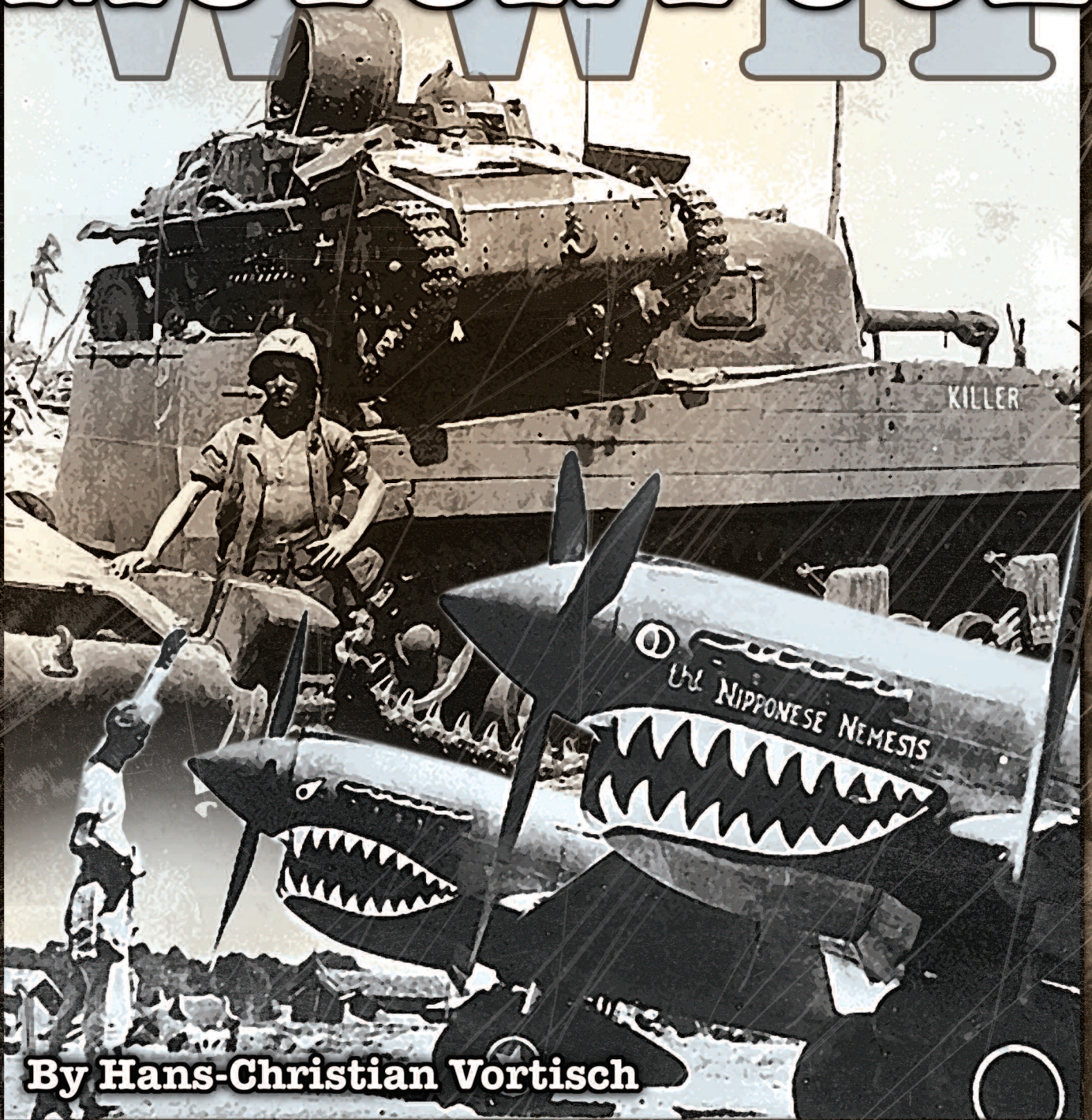


G U R P S[®]

WAWWII MOTOR POOL™



By Hans-Christian Vortisch

STEVE JACKSON GAMES

PROVE YOUR METTLE . . .

World War II raged from the deserts of North Africa to the jungles of the South Pacific, from the mountaintops of the Alps to the beaches of Normandy, across (and *under*) the high seas, and through the skies above it all. Soldiers in all of these places relied upon the machines of war: bombers, fighters, tanks, jeeps, ships, submarines, landing craft, and much more.

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. . . AGAINST HEAVY METAL!

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THE MECHANICS

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Gene Seabolt

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W W W I I I[™]

MOTOR POOL[™]

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there and back again.

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1 2 3 4 5 6 7 8 9 10

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CONTENTS

INTRODUCTION . . . 4

- About the Author 4
- About *GURPS* 4

1. VEHICLES ON CAMPAIGN 5

- VEHICLES AND CREWS 6
 - Olive Drab and Schlachtschiffgrau 6
 - Eating on the Move 6
 - Vehicle Details 7
 - Pedaling Panzergrenadiere* 7
 - Synchronized Weapons* 8

2. VEHICLE DESIGN 9

- New Chassis 10
- New Chassis Options 10
- New Armor Options 11
- Powertrain Options 13
- Dead Angles* 13
- New Weapons 14
- Guided Missiles* 17
- Weapon Modules Table 18
- Vehicular Weapons Table 19
- New Components 22
- Bilge, Brig, Bakery* 22

3. THE MOTOR POOL 23

- Vehicles Key 24
- THE ARMOURY 25
 - 2cm Flakvierling 38 25
 - 40mm Bofors Antiaircraft Gun 25
 - 75mm M-1A1 Pack Howitzer 26
 - 122mm 122-G-38 (M-30) Howitzer 26

- Hand Carts* 26
- 15cm Nebelwerfer 41 Rocket Launcher 27
- 155mm M-1 "Long Tom" Cannon 27
- THE GARAGE 28
 - Horse Carriage 28
 - 1-ton Cargo Trailer 28
 - Heavy Motorcycle 29
 - Light Sedan 29
 - VW Schwimmwagen 30
 - Steyr Raupenschlepper Ost (RSO) 30
 - Gleisketten-LKW Maultier Halftrack 31
 - 15cm Panzerwerfer 42 SdKfz 4/1 31
 - Aerosanyi Ski Sleds 32
 - Dodge 3/4-ton Truck Beep Ward LaFrance Heavy Wrecker M-1 33
 - Austro-Daimler Polizei-Panzerkampfwagen 34
 - AMD Panhard Mle 35 Armored Car 34
 - Mercedes-Benz G4 Limousine SdKfz 301 Borgward IV Remote Vehicle 35
 - SdKfz 251 Halftrack Variants 36
 - Rolls-Royce Pattern 20 Armored Car 37
 - Standard Beaverette Armored Car 37
 - Alvis-Straussler AC3D Armored Car 38
 - Weisz-Straussler 39M Csaba Armored Car 38
 - Sumida 91 Shiki "Sō-Mo" Armored Car 39
 - Marmon-Herrington Armored Car 40

