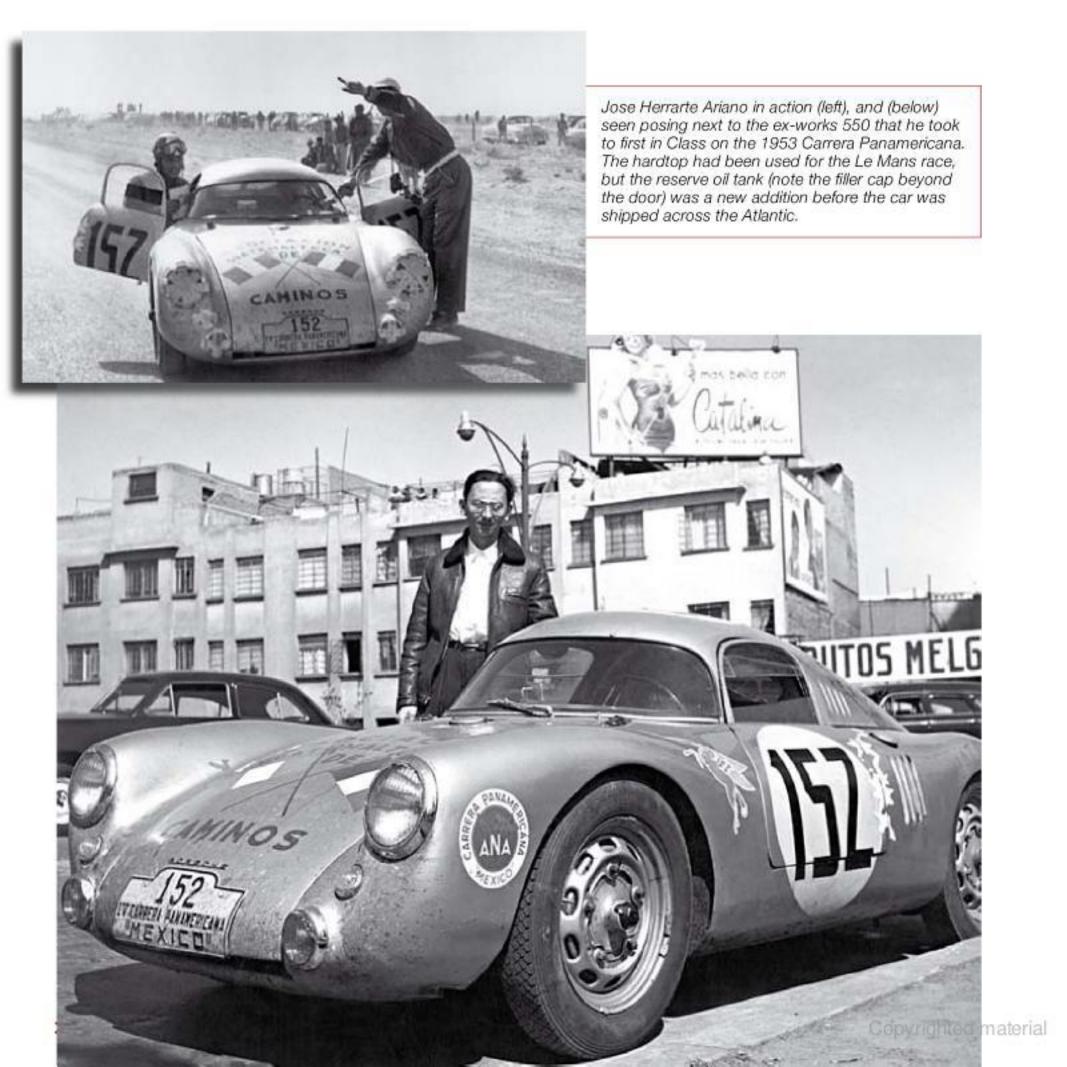
Herbert Linge, with his hand on the steering wheel of Kling's car (550-03), posing for a shot for the family album. Linge did not race during the event, incidentally.

Sponsored by Fletcher Aviation of Pasadena, Texas (this company was considering building small helicopters powered by Porsche engines, and had already built a multi-purpose Porsche-powered Jeep), Wendell Fletcher's only request was that the two works cars appear in a race in America before their main event. This was to be the first appearance for the Porsche works team on the American continent, but, unfortunately, both works' cars retired in Georgia after a good start.

The Porsche contingent of Huschke von Hanstein, Hans Herrmann, Karl Kling, Herbert Linge, Werner Enz and Willi Enz then travelled to Mexico for the start of the race. With no Mercedes-Benz factory team in 1953, the company having declared itself happy with the results achieved in the previous season, and wanting to direct all efforts toward a future Formula One programme, Porsche alone carried German pride to Mexico. Held from 19 to 23 November, the 1600cc Sport Class of the 1953 Carrera Panamericana was totally dominated by the Zuffenhausen marque.

The works drivers were Karl Kling (in chassis 550-03) and Hans Herrmann (550-04). Herrmann was born in 1928 and began his racing career in Porsche GTs in 1951; despite this late start, he was very quick and later became the German Sports Car Champion in a Porsche Spyder. Kling was another proven winner, having been with Mercedes-Benz in 1952, when he won a number of races, including the Carrera.

Sadly, both works cars, despite having fresh 1500 Super engines for the event, were out by the second leg of the Panamericana, Herrmann through mechanical problems and Kling due to an accident (at one point everyone thought Kling had been killed, although, thankfully, he arrived safely in Puebla).



#### WORLD SPORTS CAR CHAMPIONSHIP

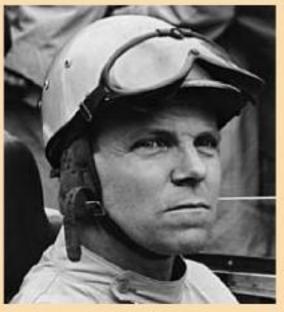
	WORLD DE	ONTO CAN CHAMIFION.	ornir -
Seb	ring 12-hour Race (8 March)		
1	P Walters/J Fitch	Cunningham C4R	173 laps
2	R Parnell/G Abecassis	Aston Martin DB3	172 laps
3	S Johnston/B Wilder	Jaguar C-type	162 laps
Mill	le Miglia (26 April)		A 10
	G Marzotto/M Crosara	Ferrari 340MM	10h 37m 19s
2	J-M Fangio/G Sala	Alfa Romeo 6C	10h 49m 03s
3	F Bonetto/U Peruzzi	Lancia D20	11h 07m 40s
Lel	Mans 24-hour Race (14 June)		
1	D Hamilton/T Rolt	Jaguar C-type	304 laps
2	S Moss/P Walker	Jaguar C-type	300 laps
3	P Walters/J Fitch	Cunningham C5R	299 laps
15	R von Frankenberg/P Frere	Porsche 550	247 laps/1st in Class
16	H Glöckler/H Herrmann	Porsche 550	247 laps/2nd in Class
Spa	24-hour Race (26 July)		
	M Hawthorn/G Farina	Ferrari 375MM	260 laps
_	J Scott-Douglas/G Gale	Jaguar C-type	242 laps
3	T Ulmen/H Roosdorp	Jaguar C-type	231 laps
Nüi	burgring 1000km (30 August)		
	A Ascari/G Farina	Ferrari 375MM	8h 20m 44s
	I Stewart/R Salvadori	Jaguar C-type	8h 35m 49s
3		Borgward 1500RS	8h 50m 03s
RAC	Tourist Trophy (5 September)		
	P Collins/P Griffiths	Aston Martin DB3S	106 laps
-0.6	R Parnell/E Thompson	Aston Martin DB3S	106 laps
	K Wharton/C Robb	Frazer-Nash Le Mans	103 laps
Car	rera Panamericana (23 Novemb	er)	
1	THE RESERVE THE PERSON NAMED TO SERVE THE PE	Lancia D24	18h 11m 00s
	P Taruffi/L Maggio	Lancia D24	18h 18m 51s
3	The state of the s	Lancia D23	18h 24m 52s
32	J Herrarte Ariano/C Gonzalez	Porsche 550	23h 57m 04s/1st in Clas
32	J Herrarte Ariano/C Gonzalez	Porsche 550	23h 57m 04s/1st in

Fortunately for Porsche, the two Le Mans coupés bought and entered by Jaroslav Juhan did a bit better. Winner of the 1600cc Class (and 32nd overall) was Jose Herrarte Ariano in 550-02; Juhan had retired 550-01 when its distributor drive failed. It's fair to say that the Panamericana could have ended in disaster but for the privateers. Ultimately, the Porsches won five out of the eight stages; Fernando Segura's 356 Super came second in Class and 33rd overall.

It was a hard first year for the 550, but, with the new Carrera engine, it would become easier in the future for the Stuttgart maker to collect trophies ...



Richard von Frankenberg.



Paul Frere.

## III

## 1954

hortly after 550-05 was shown at the 1953 Paris Salon, the so-called 'Humpback' car (chassis 550-07) was displayed at the 1954 Brussels Show, and then again in Geneva a couple of months later. The design was actually quite efficient from an aerodynamics point of view, assuming there were two passengers. With just a driver, a covered cockpit and racing screen could be used, and then the more traditional, lower rear deck was a better bet – as well as being more pleasing aesthetically. Usefully, though, this model's rear-hinged engine cover panel allowed the entire engine and transmission to be lifted out in one unit, from above. It was the first 550 to feature this arrangement, a principal duly carried over for the 'production' version of the car.

The 'Humpback' was the only car built with a fixed, tall rear bulkhead (the earlier *Buckelwagen* used a bolt-on structure that was readily removed), but it did at least have the Type 547 Carrera engine. In addition, revisions to the frame returned the design closer to that of the original 550, although the trailing-arm rear suspension seen on later prototypes was retained. This would be the last time that knock-off hubs were seen (the 'Humpback' featuring Rudge spinners rather than the German-made ones worn by the Paris Salon car), and these were soon changed to bolt-on wheels, in any case.

The next car, bodied by Weinsberg, was the last of the prototypes. Chassis 550-08 had the low rear deck configuration combined with a hinged back, and early-style headlamps that sat more upright than those fitted on customer cars. Oddly, given that Solex carburettors were the norm, Porsche chose to enter the car in the Mille Miglia with Webers, though it was Le Mans that the Stuttgart maker really had in its sights ...

Competition in 1954

Jaroslav Juhan took a Class win in 550-01 at the Buenos Aires 1000km Race, and three more 550s finished after Oscar Gonzalez in Argentina; only one failed to reach the chequered flag. A couple of early 550s ran in the midfield in Sebring, whilst a third car entered by James Graham experienced fuel problems on this, his home event, and retired before half distance.

The 1954 Mille Miglia, which started on 1 May, marked the international debut of the 550 with the Carrera engine. The top

The Brussels Show car (known as the 'Humpback') with some young VIPs:
Ferry Porsche's sons. Closest to the camera are (from the left) Peter, Gerd and Wolfgang, whilst Butzi can be seen in the background. Butzi Porsche later styled the 904 racer and the 911 road car.



This picture of the 'Humpback' clearly shows the Carrera engine. The binnacle in front of the driver housed the central tachometer, with the speedometer to the left, and oil temperature and fuel level gauges on the right. The car was later modified for use at a racing school, before doing the rounds as a publicity vehicle.





For a number of years, Porsche used the Volkswagen dealer network. Occasionally, Porsche would have a special exhibition, such as this one in 1954, with four 356s and the 'Humpback' disguised as the 1954 Mille Miglia winner on display.

Juhan in Buenos Aires. He finished the 1000km 19 laps down on the winning Ferrari, but still managed to take Class honours.



Poster A TRIPLE CLASS VICTORY proclaiming Porsche's success on the Mille Miglia.

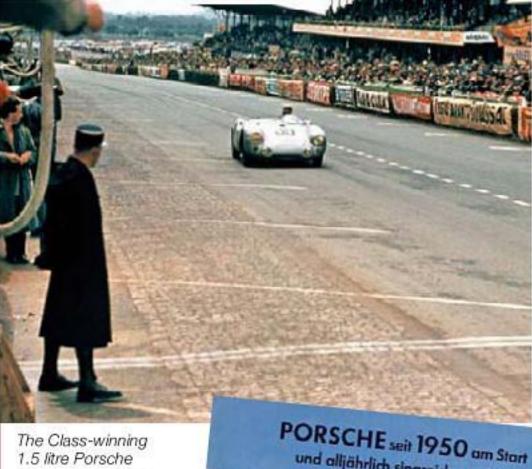


A couple of shots showing Herrmann and Linge on the Mille Miglia.



finisher for Porsche was the 550 (chassis 550-08) driven by Hans Herrmann and Herbert Linge. After having had a close call with a train on a level crossing (they ducked underneath the barriers in the low car, only seconds before the train thundered through), they went on to finish sixth overall and first in the 1500cc Sports Racing Class; Porsche also did well in the GT categories.

The Eifelrennen was not kind to Porsche. However, in the next month, at Le Mans, three more or less definitive versions of the 550, complete with 1498cc Carrera engines (fed by a pair of twin-choke Webers instead of the usual Solex carburettors to give 114bhp), were entered by the works. The Richard von



1.5 litre Porsche pictured on the pit straight at Le Mans. The similar-looking Porsches at Le Mans were identified by different colours on the rear wing tops - red, blue, green and yellow were used to distinguish them. One can see how open the pit area was, and how close spectators were to the action before the 1955 disaster.

> Le Mans memorabilia.



Issonne" Schweden

Control of Control of

Polensky and Von Frankenberg won their Class in the Reims 12-hour event, coming home eighth overall. This famous race, won by Jaguar in 1954, was held in the first week of July.

The sports car race held alongside the German Grand Prix on 1 August resulted in a clean sweep for Porsche – Hans Herrmann leading home the first of four 550s, which convincingly beat the domestic Borgward and EMW competition, as well as that offered by the OSCA concern.



Claude Storez and Herbert Linge's 550 in action during the 1954 Tour de France Automobile. The pair finished second, beaten only by the Gordini of Pollet/Gauthier, which was more than enough to secure Class honours.

Frankenberg/Helm Glöckler machine retired in the first hour with engine trouble; the Hans Herrmann/Helmut Polensky car also fell by the wayside with similar engine maladies – all three powerplants had succumbed to holed pistons, but the car driven by Johnny Claes and Paul Stasse limped home

12th overall, and, following an accident involving the leading OSCAs, duly won its Class.

The factory had actually entered a fourth 550 model. Driven by Gustave Olivier/Zora Arkus-Duntov (Chief Development Engineer at Chevrolet), this car was fitted with a 1089cc, four-cam engine (the change achieved via a reduction in bore from 85mm to 72.5mm whilst retaining the 66mm stroke of the original unit), and came 14th overall (first in Class). It's interesting to note that the smaller machine, rated at 72bhp, was just 12 laps down on the 1.5 litre 550 at the end of the 24 hours, albeit in part due to a series of unscheduled stops necessary to coax the Claes/Stasse machine to the finish.

Numerous lessons were learnt at the Sarthe – the ultimate proving ground for sports car manufacturers – and duly applied. Hans Herrmann led home the four works Porsches in a one-twothree-four victory in the sports car race before the German Grand Prix at the Nürburgring.

In the Tour de France Automobile, Claude Storez and Herbert Linge won the Sports Class in a 550 (550-08 fitted with a 1500 Super lump), and, closer to home, Richard von Frankenberg did likewise in the AVUS races, with Polensky winning the GT category. Meanwhile, officially, a 745cc DB-Panhard won the TT





Richard von Frankenberg giving Helmut Polensky (with camera) a lift. Both won their races at the famous AVUS track on 19 September 1954. Sadly, Hans Hermann was not so successful with the special-bodied 550 assigned to him, allowing Porsche to stick with the familiar Spyder profile in the future.

Poster from the final Carrera Panamericana.

after various handicaps had been applied. In reality, the laurels went to bigger-engined machines on the road, and the summary at the end of this section reflects this fact. Two private 550s were entered, with one taking third in Class, the other failing to finish.

Sadly, what was to be the last Carrera Panamericana started from Tuxtla Gutierrez on 19 November 1954. The smaller-engined category for sports cars was divided at 1500cc instead of the previous year's 1600cc, but the Porsches were safe for the time being. After a slow start – which saw the Borgward team take the first two stages and the OSCA of Louis Chiron the third – the Porsches came back to win the remaining five. The Sport Class was won by Hans Herrmann in 550-04, with Jaroslav Juhan second. Chiron's OSCA came third, and the 550 of Segura fourth (12th overall). The 550 of Salvador Lopez Chavez and 356s of



Herrmann (left) and Juhan in action on the 1954 Carrera.



Hans Herrmann in the 550 (chassis 550-04, readily identified by its inboard lights) that he took to third overall in the 1954 Carrera Panamericana. It had been fitted with a fresh Carrera engine for the race.



Delightful contemporary colour shot of the Segura/Linge 550, with Hermann's car in the background. The 356 was raced by Ernst Hirz of Germany.



All smiles at the end of the Carrera ...

Becker Estrada and Hirz took the next three places in that order.

Perhaps of even greater significance was that Herrmann had managed to achieve third place overall (less than two hours down on Maglioli's winning Ferrari), whilst Juhan took fourth overall, just seconds behind his team-mate. Segura was 12th overall, the other Porsches coming in 28th, 67th and 70th respectively.

#### WORLD SPORTS CAR CHAMPIONSHIP

Bue	uenos Aires 1000km (24 January)			
1	G Farina/U Maglioli	Ferrari 375 Plus	106 laps	
2	H Schell/A de Portago	Ferrari 250MM	103 laps	
3	P Collins/P Griffiths	Aston Martin DB3S	102 laps	
9	J Juhan/A Asturias Hall	Porsche 550	87 laps/1st in Class	
12	O Gonzalez/P Escudero	Porsche 550	79 laps/3rd in Class	

#### Sebring 12-hour Race (7 March)

	1	S Moss/B Lloyd	OSCA MT4	168 laps
	2	P Rubirosa/G Valenzano	Lancia D24	163 laps
	3	L Macklin/G Huntoon	Austin-Healey 100	163 laps
1	0	F Segura/D Bojanich	Porsche 550	144 laps/4th in Class

#### Mille Miglia (2 May)

1	A Ascari	Lancia D24	11h 26m 10s
2	V Marzotto	Ferrari 500 Mondial	12h 00m 01s
3	L Musso/A Zocca	Maserati A6GCS	12h 00m 10s
6	H Herrmann/H Linge	Porsche 550	12h 35m 44s/1st in Class

#### Le Mans 24-hour Race (13 June)

1	F Gonzalez/M Trintignant	Ferrari 375 Plus	302 laps
2	D Hamilton/T Rolt	Jaguar D-type	301 laps
3	W Spear/S Johnston	Cunningham C4R	283 laps
12	J Claes/P Stasse	Porsche 550	228 laps/1st in Class
14	G Olivier/Z Arkus-Duntov	Porsche 550	216 laps/1st in Class

#### RAC Tourist Trophy (11 September)

1	M Hawthorn/M Trintignant	Ferrari 750 Monza	84 laps
2	P Taruffi/J-M Fangio	Lancia D24	84 laps
3	R Manzon/E Castellotti	Lancia D24	82 laps
23	R Flower/E McMillen	Porsche 550	66 laps/3rd in Class

#### Carrera Panamericana (19 November)

1	U Maglioli	Ferrari 375 Plus	17h 40m 26s
2	P Hill/R Ginther	Ferrari 375MM	18h 04m 50s
3	H Herrmann	Porsche 550	19h 32m 33s/1st in Class
4	J Juhan	Porsche 550	19h 33m 09s/2nd in Class

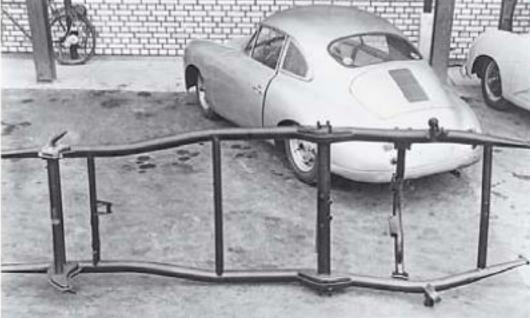


An early 550 in its most efficient aerodynamic guise at Solitude. The Solitude circuit was a normal road to the south-west of Stuttgart which was sealed off for racing once a year.

#### The customer cars

Porsche announced that the production 550 would be available at Le Mans from spring 1955, although, by the latter part of 1954, the first of the customer cars were already being completed by Wendler of Reutlingen.

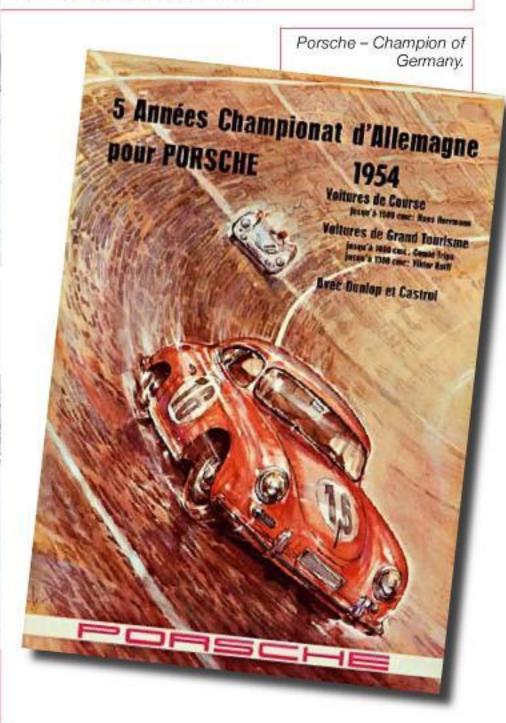
Compared to earlier works machines, the frame was suitably uprated for private owners (who, having invested a fair sum of money, naturally expected to get a few seasons' racing from their cars), and the aluminium body was also subtly different. The front wing line was more 356-like, with running lights directly beneath the headlamps, while the rear wings were more curvaceous,





Huschke von Hanstein pictured in 1954 with a 'customer' 550 Spyder. Series production Type 550 chassis numbers ran from 5500001 to 5500090.

each tipped with a circular taillight assembly. The doors were shallower, allowing a deeper sill section, and, apart from the slit in the nose for the oil cooler, the only other cooling apertures were the two grilles that sat on the hinged rear deck above the This ladder chassis (one of the earlier versions) provided the basis for the production 550 frame, which was then clothed with a lightweight aluminium body.



spare wheel. This helped give the vehicle a very clean, simple, yet purposeful appearance.

Weather equipment varied from car to car, with a small curved racing screen and covered passenger area being the norm, together with a faired-in rearview mirror on the driver's side. A full-width screen and windshield wiper could be specified

A Wendler-bodied customer car. Tipping the scale at 600kg (1320lb), the production models were roughly 40kg (88lb) heavier than the works machines. although weight distribution was as good as 50:50 with a full tank of fuel. Note the 'Spyder' badge on the front fender and the final rear light/wing arrangement.





carburettors, suitable tuning and a 9.5:1 compression ratio bringing power up to around 110bhp DIN, and peak torque a touch above 90lbft. This was linked to the 356's four-speed transaxle, enhanced by a choice of ratios, an uprated, hydraulically-operated clutch, and a ZF limited-slip differential.

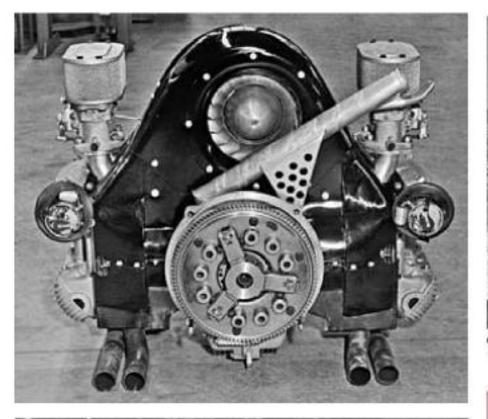
Many of the chassis components would have been familiar to 356 enthusiasts, including the steering and brakes. The wheels looked much the same, too, but had an alloy rim attached to the steel centres to save weight – an idea later carried over to the Carrera GT road car. It was also interesting to note that regular 5.00 x 16 crossply rubber was used up front, but wider 5.25 section tyres were employed for the rear. This was to aid stability, and would also be adopted on future Porsche road cars.

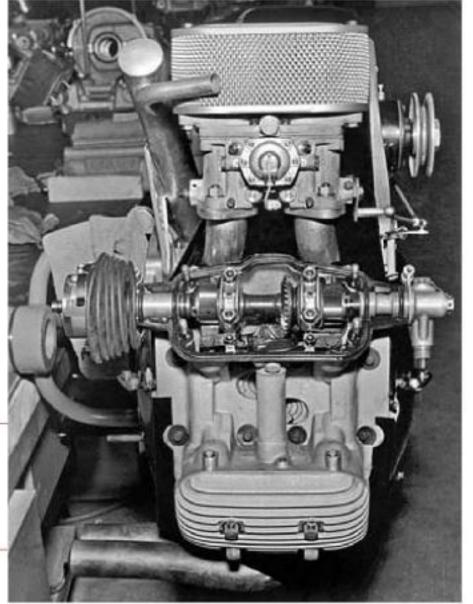
The official designation of this DM 24,600 model was 550/1500RS: the 1500 standing for the engine capacity, and RS for Rennsport. However, Max Hoffman coined the name 'Spyder' and it is this title that has stuck in the public's mind to this day. According to factory records, two were sold in 1954, 63 in the following year, and 13 in 1956.

for those events requiring a co-driver, or there was a taller version with an inside mirror suitable for road use. There was also a basic hood to keep the worst of the elements out of the spartan cockpit.

The Type 547 Carrera engine was employed, with Solex

Opposite: The 'production' Type 547 Carrera engine with Solex carburettors, awaiting fitting of distributor caps. The shot of the engine being built up on the workbench (above) clearly shows the elegant camshaft drive mechanism. Note the cooling fins on the exhaust camshaft cover and the mesh air filters.







The engine in situ in the Wendler body.

## IV

## 1955

he new season brought with it a flood of activity for Porsche enthusiasts as more of the series-built, 'production' Spyders became available. Many of the earlier works cars had also found their way into the hands of privateers, allowing the Stuttgart marque to be represented, albeit with widely differing levels of professionalism, in all four corners of the world.

#### Competition in 1955

Although 1955 was quite a lean year for the Spyder, with the factory team staying away to allow privateers a fair crack of the whip in the majority of events, Guatemalan-based Jaroslav Juhan had some fine results with his 550 racer, especially in the Buenos Aires 1000km, where he won his Class as he had in 1954. More significant was the fact that he came fourth overall, beaten only by specialist Italian cars with far bigger engines.

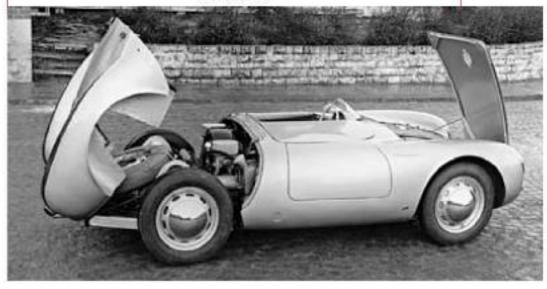
There was a second in Class (eighth overall) at Sebring in March in the 12-hour Race, plus a token win in the 1100 category when Paul O'Shea and Fritz Koster brought home the ex-works 1.1 litre Spyder in 23rd position for a Class win. Other, regular 550s finished in 11th and 14th, although the 1500 Class went to Bill Lloyd's OSCA.

Two months later, in the Mille Miglia, there was eighth overall and a 1500cc Sports Class win for Wolfgang Seidel. On the following weekend, the Rhine Cup Race at Hockenheim gave Porsche a one-two-three victory (Von Frankenberg winning, followed home by Lautenschlager and Jeser). A Porsche Spyder also took the flag at the Paris 24-hour Race at Montlhéry, this time with Veuillet and Olivier behind the wheel.

At Le Mans in June, a fine performance from Porsche was overshadowed by the tragic loss of so many lives. The Von Frankenberg/Polensky 550 Spyder not only won its 1500cc Class and the Index of Performance, but also came fourth overall (around 200 miles/320km down on the winning Jaguar D-type). A 550 entered by Ecurie Belge came fifth, driven by Olivier Gendebien (his first Le Mans) and Wolfgang Seidel. Helm Glöckler and Jaroslav Juhan drove a works car to sixth place overall and two other 550s finished – 13th (first in the 1100cc Class), and 18th. Only one Porsche, a private entry fielded by Walter Ringgenberg, failed to finish.



The sale of 'customer' 550 Spyders added a great deal of local colour and glamour to events all over the world. The proliferation of these purpose-built racers certainly helped solidify Porsche's image as a maker of sporting machines, committed to furthering the cause of motorsport. Indeed, the German company has always been an advocate of advancing technology on the track in order to improve its road cars.



continued page 42



Walter Ringgenberg and Richard von Frankenberg used an early series-production Spyder to set a number of Class speed records at Montlhéry in mid-March. The same car was then driven south and used in the Rallye Soleil-Cannes just as it had left Paris!



British advertising released by Castrol after the Ringgenberg/Von Frankenberg Montlhéry sortie.



The Von Hanstein/ Linge 550 at Sebring.







Left inset: Poster from the 1955 Mille Miglia – the fastest in history.

Right inset: The Competition Department at Porsche, with cars being prepared for the ill-fated 1955 Le Mans 24-hour Race. Ferry Porsche can be seen on the left talking to journalists.

Seidel and Glöcker in action on the Mille Miglia. An impressive line of Porsches en route to the hallowed Le Mans track. Following the spare car we can see the Von Frankenberg/Polensky machine, then the Olivier/Jeser, Glöckler/Juhan, Veuillet/Arkus-Duntov and Gendebien/Seidel cars, with a 356 bringing up the rear. Note the brake cooling ducts in the nose of the works cars, as well as the lack of a rubbing strip (as seen on number 65).

The Class-winning 550 back in Germany after its Le Mans excursion.





The Nürburgring played host to a 500km race for 1500cc machines on 28 August. Although it was won by Jean Behra's Maserati, the Porsche marque was well represented, with Von Frankenberg (winner of the sports car race attached to the Swedish Grand Prix in the same month) taking second place, ahead of a works EMW. The silver car chasing the Spyder is one of the works EMWs, incidentally, powered by a 1.5 litre, twin-cam six rated at 130bhp.



A scene from the TT, with (from the left) Richard von Frankenberg, Masten Gregory, Carroll Shelby, Herbert Linge, Wolfgang Seidel, and Helm Glöckler.

Porsches waiting for the 1955 Tourist Trophy to start, with the Shelby/Gregory car at the head of the line. Although originally planned to be, there was no TT in 1956.





### WORLD SPORTS CAR CHAMPIONSHIP

Buei	nos Aires 1000km (23 January)		
1	E Valiente/J-M Ibanez	Ferrari 375 Plus	58 laps
2	C Najurieta/C Rivero	Ferrari 375MM	58 laps
3	R Grandio/J Faraoni	Maserati A6GCS	56 laps
4	J Juhan/J Salas Chaves	Porsche 550	56 laps/1st in Class
Sebi	ring 12-hour Race (13 March)		
1	M Hawthorn/P Walters	Jaguar D-type	182 laps
- 2	P Hill/C Shelby	Ferrari 750 Monza	182 laps
3	W Spear/S Johnston	Maserati 300S	180 laps
8	H von Hanstein/H Linge	Porsche 550	166 laps/2nd in Class
23	P O'Shea/F Koster	Porsche 550	152 laps/1st in Class
Mills	e Miglia (1 May)		
1	S Moss/D Jenkinson	Mercedes-Benz 300SLR	10h 07m 48s
2	J-M Fangio	Mercedes-Benz 300SLR	10h 39m 33s
3	U Maglioli/L Monteferrario	Ferrari 118LM	10h 52m 47s
8	W Seidel/H Glöckler	Porsche 550	12h 08m 17s/1st in Class
23	E Lautenschlager/R Scholl	Porsche 550	12h 59m 52s/3rd in Class
le N	Nans 24-hour Race (12 June)		
1	M Hawthorn/l Bueb	Jaguar D-type	307 laps
	P Collins/P Frere	Aston Martin DB3S	302 laps
3	J Claes/J Swaters	Jaguar D-type	296 laps
4	R von Frankenberg/H Polensky	Porsche 550	284 laps/1st in Class
- 5	O Gendebien/W Seidel	Porsche 550	276 laps/2nd in Class
- 6	H Glöckler/J Juhan	Porsche 550	273 laps/3rd in Class
13	A Veuillet/Z Arkus-Duntov	Porsche 550	245 laps/1st in Class
RAC	Tourist Trophy (17 September)		
1	S Moss/J Fitch	Mercedes-Benz 300SLR	84 laps
	J-M Fangio/K Kling	Mercedes-Benz 300SLR	83 laps
-3	W von Trips/A Simon	Mercedes-Benz 300SLR	82 laps
	C Shelby/M Gregory	Porsche 550	75 laps/1st in Class
12	W Seidel/H Glöckler	Porsche 550	74 laps/2nd in Class
16	R von Frankenberg/H Linge	Porsche 550	70 laps/3rd in Class
			representation to tensor
Targ	a Florio (16 October)		
1	S Moss/P Collins	Mercedes-Benz 300SLR	9h 43m 14s
2	J-M Fangio/K Kling	Mercedes-Benz 300SLR	9h 47m 55s
3	E Castellotti/R Manzon	Ferrari 860 Monza	9h 53m 20s

Many of the things learnt at Le Mans in 1955 were applied to customer cars soon after the event, such as brake cooling ducts in the nose, and wider drums to enhance braking efficiency up front. There was also a new transmission being tested in the background. Although it was due to be used at the Nürburgring in August, the Porsche five-speed gearbox ultimately made its racing debut in the 1955 Tourist Trophy at Dundrod, which began on 17 September. After Moss completed 84 laps to take the flag, ninth-placed Carroll Shelby and Masten Gregory were deemed to have run away with the 1500cc Class, followed home by two more Porsches (including the five-speed car of Von Frankenberg and Linge). This all-American team did a lot for the 550 Spyder in the States, but, at over \$6500 a time, it remained a car for the serious racer only, or, at the very least, a well-heeled enthusiast.

The Targa Florio was the last race of the World Championship season, but only two 550s were on the entry list – both, for one reason or another, failing to make the start line. The 550 had proved itself better on long, fast circuits, where its reliability and sheer speed showed through. On the tighter tracks, the better-handling Lotus and Cooper machines were definitely ahead in the smaller-engined categories, with German and Italian competition continuing to present a challenge on the faster circuits. But Porsche had something up its corporate sleeve – the 550A with a lighter and stronger spaceframe chassis.

The Stuttgart company had not forgotten its roots, however, despite all this racing activity. Denis Jenkinson, writing in *MotorSport* in 1955, said: "Competition is a byword at the Porsche factory and the Porsche car is a perfect example of a race-bred one, the 1956 models all being available with the Carrera engine."

It's ironic, in view of its racing successes, that the death of movie star, James Dean, at the wheel of his 550 Spyder gave the model its greatest public fame. Supplied with the Spyder from new by John von Neumann, Dean was on his way to a race in Salinas, in September 1955, when he collided head on with an oncoming vehicle.

Moving to better premises in Werk I at the end of 1955, the racing shop was separate from the main assembly hall, and, while Baron Fritz Huscke von Hanstein continued as Porsche's Racing Team Manager, and Wilhelm Hild was the undisputed head of the Competition Department, for a period, drivers were engaged race-by-race. However, it was already a professional outfit, further enhanced by the arrival of a new racing model ...



## V

## 1956

e Mans was struck from the World Championship calendar in response to the 1955 disaster. There was no longer a Jaguar factory team, and Mercedes-Benz was relying on privateers for representation. It could so easily have been a dull year, but competition was just as fierce, with the works Astons fighting Ecurie Ecosse Jaguars and the might of Ferrari and Maserati. In the smaller-engined categories, Alfa Romeo posed a new threat to the dominance of Porsche 356s, although the Spyders were generally proving hard to catch.

The 1956 season began disappointingly, as both 550s failed to finish in Argentina. The 1500 Class was won by an interesting combination of a Maserati 150S driven by Alejandro de Tomaso – the future car manufacturer coming in fourth behind a who's who of 1950s GP racers.

There was a far more satisfactory result for Porsche fans at Sebring, the works Herrmann/Von Trips 550 coming sixth overall and comfortably taking the top slot in the Index of Performance. Jack McAfee and Peter Lovely were three laps down in a private 550, while third in Class was secured by a second factory-entered 550. Only one 550 retired – that piloted by Ed Crawford and Herbert Linge. Back in Stuttgart, though, a revised model was already being prepared ...

### The 550A

Porsche has always enjoyed a reputation of slowly refining its products over many years, but things move fast in the racing world, and, to stay ahead, it is vital to keep pace with the competition. In spring 1956, the Wendler-bodied 550A was introduced. Gone was the ladder chassis of the old Spyder, replaced by a lighter but substantially stiffer spaceframe, which incorporated a low-pivot swing axle rear suspension like that of the Mercedes that improved the 550A's handling no end.

The spaceframe was designed by Leopold Schmid, and was very similar to the frame used on Porsche Number One. The 550's ladder frame had been a case of making the most of limited resources, and going with a proven design saved a lot of time and money. With the new Porsche competition shop up and running, and a hard-won reputation to uphold, it made a great deal of sense to make this investment: after all, a rigid chassis is the foundation for a superior racing car, and it would allow



A beautiful publicity shot of the 550 outside Werk I in 1956. Quick? For sure. In an era when Morris Minor advertising was proudly boasting a 100 per cent improvement in acceleration, bringing the 0-60 dash down to 28 seconds, independent tests showed the 550 would dismiss the same yardstick in around 7.5 seconds. However, time was running out for the original Spyder ...

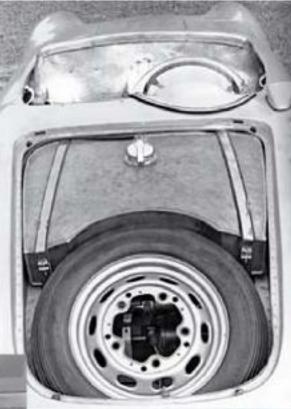
progress in other areas that could just as easily be applied to the company's road vehicles.

The body looked much the same at first glance, but, mainly to save weight, the hinged back was dropped in favour of a fixed panel with louvred inspection hatches behind each door, allowing routine maintenance away from the garage. Smaller lighting units, front and rear, and repositioning of the two grilles on the back of the car also acted as handy distinguishing features, whilst closer inspection revealed a more aerodynamic nose profile.



Action from Sebring in 1956. This is the McAfee/Lovely car, by the way.

> Two rather artistic views of the new 550A. While the 'customer' 550s had tipped the scale at 600kg (1320lb), at just 530kg (1165lb) dry,

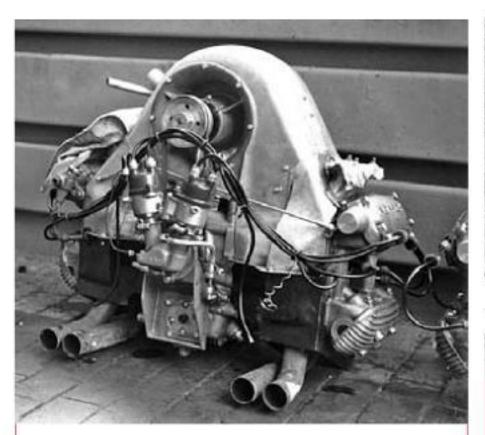


The works Herrmann/Von Trips 550 on its way to sixth overall in sunny Florida.



the 550A was even lighter than the old works machines. Series-production 550As were a lightweight 570kg (1225lb).





The 1.5 litre Type 547/3 power unit, with its relocated distributors easy to spot in this picture. The latest engines had 12-volt electrical systems instead of the former 6-volt electrics. By the end of the 1956 season, this air-cooled jewel was readily developing 135bhp at 7200rpm.



Legendary racer, Hans Hermann, trying the Speedster for size, with Ernst Fuhrmann (standing on the right) looking on. Fuhrmann, creator of the Carrera engine, left Porsche shortly after this picture was taken, but returned in later years to assume even greater responsibility.

A rise in the compression ratio and a new distributor drive mechanism brought about the Type 547/2 designation (quickly changed to 547/3 specification), and an extra 10bhp or so for the updated racing version of the Carrera engine. With Weber carburettors on both works and customer units, they were initially rated at 125bhp DIN, and delivered a maximum of 107lbft of torque an equally long way up the rev-range. The recently introduced five-speed gearbox – with a low first for quicker starts – was fitted as standard on the 550As, benefiting from an improved linkage.

At the same time, fuel tank capacity was increased via an optional side-mounted tank (good for endurance races), and a great deal of fine-tuning was done to the front suspension (the rear set-up was completely new, of course), braking and steering systems. The 550A continued to employ the old 1500RS designation as a suffix, presumably to confuse historians! Thankfully, many contemporary race reports called the car the RS – a moniker that would be used with pride by Porsche for many years to come.

The first 550A being rolled out of the workshops before a few finishing touches were added to the body. It was then sent to Italy in an unpainted state ready for the Mille Miglia.





The Mille Miglia car was handled by Von Trips (seen here) and Maglioli at the Nürburgring 1000km Race. It was joined by a sister car in Germany, which lacked the carburettor vents of the first 550A – a feature that was only seen on this car and a handful of works machines, and never adopted on 'customer' vehicles.

Two shots of the Le Mans coupés: one during build-up, and the other freshly completed. The roof-mounted lights were used to identify the cars at night. No more coupés were built after these, which were converted to open roadsters after the French classic.







The 550A coupé that Von Frankenberg and Von Trips took to fifth place (first in Class) in the 1956 Le Mans 24-hour Race. Although not a World Championship round, the event's draw and importance was just as strong for sports car makers.

### The Mille Miglia & beyond

The 1956 Mille Miglia (which started on 28 April) marked the debut of the 135bhp 550A, with Hans Herrmann teamed up with Werner Enz in the main factory entry which, sadly, was to retire. In fact, it was a poor showing generally by Porsche's previous standards in the event. Giovanni Bracco had brake trouble in the other works-supported car (a regular 550), caused, it seems, by the wet weather, and it was left to privateers to uphold Stuttgart honour. Fortunately, the hoards of 356 drivers did a good job in the GT category to save some face.

Wolfgang von Trips and Umberto Maglioli drove to fourth overall (and a Class win) in the Nürburgring 1000km Race, held in May, with Hans Herrmann and Richard von Frankenberg sixth in another 550A. The infamous Michael May winged car was at this event, and it was actually Von Hanstein who protested and had it disqualified (it was also rejected at Monza). May's Porsche was faster than the works machines, but, amazingly, no-one followed up this brilliant piece of aerodymanics until more than a decade later. There was another interesting aside, too: EMW had gone, replaced by the AWE marque. Whatever name these East German machines went under, though, their existence was to be limited; Borgward's racing efforts had already slipped into the history books.



Von Trips in action at the Nürburgring in August 1956. As it happens, Herrmann won the event in another 550A.

For the 1956 Targa Florio, only one 550A – the first car, hastily painted white – was sent to Sicily, together with Huschke von Hanstein (who was available as a second driver if needed), and two mechanics. The event, which, unfortunately, did not count toward the World Championship, was won outright by Umberto Maglioli in the 550A (at 56.8mph/90.9kph). Maglioli had given Porsche its first taste of victory on the Targa Florio, and would go on to compete in a total of 19 Targas between 1948 and 1970. Only one man in the history of the race bettered that distinction – Mantia Sergio, who began his campaign in 1920. For the Stuttgart concern, it was final proof that the little Spyders were capable of competing well above their Class, with overall wins far from out of the question. Indeed, the classic Targa was to become something of a happy hunting ground for Porsche drivers in the years that followed.

At Le Mans, which started on 28 July, apart from the Von Frankenberg/Von Trips 550A (with a coupé body as full windscreens were required) which took fifth overall, the Stuttgart concern had only one other finisher out of six entries, and this was a 356A. The weather could be blamed for the poor results, but the reality was that the other 550A (handled by the Herrmann/Maglioli pairing) had piston trouble, and the two earlier 550 Spyders also succumbed to mechanical problems.

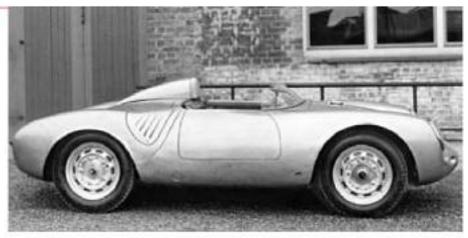
Other 1956 races on French soil included the Paris 1000km Race, held at Montlhéry in June, in which the company gained a Class victory, and there was a Porsche one-two in the Reims 12-hour event later in the month. Indeed, the Von Frankenberg/Storez pairing managed to cross the line at a winning speed of 164.6mph (263.4kph), just 14mph (22kph) slower than the D-type Jaguar that won the race for sports cars with unlimited engine sizes the following day.

While Porsche took the flag in the sports car race attached to the German Grand Prix at the Nürburgring, it was the event held during Swedish Grand Prix weekend in Kristianstaad that provided the final round of the World Championship. Richard von Frankenberg and William Buff won their Class in the latter's 550, with more private Spyders bringing up the rear. Only 14 cars completed the race!

### **Specials**

Wim Poll, the son of the VW dealer from Hilversum in Holland, was a real Porsche fanatic, and very successful in racing. As well as competing with a 356 Carrera, in 1956 he had the 'Poll-Platje Spyder' built. Initially, it was fitted with a 1300S engine, but Poll was later offered a 1.6 litre engine

Customer cars began to become available at the end of 1956. A total of 14 were built in the first year, most coming with the fairedin headrest seen here, with 23 following in 1957. Chassis numbers ran from 550A0101 to 550A0144.

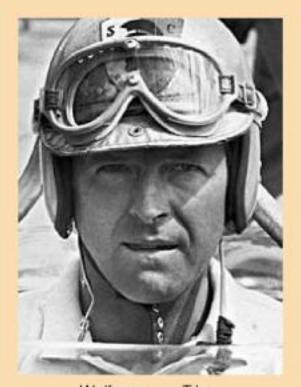








Umberto Maglioli.



Wolfgang von Trips.

### WORLD SPORTS CAR CHAMPIONSHIP

		ts Car Champions	SHIP
Buen	ios Aires 1000km (29 January)		
- 1	S Moss/C Menditeguy	Maserati 300S	106 laps
2	O Gendebien/P Hill	Ferrari 857S	104 laps
3	J Behra/F Gonzalez	Maserati 300S	101 laps
Sebri	ing 12-hour Race (24 March)		#2 160
1	J-M Fangio/E Castellotti	Ferrari 860 Monza	194 laps
2	L Musso/H Schell	Ferrari 860 Monza	192 laps
3	B Sweikert/J Ensley	Jaguar D-type	188 laps
6	H Herrmann/W von Trips	Porsche 550	182 laps/1st in Class
7	J McAfee/P Lovely	Porsche 550	179 laps/2nd in Class
14	M Marshall/J Brundage	Porsche 550	158 laps/3rd in Class
Mille	Miglia (29 April)		
	E Castellotti	Ferrari 290MM	11h 37m 10s
2	P Collins/L Klementaski	Ferrari 860 Monza	11h 49m 28s
3	L Musso	Ferrari 860 Monza	12h 11m 49s
87	R Knock	Porsche 550	15h 20m 38s/3rd in Class
Nürb	urgring 1000km (27 May)		
1	P Taruffi/H Schell	Maserati 300S	7h 43m 54s
2	J-M Fangio/E Castellotti	Ferrari 860 Monza	7h 44m 20s
3		Ferrari 290MM	7h 53m 55s
4		Porsche 550A	8h 01m 45s/1st in Class
6	H Herrmann/R von Frankenberg	Porsche 550A	8h 06m 10s/2nd in Class
13	F Kretschmann/S Liebl	Porsche 550	8h 50m 37s/1st in Class
Swed	dish GP 1000km (12 August)		
1		Ferrari 290MM	153 laps
2	P Collins/W von Trips	Ferrari 290MM	153 laps
3	A de Portago/M Hawthorn	Ferrari 860 Monza	152 laps
8	R von Frankenberg/W Buff	Porsche 550	138 laps/1st in Class
11	W Seidel/P Nocker	Porsche 550	134 laps/3rd in Class

from the works, enabling him to take his National Championship on a number of occasions.

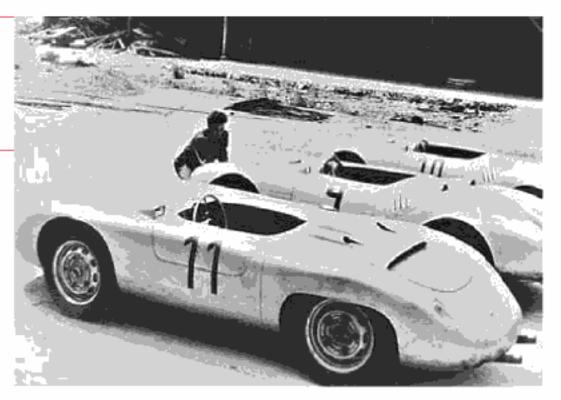
The Hirondelle Spyder was built a year after the Poll-Platje Spyder by Henke van Zalinge, powered by a 1.6 litre version of the Carrera engine (later replaced by a Super 90 unit). The car was raced in Van Zalinge's native Holland for around five years, recording a number of successes at national level.

Meanwhile, Ian Frazer-Jones raced a Porsche 1500S-powered Cooper in South Africa during the mid-1950s. Another famous car was the 'Pooper' of Peter Lovely (a Volkswagen dealer in Seattle). Seen regularly on the American circuits (and winning a number of SCCA events along the way), this was a modified Cooper machine fitted with a 1500S engine and a streamlined body. John von Neumann also had a Cooper with a Porsche engine, as did fellow American Gordon Lipe.

Closer to home, the one-off Type 645 served as a prototype for the Porsche

The Type 645, or 'Mickey Mouse' as it was known, which featured a unique suspension, an oil cooler integrated in the body, and magnesium alloy panels. It was destroyed in an accident on 16 September, only a couple of months after its debut.

718 series. The short-wheelbase 645's first race was at Solitude in July 1956, where it came fourth, despite a number of problems. Its second outing, at the Berlin Grand Prix in September, was to be its last, as it veered off the circuit on the notorious AVUS banking and was destroyed in a ball of flames. Fortunately, Richard von Frankenberg was thrown free beforehand, counting himselflucky to be alive. Von Frankenberg called the car 'Mickey Mouse' because he said it perfectly described the handling and braking! However, valuable lessons were learnt, thanks to the car's unique body and suspension designs ...



Visit Veloce on the web – www.velocebooks.com Special offers • Complete automotive book list • Newsletter • New book news • Gift vouchers

### VI

# 1957

Porsche finisher in Buenos Aires. As it happens, it was a poor showing for the Stuttgart maker, as only three 550As were entered, with one coming last and the remaining vehicle succumbing to gearbox maladies. At least Porsche was well represented at Sebring in March, with a Class one-two for private 550As, which certainly made up for the loss of the works-supported Herrmann/McAfee car towards the end of the race.

As the Mille Miglia approached, beginning 12 May 1957, the previous year's winner, Eugenio Castellotti, was killed whilst testing at Modena, and never got the chance to repeat his 1956 feat. Maglioli took fifth overall with a 550A (only 47 minutes behind the winning Ferrari of Taruffi), and a Class win in the 1500cc Sports category. In addition, the 356 of Strahle/Linge came away with a Class win in the 1600cc GT listing, driving one of dozens of 356s on the event. Unfortunately, more deaths on this classic race sealed its fate, and it never did return to the international calendar.

It was about this time that Edgar Barth, the fast AWE (EMW) man, joined the Porsche camp, making his debut at the Nürburgring 1000km Race. The Monza record car (a 356 Speedster) was there, as was a new Porsche racer – the 718 RSK prototype, which was brought out for the practice session to

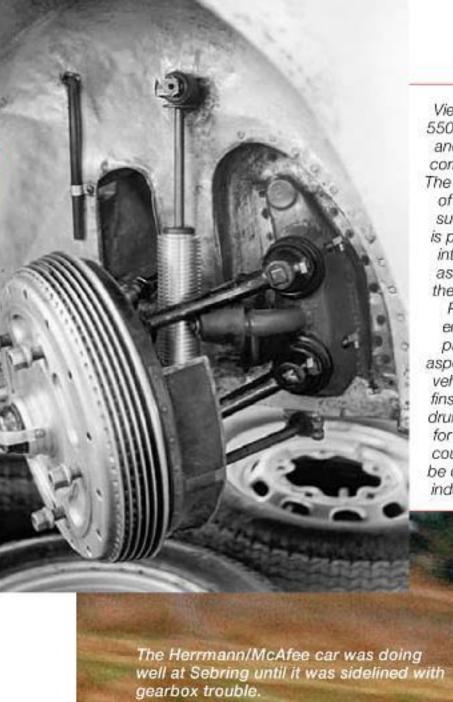
give the public its first glimpse of the car. In the race itself, there was a Class win for Maglioli and Barth, the result justifying Von Hanstein's enthusiasm for his new driver. Barth would go on to be an important figure in the development of the Stuttgart company, his son, Jurgen, carrying on the family tradition in later years.

### The 718 RSK

Work on the Type 718 prototype began during the winter of 1956, in the lull before the 1957 season. Built around a modified 550A (RS) spaceframe, it featured a new front suspension, and revised steering and braking systems, the latter incorporating larger front drums with elegant fins to dissipate heat in a more efficient manner. A novel idea was to integrate the oil cooler

Cockoit and view through the offside inspection hatch of a freshly completed 550A. The two hatches. one on each side, allowed access to the oil reservoir (seen here) and Weber twin-choke carburettors. with the electrical system vaguely accessible for double-jointed engineers ...





Views of the 550A's engine and chassis components. The detail shot of the front suspension is particularly interesting, as it shows the attention Porsche engineers paid to all aspects of the vehicle - the fins for brake drum cooling, for instance, could readily be classed as industrial art.



Maglioli on the Mille Miglia.





The 718 RSK making its debut at the Nürburgring on 26 May 1957. The car was not raced, but, during practice (where it ran as a T-car), it was tested extensively on this demanding course by Umberto Maglioli and Arthur Rosenhammer.

Sting in the tail of a 550A spotted at the Nürburgring.

The
Maglioli/
Barth 550A
leading
the De
Beaufort/
Liebl car in
Germany.



Von Frankenberg in action at the Nürburgring.



The 718 RSK prototype at Le Mans in 1957 before an accident quickly extinguished its challenge. Note the fins on the tail fitted for the French classic, while various configurations were tried for the screen.

into the underside of the front compartment lid, thus giving the stylists more freedom with nose design. The new spaceframe and changes to the vehicle's cooling and suspension allowed Wilhelm Hild and his men to reduce the car's cowl height by 120mm (4.7in), and also make a lighter yet more rigid structure to allow engineers to provide drivers with an accurate chassis set-up and ensure consistent handling. It was at this point that the new Porsche racer became known as the RSK.

From a styling point of view, the 718 RSK followed 645 practice, with a lower, more rounded nose that looked distinctly exotic with its faired-in headlights, combined with a curved tail that sloped steeply downward over the exhaust system, although overhang was reduced at both front and rear compared to the infamous 'Mickey Mouse' car. The body was crafted mainly in aluminium, with only the front lid in steel. As with the 550 series, wheelbase was kept at 2100mm (82.7in), while the track was 1290mm (50.8in) up front, and 1250mm (49.2in) at the rear.

Like the 550A, engine access was via inspection hatches to each side (with four louvres initially, increased to five for cars built in 1958) for minor, routine jobs, otherwise the rear panel (with its distinctive hump to clear the 547/3 power unit, and a pair of grilles at the back to draw air into the engine bay) had to be removed as a formed section. Inside, the cockpit was far tighter than before, and the dashboard lost its speedometer, proving that the car was never really meant for fast road use – it was a pure racer with everything pared to the bare minimum.

### The season continues

At the 1957 Le Mans 24-hour Race, out of six starters only one Porsche finished, and that was a private entry. Driven by Ed Hugus and Count de Beaufort, the 550A came in in eighth place and won the 1500cc Class. The only other point of interest was the appearance of the 718 RSK (chassis 718-001), driven by Umberto Maglioli and Edgar Barth. The car, being 12kg (26lb) lighter and having larger brakes than the 550A, was said to be very quick before it retired halfway through this classic race.

Meanwhile, the smattering of Spyders seen in Sweden were unable to compete in the 1000km event, which counted as the

Claude Storez being chased by a Ferrari at Le Mans in 1957. The little Porsche ran out of fuel close to the end, but at least Ed Hugus' private entry took Class honours for the Stuttgart marque.







The Ed Hugus 550A at the end of its French excursion.

Delightful period shots of 550s being prepared and raced in the States. The racing picture shows Ken Miles holding off a Maserati. sixth round of the World Championship. Interestingly, though, the week before, Porsche decided to enter three 550As in the German GP held at the Nürburgring. The Spyders looked odd in amongst proper Formula One machines, but came away with a Formula Two victory, nonetheless.

Cancellation of the Tourist Trophy in September meant a long haul to Caracas for the final event in the World Championship calendar. Von Hanstein and Barth took a 1.6 litre 550A to a highly respectable fifth place, trailing only bigger-engined Ferraris, and beating some tough competition along the way. Regular 550As gave the Stuttgart marque plenty of reasons to be cheerful, too. However, apart from a single appearance in the 1958 season opener, this was to be the last year for the works 550As.





3 M Hawthorn/M Trintignant

Ken Miles again, this time campaigning a 550A at Santa Barbara, California.

This 1000km race handed Ferrari the title, but, with a threelitre limit set for sports-racers for 1958, this promised some good, close racing across all the Classes. As a result, as 1957 drew to a close, Wilhelm Hild concentrated on preparing the 718 RSK as a works car for the following season.

The experimental front suspension was dispensed with, Hild reverting to a 550A-type design to improve high speed stability, while the rear suspension was revised completely to resemble that found on the racing Mercedes of the period, doing away with torsion bars in favour of a pair of Watts linkages and coil springs. A new transaxle was introduced at the same time, as well as new driveshafts, mated, as always, to a four-cam Carrera engine. Bigger Weber carburettors resulted in an increase in power, the

1.5 litre 547/3 now delivering 142bhp, along with 108lbft of torque. Experiments had been carried out with 'Jet Cooling' (introduced by Fletcher Aviation on its Jeep) as a possible replacement for the power-sapping, dualentry fan, but it was not adopted, mainly because of space and noise considerations.