- Landsverk L180 Armored Car 41
- Landsverk L210 Armored Motorcycle 42
- M-8 Armored Trailer 42
- White M-3A1 Armored Car 43
- Ford M-8 Greyhound Armored Car 43
- M-3 Halftrack Variants 44
- Ram Tank 45
- Renault FT-17 Tank 46
- Renault R-35 Tank 47
- Fortress Turrets* 47
- Panzerkampfwagen 38(t) 48
- Panzerkampfwagen II Variant: Flamingo 49
- Panzerkampfwagen IV Variant: Brumbär 49
- Panzer IV Variants: Wirbelwind and Kugelblitz 50
- Geschützwagen III/IV Variants: Hornisse and Hummel 51
- Panther Variants: Jagdpanther and Bergepanther 52
- Panzerkampfwagen Panther II 53
- Tiger Variant: Sturmtiger 54
- Equipment Stowage* 54
- PzKpfw VIII Maus 55
- Behelfsmässiger Panzerzug 42 (BP 42) 56
- BP 42 Mannschaft* 56
- Light Tank Mk VII Tetrarch 59
- Cruiser Tank Mk VIII Cromwell 60
- Churchill Variant: Churchill VII Crocodile 61
- Sherman Variants: VC Firefly and III BARV 62
- 41M Turán Tank 63
- FIAT-Ansaldo M11/39 Tank 64
- 2 Shiki "Ka-Mi" Amphibious Tank 65
- 1 Shiki "Chi-He" Medium Tank 66
- T-38 Amphibious Tank 66
- T-35 Heavy Tank 67
- Medium Tank M-3 Lee 68
- Heavy Tank M-6A1 69
- Sherman Variant: M-32B1 70
- THE HANGAR 71
 - Dewoitine D.510 71
 - Pilot Survival Kit* 71
 - Blohm & Voss Bv 138 Seedrache 72
 - Dornier Do 24 73
 - Dornier Do 335 Pfeil 74
 - Fieseler Fi 156 Storch 75
 - Focke-Achgelis Fa 223 Drachen 76
 - Baumgartl Heliofly III* 76
 - Focke-Wulf Fw 200 Condor 77
 - Hitler's Immelmann III* 77
 - Heinkel He 162 Spatz 78



Heinkel He 177 Greif	79	Yokosuka MXY7 'ka "Baka"	97	Leichtes Sturmboot 39	112
Henschel Hs 129	80	PZL P.11 "Jedenastka"	98	Tragflächen-Schnellboot (TS)	112
Mistel	81	Bereznyak-Isayev BI-1	99	Zerstörer 1934	113
Messerschmitt Me 323 Gigant	82	Beriev MBR-2 (Be-2)	99	HSK 4 KMS <i>Thor</i>	114
Armstrong Whitworth Whitley	83	Ilyushin DB-3 (Il-4)	100	U-Boot Typ XB	115
Boulton Paul Defiant	84	Tupolev TB-3	101	<i>Flower</i> -Class Corvette	116
Bristol Bombay	84	The Zveno Experiments	101	<i>Illustrious</i> -Class Aircraft Carrier	117
Bristol Blenheim	85	Boeing B-29 Superfortress	102	T-Class Submarine	118
Fairey Fulmar	86	Curtiss C-46 Commando	103	600-Class <i>Adua</i> -Series Submarine	119
<i>Air Survival Raft</i>	86	Curtiss Hawk 75	104	Daihatsu Landing Craft	120
General Aircraft Hamilcar	87	<i>The P-36 at Pearl Harbor</i>	104	Kaiten Human Torpedoes	120
<i>Airborne Supplies</i>	87	Douglas A-20 Havoc	105	Aircraft Carrier <i>Taihō</i>	121
Gloster Meteor	88	Goodyear K-Class Blimp	106	B1 Shiki Sensuikan Submarine	122
Intercettore Macchi MC.200 Saetta	89	Grumman TBF Avenger	107	<i>Vesikko</i> Submarine	123
Reggiane Re.2000 Falco	90	Northrop P-61 Black Widow	108	85-Foot Crash Rescue Boat	123
Savoia-Marchetti SM.79 Sparviero	91	Sikorsky R-4 Hoverfly	109	Liberty Ship	124
Kawasaki Ki-48 "Lily"	92	Vought OS2U-3 Kingfisher	109	<i>A Little Bit of Everything</i>	124
Kawasaki Ki-61 Hien "Tony"	93	THE DOCK	110	<i>Iowa</i> -Class Battleship	125
Mitsubishi J2M Raiden "Jack"	94	Lifeboat/Whaler	110		
Nakajima Ki-27 "Nate"	95	Pinnace	110		
Yokosuka D4Y Suisei "Judy"	96	<i>Too Little to Live,</i> <i>Too Much to Die</i>	110		
Yokosuka E14Y "Glen"	97	Fishing Boat	111		
		Junk	111		

REFERENCES . . . 126
INDEX 127



ABOUT GURPS

Steve Jackson Games is committed to full support of the *GURPS* system. Our address is SJ Games, Box 18957, Austin, TX 78760. Please include a self-addressed, stamped envelope (SASE) any time you write us! Resources include:

Pyramid (www.sjgames.com/pyramid/). Our online magazine includes new *GURPS* rules and articles. It also covers *Dungeons and Dragons*, *Traveller*, *World of Darkness*, *Call of Cthulhu*, and many more top games – and other Steve Jackson Games releases like *In Nomine*, *Illuminati*, *Car Wars*, *Toon*, *Ogre Miniatures*, and more. *Pyramid* subscribers also have access to playtest files online!

New supplements and adventures. *GURPS* continues to grow, and we'll be happy to let you know what's new. For a current catalog, send us a legal-sized or 9"×12" SASE – please use two stamps! – or visit www.warehouse23.com.

Errata. Everyone makes mistakes, including us – but we do our best to fix our errors. Up-to-date errata sheets for all *GURPS* releases, including this book, are available on our website – see below.

Gamer input. We value your comments, for new products as well as updated printings of existing titles!

Internet. Visit us on the World Wide Web at www.sjgames.com for errata, updates, Q&A, and much more. *GURPS* has its own Usenet group, too: rec.games.frp.gurps.

GURPSnet. This e-mail list hosts much of the online discussion of *GURPS*. To join, point your web browser to www.sjgames.com/mailman/listinfo/gurpsnet-l/.

The *GURPS WWII: Motor Pool* web page is www.sjgames.com/gurps/books/ww2/motorpool.

Page References

Rules and statistics in this book are specifically for the *GURPS Basic Set, Third Edition*. Any page reference that begins with a B refers to the *GURPS Basic Set* – e.g., p. B102 means p. 102 of the *GURPS Basic Set, Third Edition*. Page references that begin with CI indicate *GURPS Compendium I*. Other references are HT to *High-Tech*, VE to *Vehicles*, W to *WWII*, W:AKM to *WWII: All the King's Men*, W:D to *WWII: Dogfaces*, W:FH to *WWII: Frozen Hell*, W:HS to *WWII: Hand of Steel*, W:IC to *WWII: Iron Cross*, and W:RH to *WWII: Return to Honor*. The abbreviation for *this* book is W:MP. For a full list, see p. CI181 or www.sjgames.com/gurps/abbrevs.html.

INTRODUCTION

Some historians like to call WWII the first war fought about and with oil. That perspective ignores a great deal of nationalism, empire-building, and racism that really motivated the conflict. Still, the point stands that in the Second World War, for the first time, machines may have played just as important of a role as the flesh-and-blood soldiers who had previously all but monopolized center stage.

When we began developing the *GURPS WWII* line, it became obvious that these machines would need proper support in the game mechanics. The fragile humans who operate them remain the focus of drama and emotional tension, but placing them in a setting with these complex tools as mere backdrops would become artificial and limiting. Often, it is enough for the GM to say, “You’re trapped in the bowels of a battleship,” but when the players try to cut their way out – or hijack the turbines’ output to start up their kilowatt-greedy death ray – the GM needs some guide as to how thick or heavy or powerful or reliable various things are.

Of course, *GURPS* already possessed a guide to such things, David Pulver’s *Vehicles* sourcebook, which is alternately praised for its utility or criticized for its complexity (which isn’t really all that much worse than a lot of popular roleplaying systems). With an eye toward avoiding those criticisms, I decided to simplify the *Vehicles* system, grouping options together realistically, ignoring all content outside the WWII technology level, and stripping out a few things that simply weren’t used. The resulting Modular Vehicle Design System still raised more than a few eyebrows – and remains the most criticized feature of the *WWII* corebook – but be that as it may, when a GM needs an idea how much weight a destroyer really could float, he can spend five minutes with the system and come up with a ballpark-accurate answer.

From the beginning, a German *GURPS* fan (who has since become a steady *GURPS* author) named Hans-Christian Vortisch made himself invaluable in developing the MVDS, the actual vehicle designs derived from it, and the small-arms profiles found in this line. His drive for precision collided with my passion for simplifying, and the result was something better than either of us could have produced on our own. (Certainly, not perfect – the MVDS squeaks and groans in certain places – but so would any 23,000 words attempting to mathematically model a world’s worth of what once was cutting-edge technology . . .)

Despite its utility in working up the numbers for any vehicle that catches the GM’s eye, what the MVDS cannot capture is the often fascinating stories about how a plane or tank or ship came to be developed, how its crews came to regard it, and how it fared in the actual fighting. These often give a vehicle more character than some of the PCs at its controls. With this in mind – and to serve those readers who still recoil at the thought of approaching even a scaled-down *Vehicles* system – we decided to do a book full of the vehicles that simply couldn’t fit elsewhere.

There was no question as to who should write it.

– Gene Seabolt

About the Author

Hans-Christian Vortisch is a writer and translator based in Berlin, Germany. His interest in armed vehicles goes back some 20 years, shortly before he first made contact with vehicle design in *Car Wars*. He is obsessed with detail and trivia, a quirk that has served him well on most game projects that he has worked on so far.

In his day-to-day operations, he rides a battered bicycle – *sans* machine gun.

PANTHER VARIANTS: JAGDPANTHER AND BERGEPANTHER

The chassis of the PzKpfw V Panther (see p. W:IC81) was used as the basis for a few other armored vehicles, though these modifications were not nearly as widespread as with earlier panzer chassis. The more important include:

SdKfz 173 Jagdpanther

In 1943, design began on a tank destroyer based on Panther components and carrying the 88mm Krupp PaK 43/3 gun, a massive weapon that was one of the most effective tank killers of the war. The resulting Panzerjäger V *Jagdpanther* (hunting panther) debuted in 1944.

Extensive sloping ensured that it was well protected, even though the armor plates were only moderately thick. It combined a low silhouette, hard-hitting gun, and good mobility, resulting in a superb fighting machine that could destroy any Allied contemporary. It was never available in sufficient numbers, however, with only 384 being completed until April 1945. It was deployed in platoons of four, usually in mixed units with the Jagdpanzer IV (see p. W:IC80).

The crew included the German's usual complement of driver, hull gunner/radio operator, main gunner, loader, and commander. The Jagdpanther burns 23.5 gallons of gasoline per hour at routine usage. Fuel and ammo cost \$3,040.

Subassemblies: Immense Tank chassis with Medium slope +4; Large TD superstructure with Advanced slope [Body:T] +4; tracks +4.

Powertrain: 522-kW standard gas engine with 522-kW tracked transmission and 190-gallon light fuel tanks; 12,000-kWs batteries.

Occ: 2 CS Body, 3 CS Both **Cargo:** 22.7 Body, 8.4 Sup

Armor	F	RL	B	T	U
Body:	6/540	4/190S	4/160	4/60	4/120
Tracks:	4/55	4/55	4/55	4/55	4/55
Sup:	6/620	5/285	5/225	4/60	-

Standoff armor on both sides protects tracks 50% of time.

Weaponry

Ground LMG/MG 34 [Body:F] (600 rounds).

88mm Long Tank Gun/PaK 43/3 [Sup:F] (57 rounds).

92mm Vehicle Mortar/NvW [Sup:T] (20 rounds).

Equipment

Body: Fire extinguisher; medium radio receiver and transmitter; Zimmerit. **Sup:** Zimmerit.