### The European Hillclimb Championship

The European Hillclimb Championship was revived in 1957, with a maximum engine capacity of two litres. Porsche used the championship to test bigger engines based on the Type 547 in preparation for the RSK. At the first round on Mont Ventoux, Barth and Maglioli competed in a 1.5 litre Spyder. In the second round at Freiburg, a 1.6 Spyder was seen for the first time with improved torque and 148bhp on tap (thanks to an increase in the bore measurement, up from 85mm to 87.5mm, giving a larger 1587cc capacity), while Gino Munaron drove the 718 prototype. This unit (known as the 547/4) was followed by the 547/5, which took the bore out to 90mm to give 1679cc. Making its debut at the fourth round of the series, at Lenzerheide in Switzerland, was a 1.7 Spyder for Von Trips and the prototype RSK for Von Frankenberg. These power units would later appear in a number of works'-backed machines in various events. The hillclimb championship was ultimately won by a Maserati driver in 1957, leaving Von

WORLD SPORTS CAR CHAMPIONSHIP

	World Spo	RTS CAR CHAMPIONS	HIP
Buei	nos Aires 1000km (20 January)	14	
1	M Gregory/E Castellotti/L Musso	Ferrari 290MM	98 laps
2	J Behra/C Menditeguy/S Moss	Maserati 300S	98 laps
3	A de Portago	Ferrari 290MM	98 laps
8	J Juhan/A von Dory	Porsche 550A	86 laps/2nd in Class
12	C Delfosse/E Tornquist	Porsche 550A	65 laps/3rd in Class
Sebi	ring 12-hour Race (24 March)	114	
1	J-M Fangio/J Behra	Maserati 450S	197 laps
2	S Moss/H Schell	Maserati 300S	195 laps
3	M Hawthorn/I Bueb	Jaguar D-type	193 laps
8	A Bunker/C Wallace	Porsche 550A	185 laps/1st in Class
9	J-P Kunstle/K Miles	Porsche 550A	184 laps/2nd in Class
Mille	e Miglia (12 May)		
1.	P Taruffi	Ferrari 315S	10h 27m 47s
2	W von Trips	Ferrari 315S	10h 30m 48s
3	O Gendebien/J Wascher	Ferrari 250GT	10h 35m 53s
5	U Maglioli	Porsche 550A	11h 14m 07s/1st in Class
11	H Schiller	Porsche 550A	11h 54m 24s/2nd in Class
27	H von Saucken/G Bialas	Porsche 550	12h 54m 05s/3rd in Class
Nürl	burgring 1000km (26 May)		
1	T Brooks/N Cunningham-Reid	Aston Martin DBR1	7h 33m 38s
2	P Collins/O Gendebien	Ferrari 335S	7h 37m 52s

Ferrari 315S

continued over ...

7h 39m 27s

### WORLD SPORTS CAR CHAMPIONSHIP

4	U Maglioli/E Barth	Porsche 550A	7h 47m 17s/1st in Class
7	R von Frankenberg/H Schulze	Porsche 550A	7h 56m 55s/2nd in Class
12	H Schiller/A Heuberger	Porsche 550A	2 laps down/3rd in Class

### Le Mans 24-hour Race (23 June)

1	I Bueb/R Flockhart	Jaguar D-type	327 laps
2	N Sanderson/J Lawrence	Jaguar D-type	319 laps
3	J Lucas/'Jean-Marie'	Jaguar D-type	317 laps
8	E Hugus/C G de Beaufort	Porsche 550A	286 laps/1st in Class

### Swedish GP (11 August)

1	J Behra/S Moss	Maserati 450S	145 laps	
2	P Hill/P Collins	Ferrari 335S	144 laps	
3	J Bonnier/G Scarlatti	Maserati 300S	138 laps	

#### Venezuelan GP (3 November)

P Hill/P Collins	E 10055	1 (C) (C) (V)
r militr collins	Ferrari 335S	101 laps
L Musso/M Hawthorn	Ferrari 335S	100 laps
W von Trips/W Seidel	Ferrari 250TR	99 laps
H von Hanstein/E Barth	Porsche 550A	91 laps/1st in Class
E Hugus/E Crawford	Porsche 550A	90 laps/1st in Class
A Bunker/C G de Beaufort	Porsche 550A	88 laps/2nd in Class
	L Musso/M Hawthorn W von Trips/W Seidel H von Hanstein/E Barth E Hugus/E Crawford	L Musso/M Hawthorn Ferrari 335S W von Trips/W Seidel Ferrari 250TR H von Hanstein/E Barth Porsche 550A E Hugus/E Crawford Porsche 550A



Wolfgang von Trips on the Lenzerheide hillclimb, where he tested the 1.7 litre Carrera engine, and beat Von Frankenberg to give Porsche a one-two finish.



Edgar Barth (on the bridge) in the German Grand Prix at the Nürburgring, with the private F1 Maserati of Hans Herrmann in his sights, and Roy Salvadori's F2 Cooper behind. The Formula Two category was won by Barth, beating a Cooper into second place, before De Beaufort came home in a second Porsche to complete the F2 podium on a scorching hot day.

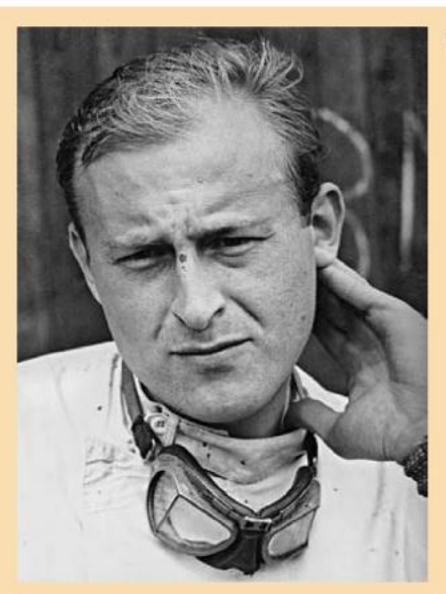
Trips with only a silver medal to show for his two wins out of six events. Herrmann was third, but, by now, was representing Borgward in this exciting motorsport arena.

### The F2 campaign

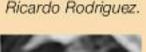
Formula Two also returned in 1957 after a couple of seasons in the wilderness, though there was no officially recognized championship anywhere other than in Britain. New regulations dictated that 1.5 litre NA engines running on pump fuel would form the basis for the Formula Two cars of 1957. Von Hanstein considered that the RSK would be suitable (it actually needed very little modification), and entered Porsche for the 1957 Reims F2 race, held in July.

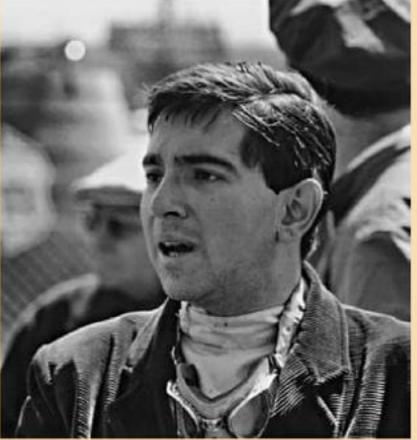
Unfortunately, the RSK never made it to Reims, as it was damaged by Umberto Maglioli at Le Mans three weeks earlier after hitting Tony Brooks' Aston Martin; in any case, it was deemed to need further modifications to make it more competitive – it was used in hillclimb events only for the rest of the season. Instead, Christian Goethals was left to represent the marque by entering a privately-owned 550 Spyder (unlike F1, open wheels were not required by F2 regulations). After qualifying eighth, he moved up three places to finish fifth overall in the race.

Two 550A Spyders were entered by the works for the Nürburgring Grand Prix event, driven by Maglioli and Edgar Barth. The latter – despite being relatively new in the Porsche camp (he was still contracted to Borgward at the time) – took advantage of his knowledge of the course and won the F2 Class by a full lap. Count Carel Godin de Beaufort took third in Class in his private 550A Spyder, whilst Maglioli failed to finish. Maglioli was badly injured in a car crash shortly after, bringing his season to an end.



Carel de Beaufort.





# 1958

n January 1958, Stirling Moss and Jean Behra came third overall (first in Class) in the Buenos Aires 1000km Race, Moss should have driven a Maserati, but the car was damaged before the race, so Von Hanstein stepped aside and offered him a drive in a 1.6 litre 550A. Barth also won his Class in a regular 550A. It was the last time that the company relied solely on the old model, as, by early 1958, the definitive 718 RSK had arrived.

### The RSK era

At the 1958 Sebring 12-hour event, the Schell/Seidel pairing came third overall in their 718 RSK, just seven laps down on the winners, while the 1.6 litre Behra/Barth works machine was sidelined with gearbox problems. The 356A Carrera of Von Hanstein and Linge put up an unbelievable performance to take tenth overall (and

Stirling Moss getting to grips with the 550A in Argentina.

An interesting advert placed in the February 1958 issue of MotorSport by Frazer-Nash in the UK.

Class honours), which did Porsche's reputation in the States no harm at all.

Jean Behra and Giorgio Scarlatti came second on the Targa Florio, winning their Class in the process. They used a finned 1.5 litre 718 RSK: fins had first been seen at Le Mans in 1957. and, while some drivers

Even if you cannot have a Spyder you COULD have one of our used Porsches.



1957 1600 Super Cabridlet, 3,600 miles, silver 1957 1600 Standard Cabriolet, 10,000 miles, Meissen --. £2,000

1956 1600 Standard Flood-head Coupe, 17,000 miles, 41,925

1955 ISOO Super Fixed-head Coupe, 10,000 miles, CHRECT TO ALMS INSOLDS

N.B.—if, perhaps, you are an enchusiast for 8-cyls, or 3-cyls, we shall be pleased to tell you what used 8,M,W, and D.K.W, cars we have available.

Sole Concessionaires for PORSCHE, B.M.W. and D.K.W. Care ISLEWORTH, MIDDLESEX.

HOUmlow 6011



One of the works RSKs at Sebring.

Behra finished the Targa in second place on his first attempt at this Sicilian classic. One magazine called it a moral victory for Porsche.

Ricardo Rodriguez in action at Avandaro in his native Mexico.







Poster released after the 1958
Targa Florio, which also makes the most of Porsche's success in the European Hillclimb
Championship.

An accident with the third RSK forced Porsche to use a 550A at the Nürburgring, but this actually finished ahead of the only RSK left in the running – the other dropped out with engine trouble. Fins were found to be a necessity on the RSK at this demanding German circuit, but were hardly seen during the remainder of the season. Note the new access panel, resembling that used on the very first 550s.

swore by them, others swore at them! Only 15 cars managed to finish, Scarlatti joining Barth in his works 550A – one of more than 20 entries that failed to be classified in the end.

The Nürburgring hosted the fourth round of the World Championship, but the finned Behra/Barth RSK dropped a valve, so Barth joined Von Frankenberg and De Beaufort in the closing stages to help push their 550A into sixth overall, one place ahead of the Schell/Frere RSK.

At the 1958 Le Mans 24-hour Race, Behra and Herrmann took their 1.6 litre 718 RSK to third place overall and victory in the two-litre Class – the sister car was the only Porsche to retire. The 1.5 litre 718 RSK of Edgar Barth and Paul Frere came fourth – again, first in Class – whilst the two 550As entered took fifth and tenth places. By the way, the mysterious 'Franc' who appears

The 550A that did so well at the Nürburgring, with Linge, Strahle and Von Frankenberg inspecting mementos from the 1000km epic.





A works RSK at Le Mans in 1958. This is the 1.6 car that Behra and Herrmann took to third place overall.

The Behra/Barth RSK in action during the Tourist Trophy race.





A minor race at Zeltweg Airfield in Austria, August 1958. Emst Vogel is nearest the camera in a 550A, with Edgar Barth (in the middle), and Jean Behra driving the 718 RSKs. The event was won by Von Trips, also driving a Porsche, with Behra second and Barth third.

in the results table later on, was an alias used by racer Jacques Dewez.

The Tourist Trophy returned to finish off the season, but this time the historic event was held at the Goodwood circuit in southern England. Only two Porsches were entered, so their onetwo in Class was a notable achievement – almost as impressive as the third place the Stuttgart marque garnered after all the

Dashboard of Barth's RSK that he used for the Freiburg-Schauinsland hillclimb in July.



### WORLD SPORTS CAR CHAMPIONSHIP

1	P Hill/P Collins	Ferrari 250TR	106 laps
2	W von Trips/O Gendebien	Ferrari 250TR	106 laps
3	S Moss/J Behra	Porsche 550A	106 laps/1st in Class
5	E Barth/R Mieres	Porsche 550A	99 laps/1st in Class
10	H Wiesse/J Juhan	Porsche 550A	94 laps/3rd in Class

### Sebring 12-hour Race (22 March)

1	P Hill/P Collins	Ferrari 250TR	200 laps
2	L Musso/O Gendebien	Ferrari 250TR	199 laps
3	H Schell/W Seidel	Porsche 718 RSK	193 laps/1st in Class
25	C Wallace/B Holbert	Porsche 550A	153 laps/2nd in Class

### Targa Florio (11 May)

1	L Musso/ O Gendebien	Ferrari 250TR	10h 37m 58s
2	J Behra/G Scarlatti	Porsche 718 RSK	10h 43m 38s/1st in Class
3	W von Trips/M Hawthorn	Ferrari 250TR	10h 44m 29s

### Nürburgring 1000km (1 June)

1	S Moss/J Brabham	Aston Martin DBR1	7h 23m 33s
2	M Hawthorn/P Collins	Ferrari 250TR	7h 27m 17s
3	W von Trips/O Gendebien	Ferrari 250TR	7h 33m 15s
6	R von Frankenberg/ C G de Beaufort	Porsche 550A	3 laps down/1st in Class
7	H Schell/P Frere	Porsche 718 RSK	3 laps down/2nd in Class

### Le Mans 24-hour Race (22 June)

1	P Hill/O Gendebien	Ferrari 250TR	305 laps
2	G Whitehead/P Whitehead	Aston Martin DB3S	293 laps
3	J Behra/H Herrmann	Porsche 718 RSK	291 laps/1st in Class
4	P Frere/E Barth	Porsche 718 RSK	290 laps/1st in Class
5	C G de Beaufort/H Linge	Porsche 550A	288 laps/2nd in Class
10	J Kerguen/'Franc'	Porsche 550A	254 laps/3rd in Class

### Tourist Trophy (13 September)

1	S Moss/T Brooks	Aston Martin DBR1	148 laps
2	R Salvadori/J Brabham	Aston Martin DBR1	148 laps
3	C Shelby/S Lewis-Evans	Aston Martin DBR1	148 laps
4	J Behra/E Barth	Porsche 718 RSK	144 laps/1st in Class
8	C G de Beaufort/C Heins	Porsche 550A	135 laps/2nd in Class

Behra attacking the mountain at Ollon-Villars – the final round of the hillclimbing season for the big-name drivers.



Von Trips at the Gaisberg hillclimb in August. Note the auxiliary oil cooler arrangement of the works cars, with a scoop under the door taking air to the cooler, while warm air was directed through the duct just in front of the wheel.





Poster declaring Von Trips European Hillclimb Champion.

Eberhard Mahle.

Jean Behra.

year's points were added together. Porsche was beaten only by Ferrari and Aston Martin, both makers using machinery with far greater engine capacities.

Of the non-championship sports car races, Behra, who was later declared German Sports Car Champion (1500 Class), won the three-hour event at Rouen in June, the race attached to the German Grand Prix in the first week of August, and the Avusrennen in September. Christian Heins and Paul Strahle won the Messina 10-hour Race in Sicily, and there was a Porsche one-two-three at Zeltweg.

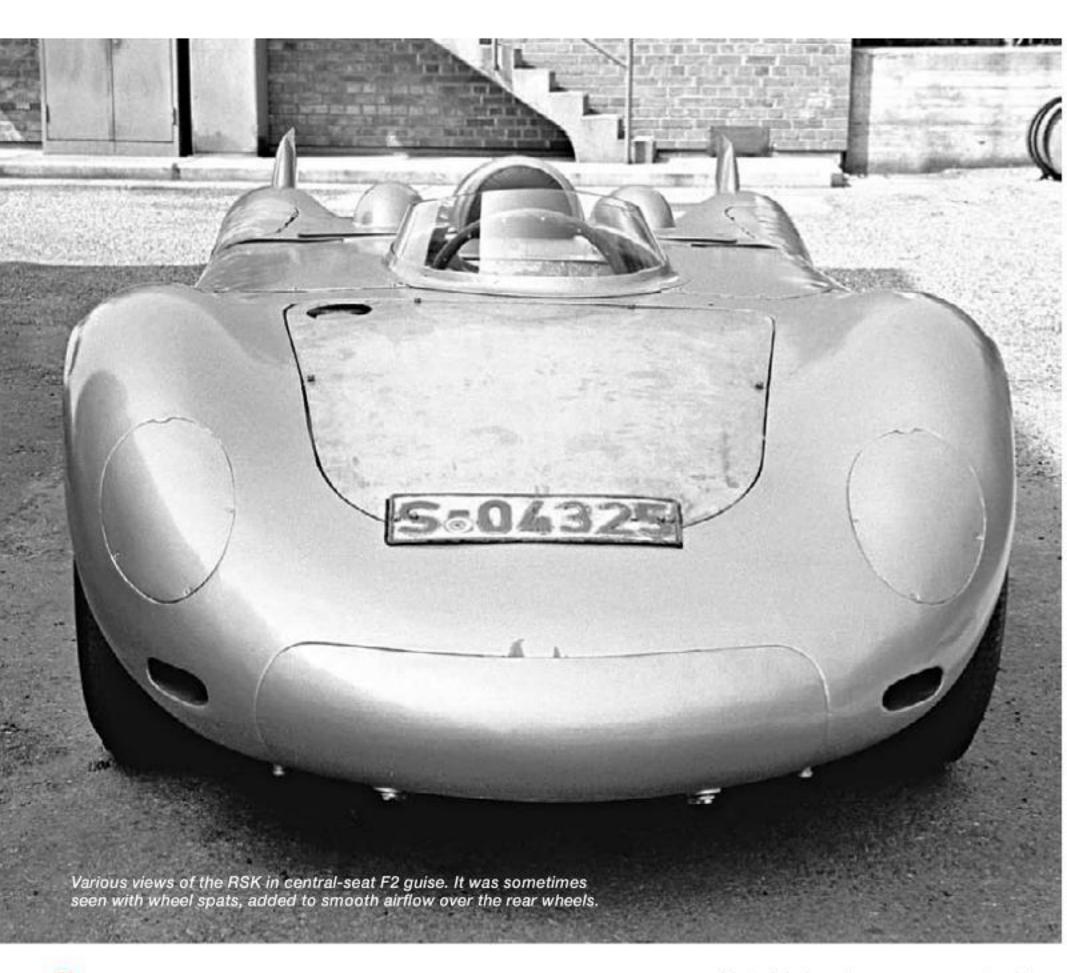
Count Wolfgang Berghe von Trips started racing private Porsches before moving up to a works drive. Born in 1928, his promising career was cut short in 1961 when his Ferrari F1 car crashed – he died, taking 14 spectators with him. However, during 1958, when entrants were restricted to 1.5 litre machines, he won three of the six hillclimbs in the series outright for Porsche, and was duly declared European Hillclimb Champion.

### The F2 programme

As early as 1953, Ferry Porsche had hinted that Porsche might become involved with Grand Prix racing. In October 1958, the CSI announced that Formula One would run with 1.5 litre cars with a minimum weight of 500kg (1100lb) for 1961. Naturally, this suited Porsche down to the ground, as the engine size was already at its production capacity and the weight would not present any problems.

In the meantime, Porsche continued to field the RSK in Formula Two races. For the 1958 event at Reims, Von Hanstein entered the ex-Barth/Frere RSK that had won its Class at Le Mans. It featured an updated rear suspension, and a central driving seat and steering wheel. With tail fins, an aluminium tonneau cover topped by a wraparound screen, a fresh panel over the engine, and rear wheel spats, it was extremely aerodynamic and, in order to save weight, the spare wheel and lights had been removed. Jean Behra drove the car and won quite easily from Peter Collins in a Ferrari Dino 156, with one of the ubiquitous Coopers coming home in third.

The car was out again (albeitslightly modified) for the German Grand Prix at the Nürburgring, with Barth taking it to sixth overall and second in Class after qualifying it (minus tail fins and wheel spats) in the middle of the wide fourth row. It stayed in Germany for the Berlin Grand Prix at AVUS, held in late September. Masten Gregory drove the machine on this occasion, winning his heat, and then went on to win the F2 Class. The fastest time recorded at the event was, somewhat ironically, that set by Jean Behra in his rather more standard RSK (1h 36m 02s against the American's 1h 36m 52s!) As such, the Frenchman won the race overall, despite having what should have been an inferior mount!





### VIII

# 1959

orgward officially withdrew from racing in the early part of 1959, so Porsche won the European Hillclimb Championship easily through ex-Borgward star Edgar Barth, who took three overall victories in five rounds to clinch the title, with other Porsche exponents second and third. Apart from Barth, Borgward also had Jo Bonnier and Hans Herrmann in the 1958 team, but the company was in serious financial trouble and soon afterward was sold to the government. Bonnier followed Barth's lead and joined the Stuttgart maker, while Herrmann also became involved with Porsche, although, in his case, it was more like a return home after a brief excursion. The German would have a full season with Porsche again in 1960.

### Competition in 1959

The Sesslar/Holbert pairing took a Class victory in the 1959 Sebring 12-hour Race with a 1.5 litre 'customer' car, actually finishing just two laps down on the 1.6 litre works car driven by Von Trips and Bonnier, which placed them third overall. Double wishbones and coil springs were used at the rear on the majority of works cars for 1959, incidentally, and a new, lightweight transaxle was also introduced. By now, the 1.5 litre powerplant was producing around 150bhp at 7800rpm, while the 1.6 litre version (547/4) put out 160bhp, and the rarely seen 1.7 litre Type 547/5 lump gave 170bhp – 100bhp per litre in a normally-aspirated engine being quite something for the time. Only the Von Dory RSK failed to finish in Sebring, but, shortly after, Von Dory and Mieres won at Daytona in a non-championship 800km race, which must have more than made up for this disappointment.

The dream team of Von Trips and Bonnier in a 1.6 litre RSK failed to deliver the goods in Sicily due to a broken rear suspension, although Bonnier, in particular, set a blistering pace that even the big Ferraris couldn't match. The Herrmann/Maglioli RSK also dropped out, this time due to transmission trouble. It's interesting to reflect that the German ace stayed with his stranded car for 13 hours to keep it safe from unsavoury characters, which begs the question: would today's Grand Prix drivers be so loyal to their employers?

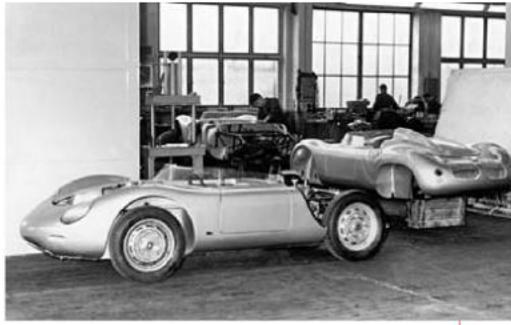
Despite these setbacks, though, Edgar Barth and Wolfgang Seidel gave Porsche its second victory in the classic event, averaging 57.1mph (91.3kph) for the course with their 1.5 litre



The 'customer' version of the 718 RSK. A total of 37 of these 575kg/1265lb cars were built in 1959, many of them going to America, where they sold for around \$8000 apiece – not that much different to the DM 30,000 being asked for the cars in Germany. Chassis numbers for the RSK series, including factory cars, ran from 718-001 to 718-039.

RSK (Bonnier had set fastest lap when he was still running). Behind them was a swarm of Porsche drivers – Mahle/Strahle/

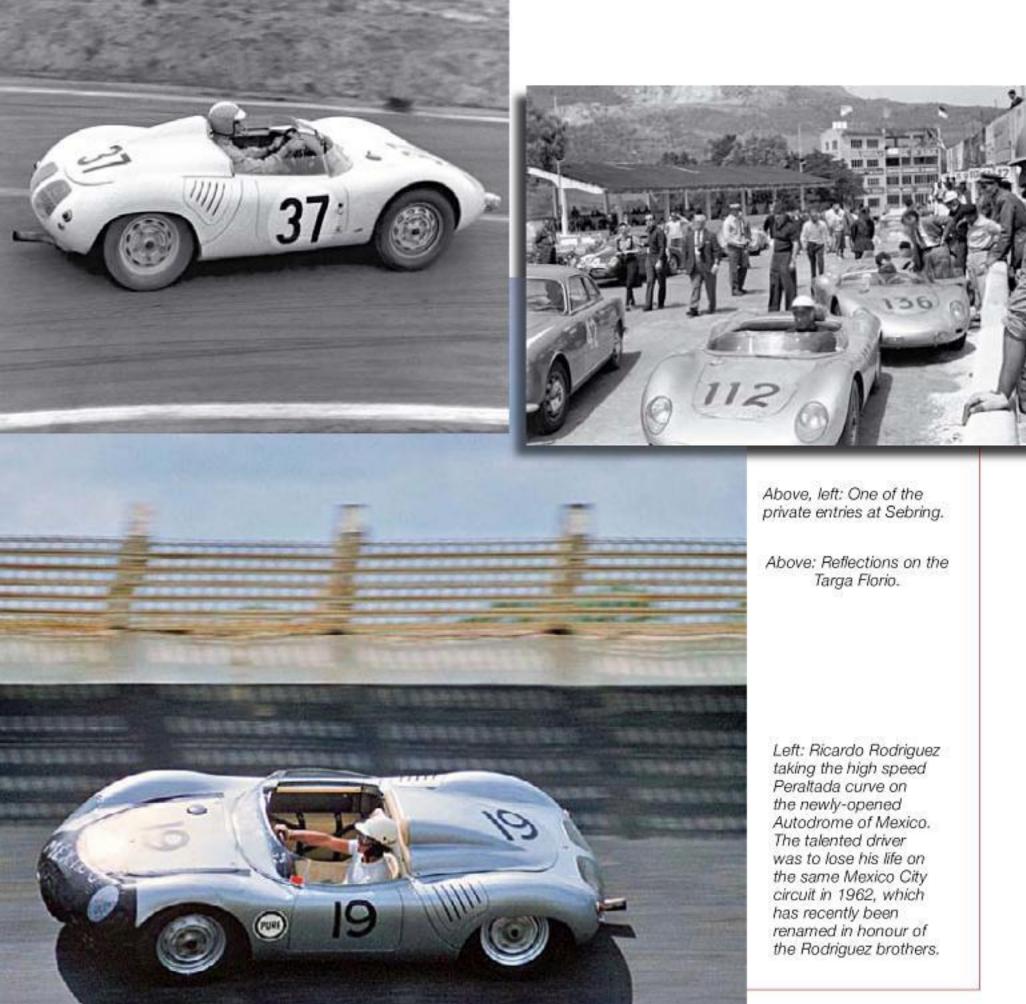




The 'customer' RSK in various stages of the build process, from basic spaceframe all the way through to completed vehicle. These 1.5 litre machines had a more conventional oil cooling system, and also featured a built-in rollover bar for enhanced safety. Note the coachbuilder's badge on the base of the front wing. As with the 550s, the aluminium bodies were produced by Wendler.









driver had won was in 1924, when the Mercedes-Benz that took the flag had been modified by Professor Porsche.

The Targa was the highlight in a season of mixed fortunes, the Stuttgart firm's first overall win in a round of the World Sports Car Championship, but, before the disasters, the Nürburgring 1000km Race at least saw Porsches achieve a one-two finish in two of the sports car categories: Maglioli and Herrmann won the two-litre Class with their 1.6 litre RSK, while Walter and Heuberger took

The Goethals/Romain car had a short run at the Nürburgring, but Goethals kept on plugging away. The Belgian also entered a number of Formula races.

1.5 litre Class honours with a private RSK, actually beating the works car of Von Trips/Bonnier.

At Le Mans, all six Porsches entered (five 718 RSKs and a single 550A) failed to finish. A different camshaft had been tried on the works cars, but, obviously, the advantages on paper were heavily outweighed by the disadvantages in reality. Back to the drawing board ...

With four of the five rounds completed, there was a large gap before the final event in the World Championship calendar. Being a man that loved his racing, Jean Behra entered the sports car race during the German Grand Prix weekend at AVUS, but died at the wheel of his RSK. Born in 1921, his memorable racing career had spanned about a decade. Fortunately, De Beaufort was luckier than Behra, for, having gone over the AVUS banking as well, his car landed on its wheels and, amazingly, continued in the race! Hans Herrmann was lucky to survive an horrific crash in the BRM he drove in the German Grand Prix the next day, bringing an awful two days to a close.

The TT at Goodwood was originally scheduled to run for four hours, but, in order to make it qualify as a round of the World Championship, had to be extended to six. It turned out to be an eventful race, to say the least. Wearing number 22, the 1.6 litre RSK of Von Trips and Bonnier led for a while, but the larger-engined Aston finally overhauled it. The Maglioli/Barth RSK finished a long way down the field, whilst the third factory car (shared by Hans Herrmann and Chris Bristow) crashed out.

With wins in Germany, France and England, the Aston Martin équipe won the World Sports Car Championship title, with Ferrari second and Porsche third, just three points behind the British victors. At least the Swiss driver, Heini Walter, was

declared the German Sports Car Champion (1500 Class) in 1959, after campaigning a private RSK. RSKs also had a superb year in SCCA racing, as well as other events, with Ken Miles (winner of the US season opener at Pomona in California), Jack McAfee, Don Sesslar, and Bob Holbert excellent representatives for the Porsche marque.

### Porsche single-seaters

Although contracted to Ferrari for 1959, and so unable to drive the car whenever there was a clash of interests, Jean Behra still commissioned his own Porsche-based F2 single-seater. Built around a Valerio Colotti-designed spaceframe chassis, Colotti (an ex-Maserati man) drew up the new design to accept the

### WORLD SPORTS CAR CHAMPIONSHIP

Sebring 12-hour Race (21 March)			
1	D Gurney/C Daigh	Ferrari 250TR	188 laps
2	J Behra/C Allison	Ferrari 250TR	187 laps
3	W von Trips/J Bonnier	Porsche 718 RSK	184 laps/1st in Class
4	B Holbert/D Sesslar	Porsche 718 RSK	182 laps/1st in Class
5	J Fitch/E Barth	Porsche 718 RSK	181 laps/2nd in Class
8	J McAfee/K Miles	Porsche 718 RSK	173 laps/3rd in Class

2 E Mahle/P Strahle/H Linge	Daniele CCOA	
2 c marileri strameri enige	Porsche 550A	11h 22m 21s/2nd in Class
3 H von Hanstein/A Pucci	Porsche 356A Carrera	11h 31m 44s/1st in Class

Targa Florio (24 May)

Le Mans 24-hour Race (21 June)

Nürburgring 1000km (7 June)			
1	S Moss/J Fairman	Aston Martin DBR1	7h 33m 18s
2	O Gendebien/P Hill	Ferrari 250TR	7h 33m 59s
3	T Brooks/J Behra	Ferrari 250TR	7h 36m 45s
4	U Maglioli/H Herrmann	Porsche 718 RSK	7h 40m 57s/1st in Class
6	H Walter/A Heuberger	Porsche 718 RSK	2 laps down/1st in Class
7	W von Trips/J Bonnier	Porsche 718 RSK	3 laps down/2nd in Class

Le Maris 24-riodi nace (21 Julie)			
1	R Salvadori/C Shelby	Aston Martin DBR1	324 laps
2	M Trintignant/P Frere	Aston Martin DBR1	323 laps
3	J Blaton/L Dernier	Ferrari 250GT	298 laps
Tourist Trophy (5 September)			
			1

rounse froping to september,			
S Moss/J Fairman/C Shelby	Aston Martin DBR1	224 laps	
W von Trips/J Bonnier	Porsche 718 RSK	223 laps/1st in Class	
O Gendebien/T Brooks	Ferrari 250TR	223 laps	
U Maglioli/E Barth	Porsche 718 RSK	197 laps/2nd in Class	
	S Moss/J Fairman/C Shelby W von Trips/J Bonnier O Gendebien/T Brooks U Maglioli/E Barth	S Moss/J Fairman/C Shelby Aston Martin DBR1 W von Trips/J Bonnier Porsche 718 RSK O Gendebien/T Brooks Ferrari 250TR	

mechanical components from a two-seater 718 RSK. As Behra was a Frenchman, he had the 'Behra-Porsche' painted in a traditional French racing blue.

At the same time, a programme was instigated so that Porsche would have an open-wheeled F2 car for 1959, using it as a test-bed for the proposed F1 machine for 1961. Wilhelm Hild, Helmuth Bott and Hans Mezger developed the car alongside the 'customer' RSK, and even gave it a Type 718/2 designation rather than its own distinct project number.

It was interesting to see other Grand Prix teams advocating what Porsche had always believed – the engine is better off at the back, just behind the driver. The Cooper F1 car of 1957 was the final proof, and prompted more to follow. However, it was not

# LUCHAFEN L.IN

75



Richard von Frankenberg won the OASC Linz race on 5 July, his 1.6 litre 550A beating the RSK of Emst Vogel and the 1.5 litre 550A of Milivoje Bozic. Vogel got his revenge later in the year at the Graz Airfield. Incidentally, the 550A and Von Frankenberg were also involved in a record-breaking session conducted by Paul Strahle and Herbert Linge.

As with the loss of Peter Collins, and then Mike Hawthorn, the death of Jean Behra was felt by everyone in motorsport. The main characters in this 1958 picture are Huschke von Hanstein (white jumper), Wolfgang von Trips (with camera), Jean Behra (in car), and Edgar Barth, seen on the far right.



Porsche's first proper single-seater – the 718/2 F2 car of 1959 vintage.



quite as melodious as an Italian thoroughbred, with one racer likening the exhaust note of the Porsche Formula racing cars to "ducks fartin' through long grass!"

With Sebring behind it, Porsche concentrated on the singleseater, and had it running by April 1959. Running modifications found on the works RSKs were employed, along with a new transmission, but otherwise the car was very much the same as the 1.5 litre Type 718 under the skin, save for the new narrow chassis frame and detail changes that this necessitated. Testing on the Malmsheim Airfield in the presence of Ferry Porsche, and then at the Nürburgring in the first week of May, proved successful, and the car was entered for the 1959 Monaco Grand Prix, where the Behra-Porsche was also making its debut.

With Behra contracted to drive for Ferrari, Maria Teresa de Filippis handled the Behra-Porsche in Monaco, but failed to qualify it. As for the works F2 Porsche, this was sent unpainted to Monte Carlo (there simply had not been time to spray the body), with Von Trips assigned to drive it. He did well in qualifying (getting in amongst the F1 cars) though, unfortunately, crashed the vehicle on the second lap of the race, taking out the Lotus of Bruce Halford and Ferrari of Cliff Allison in the process.

In the middle of the season, Behra at last had a chance to



Von Trips in action piloting the 718/2 in Monte Carlo.

drive his own machine in anger. Wolfgang Seidel, Carel Godin de Beaufort, and Christian Goethals all had RSKs that were capable of being converted to central cockpit models, and these were entered for the 1959 Pau Grand Prix. Also, there was the Behra-Porsche, which qualified on the front row (this time driven by Behra himself), and a conventional RSK driven by Harry Schell. After leading briefly, Behra could muster fifth place only at the end and Schell finished eighth – the only Porsche finishers.

For the Reims event, the factory's single-seater was repaired following its Monaco debacle. Jo Bonnier took third place, behind Stirling Moss (Cooper-Borgward) and the Behra-Porsche, driven on this occasion by Hans Herrmann. Interestingly, Von Trips managed fifth in a works RSK with central steering (chassis 718-007), finishing within a few seconds of the Cooper-Climax in fourth.



Maria Teresa de Filippis in the Behra-Porsche at the Monaco Grand Prix.

At the German Grand Prix held at the AVUS circuit. Behra - who, by now, had left the Ferrari camp - entered his Spyder for the sports car race on the day before the Grand Prix, and the Behra-Porsche for the main event. Sadly, he never got to drive his F2 car, as the Frenchman lost his life in the Spyder. As a sign of respect, the Porsche team withdrew its entries for the weekend and the Behra-Porsche eventually went to the Camoradi team.

Although officially a Formula One race. Carel Godin de Beaufort's RSK was allowed to make up the numbers on the grid for the Dutch Grand Prix, held at Zandvoort on 31 May. When the flag dropped and Jo Bonnier's BRM was declared the winner, De Beaufort was seven laps behind, but finished tenth nevertheless after several F1 retirements. At least De Beaufort won proper sports car races at Spa and Innsbruck during the year.

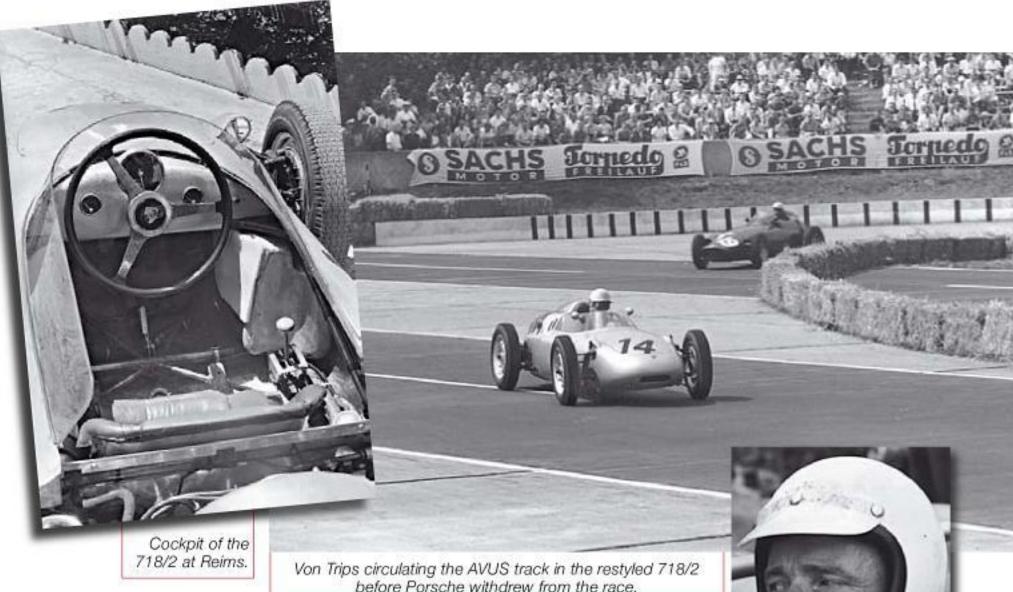
After the Behra-Porsche was passed to Lloyd Casner's équipe, it came 12th in the 1960 Argentine Grand Prix with Masten Gregory at the wheel. Later in the year, in July, it was seen during the practice session of the German Grand Prix, but Herrmann, its driver, later drove a works car instead. Fred Gamble took tenth at the 1960 Italian Grand Prix, but the Behra-Porsche's best days were well and truly behind it.

In the meantime, the works single-seater acquired better coachwork, aimed at improving its aerodynamics and the way

Hans Herrmann on his way to second place with the Behra-Porsche at Reims.







in which air was fed to the engine. The car also gained some paint for the first time in its career, but, after practice with Von Trips, it was withdrawn from the AVUS event as a sign of respect following Behra's fatal accident.

Jo Bonnier was sent to Brands Hatch in August, and finished fourth in the Kentish 100 event. Stirling Moss was impressed enough by the Stuttgart machine to test it at Goodwood a week later, with the result that Rob Walker was loaned a works F2 car for Moss' use for the whole of the 1960 season. The English maestro said: "The only bad things about that car were its gearchange and the way it looked!"



Heini Walter.



Edgar Barth.

## VIV

# 1960 E

erry Porsche once said: "Prior to a motor race a certain number of problems have to be solved because otherwise the other manufacturers would win. This impulse is exceedingly important for progress and particularly the quick progress of engineering. It should not be said that ours is an exceptional position because we only build cars that have a sporting tendency and which bear an obvious relationship to sporting success. We also design for other companies and our experience drawn from sports cars in this manner also bears fruit in other designs." In other words, use racing car technology to improve the road car, which was a statement of fact in Stuttgart, not the wishful prose of an advertising agency.

Even by its own standards, this was a remarkable year for Porsche, with Wilhelm Hild and his team of 20 men in the Competition Department working at full tilt in order to prepare a wide range of vehicles – new and old – for the works effort in the World Sports Car Championship, Formula Two, the European Hillclimb Championship, and the increasingly important Gran Turismo (GT) series, not to mention getting 'customer' cars ready for the many motorsport enthusiasts around the world eager to get their hands on the latest Porsche machinery.

### The RS60

The RS60 had a larger windscreen than the RSK to comply with new FIA regulations for 1960. The rules also stipulated that cockpits should be closer to road car standards, significantly wider (110mm/4.3in, in Porsche's case, requiring changes to the spaceframe), and accessible through larger doors, and that vehicles should have reasonable luggage space: after trying to make enough room under the front hood, a suitable compartment was later mounted above the gearbox at the back. Otherwise, the RS60 was essentially similar to the 718 from the previous year, except for the slightly longer wheelbase (increase of 100mm/3.9in to aid stability and improve handling), a subtle modification to the brakes, and the use of 4J x 15 wheels rather than the old-fashioned 16-inch rims of yore, the latter shod with crossply tyres of 5.50 section up front and 5.90 at the rear.

The batch of 'customer' cars that followed a run of four works machines as winter drew to a close justified the expense of developing the updated vehicle, putting money back in the pot



Plenty of interest for Porsche fans in all the major motorsport disciplines in 1960.

to fund the factory's competition exploits. Wendler continued to build the bodies, which played host to a 1.5 litre 547/3 engine, rated at 150bhp DIN, or a 1.6 litre 547/4 unit, the extra displacement releasing ten more horses. Both powerplants used Weber carburettors and a 9.8:1 compression ratio, incidentally. The 1.7 litre 547/5 lump, occasionally fielded by the works, was now pumping out 180bhp. These three capacities gave privateers and the factory team a number of options, as each event had different breaks in classes determined by engine size – in addition to the tiddlers, some specified 1500, others 1600, and, of course, 2000 and 3000. The bigger engine also allowed fitment of a larger fuel tank – a useful bonus on long-distance



Ferry Porsche's son, F A 'Butzi' Porsche (right), paying attention to detail whilst discussing the cockpit arrangement of the RS60, while Wilhelm Hild looks on behind him. Butzi would become a valuable asset in the styling studio, and ultimately established Porsche Design after leaving the family fold. Note the latest dual fuel tank arrangement up front, with a combined capacity of 80 litres (17.6 Imperial gallons) as standard, although 1.7 litre works cars were permitted to use a 100 litre (22 gallon) tank.

events. At Le Mans, the 547/4-powered cars had an 88mm bore to take them just over the 1600cc break, thus giving Porsche the chance to employ one of these tanks with an extra 20 litres (4.4 Imperial gallon) capacity.

### The Italian connection

The 356 Carrera models had proved extremely popular with enthusiasts – far more popular than expected, as it happens. Helmuth Bott remembered: "At first we expected to build only a very small series, but demand was far higher than we thought, and the Carrera had a good name, despite some service problems."

Ironically, this popularity led to production difficulties, prompting the introduction of the Type 692 powerplant for road car use. For this engine, the crankshaft's roller-bearings were replaced by plain bearings, and, although the Carrera was a little late catching up with FIA regulations, the unit's capacity was increased to 1587cc by enlarging the bore to 87.5mm, as per the 547/4 racing flat-four. Klaus von Rücker was the man behind the

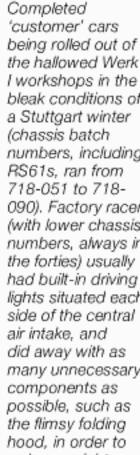


Work in progress in the Competition Department. Tipping the scales at 580kg (1276lb), the RS60's weight was much the same as that of the strict RSK, despite the longer wheelbase. Note the fusebox location on the matt black dashboard panel, allowing electrical circuits to be revived quicker.

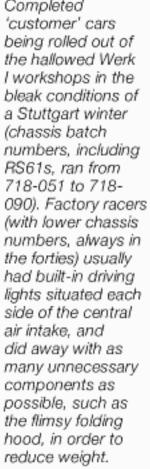


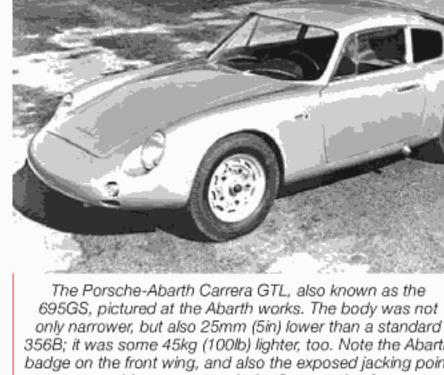












only narrower, but also 25mm (5in) lower than a standard 356B; it was some 45kg (100lb) lighter, too. Note the Abarth badge on the front wing, and also the exposed jacking point something seen on only the first couple of cars.



View under the front lid of the Abarth. Everything was a tight fit in the Zagato body, including the drivers!



The elegant lines of the 'customer' RS60 Spyder. Although the vastly improved seating was appreciated, especially during longer events, drivers were not at all keen on the new windscreens, required by the latest FIA regulations. Indeed, twenty of the top racers of the time issued a strongly-worded complaint to those making the rules in Paris following the 1000km Race in Argentina.



The Type 692 engine in the tail of the Abarth.

The Gendebien/Herrmann RS60 on its way to an impressive overall victory at Sebring.



The adjustable air scoop and lower set of louvres on the outer edges were originally specified by Zagato, but testing back in Stuttgart revealed a need for another set down the centre of the engine compartment lid, and at its top corners. Note the special exhaust system, and original-style lighting; the latter was quickly changed to incorporate smaller number plate lights, mounted lower down, and sunken rear combination lamps that sat flusher to the body.

Paul Strahle and Herbert Linge put up an amazing performance in the 1960 Targa Florio. Strahle's car was only the second Abarth built.

246

change to plain bearings for the Carrera – roller-bearings were simply too much hassle for anything but very limited production. Having said that, however, a number of Carrera engines were built up with roller-bearings after the change point in mid-1958, as these were undoubtedly better for competition work.

The Carrera had been dropped when the Super 90 arrived. However, in 1960, Reutter built 40 lightweight Carrera coupés featuring bucket seats, plexiglass side windows, bigger fuel tanks and enhanced braking. For track use only, they gave between 125bhp and 135bhp, depending on the exhaust system.

At the same time, to meet the ever-increasing threat from Alfa Romeo and Lotus, Porsche exploited FIA rules to their limits and had a new Carrera made ready to keep its position at the top of the 1600 Class.

Wendler (who made the Porsche Spyder bodies) was asked to quote on new lightweight bodies, as was Zagato, through Carlo Abarth. Abarth, who had brought the Cisitalia project to Gmünd, was married to Anton Piech's secretary, and, together with Rodolfo Hruska, was the Porsche representative in Italy. Ultimately, Zagato of Milan won the contract, but wanted its name kept off the machine, presumably because of close links with Porsche's competitors, Alfa Romeo and Lancia. Designed by Franco Scaglione and built by Zagato, it was the Abarth badge that appeared on the body's flanks.

Not that the 356 was an aerodynamic disaster by any means, but the Abarth, being designed for a specific purpose, was just that much better. Scaglione succeeded in creating a wind-cheating shape that was lower and narrower than the 356B, plus far smoother, thanks to gentler curves in the longer nose and a lack of bumpers, as well as a host of beautiful details like sunken door handles and subtle bulges in the trailing edge of the front lid to get air moving cleanly over the windscreen wiper posts. Previously wasted power needed to cut through the air could now be put to better use. In addition, with a homologated limit to adhere to, the weight saving accorded by the use of aluminium panels and a very basic interior allowed the chassis to be further strengthened, giving the engineers a perfect platform on which to work their magic.

Porsche shipped 356B (T-5) chassis to Italy, which were then modified by Zagato and the bodies fitted before the assemblies were sent back to Stuttgart for the Competition Department to fit the mechanical components.

Motive power was provided by the 1.6 litre, plain-bearing Type 692, four-cam engine, usually in 692/3 guise with its higher 9.8:1 compression ratio (upped from 9.5:1), Weber carburettors and 12-volt electrics. This unit, linked to a four-speed gearbox, produced a healthy 115bhp, and around 100lbft of torque was available.

Approximately 25 chassis were reserved by Porsche for the Abarth-Carrera project, although, eventually, only 20 examples were built (the final chassis, number 11021, was actually 11019 rebuilt). The first car was ready in the spring of 1960, with four or five made ready for works-approved drivers by the time the European racing season began in earnest.

### Sports car review

There was a welcome return for the Buenos Aires 1000km Race in 1960, although Von Trips had moved to Ferrari during the post-season activity. Graham Hill (aka 'Mr Monaco') joined the Porsche team, and, with Jo Bonnier in a 1.6 litre RSK, complete with a new-style windscreen, gave the Stuttgart maker a Class win (third overall) in Argentina. Von Dory then led home a string of RSKs, including the factory car of Herrmann/Trintignant. The RSK of Gendebien/Barth – another fresh works pairing – retired on lap 53 when an oil pipe fractured.

Using a new car, Olivier Gendebien and Hans Herrmann claimed overall victory in the Sebring 12-hour Race, beating a gaggle of Ferraris to the flag. Indeed, it was a good weekend for the German manufacturer, as the Gendebien/Herrmann car was followed home by another Porsche, the second-placed RS60 entered by Brumos Porsche – a name that would become legendary in US racing circles.

Jo Bonnier and Hans Herrmann won the Targa Florio in impressive style in one of the two works 1679cc RS60s. Winning at an average of 59.6mph (95.3kph), they also claimed fastest lap. By coming fifth, Barth and Hill won the 1600 Sports Class with

A tense moment for Jo Bonnier on the Targa.





Fuelling the Bonnier/Gendebien car at the Nürburgring.



The four works-entered Porsches that campaigned the Le Mans 24-hour Race (there were also two private entries). Nearest the camera is the Abarth of Linge and Walter, and behind it are three RS60 Spyders. Number 39 was the only RS60 to finish the event.

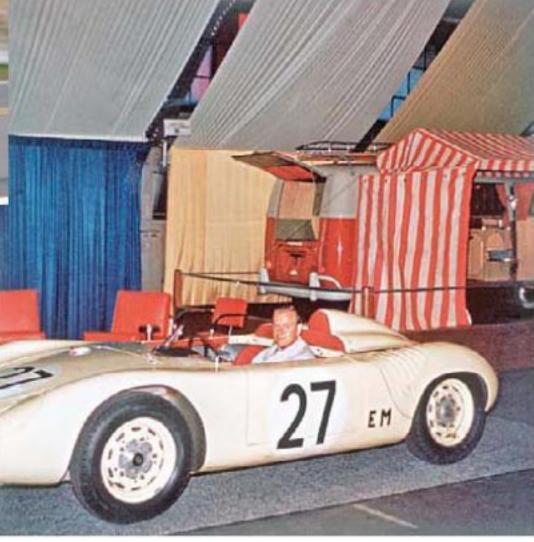


RSKs were still out in force in minor events in the States ...

a factory 1587cc RS60, and the new Porsche-Abarth took GT honours, beating a NART Ferrari Dino 196S along the way.

Other than the Barth/Hill RS60 crashing out, the Nürburgring 1000km Race (also in May), was a great success for Porsche. Granted, the Bonnier/Gendebien pairing came second in their RS60 behind Moss and Gurney in a Maserati Tipo 61, but it was one of three Class wins. The Linge/Greger car was an Abarth, sure enough, but had disc brakes on test, meaning it had to run as a sports car rather than a GT model. The factory also ran an experimental 356B Super 90, the latter featuring fuel-injection and an incredible four-pipe exhaust system that had to be seen to be believed. It finished in 19th, five laps down on the leaders.

This left only Le Mans to finish off the Championship, as the Tourist Trophy was restricted to GT cars for 1960. Four RS60s were sidelined with engine maladies, two of them works entries; needless to say, Stuttgart hierarchy was far from pleased with the



18/	-	_	-
WORLD	STRONG	( AD	CHAMPIONSHIP
A A OUT O	JEON13	~~~	CHAMEIONSHIE

	WORLD SP	ORTS CAR CHAMPION	SHIP
Buen	nos Aires 1000km (31 January	)	
1	P Hill/C Allison	Ferrari 250TR	106 laps
2	W von Trips/R Ginther	Ferrari 250TR	105 laps
3	J Bonnier/G Hill	Porsche 718 RSK	101 laps/ 1st in Class
5	A von Dory/P von Dory	Porsche 718 RSK	100 laps/2nd in Class
6	C Goethals/C Delfosse	Porsche 718 RSK	100 laps/3rd in Class
Sebri	ing 12-hour Race (26 March)		
1	O Gendebien/H Herrmann	Porsche 718 RS60	196 laps/1st in Class
2	B Holbert/R Schechter	Porsche 718 RS60	187 laps/2nd in Class
3	P Lovely/J Nethercutt	Ferrari 250TR	186 laps
Targa	a Florio (8 May)		
1	J Bonnier/ H Herrmann	Porsche 718 RS60	7h 33m 08s/1st in Class
2	W von Trips/P Hill	Ferrari Dino 246S	7h 39m 11s
3	O Gendebien/H Herrmann	Porsche 718 RS60	7h 41m 46s/2nd in Class
5	E Barth/G Hill	Porsche 718 RS60	7h 59m 11s/ 1st in Class
6	P Strahle/H Linge	Porsche-Abarth GTL	8h 10m 06s/1st in Class
Nürb	urgring 1000km (22 May)		
1	S Moss/D Gurney	Maserati Tipo 61	7h 31m 40s
2	J Bonnier/O Gendebien	Porsche 718 RS60	7h 34m 33s/1st in Class
3	C Allison/W Mairesse	Ferrari 250TR	7h 35m 44s
4	H Herrmann/M Trintignant	Porsche 718 RS60	7h 37m 58s/2nd in Class
6	H Walter/T Losinger	Porsche 718 RSK	2 laps down/ 1st in Class
7	S Greger/H Linge	Porsche-Abarth (exp)	3 laps down/2nd in Class
9	C G de Beaufort/P Frere	Porsche 718 RS60	4 laps down/3rd in Class
10	P Strahle/H-J Walter	Porsche-Abarth GTL	4 laps down/1st in Class
13	G Koch/H Stausberg	Porsche-Abarth GTL	4 laps down/3rd in Class
Le M	ans 24-hour Race (26 June)		
1	O Gendebien/P Frere	Ferrari 250TR	313 laps
2	R Rodriguez/A Pilette	Ferrari 250TR	309 laps
3	J Clark/R Salvadori	Aston Martin DBR1	305 laps
10	H Linge/H-J Walter	Porsche-Abarth GTL	268 laps/1st in Class
11	E Barth/W Seidel	Porsche 718 RS60	263 laps/1st in Class

weekend's proceedings. As it happens, the new decade signified a period of Ferrari dominance in the event, and it was Ferrari's results in the 24-hour Race that sealed the title for it. Just two of the six Porsches entered finished, the best placing coming from the Abarth-Carrera of Linge and Walter (tenth overall and a Class win), actually the disc-braked car that ran in Germany, rebuilt with standard braking. The only other car of the marque to complete the course was the 1.5 litre RS60 of Barth and Seidel, which was

11th overall after it lost three of its five gears. In any case, it was another Class win in the bag, and although there was disappointment at not winning the title after going to the Sarthe with a points lead over Ferrari, Porsche could certainly be proud of its second place in the World Championship.

### Other races

Although the Porsche-Abarth was appearing in sports car races, it was developed to compete in GT events first and foremost. Gerhard Koch came second in the Gran Turismo race at the Grand Prix de Spa, losing out to the well-sorted 356 Carrera of Karl Braun by just four seconds. And whilst Ferrari 250GT SWB models dominated the Tour de France Automobile, it was a notable achievement for Robert Buchet and Hans Walter to pick up fourth place ahead of some strong competition.

In the sports car arena, Paul Frere won the Sports Car Race of the Grand Prix de Spa, Christian Goethals following him home in another 718 RSK. Prince Gaetano Starrabba, Masten Gregory, and Ken Miles had a good season, while Roger Penske was named 1960 SCCA Class F Sports Champion, thanks to the speed and reliability of his 718 RSK; Bob Holbert took the Class E title with a 1.7 litreengined model.

Heini Walter was declared 1960 European Hill Climb Champion driving the RS60, an achievement he repeated in 1961. Walter won the Schauinsland round, and came second in three of the four other events to secure the title. Sepp Greger, another RS60 exponent, had to be content with the runnerup prize.

### The 1960 single-seater season

Porsche's proper F2 car for 1960 was built on a wheelbase that was longer by 100mm (3.9in), and, although it still featured drum brakes, the suspension was subtly modified. The bodywork also received a few detail changes – nothing dramatic, it has to be said, but enough to distinguish a 1960 car

from a 1959 version.

The first car (chassis number 718201) was tested by Herbert Mimler at Hockenheim in February, after which it was painted blue and white (Rob Walker's colours), and sent to Syracuse for Stirling Moss to use in the F2 race of 19 March. Having qualified on pole and set fastest lap, sadly, the engine failed later in the race, handing victory to Von Trips' Ferrari.

Porsche had given Moss (the reigning Formula 2 British





Europa-Bergmeisterschaft

A minor race at the recently opened Harewood Acres circuit in Canada. This is the Carling 300, held on 28 May. Roger Penske won the event in an RSK, with Peter Ryan coming home in second. Olivier Gendebien was third in the car closest the camera.

Champion and darling of the racing circus) the use of the latest six-speed 718/2 for the whole season, but also signed up Jo Bonnier to campaign a full F2 season for the works. Jo Bonnier, born in Sweden in 1930, competed in sports car events alongside his Grand Prix career. Another man to do that was Graham Hill, who'd moved over to Porsche sports cars in 1960, but also drove the Stuttgart single-seaters.

Bonnier was first seen at Brussels in April in the second 718/2 alongside Moss, but it was Moss who finished best – second overall to Jack Brabham's Cooper-Climax after the two heats. Following an event at Goodwood, which saw the new Lotus-Climax take its second victory of the year, the next big race was at Pau; an awkward clash on the calendar, meaning that Moss had to choose between England or France. Moss stayed on home territory to claim second place, whilst Olivier Gendebien drove the works car in Pau. He complained bitterly about the gearchange and handling, but still qualified on the front row and finished third. The first open-wheeled victory for Porsche

came on 30 April 1960 when Stirling Moss won the Aintree 200, followed home by Bonnier and Hill to give Porsche a one-two-three finish.

By July, two more chassis (718204 and 718205) were completed, the latter having a Butzi Porsche-styled body with a vastly reduced frontal area and flatter sides. At the German Grand Prix, all five 718s ran in the F2 event. Bonnier won, with guest driver, Von Trips, second, while the other three Porsches were separated only by the Cooper-Climax of Jack Brabham.

The Italian Grand Prix (held on 4 September) saw Hans Herrmann qualify tenth on the grid, almost 17 seconds down on pole. However, he finished sixth (three laps behind Phil Hill in the winning Ferrari) to give Porsche its only World Championship point of the 1960 season. Jack Brabham (Cooper-Climax) was ultimately declared World Champion, and deservedly so.

Meanwhile, after the Solitude Grand Prix defeat on home ground (held a week before the German Grand Prix), at least Porsche had its revenge by beating Ferrari at Modena a few weeks later – Bonnier won from Ferrari men, Ginther and Von Trips. To end the year, Moss won the F2 race at Zeltweg Airfield, and also the Cape GP and South African GP (Moss' nine entries over the year resulted in four victories), whilst Herrmann took victory at Innsbruck Airfield.



Porsche's new F2 challenger, pictured at the works in isolation and with the team truck. At first glance, apart from the longer wheelbase, it looked very similar to the final 1959 design, but the rear panelwork configuration was changed to allow the back section to be removed in one piece, while the engine cover was shallower, split horizontally at the car's beltline, instead of continuing down to the suspension mounting points.



Engine, transmission and chassis details of the 718/2 F2 car.

Graham Hill.

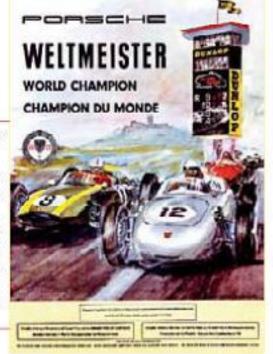
The revised bodywork of the Gurney machine (718205) at Solitude. Note the familiar-looking engine, visible thanks to removal of the grille that was used at one stage in the meeting.



June 1960 edition of MotorSport.

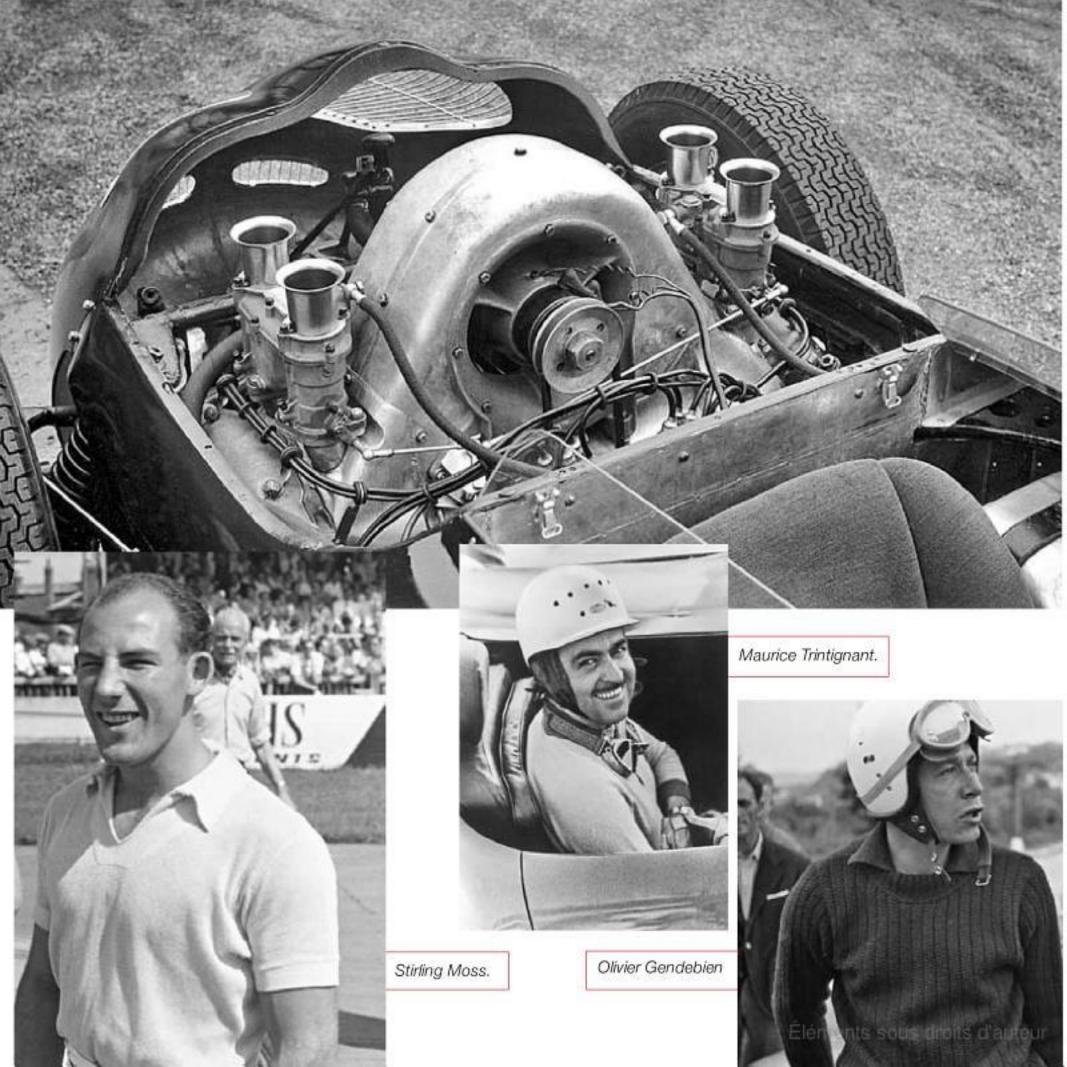
MOTORSPORT

After a strong finish
to the season,
Porsche duly won
the Formula Two
Championship,
which took in the
Syracuse GP, the
Brussels GP, the Pau
GP, the Aintree 200,
and the German GP.



Material com direitos autorais





# X

# 1961

he 1961 season marked the end of an era in sports car racing, as the FIA placed more emphasis on GT cars in the following year. The Porsche Competition Department was as busy as ever, though, once again supporting a full assault on the World Sports Car Championship, as well as having a GT and Grand Prix programme (F2 was dropped in favour of Formula Junior), the latter conducted with a step up to a serious F1 campaign in mind for 1962 ...

### 1961 upgrades

The Porsche-Abarth Carrera GTL looked much the same as the later 1960 cars, but had greater sting in its tail thanks to the revised Type 692/3A power unit. This engine featured Solex carburettors, a stronger bottom-end, and new, high lift camshafts on the inlet side (camshafts operating the exhaust valves went unchanged, apart from the addition of balance flywheels, which were smaller than those fitted to the latest intake camshafts). In this guise, the GTL developed a healthy 128bhp at 6700rpm, or 135bhp at 7400rpm with the straight-through Sebring exhaust system.

The RS60 became the RS61 for the 1961 season. In reality, the regular RS61 was virtually the same as the RS60 (in fact, many of the works cars were the same vehicles as in the previous year, simply given a fresh designation), although a handful of special vehicles were built on the chassis – cars that bridged the gap between the old Spyder-based machines and the new generation of sports-racers that came with the introduction of the 904.

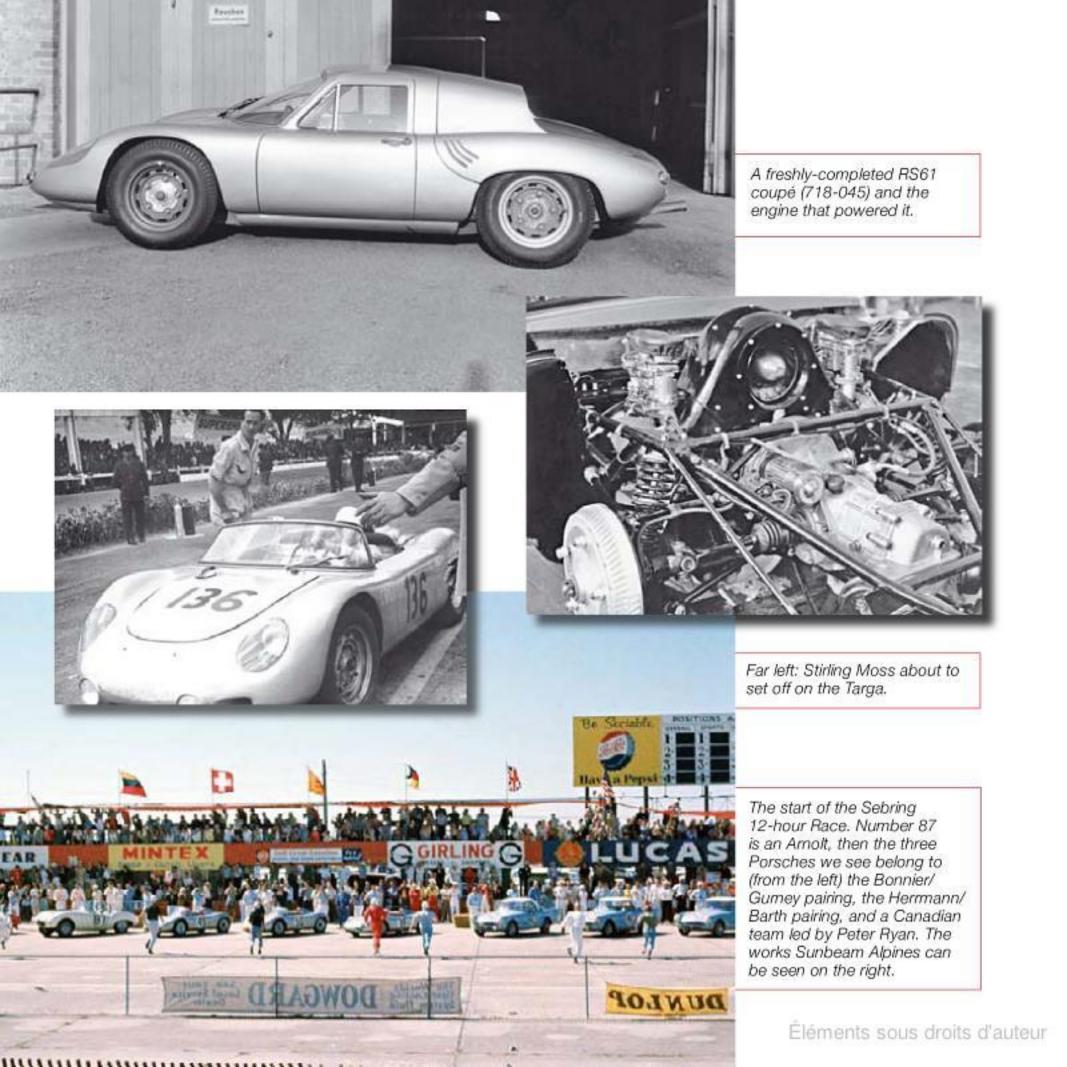
The main point of these RS61 variants – three in total, and all reserved for factory team duties – was to allow fitment of a new, larger Porsche Grand Prix engine. As it happens, only one car (718-047) had the extended wheelbase necessary to house the flat-eight unit, this being the W-RS Spyder version, although the two coupés built alongside it had similar styling. Indeed, it was only above the beltline and immediately behind the door where the extra length was added into the Spyder frame that differed.

One of the two 718 RS61 coupés (chassis 718-045 and 718-046) in the process of being built. There was no duct cut into the open-ended rear panel about to be put in place at this stage, though testing quickly revealed that one was required. Grilles were added into the tail as well.



The Porsche-Abarth Carrera GTL made quite an impression on the racing world in 1961, the year this photograph was taken. Note the final lighting arrangements, the engine air scoop in its closed position, and the removable panel added above the exhaust system after the first couple of cars were completed.





The new lines, penned by Butzi Porsche, gave the latest racers a sharper nose, with faired-in headlights, a steeper rake on the windscreen, and a hollow hump over the engine – the latter being low on the Spyder, and an extension of the roofline on the closed cars. The upper frames of the doors were cut into the roof panel on the coupés to allow helmeted drivers to more easily get in and out of the cockpit, while the open car had its perspex side windows folded over at the top to smooth airflow over the driving compartment, and direct some of it into the louvres cut into the edges of the engine cover.

Underneath the engine cover was usually a 547/5 unit, but a few times the works placed a Type 587 four-cam powerplant in the bay. This had a bore and stroke of 92 x 74mm, giving a displacement of 1966cc, and plain bearings – chosen because the two-litre Carrera engine would soon see service in a new road car, albeit in detuned form. In racing trim, it developed around 165bhp, but even more interesting engines would find their way into the W-RS body in the future.

There were thoughts of employing the new coupé as a replacement for the Abarth, with a production run of 100 vehicles qualifying it for FIA GT status. However, the Abarth was easily upholding Porsche honour on the tracks, and the plan was not carried through. Instead, it was used as a test-bed for the 904 of 1963 vintage.

### The 1961 sports car season

Dropping Buenos Aires and adding a new event in Italy at the tail end of summer brought about a more balanced calendar for race fans: the season had started and ended all too quickly in 1960. But, as such, it was Sebring that opened the proceedings, with the world's top drivers making their way to sunny Florida at the end of March.

The trip was far from fruitful for the Porsche team, as both Herrmann/Barth and Bonnier/Gurney RS61s failed to reach the finish. With nothing but privateers left in the running – although Holbert and Penske took the Sports Class and the Index of Performance with their Brumos-entered RS61 – it was just like a Ferrari exhibition race at the end of the day ...

Porsche went all-out to put things right in Sicily, with a 1.7 litre RS61 for Herrmann/Barth, and a long-wheelbase W-RS model with a two-litre lump for Bonnier/Gurney – a Spyder version of the coupé that had been seen at the Le Mans practice weekend earlier in the month. The Camoradi team from America was Porsche-backed for the whole of the 1961 season, and an RS60 was entered under the Camoradi banner (fitted with a two-litre engine, with Moss and Hill at the wheel). There were also two works-supported Abarths, handled by the pairings of Strahle/Linge and Von Hanstein/Pucci.

Moss demonstrated on the Targa why he was considered by many to be the number one driver of the era, setting lap record

continued page 96

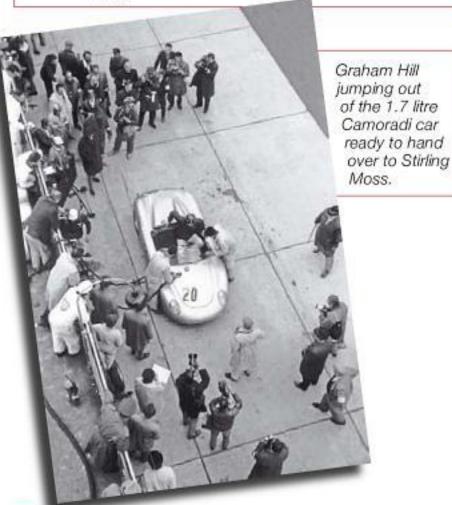


The Bonnier/Gurney W-RS Spyder pictured on the wet Friday before the Nürburgring 1000km Race. Huschke von Hanstein can be seen at the front of the car in the front three-quarter shot, while the rear view shows Dan Gurney talking to Wilhelm Hild.





Heini Walter's RS60 at the Nürburgring. He shared the driving with Herbert Müller in the 1000km event, though an accident just after the midway point in the race put an end to his challenge. Note the Swiss flag on the Porsche's front wing.



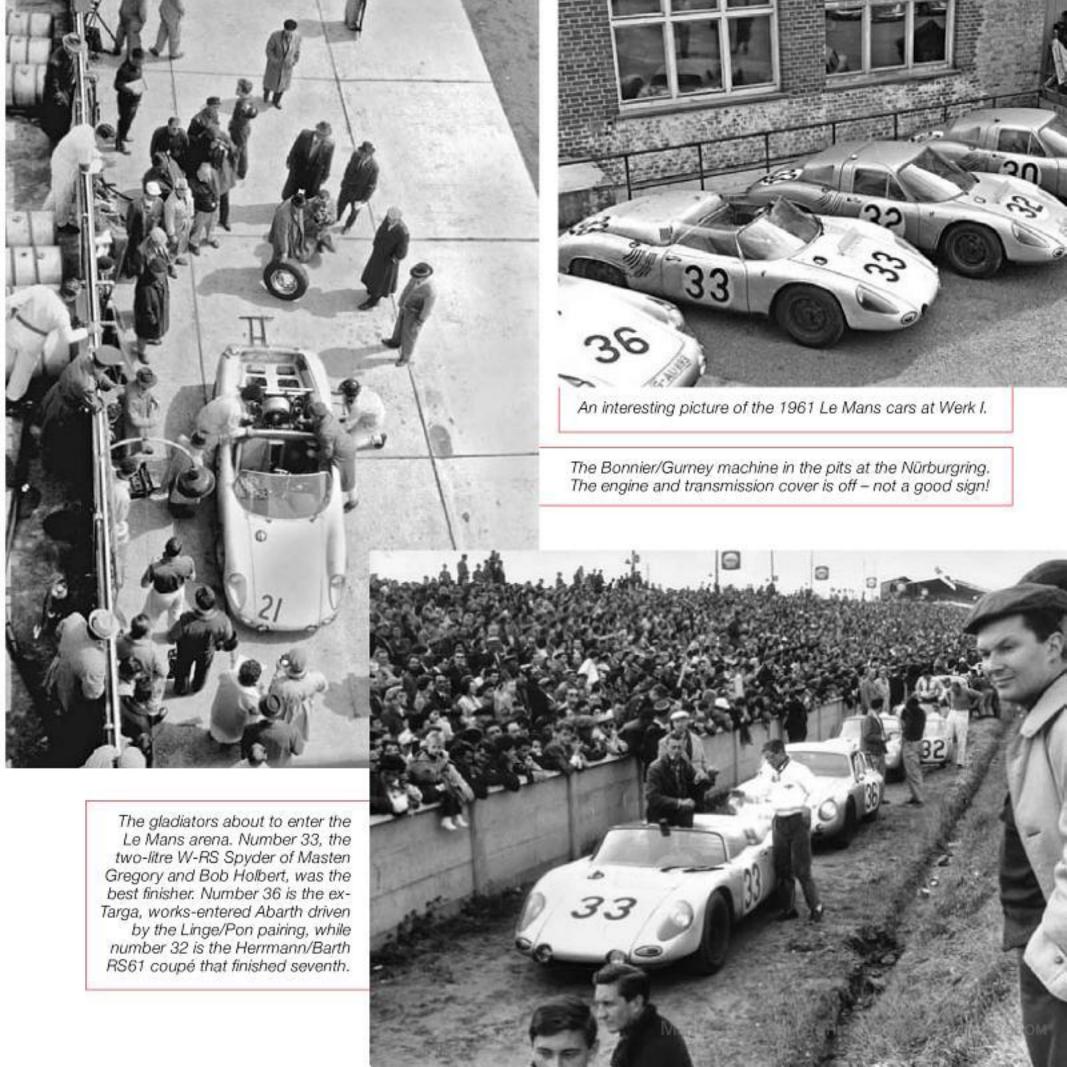


The Abarth of Gerhard Koch going through the Karussel.

Like many of its Italian contemporaries with scalloped headlights, perspex covers were often added on the Porsche-Abarth, too, allowing the car to cut through the air with even greater efficiency – at least in daylight races, as the covers reduced the candle power of the lighting units quite significantly.

The master in his office: Moss during the ADAC 1000km Race.





The Herrmann/Barth RS61 coupé back at the works after its Le Mans campaign, and on display at the 1961 Frankfurt Show.

### WORLD SPORTS CAR CHAMPIONSHIP

Sebring '	12-hour	Race	126 4	larch
Sepring	1.2°110'01	nave	LZUIT	141111111111111111111111111111111111111

1	P Hill/O Gendebien	Ferrari 250TR	210 laps
2	R Ginther/W von Trips	Ferrari 250TR	208 laps
3	P Rodriguez/R Rodriguez	Ferrari 250TR	207 laps
5	B Holbert/R Penske	Porsche 718 RS61	199 laps/1st in Class
7	D Sesslar/B Donner/E Erickson	Porsche 718 RS61	199 laps/2nd in Class
9	P Ryan/F Bradley/L Heimrath	Porsche 718 RS61	189 laps/3rd in Class

### Targa Florio (30 April)

1	W von Trips/O Gendebien	Ferrari Dino 246SP	6h 57m 39s
2	J Bonnier/ D Gurney	Porsche 718 W-RS	7h 02m 03s/1st in Class
3	H Herrmann/E Barth	Porsche 718 RS61	7h 14m 14s/2nd in Class
6	P Strahle/A Pucci/H Linge	Porsche-Abarth GTL	7h 48m 26s/1st in Class
7	H Linge/P Strahle/H von Hanstein	Porsche-Abarth GTL	7h 50m 53s/2nd in Class

### Nürburgring 1000km (28 May)

1	M Gregory/L Casner	Maserati Tipo 61	7h 51m 39s
2	R Rodriguez/P Rodriguez	Ferrari 250TR	7h 52m 32s
3	R Ginther/O Gendebien	Ferrari Dino 246SP	7h 54m 59s
6	F Hahnl/H Zick	Porsche-Abarth GTL	7h 59m 23s/1st in Class
7	S Gunther/E Mahle	Porsche-Abarth GTL	8h 01m 08s/2nd in Class
9	G Koch/F Leinenweber	Porsche-Abarth GTL	2 laps down/3rd in Class
10	D Gurney/J Bonnier	Porsche 718 W-RS	3 laps down/2nd in Class

### Le Mans 24-hour Race (11 June)

1	P Hill/O Gendebien	Ferrari 250TR	333 laps
2	M Parkes/W Mairesse	Ferrari 250TR	330 laps
3	P Noblet/J Guichet	Ferrari 250GT SWB	317 laps
5	B Holbert/M Gregory	Porsche 718 W-RS	309 laps/1st in Class
7	H Herrmann/E Barth	Porsche RS61 coupé	306 laps/2nd in Class
10	H Linge/B Pon	Porsche-Abarth GTL	284 laps/1st in Class

### Pescara GP (15 August)

1	L Bandini/G Scarlatti	Ferrari 250TR	23 laps
2	K Orthuber/E Barth	Porsche 718 RS61	22 laps/1st in Class
3	M Boffa	Maserati Tipo 60	22 laps



Action from the Nürburgring in August. The Carlo Maria Abate won the Rheinland Cup Race in a Ferrari 250GT SWB, but he was followed home by no fewer than five Porsche-Abarths. The Jaguar E-type seen in the picture, and not long on the market, came seventh.



Heini Walter at the start line of the Freiburg-Schauinsland hillclimb in 1961. The Swiss driver was declared European Hillclimb Champion in 1960 and 1961. after lap record in the mountains. Sadly, his two-litre car could not maintain this pace, and the transmission gave way within sight of the finish. Stirling Moss and Graham Hill in car number 136 were named moral winners of the event in a number of contemporary magazines. Unfortunately, moral winners don't get to hold the trophy! It was a bitter disappointment for all concerned, especially when it handed another victory to Ferrari. At least Porsche won its Class with ease thanks to Bonnier and Gurney taking second place, and the Abarths were untouchable, coming sixth and seventh overall (first and second in Class).

The Abarths went some way toward saving face at the Nürburgring, too. Both the RS60 of Moss/Hill and the RS61 of Herrmann/Barth suffered engine maladies at this, the third round in the World Championship, and the W-RS of Gurney/Bonnier was forced off the pace due to electrical problems. It's ironic that the latter was beaten in Class by the eighth-placed 356B Carrera, forced to run in the Sports category due to its modified engine and experimental disc brakes. Maserati saved it from being another Ferrari parade, but there was no doubt that Porsche fans were suffering.

Afterthe Stuttgart marque's poor showing at the Nürburgring, the works cars were detuned for the Le Mans classic in a bid to reinstate the reliability of old. This took a lot of sparkle out of their performance, and still the Bonnier/Gurney car gave up the ghost near the end, as did the French Blue Abarth entered by Auguste Veuillet – the latter, driven by Robert Buchet and Pierre Monneret, running in 12th until it retired one hour from the end. At least, the remaining RS61s claimed first and second in Class (the two-litre W-RS Spyder of Gregory and Holbert was the top Porsche, finishing in fifth place overall, while not far behind in seventh was the 1.6 litre RS61 coupé of Barth and Herrmann); Herbert Linge and Ben Pon took tenth place and a Class win in their works-entered 695GS.

The Four Hours of Pescara was the final round. The factory team stayed away, and, following Tommy Spychiger's accident, the best Porsche could manage was second place in the scorching Italian heat. This was enough, however, to secure the third slot in the World Sports Car Championship, behind Ferrari and Maserati.

As well as a string of Class wins during the season, the Porsche-Abarth Carrera GTL notched up some good results at the Nürburgring in August, and then Graham Hill did a splendid job in his native England to come sixth in the Tourist Trophy, his little Abarth beaten only by the far more powerful Ferraris and Aston Martins in the field. Zandvoort was also good to the German-Italian hybrid, with Ben Pon coming second overall in the World Cup. The Abarth's consistency allowed Porsche to claim its Class in the Grand Touring Championship relatively easily.

In America, Bob Holbert won the SCCA Sports Class E title with an RS61, and then repeated the feat the following year.



The new 787 – essentially a long-wheelbase version of the updated 718/2. Just two were built (78701 and 78702), the first completed in April. The Porsches looked like bars of soap on wheels compared to the gorgeous 'sharknose' Ferraris, but they certainly got the job done, despite the lack of disc brakes.



Jo Bonnier in the 787 at Monaco.

# RPANO PUNTE

Jo Bonnier.

Copyrighted m97erial

Closer to home, as mentioned in the previous chapter, Heini Walter won the European Hillclimb Championship. He had an excellent year with his Porsche, winning the Rossfeld, Mont Ventoux, Les Rangiers, and Schauinsland events, and picked up podium finishes at three more venues.

### The 1961 Grand Prix season

The March 1961 edition of MotorSport noted: "In spite of reports and news to the contrary in many publications, the new F1 Porsche is hardly any nearer completion than is the V8 Coventry-Climax engine ... it will be a surprise if it appears before the middle of the season. However, the fact that both Porsche and Coventry-Climax are at work on new power units is most heartening, and with Ferrari well satisfied with his V6 Dino engine and rearengined car, the future looks well."

Indeed it did. Lucas patented its electronic ignition for racing engines, and, in the background, the 1.5 litre, Type 753 eight-cylinder engine (designed by Hans Mezger and Hans Honich) had gone on test in December 1960. For something straight off the drawing board, it proved satisfactory, albeit disappointing from a peak power point of view. By the spring, it was developing around 160bhp, but this was still well below target and postponed its introduction to the racing scene.



Dan Gurney using an older 718/2 model for the Monaco GP. Note the steel roll-over ring added behind his head in order to meet the FIA's 1961 regulations.

Zandvoort in May, with Hans Herrmann's 787 being chased by the 718/2 of Carel Godin de Beaufort. Both finished at the back of the field, three laps down on the winning Ferrari.





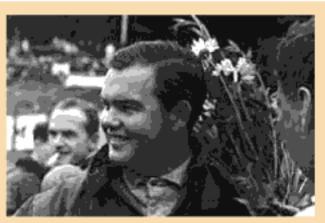
Not having Stirling Moss in the camp was another blow to the men at Porsche. Although he was seen in the company's sportsracers during the season, it was Lotus that got Moss' services in the single-seater arena. In 1961, Bonnier was joined full-time by American, Dan Gurney, so that Porsche could launch a full-scale attack in Grand Prix racing. Amiable American, Gurney, was born in 1931. He had a works drive with the Ferrari sports car team in 1959, and also a number of GP drives for the Modena company. Following a bad year with BRM in 1960, he moved to Porsche.

The eight-cylinder GP car should have made its debut at Monaco, but it wasn't until Zandvoort in 1962 that it put in an appearance. It was therefore old 718/2 cars that began the 1961 season, incorporating the necessary changes needed to allow them to meet latest FIA regulations, along with a new gearchange and some additional air intakes in the sides of the engine cover.

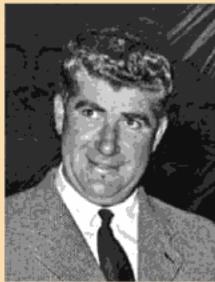
Porsche's F1 debut came at Brussels on 9 April 1961, but the company failed to get the desired results. Although Bonnier was fast, qualifying on pole and winning the first heat, an accident in the second of three heats put an end to his chances; Gurney had already dropped out in heat one with transmission trouble. The Siracusa Grand Prix saw Porsche rewarded with a second and third, but the older cars were no match for Baghetti's Ferrari.

The last of the 718/2 models (718205) acted as a prototype for the two Type 787s built at the start of 1961. Completed in April, the first 787 lined up with a pair of 718/2s for the Monaco Grand Prix. Bonnier drove the new car, featuring a coil spring/damper and wishbone front suspension, with Gurney and Herrmann piloting the older machines – the latter using 718205 with its modified suspension, and a new body which matched that of the

Edgar Barth's mount at Solitude had disc brakes and a horizontally-mounted cooling fan – both items becoming familiar Porsche fare in the not-too-distant future. The experimental car finished in eighth place, three minutes down on the winning Lotus-Climax of Innes Ireland. The Porsches of Bonnier and Gumey crossed the line literally within a split second of the English machine.



Ben Pon.



Robert Buchet.

787 in styling, albeit with its original wheelbase dimension rather than the longer one selected for the 787s to allow fitment of the flat-eight as soon as it was ready. For the time being, all three had 1.5 litre flat-fours, but with their familiar carburettors replaced by a Kugelfischer fuel-injection system. Gurney was the top finisher for Porsche, coming fifth behind Moss' Lotus and three Ferraris, with Herrmann ninth; Bonnier's engine gave up just after the halfway mark.

The second 787 was ready for the Dutch Grand Prix (22 May), but all four entered cars did little more than make up the numbers during the race. Neither handling nor the engine could compete with that of the Ferrari or Lotus-Climax, and, after such disappointing results, Ferry Porsche decided to authorize the use of the older 718/2s with carburettors until the 804 was ready.

There was a sixth and seventh at Spa, while Gurney came second at Reims, losing out by a fraction of a second to Giancarlo Baghetti's Ferrari in a race remarkable for the fact that it was Baghetti's Formula One debut, and no-one else – before or since – has ever managed to win an F1 race first time out. Gurney had actually led the race out of the last bend, but Baghetti pulled out of his slipstream to win by a car's length. Two weeks later at the British Grand Prix, it was Bonnier who picked up the points, coming fifth in the changeable weather, but he retired in Germany, and Gurney finished outside the points.

As a matter of interest, the 1961 Solitude Grand Prix (a non-Championship race for F1 cars held on 23 July) saw Porsche send three 718/2s (for Bonnier, Gurney and Herrmann), and a 787 for Barth. Disc brakes were used for the first time on the 787 (Porsche was actually the last factory team in F1 to give up on drum brakes), and there was a new cooling fan arrangement, too, that was lighter and more compact, and used less power. The event was still won by a Lotus, but the data obtained would at least prove useful in the future – and Bonnier and Gurney came second and third.

In the same month, Michael May had moved from Mercedes-Benz and introduced Bosch fuel-injection to the Porsche fourcylinder Grand Prix engine. This increased power by 20bhp, but the idea was slow to bear fruit, and carburettors were retained in the meantime. It will be remembered that, in later years, the May head on the V12 Jaguar engine transformed the already excellent power unit.

Returning to the GP scene, Gurney lost out at Monza by 31 seconds, but his second place was admirable, especially considering that Phil Hill – who won the race – was later declared World Champion. Gurney came second again at Watkins Glen, this time following home an on-form Innes Ireland, but this was enough to allow him to finish the 1961 Grand Prix season in fourth (he actually had the same number of points as Stirling Moss in third place). Bonnier, despite having set pole on a number of occasions, was well down the field in 15th, but did, at least, finish ahead of drivers such as Graham Hill and Roy Salvadori. As a manufacturer, Porsche claimed an easy third, beaten only by the Ferrari and Lotus teams.

In the minor Formula One races, Bonnier and Gurney graced the podium five times between them after the Solitude round. With the 804 now sorted (four 804 Grand Prix cars were built ready for the 1962 season), the old cars were sold off at DM 50,000 apiece. One of them went to Carel Godin de Beaufort (a Dutch Count, who purchased his early in the year), one to Heinz Schiller, and another to Count Giovanni Volpi, owner of Scuderia SSS Repubblica di Venezia (formally Scuderia Serenissima). The 787s were retained by the factory, but ultimately scrapped in 1964.

# XI

# 1962

he World Endurance Trophy took the place of the World Sports Car Championship following the FIA's decision to move toward GT racing and away from pure sports models. Prototypes – sports-racers to you and I – were able to compete for the new Trophy, with the four rounds being held at Sebring, Sicily (for the Targa Florio), the Nürburgring, and Le Mans.

### The 1962 season

The sports-racing scene lost a great deal of its appeal for Porsche in 1962, not only because the championship format had changed, but probably also because so much effort (and not a small amount of money) was being pumped into the F1 programme. The factory entered just two Abarths for Sebring – numbers 48 and 49 – driven by Bob Holbert and Dan Gurney, and Edgar Barth

Bob Holbert (left) with Edgar Barth at Sebring with the two works Porsche-Abarths.

and Paul Strahle respectively. They finished the event in fine style, taking first and second in Class. Meanwhile, Bruce Jennings, Bill Wuesthoff and Frank Rand shared the driving at Sebring to steer a 1.5 litre RS60 to third overall; an incredible feat, considering the pedigree of the three cars and drivers that filled fourth through sixth places.

After the Le Mans test weekend at the start of April, it was down to Sicily for the Targa. For this classic event, the dustsheets were taken off the W-RS Spyder (718-047) and RS61 coupé (718-046), cars that had not been seen since last year's Le Mans. Both were provided with disc brakes and new, two-litre Type 771 flat-eights. With a bore and stroke of 76 x 54.6mm, giving a displacement of 1982cc, this beautiful creation was a larger bore sister to the Grand Prix engine, developing 210bhp at 8200rpm. The Spyder kept its 718 W-RS designation, although the closed car was now referred to as a 718 GTR in its extended form.

The GTR was assigned to Nino Vaccarella and Graham Hill, while Jo Bonnier and Dan Gurney were given the keys to the W-RS Spyder. There were also a number of Porsche-Abarths,



The Holbert/Gurney Abarth tackling Sebring at the start of the season.



# NI&ROSS

The Barth/Strahle car blurring the scenery in Florida. The two Abarths were separated by a Ferrari 250GT SWB, which gives an idea of the kind of pace they were running at.

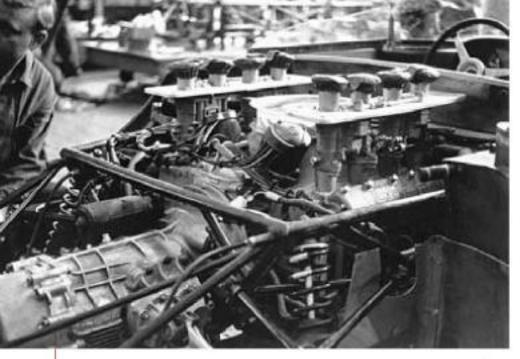


several – like the eight-cylinder cars (and an odd Maserati) – officially entered by Count Volpi's team rather than the factory. Ultimately, the WR-S retired early after an accident, while the GTR was third behind a pair of Ferrari Dinos, Bonnier pairing up with Vaccarella before Hill had a chance to put on his helmet. The Herrmann/Linge car was the first Abarth

Dan Gumey on the 1962 Targa Florio, behind the wheel of the 718 W-RS Spyder he was assigned to share with Jo Bonnier. An accident put the car out early on, before the Swede had the chance to drive it. home, while the pairing of Pucci and Barth came tenth; Strahle and Hahnl were told to stop halfway through the event, as their vehicle was declared unsafe.

The big guns were back out for the Nürburgring, the factory entering the two-litre W-RS and

continued page 108



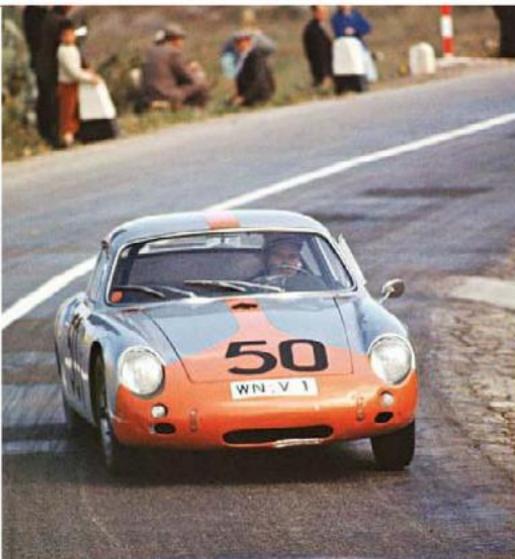
Above: The Type 771 engine that powered the 718 W-RS, linked to a Type 787 six-speed transmission. This incredibly complicated unit took more than 200 hours to build, ruling out any hopes of ever using it in a road car!

The Pucci/Barth Abarth captured during a quiet moment on the Targa.



A couple of shots of the Strahle/Hahnl Abarth in Sicily before the nose was badly damaged. The organizers were worried in case a panel flew into the crowd, and black-flagged Strahle just as he was moving up through the field.









Various views of the Hill/ Hermann 718 W-RS at the factory. Note the 1962 windscreen arrangement, and the odd combination of a standard road car gearlever and a drilled accelerator pedal in the interior shot. The tape on the steering wheel is

holding in place a spare ignition key. The black items in the driving light pods are homs, incidentally, fitted for the Targa.





Le Mans 1962, with the Barth/Herrmann (number 34) and Buchet/Schiller Abarths in focus. The third factory car (number 30) was driven by Pon and De Beaufort.

GTR models, as well as an Abarth for Barth and Linge. The W-RS was assigned to Graham Hill and Hans Herrmann, but bad tyre choices in the mixed weather slowed its pace. The 718 GTR of Gurney and Bonnier (back to its familiar silver hue) went out two laps from the end whilst challenging for second, but third place for the Spyder was a decent result, and both the 718 and Abarth models won their respective Classes.



Interior of the works Porsche-Abarth used by Barth and Herrmann at Le Mans.

Le Mans was the last round of the World Endurance Trophy series. Surprisingly, although in the entry list (logged, like all works cars in 1962 and beyond, against Porsche System Engineering), the W-RS and GTR stayed in Stuttgart, and three Abarths made up the factory contingent. One car had engine problems, but the others finished first and second in Class, albeit a long way behind the winning Ferrari. It should also be noted that there was little else in the 1.6 litre GT category, save for the works Sunbeam Alpines, the best of these finishing in 15th.

In the other sports car races that made up the season, there was a one-two-three in the two-litre Sports Class at Daytona in February, although the works-entered Abarth of Bonnier had engine trouble near the end. Bob Holbert got on the podium at Mosport, Heini Walter came third in the Tyrol Races at Innsbruck, and Dawie Gous and Al Klesse's RSK was third in the Kyalami 9-hour Race. At the end of the year, the eight-cylinder car did well in Peurto Rico (with Gurney at the wheel), and in Nassau, where Holbert finished just behind Innes Ireland's Lotus-Climax 19.

Joe Buzzetta won the 1962 SCCA Class F title with an ex-works car that had originally been shipped to America at the end of 1958 for Jean Behra to drive at the tail end of the season. Buzzetta duly took the Class E spoils in the following year using an RS60.

As for the GT circus, Gerhard Koch was third at AVUS in May, and second at Montlhéry four months later. Bob Holbert had the only outright win of the year, taking the flag at the 400km race at Bridgehampton on 15 September. Nevertheless, although it had been easier in 1961, Porsche still managed to secure its second in a row Grand Touring Championship title.

The experimental 1.8 litre 547/6 engine of 1962 had an 80cc greater capacity than the 547/5 four, and gave 185bhp at

7800rpm. Although never released, work on this powerplant led to a list of improvements issued at the start of 1963 for customers with 547/4 and 547/5 units, to release more horses. These modifications at least kept the Porsche racers in the running at a time when the competition was fielding ever-lighter cars with superb handling.

In the world of hillclimbing, Heini Walter met his match in the shape of Ludovico Scarfiotti's Ferrari Dino. Walter won the first round at La Faucille, but the Fornovo-Mount Cassio event saw Scarfiotti draw blood on home territory. Porsche loaned Walter the 718 W-RS for Mont Ventoux on 17 June, but still the Ferrari was too quick, as it was in the next two rounds, despite Walter having the two-litre Porsche at his disposal. Sepp Greger won the final two rounds, but Scarfiotti was declared 1962 champion.

Herbert Linge in Gerhard Koch's Abarth at Montlhéry for the Paris 1000km Race. The pair finished seventh, but first in Class, and only 11 laps down on the winning NART Ferrari 250GTO.

#### WORLD ENDURANCE TROPHY

Sek	oring 12-hour Race (24 March)		
1	J Bonnier/L Bianchi	Ferrari 250TR	206 laps
2	P Hill/O Gendebien	Ferrari 250GTO	196 laps
3	B Jennings/B Wuesthoff/F Rand	Porsche 718 RS60	195 laps/1st in Class
7	B Holbert/D Gurney	Porsche-Abarth GTL	188 laps/1st in Class

Porsche-Abarth GTL

Porsche 718 RSK

182 laps/2nd in Class

158 laps/2nd in Class

9 E Barth/P Strahle

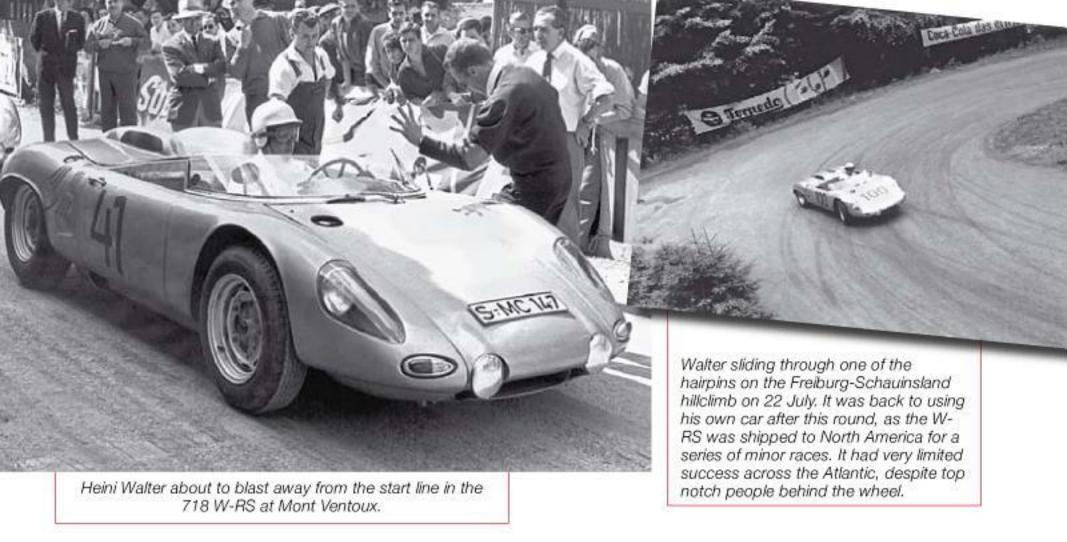
26 L Heimrath/J Palivka

Le Mans 24-hour Race (24 June)

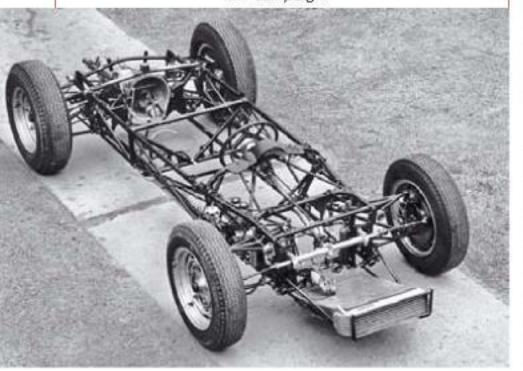
Tar	ga Florio (6 May)		
1	W Mairesse/R Rodriguez	Ferrari Dino 246SP	7h 02m 56s
2	G Baghetti/L Bandini	Ferrari Dino 196SP	7h 14m 24s
3	N Vaccarella/J Bonnier	Porsche 718 GTR	7h 17m 20s/1st in Class
6	H Herrmann/H Linge	Porsche-Abarth GTL	7h 45m 26s/1st in Class
10	A Pucci/E Barth	Porsche-Abarth GTL	8h 00m 05s/2nd in Class
13	A Vella/P Termini	Porsche 356R Carrera	8h 22m 50s/3rd in Class

1	P Hill/O Gendebien	Ferrari Dino 246SP	7h 33m 28s
2	M Parkes/W Mairesse	Ferrari 330LM/GTO	7h 35m 49s
3	G Hill/H Herrmann	Porsche 718 W-RS	7h 42m 25s/1st in Class
6	E Barth/H Linge	Porsche-Abarth GTL	3 laps down
9	G Koch/E Mahle	Porsche-Abarth GTL	4 laps down/2nd in Class

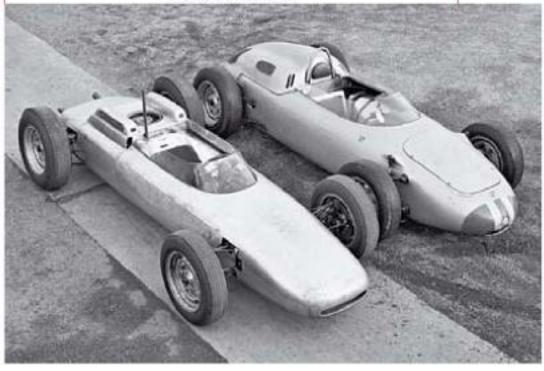
1	P Hill/O Gendebien	Ferrari 330TR	331 laps
2	P Noblet/J Guichet	Ferrari 250GTO	326 laps
3	L Dernier/J Blaton	Ferrari 250GTO	314 laps
7	E Barth/H Herrmann	Porsche-Abarth GTL	287 laps/1st in Class
.12	R Buchet/H Schiller	Porsche-Abarth GTL	272 laps/2nd in Class



Rolling chassis of the Type 804. Four were built for the 1962 F1 campaign.



The completed F1 car next to its F2 counterpart used during the 1961 season.



## The end of Grand Prix racing

At the end of 1961, Porsche management declared itself satisfied with the performance of the Type 753 four-cam, twin-plug engine. With a bore and stroke of 66 x 54.6mm, giving 1494cc, the air-cooled flat-eight developed 178bhp with its four Weber twin-choke carburettors.

The newType 804 chassis was taking shape, too, but upheaval in the background slowed its development. Hans Tomala became Technical Director early in 1962, replacing Klaus von Rucker after the latter moved to BMW. Tomala was not from the ranks, and the long-serving Leopold Schmid resigned, feeling he should have been offered the job. With Karl Rabe retiring, and Ernst Fuhrmann already gone, it was an era of change just when consistency and continuity were needed in the engineering department.

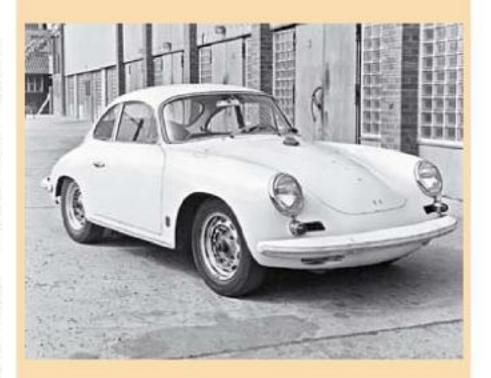
Anyway, the first car (80401) was up and running by spring, with its Type 753 engine, six-speed Type 787 transmission, disc brakes. and ZF rack-and-pinion steering, plus a new suspension featuring double-wishbones, torsion bar springing, and inboard shock absorbers. Most of the leading players had turned to a monocoque chassis by 1963, but, for the time being, only the Lotus 25 showed the way forward. At least the Porsche 804 had a frontal area some 25 per cent smaller than that of its predecessor. Side-by-side, the eight-cylinder Type 804 was dwarfed by the original four-cylinder F2 car.

The Dutch Grand Prix at Zandvoort (20 May) marked the debut of the 460kg (1012lb) 804, with Bonnier and Gurney driving two of the new cars, backed up by De Beaufort in his private car, and Pon trying an older vehicle equipped with the May fuel-injected four. It was an inauspicious start, as De Beaufort finished sixth, one place ahead of Bonnier, while Gurney had gear linkage problems, and Pon crashed. At least Gurney had shown decent pace, and was convinced he had something that could be improved with more race mileage. For the time being, that was enough to keep the F1 programme going.

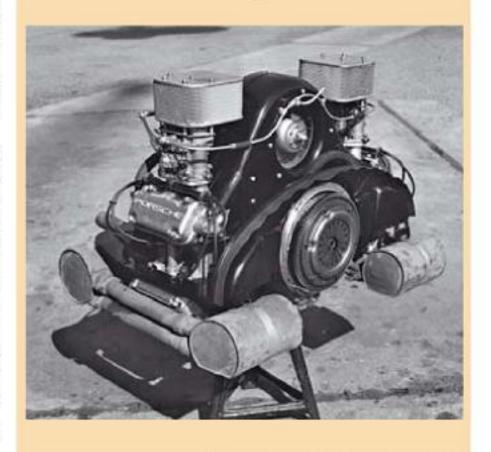
At Monaco, Gurney had an 804, but Bonnier was given an older model from the Count Volpi stable, while De Beaufort had his own 718/2 to play with. The latter didn't qualify, although Gurney put the 804 on the second row. Sadly, the American was involved in a first lap pile-up, and Bonnier was the last car running at the end. With Ferry Porsche far from happy, De Beaufort was the only Porsche driver in Spa for the Belgian Grand Prix, finishing a respectable seventh, two laps down on Jim Clark's Lotus-Climax.

The French Grand Prix on 8 July saw Gurney and Bonnier campaigning the 804, complete with a number of chassis upgrades, while De Beaufort ran his four-cylinder model. All seemed off the pace in qualifying, but a huge list of retirements and a steady run enabled Gurney to win the race by a full lap! Across the Channel in Britain, the works drivers qualified on the third row, but the American failed to shine and the Swede went out with a broken final-drive.

continued page 116



The Carrera returns. This is the Carrera 2 homologation vehicle pictured at the factory. Production models, available from April 1962, featured disc brakes – a first for the Porsche marque's road cars – and the 587/1 fourcam engine.





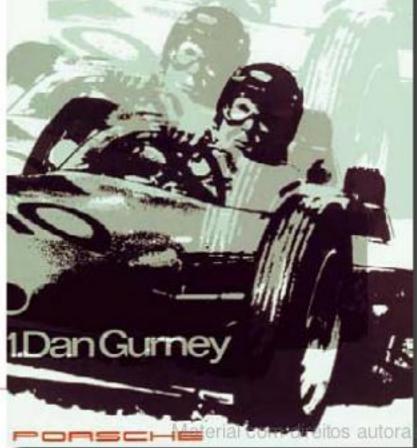


Ben Pon trying the May fuelinjected four for size in 718204 at Zandvoort. However, Michael May left Porsche at around this time, and his fuel-injected engine project was duly shelved as a result. Pon crashed out on lap three, but, in any case, all eyes were on the new 804s ...



Dan Gurney on his way to victory in the 1962 French Grand Prix at Rouen, and the poster commemorating the occasion. The eightcylinder Type 804 gave Porsche its only win in a World Championship event.

# GROSSER PREISvon FRANKREICH







It was back on home ground for the next round, held at the Nürburgring. The two works 804s were joined by three 718/2s, and, whilst Gurney put his car on pole, prompting hopes of a win for the German maker, the best the Stuttgart firm had to show for a weekend's work was third place. Monza was worse, though, with Bonnier sixth after clutch problems slowed his progress, and Gurney dropping out with transaxle maladies after 67 laps.

At the US Grand Prix, it was again Gurney who was fastest of the Porsche drivers in qualifying, and he came fifth in the end, despite a sick engine. Bonnier had gear selector trouble for most of his race, finishing 21 laps down on the winning Lotus-Climax. The final round was very late in the year, held on 29 December in South Africa, but for Porsche fans, all it did was confirm Graham Hill and BRM as World Champions, as the works cars stayed away.

At the end of the season, Dan Gurney was again Porsche's top man, finishing fifth after his win in the French Grand Prix, a third at the Nürburgring, and a fifth place in his native country. Bonnier was again well down the field with three Championship points, only one more than privateer, Carel de Beaufort, in his earlier machines. However, combining the totals gave Porsche fifth place in the Manufacturers' Championship.

Bonnier's car at Monza, with a close-up of the engine, now developing around 185bhp. Note the wheel discs used for this high-speed race – an interesting idea, but not one adopted by other teams.

# XII

# 1963

an Gurney's victory in the 1962 French Grand Prix was ultimately to be Porsche's only win in a World Championship event. Formula One proved to be too expensive and, despite having invested a small fortune in developing the flat-eight engine, it was decided to cut the company's losses and distance itself from the circus. Huschke von Hanstein announced that Porsche was withdrawing from the world of F1 to concentrate its efforts on endurance racing and the European Hillclimb Championship, giving the official reason that Ferry Porsche felt that the Formula cars were too far removed from production machines for Porsche owners to identify with.

Both Dan Gurney and Jo Bonnier were released from their F1 duties, and, whilst there were rumours of a new car in the motoring press, these turned out to be nothing more than wishful thinking. Saying that, though, work had continued on the 804 behind the scenes on the off-chance of Ferry Porsche changing his mind, with suspension modifications and an increase in engine power (up to 200bhp on the test-bed), but it was not raced after 1962.

Thanks to the efforts of privateers, however, the Porsche marque was represented in the 1963 World Championship. Gerhard Mitter took fourth in the German Grand Prix, and Carel de Beaufort managed sixth in both the Belgian and US Grands Prix. In all, this gave five points, and seventh place to Porsche as a constructor. To put this into perspective, the winning Lotus team finished with 54, followed by BRM on 36. Sadly, De Beaufort died following an accident during practice for the 1964 German Grand Prix at the Nürburgring: he was the last to use the 718/2 in anger.

On the sports-racing front, the 718 W-RS and GTR were given new front suspensions (similar in design to that fitted to the 787 F1 car), ending the long-serving trailing-arm arrangement. In addition, the front bodywork on the Spyder was modified to match that of the 1962-style coupé (they were both the same in 1961), and a number of other non-stressed panels were replaced

The first of the so-called Dreikantschaber models pictured at Werk I shortly after it was completed. Its proper designation was the 356B 2000GS Carrera GT, but most refer to it as the DKS – a shortened version of its nickname.

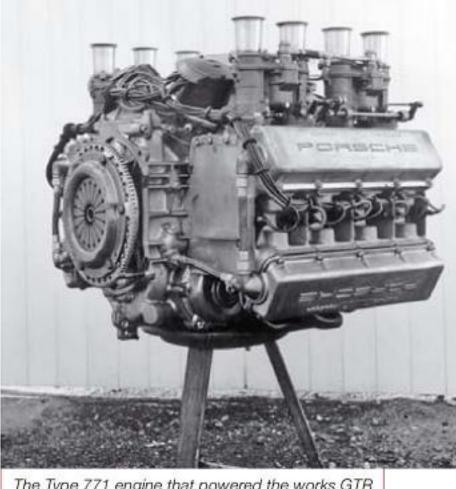




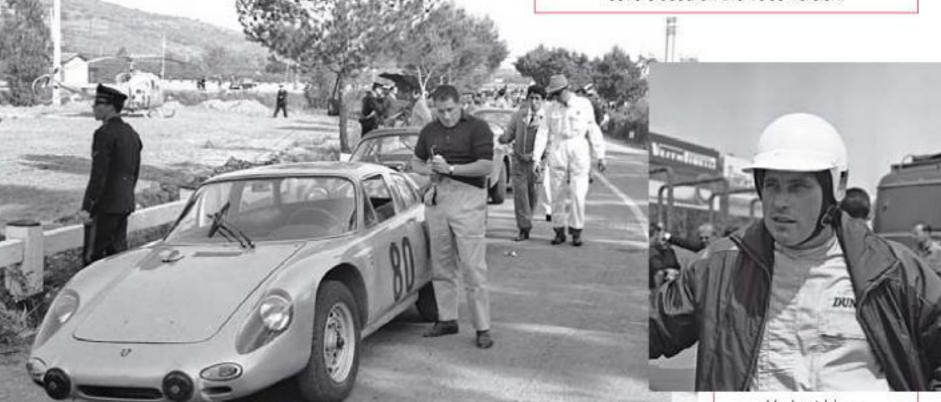


Bonnier pushing hard in the Targa Florio.

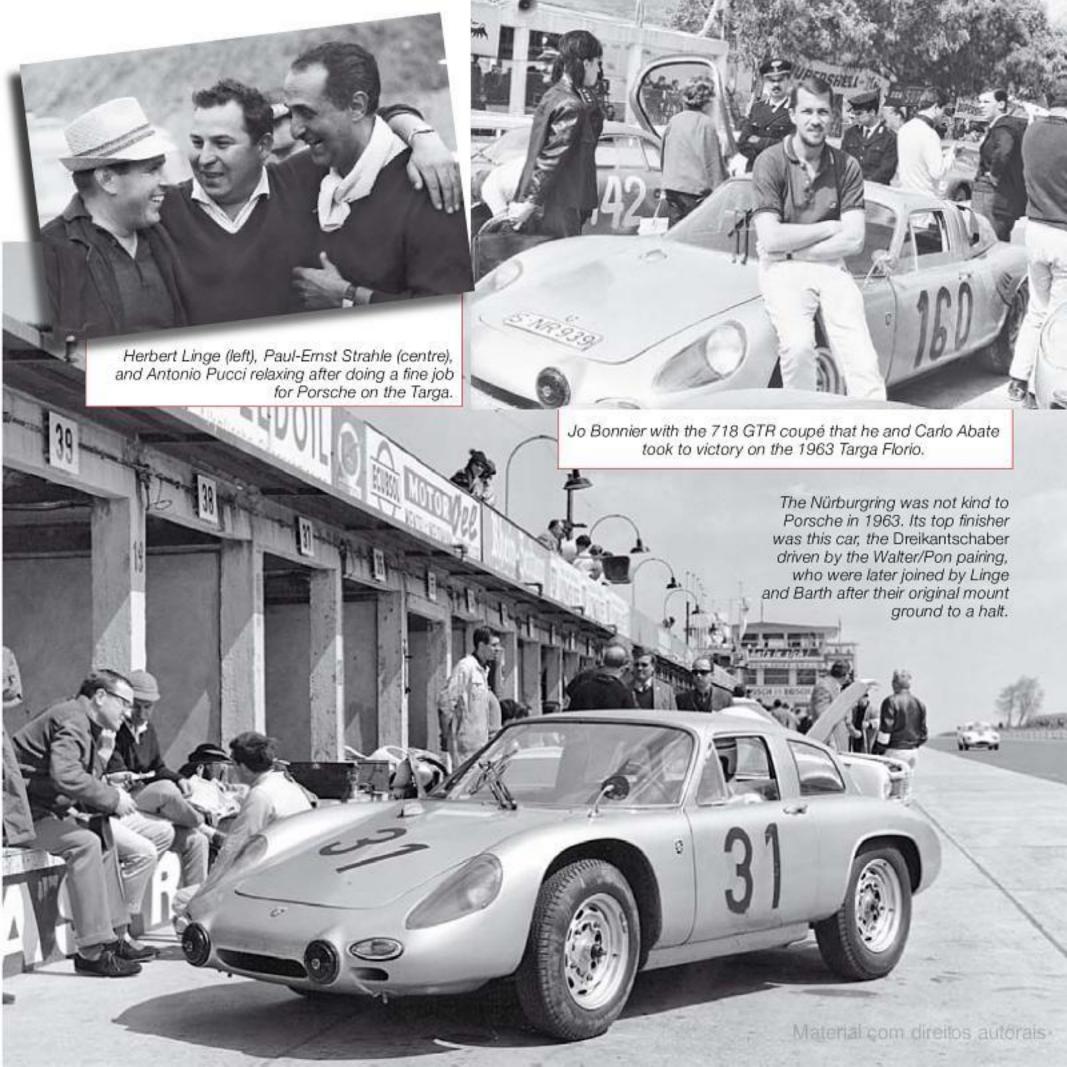
Linge pictured in Sicily during a rare quiet moment with his DKS.



The Type 771 engine that powered the works GTR and W-RS models. Note the different camshaft covers used on the 1963 version.



Herbert Linge.





The original DKS (right) was joined by a sister car in time for Le Mans. The second DKS has a slightly narrower B-post, which serves as a useful identifying feature.

by glassfibre items in a bid to save a few precious grammes. Work on the Grand Prix engine enabled engineers to increase power to 225bhp on the Type 771 unit. Naturally, this improved the car's power-to-weight ratio, which proved particularly useful in the top-flight hillclimbing arena. Porsche had another track warrior, too ...