Statistics

Size: 32'×11'×9' **Payload:** 2.6 tons **Lwt:** 50 tons
Volume: 267 **Maint.:** 27 **Cost:** \$55,865

HT: 10. **HPs:** 2,600 Body, 900 each Track, 450 Sup.

gSpeed: 34 **gAccel:** 3 **gDecel:** 20 **gMR:** 0.25 **gSR:** 6
 Ground Pressure Low. 2/3 Off-Road Speed.

Design Notes

Loaded weight was decreased 11% and design gSpeed increased 7% to the historical values.

SdKfz 179 Ausf A Bergepanther

The weight and mechanical unreliability of the Panther (and Tiger) made a dedicated recovery vehicle necessary; an immobilized Panther needed at least *three* 19.8-ton SdKfz 9 halftracks to recover it, and they could not work under fire.

The Panzerbergewagen V *Bergepanther* (recovery Panther) consisted of a Panther sans turret. A 44-ton winch with 155-yard cable was installed in the fighting compartment and a massive spade at the rear was used as counterweight and to dig in the vehicle. A 2.2-ton lifting crane was added to allow the removal of engines or similar work. The superstructure over the winch could stow 3.3 tons of cargo, usually a spare engine.

Some 348 were built from mid-1943, but 46 were delivered without the expensive winch and other equipment.

The cannon is above the driving compartment. Pintles to each side can mount MGs, but usually are empty. Crew includes driver, commander/gunner, and winch operator. The vehicle burns 23.5 gallons of gasoline per hour. Fuel and ammo cost \$85.

Subassemblies: Immense Tank chassis with Medium slope +4; Medium AFV superstructure [Body:T] +2; limited-rotation Mini open mount 1 [Body:T] +0; limited-rotation Small AFV open mount 2 [Body:T] +2; tracks +4.

Powertrain: 522-kW standard gas engine with 522-kW tracked transmission and 284-gallon standard fuel tanks; 12,000-kWs batteries.

Occ: 3 CS Body **Cargo:** 20 Sup

Armor	F	RL	B	T	U
Body:	6/540	4/190S	4/160	4/60	4/120
Tracks:	4/55	4/55	4/55	4/55	4/55
Sup:	3/5W	3/5W	3/5W	0/0	-
OM 1:	4/25	0/0	0/0	0/0	-
OM 2:	0/0	0/0	0/0	0/0	-

Standoff armor on both sides protects tracks 50% of time.

Weaponry

20mm Long Gr. AC/20mm Mauser KwK 38 [OM 1:F] (180).

Equipment

Body: Bulldozer blade [B]; fire extinguisher; medium radio receiver and transmitter; 44-ton winch. **Sup:** 20-VSP cargo hold. **OM 1:** Universal mount. **OM 2:** 2.2-ton crane.

Statistics

Size: 29'×11'×9' **Payload:** 4.5 tons **Lwt:** 47.3 tons
Volume: 228 **Maint.:** 36 hours **Cost:** \$31,585

HT: 10. **HP:** 2,600 Body, 900 each Track, 200 Sup, 30 OM 1, 120 OM 2.

gSpeed: 34 **gAccel:** 3 **gDecel:** 20 **gMR:** 0.25 **gSR:** 6
 Ground Pressure Low. 2/3 Off-Road Speed.

Design Notes

The spade was treated as a bulldozer blade. The winch uses 18 modules rather than 17.6; this helps cover the extra cable. The crane uses two modules rather than 2.2 as it was a light-weight boom. Crew access space was trimmed by 0.9 VSPs.

ILYUSHIN DB-3 (IL-4)

The Ilyushin *Dalni Bombardirovshchik-3* (medium bomber) was an important bomber of WWII. It was a successful twin-engined design, relatively simple but sturdy, and reliable like many Soviet aircraft of the era.

The original DB-3B entered production in 1937. This was heavily used in the Winter War against Finland (see *GURPS WWII: Frozen Hell*). During the 1940s, the Finnish air force had 11 captured DB-3Bs, but did not put them to much use.

From 1938, 24 were used by the Russian volunteer group of the Chinese air force in the Sino-Japanese War.

In 1939, it was superseded by the improved DB-3M, which had better engines and other upgrades. This in turn was replaced by the DB-3F, which was to become the standard type of the Great Patriotic War. Its appearance was noticeably different, with a slimmer nose featuring a large glazed area, new wings, and more powerful engines. In keeping with new naming conventions, it was re-designated the Il-4 in reference to its designer of 1942. No fewer than 5,256 were built until early 1945.

The armament, which had been found lacking against the Finns and Japanese, was improved, although the aircraft's defensive capability would remain mediocre for its service life. This generally confined it to night attacks. The nose turret of the older models was replaced by a swivel mount on the DB-3F.

The bomber was in service both with the long-range aviation command of the Red Army as well as naval aviation. It is credited with the first attacks on Berlin, bombing the German capital on August 8, 1941. Apart from long-range bombing raids, it was also frequently used for short-range, maximum payload attacks on tactical targets immediately behind enemy lines. The navy used it as a land-based torpedo bomber with the Baltic, Black Sea, and Northern fleets. In the reconnaissance role, it was fitted with a recon camera in the bomb bay, and late in the war, it was used to tow A-7 or G-11 gliders.

Those built from 1942 had more powerful supercharged engines and a wooden nose, wings, and fuselage deck due to a shortage of light alloys. The final production returned to metal parts again when new factories in Siberia picked up production.

The DB-3F is crewed by a pilot, navigator/bombardier (who also fires the 12.7mm UBS machine gun in the nose), radio operator (who also fires the 7.62mm ShKAS in the ventral position), and gunner (who fires the 12.7mm UBT in the turret with 28°-per-second manual traverse). The bomb bay will hold ten 220-lb. bombs, and the external hardpoints will usually carry three 550-lb. bombs.

The engines burn 82 gallons of aviation gas per hour at routine usage. A full load of fuel and ammo costs \$320.

Ilyushin DB-3F (Il-4)

Subassemblies: Heavy Fighter-Bomber chassis +4; Light Bomber wings +4; two Large Weapon pods 1-2 [Wings:F] +2; full-rotation Medium Weapon turret [Body:T] +1; three retractable wheels +1.

Powertrain: two 820-kW aerial HP supercharged gas engines with two 820-kW props [Pods 1-2], 1,018-gallon self-sealing tanks [Wings]; 4,000-kWs batteries.