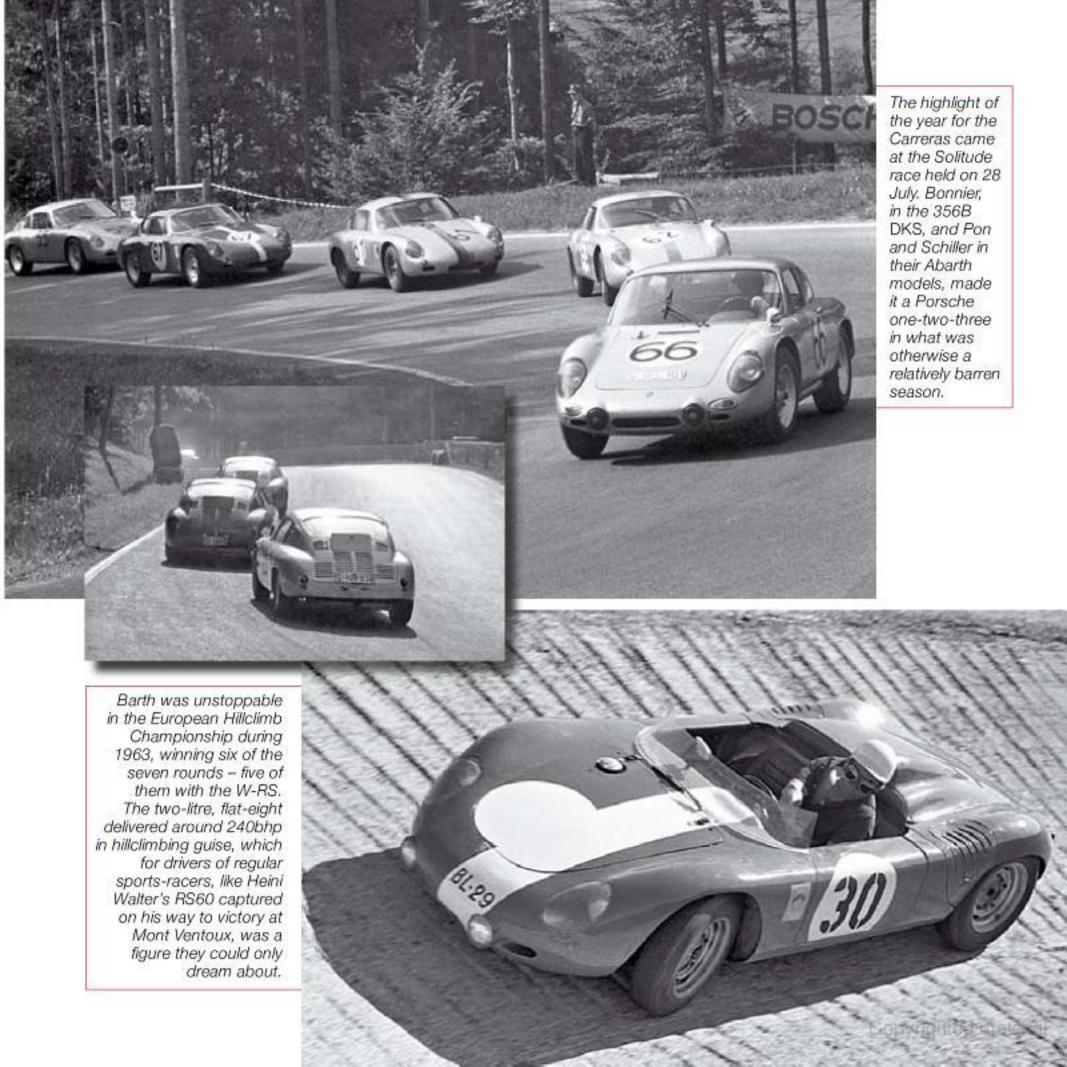
### The DKS

The Dreikantschaber, or DKS for short, was the Carrera 2 equivalent of what the Abarth-Carrera GTL was to the older T-5 body – a special lightweight machine with superior aerodynamics that took advantage of every loophole there was in the FIA rulebook. Styling was rather like that of the 718 GTR, but with side windows in the rear quarter panels, revised louvres cut into the flanks, and a different grille arrangement on the tail.

The first DKS was ready for the Targa Florio in May, powered

The Barth/Linge car that came eighth at Le Mans.





#### WORLD ENDURANCE TROPHY

Sebrino	12-hour	Race	(23 N	(arch	١
---------	---------	------	-------	-------	---

1	J Surtees/L Scarfiotti	Ferrari 250P	209 laps
2	W Mairesse/N Vaccarella	Ferrari 250P	208 laps
3	G Hill/P Rodriguez	Ferrari 330TR/LM	207 laps
9	B Holbert/D Wester	Porsche-Abarth GTL	193 laps/1st in Class
10	E Barth/H Linge	Porsche-Abarth GTL	193 laps/2nd in Class
15	C Cassel/D Sesslar	Porsche-Abarth GTL	185 laps/st in Class

#### Targa Florio (5 May)

1	J Bonnier/C M Abate	Porsche 718 GTR	6h 55m 45s/1st in Class
2	L Scarfiotti/L Bandini/W Mairesse	Ferrari Dino 196SP	6h 55m 57s
3	H Linge/E Barth	Porsche 356B DKS	7h 26m 20s/1st in Class
5	A Pucci/P Strahle	Porsche-Abarth GTL	7h 33m 37s/2nd in Class
7	U Maglioli/G Baghetti	Porsche 718 W-RS	7h 49m 12s/2nd in Class
10	G Cavaliere/V Riolo	Porsche 718 RS61	1 lap down/2nd in Class
12	G Koch/S von Schroter	Porsche-Abarth GTL	1 lap down/1st in Class

#### Nürburgring 1000km (19 May)

1	J Surtees/W Mairesse	Ferrari 250P	7h 32m 18s
2	P Noblet/J Guichet	Ferrari 250GTO	7h 40m 03s
3	C M Abate/U Maglioli	Ferrari 250TR	1 lap down
4	H-J Walter/B Pon/E Barth/H Linge	Porsche 356B DKS	1 lap down/1st in Class
10	G Koch/P Strahle	Porsche-Abarth GTL	4 laps down/1st in Class
12	H Kuhnis/H Schiller	Porsche-Abarth GTL	4 laps down/2nd in Class

#### Le Mans 24-hour Race (16 June)

	1	L Scarfiotti/L Bandini	Ferrari 250P	339 laps
	2	J Blaton/G Langlois	Ferrari 250GTO	323 laps
	3	M Parkes/U Maglioli	Ferrari 250P	323 laps
Ī	8	E Barth/H Linge	Porsche 718 W-RS	300 laps/3rd in Class

by a production Carrera 2 flat-four, with a sister car joining it in time for Le Mans. By the way, this model was classed as a Carrera in race entry lists, but officially called a 356B 2000GS Carrera GT. However, we will refer to it by its DKS nickname to differentiate between it, the strict Carreras, and the Abarths, which were still playing an important role in the Porsche motorsport programme.

### The classic races

Once again, the World Endurance Trophy was held over four rounds, taking in established classic venues. Porsche entered two factory Abarths at Daytona (one came fifth), before shipping them to Sebring, where they ran with larger engines and disc brakes. Bob Holbert had done well at Daytona with the Abarth, so

was given a works drive alongside Don Wester, with the other car shared by Barth and Linge. The works cars ultimately came home ninth and tenth (first and second in Class), while Chuck Cassel (who'd had an excellent drive at Daytona in his own Abarth) and Don Sesslar took Class honours in the 1600 GT category, beating Ferrari 250GTOs, Jaguar E-types, and Chevrolet Corvettes along the way.

Porsche went to some real effort for the Targa, sending the two-litre 718 GTR (Bonnier/Abate) and 718 W-RS (Maglioli/Baghetti) eights, as well as a pair of works-prepared, two-litre GT cars. These were assigned to the teams of Linge and Barth, and Pucci and Strahle, with Linge having the 356B DKS model (as seen at the Le Mans practice on the first weekend of April), while Pucci was given a rather more standard-looking Abarth.

Bonnier was certainly on form in Sicily, and did seven faultless laps out of the ten in the race in his six-speed, 230bhp machine. Mairesse's Ferrari had an argument with a bollard after a touch of rain made the roads slippery, allowing the Bonnier/Abate pair to

An American dealer visit to the Porsche works at the end of 1963, with the company's new road car in the foreground, and Ferry Porsche sitting on the front wing of the company's new racer – the Type 904. Both vehicles were styled by Butzi Porsche.



win by a few seconds, despite gear selector problems – which affected both 718-based cars. The winning average speed was 64.9mph (103.9kph), slightly quicker than the Ferraris that had won this classic road race in the previous two years. There were also Class wins for the Linge/Barth car, and the private Abarth of Gerhard Koch and Sven von Schroter.

The Nürburgring was a disaster, with the 718 GTR of Jo Bonnier and ex-World Champion Phil Hill dramatically crashing out, and the 718 W-RS of Edgar Barth and Herbert Linge suffering transaxle maladies; the works Abarth of Sepp Greger and Gunther Klass also failed to make the finish after an accident. At least the *Dreikantschaber* had a good run, Hans-Joachim Walter and Ben Pon (later joined by Barth and Linge after the W-RS expired) taking it to fourth overall and an easy first in Class.

At Le Mans, just four Porsches were entered, and all were works-supported. There were two 718-based models (one GTR coupé and the W-RS Spyder), powered by the two-litre flat-eight units, plus a pair of DKS machines. As it happens, the open car of Barth and Linge, complete with a new rear spoiler, was the only Porsche finisher, coming in eighth overall (third in Class), despite having lost a wheel at one stage. Both *Dreikantschaber* models fell by the wayside with engine trouble.

The Targa Florio was to remain the only outright victory for Porsche sports cars in 1963, unless one counts Edgar Barth's new title of European Hillclimb Champion, won thanks to the use of a works eight-cylinder racer in a highly-tuned state. In reality, the Spyder-based machines were outdated now, but soon a change indirection provided the Stuttgart maker with the winner's laurels once again. It's a shame that an era had passed on something of a low note, but, as Helmuth Bott pointed out: "In those days, Spyders and road cars were not so far apart." Porsche insisted on keeping a family relationship between the production and racing cars – even the early Grand Prix cars. When one considers this, and the fact that the marque's competition, more often than not with far larger engines, was using some very specialized machinery, Porsche's results are all the more commendable.

# XIII

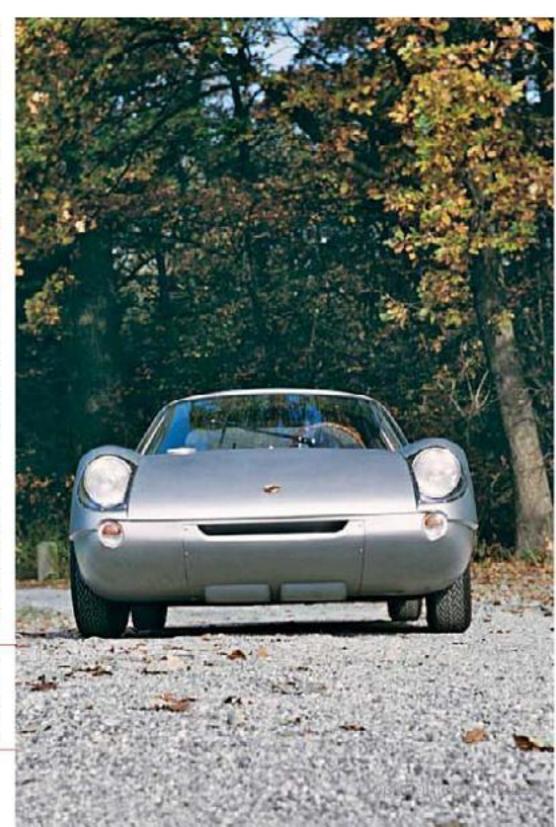
# 1964

t the tail end of 1963, respected journalist and Porsche fan, Denis Jenkinson, wrote: "A short while ago I published a photograph of the new Ferrari 250GT Le Mans, and suggested that it was the beginning of a new era of GT racing coupés. Now, Porsche have released details of their new competition coupé for GT racing, and it is as exciting as the Ferrari. The new Porsche is designated the Type 904, not to be confused with the Type 901, which is the touring six-cylinder that appeared recently at all the motor shows.

"The new 904 is a complete break from Porsche tradition in its construction, for it has a chassis frame comprised of two deepsection box members, suitably cross-braced, whereas previous Porsche coupés have been of monocoque construction, made from thin sheet steel or sheet aluminium. The 904 chassis has double-wishbone and coil spring suspension front and rear, and rack-and-pinion steering, all of which is directly descended from the Porsche eight-cylinder Grand Prix models. The air-cooled two-litre Carrera four-cylinder engine is mounted ahead of the rear axle and drives to a five-speed Porsche gearbox, and the drive is taken to the independently-sprung rear wheels through one-piece driveshafts having very clever inboard universal joints that not only swivel in all planes, but also extend in and out on short links, giving friction-free movement to the rear end. These new UJs achieve by mechanical means exactly the same effect as Lotus arrive at with their rubber-ring 'doughnut' UJs used on their racing cars.

"The very sleek body for this new car is made from fibreglass and is bonded to the chassis frame, the whole tail swinging upwards to give access to the engine and gearbox. The four-cylinder engine has 92x74mm bore and stroke, giving 1966cc, and develops 180bhp DIN at 7000rpm using Weber carburettors and a 9.8:1 compression ratio. This new car is in production, will be sold for racing, and will be homologated as soon as possible, and Porsche insist that it is not an 'airport racer' but an all-round

The elegant nose of one of three 904 prototypes built (chassis 904003), this one completed in August 1963. Although its profile was first and foremost created to cheat the wind, a number of detail changes were soon applied at the front, however.







Body production at the Heinkel works in Speyer, and the gossamer-thin finished article. The body was so light that two people could lift it with ease.



Testing the new mid-engined car at Solitude, although most of the development work was conducted at the Nürburgring and Hockenheim. Due to its light weight (the car was homologated at just 640kg/1410lb), top speed was approximately 160mph (255kph), with a 0-60 time hovering around the 5.5 second mark. Note the early-style air intake on the rear flanks, which was later given a scoop to help direct cooling air towards the brakes.



GT car that can run in the Targa Florio, on smooth circuits, or in rallies of the Tour de France type. It is 150kg (330lb) lighter than the previous two-litre GT, and has vastly improved roadholding and traction, equal to the RSK sports Porsches of past seasons."

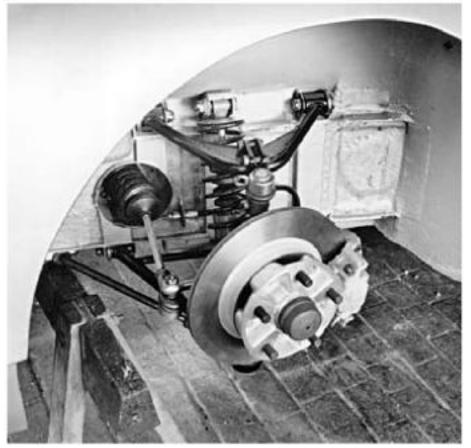
## The Type 904

Ferry Porsche gave the go-ahead for a new competition car at the end of 1962, when it was decided to quit the Grand Prix circus and return to more familiar racing territory. To comply with FIA regulations for the Grand Touring Championship, at least 100 examples would have to be built, thus ruling out labour-intensive spaceframes and handmade bodies. Making a handful of cars at a time, an aluminium body would have been the obvious answer, but this was a job for artisans. Glassfibre, on the other hand, which had been tried on certain parts of Porsche's F1 and F2 cars, plus

Various views of an early pre-production 904, showing the interior, the front suspension and braking system, and the engine in the chassis frame. The interior was very functional, containing all that was necessary and nothing more, and finished in materials that would reduce glare. As the seats were fixed, a comfortable driving position was accomplished via movement in the steering column and pedal box. The dashboard and steering wheel were changed slightly on series-production versions of the car.













Chassis 904002 seen from above. Note the four-cylinder Carrera unit and oil tank beneath the raised engine cover on the first cars. Also, the way the doors cut into the roof to aid access and egress, the fuel filler poking through the front compartment lid, and the novel windscreen wiper arrangement, with two arms operating a single blade.

the W-RS in 1963 guise, was a better option for volume of the sort envisaged in this case, as components could be produced quickly and easily as soon as a mould had been made – and even the moulds were cheap to make compared to pressing dies and stamps. This material was therefore chosen for speed of production, as four to five cars a day had to be built in order for the model to qualify in time for the start of the 1964 season.

However, apart from the odd, small component here and there, Porsche had no real experience of working in glassfibre, so farmed out the work to Ernst Heinkel Flugzeugbau – Heinkel being a company perhaps better-known for its bombers and bubble cars rather than exotic bodyshells! But this turned out to be an ideal partnership, resulting in the creation of a series of lightweight panels that could be reproduced at will.

The body (designed in the first weeks of 1963 by Butzi Porsche, by then head of the new Styling Department) was very much an evolution of the 356B DKS and 718 GTR models, with the same elegant, pointed nose, but with a simple door cut line, and a Kamm tail – a popular aerodynamic trick of the period. The character line at what would be bumper height on a regular car was also seen in more subtle form on the DKS and GTR, but as a

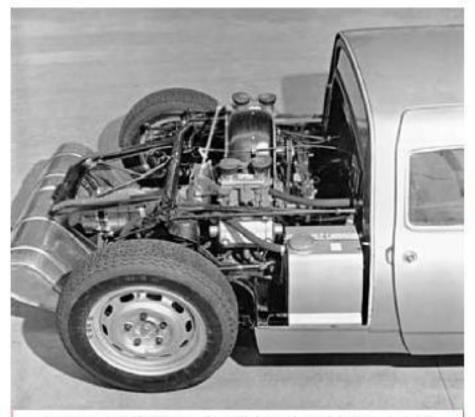
An early Carrera GTS being completed in Stuttgart, and what appears to be the same car on display at the 1964 Geneva Show.

deep tuck-in of the sills on these older machines rather than a full-length crease. In addition, the roofline was shorter, as the rear side windows were deleted and the rear screen brought closer to the cockpit, sunk in-between 'flying buttresses' on the 904 that sweep down from the roof to taper off above the bulging rear wheelarches. The bodyshell was ultimately bonded to the ladder-frame chassis to enhance rigidity.

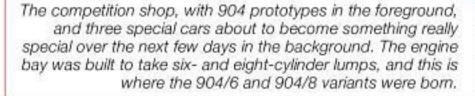
The idea was to use the flat-six then being completed for the Type 901 road car, which reached the marketplace as the legendary 911. Hans Tomala decided instead to stick with proven technology, and opted for the four-cylinder 587/2 unit – a 155bhp tuned version of the two-litre Carrera 2 engine that had already seen service in the works DKS. Hans Mezger then further developed the four-cylinder, four-cam unit, until the 587/3, as it



The 904 GTS pictured with one of the 13 pre-production 911s in mid-1964. This particular shot gives a very clear idea of scale, but not long after it was taken, a decision to cancel the second batch of 904s was made in view of the uncertainty at Heinkel, and a forthcoming change in the FIA rulebook.



Detail shot of the Type 587/3 engine, as supplied in the 'customer' 904 – the Carrera GTS.





Another view of the busy workshop, which would later be used for 911 production.





Tail of a works 904/8. The 904/8 combined the body of the Carrera GTS with the 225bhp, two-litre Type 771 flat-eight engine to give a devastating sports-racer. First seen at the Le Mans test weekend in April, the 904/8's official debut came on the Targa Florio.



The W-RS with Graham Hill at the wheel in Sicily. A driveshaft coupling gave way when Bonnier was driving.

was known, reliably produced 180bhp and 145lbft of torque with a straight-through exhaust, or 155bhp/125lbft in road-going trim. It was linked to a five-speed transaxle incorporating a ZF limited-slip differential, and a number of gear ratio options.

With a 2300mm (90.5in) wheelbase, and track dimensions of 1315mm (51.8in) up front and 1312mm (51.6in) at the rear, the chassis frame played host to double-wishbone suspension at both ends, with coil spring/shock absorber units employed for springing and damping. At the front, this assembly sat in the middle of the wishbones, but at the back, they sat outside, with



Edgar Barth making good use of the roll-over bar added to the W-RS in 1963 to jump into this well-used works car at Sebring. It proved temperamental in Florida, and again when the same car wore number 188 for its fourth Targa. Perhaps it was starting to show its age? After all, only one 718 W-RS was ever built ...

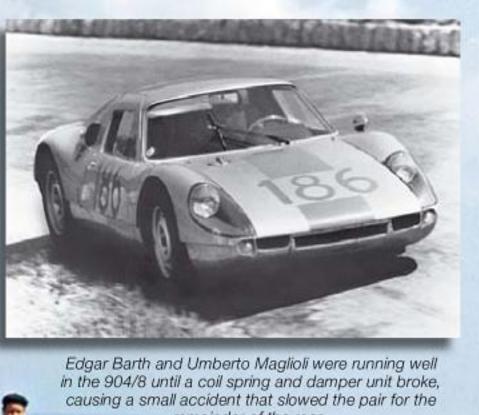
radius rods to aid location. Disc brakes were used on all four corners, sourced from the 356C parts bin, shrouded by Dunlop 165 R15 radials mounted on 5J rims.

The first production model was completed in November 1963, and details were released to the press at the end of the month. The price for the Carrera GTS – the 'customer' version of the 904 – was less than DM 30,000, which was quite cheap for a thoroughbred racing machine.

The intention was to build 100 examples with the fourcylinder Carrera engine for homologation purposes as soon as possible (two cars a day proved the limit at the Heinkel facility), and then to make a small series as works cars with six- and eightcylinder power units. After that, a second series of 100 vehicles would be built for the 1965 season, solely with six-cylinder engines and with an evolution certificate for GT competitions.

Records show that around 110 904s were built in the initial production run. Porsche kept the first ten 1964 model year cars for itself, but the vast majority of the rest were sold within weeks, with some delivered as early as the middle of January. Although many of the early cars went to America, it wasn't until 31 March 1964 that homologation requirements were finally met; sadly, too late for Daytona and Sebring, putting the car in a Class it was never meant to be competitive in. Despite the car's popularity, demand did ultimately outstrip supply, as the second batch was never made. Instead, with Heinkel's future as part of the VFW group uncertain, resources were poured into another new machine planned for 1966, when the World Championship would be run using a different format.

The 356B DKS of Gunther Klass and Jochen Neerpasch being admired in Sicily, and a rear view of the same car as it appeared on the Targa Florio. US-R5 1011



remainder of the race.

(and overleaf) A couple of shots of the Dreikantschaber in action during its Sicilian sortie. The 904s would soon make this model redundant in racing, although it did have a very brief rally career afterward.



### 1964 season review

As the World Sports Car Championship format became less and less distinct, with a great deal of its appeal lost as a result, the most important races were those that accepted prototypes, for these were the closest to a proper no-holds-barred formula – events that accepted pure sports-racers, and therefore the best that each manufacturer could field. These high profile endurance events (some of which allowed GTs to run at the same time, giving the kind of colourful grids that harked back to the heydays of the 1950s), were augmented by GT races and hillclimbs, and even the Tour de France Automobile was included. Naturally, it was almost impossible to declare a worthy champion at the end of the season ...

Porsche entered the two 356B DKS models at Daytona, with Edgar Barth, Herbert Linge, Jo Bonnier, and Don Wester sharing the driving in this 2000km, GT-only meeting. In a race dominated by 250GTOs, which marked the debut of the 904 (albeit an unsuccessful outing), one of the factory Porsches came sixth (first in Class), with the other eighth (second in Class).

These same two cars were then used for the Sebring 12-hour classic a month later in March, along with the 718 W-RS for Barth and Linge. The best of the works Porsches was the 'standard' DKS handled by Ben Pon and Joe Buzzetta (the Don Wester DKS ran as a prototype), finishing tenth overall and first in the two-litre GT category. However, it was not the first Porsche to cross the line; that honour went to the ninth-placed 904 GTS driven by Briggs Cunningham and Lake Underwood. The 904 was not homologated until April, meaning it had to run as a prototype at Sebring, rather than a GT car. Nonetheless, it still won its Class, in this, its first major race (Daytona was not on the international calendar at that time). Two other 904 GTS models finished, with two more failing to reach the end – all of the 904s were privately entered in Florida.

The 904 had already shown a good turn of speed in the States, on power tracks where a horsepower advantage could



The Davis/Pucci 904 on its way to victory on the Targa.

make itself felt, but superior handling was very much the order of the day on the Targa Florio. A good chassis could level things up, as long as there was enough torque on hand to get out of the corners as quickly as a well-balanced car could go through them. Modifications applied after lessons learnt from the US races, and further testing, improved the 904, with better venting for the engine bay, and a host of minor changes aimed at enhancing reliability and ease of servicing.

With the Ferrari factory team staying away from Sicily, it looked like the biggest threat to Porsche would come from the Shelby-Cobras and privateers. The works entered the W-RS and a new eight-cylinder version of the 904 (designated as a 904/8), plus a 356B DKS and two 904 GTS models. Unfortunately, a driveshaft coupling broke while Bonnier was leading in the W-RS, leaving Barth and Maglioli in front in the 904/8. This pair was then delayed when a suspension failure caused an accident, though there were enough regular 904s to give the Stuttgart marque an epic victory. Colin Davis (son of the famous journalist and racing driver, Sammy), and Antonio Pucci won the 1964 Targa Florio; Linge and Balzarini finished second in another 904 GTS. The DKS came seventh after brake problems slowed Klass, a top rally exponent, but he and Neerpasch could be proud of their third in Class, while Jacques Rey's 904 GTS picked up fourth in the same 2000 GT category.

A 500km race at the beautiful Spa circuit was added to the 1964 endurance calendar, albeit restricted to GTs. No fewer than eight 904 GTSs finished the event, including the sole factory car (a normal, four-cylinder version) entered for Barth, with only one falling by the wayside. Reliability concerns voiced during the Targa Florio proved unfounded.

Although Ferrari won at the Nürburgring, Porsche's performance was every bit as impressive, thanks to the efforts of privateers. The factory entered 904/8s for the pairings of Davis/



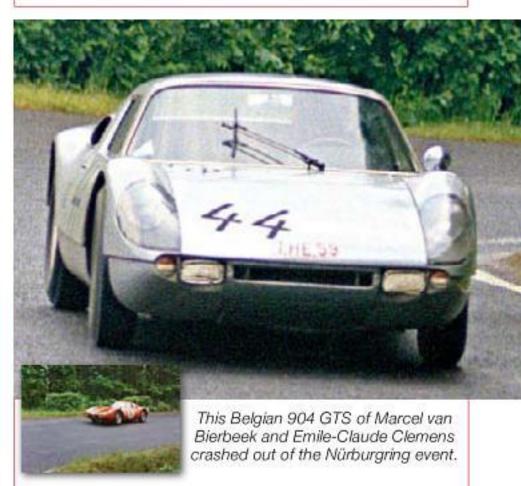


Front and rear views of the works 904/8 supposed to have been shared by Colin Davis and Edgar Barth for the Nürburgring 1000km classic, although they ended up using a four-cylinder machine brought along as a T-car. Number 46 was driven by Herbert Linge and Gerhard Mitter, while 126 in the background was handled by Jo Bonnier (seen talking to Huschke von Hanstein at the back of 127), and Richie Ginther.

Barth (forced to use a spare GTS following a pre-race accident) and Bonnier/Ginther, plus a regular 904 for Linge and Mitter. Davis and Barth crashed out, while Bonnier and Ginther had all sorts of problems, but somehow limped to a Class victory, even after finishing behind Ben Pon's privately-owned GTS; the fact there were no other vehicles left in the Prototype category after 1000km seems to explain it! The Linge/Mitter car finished



Gunther Klass and Sepp Greger shared the 356B DKS, but it was Klass' name on the entry list rather than Porsche System Engineering.



Inset: The car that Herbert Müller and Andre Knorr took to sixth place (second in Class) at the Nürburgring. Sadly, the works Ferraris were too strong for the Stuttgart warriors on this occasion.

a disappointing 12th, with no fewer than six GTSs crossing the line ahead of them.

Le Mans was not kind to Porsche. Both 904/8s (904008 and 904009) had engine and clutch trouble that put them out of the race, and clutch slip on the works GTS of Koch and Schiller slowed progress on that car, too. Even though the privateers did well, in reality, the weekend was best forgotten ...

The circus them moved to Reims, but only one 904/8 (assigned to Davis/Barth) and a GTS for Koch and Mitter were entered by the works. Nevertheless, eight other 904s lined up on the grid, thanks to private owners turning out, so there was plenty of Porsche representation. Unfortunately, the 904/8 dropped out when its gearbox lost all its oil, and it became something of a Ferrari whitewash. At least the German maker could claim excellent reliability for the regular GTS, and a one-two-three in Class, but it wasn't quite the same as an outright victory.

The 904s were restricted to the separate 1600cc race at the TT at the end of August, and there was no works activity. The next round of interest was therefore the final one in Paris – the Montlhéry 1000km Race. The 904/6 of Linge and Mitter went out following an accident (not a good debut for the six-cylinder version of the 904), and the car entered by Auguste Veuillet for Buchet and Klass also fell by the wayside. But at least the factory 904/8 (904009) finished on the podium, and there was another one-two-three in Class for the run-of-the-mill 904s, giving Porsche yet another two-litre GT Championship title.

Of the minor events, Gerhard Koch won the Rheinland-Pfalz race at the Nürburgring in August in his 904, Rob Slotemaker took the flag at the Inter-Europa three-hour event

at Monza, and also came third at the Nürburgring, while Joe Buzzetta and Bill Wuesthoff won the Bridgehampton Double 500 meeting, followed home by the 904 of Skip Scott. Other Porsche 904 drivers to pick up podium places included Ben Pon at the Nürburgring and Monza, Guy Ligier at Montlhéry (third behind Koch), Dickie Stoop and Mike de Udy at Goodwood, and Heinz Schiller at Monza.

Jo Bonnier (left), Herbert Linge (centre), and master engineer, Helmuth Bott, pictured in reflective mood in 1964.

### INTERNATIONAL ENDURANCE RACES

Day	tona 2000km (16 February)		
1	P Hill/P Rodriguez	Ferrari 250GTO	327 laps
2	D Piper/L Bianchi	Ferrari 250GTO	323 laps
3	W Hansgen/R Grossmann	Ferrari 250GTO	319 laps
6	E Barth/H Linge/J. Bonnier	Porsche 356B DKS	311 laps/1st in Class
8	J Bonnier/D Wester/E. Barth	Porsche 356B DKS	303 laps/2nd in Class
13	D Streeter/M Kurkjian	Porsche-Abarth GTL	277 laps/3rd in Class

Seb	ring 12-hour Race (22 March)		10
1	M Parkes/U Maglioli	Ferrari 275P	214 laps
2	L Scarfiotti/N Vaccarella	Ferrari 275P	213 laps
3	J Surtees/L Bandini	Ferrari 330P	212 laps
9	L Underwood/B Cunningham	Porsche 904 GTS	194 laps/1st in Class
10	B Pon/J Buzzetta	Porsche 356B DKS	191 laps/1st in Class
11	C Cassel/D Sesslar	Porsche-Abarth GTL	190 laps/2nd in Class
18	D Wester/B Jennings	Porsche-Abarth GTL	175 laps/2nd in Class
19	E Barth/H Linge	Porsche 718 W-RS	173 laps/3rd in Class

Targ	ga Florio (26 April)		
1	C Davis/A Pucci	Porsche 904 GTS	7h 10m 54s/1st in Class
2	H Linge/G Balzarini	Porsche 904 GTS	7h 23m 16s/2nd in Class
3	R Bussinello/N Todaro	Alfa Romeo Giulia TZ	7h 27m 07s
6	E Barth/U Maglioli	Porsche 904/8	7h 29m 16s/1st in Class
7	G Klass/J Neerpasch	Porsche 356B DKS	7h 30m 45s/3rd in Class

Spa	500km (17 May)		0
1	M Parkes	Ferrari 250GTO	2h 32m 05s
2	J Guichet	Ferrari 250GTO	2h 33m 14s
3	L Bandini	Ferrari 250GTO	2h 34m 20s
5	E Barth	Porsche 904 GTS	1 lap down/1st in Class
7	G Koch	Porsche 904 GTS	1 lap down/2nd in Class
8	B Pon	Porsche 904 GTS	1 lap down/3rd in Class

continued page 136





Two contemporary colour shots of the Barth/Linge 904/8 at Le Mans.



This 904 was entered by 'Franc' in the three-litre prototype category at Le Mans. Driven by Jean Kerguen and Franc himself (aka Jacques Dewez), it finished 12th overall and first in Class.



Left: Ben Pon and Heck van Zalinge on their way to eighth place in France's premier race.



### INTERNATIONAL ENDURANCE RACES

Nür	burgring 1000km (31 May)		
1	L Scarfiotti/N Vaccarella	Ferrari 275P	7h 08m 27s
2	M Parkes/J Guichet	Ferrari 250GTO	7h 09m 02s
3	B Pon/G Koch	Porsche 904 GTS	7h 12m 34s/1st in Class
5	J Bonnier/R Ginther	Porsche 904/8	2 laps down/1st in Class
6	H Müller/A Knorr	Porsche 904 GTS	2 laps down/2nd in Class
8	J Siffert/H Schiller	Porsche 904 GTS	2 laps down/3rd in Class
15	G Klass/S Greger	Porsche 356B DKS	3 laps down/3rd in Class

1	J Guichet/N Vaccarella	Ferrari 275P	348 laps
2	G Hill/J Bonnier	Ferrari 330P	344 laps
3	J Surtees/L Bandini	Ferrari 330P	337 laps
7	R Buchet/G Ligier	Porsche 904 GTS	322 laps/1st in Class
8	B Pon/H van Zalinge	Porsche 904 GTS	318 laps/2nd in Class
10	G Koch/H Schiller	Porsche 904 GTS	314 laps/3rd in Class

La Mana 24 hour Base (21 hour)

Rein	ms 12-hour Race (5 July)		
1	G Hill/J Bonnier	Ferrari 275LM/P	296 laps
2	J Surtees/L Bandini	Ferrari 275LM/P	295 laps
3	M Parkes/L Scarfiotti	Ferrari 250GTO	279 laps
5	N Estefano/A Viannini	Porsche 904 GTS	273 laps/1st in Class
6	G Koch/G Mitter	Porsche 904 GTS	271 laps/2nd in Class
7	B Pon/R Slotemaker	Porsche 904 GTS	270 laps/3rd in Class

1	G Hill/J Bonnier	Ferrari 330P	129 laps
2	P Rodriguez/J Schlesser	Ferrari 250GTO	127 laps
3	E Barth/C Davis	Porsche 904/8	126 laps/1st in Class
6	R Slotemaker/D van Lennep	Porsche 904 GTS	124 laps/1st in Class
8	B Pon/G Koch	Porsche 904 GTS	123 laps/2nd in Class
9	J Dewez/J Kerguen	Porsche 904 GTS	121 laps/3rd in Class

There was also a third place in the Tour de France Automobile for Robert Buchet and Herbert Linge, which translated into an easy Class win for the French-German pairing and their 904 GTS; the works car of Gunther Klass and Rolf Wutherich came next, followed by two more 904 GTSs. Farther afield, Soukichi Shikiba won the Japanese Grand Prix, but it wasn't long before the domestic manufacturers were creating some very specialized machinery to meet the German challenge.

### The Elva-Porsche

Elva was a British sports car maker founded in 1955 by Frank Nichols. Elvas were always popular in America, allowing Nichols to



Action from the Japanese Grand Prix, and a Prince Skyline being chased by a 904 GTS. The 904, driven by Soukichi Shikiba, went on to win the event. (Courtesy Nissan)

Although Edgar Barth won the Mont Ventoux hillclimb in an Elva-Porsche, he was soon back in the driving seat of the 718 W-RS.





A beautiful shot from the Gaisberg event in Austria, with Barth in the background studying the competition – in this case, a BMW-powered Lotus ...

expand the business in 1962 with larger premises opened in Rye, southern England. The Mark VII that was launched at that time came to the attention of a number of US racers, and Carl Haas, the Elva importer based in Chicago, was asked to see if Porsche would be willing to supply power units for this lightweight machine.

Ultimately, Porsche developed a 180bhp, four-cylinder



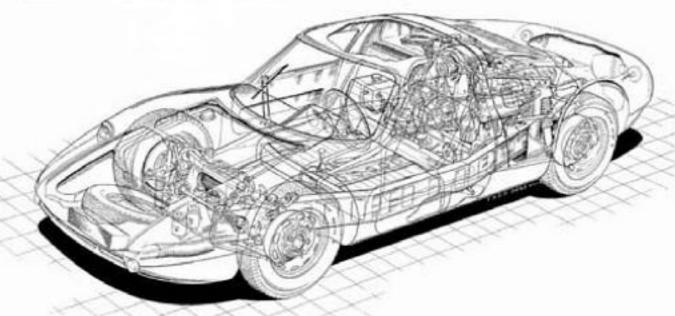
Edgar Barth threading his way through traffic to the start of the Sierre Montagna Crans hillclimb. Of the seven point-scoring rounds, he won the first six to claim the 1964 European Hillclimb Championship with ease. This last event of the season, in which Barth failed to finish, was won by Herbert Müller in an Elva-Porsche. Sadly, Barth fell seriously ill soon after, and died in May 1965. The W-RS was retired in his honour.

Carrera engine with a horizontal cooling fan for the project, and linked it to a five-speed gearbox before it was mated to the Mark VII spaceframe. Testing took place at the end of 1963, with Herbert Linge personally trying the prototype as a safeguard against factory embarrassment. The first car was then shipped to Haas, and raced with a great deal of success at the tail end of

the season. At the 1964 London

Racing Car Show, it was announced that Trojan had bought the Elva marque, but the official debut of the 'production' Elva-Porsche was of greater importance to followers of motorsport. More than a dozen were built and shipped straight to the States, but the marriage of an Elva chassis and a Porsche engine was somehow destined to be better in theory than in practice. At least the Elva-Porsche combination found favour with the hillclimbing set in Europe, but it was of little consolation to those who did the matchmaking in the first place ...





# XIV

# 1965

hankfully, 1965 was the last year of a mixed format for the top-class races; 1966 would see a return to purity, with prototypes and proper sports-racers fighting it out for a meaningful World Championship. This new era would ultimately bring about one of the most exciting periods in the history of motorsport. In the meantime, the GT title was still Porsche's target for the 904; the 904/8 and 904/6 models were refined, and a batch of unusual eight-cylinder variants was produced to compete in the premier hillclimb series.

### The races

The factory had two 904s listed as entries for Daytona, but they did not compete in the end. Instead, it was left to privateers to uphold Stuttgart honour, and a very good job they did of it, too, with three GTSs finishing in the top ten to secure a one-two-three in the two-litre GT Class. There were no reliability issues, either, as the fourth 904 in the race also finished, albeit a long way down the field.

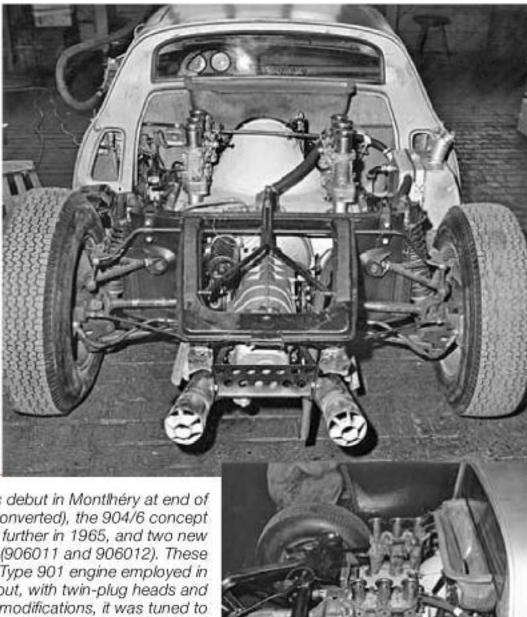
Despite a couple of 904 retirements, the GTS claimed first through fifth in Class at Sebring, with the two works-entered cars coming out at the top of the pile. The factory 904/8 coupé was perhaps the only disappointment in a very wet Florida, finishing a long way down on the leaders.

Porsche had a 904/8 and a 904/6 at the Le Mans test weekend in early April, the latter spotted with a vertical cooling fan (still

horizontal on the eight-cylinder car), and special Weber carburettors. Lap times revealed it was going to be a Ferrari versus Ford event, with the Porsches quite a long way off the pace. But 24 hours is a long time, and nothing is ever certain until the chequered flag falls at Le Mans.

Monza was added to the calendar for 1965, with Ferrari turning out in force. However, the performance of Ben Pon and Robert Slotemaker's private 904 GTS was quite remarkable, recording fourth overall against opposition that should have proved way too strong if one was to take any notice of bookmaker's odds. Only

Having made its debut in Montlhéry at end of 1964 (904001 duly converted), the 904/6 concept was developed further in 1965, and two new cars were built (906011 and 906012). These used the 1991cc Type 901 engine employed in the 911 road car, but, with twin-plug heads and a number of other modifications, it was tuned to give 190bhp instead of the regular 130bhp. Tuning and a new exhaust system bumped up power to 185bhp on the 904's 587/3 four-cylinder engine, too. Improvements in braking, steering and suspension were also made in readiness for the new season.







Another 904 variant was the 904/8 Bergspyder. In hillclimbing, weight reduction comes before beauty, and styling considerations were obviously of no concern with this series. It appears that three cars were given Spyder bodies, usually powered by flat-eights, although at least one had a six-cylinder unit transplant at some stage in its racing life. These cars, like the two new 904/6s built for 1965, carried 906 rather than 904 chassis numbers.

Gerhard Mitter and Herbert Linge took this 904/8 coupé to a Class win in the prototype category at Sebring.





Gerhard Koch and Ben Pon in action during the ADAC 1000km event at the Nürburgring.



one other Porsche was entered – that of the Scuderia Filipinetti – but this was withdrawn following a fatal accident in one of the team's Ferraris.

There were no Porsches present for the Tourist Trophy races on 1 May, so the Targa Florio was the next important race as far as fans of the Stuttgart marque were concerned. Klass and Pucci ran a 904/6 in practice, but swapped to a regular GTS in the race, while Maglioli and Linge parked up their 911 to drive a six-cylinder 904 (chassis 904001); Andrea Viannini crashed a works GTS, and did not take the starter's flag. Although a Ferrari won, the works Porsches filled the next four places. The 904/8 that came second was one of the Bergspyder models (906007), while the other 904/8, which finished fourth, had a regular coupé body. In-between them was the Maglioli/Linge machine, with

The works cars about to set off for Sicily.

The 904/8 Spyder that Colin Davis and Gerhard Mitter campaigned on the Targa Florio being used as a handy writing desk. This is chassis 906007, which was known at the factory as the Kangaruh due to its driving characteristics. One contemporary report described it as looking "terribly short and peculiar."



the Klass/Pucci car taking fifth and a Class win in the two-litre GT category. Only one Porsche failed to finish – the 904 GTS belonging to Giancarlo Maestrini, which had trouble with its fuel system early on.

The Spa-Francorchamps event attracted little in the way of factory support, so the Belgian Ferraris were up against the Dutch Porsches, dealer teams, and a smattering of privateers. Pon did well to keep up with the larger-engined Ferraris on this fast circuit, and finished third in a 904 GTS, less than three minutes down on the winner. A second in Class was duly secured by a private 904 after Slotemaker had a wheel break on the other Racing Team Holland GTS.

The 1000km classic at the Nürburgring was not a happy one for Porsche in 1965. Edgar Barth had died on the eve of the race, and one of the 904/8 Bergspyders had been badly damaged in practice. Overshadowed by the Ferrari prototypes (including a new Dino 166), despite fielding three 904/6s and a 904/8 coupé, Porsche's performance prompted one commentator to ponder whether or not the 904 was obsolete. The team would go

		onal Endurance Rac	
2	J Surtees/L Scarfiotti	Ferrari 330P2	100 laps
3	B McLaren/K Miles	Ford GT40	96 laps
4	B Pon/R Slotemaker	Porsche 904 GTS	92 laps/1st in Class
T	- Floris (O.B.)		
	ga Florio (9 May)	E1075D3	71.0110
_1	N Vaccarella/L Bandini	Ferrari 275P2	7h 01m 12s
_2	C Davis/G Mitter	Porsche 904/8 Spyder	7h 05m 34s/1st in Class
3	U Maglioli/H Linge	Porsche 904/6 coupé	7h 06m 58s/2nd in Class
4	J Bonnier/G Hill	Porsche 904/8 coupé	7h 10m 08s/3rd in Class
5	G Klass/A Pucci	Porsche 904 GTS	7h 11m 07s/1st in Class
-	500l (15 ht)		
	500km (16 May)	F 375144	21- 20 46-
	W Mairesse	Ferrari 275LM	2h 29m 46s
_2	D Piper	Ferrari 275LM	2h 31m 43s
3	B Pon	Porsche 904 GTS	2h 32m 37s/1st in Class
_10	L Dernier	Porsche 904 GTS	2 laps down/2nd in Class
NIG	huraring 1000km (22 May)		
	burgring 1000km (23 May)  J Surtees/L Scarfiotti	Ferrari 330P2	6h 53m 05s
2	M Parkes/J Guichet	Ferrari 275P2	6h 53m 50s
3	J Bonnier/J Rindt	Porsche 904/8 coupé	7h 00m 59s/1st in Class
5	U Maglioli/H Linge	Porsche 904/6 coupé	1 lap down/3rd in Class
_11	A Fischhaber/U Schutz	Porsche 904 GTS	2 laps down/1st in Class
14	M Abels/G Selbach	Porsche 904 GTS	3 laps down/2nd in Class
21	B Degner/F Kalkuhl	Porsche 904 GTS	5 laps down/3rd in Class
88	gello 500km (6 June)		
	r -	Farmed 2501 AA	4h 50 00-
	M Casoni/A Nicodemi	Ferrari 250LM	4h 59m 08s
2	M Grana/C Toppetti	Ferrari 250LM	5h 03m 37s
3	O Sigala/L Taramazzo	Ferrari 250LM	5h 14m 01s
- 8	G Maestrini/C Fabri	Porsche 904 GTS	5h 42m 26s/1st in Class
le A	Mans 24-hour Race (20 June)		
1	M Gregory/J Rindt	Ferrari 275LM	348 laps
	P Dumay/G Gosselin	Ferrari 275LM	343 laps
3	W Mairesse/J Blaton	Ferrari 275GTB	340 laps
4	H Linge/P Nocker	Porsche 904/6 coupé	336 laps/1st in Class
- 5	G Koch/A Fischhaber	Porsche 904 GTS	325 laps/1st in Class
-	S ISSUITE I ISSUITABLE	. GISCHE SOT GIS	DED INPAY ISCHI CIUSS

Ferrari 365P2

Ferrari 365P2

Ferrari 250LM

Porsche 904 GTS

Porsche 904 GTS

261 laps/1st in Class

231 laps/2nd in Class

284 laps

282 laps

279 laps

in this 12-hour event, and with Montlhéry demoted, that was the end of another year's racing ...

In the minor meetings during the year, Maurizio Grana piloted a 904 GTS to second place in the Circuit of Vallelunga in May, and Porsche was triumphant at Solitude a couple of months later, in both GT and sports car races. Ben Pon won the Circuit of Zandvoort for Grand Touring cars, and then Herb Wetanson won the two-litre version of the Double 500 at Bridgehampton with his own 904. There was only one other Porsche in the event (the 356B Carrera of Bruce Jennings), and that failed to finish. Wetanson's victory was therefore keenly appreciated back in Stuttgart. To end the season, Robert Buchet, Rolf Stommelen, and Peter Gregg were second at Montlhéry, Innsbruck, and Nassau respectively.

It's fair to say that the 904 had dominated two-litre GT and sports car racing during 1964 and 1965. In terms of overall wins the 904 was not as successful as the previous 718s, though it did set Porsche on a route that led to a decade of competition success. From now on, Porsche's philosophy on motorsport changed, with the company's racers moving further and further away from their road car counterparts. The 904 was to be the last competition model in which the Fuhrmann four-cam Carrera engine was used.

### The European Hillclimbing Championship

In hillclimbing, the season was a three-way battle between Porsche, Abarth and Ferrari. Gerhard Mitter used a 904/6 at Mont Ventoux, but was declared runner-up to Hans Herrmann's two-litre Fiat-Abarth. With no Edgar Barth to defend his title, Porsche then gave Mitter the car that had come second on the Targa Florio, and he won Rossfeld by a handsome margin as a result, followed home by Herbert Müller in a works 904, and Anton Fischhaber in his Porschepowered Elva. An Abarth won in Bolzano, and then Ludovico Scarfiotti began an incredible string of victories with his factory Ferrari Dino 206P and 206S models. With the Bergspyder gradually refined over the season - including a complete revamp in the last days of summer -Mitter was close behind when Scarfiotti chalked

Reims 12-hour Race (4 July)

2 J Surtees/M Parkes

3 W Mairesse/J Blaton

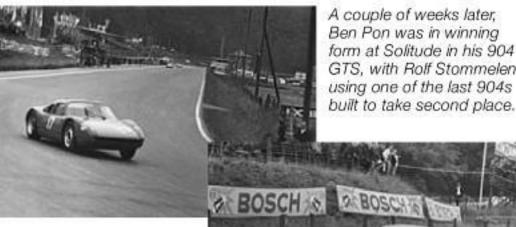
6 P Hawkins/M de Udy

10 C Barbier/A Potier

1 P Rodriguez/J Guichet



The Lotus of Chris Williams looks in a sorry state, but Gerhard Mitter (seen here in the 904/8 Bergspyder) held off a pair of Elva-BMWs to take the flag at the Norisring International meeting on 4 July. The car was fitted with wider rear wheels by this time.



A couple of weeks later, Ben Pon was in winning form at Solitude in his 904 GTS, with Rolf Stommelen using one of the last 904s

Note the air scoops on the rear flanks. which had a squarer profile on the later cars.



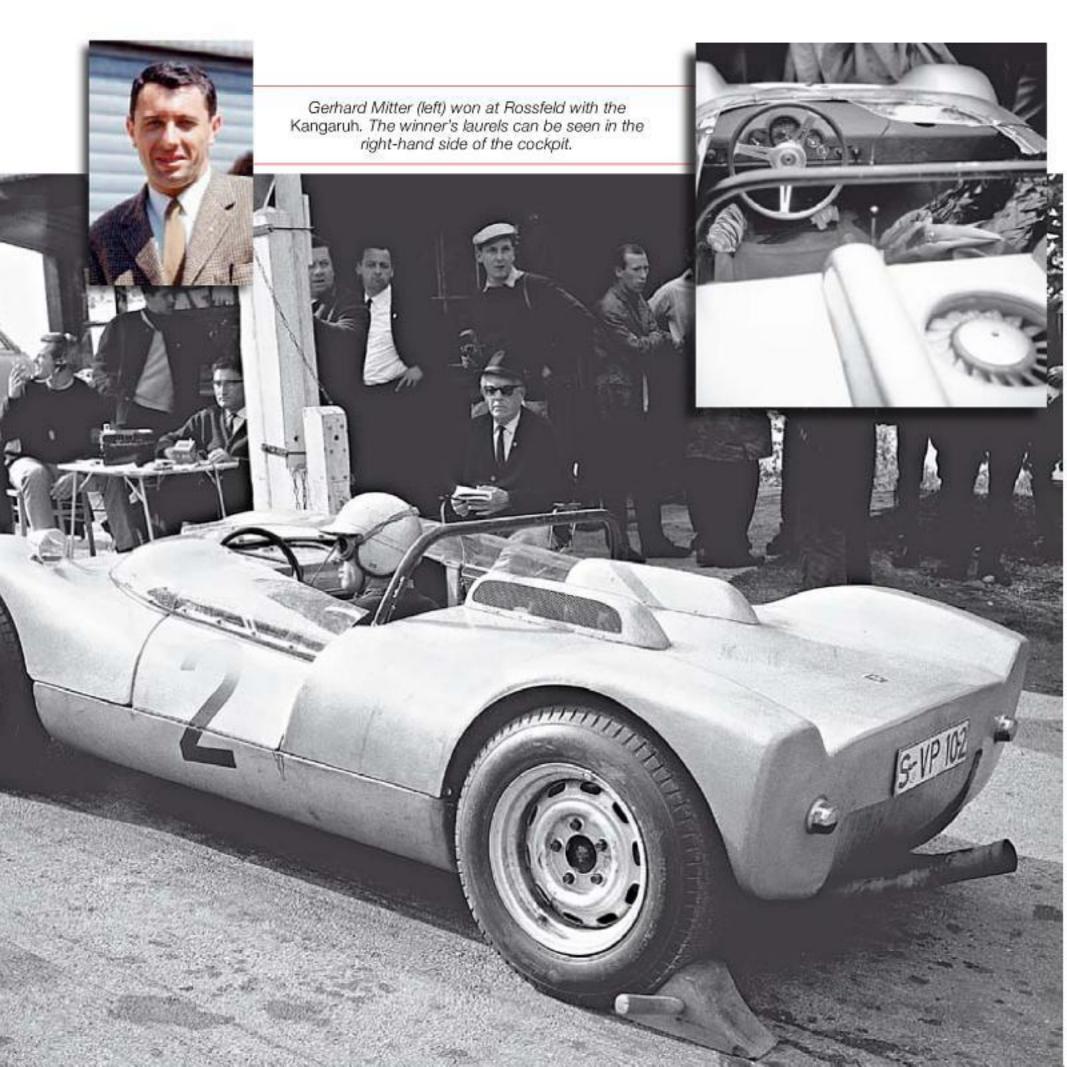
Anton 'Toni' Fischhaber attacking the Rossfeld climb in his Porsche-engined Elva Mark VII.

up his four wins, but the Italian was crowned champion, as he had been in 1962. At least the final round at Gaisberg provided a one-two-three for Porsche 904 GTS drivers, with Michel Weber leading them home in the awful conditions.

Interestingly, while Porsche's works racing cars started out silver, in the 'Silver Arrows' tradition of the 1930s, the hillclimb cars had begun to adopt Germany's proper national racing colour of white. One always thinks of British racing cars being green, Italian machines in red, and French vehicles painted blue,

The Solitude event also had a sports and prototype race, which Gerhard Mitter won easily using the 904/8 (chassis 906004, aka Contergan). The Lotus-BMW in the background came second, two minutes down in the end, while the 904/6 coupé of Herbert Linge was third.





Wemer Brockhaus lifting a wheel on the Freiburg hillclimb.

(and overleaf) Various views of the 904/8 Bergspyder as it appeared at the Ollon-Villars event, complete with much more attractive bodywork, and a new spaceframe underneath it. Note also the use of Formula One, 13-inch wheels with knockoff hubs rather than the traditional 15-inch rims, as well as a revised suspension. In this guise, the car was officially known as the Type 906. The one shot shows Mitter with Fischhaber's Elva waiting in line behind him.



Rolling Mitter's car into battle on the Freiburg-Schauinsland climb. A matching 904/8 Spyder can be seen behind, with Herbert Müller at the wheel. Mitter came second, while Muller failed to finish the seven mile (11.2km) course. At least modifications made to the Bergspyders, both body and mechanical, were starting to pay off.





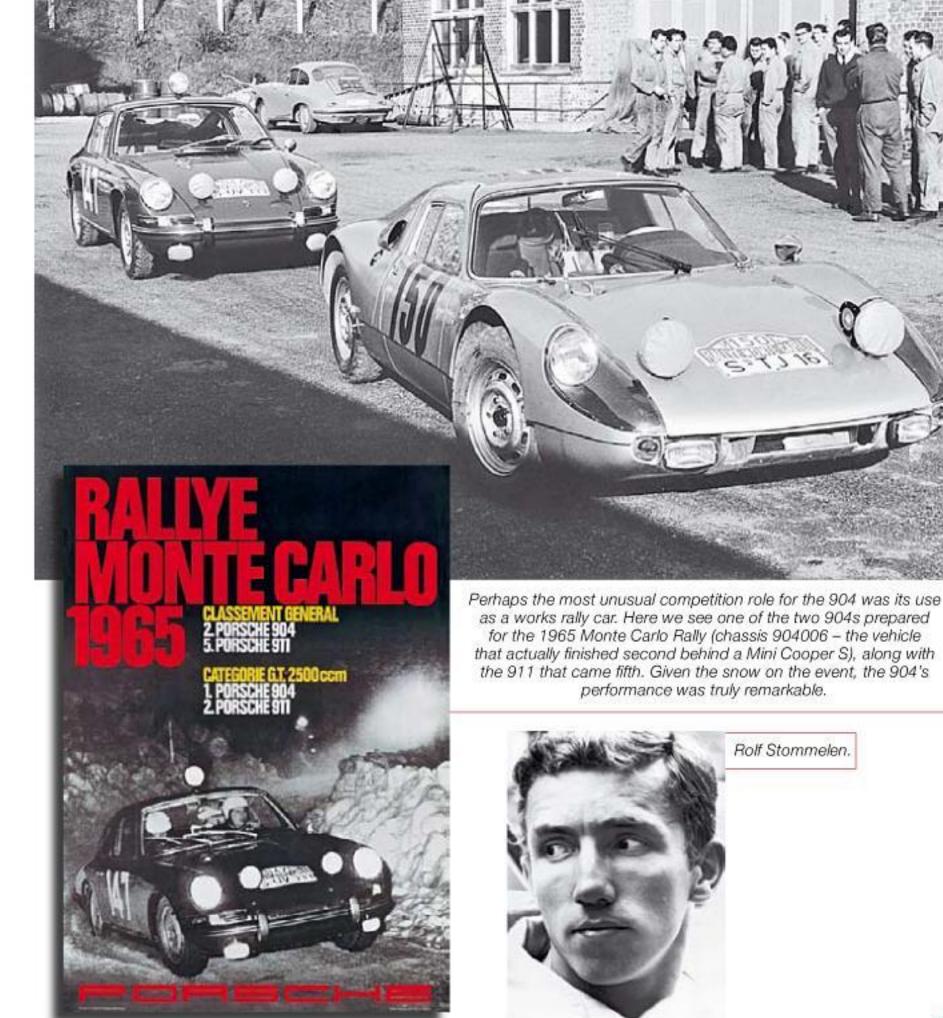


but the image of German racers has always been silver, thanks to the strong impression left by the Mercedes-Benz and Auto Union Grand Prix cars of the pre-war era. This was not always the case, however, for they started off as white. It was only after the legendary Mercedes team manager, Alfred Neubauer, ordered his mechanics to strip the paint off his racing cars in order to save weight – thus revealing the bare metal underneath – that silver became recognized as the shade for German racers. Now, on the orders of Ferdinand Piech, Ferry Porsche's nephew, white was to get a revival via the Stuttgart marque ...

One of the many 904s pushing hard on the Gaisberg hillclimb in Austria.

Huschke von Hanstein pictured on 30 September at Hockenheim. He took the Ollon-Villars Bergspyder to a number of world speed records on the day, although the wet weather robbed him of valuable traction, which meant that the records didn't stand for long.





# XV

# 1966

he 1966 season was full of promise. To qualify as a Group 4 Sports Car, only 50 cars had to be built over a 12-month period in order to get FIA homologation papers. A new generation of sports-racers was born as a result, with last year's thinly-disguised 'GTs' becoming proper sports cars again, GTs being recognizable as real Grand Tourers (Porsche 911, Ferrari 275GTB, and so on), and the Prototype category (Group 6) pushing the technology envelope. The Ford GT40 came of age, along with the Ferrari 250LM and Dino 206S, and a new Porsche that could compete on equal terms – the 906 Carrera 6.

### The Carrera 6

The Carrera 6 was basically an evolution of the 904/6s and the Ollon-Villars Bergspyder run in 1965, inasmuch as the experience gained with these cars was the starting point for the 906 design. However, unlike the 904 series, under the new FIA rules the numbers required were not as high, and there were no niggling worries about potential road use (demand had been high enough for the 904 not to have to allow for road car sales), so a pure racing frame could be built.

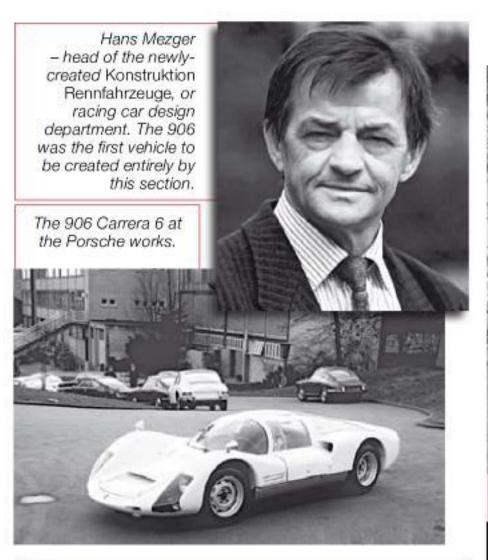
The light and elegant spaceframe (built outside the factory and found to be as rigid as that of the 904 chassis, but a fraction of its weight) was duly clothed in a body made of thin fibreglass panels with gullwing doors. It was extremely low, and the phrase 'form follows function' could well have been coined for this vehicle. One-fifth scale models were produced and tested for aerodynamic efficiency, and it was the results of these experiments that largely decided the final shape. Attention to detail was evident in each duct, louvre and curve, and the windscreen was bonded in place to cut drag.

By the standards of the day, the 904 had been blessed with leading edge styling, sporting a nose profile that cut through the air, and a purity of design that eliminated anything superfluous. The 906, however, made it look heavy and almost ornate. This was a pure racer, with panels starting from the ground and stretched tight up and over mechanical components and the cockpit, then smoothed over to interrupt airflow as little as possible. At a stroke, it even managed to make the Dino 2065 look dated.

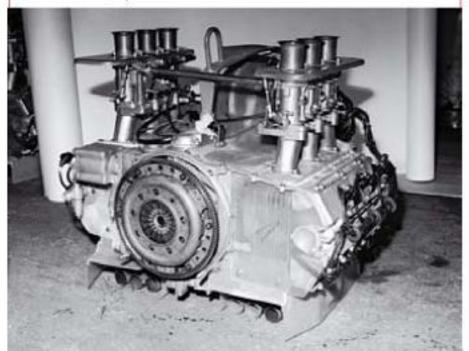
The new frame and body played host to a number of proven components from the works 904s. The 904/6 had come good at continued page 153 Ferdinand Piech, who was heavily involved in Porsche's six-cylinder engine project, and, later, architect of the company's all-conquering racing programme. He took over the Experimental Department in 1965, and then worked with Helmuth Bott to create a magnificent line of memorable Porsche sports-racers.



Helmuth Bott – the legendary engineer behind so many of Porsche's road and track projects.

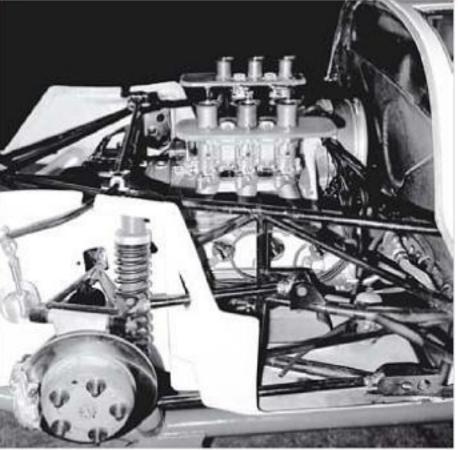


The Type 901/20 unit that powered the 906. In its basic construction, it was similar to the road car engine, but, in order to reduce weight, made from even more exotic metals than was the production version. It was ultimately lighter than a Carrera four, thanks to extensive use of magnesium alloy, titanium for the connecting rods, and forged aluminium pistons rather than cast items.





The 906 in the process of being built at Zuffenhausen.





The engine in situ. Cooling air was drawn in through the large scoop attached to the cockpit's rear bulkhead, while the two ducting tubes directed cooling air to the brakes and transmission.



The spartan cockpit was as compact as FIA rules would allow, while the deep and wide sills played host to the car's twin fuel tanks with a combined capacity of 100 litres (22 Imperial gallons).



Two views of a freshly completed Carrera 6 at the works. With the front cover off. one can see the oil cooler location beyond the spare tyre. The small ducts lower down, between the lighting units, were there to cool the front brakes.



Ar autortiesībām aizsargāts materiāls



Once the batch of 50 cars was completed in April, selected journalists were invited to inspect the 906 at Hockenheim. Note the diminutive size, the low front with its faired-in lights, the gullwing doors, and the signature yellow-tinted perspex canopy that smoothed airflow over the tail and fed air to the engine. While the wheelbase was carried over, the 580kg (1276lb) car was both wider and lower than the 904, with vastly increased track dimensions.



the end of 1965, with the team encouraged by its performance at Le Mans. The two-litre six was carried over, giving 210bhp at 8000rpm on a 10.3:1 compression ratio, and linked to a five-speed gearbox with numerous ratios available to suit each venue. In racing guise, the engine delivered an amazing exhaust note!

The suspension and braking system was also borrowed from the 904 series, which not only used up parts on hand, but also allowed existing customers to swap and change a large number of components if they were racing on a limited budget. About the only difference was in the use of harder mounting points for enhanced control, and greater adjustability built into the design. In addition, the brakes were the uprated set with a larger friction pad area, offered as an option the previous season. Covering these brakes were wider 15-inch wheels (7J up front, 9J at the rear), shod with either Dunlop or Goodyear racing rubber, which helped improve handling and roadholding.

The first car was finished in December 1965, and testing began straight away. The factory hoped to have the DM 45,000 car homologated in time for the start of the European season. As it happens, it wasn't until 1 May that Group 4 papers were issued, but at least a few cars were made ready in January, and there was nothing to stop it being entered as a prototype in the meantime.

## Season reflections

An unusually cold Daytona hosted the season opener, extended in 1966 to become a 24-hour event - the American equivalent to Le Mans. Porsche sent over 904 GTSs for Gerhard Mitter/Joe Buzzetta and Udo Schutz/Gunther Klass, plus one of the new 906s for Hans Herrmann (back in Porsche overalls again) and Herbert Linge. The works campaign was reminiscent of days of old - like clockwork, with no concerns about mechanical reliability. As one magazine put it: "The German team had merely poured in fuel, changed tyres and drivers, but nothing else." Granted, the big Fords dominated the top placings, but the Carrera 6 came sixth (first in the two-litre Prototype category), with the 904s a few laps down but next in line, and with a Class win into the bargain. Private 904s followed the ninth-placed NART Ferrari 250LM, and only one retired, giving the Porsche management plenty to celebrate before the next round at Sebring.

Porsche was out in force for the 12-hour Florida classic, with two Carrera 6s entered by the works, three from private owners, and five 904s, two of which were factory cars. The Herrmann/ Buzzetta 906 eventually took fourth place, beaten only by V8 Ford power, thanks to the fast little Dino having gear linkage trouble, and a private 906 (handled by Scooter Patrick and Don Wester) that had been leading the two-litre pack being involved in a freak accident. But reliability counts, and, with 40 of the 64 cars that started failing to make it to the chequered flag, Porsche had proved the point.

Poster declaring Porsche's success at Sebring, despite using the Daytona car for artwork!

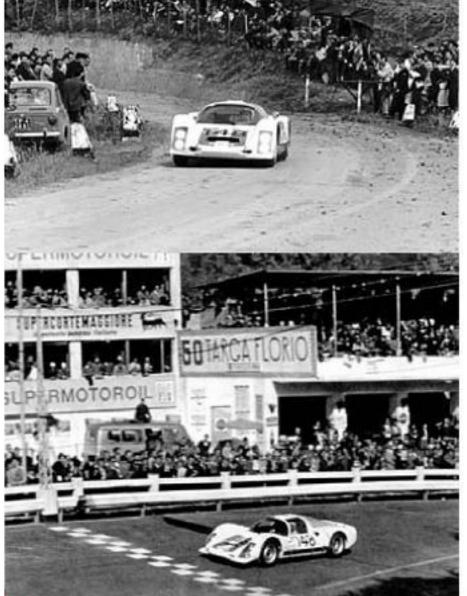
The next race was at Monza, where Ferrari managed to hold off the Fords for a home win. Once again, though, 906s showed exceptional pace and reliability, even in the pouring rain. They beat not only the works Ferrari Dinos, much bigger cars, too, to claim a convincing one-two-three Class. Only one 906

failed to finish (Gerhard Koch's car), sidelined with the only two 904s in the race, both privately-entered machines.

The Targa was an odd event, as, having received Group 4

Back in Stuttgart after a highly successful trip to Florida. This wonderful picture shows (left to right): Helmuth Bott, Dieter Glemser (who partnered Udo Schutz in one of the 904s), F A 'Butzi' Porsche, Hans Herrmann, Ferdinand Piech, Ferry Porsche, Gerhard Mitter, Peter Falk (a key development engineer that worked with Bott when not driving 911 rally cars - he was fifth with Herbert Linge on the 1965 Monte!), and Gunther Klass, who shared one of the 906s with Mitter.





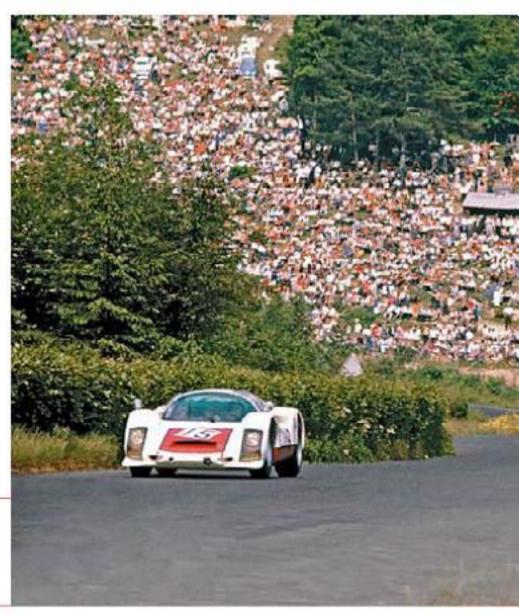
A couple of shots of the Scuderia Filipinetti 906 of Herbert Müller and Willy Mairesse en route to victory on the 50th Targa Florio. This was actually a factory-prepared car on loan to the famous équipe. Note the tiny front spoilers, added by the works in the spring to reduce lift.

tried by Porsche previously, but while response was improved, it didn't help on this occasion, as both of the 220bhp cars crashed. With the 906Es out, it looked as if the 2195cc 906/8 was going to win with ease, but then the rear suspension suddenly gave way, bringing its race to an end. Fortunately, Willy Mairesse kept Porsche in the lead in the Scuderia Filipinetti car, and then stayed in front to claim a well-deserved victory, beating the nearest

Hans Herrmann and Dieter Glemser were running well in the ADAC 1000km, actually staying in front of the 906/8, but an accident ended their challenge in the 906E. Another works 906E was sidelined by a broken driveshaft, but at least one finished fourth.

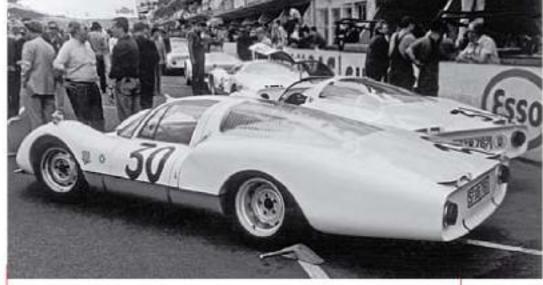


The 906/8 of Rindt and Vaccarella at the Nürburgring. Clutch troubles proved its downfall on this occasion.





The 904 GTS was homologated as sports car for 1966, complete with a subtle rear spoiler. By now, most 904 engines had a higher c/r and detail changes to give 190bhp. This was actually a works car loaned to a German TV company to film the action at the Nürburgring, with Paul Frere and Rainer Gunzler at the wheel.



The fuel-injected, long-tail cars at Le Mans in the order they finished, the car nearest the camera first home (Jo Siffert becoming an important member of the Porsche team thereafter), followed by number 31, then 32. The LH arrangement was far neater than that seen at the Le Mans practice session a couple of months earlier, although it was found that tiny spoilers were needed in each corner at the back to prevent the vehicles lifting down the Mulsanne Straight. The new tail, whilst more aerodynamic, added around 20kg (44lb) to the car's weight.



An honourable mention in Dunlop's advertising after Le Mans.



The Siffert/Davis car on a charge at the famous Sarthe track.

Ferrari by a handsome margin of over eight minutes.

After the joy of Sicily, smiles were few and far between on the way back from Belgium to Stuttgart. One 906E had an accident in practice, and another lost a wheel in the race. The regular 906 entered for Koch and Schutz to drive had engine trouble, and it was left to one of the Racing Team Holland 906s to pick up a Class win, albeit 20 laps down on the winning Ferrari.

The ADAC 1000km race should have been Porsche's chance to make up for Spa on home turf, and Von Hanstein put together a formidable team. Rindt and Vaccarella were paired up in the 250bhp 906/8 that had run on the Targa; 906Es were prepared for Herrmann/Glemser, Schutz/Klass and Bondurant/Hawkins, and a regular 906 reserved for Beltoise and Nocker. It was not to be, however, and victory went instead to an American Chaparral, with the Ferrari Dinos close behind. At least there was a one-two-three in Class for the 906 customer cars, all of which finished in the top ten; the works-entered strict 906 came home in 11th place.

Le Mans was essentially a question of Ford versus Ferrari, the Americans coming out on top in the end. The Dinos also fell out of contention early on, leaving Porsche a fairly easy ride in the two-litre category, assuming the cars could keep going, of course! One 906 went into the pits with a rough engine with one hour to go, but otherwise, the other four 906s finished a highly creditable fourth, fifth, sixth and seventh, the Siffert/Davis car – the first of the injected long-tail models – winning its Class and the Index of Performance, whilst the regular 906 of Klass and Stommelen won the sports award.

WhileFordranawaywith the world title, the season had nevertheless gone exceptionally well for Porsche, with championship results augmented by outright wins for the Carrera 6 at Montlhéry (Gijs van Lennep), Mugello (Gerhard Koch and Jochen Neerpasch), Hockenheim (Gerhard Mitter), and Zeltweg (Mitter, teamed up with Hans Herrmann). The 906 also dominated the United States Road Racing Championship series, with Scooter

### WORLD SPORTS CAR CHAMPIONSHIP

		ORIS CAR CHAMPIO	1001111
Day	tona 24-hour Race (6 February)		
1	K Miles/L Ruby	Ford GT40 MkII	678 laps
2	D Gurney/J Grant	Ford GT40 MkII	670 laps
3	W Hansgen/M Donahue	Ford GT40 MkII	669 laps
- 6	H Herrmann/H Linge	Porsche 906	623 laps/1st in Class
_ 7	G Mitter/J Buzzetta	Porsche 904 GTS	612 laps/1st in Class
8	U Schutz/G Klass	Porsche 904 GTS	610 laps/2nd in Class
10	P Gregg/G Drolsom	Porsche 904 GTS	589 laps/3rd in Class
Seb	ring 12-hour Race (26 March)		
1	K Miles/L Ruby	Ford Roadster XI	228 laps
2		Ford GT40 MkII	216 laps
3	P Revson/S Scott	Ford GT40	213 laps
4	H Herrmann/J Buzzetta	Porsche 906	209 laps/1st in Class
6	J Siffert/C Vogele	Porsche 906	206 laps/3rd in Class
7	G Follmer/P Gregg	Porsche 904 GTS	205 laps/1st in Class
16	J Duval/H Kroll	Porsche 904 GTS	188 laps/2nd in Class
Mor	nza 1000km (25 April)		
1	J Surtees/M Parkes	Ferrari 330P3	100 laps
2	M Gregory/J Whitmore	Ford GT40	99 laps
3	H Müller/W Mairesse	Ford GT40	98 laps
4	H Herrmann/G Mitter	Porsche 906	98 laps/1st in Class
5	J Siffert/C Vogele	Porsche 906	96 laps/2nd in Class
7	C Davis/D Glemser	Porsche 906	94 laps/3rd in Class
Targ	ja Florio (8 May)		
1	H Müller/W Mairesse	Porsche 906	7h 16m 33s/1st in Class
2	J Guichet/G Baghetti	Ferrari Dino 2065	7h 25m 02s
3	A Pucci/V Arena	Porsche 906	7h 34m 08s/2nd in Class
5	U Maglioli/C Bourillot	Porsche 906	7h 51m 55s/3rd in Class
Spa	1000km (22 May)		
1	M Parkes/L Scarfiotti	Ferrari 330P3	4h 43m 24s
2	J Whitmore/F Gardner	Ford GT40 MkII	4h 43m 29s
3	S Scott/P Revson	Ford GT40	2 laps down
15	G van Lennep/D van Lennep	Porsche 906	20 laps down/1st in Class
Nürl	burgring 1000km (5 June)		
1	P Hill/J Bonnier	Chaparral 2D	6h 58m 48s
2	L Scarfiotti/L Bandini	Ferrari Dino 206S	6h 59m 29s
3	P Rodriguez/R Ginther	Ferrari Dino 2065	7h 00m 02s
4	B Bondurant/P Hawkins	Porsche 906E	7h 06m 53s/3rd in Class
7	G van Lennep/D van Lennep	Porsche 906	2 laps down/1st in Class
8	S Axelsson/B Johansson	Porsche 906	2 laps down/2nd in Class

continued ...

### WORLD SPORTS CAR CHAMPIONSHIP

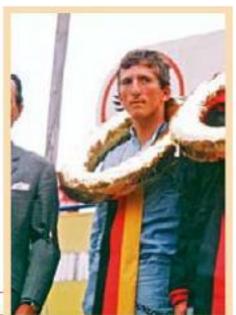
10	G Koch/H Linge	Porsche 906	2 laps down/3rd in Class
Le N	Nans 24-hour Race (19 June)		- AV
1	B McLaren/C Amon	Ford GT40 MkII	360 laps
2	K Miles/D Hulme	Ford GT40 MkII	360 laps
3	R Bucknum/R Hutcherson	Ford GT40 MkII	348 laps
4	J Siffert/C Davis	Porsche 906L	339 laps/1st in Class
5	H Herrmann/H Linge	Porsche 906L	338 laps/2nd in Class
6	U Schutz/P de Klerk	Porsche 906L	337 laps/3rd in Class
7	G Klass/R Stommelen	Porsche 906	330 laps/1st in Class



The Hockenheim 500km race was run in two heats as the new pits were not completed in time, thus making refuelling difficult. Still, this was something of a Carrera 6 exhibition race, with Mitter, Klass, and Hermann (seen here) in the fuel-injected works 906Ls running away with the event, followed home by a rich variety of privateers using Stuttgart-built machinery.

Patrick winning the USRRC title, and Joe Buzzetta second in an ex-works machine.

In hillclimbing, Mitter reversed last year's results, with Ludovico Scarfiotti having to settle for second place in his Ferrari Dino – five wins and two seconds in seven events saw Mitter crowned European Hillclimb Champion, with no-one willing to question whether or not he deserved the title. Thanks to his unique eight-cylinder Porsche (fuel-injected midway through the season), and a new 910 Berg on a couple of runs before it was destroyed, it was the kind of domination that brought back memories of the late Edgar Barth ...



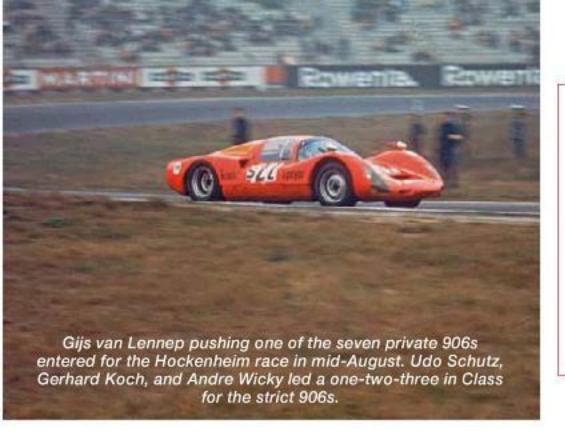
Jochen Rindt.



Jurgen Neuhaus.



Gunther Klass.



Helmut Leuze using his 904 GTS in a German hillclimb event. He would later campaign the Carrera 6, and also took part in the Interserie races. The Mefco
Racing team
was happy
to endorse
Duckhams
oil, although
it was not
the choice of
the Porsche
factory.
The British
équipe later
moved
up to 906
power.





# XVI

# 1967

ubsequent to the more aggressive motorsport management style adopted in the previous year, 1967 saw a new – albeit temporary – policy of fielding freshly-built vehicles in each of the major races to avoid retirements caused by what would eloquently be called 'wear and tear' in the second-hand car business. The enormous expense involved in doing this was partially recovered by selling on the cars once the factory team had used them and refurbished them with virgin, six-cylinder engines, but Piech's section was working flat-out on new machines that were being almost individually catered to each event.

# Porsche's new gladiators

The 910 designation had already been allocated to the 1966 hillclimb car. However, the 910 was very much a refinement of the 906 rather than a completely fresh design, with a new nose profile and headlight arrangement, doors that hinged from the A-post, the area immediately behind the cockpit (the signature canopy of the Carrera 6 was gone), and the way the rear valance tucked in being the main areas of change.

Weight reduction measures were applied to balance the areas where it was deemed extra strengthening was required, and then, by making the body lower and shorter (as well as cleaner through the air), it ultimately tipped the scales a few kilos lighter overall, despite being a fraction wider to house the new car's fatter rubber in each corner. At the same time, the main components of the bodyshell were bonded to the spaceframe in order to increase rigidity; this practice, first used on the 904, and other running improvements, produced a frame that was more than 25 per cent stiffer than that of the 906.

The 575kg (1265lb) 910 was generally powered by the 220bhp/152lbft, fuel-injected 901/21 unit, which Porsche was now happy to supply outside customers that were competing in the Prototype category, although the Type 771 eight was still brought out for service in a few events. This added about 27kg (60lb) to the vehicle's kerb weight, but an extra 50 horses more than made up for it.

Suspension geometry and tuning was optimized via feedback from the works track and hillclimb programme, with new, 13-inch centre-lock wheels adopted to complete the package. These cast

magnesium alloy rims were shod with wider Dunlop tyres that their makers asserted could go a whole race distance – a claim duly proved in Daytona! The only downside of using this wheel and tyre combination was that the brake diameters had to be reduced slightly.

The 906 was listed in Group 4, but the 906E and 910 had to run as Group 6 cars due to their smaller build numbers (001 and 002 were assigned to the 910 Bergspyders, regular 910 chassis numbers went from 910003 to 910028). But, under Piech, the pace of development was rapid, with a running change introduced on the 910's suspension; by the end of season, the latter machine was obviously going to be superceded by the 907.

The 907 was, in reality, nothing more than a rebodied 910, but it was new, nonetheless, demanding yet more time and money. Making its debut in prototype form at Le Mans in April, the long-tail design was refined in time for the French classic in June. I've said before that nothing ever goes to waste at Porsche, and the 907L's profile bore a striking resemblance to the jelly-mould Type 64 Berlin-Rome racers of 1939, at least above the waistline, while the long, tapered rear-end was a sharper version of that introduced on the 906L.

The nose was modified slightly to improve aerodynamics, with the lighting units pushed forward and angled inward a touch. The brake ducts disappeared (it was always envisaged that ventilated discs, like those used on the 911S, would be employed on the 907 series), but the aperture for the oil cooler was larger, the front wings melding with the forward lid in a less abrupt manner than before. The wing-line itself was extremely elegant, like two perfect aerofoils seamlessly joined together at the tiny door in profile, whilst a heavily-louvred perspex canopy brought the roof down smoothly into the rearmost one. The back – which made the car 740mm (29.1in) longer than a 910 – was characterized by a small wing spoiler and two funnels, added to help with transmission cooling.

The standard engine was the tried and trusted fuel-injected six used in the 910s, and, as well as the uprated brakes mentioned earlier, there were some subtle suspension changes. About the only other thing of note was that the steering wheel was moved from the left to the right. Right-hand drive brought Porsche into line with many of its racing contemporaries, but, unlike rhd road



The 910 making its race debut in the Florida sunshine. Note the way the door hinges (air pressure keeping it closed rather than lifting it at speed), and the new, centre-lock magnesium alloy wheels, requiring an enormous torque wrench to tighten the single nut holding them firm on the hub. By the end of the season, however, Porsche was using airguns on the wheelnuts, heralding another advance in racing pitwork.

Until the Alfa Romeo 33 came along, the Ferrari Dino was the biggest threat to Porsche in its two-litre category. To fight it - not wanting to rely on an untried design - the Stuttgart team had two 906Es (assigned to the pairings of Mitter/Rindt and Schutz/Stommelen), and a new 910 handled by the dream team of Herrmann and Siffert. Two injected 906Ls and a handful of 911s were entered by privateers to back them up. In the race, one 906E went out with valve trouble, and another hit something in the night that damaged its suspension. Three Ferraris finished line abreast, but there was no denying the 910 had made an impressive debut, coming home in fourth (first in Class) despite electrical problems, and ten laps ahead of the ex-works Squadra Tartaruga 906 that came in fifth. John Wyer's JW Engineering had also made an impact with its GT40: later securing sponsorship from Gulf Oils, it would ultimately become an important part of the Porsche racing story.

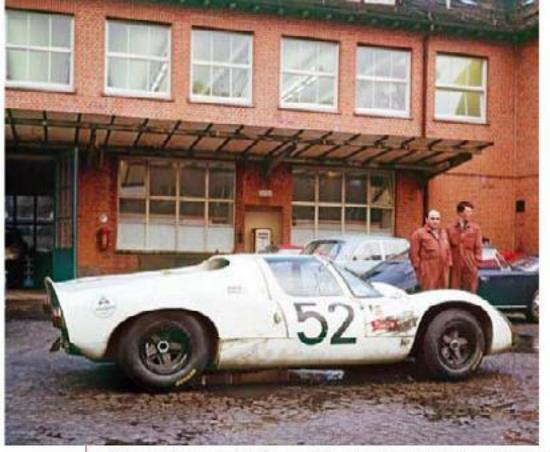
At Sebring, it was found the 910s were able to challenge the big Fords – even the new MkIV model. Herrmann and Siffert teamed up again in one 910, whilst a second car was given to Gerhard Mitter and Scooter Patrick; Joe Buzzetta and Peter Gregg piloted a factory-entered 906E, with Schutz, Stommelen, and Van Lennep in the sister car. Sadly, the latter team went out after hitting a dog, and two private 906s fell by the wayside



Dawn breaking on the Herrmann/Siffert 910 at Daytona.

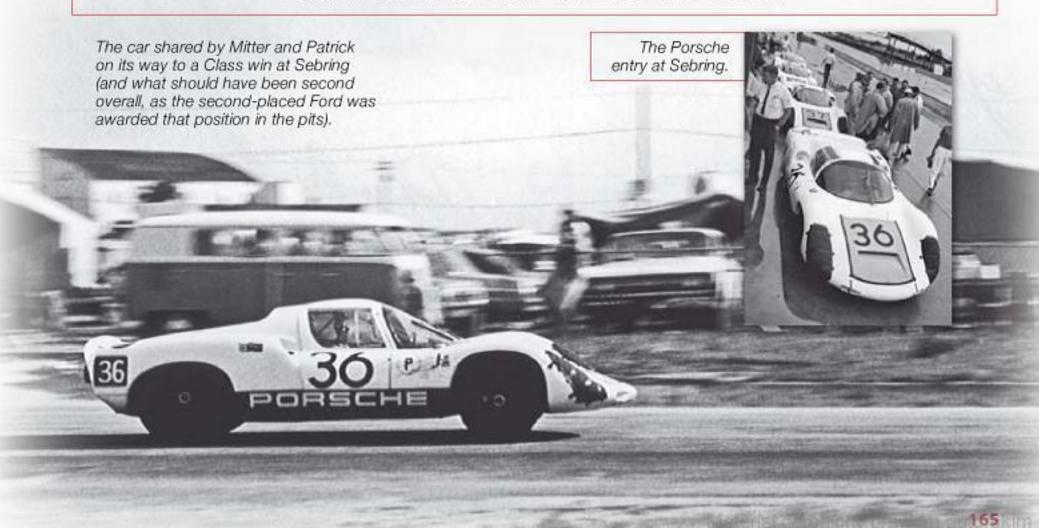


Reason to celebrate at Daytona, with Huschke von Hanstein taking centre stage. In reality, although Von Hanstein was still the face of Porsche (and undisputed head of PR), much of the racing management was handled by Ferdinand Piech by this time.





The car that won its Class at Daytona back in Stuttgart in the service area. Although the black tape has been removed from around the front lid, one can still see its scrutineer's pass in the comer of the windscreen. The 910's headlight shape – which is quite different to that of the 906's – can clearly be seen in one shot.





Steinemann, Stommelen, Mitter, Rindt, Herrmann, and Siffert awaiting the start at Monza.



with mechanical maladies, but the 910s performed admirably, claiming an easy Class victory and third and fourth overall. Dieter Spoerry and Rico Steinemann (a name to remember) came sixth, one place and three laps ahead of the Buzzetta/Gregg pairing. Bringing up the rear, but winning its Class, nonetheless, was the 904 GTS owned and campaigned by George Drolsom.

Porsche tested long-tail bodies on the 910 at the Le Mans test weekend, with the exhaust gases exiting through a wide slot in the rear of the coachwork rather than via visible pipes. The

arrangement seemed to direct fumes into the cockpit, however, so obviously more work was needed to modify the design before it could be employed in a long-distance race. Sure enough, it was refined, and given a more traditional exhaust system, duly appearing as the Type 907L at the Sarthe.

A couple of weeks after the French testing session, it was off to Monza. Porsche was still hedging its bets, putting a pair of 906s on the grid via Gerhard Koch and Udo Schutz alongside the two 910s entered for Herrmann/ Siffert and Mitter/Rindt. These were ably backed up by the Squadra Tartaruga 906L, two private 906s in regular guise, and a 904. Only one factory-prepared car failed to complete the course (put out with engine problems), and, while the Herrmann/Siffert 910 should have



Having won the Targa Florio in 1956, 1959, 1960, 1963, 1964, and 1966, Porsche was determined to get a good result in Sicily. Here, we see three

910/8s, and four strict 910s
(one was reserved as a T-car),
plus a typical 910 interior. The
factory also entered a 911S in
a bid to secure GT honours,
which it did. Note the Porsche
transporter in the background; a
big, enclosed Mercedes wagon
capable of carrying three cars
and spares.



The 2.2 litre 910/8 of Paul Hawkins and Rolf Stommelen on its way to a Targa victory, and a new race record into the bargain, the eight-cylinder Porsche averaging exactly 68mph (108.8kph).

A couple of atmospheric shots from the ADAC 1000km meeting held, as always, at the legendary Nürburgring circuit. Ventilated front discs were fitted to one of the 910/8s in this race, and became standard fare on the front end of 910s not long after, once it was realized that pad wear was dramatically reduced.







The 2.2 litre Type 771 flat-eight lump in the 910 (featuring a new Bosch fuel-injection system, with the injectors moved from the ports to the intake trumpets), and a shot of Egon Alber working on the same model fitted with a fuel-injected six for comparison. Note the fixed fibreglass wheelwells, introduced on the 910 to help strengthen the frame's rigidity, and the built-in cooling ducts that still fed air to the brakes and transmission, but did away with the long pipework that had previously hindered engine access.





The Jo Siffert/Hans Herrmann car (seen here) failed to finish due to valve trouble. The third 910/8 entered by the factory, that of Rolf Stommelen and Kurt Ahrens, fell by the wayside with the same problem 20 laps later. The eight-cylinder models were given the role of hares, the six-cylinder cars following at a slower pace that guaranteed their survival.

finished higher (a broken suspension component dramatically slowed progress in the last three laps, letting a Scuderia Filipinetti Ferrari through with the flag in sight), there was no shame in coming fifth.

Spa in the rain is a driver's nightmare, but the inclement weather, together with the track improvements that prevented some of the flooding that used to occur after a heavy downpour, made for an interesting race. The works entered 910s for Herrmann/Siffert and Mitter/Koch, and orchestrated a splendid race, making up for the disappointing results obtained by the private 906s (of the five, two didn't make the start line, and the others failed to finish). In reality, the Squadra Tartaruga 906L was out for its second 1000km race in a week, so it's no wonder that that particular car didn't finish!

Two weeks later, Porsche was out in force for the Targa Florio, entering no fewer than six 910 models, including three regular 910s and three with 2.2 litre, eight-cylinder engines,





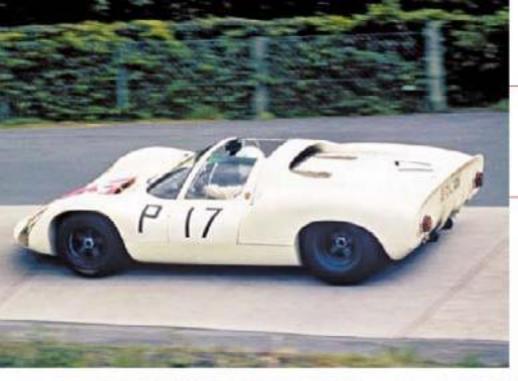
The 910 shared by Hawkins and Koch becoming airborne at the Ring ...

... and this is the Mitter/Bianchi 910/8 that should have won the race.

as had been seen occasionally in 1966. The Type 771-powered machines, with their improved fuel-injection system, were handled by the pairings of Herrmann/Siffert, Mitter/Davis and Hawkins/Stommelen, while the six-cylinder vehicles were given

to Umberto Maglioli and Udo Schutz, Jochen Neerpasch and Vic Elford, and the Italian team of Leo Cella and Giampiero Biscaldi.

The Sicilian classic started with Mitter the fastest of the Porsches, though an accident ended his challenge, whilst the



As on the Targa, Schutz had to race with the roof section removed from his car, as there was not enough head clearance for this tall German with the panel in place. The pair of Schutz and Buzzetta won the Nürburgring classic by a margin of two-tenths of a second!

The pit lane at Le Mans before the race started. The 907L in the foreground was the top Porsche finisher. The 907s were very unusual in that they had right-hand drive, harking back to pre-war practice when the majority of racing cars had rhd to better suit standard circuit rotation. They also brought back a rear canopy, something found on the 906s but not carried through on the 910s.





A day later, and number 41 claims a Class win and the Index of Performance award on the 907L's race debut. Behind it we can see the 911S of Buchet and Linge, the Ferrari 330P4 that came second, and the Stommelen/Neerpasch 910.

Advertising for the BOAC 500 ...



# The teams lining up for the BOAC International 500 Race at Brands Hatch, on Sunday July 30, spell out an exciting day!

ALFA ROMEO ABARTH FORD FERRARI PORSCHE CHAPARRAL

LOLA LOTUS BOAC VC10 MIRAGE MG MATRA

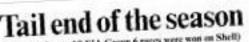
One of them, however, may not qualify.



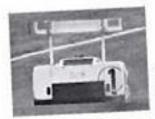
... and a Shell advert issued after Brands Hatch, which shows a 910 chasing the Ferrari of Richard Attwood and David Piper, along with the Chaparral 2F that won the BOAC 500 and the Le Mans-winning Ford.

The 910/8 driven by Jo Siffert and Bruce McLaren being toasted at a UK dealership after coming third at Brands Hatch. Note the different front lid profile, shaped to make room for a larger oil cooler, and the aerodynamic appendages on the 'flying buttress' behind the cockpit. Helmuth Bott certainly looks happy in the centre of the shot ...

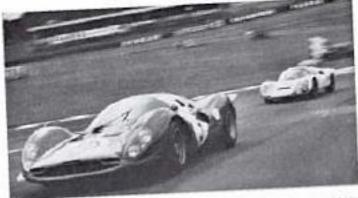




(in which 7 out of 8 FIA Group 6 races were won an Shelly



The Chapterful next to Branch to a backwards forces to one the back many Principles risk of the section on DCAL commissions Size-only many back again of two logs with artists to backages, they adopted within the backages, they adopted to the backages, they adopted to the backages, they adopted to



65

Top of the forces. Forces and Pennish popular annual, with the mallam with the months for month, Pennish of prome private and the state of prome private the 2 tens also they're past they not ...

The big point, to these we menting the a repeat of had possible provide provid

7 great wise, Dancen, Miles, March, Scotterping, La Stern, Taras Stern, MAAC tomospherial 2001. 7 great understate visite, 45 work per Start.

Female, Coppored

### WORLD SPORTS CAR CHAMPIONSHIP

M Parkes/L Scarfiotti	Ferrari 330P4	384 laps
W Mairesse/J Blaton	Ferrari 330P4	377 laps
H Herrmann/J Siffert	Porsche 907L	358 laps/1st in Class
R Stommelen/J Neerpasch	Porsche 910	351 laps/2nd in Class
V Elford/B Pon	Porsche 906	327 laps/1st in Class
G Koch/C Poirot	Porsche 906	321 laps/2nd in Class
	M Parkes/L Scarfiotti W Mairesse/J Blaton H Herrmann/J Siffert R Stommelen/J Neerpasch V Elford/B Pon G Koch/C Poirot	W Mairesse/J Blaton Ferrari 330P4 H Herrmann/J Siffert Porsche 907L R Stommelen/J Neerpasch Porsche 910 V Elford/B Pon Porsche 906

### BOAC 500-mile Race (30 July)

1	M Spence/P Hill	Chaparral 2F	6h 00m 26s
2	J Stewart/C Amon	Ferrari 330P4	6h 01m 25s
3	J Siffert/B McLaren	Porsche 910/8	2 laps down/3rd in Class
8	T Dean/B Pon	Porsche 906	11 laps down/1st in Class
11	U Schutz/J Rindt	Porsche 910	16 laps down/2nd in Class
13	D Spoerry/R Steinemann	Porsche 906	19 laps down/2nd in Class
17	W Bradley/M Costin	Porsche 906	30 laps down/3rd in Class

The Montseny hillclimb held in Spain on 21 May gave Mitter a chance to fine-tune the 910 Bergspyder in readiness for the rest of the championship season. 1967 was the first time Montseny had been approved as a round of the EHC, a situation which continued for just two more years.



Rudi Lins attacked the Rossfeld hillclimb in Germany in a Carrera 6.



Mitter charging up the mountain in the second German round of the European Hillclimb Championship.



Former champion, Heini Walter, guiding a 910 through the twisty bits on the Freiburg-Schauinsland hillclimb.

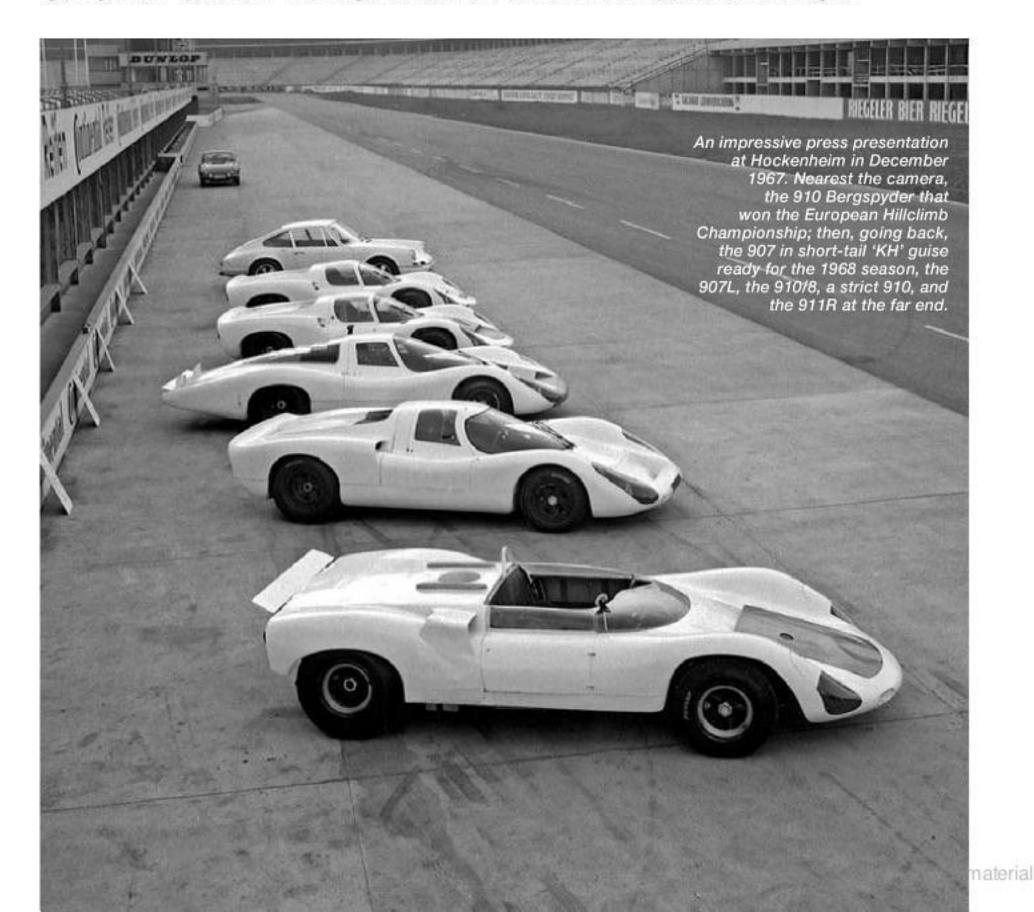




The lightweight, highly tuned 911R pictured at the factory and Hockenheim. The first four cars were built in early 1967, with a limited production run following at the end of the year. Low build numbers (a total of 24 911Rs were produced) and the special 901/22 power unit meant that the 2.2 litre six had to run in Group 6.

The 911 was making its mark in touring car events and rallying, and Porsche totally dominated the hillclimbing scene with the eight-cylinder, two-litre 910 Berg – now back to ultralightweight open Spyder form. Of the eight rounds in the

European Hillclimb Championship, Rolf Stommelen won four rounds and came second in three. Gerhard Mitter had done the same, but his third place in one of the other events enabled him to retain his crown by the narrowest of margins.



this was to remain a one-off, despite the weight saving. As it happens, it was the 907Ls that put in an appearance first, acting as the works cars for Daytona – the short-tail 907s were rolled out for the next World Championship round at Sebring.

Both of the 907 variants were powered by the 2.2 litre, fuel-injected flat-eight seen in the 1967 910/8s, but now fitted with a modified crankshaft and delivering in excess of 270bhp. Incidentally, fuel-injection was given the FIA green light for the 906 in 1968, breathing new life into the old car, even if it wasn't able to keep up with the works machines.

Knowing of the changes ahead for 1969, when a threelitre formula would be in force for the Group 6 cars, Porsche was also busy working on a new eight-cylinder engine to suit this purpose. First tried at the Le Mans test weekend, the fourcam Type 908 unit (with a bore and stroke of 84 x 66mm giving 2924cc) was actually derived from the six-cylinder engine of the 911 rather than the Grand Prix eight, so it had a much simpler camshaft drive. Indeed, the entire power unit was simplified, as Ferry Porsche insisted that, given the investment necessary for a completely new design, it could be readily converted for use in a high-end GT car.

Based on the basic format of the Type 916 four-cam six being developed for the 911R, with Bosch fuel-injection, the engine delivered just over 300bhp initially (unleashed at 8000rpm), and, as a result, it was decided that a new transmission was required to handle the increased power and torque. A new six-speed transaxle was designed with an exposed clutch on the tail-end rather than on the flywheel. Carrying the Type 907 moniker, this all-synchro unit was still used, even after a larger bore of 85mm was adopted in the final race of the year, taking engine capacity up to 2996cc and the rating up to around 350bhp/235lbft. Due to the bigger engine, the fuel tanks were duly enlarged to FIA limits for the Class.

It was very difficult to tell a 908 from a 907, as they are virtually the same as far as the body is concerned (even the spaceframe was only altered as necessary to take the physically larger engine). The best distinguishing feature is in the shape of the front oil cooler surround, which is oval on the later car, while the latter's vertical nearside brake cooling duct is another good clue. The newer model is also usually seen with tiny spoilers under the headlights on the KH variant, and, while the one on the tail started off like those employed on the 907 and 907L, both were changed as the season progressed. Careful inspection reveals a slightly different front lid, too, as well as fatter racing rubber on 15-inch rims in the second half of the season – the reason why the 908 body was made 110mm (4.3in) wider from the outset.

The three-litre 908 was, in effect, the final stepping stone to the legendary 917. But it was also a big risk; no longer would Porsche be playing the role of David fighting Goliath. Come the 1969 season, Porsche would be starting on equal terms with

Ferrari and other leading teams, and much would be expected of the proud German marque.

For 1968, however, it seemed as though Porsche had the cars, the budget (around \$4,000,000 at the time), and the drivers, with Jo Siffert, Hans Herrmann, Gerhard Mitter, Vic Elford, Rolf Stommelen, Jochen Neerpasch, and Ludovico Scarfiotti, who changed his allegiance from the red of Modena to the white of Stuttgart, as well as the occasional services of other top racers, like Jo Schlesser. A championship win was not beyond the realms of possibility ...

# 1968 - a bitter pill to swallow

Porsche went to Florida full of hope, for, although Autodelta was in Daytona as a full Alfa factory entry, the Ford marque was represented by John Wyer's private team, resplendent in its Gulf colours, and Ferrari by NART. As expected, the GT40s were fastest in practice, but the four works 907Ls were next in line, followed by the Howmet turbine car. The factory Porsches were all powered by 2.2 litre flat-eights, now deemed reliable enough for a 24-hour event, and, whilst the Mitter/Stommelen machine had an accident early on (rolling onto its roof and setting off a chain of events that also took out the Squadra Tartaruga two-litre 907L), its place was quickly taken up by the 907L of Buzzetta/Schlesser (actually, the aluminium spaceframe prototype added to the starting line-up as a late entry). The GT40s dropped out with engine and fuel tank problems, allowing Porsche to dominate the front of the field, as well as the GT category.

The grid was much the same at Sebring, except that the 907s were short-tail (KH) versions. Two of the four works Porsches had engine trouble, but the threat of the JW Automotive GT40s was diminished by a run of bad luck, and a Porsche one-two duly unfolded. Interestingly, though, Siffert had qualified within a whisker of last year's track record, so the 907 was undoubtedly fast. The other interesting point was the use of cooling suits, in which a small electric pump pushed iced water through a series of tubes in the driver's racing overalls, although race day dawned cool enough not to require them.

Of the 35 cars that took the starter's flag for the BOAC 500, no fewer than 11 were Porsches: three works 907s, three private 910s, and five of the older 906s. The Siffert/Herrmann car, which had set pole, went out halfway through with brake problems whilst leading the race, but the Ben Pon 910 was the only other Stuttgart machine to retire. John Wyer got his revenge with a win, though, lckx and Redman beating the first Porsche home by a margin of 22 seconds.

The timing of the Le Mans test session was rather odd, being on the same weekend as the big German meeting at Hockenheim (where Jim Clark perished) and the BOAC 500. Still, Porsche was determined to try its 908L, powered by the new three-litre eight. It was a glimpse of the future ...





Thanks to Von Hanstein's team orders, virtually everyone in the Porsche team drove the winning 907L at Daytona. In reality, it was the Elford/Neerpasch machine, although the record books will show that the two were joined by Stommelen, Siffert and Hermann.

Like the Ferraris in 1967, Porsche finished Daytona line abreast (albeit several laps apart) to add impact to a stunning onetwo-three victory.



Daytona memories. From the left: Rolf Stommelen. Jochen Neerpasch, Vic Elford, the then-Miss Universe (who presented the trophy), Hans Herrmann, and Jo Siffert, Note the colourful team jackets of the 'psychedelic' era and Les Leston racing overalls.



The Elford/Neerpasch 907 that came second at Sebring, just behind a sister car. The other two works 907s, also powered by the same 2.2 litre eights, dropped out with engine maladies.

Monza was next, and Porsche fielded two three-litre 908Ls backed up by a 2.2 litre 907L. The JW Automotive team won again, and the 908s were disappointing in this debut outing – Siffert had one of the rear brake ducting pipes come free and wrap itself around a driveshaft, destroying a great deal of important plumbing as the metal binding acted like a flail, and the Mitter/ Scarfiotti car had trouble with the fuel-injection system, delaying its progress. The private 910 of Bill Bradley (the owner) and Vic



Jochen Neerpasch blasting around Brands Hatch in practice in the 907 T-car before an accident ended his enjoyment. He was uninjured, though, and entered the race as planned, teaming up with Vic Elford.

Elford was unlucky not to finish fourth, a loose wheelnut of all things costing the pair five places.

The Targa had proved a happy hunting ground for Porsche in the past, and 1968 was no exception. Alfa Romeo had defended Italian honour admirably, but the German assault was just too



Hustling the Siffert/Stommelen 907 on the 1968 Targa Florio. Note the airhorns fitted underneath the offside headlight; a sensible precaution for the Sicilian classic.

The 910 of Gerhard Koch and Rudi Lins at the Nürburgring. It was one of 12 private 906s and 910s at this premier German event.

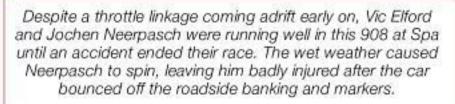


The cars were identified by colour-coding as usual, the winning car (seen here) of Elford/Maglioli having a yellow nose with a bright orange surround; it also had the roof section removed to allow clearance for Maglioli's helmet. This was Porsche's eighth Targa win.





Karl von Wendt and Willy Kauhsen in the IGFA Carrera 6 at Spa. The pair had an excellent season, although wheel bearing trouble delayed their progress in Belgium.







A non-championship race – the Solituderennen – at Hockenheim on 21 July. The 908 of Hans Herrmann can be seen sitting next to the Ferrari 330P3/4 of David Piper; Piper ultimately won the 20-lap event by a fraction of a second. Note the latest rear spoiler arrangement, introduced at Watkins Glen, and the bigger, 15-inch wheel and tyre combination, adopted on the 908 in time for the championship round at the Nürburgring in mid-May.

Jo Siffert walking away with the victor's laurels at Zeltweg.

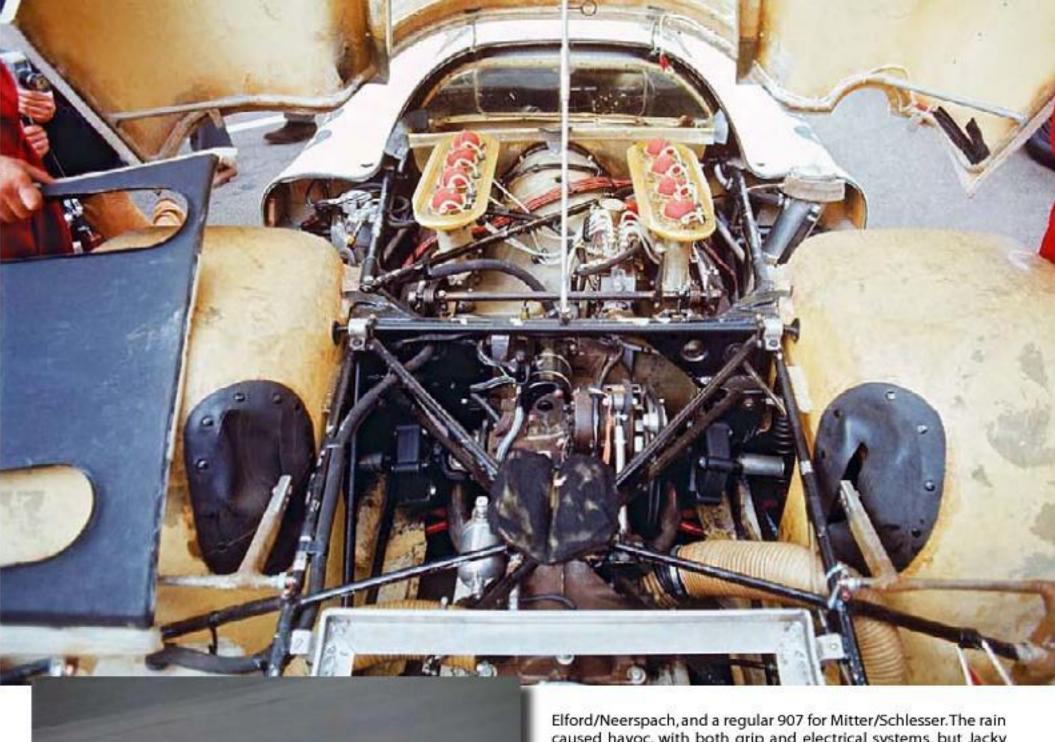




The Spoerry/Steinemann 907 on its way to second place in France's premier sports car race. Another private 907 can be seen chasing behind.

(and opposite page) Various perspectives of the Stommelen/Neerpasch 908 at Le Mans, including a superb view of the engine bay with its eight-cylinder lump of aluminium and magnesium alloy in place. Although not visible from this angle, the latest engine used a single distributor for the twinignition system rather than two separate ones handling eight plugs each. It's ironic, however, that a private 907L was the top Porsche finisher in 1968, coming second, while this car had to be content with third.





Elford/Neerspach, and a regular 907 for Mitter/Schlesser. The rain caused havoc, with both grip and electrical systems, but Jacky Ickx had driven a masterful race on home turf, leaving all in his wake. As a matter of interest, it was Jo Schlesser who set fastest lap in the 907 – the car that came second, while it should have been playing second fiddle to the 908s instead.

Afew days later, in early June, the Porsche camp was saddened by the death of Ludovico Scarfiotti on the Rossfeld hillclimb. Having been a thorn in the side of Gerhard Mitter in his Ferrari days, at least in terms of his European Hillclimb Championship campaign, the two had become team-mates at Porsche earlier in the year, a speedy pairing that had already brought them a second place at Brands Hatch. 1968 witnessed the loss of many good men ...

Watkins Glen was a turning point in the championship

# Jo Siffert. Jochen Neerpasch. Kurt Ahrens.

Dayt	ona 24-hour Race (4 February)		
1	V Elford/J Neerpasch/R Stommelen	Porsche 907L	673 laps/1st in Class
2	J Siffert/H Herrmann	Porsche 907L	668 laps/2nd in Class
3	J Buzzetta/J Schlesser	Porsche 907L	659 lap/3rd in Class
Sebr	ing 12-hour Race (23 March)		
1	J Siffert/H Herrmann	Porsche 907	227 laps/1st in Class
2	V Elford/J Neerpasch	Porsche 907	226 laps/2nd in Class
3	M Donohue/C Fisher	Chevrolet Camaro	221 laps
20	D Spoerry/R Steinemann	Porsche 910	168 laps/2nd in Class
BOA	C 500-mile Race (7 April)		
1	J Ickx/B Redman	Ford GT40	6h 01m 13s
2	G Mitter/L Scarfiotti	Porsche 907	6h 01m 35s/1st in Class
3	V Elford/J Neerpasch	Porsche 907	2 laps down/2nd in Class
7	D Spoerry/R Steinemann	Porsche 910	11 laps down/1st in Class
9	R Lins/K Foitek	Porsche 910	12 laps down/3rd in Class
12	W Bradley/E Liddell	Porsche 906	18 laps down/2nd in Clas
16	M Hone/J Harris	Porsche 906	23 laps down/3rd in Class
Mon	za 1000km (25 April)		
1	P Hawkins/D Hobbs	Ford GT40	100 laps
2	R Stommelen/J Neerpasch	Porsche 907L	100 laps/1st in Class
3	P Depailler/A de Cortanze	Alpine-Renault A211	97 laps
4	G Koch/R Lins	Porsche 910	95 laps/1st in Class
5	A Nicodemi/C Facetti	Porsche 910	94 laps/2nd in Class
6	A Wicky/J-P Hanrioud	Porsche 910	92 laps/3rd in Class
11	G Mitter/L Scarfiotti	Porsche 908L	84 laps/3rd in Class
16	K von Wendt/W Kauhsen	Porsche 906	79 laps/1st in Class
Targ	a Florio (5 May)		W.
1	V Elford/U Maglioli	Porsche 907	6h 28m 48s/1st in Class
2	N Galli/I Giunti	Alfa Romeo T33/2	6h 31m 31s
3	M Casoni/L Bianchi	Alfa Romeo T33/2	6h 37m 55s
4	H Herrmann/J Neerpasch	Porsche 907	6h 38m 49s/2nd in Class
7	K von Wendt/W Kauhsen	Porsche 906	7h 11m 39s/1st in Class
18	J Siffert/R Stommelen	Porsche 907	1 lap down/3rd in Class
21	E Buzzetti/S Ridolfi	Porsche 906	1 lap down/3rd in Class
Nürk	ourgring 1000km (19 May)		
1	V Elford/J Siffert	Porsche 908	6h 34m 06s/1st in Class
2	H Herrmann/R Stommelen	Porsche 907	6h 37m 08s/2nd in Class
3	J Ickx/P Hawkins	Ford GT40	6h 37m 57s
4	J Neerpasch/J Buzzetta	Porsche 907	6h 42m 23s/3rd in Class
8	J Neuhaus/H Kelleners	Porsche 910	2 laps down/2nd in Class

continued ...

Ludovico Scarfiotti.

11	E Bitter/R Joest	Porsche 906	4 laps down/1st in Class
12	K von Wendt/W Kauhsen	Porsche 906	4 laps down/2nd in Class
Spa	1000km (26 May)		
1		Ford GT40	5h 05m 03s
2	G Mitter/J Schlesser	Porsche 907	5h 06m 47s/1st in Class
3	H Herrmann/R Stommelen	Porsche 908	2 laps down/2nd in Class
5	G Koch/R Lins	Porsche 910	4 laps down/1st in Class
6	D Spoerry/R Steinemann	Porsche 910	5 laps down/2nd in Class
7	W Bradley/C Lambert	Porsche 906	9 laps down/1st in Class
Mat	kins Glen (14 July)		A
1	The state of the s	Ford GT40	286 laps
	P Hawkins/D Hobbs	Ford GT40	286 laps
3		Howmet TX	267 laps
4		Porsche 906	259 laps/1st in Class
5		Porsche 906	257 laps/2nd in Class
6		Porsche 908	257 laps/2nd in Class
7-16			
Zeit	weg 500km (25 August)  J Siffert	Porsche 908	2h 55m 18s/1st in Class
	H Herrmann/K Ahrens	Porsche 908	2h 55m 30s/2nd in Class
_	P Hawkins	Ford GT40	
5	- Carlotte Control Control	- Control of the Cont	5 laps down
		Porsche 910	10 laps down/1st in Class
6		Porsche 910	11 laps down/2nd in Class
7	AND THE RESIDENCE OF THE PARTY	Porsche 910	11 laps down/3rd in Class
9	Triviality a raint	Porsche 906	12 laps down/1st in Class
and the last teacher	P Peter/W Reidl	Porsche 906	14 laps down/2nd in Clas
11	H-D Dechent/R Joest	Porsche 906	25 laps down/3rd in Class
Le N	lans 24-hour Race (29 September)	From Voltage	With any and
4	P Rodriguez/L Bianchi	Ford GT40	331 laps
1			
_	D Spoerry/R Steinemann	Porsche 907L	326 laps/1st in Class

race, with Ford scoring a one-two, and the Howmet turbine car coming good at a time when the short-tail 908s looked far from race-ready, despite having new suspension-activated stabilizer flaps placed just before the tail spoiler (the black art of creating effective downforce with the minimum of drag was really coming to the fore at this time). Only one of the four works cars made it through the heat to the end, with wheel bearing failure putting two out, and the engine blowing on the cardriven by the American pairing of Joe Buzzetta and George Follmer (it seems the unit was over-revved after a missed gearshift). Wheel bearings, batteries, throttle linkages – problems that were coming up far too often to allow Piech and his team back in Stuttgart to rest easy. At least

the spaceframe of the Siffert/Elford 908 (chassis 908012) had held up well – made of aluminium tubing, it convinced Piech that all future 908s – including those sent to the Sarthe – would use this lighter material for their frames instead of steel.