Occ: 3 CS Body, 1 CS Both **Cargo:** 46.6 Body, 1.2 Wings



Armor	F	RL	B	T	U
All:	2/3	2/3	2/3	2/3	2/3
Pilot:	0/+0	0/+0	0/+30	0/+0	0/+0
Bombard:	0/+20	0/+0	0/+0	0/+0	0/+0
Radio Op:	0/+0	0/+0	0/+0	0/+0	0/+20
Gunner:	0/+30	0/+0	0/+0	0/+0	0/+0

Weaponry

Long Aircraft HMG/UBS [Body:F] (200 rounds).

Aircraft LMG/ShKAS [Body:U] (1,100 rounds).

Long Aircraft HMG/UBT [Tur:F] (500 rounds).

Equipment

Body: Autopilot; 2,200-lb. bomb bay; bombsight; 2,200-lb. hardpoint; IFF; navigation instruments; precision navigation instruments; large radio receiver and transmitter.
Wings: 550-lb. hardpoint each. **Turret:** Universal mount.

Statistics

Size: 48'×70'×14' **Payload:** 4 tons **Lwt:** 11.1 tons
Volume: 640 **Maint:** 24 hours **Cost:** \$68,720

HT: 10. **HPs:** 525 Body, 300 each Wing, 50 each Wheel, 120 each Pod 1-2, 75 Turret.

aSpeed: 251 **aAccel:** 4 **aDecel:** 20 **aMR:** 5 **aSR:** 2
Stall Speed 76. -1 aSpeed per loaded hardpoint.
gSpeed: 177 **gAccel:** 8 **gDecel:** 10 **gMR:** 0.25 **gSR:** 3
Ground Pressure Extremely High. No Off-Road Speed.

Design Notes

The historical 718-sf wing area was used for performance calculations. Design aSpeed was increased 5% to the historical figure. Weight, cost, and HPs of the wings were halved to reduce weight – this also represents some of the effects of the wooden construction.

From 1943, the Il-4 was rearmed to mount a 20mm ShVAK (20mm Long Aircraft AC) with 120 rounds in the nose and another ShVAK with 240 rounds in the turret.

Variants

The *DB-3B* of 1937 had 570-kW engines and was armed with a 7.62mm ShKAS (Aircraft LMG) with 500 rounds in the nose, a ShKAS with 1,100 rounds in the turret, and a ShKAS with 1,100 rounds in the ventral position. Some had an optional remote-controlled ShKAS with 300 rounds in the tail, fired by the pilot with an effective Acc of 0. Some 1,528 were built.

The 7.1-ton *DB-3T* of 1937 could carry a single 450mm torpedo under the belly; aSpeed 245.

The *DB-3M* of 1939 received new 694-kW engines, which were upgraded in early 1940 to 709 kW, and again in 1941 to 820 kW. That latest version also had increased fuel tankage to 756 gallon; aSpeed 277.

FLOWER-CLASS CORVETTE

In the 1930s, the Royal Navy requested a small corvette to escort coastal convoys. A design based on a modified commercial whaler was selected, and 60 were ordered before the outbreak of the war, but it didn't enter service before 1940. Eventually, 135 ships of the basic design were built in Britain until 1943, and another 79 in Canada.

All received flower names, from *Anemone* to *Zinnia*. The type was primarily used by the Royal Navy and Royal Canadian Navy, but a few were delivered to the Free French, Greek, and Norwegian forces, as well. The U.S. Coast Guard operated 18 as the Patrol Gunboat (PG) from 1942.

The *Flower* class was extensively used for escort duties protecting Allied convoys, mainly on the Atlantic, but also in the Arctic and Indian seas. Despite being good sea vessels, they suffered from being "wet" ships, with much sea spray on the decks, and bobbed heavily on the waves, making life for the crew rather miserable. A fortnight of constant rolling and pitching on transatlantic convoy duty exhausted everyone who sailed in them.

The original design had a mercantile bridge, but it was quickly replaced in production by a more warlike open bridge with a radar system on top. This was one of the great innovations of the sea war, allowing the previously blind escorts to see at night and in fog. In contrast to the good radar, the ship had an outdated sonar system that lost contact when the ship passed over a submarine to drop depth charges. (This problem was circumvented when it received the Hedgehog antisubmarine mortar, allowing it to attack from a distance.)

The ship's primary opponent was the German U-boat, even though it was fairly vulnerable against torpedoes and mines: Having few compartments below the waterline, the corvette could sink in seconds, with few survivors, if severely holed. A total of 35 *Flowers* were lost during the war.

The ship has a crew of 85. The main armament is a 102mm ("4-inch") QF Mk XIX gun in a forward turret with 4°-per-second manual traverse. A gun tub on the aft superstructure carries a quadruple .500 Vickers Mk III machine gun mount for AA fire (12°-per-second manual traverse); Canadian and U.S. ships mount twin .50 Browning M-2WC guns (see p. W:D73). Twin .303 Lewis Mk IISS machine guns (see p. W:AKM64) are mounted on the bridge house siderails, with 60°-per-second manual traverse. For antisubmarine work, there is a depth-charge thrower on either side, and depth charge rails are installed aft. This armament was considerably upgraded over the course of the war.

The *Flower*-class corvette's engine burns 130.9 gallons of fuel oil per hour of routine usage. Fuel, ammo, and provisions cost \$74,810. The historical cost was 70,000 pounds Sterling (\$269,230).

Flower-Class Corvette

Subassemblies: Heavy Corvette chassis +8; waterproofed Small Secondary superstructure [Body:T] +4; waterproofed limited-rotation Small TD turret [Body:T] +3; full-rotation Large Weapon open mount 1 [Body:T] +2; two limited-rotation Mini open mounts 2-3 [Sup:L, R] +0.

Powertrain: 2,148-kW steam turbine with 2,148-kW water screw and 48,300-gallon standard tanks; two 25-kW marine diesel engines; 40,000-kWs batteries.

Occ: See above.

Cargo: 2,741 Body, 68 Sup

Armor	F	RL	B	T	U
<i>Body:</i>	4/100	4/50	4/50	4/30	4/50
<i>Sup:</i>	4/30	4/30	4/30	4/30	—
<i>Turret:</i>	4/20	4/20	0/0	4/20	—
<i>OM 1:</i>	0/0	0/0	0/0	0/0	—
<i>OMs 2-3:</i>	4/20	0/0	0/0	0/0	—

Weaponry

102mm Short DP Gun/QF Mk XIX [Tur:F] (350 rounds).

4×Long Gr. HMGs/Vickers Mk IIIs [OM 1:F] (2,500 each).*

4×Ground LMGs/Lewis Mk IIs [OM 2-3:F] (2,350 each).**

2×Medium DC Throwers [Body:T toward R, L].

2×600-lb. 3-round DC Rails [Body:T toward B] (50 total).

* Linked. ** Linked in pairs.

Equipment

Body: 2,500-VSP bilge; 12 bilge pumps†; nine bunks; six cabins; 1,500-VSP cargo hold; degaussing cable; 100-man environmental control†; two 3.75-ton external cradles (16' lifeboats); 12 fire extinguishers†; 70 hammocks; 1,200 man-days of provisions; 2-mile passive sonar†; three workshops (Electronics, Engineer, Mechanic). **Sup:** Autopilot; IFF; navigation instruments; precise navigation instruments; 10-mile non-targeting surface radar; large radio direction finder; large radio receiver and transmitter; very large radio receiver and transmitter; searchlight. **OMs 1-3:** Universal mount.

† Includes full access.

Statistics

Size: 205'×33'×75' **Payload:** 250 tons **Lwt.:** 1,160 tons

Volume: 14,447 **MH:** 7 man/hours **Price:** \$200,685

HT: 12. **HPs:** 120,000 **Body,** 1,120 **Sup,** 285 **Turret,** 120 **OM 1,** 30 each **OMs 2-3.**

wSpeed: 18 **wAccel:** 0.3 **wDecel:** 0.3 (0.5) **wMR:** 0.05 **wSR:** 4 **Draft** 13'. Flotation Rating 1,320 tons.

Design Notes

Weight, cost, and HPs of body and superstructure were doubled. Loaded weight had to be increased 36%.

From mid-1941, a 24-barrel Hedgehog antisubmarine mortar with 120 rounds was fitted.

From late 1941, most replaced the HMGs with a single 2-pounder Vickers Mk VIII (40mm Short Ground AC) with 720 rounds and DR 40 gunshield, and added a 20mm Oerlikon Mk IV (20mm Long Ground AC) with 1,800 rounds each to either superstructure side.

In 1943, four more Oerlikons were added aft. Also in 1943, a few added a 6-pounder ROQF Mk II (57mm Medium Tank Gun) on the superstructure to fire at submarines.

The number of depth charges carried aboard was eventually increased to 100.

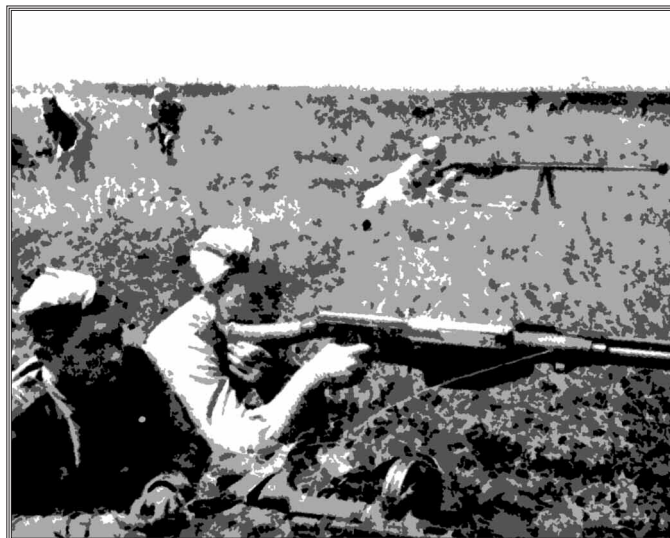
INDEX

0 Shiki Kogata Suijōki 11 Gata seaplane, 97, 122.
 3/4-ton Ambulance Truck WC54 and Command and Reconnaissance Truck WC56, 33.
 1 Shiki "Chi-He" medium tank, 66.
 1-ton cargo and water trailers, 28.
 2cm Flakvierling 38, 25.
 2 Shiki "Hōo-I" tank, 66.
 2 Shiki "Ka-Mi" amphibious tank, 65.
 3 Shiki "Ka-Chi" tank, 66.
 7.5cm PaK 40 (Sf) auf RSO/02, 30.
 8cm GrW 34 (Sf) auf Gw 35(f) mortar carrier, 47.
 8.8cm Panzerabwehrkanone 43/1 auf Gw III/IV SdKfz 164 Hornisse tank destroyer, 51.
 10.5cm leFH 18 (Sf) auf Gw 35(f) SP gun, 47.
 20 cwt G.S. trailer, 28.
 21cm NbW 42 rocket launcher, 27.
 15cm Nebelwerfer 41 rocket launcher, 27.
 15cm Panzerfeldhaubitze 18/1 auf Gw III/IV SdKfz 165 Hummel SP gun, 51.
 15cm Panzerwerfer 42 SdKfz 4/1, 31.
 15cm sIG 33 (Sf) auf PzKpfw 38(t) SdKf 138/1 Ausf M Grille, 48.
 37mm M-6 Gun Motor Carriage WC55, 33.
 40mm Bofors anti-aircraft gun, 25.
 41M Turán tank, 63.
 70' junk, 111.
 75mm M-1A1 pack howitzer, 26.
 79 Shiki Kogata Keisensha tanks, 46.
 85' Crash Rescue Boat, 123.
 122mm 122-G-38 (M-30) howitzer, 26.
 152mm 152-G-43 howitzer, 26.
 155mm M-1 "Long Tom" cannon, 27.
 600-class *Adua*-series submarine, 119.
 A-4 and A-5 parachute containers, 87.
 A-20 Havoc plane, 105.
 A-frame, 22.
 Access space, 22.
 Aerosanyi ski sleds, 32.
 Air survival kits, 71, 86.
 Airborne supplies, 87; 75mm howitzer as, 26.