With Le Mans pushed back in the calendar, there was at least a little time for teams to catch their breath after a busy summer. Zeltweg was not considered important enough for most of the bigger names, but Porsche family honour was at stake, and at least it served as a good practice run in readiness for the final round in France. The 908s showed there were still niggling faults to overcome, but at least two of the four short-tailed works cars led the field, and only one failed to finish.

Le Mans was run as a three-litre race for Group 6 cars this year (five-litres for Group 4) in accordance with the forthcoming 1969 formula. With the 908 still far from perfect, a win from Ford was

At first, the lightest of the 1967
Bergspyders was rebuilt and given
new body appendages (such as
lower sills and a strange rear spoiler
arrangement), and a revised front
suspension. It was joined by two
freshly-built 275bhp sister cars in
1968, tipping the scales at just over
400kg (880lb) apiece, allowing Mitter,
Stommelen, and Scarfiotti to drive for
the works.

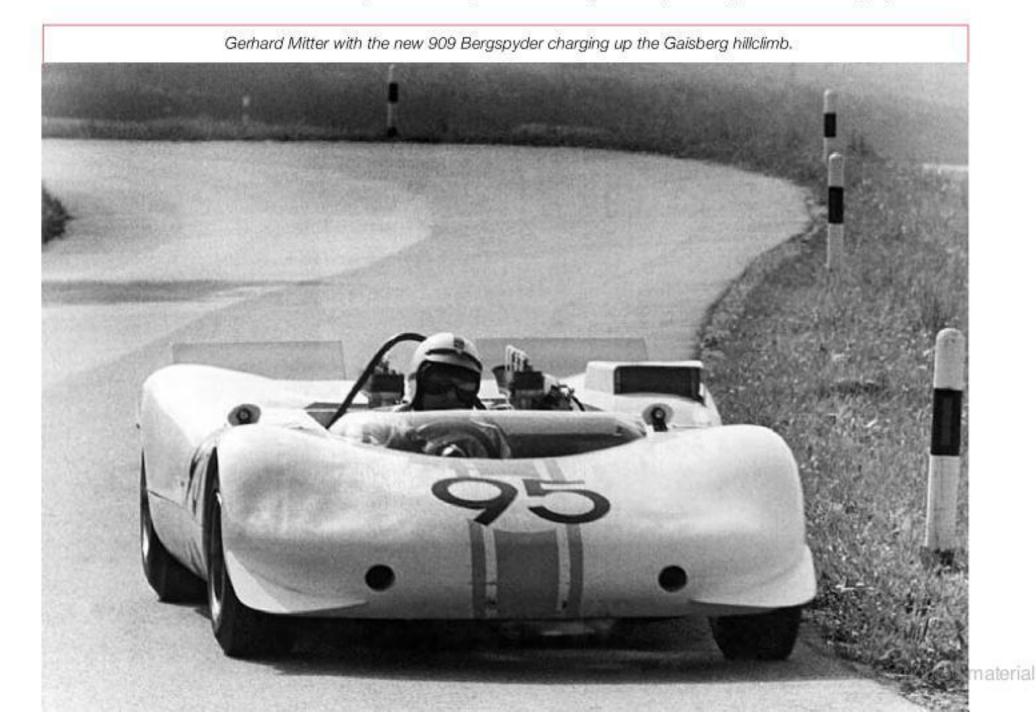


always a good possibility, especially with a strong three-car entry from J W Automotive. There were also the Scuderia Filipinetti and NART Ferraris to contend with, but it was the GT40s that the Stuttgart marque had to beat to secure the championship. Porsche sent four 908Ls (handled by Siffert/Herrmann, Mitter/Elford, Stommelen/Neerpasch, and Patrick/Buzzetta) with uprated engines, supported by three 907s (ex-works cars, including one driven by Linge and Buchet), a 910 and a 906. Only one Ford finished, but, with 908s going out because of clutch and alternator maladies, unfortunately, it had done enough mileage to win with ease – Porsches in second and third were no consolation ...

Porsche was cheated of the World Championship by the ridiculous scoring system used at the time, where only the five best scores were counted. Ford won five rounds, as did the German manufacturer, but with the Zeltweg round having a shorter race distance, the winner was given only half the points of the other nine rounds. The fact that Porsche drivers filled the podium on more occasions was also not taken into account, so although a moral victory belonged to the men in Stuttgart, sadly, the silverware went to Slough instead.

### Other events

In the non-championship races, Jo Siffert came third at the Norisring in a 910 in June, and Hans Herrmann gave the 908 a good run at Hockenheim the following month. Siffert teamed up with Gianrico 'Rico' Steinemann to take second place in the picturesque Circuit of Mugello, and then Siffert won the Enna Cup. Porsche featured strongly in the German Circuit of Wunstorf, and, in September, Herrmann got his revenge at Hockenheim, this time taking the chequered flag whilst demoting Piper's Ferrari





The final round of the 1968 European Hillclimb Championship, with Rolf Stommelen attacking Mont Ventoux in a 909 Bergspyder. He came second to Mitter, who retained his title with ease.

to second. Hans Herrmann and Rolf Stommelen then won the Paris 1000km event at Montlhéry, followed home by Vic Elford and Rudi Lins in a similar 908. Farther afield, Tetsu Ikuzawa was second in a 910 at the Japanese Grand Prix, finishing a lap behind the Group 7 Nissan R381 of Moto Kitano.

Gerhard Mitter absolutely dominated the European Hillclimb Championship, winning seven of the eight rounds, only ever seriously challenged by Dieter Quester's BMW or his team-mates. The only round he lost was the Trento-Bondone climb in mid-July, and that was because the weather was so bad that no-one could race flat-out in safety.

At first, the 1967 Mitter car was dusted off and updated, with

two replicas built to allow Mitter, Stommelen and Scarfiotti to defend Porsche honour in the mountains. Two crashed heavily at Rossfeld, an event in which Stommelen broke an arm and Scarfiotti was fatally injured, but it wasn't until Gaisberg on 8 September that a new model was introduced – the 909. This was given a shorter wheelbase and a wider track, as well as a repositioned engine and transmission to improve weight distribution. Although Porsche had a winner on its hands, this was the last year that the company took a serious interest in the European Hillclimb Championship. Mitter also threw in the towel, ending his hillclimb career on a high note.

to a re-organization within the racing department, and the introduction of some new young engineers. They found out the hard way that knowledge gained over 16 or 17 years of successful racing should not be discarded as being of no value. It often pays to pause and see what happened last year or the year before that, before plunging ahead with a new idea. Let us hope that Porsche can regain the name they had for impeccable reliability and speed that they built up during the reign of Von Hanstein. Porsche engineering and ability has always been beyond reproach, but some of the things that happened in racing in 1968 were not worthy of the Stuttgart team."

# "A new broom sweeps clean"

So goes the old English adage, and it was certainly hoped that this would be the case once Rico Steinemann had been installed as Porsche's new Team Manager. Friction between the Porsche and Piech families was increasing as the next generation became locked in a power struggle, and to many – including Von Hanstein – it was as if the competitions department had become the battleground. There was never any doubt that Von Hanstein's loyalty lay with Ferry Porsche, and it was hoped that his gracious withdrawal and the appointment of someone fairly neutral (he was selected for the job by Piech, after all!) would stop the infighting and help bring back a sense of normality. In reality, it was an enormous loss to the company, but this selfless move changed the atmosphere, killing off a political nonsense and allow minds to focus on winning races.

Daytona was the first test. Five works 908Ls were sent to Florida, sporting new Type 916 five-speed gearboxes developed over the winter, with the main opposition coming from the JW Automotive GT40s and the Lola T70 drivers. The Stuttgart maker had fielded fast machines, of that there was no doubt, but it also had terrible trouble with exhaust pipes during the event, Brian Redman the first to succumb to fumes but recovering quickly, while Gerhard Mitter had to be taken to hospital after inhaling exhaust gases for too long. Donohue's Lola had similar trouble, although still went on to win after all five works Porsches dropped out with broken camshaft drives.

For Sebring, Porsche fielded five 908 Spyders, but already sporting revised 908/02 bodywork with a smoother wing line, deeper sides on the perspex screen, and fixed tail flaps. This variant was made possible by a change in the regulations stating that prototypes no longer needed to carry spare tyres, have luggage space, or conform to a certain weight and windscreen height. The open car tipped the scales at 630kg (1386lb), was a full 30kg (66lb) lighter than the 908 coupé, and had a new crankshaft and firing order (to try and prevent a reoccurrence of the exhaust splitting), plus a modified cam and alternator drive.

The Porsches were fast again, even against the new Ferrari





The Siffert/Herrmann 908L in the pits at Daytona, where it spent a lot of time during the race weekend, as bad weather had restricted testing in Europe. Although the 908L moniker is universally accepted, the 1969 cars, readily identified by their return to matching front brake ducts, were officially known as 908/01 models. The mass of decals on the side of the car show that the sponsorship era had finally arrived.

prototype that was making its debut, but rear-end chassis fractures sidelined Herrmann/Ahrens and Siffert/Redman, and seriously delayed the Mitter/Schutz challenge (their car ultimately finished in fifth), as well as the third-placed 908. Vic Elford lost 40 minutes having a front wing repaired, which almost





By the time Sebring came along, the 908 Spyder had been modified into the 908/02. Note the new rear wing line; the leading edge was now closer to the flowing profile of the LH body rather than the KH one, as had been seen at the Hockenheim press preview. The shape and position of the front and rear spoilers were altered over the season, depending on track characteristics.



Action from Brands Hatch.

Monza memories ...





Poster proclaiming another Targa Florio victory for Porsche, both overall and in the GT category. Unknown at the time, this was to be Mitter's last great win, for he died driving a works F2 BMW at the German Grand Prix in the first week of August.



The 917 making its debut at the Geneva Show. (Courtesy Miki Press)

After being announced at the 1969 Geneva Show (the car numbered 917 was displayed), 21 April 1969 was the day inspectors from the CSI came to ensure 25 917s had been built. The 4.5 litre, 12-cylinder cars were duly lined up, engines ready to start, and, in complying with a minimum of 800kg (1760lb), FIA Group 4 homologation was granted on 1 May. The 917 sold for DM 140,000 – £14,000 at a time when a Sunbeam Imp Sport was priced at £735! Even a Porsche 911S could be had for £4385!





rubber. Whatever, the Stuttgart Spyders pulled off a convincing one-two-three against some stiff opposition.

The Porsche versus Ferrari battle came to a head in Monza, as four 908Ls went up against a pair of 312Ps. In support were five 907s, three with the ex-works 2.2 litre engines, and two with two-litre lumps. The Mitter/Schutz 908L had gear selection problems, and the Elford/Attwood machine was destroyed after a tyre burst at high speed and sent the car into the guard rails whilst lying third. But still, Porsche was back, and, with the help of a private 2.2 litre 907, claimed a second one-two-three finish in a row.

The 908/02 Spyders were out again for the Targa, with no fewer than six factory cars entered (assigned to the teams of Mitter/Schutz, Redman/Attwood, Herrmann/Stommelen, Elford/Maglioli, Von Wendt/Kauhsen, and Larrousse/Lins). The British pair had driveshaft problems, and the French-Austrian pair were strangely off the pace; otherwise, it was an event totally dominated by Porsche. The Stuttgart marque took the first four places, now winning the Targa a remarkable four times in a row.

## A new weapon

Ford had won Le Mans with the GT40 in 1966 and 1967, and would do so again in September 1968 via JW Automotive. By that time, Porsche had already set in motion work on a car that was capable of winning this classic race. In the same way as Ford had gone all-out to beat Ferrari at the Sarthe, now the German maker was going all-out to beat Ford with a car more technically-advanced than anything Porsche had fielded in recent history, and with an engine 50 per cent larger than its current breed of sports-racers.

In fact, much of the vehicle's body, the aluminium spaceframe beneath it, and chassis components were based on the latest 908 and 910 Bergspyder practices when work began in July 1968, as time was at a premium if homologation was to be secured for the early part of the 1969 season. Even the flat-12 engine at the heart of the beast was, in simple terms, basically a 908 unit-and-a-half with a revised cooling fan arrangement. Truly exotic, the layout had been used by Porsche before for the Cisitalia, and was being looked at again for military use, so it was hardly new to the men in Stuttgart. However, this fact did nothing to dampen the excitement surrounding the project, and it certainly caught the public's imagination.

The glassfibre body was much the same as that of the 1969 908L with detail refinements brought about through extensive wind tunnel testing, although the long tail section was removable, allowing a quick-change Kamm tail to be fitted for slower circuits. It was an ideal compromise that gave the best of best worlds without the need to homologate two 917 variations. The 917 was ultimately a couple of inches wider and a fraction lower than its predecessor.

The air-cooled Type 912 powerplant had the same 85 x 66mm



Working flat-out to get the necessary batch of 25 917s completed in time for spring.

The nearside rear suspension and braking system, complete with vented discs. The brakes were given further ventilation for 1970 via cross-drilling.







Taking off the interchangeable, long-tail section enabled the remaining bodywork to become a basic KH configuration with the help of a bolt-on Kamm tail, although the idea would soon be refined after the suspension-activated aerofoils were banned. A proper 917K was introduced for the 1970 season. Note the early exhaust pipe arrangement, with one each side in front of the rear wheels, and two exiting from the rear.

Siffert made the right decision to leave the 917 in the transporter and drive a 908L at Spa. Here, the Siffert/Redman car is seen leading the 312P of Pedro Rodriguez and David Piper – the V12 Ferrari that came second, finishing

three-and-ahalf minutes behind the three-litre Porsche.



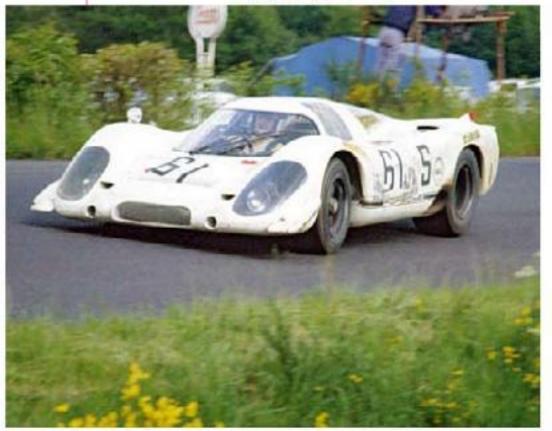
bore and stroke as the three-litre 908 unit, but, with 12 cylinders instead of eight, giving superb balance, displacement was increased to 4494cc. One of the biggest differences between the two was the dohc and cooling fan drive, taken from a gear at the centre of the crank rather than at one end. It was an elegant piece of engineering, with the mechanically-driven fan sitting horizontally atop the engine like that of the earlier Grand Prix eights. Bosch fuel-injection was retained,

and a pair of distributors (one each side of the fan) and four coils were used in the twin-plug ignition system. Right from the start, with a 10.5:1 compression ratio, it delivered 580bhp at 8400rpm, and 375lbft of torque. The five-speed transmission was basically similar to the Type 916 transaxle used on the 908, with a ZF limited-slip differential as standard.

The wheelbase and track dimensions of the 908 were carried over, while the suspension, steering and braking system was also familiar to anyone who had seen the 1968 racing Porsches. Racing tyre technology had improved year-by-year in the mid-1960s, so that even 1965 sizes were beginning to look like road equipment.



The 917 at least finished at the Nürburgring, although a lot of work was needed still to bring it up to the standard of the latest 908s. It came second in Class, lagging behind a Ford GT40, although a two-litre Alfa 33 also beat it to the flag. Note the bigger oil cooler aperture and front brake cooling ducts adopted by this time.



Action from the pits at Spa.



Atmospheric shot from the ADAC 1000km Race at the Nürburgring. You can just make out the Elford/Ahrens car being chased by the Herrmann/Stommelen machine – the only 908/02 to run with the revised Flunder bodywork.



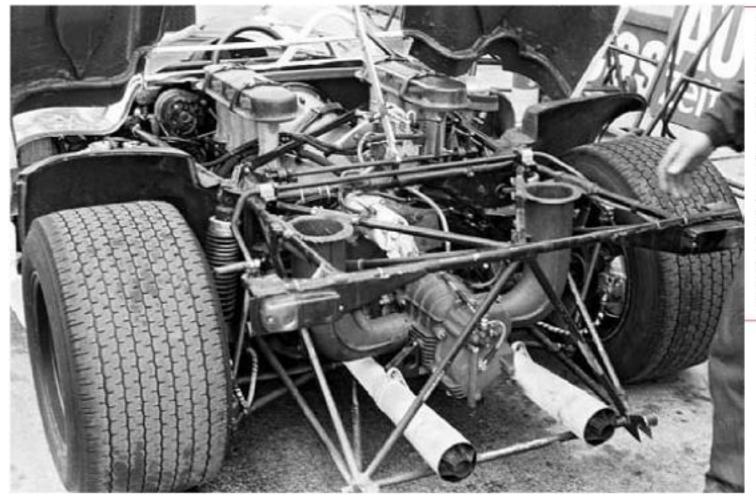
Materiál chráněný autorskýn 199 ávy



The Mitter/Schutz car was the only 908/02 that struggled; the front wheel bearing seizing twice. It still finished, however, ending the race ten laps down in 31st place. Helmuth Bott (third from the left), Peter Falk, and Rico Steinemann can be seen in this shot. Falk (in hat, next to Bott), would be given the job of refining the 917 with Helmut Flegl.



As one would expect, there were all manner of older racing Porsches at the Ring. This is the 907 of the Picchio Rosso team of Milan, with Giampiero Biscaldi as the main driver.



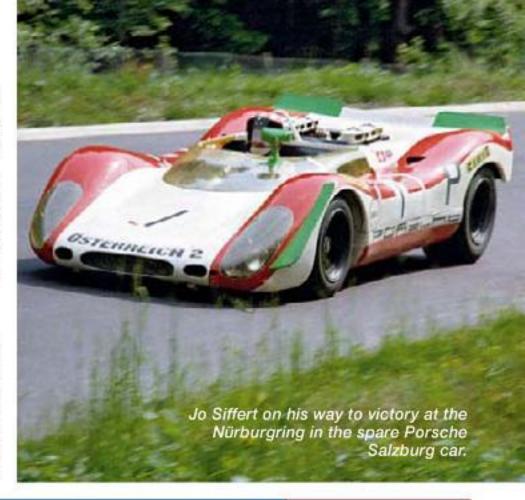
One of the works 908/02 Spyders in the pits, giving a superb view of the threelitre engine and the more conventional 1969-type five-speed transmission. Note the new location for the alternator (up front, to the left), removed from the cooling fan area to reduce fanbelt stress and site this crucial component in a less harsh environment.

At Goodyear, for instance, the contact area available in 1969 was literally twice that of the typical 1965 pattern. To make use of these advances, the 917 employed 9J x 15, five-spoke magnesium alloy rims up front, with 12J versions at the rear. A spacesaver spare was placed under the rear lid, aft of the engine.

There were hopes that the new car would be given its papers in time for the BOAC 500 at Brands Hatch, but the FIA was not convinced that the minimum number of cars had been built. A week later, the inspectors were given the ultimate proof that they had, but Monza was also missed due to the bureaucratic delay in issuing paperwork. The production of 25 units successfully put the car in Group 4, where the GT40s were homologated.

## The season continues ...

Although already seen at the Le Mans test weekend – and impressing all those present with its turn of speed – it was Spa that witnessed the proper racing debut of the 917. While Group 6 908Ls were used by the Herrmann/Stommelen and Elford/Ahrens pairings, Siffert/Redman and Mitter/Schutz were assigned Group 4 917s. In the end, however, despite setting a fastest time in practice with the 917, Siffert decided to stick with the 908L T-car, so only one of the new machines made it to the start line.





Stunning publicity shot of the Siffert/ Redman 908/02L the Flunder body with a longer tail – and the 917 of Elford and Attwood as entered at Le Mans, with its LH tail configuration (complete with moving aerofoils that Porsche was allowed to use for the 24-hour race but others were forced to abandon), larger brake ducts and revised front suspension. Unfortunately. both retired with gearbox trouble, but not before Elford had set a new lap record at an average of 146.2mph (234.0kph).



Two views of the dramatic 917 that won at Zeltweg. This car, chassis 917009, was one of seven that went to JW Automotive for the 1970 season. Note the wheelarch flares on this particular vehicle, also adopted by its sister car driven by the Attwood/Redman team in Austria to allow 15J rims with wider racing rubber to be fitted. Bigger front brake ducts than those used at Le Mans were another feature on these machines, and, by the time they reached the Österreichring, additional louvres had been cut into the tops of the front wings and

above the side exhausts to enhance heat dispersion. By the way, while the left-hand tank ahead of the rear wheel was for oil, the right-hand one was for topping up the latest driver cooling system, so is not always seen.



SIEG FUR PORSCHE
INTERPRETATION
ISSUED AND STREET
INTERPRETATION
I

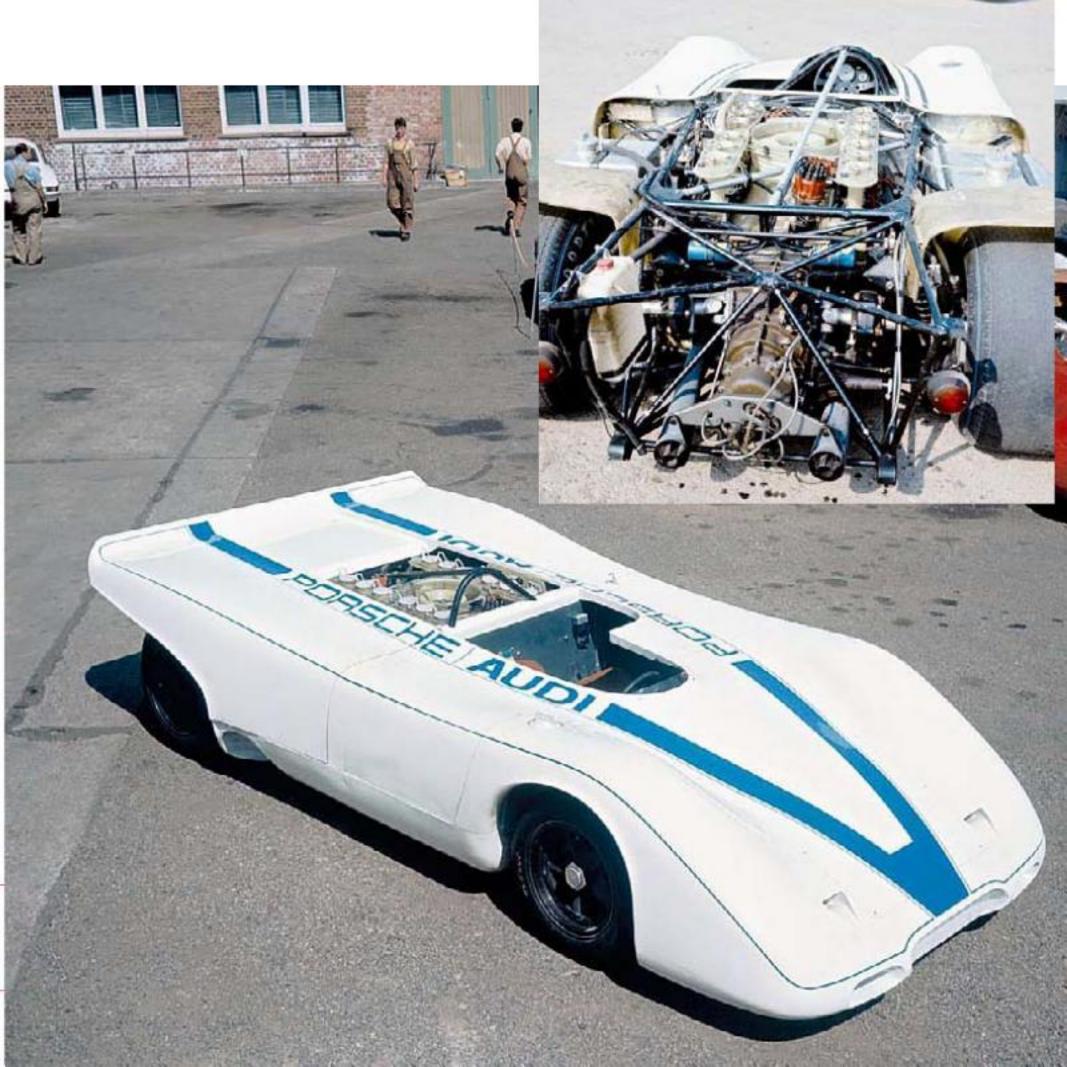
Poster celebrating the 917s first victory. However, although Zeltweg was a championship round, most manufacturers considered it a minor event in 1968 due to its lower points allocation. In 1969, it was upgraded from a 500km race to a 1000km one, which meant a full nine points for a win.



Richard Attwood.



Udo Schütz.



## XIX

## 1970

he FIA reshuffled categories again, with Group 5 now for Sports Cars, capped by a five-litre engine capacity limit, plus a minimum of 25 built (basically 1969's Group 4). As before, Group 6 was reserved for Prototypes with a threelitre limit and the building of one-offs acceptable; Group 7 was for two-seater racers, as per the Can-Am series and races such as the Japanese Grand Prix.

Meanwhile, within the Porsche empire, a lot of testing and negotiating had taken place throughout the tail-end of 1969. During these autumn and winter months, a number of things had happened – mechanically, bodily, and also politically – that would make the 1970 season very different to the one that had just ended. No sooner had the champagne been opened at Zeltweg to celebrate a maiden victory for the 917, than the 1970 Porsche campaign was being planned in the team bus. Moreover, it was being openly planned with its chief rival for the last two seasons – JW Automotive of England.

This was a major development. The JW Automotive outfit in Slough, sponsored by Gulf Oils, had agreed to run at least two works-supported 917s for Porsche in each championship race, with all cars and engines supplied by and full ongoing technical assistance from the factory. This freed up staff and finances in Stuttgart to develop the company's core business, which would then generate funds to further refine the existing racers. Whilst Steinemann was still in charge of matters back in Germany, having John Wyer (who'd led Aston Martin and Ford drivers to victory at Le Mans) running the day-to-day activities of the team was also of great benefit, as he brought a level of experience to Porsche that had disappeared with Von Hanstein's retirement. Officially announced in London on 30 September, the deal was good for all concerned.

As noted earlier, though, work had already begun on the 1970 cars before the press briefing. In a lengthy joint testing session at Zeltweg, held after everyone had gone home following watching the 917 win, the two 12-cylinder cars were put back out on the track, along with the works spare and one of the 917PA Can-Am machines, the latter given its final preparation before beginning its racing career in the States.

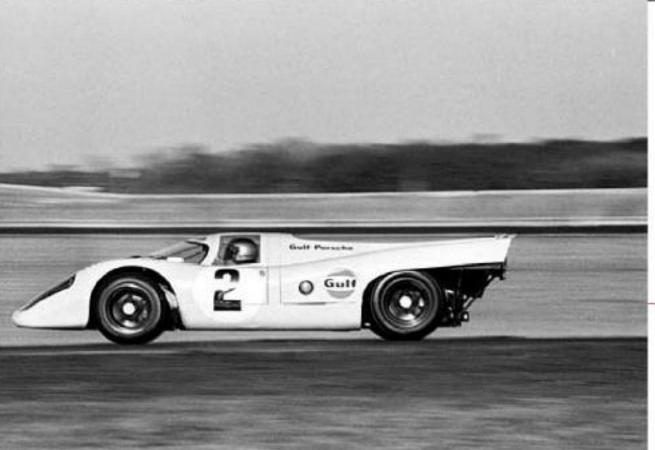
The 917 was still something of a handful, with only a few elite drivers able to control it, let alone make it win. The modifications made before the Austrian race had mellowed it, but everyone was shocked when the Can-Am car lapped so much faster, due, not to the power-to-weight difference, but the confidence that the drivers had in the open car. It was then realized that the aerodynamics of the original vehicle were not right; roughly shaping the tail of one of the coupés closer to the profile of the 917PA, an immediate, substantial improvement was obtained, and the 917K was born ...

## The 917K

A quick glance, and it appeared that the 917K was simply the 1969 car with a new tail. However, the nose ducts were changed (which tied in with the modified front lid), wheelarch lips were added to allow bigger wheels and tyres, and everything aft of the cockpit was revised completely. The perspex canopy was dropped in favour of a 907/908-style roof fairing which separated the two wings to give the required rearward vision, and played host to the cooling fan and the top of the engine, while the rear wing profile continued the door line straight back, finishing at a length not dissimilar to the old 917 in KH guise, but angled upward instead of curving down to expose the wheels and frame, as in the PA model. Tiny, adjustable spoilers were added on the trailing edge of the tail, but otherwise the car was refreshingly free of aerodynamic appendages. In addition, the exhaust system was redesigned to have two pipes instead of four, both exiting from the rear in traditional manner, so the sills were now smooth. Finally, the fuel filler was moved to a position behind the driver - this was because new FIA regulations called for a smaller 'safety' fuel tank, and, after Daytona, the twin fillers up front disappeared. This dramatic new shape was allowed by the FIA as an evolution of an existing design.

Mechanically, the new exhaust has already been mentioned. Its main advantage was reducing heat build-up in the engine bay, which had often led to fuel evaporation problems when the car was standing in the pits. At the same time, the transaxle was uprated and changed to a four-speed unit, linked to a new clutch assembly. There was a revised front suspension, as well as a good deal of general chassis tuning that included the adoption of wider wheels at both ends. Behind these rims were new brakes, with different calipers and cross-drilled discs.





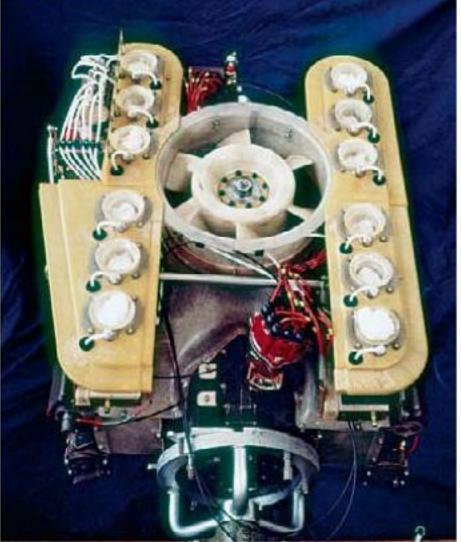
A couple of shots of the 917K on its way to victory at Daytona. It was an excellent start for the new Porsche partnership with JW Automotive and Gulf, and a pleasing result for all those involved in creating the 917K over the winter. Note the tiny roof window, only seen in the opening round (to give better vision on the Daytona banking), and the central orange stripe on the nose – the other team car had a wide base to its stripe, extending to underneath the headlights and sills, in order to quickly identify which was which. On the odd occasions a third car was run, it was given an orange roof but no stripe.



The Le Mans test weekend once again clashed with Brands Hatch, so was poorly supported. There was a 917K in France having its suspension calibrated, and a 917L with a pair of fins that brought back memories of the earlier F2 central-seat RSK – Mike Hailwood and Herbert Linge did most of the driving. The problem was that the 917K was not very aerodynamic compared to the 917L, so the engineers wanted to give their long-tail theory one more chance. This is the same 917L with its fins bridged, pictured here at the Hockenheim circuit. Note the subtle differences in the nose, too.

Pit lane at Monza, with Pedro Rodriguez strapping his wrists at the front of number 7.





The latest version of the Type 912 engine, an increase in the bore and stroke giving a displacement of 4.9 litres. Peak power was not all that different, but there was a substantial improvement in torque.



The three-litre 908/03s built for the Targa Florio. The Gulf cars were assigned to Siffert/Redman (number 12), Attwood/ Waldegaard (36, with John Wyer beside it in black), and Rodriguez/Kinnunen (40), while the Porsche Salzburg machine was driven by Elford/Herrmann. That looks like Goodyear's racing chief, Leo Mehl, in the blue rally jacket, and it's definitely Siffert in the white overalls.

red 512S was fastest in practice, but the three 917Ks were next (Siffert/Redman, Rodriguez/Kinnunen, and Elford/Ahrens, in that order), backed up by a couple of private 908/02s: the 917K of Tony Dean and Peter Gregg packed up in qualifying with a seized camshaft. Both 908s failed to finish (one on the first lap, the other on lap 385 whilst lying tenth), and the Austrian 917 was forced to retire when a shock absorber broke and pierced the fuel tank.

Putting Bjorn Waldegaard, one of the Porsche works rally drivers, in the third Gulf car made sense, as both Elford and Larrousse had been famous in this discipline before hitting the circuits. The Attwood/Waldegaard pairing placed fifth.



Almost a time warp: the 906 Carrera 6 of Italians Alfio Nicolosi and Angelo Bonacorsi.

Poster celebrating Porsche's success on the Targa – a classic race the German company had almost made its own ...

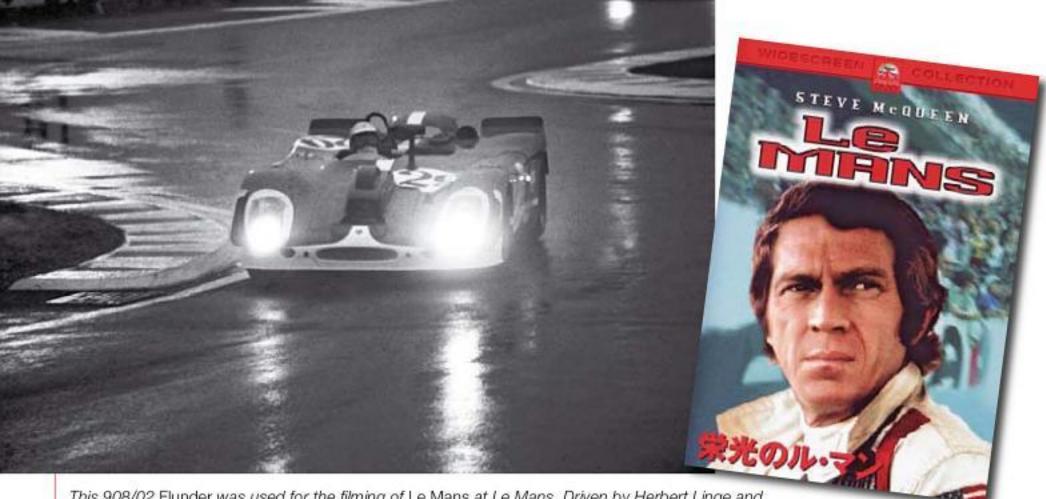


One of the JW Automotive 917Ks about to blast away from the pits in Belgium.

The fastest Ferrari had suspension maladies, allowing the Gulf Porsches to glide through to first and second, despite the Siffert car experiencing a number of niggling problems during the race.

Sebring was full of drama. Porsche was represented by a pair of Gulf 917Ks, and another pair of similar models with top drivers entered by Porsche+Audi. Four 908/02s were also thrown in to face the Ferraris, Matras, and AlfaT33/3s. The Gulf cars had niggling problems, not helped by new hubs that were so new they hadn't

even been tested, but the Herrmann/Lins 917's engine blew and Elford crashed out early after being hit by a 911. Siffert's car had suspension failure due to the new hub, so the Swiss driver was put into the last good 917 to help lift the pace, but it was a Ferrari day. As for the Spyders – two finished, one in second, with one of the two Martini International team cars in seventh.

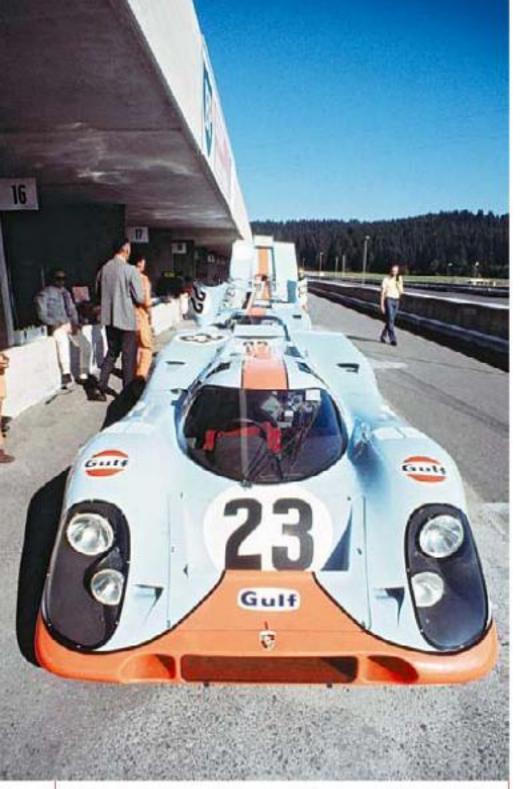


This 908/02 Flunder was used for the filming of Le Mans at Le Mans. Driven by Herbert Linge and Jonathon Williams, it finished ninth on the road, but spent too much time in the pits changing film, and was officially 'unclassified' at the end. Only seven cars qualified as finishers in 1970.



Porsche was determined to give the revised 917L a chance, loaning this 4.5 litre car to the Martini International Racing Team. With Gerard Larrousse and Willi Kauhsen (who did a lot of the final testing) at the wheel, it came second, with a Martini 908/02 taking third (first in Class). Another 917L (a 4.9 litre version) was entered for Elford/Ahrens by Porsche Salzburg - this started on pole position but dropped out with engine trouble.





The Le Mans tail spoiler introduced by JW Automotive was retained on its 917Ks after the French event, and used in America and Austria. This is the car that the Siffert/Redman pair took to victory at Zeltweg.

only 4.9 litre model in the race, but the damage from a burst tyre ended his charge. Rodriguez was close behind with a smaller-engined 917K, and drove sensibly to take the flag. The Siffert car was damaged early on, and actually finished 12th, behind the 917Ks of Gesipa Racing and Racing Team AAW. The Martini 908/02 finished strong again, taking 14th.

The Targa Florio witnessed the debut of the 908/03. This was essentially a revised version of the Flunder model, utilising experience from the 909 Bergspyder to shorten and lighten the frame and body, reduce the weight of components, and then improve weight distribution by moving the engine and transmission closer to the centre of the vehicle and the driver forward. After the first was completed in March 1970, eight 908/03s were built in all, with four entering the Targa. In the race, extended in 1970, the little Porsche was a revelation. Elford swerved to miss a fallen rock and crashed on the opening lap, but otherwise it was a copybook performance for the Porsches, and a fine result for the Gulf team. The older 908/02s had done well. too, with the Racing Team AAW car coming fourth. The Martini 908/02 of Larrousse/Lins was leading the Targa at one point, thanks to the Frenchman's rallying skills, but gearbox troubles dropped it down the field to 13th place.

The Gulf-Porsches, now running with 4.9 litre engines and a different full-width tail designed especially for the fast Spa circuit, had a good fight with Jacky Ickx's Ferrari on the Belgian's home track. The Rodriguez/Kinnunen car retired with gearbox trouble, but the 917Ks came out ahead, thanks to Siffert and Redman. It was the first victory for the bigger-engined 917 in a race dominated by 917Ks and 512Ss, although the 908/03s were brought out again for the twists and turns of the Nürburgring, with two for John Wyer's team, and two for Porsche Salzburg. Fans of Italian machinery had high hopes for the Ferraris and Alfas, but Ickx was injured and there were numerous accidents in practice that further dented their challenge. Once the two Gulf cars dropped out, it was a relatively easy run for the Porsche Salzburg team to claim a one-two, the only competition coming from the Surtees/Vaccarella 512S Spyder.

After waiting so long to win Le Mans, 1970 was almost a nonevent. The incredible number of accidents (largely caused by the weather) and mechanical maladies cut the field from 51 starters to just 16 cars running at the end, and none of them within 20 laps of the three Porsche drivers on the podium. JW Automotive entered three Gulf-Porsche 917Ks, two with 4.9 litres engines, but all sporting a tail spoiler that bridged the rear wings made just for Le Mans. They retired for various reasons on laps 22, 49 and 156, depriving JW Automotive of a hat trick at the Sarthe. That is not to take anything away from Hans Herrmann, who retired on the spot after winning the only major classic that had eluded Porsche since it had started racing.

Although the Ferrari factory sent two cars to Watkins Glen, the John Wyer pitwork and tactics were too slick, giving the Gulf-Porsches a one-two, with Porsche+Audi 917Ks, driven by Elford/ Hulme and Attwood/Ahrens, in fourth and sixth; the works 512Ss were third and fifth. As in 1969, most of the top drivers stayed on for the Can-Am event the following day, and, whilst Denny Hulme won in a McLaren, 917Ks finished in the next three places (Siffert,

WORLD	SPORTS	CAD	CHAMPIONSHIP
VVORLD	SPURIS	CAR	CHAMPIONSHIP

ay	tona 24-hour Race (1 February)		
1	P Rodriguez/L Kinnunen	Porsche 917K	724 laps/1st in Class
2	J Siffert/B Redman	Porsche 917K	679 laps/2nd in Class
3	M Andretti/A Merzario/J Ickx	Ferrari 512S	676 laps
9	G Loomis/B Everett	Porsche 906E	573 laps/3rd in Class

Seb	ring	12-hour	Race	(22 M	larch)	
	4 400		4-047-17		4 / 10	ī

1	I Giunti/N Vaccarella/M Andretti	Ferrari 512S	247 laps
2	S McQueen/P Revson	Porsche 908/02	247 laps/1st in Class
3	M Gregory/T Hezemans	Alfa Romeo T33/3	246 laps
4	P Rodriguez/L Kinnunen/J Siffert	Porsche 917K	243 laps/2nd in Class
23	M Rahal/H Wise/W Frank	Porsche 906	181 laps/1st in Class

### BOAC 1000km (12 April)

-1	P Rodriguez/L Kinnunen	Porsche 917K	6h 45m 30s/1st in Class
2	V Elford/D Hulme	Porsche 917K	5 laps down/2nd in Class
3	H Herrmann/R Attwood	Porsche 917K	8 laps down/3rd in Class
4	G van Lennep/H Laine	Porsche 908/02	8 laps down/1st in Class
6	G Larrousse/G Koch	Porsche 908/02	18 laps down/2nd in Class
9	J L'Amie/T Reid	Porsche 910	24 laps down/1st in Class
11	N Gold/M Beuttler	Porsche 910	34 laps down/3rd in Class

#### Monza 1000km (25 April)

1	P Rodriguez/L Kinnunen	Porsche 917K	174 laps/1st in Class
2	I Giunti/N Vaccarella/C Amon	Ferrari 512S	174 laps
3	J Surtees/P Schetty	Ferrari 512S	171 laps
15	A Wicky/M Cabral	Porsche 907	144 laps/1st in Class
17	H-D Blatzheim/H Krause	Porsche 907	139 laps/2nd in Class
19	J L'Amie/B Nelson	Porsche 910	131 laps/1st in Class

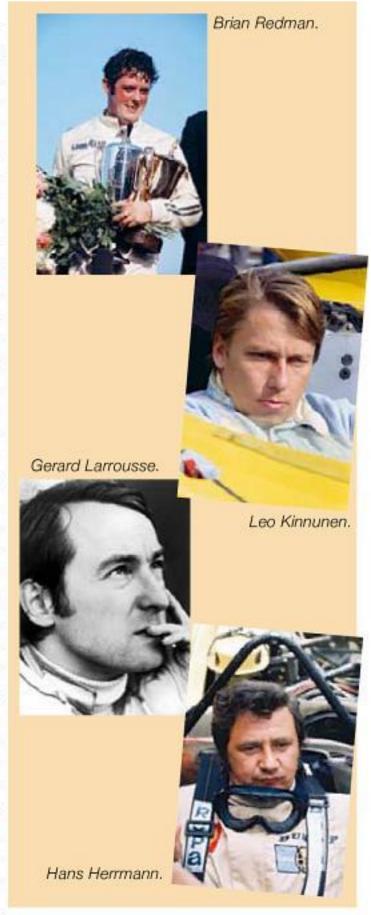
## Targa Florio (3 May)

J Siffert/B Redman	Porsche 908/03	6h 35m 30s/1st in Class
P Rodriguez/L Kinnunen	Porsche 908/03	6h 37m 12s/2nd in Class
N Vaccarella/I Giunti	Ferrari 5125	6h 39m 05s
G van Lennep/H Laine	Porsche 908/02	6h 44m 52s/3rd in Class
A Nicodemi/G Moretti	Porsche 907	1 lap down/3rd in Class
A Nicolosi/A Bonacorsi	Porsche 910	3 laps down/3rd in Class
	P Rodriguez/L Kinnunen N Vaccarella/I Giunti G van Lennep/H Laine A Nicodemi/G Moretti	P Rodriguez/L Kinnunen Porsche 908/03 N Vaccarella/I Giunti Ferrari 5125 G van Lennep/H Laine Porsche 908/02 A Nicodemi/G Moretti Porsche 907

## Spa 1000km (17 May)

1	J Siffert/B Redman	Porsche 917K	4h 09m 48s/1st in Class
2	J lckx/J Surtees	Ferrari 512S	4h 12m 23s
3	V Elford/K Ahrens	Porsche 917K	1 lap down/3rd in Class
9	G Larrousse/R Lins	Porsche 908/02	7 laps down/1st in Class
11	H-D Dechent/H Marko	Porsche 908/02s	9 laps down/2nd in Clas
12	J L'Amie/B Nelson	Porsche 910	12 laps down/1st in Class

continued over ...



1 1				-		_		
M	$M \cap D$	10 ,	ADOD:	TC (	AD	LIA	MADIO	ONSHIP
w	A OUR	LU	POR	13	.ran		WIFT	JINSHIE

13 H-D Blatzheim/E Kraus		Porsche 907	12 laps down/1st in Class		
14 F	P Sadler/P Vestey	Porsche 910	15 laps down/2nd in Class		

#### Nürburgring 1000km (31 May)

1	V Elford/K Ahrens	Porsche 908/03	6h 05m 21s/1st in Class
2	H Herrmann/R Attwood	Porsche 908/03	6h 10m 34s/2nd in Class
3	J Surtees/N Vaccarella	Ferrari 512S	1 lap down
5	G Larrousse/H Marko	Porsche 908/02	2 laps down/3rd in Class
9	A Wicky/M Cabral	Porsche 907	5 laps down/1st in Class

#### Le Mans 24-hour Race (14 June)

1	H Herrmann/R Attwood	Porsche 917K	343 laps/1st in Class	
- 2	G Larrousse/W Kauhsen	Porsche 917L	338 laps/2nd in Class	
3	R Lins/H Marko	Porsche 908/02L	335 laps/1st in Class	

#### Watkins Glen (11 July)

1	P Rodriguez/L Kinnunen	Porsche 917K	308 laps/1st in Class
2	J Siffert/B Redman	Porsche 917K	308 laps/2nd in Class
3	M Andretti/I Giunti	Ferrari 512S	305 laps
7	R Lins/H Marko	Porsche 908/02	288 laps/1st in Class
11	M Rosen/D Jacobs	Porsche 906	241 laps/1st in Class
12	H Wise/W Frank	Porsche 906	236 laps/2nd in Class
15	R Brezinka/H Peterman/R Bartling	Porsche 906	231 laps/3rd in Class

#### Zeltweg 1000km (11 October)

1	J Siffert/B Redman	Porsche 917K	5h 08m 05s/1st in Class
2	A de Adamich/H Pescarolo	Alfa Romeo T33/3	2 laps down
3	R Lins/G Larrousse	Porsche 908/02	3 laps down/2nd in Class
4	V Elford/R Attwood	Porsche 917K	8 laps down/2nd in Class
5	R Joest/G Pankl	Porsche 908/02	8 laps down/3rd in Class
10	L Hofer/W Riedl	Porsche 910	24 laps down/2nd in Class
13	K Rieder/O Stuppacher	Porsche 906	31 laps down/3rd in Class

Attwood, Elford, in that order). Tony Dean was the only man running consistently in the Can-Am, but he won the Road Atlanta round on 13 September, finishing the season in sixth place, albeit a long way down on Hulme, who took the 1970 title.

After Watkins Glen, Mosport should have been next but was cancelled, so there remained ten World Championship rounds on the calendar, as per the previous year. In the massive gap between the Glen and Zeltweg, the Italians had been honing their weapons of choice. Still, the Siffert/Redman car came through to win, with an Alfa next, followed by three 908/02s and a Salzburg 917K. It was a good way to end the season ...

The season finished with Porsche on 63 points to Ferrari's 37; Alfa Romeo, Matra, and Chevrolet made up the numbers. Porsche also won the GT Championship with ease, and did well in the new Interserie Championship, introduced in 1970 to bring Can-Am type racing to Europe. In the six qualifying rounds (Hanover should have been the seventh but was rained off), Jurgen Neuhaus took his Gesipa 917K to victory at the Norisring and Thruxton, and placed second at Croft, Keimola, and Hockenheim, thus securing the title. Gijs van Lennep was runner-up in another 917K, a long way ahead of his closest rivals, who were driving March and Lola racers with Chevrolet power.

In the non-championship races, there were notable wins in the EmbassyTrophy atThruxton, the Circuit of Magny Cours, the Imola 500km event, the Trophy of Dunes at Zandvoort, the Coupe du Salon at Montlhery, and the six hours of Jarama.

Opposite: Two shots from the Interserie round at Hockenheim, Niki Lauda in the white 908/02 Flunder with a red nose, and Willi Kauhsen in a modified 908 Spyder. The event was won by Vic Elford in a McLaren.

atter 6.6

Steve McQueen winning at Holtville in California with a 908/02 Flunder. This is the year the classic film Le Mans was made, of course, its main star once saying: "I'm not sure whether I'm an actor who races, or a racer who acts!" A 904 can be seen in the background in hot pursuit.







The mid-engined 914/6GT was homologated on 1 March 1970 as an alternative to the 911. Powered by a two-litre flat-six, it was a available in three states of tune – for fast road use, rallying or track work, the latter versions endowed with 220bhp.



The Rodriguez/Oliver car in the pits at Daytona.

had silly incidents that cost them dearly, such as Siffert running out of fuel, and Rodriguez getting involved in a coming together with the Donohue Ferrari: they duly finished fourth and fifth. Porsche still won, though, thanks to the 4.9 litre 917K of Elford and Larrousse.

Brian Redman's retirement turned out to be the shortest in history, and he partnered Vic Elford in a Martini car at Brands, with Van Lennep/Larrousse in the sister machine sporting experimental ram tubes, which were only seen on this one occasion. The Gulf cars, running with four-speed transmissions for this race, had their usual pairings, but this was to be Autodelta's day; fuel leaks, brake trouble, and new alloy hubs causing the JW mechanics problems in getting hot wheelnuts to loosen slowed the pace of the 917s, handing victory to the Alfas. Interestingly, Reinhold Joest and Willi Kauhsen came sixth in the Team Auto Usdau 917K - Joest would be a name to look out for in the future.

Porsche was back on form in Monza. The tailfins seen in practice sessions in the US and France were refined and used on both Gulf and Martini cars, and the engines supplied to JW Automotive were also uprated for this power circuit,

Porsche at the 1971 New York Show, with the 1970 Le Mans winner on the stand. The racing season moved back to Europe the day after the show opened.



The Siffert/Bell 917K pulling out of the pits at Brands Hatch, with Rodriguez looking on from the tail of his car, and Jackie Oliver being interviewed in the background. It was to be an unhappy weekend for both of the bigger Porsche équipes, though.

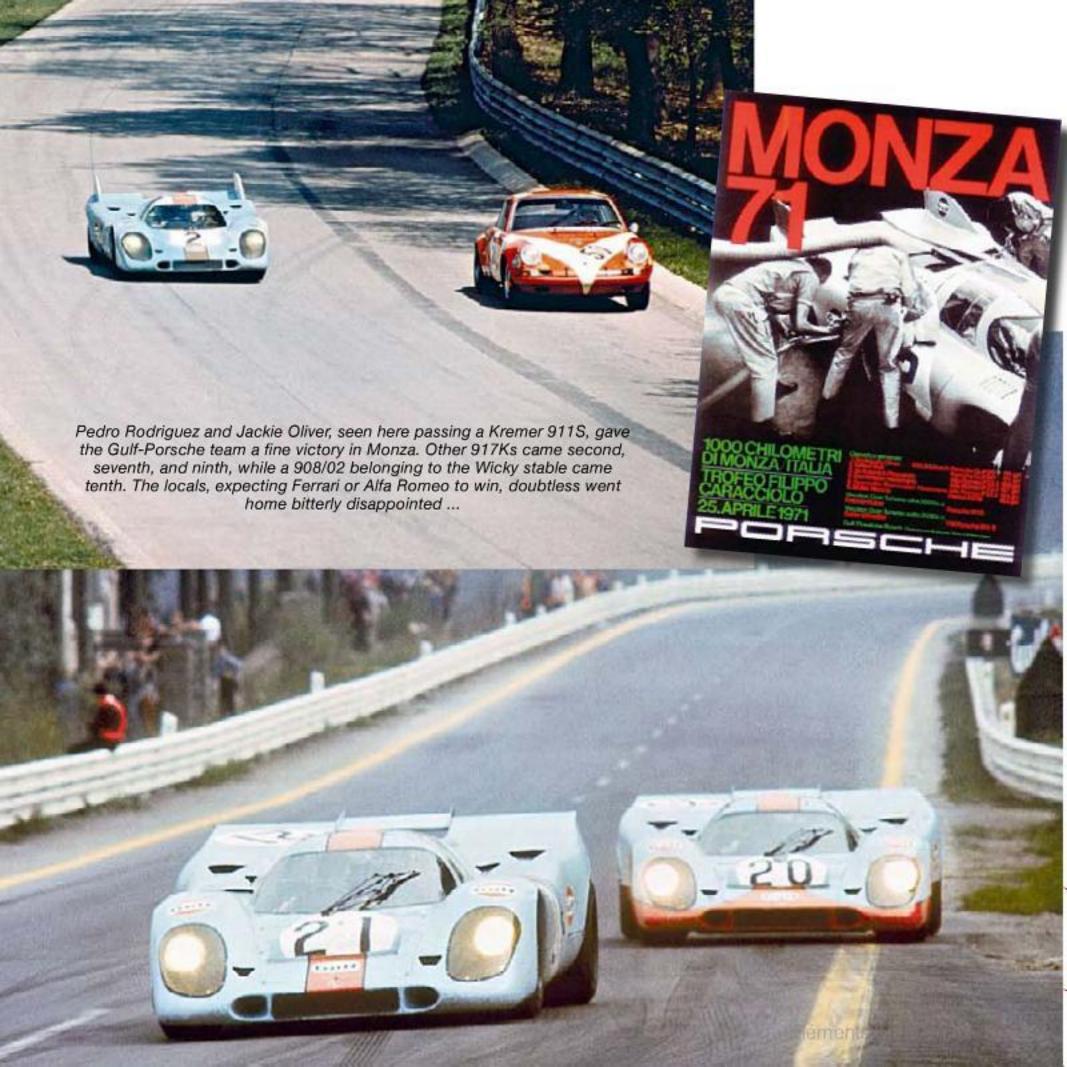


The Le Mans test weekend was held two weeks after Brands Hatch in 1971, and therefore attracted far more interest from the big teams. JW Automotive had first tried tailfins at Daytona in practice, but shorter versions appeared in France and were later adopted on some of the faster circuits. The works also experimented with an ultra-lightweight magnesium alloy spaceframe on one car.



The Le Mans practice session also witnessed the debut of the 917/20, with its SERA-designed coachwork (the French concern that had been responsible for the profile of the long-tail cars used at the Sarthe the previous year). The body was shortened front and rear, and also widened, allowing the wheels to sit out of the airflow. The one-off 917/20 (chassis 917.20.001), which can be seen competing in the threehour race held at the end of the test weekend in the second picture, is best known by its nickname of 'Big Bertha.'







The Rodriguez/Oliver 908/03 (chassis 908.03.013) that was second at the Nürburgring, pictured here before the race. Granted, wider tyres were used in Germany compared to Sicily, but it's interesting to compare 1971 racing rubber to that of the mid-1960s. Note the heavy roll-over bar required for this season.

Opposite: Back with regular bodywork in Belgium, the Gulf team dominated the Spa event with a superb display of formation driving from start to finish. Both Martini cars, which retained their Monza tailfins like most of the privateers, failed to complete the course. The Sonauto 908/02 Flunder of Ballot-Lena/ Chasseuil that came seventh at the Nürburgring. The same car and drivers had finished fifth at Spa.



Elements sous droits d'auteur



Vic Elford on his way to victory at the Ring.



The Elford/Larrousse 917L at the works, ready and waiting for its Le Mans campaign.

the bore dimension increased by 0.8mm to give a larger cubic capacity of 4998cc – bang on the five-litre limit for the Group 5 machines. In this guise, with a few other internal modifications, the Type 912 unit delivered 630bhp at 8300rpm, along with 435lbft of torque 1800rpm lower down the rev-range.

In the race, Elford dropped out with engine trouble (as did one of the leading Ferrari entries), the Martini sister car had a throttle cable break and two of the

In the race, Elford dropped out with engine trouble (as did one of the leading Ferrari entries), the Martini sister car had a throttle cable break, and two of the other Ferrari entries crashed in the same accident. The Gulf team stayed calm, though, and delivered another convincing one-two victory, which it then duly



The lone 917/20 'Big Bertha' with its novel pink paintwork noting the various meat cuts on a pig! This refers to another nickname the 917/20 had picked up since its debut. At least Willi Kauhsen can see the joke ... Note the auxiliary transmission oil cooler high up in the tail section.

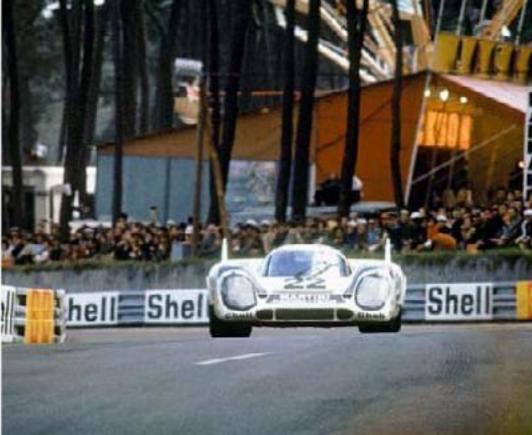


The Siffert/Bell 917L at Le Mans (chassis 917045 – the 917Ls were batched with chassis numbers in the range of 917040 to 917045, while regular chassis numbers run from 917001 to 917035, including the two 917PAs). Unfortunately, it was destined to retire in the 18th hour.

The 4.9 litre 917L that Rodriguez put on pole and recorded the race's fastest lap with. The latest 917L was far superior to earlier versions, but could not stay the distance. Minor engine problems of one sort or another plagued all of the special, long-bodied cars.







The Le Mans winner in action – a works-prepared 917K in Martini colours, driven by Gijs van Lennep and Helmut Marko. As it happens, the winning car (chassis 917053) was one of the few to have a prototype magnesium alloy frame (cars 917051 to 917053 inclusive).

repeated in the next round at Spa in what one contemporary magazine said was "a perfect demonstration."