Aircraft carriers, *Illustrious*, 86, 117; *Taihō*, 121.
 Aerial vehicles, 71-109.
 Alvis-Straussler AC3D armored car, 38.
 AMD Panhard Mle 35 armored car, 34.
 American vehicles, 25-29, 33, 42-44, 68-70, 87, 102-109, 110, 123-125.
 Antitank guns, 14-15, 18, 20.
 Antitank-mine paste, 12.
 Armor options, 11-12.
 Armored vehicles with rail wheels, 34, 39, 67.
 Armored cars, 34-44.
 Armored trains, 56-58.
 Armoured Car, *Marmon-Herrington*, 40; *Rolls-Royce, Type A*, 37; *Straussler, Type A*, 38.
 Armstrong Whitworth Whitley bomber, 83.
 Artillery gun tubes, 14-15, 18, 20.
 Atomic bombs, 102.
 Austro-Daimler Polizei-PzKpfw ADGZ, 34.
 Autocannons, 14, 18-20.
 Autocar M-15 MGMC, 44.
 Auxiliary diversion cruiser, 114.
 Avenger plane, 107.
 Aviator rescue gear, 71, 86.
 B-29 Superfortress, 102.
 B1 Shiki Sensuikan submarine, 122.
 Backpack helicopter, 76.
 Badger personnel carrier, 45.
 "Baka" kamikaze plane, 97.
 BARV recovery vehicle, 62.
 Baumgartl Heliofly III, 76.
 Be-2 seaplane, 99.
 Beep truck, 33.
 Beethoven-Gerät combo planes, 81.
 Behelfsmässiger Panzerzug 42, 56-58.
 Bereznyak-Isayev BI-1 rocket plane, 99.
 Bergpanther recovery vehicle, 52.
 Beriev MBR-2 (Be-2) seaplane, 99.
 BI-1 plane, 99.
 Bicycles, 7.
 Bilges, 22.
 Bison concrete pillbox, 12.
 Black Widow plane, 108.
 Blimps, 106.

Blind spots for vehicles, 13.
 Blohm & Voss Bv 138 Seedrache plane, 72.
 Boeing B-29 Superfortress, 102.
 Bolingbroke I plane, 85.
 Borgward IV remote vehicle, 35.
 Boston I and III planes, 105.
 Boulton Paul Defiant plane, 84.
 BP 42 train, 56-58.
 Bristol Blenheim plane, 85.
 Bristol Bombay plane, 6, 84.
 British and Commonwealth vehicles, 25, 28-29, 33, 37-38, 40, 43, 45, 59-62, 64, 68, 70, 83-88, 103-105, 107, 109-111, 116-118, 124.
 Brumbär, 49.
 Bv 138 Seedrache plane, 72.
 C-46 Commando plane, 103.
 Camouflage, 6-7.
 Cargo on Liberty ships, 124.
 Cargo trailer, 28, 42.
 Carro Armato L5/21 tank, 46.
 Cars, 29.
 Centaur tanks, 45, 60.
 Chain Drive Solo Motorcycle, 29.
 Char Canon and Mitralleuse tanks, 46.
 Char Léger Renault Modèle 1935 tank, 47.
 Chassis options, 10-11.
 "Chi-He" medium tank, 66.
 Churchill VII Crocodile, 61.
 Colors of vehicles, 6-7.
 Components, 22.
 Concrete armor, 11-12.
 Crews, 6, 22; *armored trains*, 56; *see also individual vehicles*.
 Crocodile tank, 61.
 Cromwell tanks, 60.
 Cruiser Tank, *General Grant*, 68; *Mk VIII Cromwell*, 60; *Ram I*, 45.
 Curtiss C-46 Commando plane, 103.
 Curtiss Hawk 75 plane, 104.
 Daihatsu landing craft, 120.
 Dead angles, 13.
 Deausting cable, 22.
 Depth charges, 16, 19, 21.
 Design system additions, 9-22.
 Dewoitine D.510 plane, 71.
 Dinghy Type H, 86.
 Dischargers, 22.
 Divine Wind, 92, 96-97, 117, 120.
 Dodge 3/4-ton Truck Beep, 33.
 Dornier Do 24 plane, 73.
 Dornier Do 335 Pfeil plane, 74.
 Douglas A-20 Havoc plane, 105.
 Dual-purpose guns, 15, 18, 20.
 "Earthworm" mine-clearing gear, 70.
 Eating on the move, 6.
 Einachs-Anhänger 900 kg trailer, 28.
 Ejection seats, 22.
 Electric motors, 13.
 Electrically fired weapons, 8, 14.
 Electrified hulls, 13.
 Engine options, 13.
 Engine starting, 7-8.
 Equipment stowage, 6, 54.
 Fa 223 Drachen helicopter, 76.
 Fairey Fulmar plane, 86.
 Familiarity, 8.
 Fatigue cost of travel, 8.
 FIAT Tipo 3000B tank, 46.
 FIAT-Ansaldo M11/39 tank, 64.
 Fieseler Fi 156 Storch plane, 75.
 Firefly tank, 62.
 Fishing boat, 111.
 Flakpanzer 38(t) SdKfz 140 Ausf L, 48, 50.
 Flakpanzer IV, (2cm) SdKfz 161/4 Wirbelwind, 50; (3.7cm) SdKfz 161/4 Ostwind, 50; (3cm) SdKfz 161/5 Kugelblitz, 50.
 Flamingo flame tank, 49.

Flower-class corvette, 116.
 Flying aircraft carrier, 81, 101.
 Focke-Achgelis Fa 223 Drachen helicopter, 76.
 Focke-Wulf Fw 200 Condor plane, 17, 77.
 Food, 6, 71, 86, 110.
 Ford M-8 Greyhound armored car, 43.
 Fortress turrets, 47.
 FT-17 tank, 46-47.
 Fw 200 Condor plane, 77.
 Galleys, 6, 22.
 Gear stowage, 6, 54.
 General Aircraft Hamilcar glider, 59, 87.
 German vehicles, 25-31, 34-36, 41, 46-58, 64, 66, 72-82, 87, 110-115, 123.
 Geschützwagen III/IV variants Hornisse and Hummel, 51.
 Gigant cargo plane, 82.
 Gleisketten-LKW Maultier halftrack carrier, 31.
 "Glen" E14Y seaplane, 97, 122.
 Gloster Meteor jet, 88.
 Goodyear K-Class Blimp, 106.
 "Goulash Gun" trailer, 28.
 Grant tank, 68.
 Greyhound armored car, 43.
 Grumman TBF Avenger plane, 107.
 Guide to vehicles, 24.
 Guided missiles, 17.
 Hamilcar glider, 59, 87.
 Hand carts, 26.
 Harley-Davidson motorcycles, *armored*, 42; WLA, 29.
 Heavy motorcycle, 29.
 Heavy Tank M-6A1, 69.
 Heinkel He 162 Spatz jet, 78.
 Heinkel He 177 Greif plane, 17, 79.
 Héja II plane, 90.
 Helicopters, 76, 109.
 Henschel Hs 129 plane, 71, 80.
 Hilfsstörkreuzer auxiliary diversion cruiser, 114.
 Hitler's vehicles, 35, 77.
 Hornisse tank destroyer, 51.
 Horse carriage, 28.
 Hoverfly I, 109.
 HSK 4 KMS *Thor*, 114.
 Human torpedo, 120.
 Hummel SP gun, 51.
 Hydrofoils, 11, 112.
 Il-4 plane, 100.
Illustrious-class aircraft carrier, 86, 117.
 Ilyushin DB-3 (Il-4) plane, 100.
 Immelmann III, Hitler's plane, 77.
 Improvised armor, 12.
 Infantry Tank Mk IV Churchill flamethrowing conversion, 61.
 Infrared targeting devices, 53.
 Intercettore Macchi MC.200 Saetta plane, 89-90.
 Iowa-class battleship, 125.
 Irish Armoured Cars Mk II, 41.
 "Jack" J2M Raiden plane, 94.
 Jagdpanther tank destroyer, 52.
 Japanese vehicles, 29, 39, 46, 65-66, 92-97, 110-111, 120-122.
 "Jedenastka" P.11 plane, 98.
 "Judy" D4Y Suisai plane, 96, 121.
 Junk fishing boat, 111.
 K-Class Blimp, 106.
 Kaiten human torpedo, 120.
 "Ka-Mi" amphibious tank, 65.
 Kamikazes, 92, 96-97, 117, 120.
 Kangaroo personnel carrier, 45.
 Kawasaki Ki-48 "Lily" plane, 92.
 Kawasaki Ki-61 Hien "Tony" plane, 93.
 Key to vehicles, 24.
 Kfz 1/20 Kübelwagen 2, schwimmfähig amphibious car, 30.