The Targa Florio had been kind to Porsche on many occasions, but this year was to be what amounted to a home win. Both Gulf 908/03s, complete with tailfins like those of their coupé stablemates, and assigned to specialist pairings of Siffert/Redman and Rodriguez/Müller, crashed out on the opening lap, while the Martini-entered Larrousse/Elford 908/03 was sidelined by a damaged suspension.

Suitably strengthened, the 908/03s were rolled out again for the Nürburgring – two new cars for the Gulf team, and two prepared for the Martini outfit. Although the frame failed on the Siffert/Bell machine, the other three-litre Spyders filled the podium places, clinching the World Championship for Porsche in the process.

Next on the agenda was proving that last year's win at Le Mans was no fluke. The 917L was brought up-to-date with improved aerodynamics and wider bodywork (like that of 'Big Bertha') which incorporated rear wheel spats in the design – three were built, with two for Gulf and one going to the Martini team. Both of these teams also ran a 917K each, and Martini made up its entry with the 917/20 seen at the test weekend. In addition, a private 917K, a 910, a 907, and a selection of 908/02s represented the Stuttgart maker, not to mention a swarm of 911s and the odd 914. It was to be another war of attrition, though,

and the different types of special bodies counted for nothing ultimately. At the end of 24 hours it was Gijs van Lennep and the good Dr Marko who had travelled the furthest in the Martini 917K; the same model, but in Gulf colours, came home in second. Amazingly, of the 13 finishers, ten were Porsches.

The Austrian 1000km at Zeltweg's Österreichring saw many of the top entries fall by the wayside, including one of the Martini cars with an experimental ABS system, but Pedro Rodriguez and Richard 'Dickie' Attwood, with their 917K back in its regular guise minus the fins, came through to beat the works Alfas by two laps. Sadly, the little Mexican died shortly after at the Norisring, and the sport lost one of the most exciting drivers it had ever seen.

The Canadian race was cancelled again, so Watkins Glen turned out to be the last round, ending the season two weeks early. A series of punctures deprived the Gulf team of a sure victory, and with no Martini cars there to back it up, Alfa Romeo was able to come away with the win. The Gulf machines were interesting, however, as the front wheelarches were extended to allow wider tyres (something seen at Zeltweg), there were bigger ducts on one side of the nose, and the top edge of the rear wings gained some heavy louvres to help cool the rear tyres – a modification deemed necessary to comply with the following day's Can-Am regulations, which required bodywork to create a full wheel housing at the back.

A magnificent era had come to a close. The 1972 World

## WORLD SPORTS CAR CHAMPIONSHIP

Bue	enos Aires 1000km (10 Janu	iary)
1	J Siffert/D Bell	Porsche

- 1	1 2 ILLELT/D Rell	Porsche 91/K	on 25m 26s/1st in Class
2	P Rodriguez/J Oliver	Porsche 917K	5h 26m 23s/2nd in Class
3	R Stommelen/N Galli	Alfa Romeo T33	31 lap down

#### Daytona 24-hour Race (31 January)

1	P Rodriguez/J Oliver	Porsche 917K	688 laps/1st in Class	
2	R Buckman/T Adamowicz	Ferrari 512S	687 laps	
3	M Donohue/D Hobbs	Ferrari 512M	674 laps	

#### Sebring 12-hour Race (20 March)

1	V Elford/G Larrousse	Porsche 917K	260 laps/1st in Class
2	R Stommelen/N Galli	Alfa Romeo T33/3	257 laps
3	A de Adamich/H Pescarolo	Alfa Romeo T33/3	248 laps
4	P Rodriguez/J Oliver	Porsche 917K	248 laps/2nd in Class
5	J Siffert/D Bell	Porsche 917K	244 laps/3rd in Class

#### BOAC 1000km (4 April)

1	A de Adamich/H Pescarolo	Alfa Romeo T33/3	6h 24m 32s
2	J Ickx/C Regazzoni	Ferrari 312P	3 laps down
3	J Siffert/D Bell	Porsche 917K	6 laps down/1st in Class
10	D Spoerry/H-D Weigel	Porsche 908/02	25 laps down/3rd in Class

#### Monza 1000km (25 April)

- 1	P Rodriguez/J Oliver	Porsche 917K	174 laps/1st in Class
2	J Siffert/D Bell	Porsche 917K	3 laps down/2nd in Class
3	A de Adamich/H Pescarolo	Alfa Romeo T33/3	6 laps down

#### Spa 1000km (9 May)

1	P Rodriguez/J Oliver	Porsche 917K	4h 01m 09s/1st in Class
2	J Siffert/D Bell	Porsche 917K	4h 01m 10s/2nd in Class
3	A de Adamich/H Pescarolo	Alfa Romeo T33/3	4 laps down
4	R Joest/W Kauhsen	Porsche 917K	5 laps down/3rd in Class
5	C Ballot-Lena/G Chasseuil	Porsche 908/02	11 laps down/2nd in Class

#### Targa Florio (16 May)

1	N Vaccarella/T Hezemans	Alfa Romeo T33/3	6h 35m 46s	
2	A de Adamich/G van Lennep	Alfa Romeo T33/3	6h 36m 58s	

continued ...

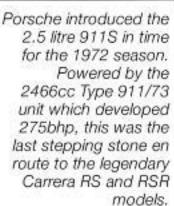


Pedro Rodriguez.
Helmut Marko.



Derek Bell. Jackie Oliver.







### WORLD SPORTS CAR CHAMPIONSHIP

3	J Bonnier/R Attwood	Lola T212	7h 00m 05s
35	F Berruto/A Mola	Porsche 906	3 laps down/2nd in Class

#### Nürburgring 1000km (30 May)

1	V Elford/G Larrousse	Porsche 908/03	5h 51m 49/1st in Class
2	P Rodriguez/J Siffert	Porsche 908/03	5h 53m 33s/2nd in Class
3	G van Lennep/H Marko	Porsche 908/03	5h 53m 34s/3rd in Class
6	R Joest/W Kauhsen	Porsche 917K	4 laps down/1st in Class
11	S Greger/R Lins	Porsche 910	7 laps down/1st in Class
30	H Link/B Becker	Porsche 906	16 laps down/3rd in Class

#### Le Mans 24-hour Race (13 June)

1	G van Lennep/H Marko	Porsche 917K	397 laps/1st in Class
2	R Attwood/H Müller	Porsche 917K	395 laps/2nd in Class
3	S Posey/T Adamowicz	Ferrari 512M	366 laps
7	W Brun/P Mattli	Porsche 907	306 laps/1st in Class

#### Zeltweg 1000km (27 June)

1	P Rodriguez/R Attwood	Porsche 917K	5h 04m 26s/1st in Class
2	N Vaccarella/T Hezemans	Alfa Romeo T33/3	2 laps down
3	R Stommelen/N Galli	Alfa Romeo T33/3	2 laps down
5	E Bonomelli/'Pooky'	Porsche 910	30 laps down/1st in Class
8	A Trummer/D Sessitsch	Porsche 906	31 laps down/2nd in Class

#### Watkins Glen (24 July)

1	R Peterson/A de Adamich	Alfa Romeo T33/3	279 laps	
2	J Siffert/G van Lennep	Porsche 917K	277 laps/1st in Class	
3	D Bell/R Attwood	Porsche 917K	269 laps	

Championship would exclude cars like the 917, and, with Porsche refusing to field a brand-new three-litre prototype, the Gulf-Porsche agreement also ended. Rico Steinemann was another casualty, his contract expiring with the end of the season, whilst Ferdinand Piech stepped aside amid the fallout from the company's internal politics to make way for the return of Ernst Fuhrmann ...

## The other races

Jo Siffert won the Yellow Pages Trophy at Thruxton in a 917, and Jurgen Neuhaus won the ADAC 300km race on the same day The words on the poster say it all ... Porsche scored 72 points to Alfa Romeo's 51; Ferrari came third on 26 points.

npione del Mondo

in Germany. Claude Ballot-Lena and Guy Chasseuil took their 908/02 to victory at the three-hour race at Le Mans following the test weekend, and Guy Larrousse won an event at Magny Cours a couple of weeks later. The Vila Real was also claimed by a Porsche driver, as was the Paris 1000km when Derek Bell joined forces with Gijs van Lennep.

In the Interserie, the works-built 917 Spyders of Jurgen Neuhaus (Uschi Heckersbruch), Leo Kinnunen (AAW Racing), and Michel Weber (Gesipa) were backed up by the 917Ks of Dominique Martin (Zitro) and Mario Casoni, as well as the 908/02s of Ernst Kraus, Hans-Dieter Weigel, and Otto Stuppacher. Kinnunen won

969 1970 197





Jurgen Neuhaus on his way to victory in the ADAC 300km Race at the Nürburgring, held on 12 April. The second picture shows the German's 917 Spyder at the works.

Two shots from the Interserie round at Hockenheim, with the blue 917 Spyder belonging to the Gesipa Racing Team (Michel Weber driving), and the other car the 908/02 Flunder of Ernst Kraus. Weber finished fourth that day, Kraus sixth.





only one of the seven Interserie rounds with his Porsche (that held in Finland), but had numerous podium finishes to allow him to take the title with ease. Peter Gethin (McLaren) was second, with Weber's 917 third. Neuhaus, last year's winner, ended the season in sixth.

Meanwhile, Porsche's interest in the Can-Am series was revived by the efforts of Vasek Polak – a gentleman who first came to the factory's notice in the 1950s as a race tuner of Carrera fours on the West Coast of America. By now, he was an established Porsche+Audi dealer, and, on buying the old 917PA built for Jo Siffert, unwittingly set the wheels in motion for a fully-fledged works assault for the 1972 season.

Polak had the 917PA shortened and given a new nose, and it was then fitted with a new 4.9 litre engine in time for the opening round on 13 June at Mosport. Driven by Milt Minter, it ran alongside two of Tony Dean's old 908 Spyders (handled by Dick Barbour and Steve Matchett respectively), but had trouble in practice which prevented it from starting the race.

Things improved at St Jovite, with an eighth-place finish, and, in the third round, Minter's 917PA came good and rewarded him with fifth. The fourth round at Watkins Glen followed the World Championship race, and brought Siffert's 917/10 into the arena.

Entered officially by Vasek Polak, Siffert's car was basically a cross between the 908/03, with its cockpit moved as far forward as possible, and the 917K with tailfins, while the nose was based on that of the 917PA in its final 1969 form. Enormous Goodyears were fitted to transmit the five-litre, flat-12's power to the road. Although McLarens were first and second, the 917/10 finished third in this first outing, and the factory was already working on a plan to endow the car with more horses.

Supercharging, that most elegant form of forced induction, was investigated, though ultimately rejected. Turbocharging was also beginning to be introduced to the racing scene, largely thanks to the work of Michael May, and twin-turbos were looked at for the flat-12, using wastegates to control boost pressure. However, turbo-lag was a serious problem, and, in the meantime, the engine remained in naturally-aspirated guise with capacity upped to 5.4 litres – the physical limit for the 12-cylinder engine's structure.

Siffert was second to Jackie Stewart at Mid-Ohio, where Minter came sixth. The Swiss driver was second again on the Road America track at Elkhart Lake, but dropped to fifth in a McLaren-dominated Donnybrooke round. At Edmonton, Siffert was fourth, Minter fifth. Fifth was the best Siffert could manage at Laguna Seca, and he perished in a BRM at a Brands Hatch F1 race before he had a chance to compete in the final race of the Can-Am season at Riverside – it was another tragic loss to the racing community. Minter was sixth at Riverside, allowing him to end the season in the same position, two places behind the respected Swiss racer.



## XXI

# 1972

he Competition Department moved to the Weissach proving ground at the end of 1971, but there was no replacement for the 917. Instead, Ernst Fuhrmann, who took full control of the R&D facility in March 1972, sat down to think about what had happened over the last few racing seasons, how much it had all cost, and how much did it benefit the company? For sure, amongst enthusiasts the numerous victories in the World Championship had brought great prestige to the Stuttgart make, but Fuhrmann was not convinced that the outlay had been worth the return in terms of general publicity.

Given the close bond between race and road cars during the 356 era, Fuhrmann considered that the latest breed of Porsche racers were too far removed from the production cars to be of any real use in marketing. Not long after his new appointment, a whole range of sporting machines stemmed from the 911, and, once again, the Porsche road and racing cars were unequivocally linked. In the meantime, Fuhrmann simply continued with the Can-Am programme that was already approved and progressing well, put more effort into the GT and rally cars, and supported the Porsche teams running in the Interserie events.

## The World Championship

For 1972, both Sports and Prototype cars were limited to a three-litre capacity and a maximum of 12 cylinders in FIA events. The old Group 5 and Group 6 merged, meaning it was no longer necessary to build 25 units – all would qualify as newly-defined Group 5 Sports Cars. However, Porsche was not interested. It had invested a fortune in time and money to develop the 917, and had more to lose than gain by creating a new three-litre challenger. It would go out on a high note, leaving in its wake strong memories of Porsche domination.

Of course, before the 917 came along, Porsche had built the 908 for the three-litre formula, and this, along with older racers, was allowed to score points in the series. In Buenos Aires, the yellow 908/03 of Juan Fernandez and Jorge de Bagration came a valiant sixth behind the works Ferraris and Alfas, which were ideally suited to the new championship format.

It was the Brumos 911S that did the best job at Daytona, coming seventh, as the Spanish 908/03 that had done well in Argentina failed to finish, as did Tony Dean's beautifully-finished



Dr Ernst Fuhrmann played an important role in Porsche's early development, and, on returning to the company after a tenure with the Goetze pistoning concern, was duly named the new Chairman of the Porsche car business in 1972. As head of engineering, too, the responsibility for any racing programme also fell to him.

blue 908/02. The Brumos 911S (handled by Peter Gregg and Hurley Haywood) was then fifth at Sebring, two places higher than the Vasek Polak-entered 910 driven by Milt Minter and Roman Pechmann, and 16 better than a 906 listed against the Carousel Porsche+Audi dealership.

At Brands Hatch, Otto Stuppacher and Kurt Rieder took their Bosch 908/02 to ninth, having had a good battle with the Joest 908/03. In fact, the Joest car (chassis 908.03.008), driven by Reinhold Joest and Gerhard Schuler, was in action again in Monza, beating one of the works Ferraris to take an amazing second place, just four laps down on the other Ferrari 312PB. At the same time, the 907 of Peter Mattli and Herve Bayard was fourth.

A Kremer 911S was the best Porsche finisher at Spa, and it was 911 drivers that upheld German pride on the Targa and in the ADAC 1000km race, too. At Le Mans, history will show a victory for the Matra-Simcas, but third place was actually claimed by an old 908L that once belonged to Jo Siffert. Raced by Reinhold

#### WORLD CHAMPIONSHIP

Bue	nos Aires 1000km (9 January)	y =	1)
1	R Peterson/T Schenken	Ferrari 312P	5h 45m 58s
2	C Regazzoni/B Redman	Ferrari 312P	5h 48m 03s
3	C Facetti/G Alberti	Alfa Romeo T33/3	6 laps down
Day	tona 24-hour Race (31 Januar	y)	
1	M Andretti/J lckx	Ferrari 312P	194 laps
2	R Peterson/T Schenken	Ferrari 312P	192 laps
3	V Elford/H Marko	Alfa Romeo 33TT3	190 laps
Seb	ring 12-hour Race (25 March)		
1	M Andretti/J lckx	Ferrari 312P	259 laps
2	R Peterson/T Schenken	Ferrari 312P	257 laps
3	N Vaccarella/T Hezemans	Alfa Romeo 33TT3	233 laps
21	M Rosen/J Schaub	Porsche 906	172 laps/3rd in Class
2	R Peterson/T Schenken P Revson/R Stommelen	Ferrari 312P Alfa Romeo 33TT3	1 lap down 2 laps down
Mor	ıza 1000km (25 April)	AC-	D.C.
1	C Regazzoni/J lckx	Ferrari 312P	5h 52m 05s
2	R Joest/G Schuler	Porsche 908/03	4 laps down/2nd in Class
3	R Peterson/T Schenken	Ferrari 312P	9 laps down
4	P Mattli/H Bayard	Porsche 907	21 laps down/1st in Class
Spa	1000km (7 May)	W.	· W
1	B Redman/A Merzario	Ferrari 312P	4h 17m 19s
2	C Regazzoni/J lckx	Ferrari 312P	1 lap down
3	J Hine/J Bridges	Chevron B21	6 laps down
Targ	ga Florio (21 May)		
1	A Merzario/S Munari	Ferrari 312P	6h 27m 48s
2	H Marko/N Galli	Alfa Romeo 33TT3	6h 28m 05s
3	A de Adamich/T Hezemans	Alfa Romeo 33TT3	6h 46m 22s

continued over ...





Mark Donohue.

George Follmer.

Joest, Michel Weber, and Mario Casoni, the 1969 car was only 19 laps down on the big-budget MS670 that won.

There was no good news for Porsche fans from Zeltweg, but Watkins Glen threw up a fourth for the 908/02 of Tony Dean and Bobby Brown, and a fifth for Reinhold Joest and Mario Casoni. At the end of the year, having won every round except Le Mans, Ferrari naturally took the championship, amassing 160 points; Alfa came second on 85, and Porsche finished third on 72, well ahead of serious contenders like Lola, Chevron, Mirage, and Matra. Porsche easily walked away with the GT trophy.

Perhaps one of the most interesting Porsche entries of the year was that in the name of E Strahle KG at Zeltweg, for this 911S, driven by Gunther Steckkonig, was fitted with an experimental 2.7 litre engine, and was ultimately one of the Carrera RS/RSR series cars that made their official debut at the 1972 Paris Salon.

## The Interserie season

Roger Penske had driven a Porsche in his racing days, but was now better-known as a Team Manager. He was the John Wyer of the States, able to attract good drivers thanks to a proven track record – the Trans-Am Championship had been dominated by the Penske outfit, for instance. Penske was also a Porsche+Audi dealer with excellent contacts at the US head office, so was the ideal choice to front the 1972 and 1973 Can-Am campaigns for the works.

#### WORLD CHAMPIONSHIP

	ourgring 1000km (28 May)	450	
1	R Peterson/T Schenken	Ferrari 312P	6h 01m 40s
2	B Redman/A Merzario	Ferrari 312P	6h 06m 10s
3	A de Adamich/H Marko	Alfa Romeo 33TT3	1 lap down

1	G Hill/H Pescarolo	Matra-Simca MS670	343 laps
2	F Cevert/H Ganley	Matra-Simca MS670	333 laps
3	R Joest/M Weber/M. Casoni	Porsche 908L	324 laps/3rd in Class
18	W Brun/P Mattli/H. Bayard	Porsche 907	251 laps/2nd in Class

à	J Ickx/B Redman	Ferrari 312P	4h 58m 46s
	H Marko/C Pace	Ferrari 312P	1 lap down
	R Peterson/T Schenken	Ferrari 312P	4 laps down

Watkins Glen (22 July)			
1	M Andretti/J lckx	Ferrari 312P	195 laps
2	R Peterson/T Schenken	Ferrari 312P	195 laps
3	D Bell/C Pace	Mirage M6	181 laps

Porsche essentially used the nine rounds in the Interserie races to test its new Can-Am machine in a harsh environment. One could see the distinct similarities to the 1971 car, but with a smoother nose and the adoption of a huge rear wing, added on Mark Donohue's request – the man who would be the key figure in developing the Can-Am car with Porsche's project chief, Helmut Flegl. Indeed, Flegl found Donohue, Penske's star driver, to be immensely talented. He worked with Flegl in Germany to help improve the vehicle before the season started, and then used a five-litre test car (917.10.003) in America to finalize it.

In the end, although the 917/10 designation was retained, the 1972 car had a new frame with a fraction longer wheelbase, revised body, a modified front suspension, uprated brakes, and availability of a 5.4 litre engine, made possible by taking the bore out to its safe maximum of 90mm (most of the 'customer' cars retained the five-litre lump, however). Leo Kinnunen had the honour of taking delivery of the first 'customer' 5.4 litre 917/10, but it wasn't on song at the Nürburgring season opener. Indeed, the Finnish driver was beaten by Willi Kauhsen, who finished second



The 2687cc Carrera RS (left), which could be bought in Sport or Touring guise, was to form the basis for Porsche's new racing car, the 2806cc Carrera RSR. Introduced at the Paris Salon in October 1972, the high powered 911 variant made a massive impact on the 1973 racing scene.

in Jo Siffert's old car, coming home just behind the works BRM of Howden Ganley. Jurgen Neuhaus was fifth in a 917 Spyder.

Kauhsen won the next round at Imola. Ernst Kraus was third in a 917 Spyder, and Reinhold Joest finished sixth in his 908/03. Having experienced engine trouble in Italy, Kinnunen won at Silverstone, beating Willie Green's Ferrari 512M. Ganley took his second win of the season in the Austrian round, but, from then on, it was Kinnunen all the way: he won the final five races with a turbocharged lump in the tail of his car, with Kauhsen second in four of them (Joest was second after two heats in the second Nürburgring visit of the series). Not surprisingly, this handed Kinnunen the Interserie title, while Kauhsen's consistency was rewarded by receipt of the runner-up prize.

## The Can-Am Challenge

With the normally-aspirated 917/10 out and about on the race tracks of Europe, providing an early warning of any chassis



Leo Kinnunen had the first 5.4 litre 917/10 available outside the works, and is seen here charging to victory at Hockenheim. The replica 'Can-Am' body panels were first used at Zeltweg, a week before this picture was taken. Of the nine Interserie rounds, Kinnunen won six of them, the later races using the 850bhp, 4.5 litre turbocharged flat-12 seen in the second shot.



Mark Donohue's Can-Am car stripped of its wafer-thin bodywork. The 917/10 Turbo was pretty much a modern interpretation of the pre-war Auto Union Grand Prix machine.

problems for the factory Can-Am effort, work continued behind closed doors on giving the car more power. Through a trial and error process, Hans Mezger and Valentin Schaeffer gradually refined the forced induction system, concentrating efforts on the proven 4.5 litre engine. With the compression ratio reduced to 6.5:1, the fuel-injected, twin-turbo unit now delivered a healthy 850bhp.

Further modifications enabled the Porsche men to try the turbocharged set-up on a five-litre version of the Type 912 unit, and with a reliable 900bhp, this was declared the ultimate Can-Am engine. Linked to an uprated four-speed transmission, everything was ready just in time for the season opener at Mosport on 11 June – mechanically, at least. By the time the car made its debut, the oil cooler ducting in the nose was different, with a more dramatic wing shape on each side of it. This new front-end was duly made available for 'customer' 917/10s, but a fairing was also built in behind the driver to smooth airflow over the rear of the vehicle on the Penske machines.

It was obvious right from the start that, at last, McLaren





A couple of shots of George Follmer on his way to winning the 1972 Can-Am series. Before Penske and Porsche joined forces, McLaren had dominated the field. Note the rear fairing used on the L&M Porsche+Audi Can-Am cars, but left off the 'customer' 917/10s.

An interesting shot from Riverside in October 1972, showing Ernst Fuhrmann (left) explaining something to Mark Donohue (centre) and Roger Penske.



had some serious competition. Denny Hulme's new M20 won in Mosport, but only after Donohue had trouble with the turbocharging mechanism – the L&M Porsche+Audi car finished second, with Milt Minter fourth in a regular 917/10, and Peter Gregg close behind in another of the new Porsches.

Donohue was badly injured in testing, and it was the experienced George Follmer who took over the hot seat, winning first time out at Road Atlanta. Minter was third and Gregg fifth, maintaining the pressure on the McLaren and Lola runners. There were turbo and tyre problems at Watkins Glen, but things came good at Mid-Ohio with Follmer leading from start to finish. Minter finished third in the Vasek Polak car, while Tony Dean finished 14th in his well-used 908/02 Spyder.

Follmer won again in Elkhart Lake, with Gregg third and Minter (now with turbo power) seventh. There were rumours of Donohue returning for Donnybroke, and these turned out to be true. Two cars were run, but it was not a kind event for Penske's men: Donohue crashed after suffering a puncture, and Follmer ran out of fuel, delaying his progress somewhat. At least Minter finished a strong second in his normally-aspirated machine.

Donohue won at Edmonton, with Follmer third, and the Penske cars claimed an easy one-two at Laguna Seca. Milt Minter came fourth in that race, followed home by Sam Posey in the original 917PA, which, by now, had been rebodied and given a turbocharged engine. Another old car was also in California that day – 917.10.001 – which had now passed to Willi Kauhsen after his original 1972 ride was destroyed in an accident. Sadly, it did

# XXII

# 1973

he 911 (originally Type 901) had first been introduced at the 1963 Frankfurt Show, although it would be another year before the vehicle went on general sale, powered by a two-litre flat-six. It won many races and rallies in that form (including prestigious events like the Tour de France Automobile, the Marathon de la Route, and the Monte Carlo Rally), with the 911R the ultimate development before the road car range received a larger, 2.2 litre engine for the 1970 season. Lightweight 'Rallye' machines were duly built, and formed the basis for a small batch of 2.4 litre racers that ultimately became the 2.5 litre 911S after the engines on the road machines were enlarged once again. Then, at the end of 1972, Porsche introduced an improved race-bred 911 built in large enough numbers to homologate the car in Group 4 - the 2.7 litre Carrera RS was born, with an even more sporting version, the 2.8 litre RSR, marketed for serious racing drivers and their teams.

### The RSR

The work of Helmuth Bott and Norbert Singer, the RSR was developed alongside the RS, so a prototype was available for FIA inspection at the end of 1972. The M491 (RSR) modifications included a new engine, uprated brakes and suspension, an even more basic interior than that of the RS Sport (incorporating a rollcage), and a number of bodywork revisions, mainly to improve cooling and allow the owner to take advantage of the wider wheel and tyre combinations available.

The original RSR engine retained the 70.4mm stroke of the RS, but a bigger 92mm bore was adopted, thus giving a cubic capacity of 2806cc. Again, the cylinder bores were Nikasil coated, but there was a lot of detail work on the crankshaft and con-rods, and new pistons were adopted to take the compression ratio up to 10.3:1. Mechanical fuel-injection continued to be employed, although hotter cams and twin ignition were adopted, and the heads were modified, featuring larger ports and much bigger valves. In this guise, with a free-flow exhaust system, the six-cylinder unit (Type 911/72) developed 300bhp at 8000rpm, and 217lbft of torque at 6300rpm.

The transmission was carried over from the RS, although, naturally, being a racing car, a number of gear sets and final-drive ratios were listed to suit the various tracks. With an uprated clutch



Hurley Haywood.

attached to a lightened flywheel, and a limited-slip differential, it was a pure competition car.

Drilled and ventilated disc brakes were taken from the 917, complete with hefty four-pot calipers and a facility for the driver to adjust brake balance. The suspension was stiffened up and given greater scope for adjustment, while the Fuchs wheels – 9J x 15 at the front, 11J x 15 at the rear – were shod with suitable racing rubber (usually 230/600 and 260/600 Dunlops).

The most obvious change to the bodyshell was the adoption of massive wheelarch extensions to accommodate the aforementioned alloys and wider tyres. There was an oil cooler in the centre of the deeper airdam (plus an additional one for the gearbox, behind the horn grille in the offside front wing, where the secondary oil cooler usually sat on the 911S and RS), with rubber clips above it to hold down the lid for the luggage compartment, which housed the larger, 110 litre (24.2 Imperial gallon) fuel tank (a 120 litre/26.4 gallon safety tank was available as an option).

The interior was stripped out, and left with bucket seats, full harnesses and the absolute minimum of trim. A key interior change was adoption of a 10,000rpm tachometer, with the red-line marked at 8200, and a built-in fire extinguisher.

With the standard homologated car having a 2.7 litre capacity, it was possible to go up to three-litres via a bore increase and stay



Herbert Müller
and Gijs van
Lennep claimed a
stunning outright
victory on the
Targa Florio. 1973
turned out to be
the last year this
classic event
was held in its
traditional format.



Claude Haldi and Bernard Cheneviere had an excellent run at the Nürburgring with their 908/03, finishing the 1000km event in fourth overall. After the Joest 908/03 had an accident in practice, other than this car and a 910 entered by Bernd Becker, the Porsches were all 911-based models.



The Müller/Van Lennep pair did well in a works threelitre RSR at the Nürburgring, finishing fifth (only four laps down on the winning Ferrari 312P), while a 2.8 litre car entered by the Kremer outfit took Group 4 honours (11th overall).

#### WORLD CHAMPIONSHIP

Targa Florio (13 May)					
1	H Müller/G van Lennep	Porsche Carrera RSR	6h 54m 20s/1st in Class		
2	S Munari/J-C Andruet	Lancia Stratos	7h 00m 31s		
3	L Kinnunen/C Haldi	Porsche Carrera RSR	7h 12m 43s/3rd in Class		

Nürburgring 1000km (27 May)	
1 J Ickx/B Redman	Ferrari 312F

-	J ICKA/D MEdinari	Tellalistzi	311 30111 333
2	A Merzario/C Pace	Ferrari 312P	5h 36m 54s
3	J Burton/J Bridges	Chevron B23	4 laps down
4	C Haldi/B Cheneviere	Porsche 908/03	4 laps down/3rd in Class

5h 36m 53s

#### Le Mans 24-hour Race (10 June)

1	H Pescarolo/G Larrousse	Matra-Simca MS670B	355 laps	
2	A Merzario/C Pace	Ferrari 312P	349 laps	
3	J-P Jabouille/J-P Jaussaud	Matra-Simca MS670	331 laps	

#### Zeltweg 1000km (24 June)

1	H Pescarolo/G Larrousse	Matra-Simca MS670B	4h 48m 58s
2	J-P Beltoise/F Cevert	Matra-Simca MS670B	4h 49m 44s
3	J Ickx/B Redman	Ferrari 312P	1 lap down

#### Watkins Glen (21 July)

1	H Pescarolo/G Larrousse	Matra-Simca MS670B	199 laps	
2	J Ickx/B Redman	Ferrari 312P	197 laps	
3	A Merzario/C Pace	Ferrari 312P	196 laps	



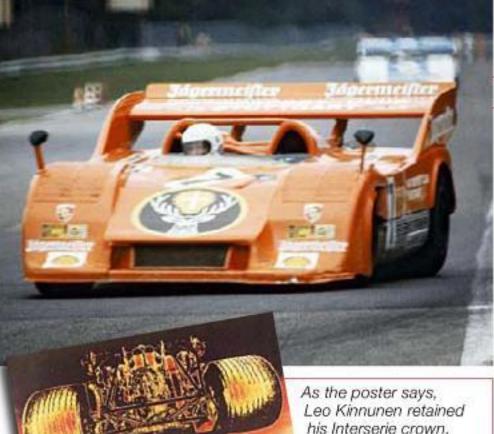
Willi Kauhsen had a good start to the Interserie season, winning the first two races. This picture shows Kauhsen at the Nürburgring on the day he won the ADAC 300km event.

Below, left: Ernst Kraus was one of the few Interserie runners to use a normally-aspirated 917/10, as most of his fellow competitors opted for turbo power. He still finished the season in fourth, however.

Below: Georg Loos in a turbocharged 917/10 at the Nürburgring.







Vic Elford on his way to victory at Hockenheim.

is the poster says, leo Kinnunen retained his Interserie crown. It also shows how all the top positions were dominated by Porsche drivers at the end of the season.

Georg Loos moved over from McLarens to a new turbocharged 917/10 for 1973, and Willi Kauhsen had his mount updated. Ernst Kraus had a normally-aspirated 917/10, and Reinhold Joest was

always going to be a threat in his 908/03. Kauhsen won this first meeting, but there was still a long way to go, and Kinnunen looked anything but ready to give up his title.

At round two at Imola, the finishing order was Kauhsen, Kinnunen, Loos in the turbocharged 917/10s, Kraus fourth, and Joest fifth in his old 908. Follmer had trouble again, and wasn't present for the next race in Silverstone, where the podium members were the same, only with first and second places reversed.

Porsches filled the top six spots at the Norisring, with Kinnunen scoring his second victory of the year. Vic Elford put in an appearance at Hockenheim, though, and walked off with the silverware that day, but Georg Loos was second to keep him in contention for the title, as he'd been finishing well all season.

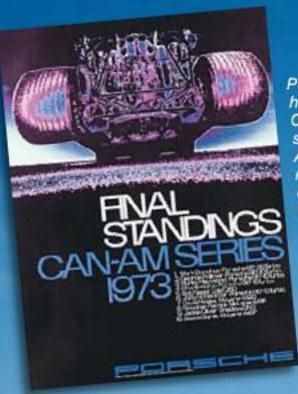


The 1972 Can-Am works cars were sold off to Bobby Rinzler in time for the 1973 season. Car number 16 (seen here) was handled by George Follmer, and its sister (number 23) was piloted by Charlie Kemp. The latter won at Mosport, while Follmer took the flag at Road Atlanta.

At Misano, the engine let go in the Loos car, and, with Kinnunen first and Kauhsen fourth, that was the end of the Gelo Racing Team's hopes. Kinnunen then drove a superb race in the final round to retain his title. Kauhsen finished the season in second place, thanks to his two wins in major events, while Georg Loos was third, closely followed by Ernst Kraus.

## Can-Am update

Not satisfied with a victory in most of the races in 1972, for the 1973 season, the Porsche factory once again revised the Can-Am machine for the Penske team in a bid to try and win every round. This new car was known as the 917/30, powered by a 5.4 litre



Porsche finished 1973
having dominated
Can-Am racing on both
sides of the Atlantic.
A large question mark
remained over the
company's future
involvement in this
field of motorsport for
1974, however ...

Main pic and opposite page: The International Race of Champions, or IROC, was an ambitious event that involved no fewer than 15 identical three-litre Porsches. They were, in fact, the first of a new breed of RS/RSR models. Anyway, they left the factory with ducktail spoilers, but were fitted with larger rear wings in time for the initial heats in late October. Mark Donohue won the final at Daytona in the New Year.





smoothly down the sides, and a longer tail that now filled the area underneath the huge wing structure. Finished in a deep blue hue to suit Sunoco, Penske's main sponsor for 1973, and with subtle chassis refinements applied, the new car was ready to roll.

Bobby Rinzler now had the two old Penske cars, with George Follmer and Charlie Kemp at the controls. In fact, these were the vehicles to be in at the start of the season. Kemp won the first round at Mosport Park, while Hans Wiedmer was second in an ex-Polak 917/10. Donohue had a coming together with another car, dropping him down to seventh. At the second round at Road Atlanta, it was Follmer's turn to pick up the trophy, with Donohue second, slowed by a dodgy fuel filler.

From then on, everything went Donohue's way, the Penske driver winning the final six races straight. Challenges were mounted by Follmer, Jody Scheckter (in Vasek Polak's new turbocharged 917/10), David Hobbs (McLaren), Jackie Oliver

(Shadow), and Hurley Haywood (another Porsche man, with the Brumos équipe), but it was a hopeless cause. In the end, Donohue scored 139 points to Follmer's 62; Haywood and Kemp finished in the mid-40s with Bob Nagel (who campaigned the ex-Jackie Stewart Lola), and Scheckter got 39. The Penske team was untouchable.

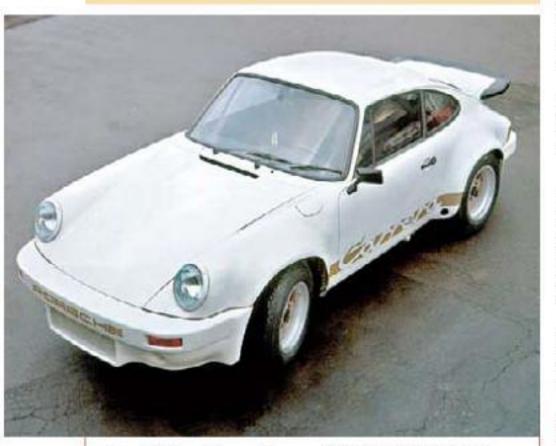
There was one other interesting statistic to come out of the 1973 season: never before had any driver managed to finish in every race, but Mark Donohue broke the curse. This was nearly as glowing a testament to the Porsche-Penske team as the number of victories it claimed during the year. Also, long before Christmas, news reports were noting that Porsche had already built a Group 5 911 racer employing the turbo technology refined in the States. The future looked bright, even if Can-Am's destiny was in question ...





Erwin Kremer.

Gunther Steckkonia.



The 1974 model year Carrera RS 3.0 in DM 64,980 Group 3 road car guise looked completely different to the Group 4 RSR. Even the rear spoiler had to be shorter to satisfy TUV people, but two were supplied, allowing customers to fit the longer version. Memories of the original 917 ...

production crankshaft was used, although exotic materials were employed for the valves and connecting rods, and there were two plugs per cylinder. With Bosch fuel-injection, a single, exhaust-driven Eberspacher/KKK turbocharger, and a 6.5:1 compression ratio, by the end of the 1974 season, the Type 911/76 unit was giving the best part of 500bhp and 435lbft of torque, prompting an uprated transmission to be fitted. Boost could be raised or lowered according to race conditions, as it was adjustable from the driving seat. Turbo-lag was still a serious problem, even though Porsche had engineered out a lot of it by the standards of the day.

Taking advantage of the Group 5 regulations, the bodywork was highly modified, with fibreglass panels giving a higher tail profile, outrageous wing bulges, and equally OTT front and rear spoilers. In addition, the fuel tank was ultimately moved to a position inside the cockpit, closer to the car's centre of gravity.

The torsion bar suspension was dropped for one incorporating adjustable titanium coil springs. These were mounted on a new alloy rear cross-structure at the back with the trailing arms fabricated in box-section aluminium. The geometry was changed to give better anti-squat, anti-dive characteristics, and to try and keep the massive tyres in contact with the road. By all accounts, the handling was quite user-friendly.

The vehicle weighed in at just 750kg (1650lb) at the start of the season, although, after an air-to-air intercooler was eventually added as part of the standard specification, plus a few other modifications, weight was up to 820kg (1805lb), over two-thirds of which was distributed over the rear wheels.

### 1974 review

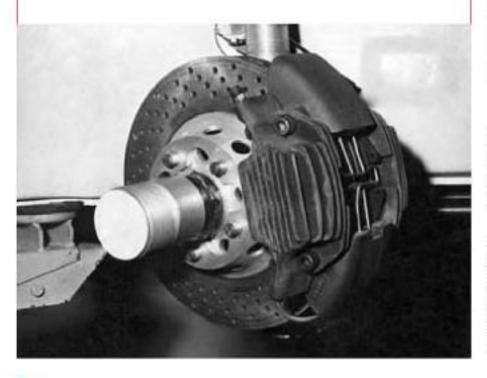
The oil shock put a real damper on the racing scene, with Daytona and Road Atlanta cancelled, as well as Buenos Aires later in the year. There were still ten World Championship rounds, though, due to the extended calendar introduced for 1974, with several new venues (including Road Atlanta) included to make up for the lack of classic races like the Targa Florio.

The Carreras were out in force at Monza, the Martinisponsored Müller/Van Lennep car leading them home in fifth place. Reinhold Joest and Mario Casoni came seventh; interesting to note was that two 908/03s were entered by Joest Racing, which would become a force to be reckoned with one day.

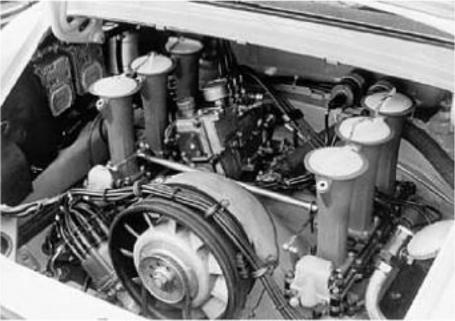
At Spa, while the Joest cars failed to turn up, and the Escuderia Tibibado 908/03 failed to finish, at least the Martini pairing came third in the turbocharged RSR. In response to the fuel shortage, the classic ADAC 1000km race was shortened to 750km for 1974. In any case, the Joest car was off song, and the turbo Porsches were outgunned by the specialist Matras and Alfas. At least a Joest 908/03 came eighth at Imola, following a train of three RSRs – the works Porsches had retired, along with the second Joest car.



The Carrera RSR 3.0 was a 'customer' racer, and not used by the works. However, it was a serious competition machine as these pictures showing the modified body, stripped-out interior (much like that of the previous RSR, with Recaro bucket seats), Type 911/75 engine, and cross-drilled brakes clearly illustrate. While the fuel tank came straight from the contemporary production car, weight was listed at just 900kg (1980lb)!







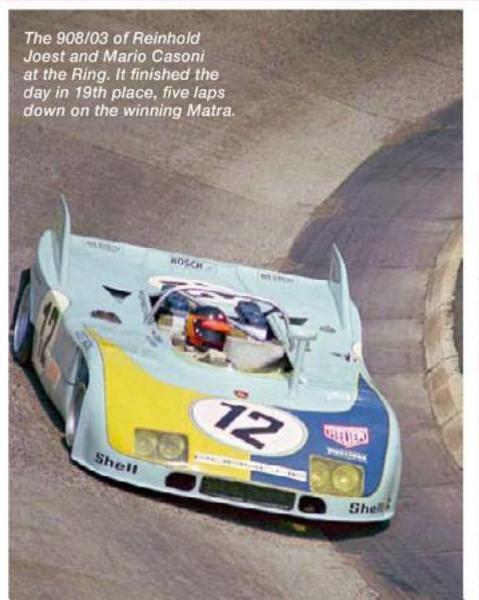
Herbert Müller and Gijs van Lennep took a fantastic second place at Le Mans, only six laps down on the winning V12 Matra-Simca, despite losing fifth gear on the Sunday morning. A 908/02 finished in 19th, but otherwise it was normally-aspirated RSRs that dominated the minor standings in the 24-hour classic after the other 908s and a 910 fell by the wayside.

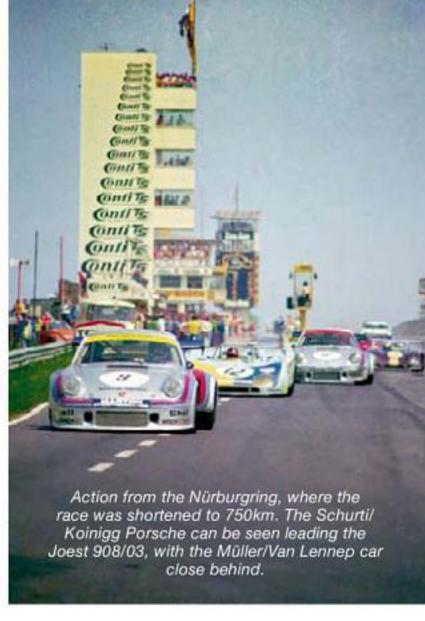
In Austria, both Joest cars failed to finish, although the Müller/ Van Lennep team was sixth, and then second again at Watkins Glen, followed home by Trans-Am Class winners, Gregg and Haywood, in the Brumos Porsche; another four 911 models finished in the top ten, while the 908/02 of Dennis Aase and Scooter Patrick was sidelined with a broken gear linkage. Incidentally, Carreras dominated the 1974 Trans-Am Championship, with Peter Gregg successfully defending his crown.

continued page 258



The Le Mans practice session in April brought the Ligier to everyone's attention, but there was no doubt the turbocharged Porsches were fast.





The Müller/Van Lennep Porsche leaving the pits at the Nürburgring. This was the best placed of the Martini works 911s, coming home in sixth, while the sister car was seventh.



#### WORLD CHAMPIONSHIP

ul P	Ricard 750km (15 August)		
1	J-P Jarier/J-P Beltoise	Matra-Simca MS670C	4h 10m 58s
2	H Pescarolo/G Larrousse	Matra-Simca MS670C	3 laps down
3	D Bell/J Ickx	Mirage GR7	5 laps down

#### BOAC 1000km (29 September)

9	1	J-P Jarier/J-P Beltoise	Matra-Simca MS670C	5h 47m 33s
3	2	H Pescarolo/G Larrousse	Matra-Simca MS670C	5h 47m 35s
- 8	3	D Bell/D Hobbs	Mirage GR7	11 laps down

#### Kyalami 6-hour Race (9 November)

1	H Pescarolo/G Larrousse	Matra-Simca MS670C	235 laps
2	J-P Jarier/J-P Beltoise	Matra-Simca MS670C	235 laps
3	D Bell/D Hobbs	Mirage GR7	229 laps



Le Mans memories. Herbert Müller (left) sharing a joke with Norbert Singer, and Gijs van Lennep looking on.

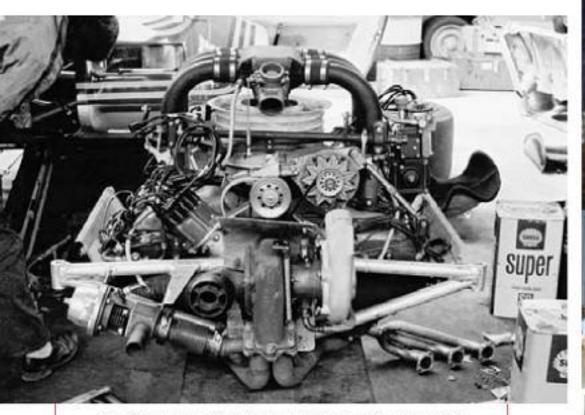
Georg Loos and John Fitzpatrick in one of the latest 'customer' RSRs at the Ring. The pair dropped out of the running early on after an accident, but Fitzpatrick would go on to have an excellent season, declared European GT Champion in the Polifac/Gelo RSR, although he also drove for Kremer that year.



Manfred Schurti (left) and Helmuth Koinigg trying to explain to Norbert Singer what went wrong with their challenge. Singer was the engineer charged with RSR development and making the turbocharged model competitive.

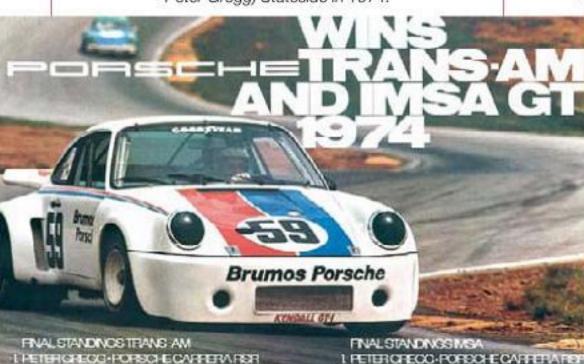


Incredible tail of the turbocharged RSR. This is the Schurti/Koinigg car at Le Mans.



The Phase III engine design, first seen in June 1974, employed a downdraught cooling fan. This power unit was used in the Müller/Van Lennep machine at Le Mans, although the other team car ran with the older Phase II lump.

An American poster celebrating the success of Porsche (and Peter Gregg) Stateside in 1974.



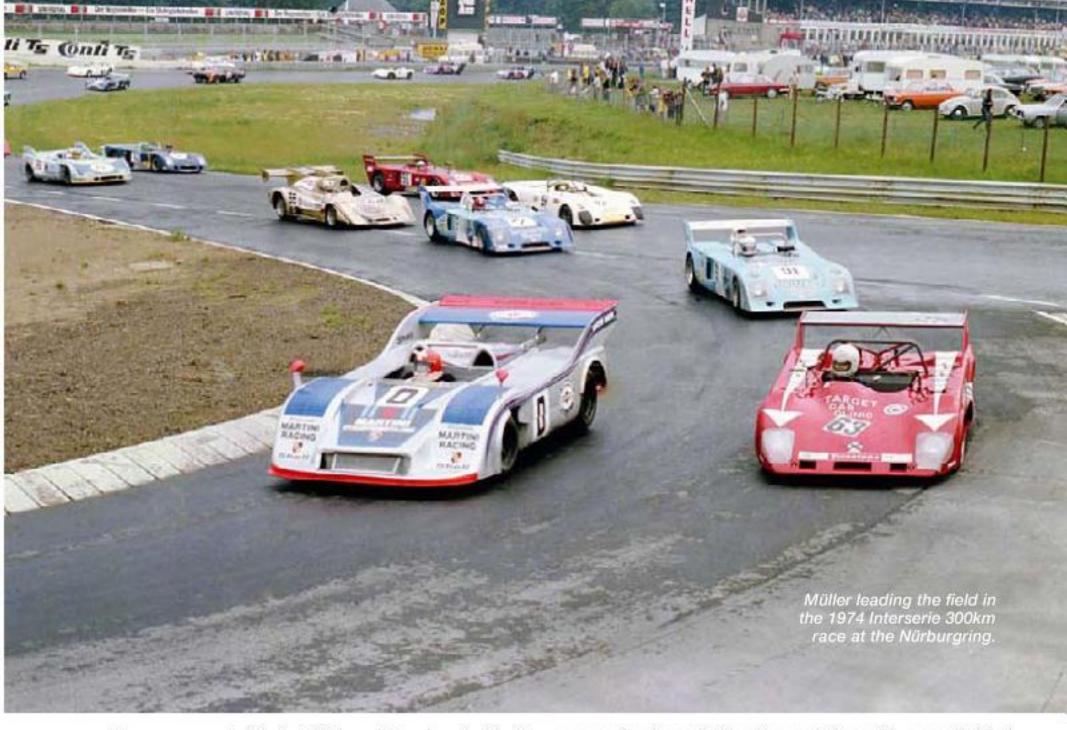


Herbert Müller and Gijs van Lennep took this car to a superb second place at Le Mans.

Paul Ricard saw another Matra win, but the two Joest 908/03s of Reinhold Joest/Mario Casoni and Paul Blancpain/Knut Lehmann came fourth and fifth, well ahead of the Carreras. The second Joest car had Edgar Barth's son, Jurgen, teaming up with Claude Haldi at Brands Hatch. It finished sixth, six laps down on the Müller/Van Lennep works Carrera; Joest himself had gearbox trouble that day and finished in 17th.

The Joest cars dropped out at Kyalami, leaving only the Gelo RSRs to uphold Porsche honour. Although they won again, with corporate politics hovering in the background, this was to be Matra's last race.

At the end of the season, Porsche finished third in the World Championship; an excellent result considering the technology packed into the winning Matra-Simca (not to mention the budget behind the équipe), while the Alfa Romeo team fielded the mighty 33TT12 – both out-and-out pure racing



machines compared with the 911-based Porsches. And in the International GT Trophy section, it was as if only one marque was competing.

The RS and RSR models were certainly hot. Peter Gregg won the IMSA title in the States again (narrowly beating fellow Porsche drivers, Hurley Haywood and Al Holbert, in the final round to retain the crown), and in the European GT Championship, the Carreras took victory at six of the eight rounds held in 1974. Indeed, Porsche drivers missed out on only five of the 24 available podium spots.

## The big bangers

Partly in a bid to level the playing field a little more, and partly in response to the first oil crisis of the troubled decade, the SCCA

proposed a change in Can-Am regulations with a so-called fuel limitation formula, which brought the works effort to a halt at Porsche. In reality, however, it had nothing left to prove, and announced its plan to leave the Can-Am arena in January.

The modified 908s from the Brezinka stable, and a private entry for Dennis Aase, were constant runners, but only Mid-Ohio attracted the star Porsche entries, with Brian Redman second in the Sunoco 917/30 (the only car left in the States after the 1973 campaign), and Hurley Haywood third in the Brumos 917/10. Haywood had another go in the fifth and final round at Elkhart Lake (four of the nine scheduled races were cancelled), but body damage cost him ten laps. Aase finished the season in eighth, but it was Jackie Oliver who won the title for the Shadow team.

That was to be the last year of true Can-Am racing. It would

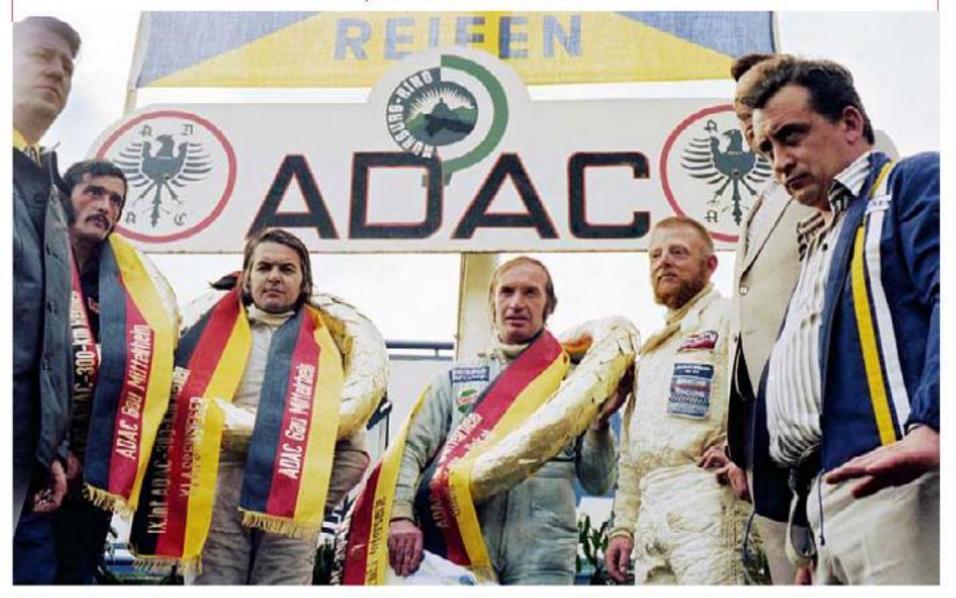
be revived, but in a completely different format. The 917/30 had just the one outing, although it hit the headlines again in August 1975 when Mark Donohue drove it to a new world speed record for a closed circuit. Equipped with a pair of intercoolers, it recorded a lap average of 221.1mph (353.8kph) at Daytona, beating the previous record by 3.3mph (5.2kph). A few days later, Donohue died in the Austrian Grand Prix – his F1 March suffered a burst tyre in the wet, and the head injuries he sustained in the crash which followed proved fatal.

It was still possible to run the 917s in the Interserie races as long as 4.5 litre engines were used rather than the larger displacements seen in 1973, although Ernst Kraus continued with a normally-aspirated unit with a larger capacity. Most of the familiar names were present, Herbert Müller joining the roll call in a Martini-sponsored 917/30.

Willi Kauhsen won the first round at Silverstone, ironically a Martini Trophy event, but Müller was at least second. He was also second at the first of the Nürburgring races, with victory falling to Helmut Kelleners in a McLaren on that occasion; Joest was third in his well-used 908/03.

Müller then won the next three races, at Kassel Airfield, the Nürburgring (hosting its second Interserie race of the season), and Casale in Italy. Hardly anyone bothered with the final round at Hockenheim, because it was all over, including Müller, but Leo Kinnunen used the Martini car to take a win and keep the order the way it was before the race – Müller was the new champion, with Kelleners finishing in second. For the record, Porsche drivers Kauhsen, Kraus, and Joest filled the next three places.

Reinhold Joest (Porsche, S500 Class winner, on the left), Helmut Kelleners (McLaren, centre), and Herbert Müller (Porsche), pictured after the 300km race.



# XXIV

he racing world found itself in a sorry state because of the FIA's forthcoming regulation changes that meant greater expenditure in a period of poor funding, following the fall-out caused by the oil crisis. There were few factories in a position to run race teams, and privateers were also struggling to make ends meet, resulting in poor grids at most events.

There was supposed to have been a World Championship of Makes based on Group 5 monsters like the Martini 911 for 1975, but the series was postponed until the following year. As a result, Porsche decided not to enter the works cars, as its engineers felt they had already gathered enough data to be competitive in the 1976 season. This interesting project also helped the Stuttgart marque refine its turbocharged road car.

The old 908/03 Spyders were rolled out for another year, but this season given the 2.1 litre turbocharged powerplants employed by the works 911s in 1974 to comply with the three-litre limit, once a 1.4 multiplication factor had been used to balance the engine outputs of cars with forced induction against normally-aspirated models.

### 1975: a racing low

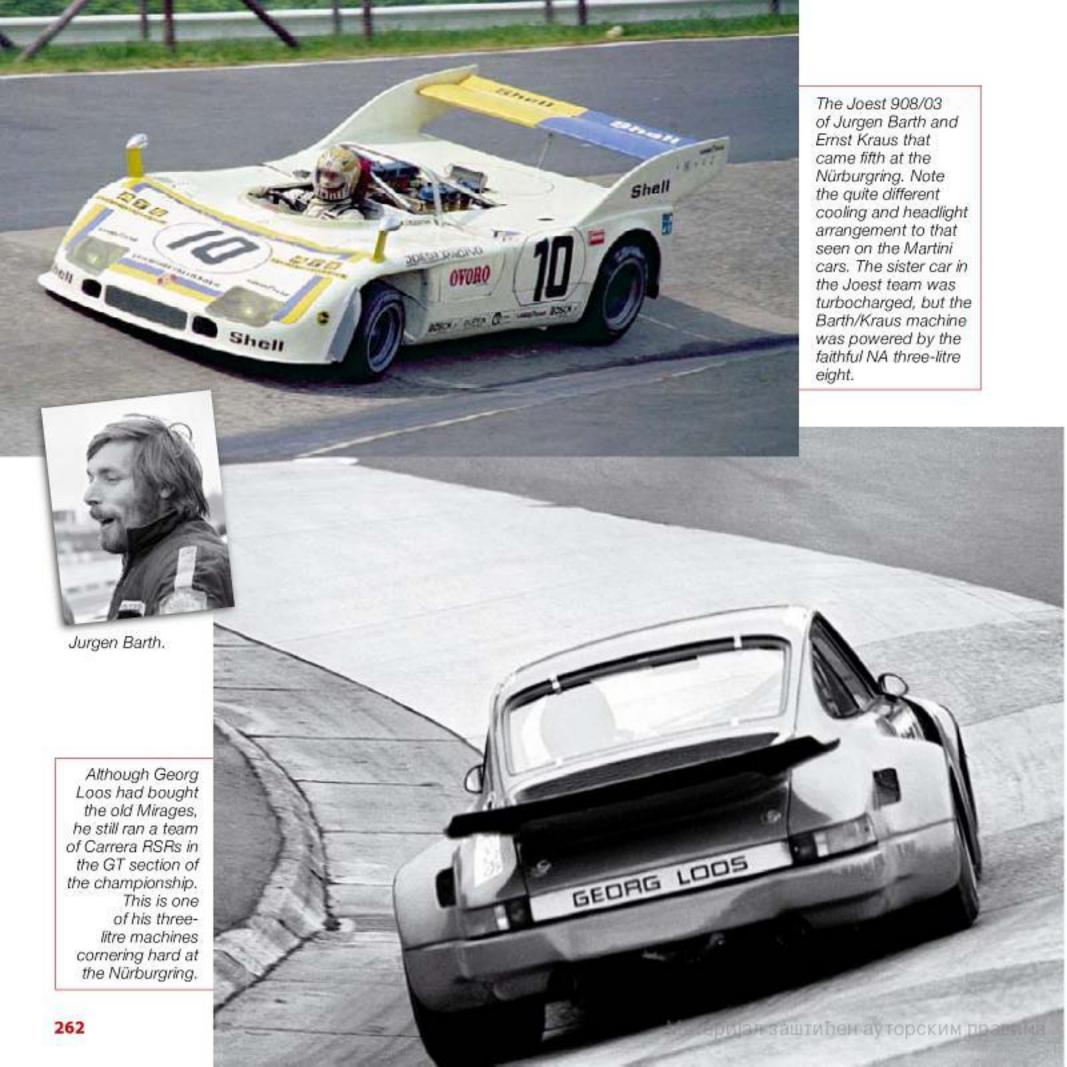
1975 really was a low point in motor racing history, at least as far as sports cars and prototypes were concerned. Many of the leading teams were either strapped for cash in the wake of the fuel crisis, or sitting on the fence waiting for a new era to begin with a fresh set of regulations in 1976. Had it not been for the French Alpine-Renault and Ligier concerns, most entries would have been ex-works machines fielded by privateers, although this lack of factory support did help establish some of the smaller équipes – Joest, Kremer, Gelo and Brumos, for instance – while Martini kept up its Porsche involvement via two 908/03s.

At Daytona, the Group 5 entry was so small, the organizers

The talented Swiss driver, Herbert Müller, in action at Spa. The Martini 908/03 Turbo at least kept alive the link between Porsche and the Martini Racing Team until a full-scale assault on the World Championship could be launched in 1976. It was also seen in Interserie events.

# 1975





decided to limit the race to GT cars. Porsche RSRs dominated the race, taking the first six places. Although the event counted toward the World Championship, it was a poor start to the season for enthusiasts wanting to see racing like that of just a few years earlier.

Things were brighter at Mugello, with Willi Kauhsen fielding the ex-works Alfas, Alpine-Renault showing off its new yellow and white creation, and a supporting cast of the Mirages (bought by Georg Loos). Ligiers, Lolas and Chevrons, plus the Martini and Joest 908 Spyders. The latter machines showed they were still capable of winning, finishing third (Herbert Müller and Gijs van Lennep in the number one Martini car), eighth (Jurgen Barth and Ernst Kraus in a Joest car), and 16th (mainly handled by Leo Kinnunen), but this was to be a Renault day. The second Joest entry, driven by Reinhold Joest himself and Mario Casoni, retired with the same turbocharger maladies that had slowed Kinnunen.

In Dijon, the Alfas came through, but the Joest Porsche was extremely fast. Müller and Van Lennep had engine trouble, dropping them to ninth. However, as in Mugello, RSRs won their Class with ease. In Monza, the result was much the same on the podium, with only third place changing, although Jurgen Barth and Ernst Kraus came through the field to claim fifth place with their 908/03. Next up was Spa, where the most interesting thing of note was the speed of the Alpina BMWs – the 908s had a bad day.

The Coppa Florio at Pergusa was a routine run for the Alfas against very little opposition. The ADAC 1000km classic produced a much better race, with a fourway fight between the Alfas, Alpines, Porsches, and Mirages, 908/03s taking third (Müller/Kinnunen) and fifth (Barth/Kraus) in the end, ahead of a gaggle of Classwinning RSRs.

One of the biggest disappointments of the year was Le Mans being dropped from the championship calendar. The test weekend was cancelled, and, with many of

#### WORLD CHAMPIONSHIP

	W OK	LD CHAMPIONSHIP	
Dayt	tona 24-hour Race (2 February)		
1	P Gregg/H Haywood	Porsche Carrera RSR	684 laps/1st in Class
2	M Keyser/B Sprowls/A Contreras	Porsche Carrera RSR	669 laps/2nd in Class
3	C Kemp/C Baird	Porsche Carrera RSR	668 laps/3rd in Class
Mug	ello 800km (23 March)		
1	J-P Jabouille/G Larrousse	Alpine-Renault A442	4h 47m 35s
2	A Merzario/J lckx	Alfa Romeo 33TT12	1 lap down
3	H Müller/G van Lennep	Porsche 908/03 Turbo	1 lap down/3rd in Class
Dijo	n 800km (6 April)		
1	A Merzario/J Laffite	Alfa Romeo 33TT12	4h 27m 29s
2	R Joest/M Casoni	Porsche 908/03 Turbo	7 laps down/2nd in Class
3	J Hine/I Grob	Chevron B31	11 laps down
Mon	za 1000km (20 April)		
1	A Merzario/J Laffite	Alfa Romeo 33TT12	4h 43m 22s
2	R Joest/M Casoni	Porsche 908/03 Turbo	3 laps down/2nd in Class
3	J-P Jabouille/G Larrousse	Alpine-Renault A442	4 laps down
Spa	1000km (4 May)		,
1	H Pescarolo/D Bell	Alfa Romeo 33TT12	3h 32m 58s
2	A Merzario/J lckx	Alfa Romeo 33TT12	1 lap down
3	A Peltier/S Müller	BMW 3.5 CSL	5 laps down
Perg	usa 1000km (18 May)		
1	A Merzario/J Mass	Alfa Romeo 33TT12	5h 05m 26s
2	,	Alfa Romeo 33TT12	1 lap down
3	R Joest/M Casoni	Porsche 908/03 Turbo2	3 laps down/3rd in Class
	ourgring 1000km (1 June)	I	
1	A Merzario/J Laffite	Alfa Romeo 33TT12	5h 41m 14s
2		Mirage GR7	5h 41m 54s
3	H Müller/L Kinnunen	Porsche 908/03 Turbo	1 lap down/3rd in Class
Zelt	weg 1000km (29 June)		
1	H Pescarolo/D Bell	Alfa Romeo 33TT12	3h 34m 51s
2	A Merzario/V Brambilla	Alfa Romeo 33TT12	3h 36m 13s

continued over ...

#### WORLD CHAMPIONSHIP

3	R Joest/M Casoni	Porsche 908/03 Turbo	1 lap down/3rd in Class
Wat	kins Glen 6-hour Race (12 July	)	
1	H Pescarolo/D Bell	Alfa Romeo 33TT12	152 laps
2	A Merzario/M Andretti	Alfa Romeo 33TT12	152 laps
3	G Larrousse/J-P Jarier	Alpine-Renault A442	149 laps



Herbert Müller in Interserie action at Hockenheim.

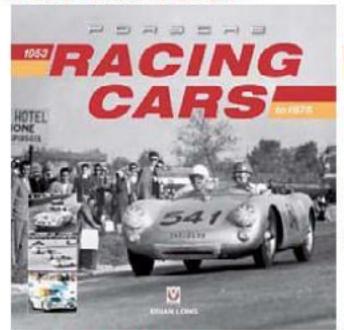
the top teams and drivers staying away, it was all too easy for the Ford-powered Gulf GR8s, which came first and third. Fourth was the normally-aspirated Joest car, leading home a string of Porsche RSRs.

The Zeltweg 1000km was more like a proper sports car race, but the result was familiar, with Alfa Romeos up front. However, the Joest cars came third and fourth, and the Müller/Kinnunen pairing ninth. The Alfas dominated again at Watkins Glen, giving the Italian maker the title. Porsche was a clear-cut second in the championship (there was some controversy over the Daytona points), while Alpine finished the year in third.

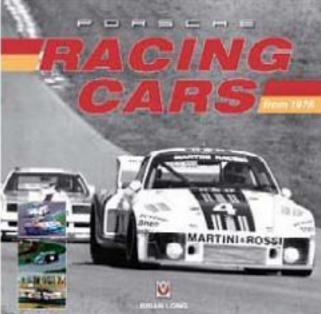
There was some close racing in the Interserie Championship, 1975 being the last year competitors were allowed to run 917/10s. Herbert Müller won the first two rounds in his Martinisponsored car, with Ernst Kraus coming second at Mainz. The next two races went to Alfa drivers in the Willi Kauhsen Racing Team, but it was Tim Schenken in the Gelo 917/10 that came back to win the final three rounds. Thanks to the strange scoring system employed for this season, Müller was declared champion (using mainly a 908/03), with Kraus second in his 917/10, and Schenken third.

Emst Kraus at the Nürburgring in September for the sixth round of the Interserie Championship.

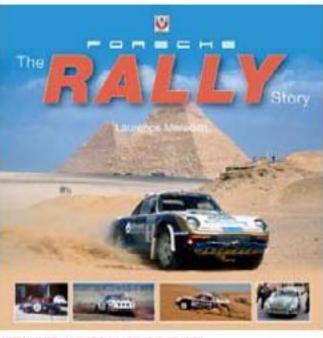
#### MORE FROM VELOCE -



ISBN 978-1-904788-44-7 £45.00\*



ISBN 978-1-904788-45-4 £45.00\*



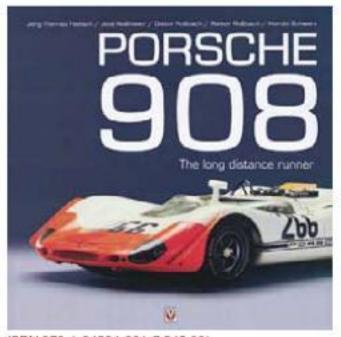
ISBN 978-1-845841-09-6 £45.00\*



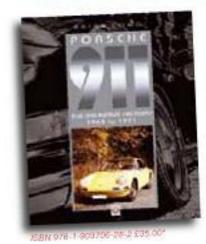
ISBN 978-1-903706-30-5 £34.99\*



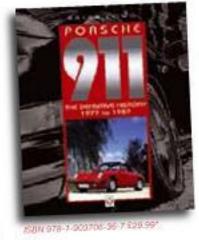
ISBN 978-1-845840-35-8 £35.00\*

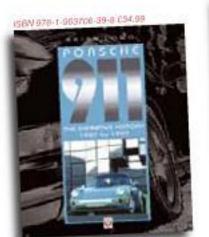


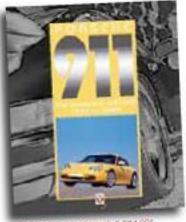
ISBN 978-1-84584-201-7 £45.00\*



On 5 CH C

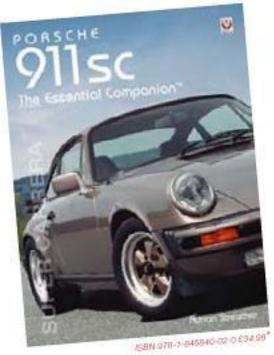


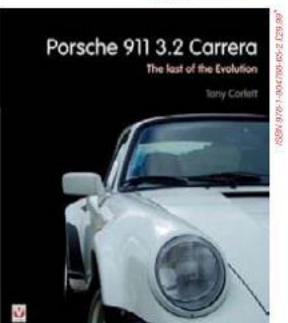


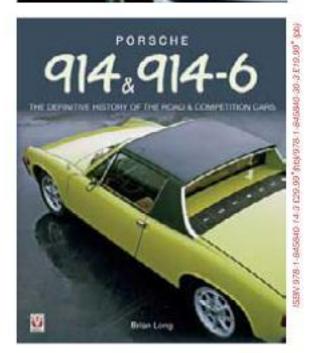


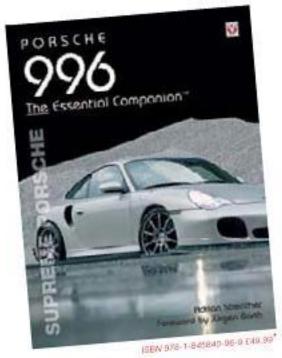
/SBN 978-1-904785-42-3 E34 DO

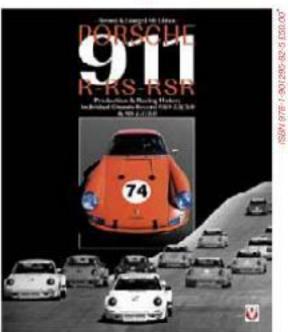
на ориал, защищенный авторским правом

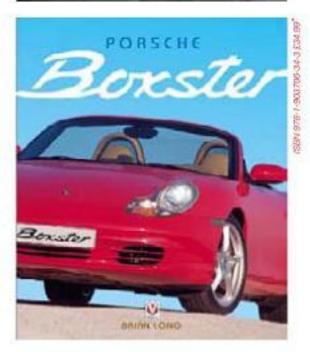


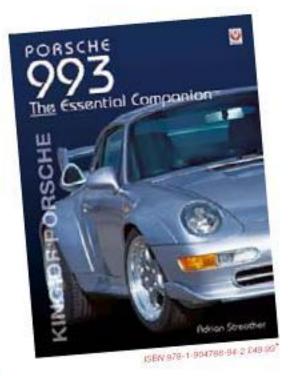




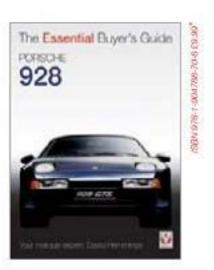










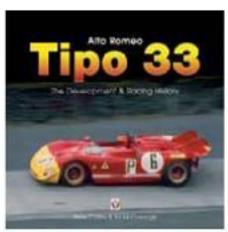


p&p extra. For details: 01305 260068/ info@veloce.co.uk/www.veloce.co.uk

\*prices subject to change



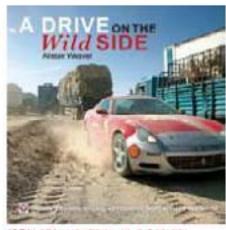
ISBN 978-1-845840-16-7 £39.99\*



ISBN 978-1-904788-71-3 £39.99\*



ISBN 978-1-845840-18-1 £55.00\*



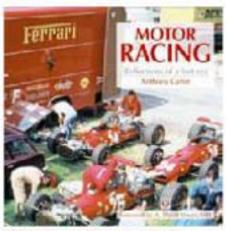
ISBN 978-1-845841-00-3 £29.99\*



ISBN 978-1-845840-82-2 £39.99\*



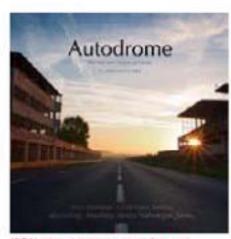
ISBN 978-1-845840-76-1 £39.99\*



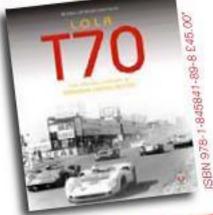
ISBN 978-1-904788-10-2 £39.99\*



ISBN 978-1-904788-15-7 £29.99\*

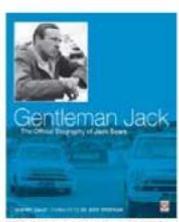


ISBN 978-1-904788-31-7 £35.99\*





ISBN 978-1-845841-50-8 £22.50\*



ISBN 978-1-845841-51-5 £24.99\*

p&p extra. For details: 01305 260068/ info@veloce.co.uk/www.veloce.co.uk

\*prices subject to change

# Index

Aase, Dennis 254, 259 Abarth 79-83, 89, 91-93, 95-96, 102-104, 106. 108-109, 120-123, 134, 142 Abarth, Carlo 9,81 Abate, Carlo Mario 95, 119, 122 Abecassis, George 25 Abels, Manfred 142 AC 132, 141 Adamowicz, Tony 231-232 Adler 19 Ahrens, Kurt 168, 188-189, 192-193, 199, 201, 204-205, 210, 212, 214-216, 218-220 Aintree 84,86 Alber, Egon 168 Alberti, Giovanni 237 Alfa Romeo 25, 44, 81, 134, 164, 172, 178, 180, 188, 192, 199, 213, 218-220, 223, 226, 230-232, 236-238, 244, 253, 256, 258, 263-264 Allison, Cliff 71-72, 74, 83 Alpina 263 Alpine (-Renault) 188, 261, 263-264 AMAG 13 Amon, Chris 158, 172-173, 204, 219, 246 Andretti, Mario 172, 204, 219-220, 237-238, 256, 264 Andruet, J-C 247 Arena, Vincenzo 154, 157 Argentine Grand Prix Z5 Arkus-Duntov, Zora 30.32,39,42 Ascari, Alberto 25, 32 Aspern 174 Aston Martin 25, 32, 42, 44, 57, 59, 64-65, 71-72, 83, 96, 208 Asturias Hall, A 32 Atencio, Alfredo 204 Attwood, Richard 171-172, 174, 192, 195, 197, 201, 203-205, 210, 212, 214-215, 218-220, 223, 230, 232 Audi & Austin (-Healey) 9.32 Austrian Alpine Rally 12 Austrian Grand Prix 260 Austro-Daimler 5-8 Austro-Fiat & Auto Union <u>8, 10, 146, 240</u> Autodelta 172, 178, 223-224 Autodrome of Mexico 70 Avandaro 61 AVUS 20, 30, 41, 51, 65, 72, 75-76, 108 Axelsson, Sten 157 Baghetti, Giancarlo 100-101, 109, <u>122,</u> 157 Bailey, Bob 189 Baird Carson 263 Baker, Fred 204-205 Ballot-Lena, Claude 227, 231-232 Balzarini, Gianni 132, 134 Bandini, Lorenzo 95, 109, 122, 134, 136, 142

157, 172 Barber, George 141 Barbier, Claude 142 Barbour, Dick 235

Barcelona 205 Barth, Edgar <u>52, 54-60, 62-65, 68, 72-73,</u> 76, 81-83, 87, 90-91, 93-96, 100-104, 108-109, 119-123, 129, 131-137, 140, 142, 158, 258 Barth, Jurgen <u>52, 258, 262-263</u> Bartling, Rudy <u>204, 220, 246</u> Basche, Dieter <u>205, 214</u> Bauer, Erwin 19 Bayard, Herve 236-238 Bechem, Karl-Gunther 25 Becker, Bernd 232, 245 Becker Estrada, O 31 Behra, Jean 40, 50, 57-58, 60-65, 72-73, 75-76, Bela Egger 6 Belgian Grand Prix 111, 117 Bell, Derek 223, 225, 229-232, 238, 246, 256-257, 263-264 Beltoise, Jean-Pierre 157, 246-247, 256-257 Bencker, Bill 141 Berckheim, Count 21 Berlin Grand Prix 51,65 Berlin-Rome Race 9, 162 Berruto, Franco 232 Beurlys, Jean 72 Beuttler, Mike 219 Bialas, Georg 57 Bianchi, Lucien 108, 134, 169, 172, 188-189 Biscaldi, Giampiero 169, 172, 200 Bitter, Erich 189 Blancpain, Paul 258 Blaton, Jean 109, 122, 142, 173 Blatzheim, H-D 219-220 BMC 147 BMW 17, 111, 137, 143, 191, 196, 204, 263 Bobby Rinzler Racing 246 Boffa, Mennato 95 Bojanich, Daimo 32 Bolzano h/c 142 Bona, G 172 Bonacorsi, Angelo 213, 219 Bondurant, Bob 141, 157 Bonetto, Felice 25 93, 95-97, 99-103, 105, 108-109, 111, 115-119, 121-123, 129, 132-134, 136, 142, 157, 205, 232 Bonomelli, E. 232 Borgward 17, 19-20, 25, 29-30, 48, 59, 68, 74 Borgward, Carl 17 Bosch 8, 236 Bott, Helmuth 72, 78, 123, 134, 148, 153, 163, 171, 200, 243 Bourillot, Claude 157 Bozic, Milivoje 73. Brabham, Jack 64, 84 Bracco, Giovanni 48. Bradley, Francis 95 Bradley, William 173-174, 180, 188-189, 204-205 Brambilla, Vittorio 263 Brands Hatch 76, 171-173, 178, 180-181, 187-188, 194-195, 201, 204, 210-211, 214,

219, 224-225, 231, 235-237, 257-258 Braun, Karl <u>83</u> Breadel, Hans <u>12</u> Brezinka, Rainer 204-205, 220, 259 Bridgehampton 12, 108, 134, 142, 206 Bridges, John 237, 247 Bristow, Chris 72 British Grand Prix 101 BRM 72,75,100,116-117,235,238 Brockhaus, Werner 145 Bronzoni, Ĝino 25 Brooks, Tony 57, 59, 64, 72 Brostrom, Richard 204-205 Brown, Bobby 23.7 Brumos 81, 91, 236, 244, 251, 254, 259, 261 Brun, Walter 232, 238 Brundage, Jan 50 Brussels Grand Prix 84, 86, 100 Brussels Show 21, 26 Buchet, Robert 83, 96, 101, 108-109, 134, 136, 142, 171, 190 Bucknum, Ronnie 158, 231 Bueb, Ivor 42, 57-58 Buenos Aires 26-27, 32, 36, 42, 44, 50, 52, 57, 60, 64, 79, 81, 83, 91, 223, 231, 236-237, 246, 253 Buff, William 49-50 Bunker, Art 57-58 Burton, John 247 Bussinello, R. 134 Buzzetta, Joe 108, 132, 134, 141, 152-153, 157-158, 164, 166, 170, 172, 178, 184, 188-190, 192, 204-205 Bytzek, Klaus 246 Cabral, M. 219-220 Cadillac 16 Camoradi 75,91-92 Capetown Grand Prix 84 Capriles, Armando 204 Carrera Panamericana 16, 20-25, 30-32 Casale 260 Casner, Lloyd 75, 95 Casoni, Mario 142, 188, 232, 237-238, 244, 246, 253, 255, 258, 263-264
Cassel, Chuck 122, 134 Castellotti, Eugenio 25, 32, 42, 50, 52, 57 Castrol 19,37 Cavaliere, G 122 Cella, Leo 169, 172 Cevert, Francois 238, 246-247 Chaparral 141, 157, 171-173 Chasseuil, Guy 227, 231-232 Cheneviere, Bernard 245-247 Chevrolet 30, 122, 188, 220, 246 Chevron 237, 247, 263 Chiron, Louis 30 Cisitalia 10, 81, 197 Citroën 8 Claes, Johnny 30, 32, 42 Clark, Jim 83, 111, 178 Classic Cars 9

Clemens, E-C 133

Cohen-Oliver, Max. 246 Collins, Peter. 25, 32, 42, 50, 57-58, 64-65, 23. Coloti, Valerio. 72 Contreras, A 263 Cook, Jim 256 Cooper 42, 50, 58, 65, 72, 74, 84, 147 Costin, Mike 173 Coventry-Climax 74, 84, 98, 100-101, 108, 111, 116 Craft Chris 205 Crawford, Ed 44, 58 Croft 220 Crosara, Marco 25 CSI 65, 196 Cunningham 25,32 Cunningham, Briggs 132,134 Cunningham-Reid, N 57 Daigh, Chuck 72 Daimler (-Benz) 6,8-9 Davies, Colin 132-134, 136, 140, 142, 154, 156-158, 169 Davies, SCH 132 Daytona 68, 108, 122, 130, 132, 134, 138, 141, 152-153, 157, 162-165, 172, 178-180, 188, 192-193, 204, 208-210, 219, 223-225, 231, 236-237, 244, 246, 250, 253, 260-261. 263-264 De Adamich, Andrea 220, 231-232, 237-238. De Beaufort, Carel <u>54-55, 58-59, 62, 64, 72, 74-75, 83, 98, 101, 108, 111, 114, 116-117</u> De Cortanze, A. 188 De Filippis, Maria T. 74-75 De Klerk, Peter 158 De Portago, Alfonso 32,50,57 De Tomaso, Alejandro 44 De Udy, Mike 134, 142, 154 Dean, James 42 Dean, Tony 173-174, 204-206, 210, 212, 220, 235-237, 241 Dechent, H-D 172, 189, 204, 219 Degner, Bernd 142 Defaunay-Belleville 8 Delfosse, Curt 57, 83 Denzel (WD) 12 Denzel, Wolfgang 12 Depailler, Patrick 188 Dernier, Leon 72, 109, 142 Dewez, Jacques 63-64, 135-136 Dijon 244, 246, 263 DKW 8 Donahue, Mark 157, 188 193, 204, 224, 231, 237-238, 240-242, 244, 249-251, 260 Donner, Bob 95 Donnybrooke 235,241 Drolsom, George 157, 166, 172 Duckhams 159 Dumay, Pierre 142 Dundrod 21,42

Dunlop 156

Dusio, Piero 9-11		Hawkins, Paul 142, 157, 163, 167, 169,	Joest 236, 244-245, 253-255, 258, 261-264
Dutch Grand Prix. 75, 101, 111-112 Duval, Jacques. 157	Gaisberg h/c 64, 137, 143, 146, 190-191 Gale, Guy <u>25</u>	172, 188-189 Hawthorn, Mike <u>25, 32, 42, 50,</u> 57-58, 64, <u>73</u>	Joest, Reinhold 189, <u>220</u> , 224, <u>231-232</u> , <u>236-238</u> , 244, 246, <u>248</u> , 253, 255, <u>258</u> ,
Ecurie Belge 36	Galll, Nanni 188, 231-232, 237 Gamble, Fred 75	Haywood, Hurley 236, 243-244, 246, 251, 254, 256, 259, 263	260, 263-264 Johansson, Bo 157
Ecurie Ecosse 44	Ganley, Howden 238, 246, 263 Gardner, Frank 157, 204	Heftler, Roger 141	Johnson, Robert 141
Ecurie Evergreen 210 Edmonton 235,241	Gardner, Frank 157, 204 Gardner, Goldie 16	Heimrath, Ludwig 95, 109, 256 Heinkel 125, 127-130	Johnston, Sherwood 25.32.42 Jordan, Dave 141
Elford, Vic 163, 169, 172-173, 178-180,	Gauthier, Hubert 30	Heins, Christian 64-65	Juhan, Jaroslav 20, 23, 25-27, 30-32, 36, 39,
183-185, 188-193, 195, 197, 199, 201, 204-205, 210, 212-214, 216, 218-220,	Gelo Racing Team 248, 257-258, 261, 264 Gendebien, Olivier 36, 39, 42, 50, 57, 64, 72.	Heinz, Dave 246 Helfrich, Theo 25	42,52,57,64 JW Automotive 164,178,180-181,184,
223-224, 228, 230-232, 237, 248	80-84, 88, 95, 109	Heppenstall, R 189	189, 193, 197, 203, 205, 208-209, 213,
Elkhart Lake 206, 235, 241, 259 Elva 136-137, 142-143, 145	Geneva Show 13, 26, 127, 196 German Grand Prix 17, 29-30, 49, 56, 58-59,	Herrarte Ariano, J. <u>24-25</u> Herrmann, Hans. <u>17-20, 23, 25, 28-32, 44-46</u> .	218.223-225
EMW (AWE) 17, 20, 29, 40-41, 52	65, 72, 75, 84, 86, 116-117, 196	48, 50, 52-53, 58-59, 62-64, 68, 71-72.	Kalkuhl Frank 142
Ensley, Jack 50 Enz, Werner 23, 48	Gesipa Racing Team 214, 218, 220-221, 232-233	74-75,80-81,83-84,87,90-91,93-96, 98,100-101,103,107-109,142,	Kassel 260 Kathrein, Hermann 12
Enz, Willi 23	Gethin, Peter 235	152-155, 157-158, 160, 163-164, 166,	Kauhsen, Willi 185, 188-189, 192, 197,
ERA 8 Erickson, Ernie 95	Ginther, Richie 32, 83-84, 95, 133, 136, 141, 157, 206	168-169, 172-174, 178-180, 184-185, 188-190, 192-193, 195, 197, 199,	202, 204-205, 214, 216, <u>220,</u> 224, <u>228,</u> 231-232, 238-239, 241-242, 247-248,
Escuderia Montjuich 246	Giunti, Ignazio 188, 219-220	201-202, 204-205, 210, 212-215, 218-220	260, 263-264
Escuderia Tibibado 253. Escudero, Pedro 32	Glemser, Dieter 153, 155, 157 Glöckler 12-14, 18-19, 21	Heuberger, Arthur 58, 71-72 Hezemans, Toine 219, 231-232, 237	Keck, Harold 141 Kelmola 220
Estefano, Nasif 136	Glöckler, Helm 13, 17, 19-20, 25, 30, 36,	Hild, Wilhelm 19, 42, 55, 57, 72, 77-78, 91	Kelleners, Helmut 188, 214, 260
European Hillclimb Ch 57,62,65,68,77 83-84,95,98, 117, 121, 123, 137, 142,	39-40, 42 Glöckler, Walter 12-13, 17, 19	Hill, Graham 81-84, 86, 91-92, 96, 101-103, 106-109, 116, 122, 129, 136,	Kemp, Charlie 248, 251, 263 Kerguen, Jean 64, 135-136
158, 160, 173, 175-176, 187, 191-192	Godia, Francisco 205	142, 238	Keyser, Michael 263
Everett, Bert 219	Goethals, Christian 59,71,74,83 Goetze 236	Hill, Phil 32, 42, 50, 58, 64, 72, 83-84, 95, 101, 109, 123, 134, 157, 173	Kinnunen, Leo 210, 212, 215, 218-220, 223, <u>232</u> , <u>238</u> , <u>240</u> , <u>246-248</u> , <u>260</u> , <u>263-264</u>
Fabri, Carlo 142	Gold, Nick 219	Hine, John 237, 263	Kitano, Moto 191
Facetti, Carlo 174, 188, 237, 256 Fairman, Jack <u>22</u>	Goliath 17 Gonzalez, Carlos 25	Hirz, Ernst 31 Hitler, Adolf 8-9	Klass, Gunther 123, 130, 132-134, 136, 140-142, 152-154, 157-158
Falk, Peter 153, 163, 200	Gonzalez, Froilan 32, 50	Hobbs, David 188-189, 205, 210, 231,	Klementaski, Louis 50
Fangio, Juan-Manuel 25, 32, 41-42, 50, 57 Faraoni, Jose 42	Gonzalez, Oscar 26, 32 Goodwood 63, 72, 76, 84, 134	251, 257 Hockenheim 36,83, 112, 125, 146, 151,	Klenk, Hans 12 Klesse, Al 108
Farina, Giuseppe 25, 32	Goodyear 212	157-160, 175-178, 181, 185, 190, 192,	Kling, Karl. 23, 25, 42
Fernandez, Juan 205, 236, 244, 246 Ferrari 25, 27, 31-32, 42, 44, 50, 52, 55-58	Gordini 30 Gosselin, Gustave 142	194, 205-206, 211, <u>220, 233, 240, 248,</u> 260, 264	Knock, Rolf <u>50</u> Knorr, Andre 133, 136
64-65, 68, <u>71-72, 74-75, 81-84, 91, 95-96,</u>	Gous, Dawie 108	Hofer, Lambert 220	Koch, Gerhard 83, 92, 95, 108-109, 122-123,
98, 100-101, 103, <u>108-109, 122-124,</u> 132-134, 136, <u>138,</u> 140-142, <u>148,</u> 152,	Graham, James <u>26</u> Grana, Maurizio 142	Hoffman, Max 12, 34 Holbert, Al 259	134, 136, 140-142, 153, 157-159, 166, 168-169, 172-173, 183, 188-189, 204, 219
163-164, 168, 171-174, 178-179, 185,	Grandio, Ricardo 42	Holbert, Bob 64, 68, 72, 83, 91, 93, 95-96,	Koinigg, Helmuth 255, 257
87, 190, 192-193, 197-198, 204, 206, 210, 212-214, 218-220, 223-224, 226,	Grant, Jerry 157 Graz 73	102, 108-109, 122 Holtville <u>220</u>	Kolb, Charlie 141 Komenda, Erwin 9.21
228, 231-232, 236-238, 244-247	Green, Willie 238	Hone, Martin 181, 188	Koster, Fritz 36, 42
Ferrari, Enzo 244 FIA 77-79, 81, 89, 91, 98, 100, 102, 120,	Greger, Sepp. 82-83, 109, 115, 123, 133, 136, 232	Honich, Hans 98 Horch 8	Kraus, Ernst 205, 220, 232-233, 238, 247-248, 260, 262-264
126, 128, <u>148.</u> 150, <u>153.</u> 157-158,	Gregg, Peter 141-142, 157, 164, 166, 212,	Howmet 178, 187, 189	Krause, Helmut 219
177-178, 192, 196, 201, 208, 234, 236, 243, 252, 261	236, 241-244, 246, 254, 256, 258-259, 263 Gregory, Masten 40, 42, 57, 65, 75, 83, 93,	Hruska, Rodolfo 81 Hugus, Ed 55-56, 58	Kremer 226, 236, 245, 257, 261 Kremer, Erwin 253
Flat 142	95-96, 142, 157, 204-205, 219	Huhn, R 172	Kretschmann, F 50
Fischhaber, Anton 141-143, 145 Fisher, Craig <u>188</u>	Griffiths, Pat 25, 32 Grob, Ian 263	Hulme, Denny 158, 210, 218-220, 241-242 Huntoon, George 32	Kroll, Horst 157 Kuhne, Bert 246
Fitch, John 25, 42, 72	Grossmann, Robert 134	Hutcherson, Richard 158	Kuhnis, Hans 122
Fitzpatrick, John 257 Flegl, Helmut 200, 238	Guerin, Richard 205 Guichet, Jean 95, 109, 122, 134, 136, 141-142,	Ibanez, J-M 42	Kunstle, Jean-Pierre 57 Kurkjian, Mike 134
Fletcher, Wendell 23	157, 172	Ickx, Jacky 172, 178, 187-189, 202, 204-205,	Kyalami 108, 205, 257-258
Fletcher Aviation 23,57 Flockhart, Ron 58	Gulf 164, 178, 208-210, 213-214, 218, 223-224, 226-228, 230, 244, 264	218-219, 231, 237-238, 246-247, 256-257, 263	La Faucille h/c 109
Flower, Raymond 32	Gunther, Siegfried 95	IGFA 185	Lafferentz, Bodo 9
Foitek, K. <u>188</u> Follmer, George 157, 189, 237, 241-242, 244,	Gunzler, Rainer 156 Gurney, Dan 71-72, 82-83, 86, 90-91, 93,	Ikuzawa, Tetsu 174, 189, 191 Imola 220, 238, 248, 253, 256	Laffite, Jacques 263 Laguna Seca 235, 241
246, 248, 251	95-96, 98, 100-103, <u>108-109,</u> 111-113,	IMSA 259	Laine, Hans 219
Ford 138-142, 148, 152-153, 157-158, 163-165, 171-172, 174, 178, 181, 184,	115-117, 157, 172	Innsbruck 75, 84, 108, 142, 174 Ireland, Innes 100-101, 108	Lambert, C 189 L'Amie, J <u>219</u>
187-190, 193, 197, 199, 201-202, 204-205,	Haas, Carl 137	Ising, Rainer 204	Lancia 25, 32, 81, 246-247
208, 264 Fornovo-Mt Cassio h/c 109	Hahne, Hubert 204 Hahnl, Fritz 95, 103-104	Italian Grand Prix 75,84	Langlois, Gerard 122 Larrousse, Gerard 192, 195, 197, 202, 204-205
Foyt, A.J. 172	Hailwood, Mike 205, 210-211, 246, 256	Jabouille, J-P 247, 256, 263	212, 216, 218-220, 223-224, 228,
Frank, Werner 189, 219-220 Frankfurt Show 13, 94, 243	Haldi, Claude 244-247, 258 Halford, Bruce 24	Jacobs, D. <u>220</u> Jaguar <u>12, 16, 25, 29, 32, 36, 42, 44, 49-50</u> ,	230-232, 246-247, 256-257, 263-264 Lauda, Niki 220
Frazer-Jones, Ian 50	Hall, Jim 141	57-58,95,101,122	Lautenschlager, Ernst 36, 42
Frazer-Nash 25,60 Freiburg-Schauinsland h/c 18,20,57,63,	Hamilton, Alan 174 Hamilton, Duncan 25, 32	Japanese Grand Prix 136, 174, 191, 208 Jarama 205, 220	Lawrence, John 58. Le Mans 11, 17-20, 24-26, 28, 32, 36, 39, 42.
83, 95, 98, 110, 145, 175	Hanover 220	Jarrier, J-P 256-257, 264	44, 47-48, 55, 58-60, 62-65, 72, 78, 82-83,
French Grand Prix 111, 113-114, 116-117 Frere, Paul 19-20, 25, 42, 62, 64-65, 72, 83, 156	Hanrioud, J-P <u>188</u> Hansa-Lloyd <u>17</u>	Jaussaud, J-P 247 'Jean-Marie' <u>58</u>	91, 93-96, 102, 108-109, 120, 122-123, 129, 134-136, <u>138,</u> 141-142, <u>153-154,</u>
Fuhrmann, Dr Ernst 17, 20, 46, 111, 142,	Hansgen, Walt 134, 157	Jenkinson, Denis 18,42, 124	156-158, 162, <u>166,</u> 170-172, 177-178,
232, 236, 241, 244 Fuji 174	Harris, John 181, 188	Jennings, Bruce 102, 109, 134, 142 Jeser, Josef 36, 39	181, 186, 189, 197, 201-205, 208, 210-211, 216-218, <u>220,</u> 223-225, <u>228-230, 232</u> .
•	•	<del></del>	

236-238, 244, 246-247, 249, 252, <u>254-258</u> ,	Matra 205, 210, 213, <u>220,</u> 223, <u>236-238,</u>	169, 171-173, 178-180, 184-186, <u>188-190</u>	Porsche, Butzi 26, 78, 84, 91, 122, 127, 153
263	244, 246-247, 253-258	Nelson, Brian 219	Porsche, Dorothea &
Lehmann, Knut 258	Mattli, Peter 232, 236-238	Nethercutt, Jack 83	Porsche, Ferdinand 6-9, 11, 15, 71
Leinenweber, F 95	Maublanc, Plerre 205	Neubauer, Alfred 6-7, 146	Porsche, Ferry 8-11, 15-17, 19, 26, 39, 65,
Lenzerheide h/c 57-58	May, Michael 48, 101, 111, 113, 235	Neuhaus, Jurgen 158, 188, 205, 214, 220,	74, 77-78, 101, 111, 117, 122, 126, 146,
Les Rangiers h/c 98 Leslie, Ed 204	McAfee, Jack 44-45, 50, 52-53, 72 McClure, Bob 246	232-233, 235, 238 New York Show, 224	153, 178, 193, 195 Porsche, Gerd 26
Leston, Les 180	McLaren 205-206, 218, 220, 235, 240-242,	Nichols, Frank 136	Porsche, Peter 26
Leuze, Helmut 159	248.251,260	Nicodemi, Antonio 142, 188, 205, 219	Porsche, Wolfgang 26
Lewis-Evans, S 64	McLaren, Bruce 141-142, 158, 171-173	Nicolosi, Alfio 213, 219	Porsche Design 78
Liddell, E 188	McMillen, Ernest 32	Nissan 174, 191	Porsche GB 154
Liebl, Sepp 50, 54	McQueen, Steve 210, 219-220	Noblet, Pierre 95, 109, 122	Porsche Salzburg 201, 204-205, 210, 212,
Liége-Rome-Liége Rally 12	Mefco Racing 159	Nocker, Peter 50, 141-142, 157	214-216, 218, 220, 223
Ligier 255, 261, 263	Mehl, Leo 212	Norisring 143, 190, 220, 230, 248	Porsche+Audi 206, 213, 218, 235-237, 241
Ligier, Guy 134, 136	Menditeguy, Carlos 50, 57	NSU &	Posey, Sam 232, 241-242
Linge, Herbert 19, 23, 28, 30-32, 37, 40, 42, 44.	Mercedes (-Benz) 6-8, 23, 42, 44, 57, 71,	Nürburgring 14, 17, 19-21, 25, 28, 30, 40,	Potier, Andre 142
52, 60, 62, 64, 71-73, 80, 82-83, 91, 93,	101, 146, 166	42,47-50,52,54,56-59,62,64-65,	Prince 136, 174
95-96, 103, 108-109, 118-120,	Merzario, Arturo 219, 237-238, 247, 256,	71-72, 74, 82-83, 91-93, 95-96, 102,	Prince Henry Trials 6
122-123, 132-137, 139-143, <u>153-154</u> ,	263-264	106, 108-109, 115-117, 119, 122-123,	Pucci, Antonia 71-72, 91, 95, 103-104,
157-158, 171, 190, 211, 216	Messina 65	125, 132-134, 136, 140, 142, 155-157,	109, 119, 122, 132, 134, 140, 142, 154,
Link, Harald 232	Mezger, Hans 72, 98, 127, 149, 240	167, 169-170, 172, 183-185, 188, 199-202,	157, 246
Lins, Rudi 173-174, 183, 188-189,	MG 16.	204, 214-215, 218, 220-221, 227-228.	Pucci, Giulio 246
191-192, 195, 197, 202, 204-205, 210,	Mid-Ohio 205, 235, 241, 259	230, 232-233, 236, 238-239, 245-247, 253, 255-257, <u>259-260,</u> 262-264	Quarter Dieter 101 204
213-214, 218-220, 223, 232	Midland Racing Part 174 Mieres, Roberto 64, 68	233, 255-257, <u>259-260,</u> 202-204	Quester, Dieter 191, 204
Linz 73 Lipe, Gordon 50	Migault, François 246, 256	Oliver, Jackie 204-205, 223-227, 231, 251, 259	Palsa Karl 17 10 111
Lloyd, Bill 32, 36	Miles, Ken 56-57, 72, 83, 141-142, 157-158	Olivier, Gustave 30, 32, 36, 39	Rabe, Karl. 17, 19, 111 Racing Team AAW, 218, 232
Locke, Jim 189	Mille Miglia 14, 18-19, 23, 25-28, 32, 36, 39,	Ollon-Villars h/c 64, 145-146, 148, 160	Racing Team Holland 140, 157
Lohner (-Porsche) 6	42, 46-48, 50, 52-53, 57	Orthuber, Karl 95	Rahal, Mike 205, 219
Lohner, Jakob 6	Mimler, Herbert 83.	OSCA 17, 20, 29-30, 36	Rallye Soleil-Cannes 37
Lola 193, 204-205, 220, 232, 237, 241.	Minter, Milt 235-236, 241-242, 246	O'Shea, Paul 36, 42	Ramelow, Hermann 19
251,263	Mirage 172, 205, 237-238, 244, 246,		Rand, Frank 102, 109
London Racing Car Show 137	256-257, 262-263	Pace, Carlos 238, 247	Redman, Brian 178, 188-189, 192-193,
Loomis, Greg 219	Misano 248	Palivka, Jerry 109	195, 197-198, 201, 203-205, 210, 212,
Loos, Georg 243, 247-248, 257, 262-263	Mitter, Gerhard 117, 133-134, 136.	Palm Beach 12	214, 218-219, 223-224, 230, 237-238,
Lopez Chavez, S 30	139-145, 152-154, 157-158, 160, 163-166,	Panhard 30	246-247, 259
Losinger, Thomas 83	168-169, 172-176, 178, 180-182, 184,	Pankl, Gerold 189, 220	Regazzoni, Clay 231, 237
Lotus 42, 74, 81, 84, 100-101, 108, 111,	187-193, 195-197, 200-201, 204	Paris Salon <u>6, 21-22, 26, 237-238</u>	Reid Tommy 219
114, 116-117, 124, 137, 143	Modena <u>84,87</u>	Parkes, Michael <u>95</u> , 109, <u>122</u> , 134, 136,	Reidl, Werner 189, 220
Lovely, Peter 44-45, 50, 83	Mola, Angelo 232	141-142, 157, 172-173	Reims 29,48,59,65,74-76, 101, 134, 136,
Lucas 98	Monaco Grand Prix 74-75, 97-98, 100, 111	Parnell, Reg. 25	141-142, 174
Lucas, Jean 58	Monneret, Pierre 96	Parsons, Chuck 204	Renault 9, 188, 261, 263-264
Luoni, Carlo 25	Monte Carlo Rally 147, 153, 243	Patrick, Scooter 141, 152-153, 158, 164-165,	Reno 16
Maddle Lance 33	Monteferrario, L. 42	172, 190, 192, 254	Reutemann, Carlos 246, 256
Macklin, Lance 32 Maestrini, Giancarlo 140, 142	Montlhery 36-37,48, 108-109, 134, 136, 138, 142, 157, 176, 191, 220	Pau Grand Prix <u>74, 84, 86</u> Paul Ricard 252, 257-258	Reutter 9,81 Revson, Peter 157, 210, 219, 237
Maggio, Luigi 25	Montseny h/c 173	Pechmann, Roman 236	Rev. Jacques 132
Maggs, Tony 141	Mont Ventoux h/c 57, 98, 109-110, 121.	Peltier, Alain 263	Ridolfi, S 188
Maglioli, Umberto 31-32, 42, 47-48, 50.	136, 142, 191	Penske 237-238,240-242,244,248-249,251	Rieder, Kurt 204, 220, 236
52-55, 57-59, 68, 71-72, 122, 131-132,	Monza 48, 52, 101, 116, 134, 138, 141,	Penske, Roger 83-84, 91, 95, 177, 237,	Rindt, Jochen 142, 155, 157-158, 164,
134, 140, 142, 157, 169, 183-184, 188,	153-154, 157, 166, 172, 178, 181-182,	241, 244	166, 172-173, 205
195, 197, 204	188, 194, 197, 201, 204, 211, 214, 219,	Pergusa 174, 190, 263	Ringgenberg, Walter 36-37
Magny Cours 220, 232	224, 226-227, 231, 236-237, 246, 253,	Peruzzi, U 25	Rinzler, Bobby 248, 251
Mahle, Eberhard 65, 68, 72, 95, 109	256, 263	Pescara 95-96	Riolo, V 122
Mainz 264	Moretti, Gianpiero 219	Pescarolo, Henri 220, 231, 238, 246-247,	Rivero, Cesar 42
Mairesse, Willy 83, 95, 109, 122, 142, 155,	Morrell, Dave 204	256-257, 263-264	Riverside 206, 235, 241, 249
157, 173	Morris <u>8,44</u>	Peter, Peter 189	Road Atlanta 220, 241, 248, 251, 253
Malmsheim 74	Moser, S 205	Peterman, Horst 205, 220	Robb, CE 25
Manzon, Robert 32, 42	Mosport Park 108, 220, 230, 235, 240-241,	Peterson, Ronnie 232, 237-238	Rochet-Schneider 4
Marathon de la Route 243	248, 251	Picard, François 12	Rodriguez, Pedro 95, 122, 134, 136, 142,
March 220, 260 March Helmut 180, 205, 210, 220, 222	Moss, Stirling 25, 32, 42, 50, 57-58, 60, 64,	Picchio Rosso 200	157, 172, 189, 198, 204, 210-212,
Marko, Helmut 189, 205, <u>219-220,</u> 223, 230-232, 237-238	22,74,76,82-84,87,90-92,96,100-101 MotorSport 18,42,60,86,98,172,192	Piech, Anton 9,81 Piech, Ferdinand 146, 148, 153, 162, 164,	214-215, <u>218-220</u> , 223-227, <u>229-232</u> Rodriguez, Ricardo 59, 61, 70, 83, 95, 109
Marshall, Mike 50	Motschenbacher, L. 204	189, 193, 232	Rolt, Tony 25, 32
Martin, Dominique 232	Mouche, Edmond 11	Piech, Louise 9	Romain, Jean 71
Martini Int Racing 213-214, 216, 218, 223-224	Mugello 141-142, 157, 174, 190, 263	Pilette, Andre 83	Roosdorp, H 25
227-228, 230, 244, 246, 252-253, 255,	Müller, Herbert 92, 133, 136-137, 142, 145,	Piper, David 134, 141-142, 171, 174, 185,	Rose, Ulrich 105
260-264	155, 157, 205, 230, 232, 244-247,	190, 198, 204-205, 214	Rosen, Merv 204, 220, 237
Martland, Digby 204	253-261, 263-264	Poirot, Christian 173, 205	Rosenberger, Adolf &
Marzotto, Giannino 25	Müller, Siegfried 263	Polak, Vasek 235-236, 241, 251	Rosenhammer, Arthur 54
Marzotto, Vittorio 32	Munari, Sandro 237, 247	Polensky, Helmut 29-30, 36, 39, 42	Rossfeld h/c 98, 142-144, 160, 173-174,
Maserati 17, 40-42, 44, 50, 56-58, 60, 72,	Munaron, Gino 57	Polifac 257	187, 191
82, 95-96, 103	Musso, Luigi 32, 50, 57-58, 64	Poll, Wirm 49	Rossi, Count Gregorio 214
Maserati, Bindo 17		Pollet, Jacques 30	Rouen 65
Maserati, Ernesto 17	Nagel Bob 251	Pomona 72	Rubirosa, Porfirio 32
Maserati, Ettore 17	Najurieta, Carlos 42	Pon, Ben 93, 95-96, 101, 108, 111, 113,	Ruby, Lloyd 141, 157, 172
Mass, Jochen 263	NART 82, 109, 153, 178, 190, 223, 244	119, <u>121-123,</u> 132-136, <u>138,</u> 140-143,	Ryan, Jack 141
Matchett, Steve 235	Nassau 108, 142 Naudor Prizo, 71	172-173, 178 Pontics 204	Ryan, Peter <u>84, 90, 95</u>
Mathé, Otto 9 Mathis 8	Naylor, Brian <u>71</u> Neerpasch, Jochen 130, 132, 134, 157,	Pontiac 204 'Pooky' 232	Sadler, Peter 220
PROCESS AS	recipascii, 30 mei 130, 132, 134, 137,	TOORY ZIE	address Feller East

Sala, Giulio 25	Sigala, Oddone 142	Terrell, Tom 205	Von Trips, Wolfgang 42, 44-45, 47-48, 50,
Salas Chaves, Jorge 42	Silverstone 174, 238, 248, 260	Thompson, Eric 25	57-59,63-65,68,72-74,76,81,83-84,95
Salinas 42	Simca 236, 238, 246-247, 254, 256-258	Thompson, Richard 172, 189	Von Wendt, Karl 185, 188-189, 192, 197, 205
Salvadorl, Roy 58, 64, 72, 83, 101	Simon, Andre 42	Thruxton 220, 232	
Salzburgring 205	Singer, Norbert 243, 257	Tidwell,Ted 141	Waldegaard, Bjorn 192, 212, 215
Sanderson, Ninian 58	Slotemaker, Robert 134, 136, 138, 140, 142	Titus, Jerry 204	Walker, Peter 25
Santa Barbara 57	Smothers, Dick 204-205	Todaro, N 134	Walker, Rob 76, 83
Sauter, Heinrich 12	Soler-Roig Alex 204-205	Toivonen, Pauli 192	Wallace, Charles 57, 64
Scaglione, Franco 81	Solitude 32,51,84,86,99-101,114-115,	Tomala, Hans 111, 127	Walter, Hans-Joachim 83, 119, 122-123
Scarfiotti, Ludovico 109, 111, 122, 134,	121, 125, 142-143	Toppetti, Cesare 142	Walter, Heini 71-72, 76, 82-83, 92, 95, 98,
136, 142, 157-158, 160, 172-173, 178,	Sonauto 227	Tornquist, Ernesto 57	108-110.121,175
180-182, 184, 187-189, 191	South African GP 84, 116	Torredemer, Francisco 246	Walter, Ludwig 106
Scarlatti, Giorgio 58, 60, 62, 64, 95	Spa 25, 75, 83, 101, 111, 132, 134, 140, 142,	Tour de France Auto 30, 83, 126, 132,	Walters, Phil 25.42
SCCA 50,72,83,96,108,254,259	157, 168, 172, 184-185, 189, 198-199,	136, 243	Wanderer 8
Schaeffer, Valentin 240	201, 204, 213, 218-219, 227-228, 231,	Tourist Trophy (TT) 21, 25, 30, 32, 40, 42,	Ward, Jon 204
Schaub, Jerry 237	236-237, 246, 253, 256, 261, 263	56, 63-64, <u>72, 82, 96,</u> 134, 140	Wascher, Jacques 57
Schechter, Roy 83	Spear, William 32,42	Treischmann, Ralph 189	Watkins Glen 101, <u>185, 187,</u> 189, 192, 202,
Scheckter, Judy 251	Spence, Mike 173	Trenkel, Richard 14	204-206, 218, 220, 230, 232, 235, 237,
Schell, Harry 32, 50, 57, 60, 62, 64, 24	Spoerry, Dieter 166, 172-174, 186,	Trento-Bondone h/c 191	241, 246-247, 254, 256, 264
Schenken, Tim 237-238. 246. 263-264	188-189, 205, 231	Trintignant, Maurice 32,50,58,72,81,83,88.	Weber, Michel 143, 221, 232-233, 237-238
Schetty, Peter 219	Sprowls, Billy 263	Triumph 8	Weidenhausen 12, 19
Schiller, Heinz. 57-58, 101, 108-109,	Spychiger, Tommy 96	Trojan 137	Weigel, H-D 231-232
121-122, 134, 136	Squadra Tartaruga <u>164, 166, 168, 178</u>	Trostmann, Bruno 17	Weinsberg 21, 26
Schlesser, Jo. 136, 141, 178, 184, <u>187-189</u>	St Jovite 235	Trummer, Andreas 232	Wendler 32,34-35,44,69,77,81
Schlüter, Walter	Standard 8		Werlich, Gunther 204
Schmid, Leopold 44, 111	Stanek, Hans 13.	Ulmen, Toni 25	Werner, Christian 🙃
Scholl, Rudi 42	Starrabba, Gaetano 👪	Underwood, Lake 132, 134, 141	Wester, Don. 122, 132, 134, 152-153
Schuler, Gerhard 236-237	Stasse, Paul 30, 32	US Grand Prix 116-117	Wetanson, Herb 142
Schulze, Helmut 58	Stausberg, Hans 83	Uschi Heckersbruch 232	Wharton, Ken 25
Schuppan, Vern 246	Steckkonig, Gunther 237, 246, 253	USRRC 157-158	Whitehead, Graham 64, 71
Schurti, Manfred 255, 257	Steinemann, Rico 166, 172-173, 186,		Whitehead, Peter 64
Schutz, Udo 142, 152-153, 157-159,	188-190, 192-193, 200, 208, 232	Vaccarella, Nino 102-103, 105, 109, 122,	Whitmore, John 157
163-164, 166, 169-170, 172-174,	Stewart, Jackie 173, 235, 251	134, 136, 142, 155, 157, 218-220,	Wicky, Andre 159, 188, 219-220, 226, 246
192-193, 195, 197, 200-201, 203-204	Steyr 6.8	231-232, 237	Wiedmer, Hans 251
Scott, Glynn 174	Stommelen, Rolf 142-143, 147, 157-158,	Valenzano, Gino 32	Wiesse, Hubert 64
Scott, Skip 134, 157	163-164, 166-169, 171-174, 176,	Valiente, Enrique 42	Wilder, Bob 25
Scott-Douglas, James 25	178-180, 183-184, 186, 188-192, 195,	Vallelunga 142, 244, 246	Williams, Chris 143
Scuderla Filipinetti 140, 154-155, <u>168,</u>	197-199, 201, 204, 231-232, 237, 256	Valvoline 206	Williams, Jonathon 216
172, 190, 205	Stoop, Dickie 134	Van Bierbeek, Marcel 133	Williamson, H 172
Scuderia Lufthansa 174	Storez, Claude 30, 49, 55	Van Lennep, David 136, 157	Wise, Hugh 205, 219-220
Scud Rep di Venezia 101	Storz, Eberhard 20	Van Lennep, Gijs 157, 159, 163-164, 205,	Woolfe, John 204
Sebring 19, 25-26, 32, 36-37, 42, 44-45, 50,	STP 235	219-220, 223-224, 230-232, 244-247,	Woolfe Racing Team 204
52-53, 57, 60-61, 64, 68, 70, Z2, 74, 80-81,	Strahle, Paul-Ernst 52, 62, 65, 68, 72-73, 80,	253-258.263	Wuesthoff, Bill 102, 109, 134
83, 90-91, 95, 102-103, 109, 122,	83, 91, 95, 102-104, 109, 119, 122, 237	Van Zalinge, Henk 50, 135-136	Wunstorf 190, 205
129-130, 132, 134, 138-139, 141,	Streeter, Don 134	Vella, Alfonso 109	Wutherich, Rolf 136
152-153, 157, 164-165, 172, 178, 180,	Stuck, Hans 18, 20	Venezuela Grand Prix 41,43,56-58	Wyer, John 164, 172, 178, 208, 212, 218, 237
188, 192-194, 204, 210, 213, 219, 223,	Stuppacher, Otto 204, 220, 232, 236	Vestey, Paul 220	104, 174, 174, 234, 244, 244, 244, 27
231, 236-237	Sunbeam 90, 108, 196	Veuillet, Auguste 11, 36, 39, 42, 96, 134	Zagato 79-81
Segura, Fernando 25, 30-32	Sunoco 251,259	Viannini, Andrea 136, 140	Zandvoort 75, 96, 98, 100, 111-113, 142,
Seidel, Wolfgang 36, 39-40, 42, 50, 58, 60,	Surfers' Paradise 174	Vila Real 205, 232	205, 220
64, 68, 72, 74, 83	Surtees, John 122, 134, 136, 142, 157,	Vogel, Ernst 63, 73	Zeltweg 63, 65, 84, 87, 157, 174, 185,
Selbach, Gunther 142	218-220	Vogele, Charles 157	189-190, 203, 205, 207-208, 218, 220.
SERA 225,249	Swaters, Jacques 42	Volkswagen 8-9, 11-12, 15, 23, 27, 49-50	230, 232, 237, 240, 246-247, 254, 256,
Sergio, Mantia 48	Swedish Grand Prix 40,49-50,55,58	Volpi, Giovanni 101, 103, 105, 111	263-264
Sessitsch, Dieter 232	Sweikert, Bob 50	Volvo &	Zick, Helmut 95
Sesslar, Don 68, 72, 95, 122, 134	Syracuse Grand Prix 83,86,100	Von Dory, Anton 57, 68, 81, 83	Zipper, Otto 152
Shadow 251,259	Syracuse Grand Frix 05,00, 100	Von Dory, Pedro 83	Zitro 232
Sharp, Hap 141	Taramazzo, Luigi 142, 172, 174	Von Frankenberg, R. 19-20, 25, 28-30.	Zocca, Augusto 32
Shelby 132, 141	Targa Florio 6-7, 42, 48, 60-62, 64, 70, 72,	36-37, 39-42, 48-51, 54, 57, 62, 64, 73	Zundapp 8-9
Shelby, Carroll 40, 42, 64, 72	80-81, 83, 90-91, 93, 95, 102-105, 107,	Von Hanstein, Huschke 14, 17-18, 23, 33,	zundapp 6-5
Shell 171, 181, 210	109, 118-120, 122-123, 126, 129-132,	37,41-43,48,52,56,58-60,65,71-73,	
Shikiba, Soukichi 136	134, 140, 142, 154-155, 157, 166-168,	91, 95, 117, 133, 146, 152, 157, 160,	
Sierre Montagna Crans h/c 137	170, 172, 180, 182-183, 188, 195-197,	163-164, 179, 192-193, 208	
Siffert, Jo 136, 156-158, 163-164, 166,	204, 212-215, <u>218-219, <del>227, 230-231, 236-237, 245-247, 253</del> 236-237, 245-247, 253</u>	Von Hohenlohe, A 22-23	
168-169, 171-173, 178-180, 183-185,		Von Neumann, John 16, 42, 50	The Borrebe company and its medical as
188-190, 192-193, 195, 198, 201,	Taruffi, Piero 25, 32, 50, 57	Von Rücker, Klaus 78, 111	The Porsche company and its products are
204-207, 210, 212-214, 218-220, 223,	Team Auto Usdau 224	Von Saucken, Harald 57	mentioned throughout this publication
225, 229-232, 235-236, 238-239	Termini, Pietro 109	Von Schroter, Sven 122-123	

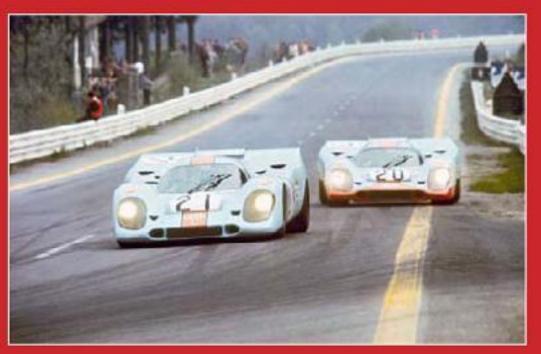
Visit Veloce on the web – www.velocebooks.com Special offers • Complete automotive book list • Newsletter • New book news • Gift vouchers

#### £45.00 UK / \$89.95 USA









Detailed year-by-year coverage of Porsche's top class racing exploits, accompanied by over 650 excellent and evocative photos.

This volume begins with the story of the giant-killing 550 Spyders of 1953 vintage, and takes the reader through all the subsequent racing models up to 1975.



www.veloce.co.uk www.velocebooks.com