KG 200, Luftwaffe special unit, 72-73, 79, 81, 87, 126.
 Kingfisher seaplane, 109, 125.
 Kommandeurwagen Kfz 21 commander's car, 35.
 Kugelblitz AA carrier, 50.
 l'Africana submarine, 119.
 Ladungsschnellboot 41, 112.
 Landing craft, 120.
 Landsverk L180 armored car, 41.
 Landsverk L210 armored motorcycle prototype, 42.
Le Dinan fishing boat, 111.
 Lee tank, 68.
 Leichte Heeresfeldwagen 1 horsedrawn carriage, 22.
 Leichtes Sturmboot 39, 112.
 Liberty ship, 124.
 Lifeboats and rations, 110.
 Light Armoured Car Beaverette Mk I, 37.
 Light sedan, 29.
 Light Tank Mk VII Tetrarch and Mk VIII, 59, 87.
 "Lily" Ki-48 plane, 92.
 Liquid-fuel rockets, 13.
 Logs as armor, 12.
 Long Range Desert Group, 6-7, 84.
 M-16 and M-17 Multiple Gun Motor Carriages, 42, 44.
 M-20 Utility Car, 43.
 M-24 ammunition trailer, 28.
 M-3 halftrack variants, 42, 44.
 M-3 Lee tank, 68.
 M-31 Armored Recovery Vehicle, 68.
 M-32B1 recovery vehicle, 70.
 M-34 prime mover, 70.
 M-3A1 scout car, 43.
 M-3A4 hand cart, 26, 33.
 M-4 18-ton High-Speed Tractor, 68.
 M-4A1 hand cart, 26.
 M-6A1 tank, 69.
 M-8 armored trailer, 42.
 M11/39 tank, 64.
 Machine guns, 14, 18-19.
 Magirus SdKfz 3c Maultier, 31.
 Magnetic anomaly detector (MAD), 22.
 Marder III tank destroyer, 48.
 Marmon-Herrington armored car, 40.
 Masts, 11.
 Maultier halftrack, 31.
 Maus tank, 55.
 MC.200 Saetta plane, 89-90.
 Medium Tank M-3 Lee, 8, 68.
 Mercedes-Benz G4 limousine, 35.
 Messerschmitt Me 323 Gigant cargo plane, 82.
 Meteor jet, 88.
 Methanol-water feeds, 13.
 Mines, 16-17, 19, 21-22.
 Mischlastabwurfbehälter mixed-load drop container, 87.
 Missiles, 17, 19, 21.
 Mistel piggyback planes, 81.
 Mitsubishi J2M Raiden "Jack" interceptor, 94.
 mittlere Flammpanzerwagen SdKfz 251/16, 36.
 mittlere Schützenpanzerwagen (MG 151S Drilling) SdKfz 251/21 Ausf D, 36.
 Mohawk planes, 104.
 Motorcycles, 29; *armored*, 42.
 Motors, 13.
 "Mule" halftrack, 31.
 Multiple main rotor (MMR) helicopter chassis, 11.
 Munitionskraftwagen für Nebelwerfer SdKfz 4, 31.
 Munitionsträger Hummel ammunition carrier, 51.
 MVDS additions, 9-22.
 Nahverteidigungswaffe, 13, 15.

Nakajima Ki-27 "Nate" plane, 95.
 Nashorn tank destroyer, 51.
 "Nate" Ki-27 plane, 95.
 Naval mines, 16-17, 19, 21-22.
 Navigation instruments, 22.
 NBC kits, 22.
 New, *armor options*, 11-12; *chassis*, 10-11; *vehicular components*, 22.
 Northrop P-61 Black Widow night fighter, 108.
 Opel Kadett K38 car, 29.
 Opel SdKfz 3a Maultier, 31.
 Ostwind AA carrier, 59.
 P.11 "Jedenastka" plane, 98.
 P.24 planes, 98.
 P-36 plane, 104.
 P-61 Black Widow plane, 108.
 P-70 plane, 105, 108.
 Páncélgépköci 39M Csaba, 38.
 Panhard Mle 35 armored car, 34.
 Panje wagon, 28.
 Pansarbil m/41 armored car, 41.
 Panservogn M/36 armored car, 41.
 Panther II, 53.
 Panther variants Jagdpanther and Bergepanther, 52.
 Pantserwagen M.36 and M.38, 41.
 Panzerjäger 35(f), 47.
 Panzerwagen 39 tank, 48.
 Parachute containers, 87; *75mm howitzer as*, 26.
 Pattern 20 armored car, 37.
 Pearl Harbor, 97, 104-106, 109, 126.
 Pedaling panzergrenadiere, 7.
 Personal helicopter, 76.
 Personenabwurfgerät personnel dropping device, 87.
 Piggyback planes, 81, 101.
 Pillboxes, 12.
 Pilot survival kits, 71, 86.
 Pinnacle, 110.
 Planes, 71-109.
 Polikarpov I-16SPB, 101.
 Polizei-PzKpfw ADGZ armored security car, 34.
 Powertrain options, 13.
 PzKpfw (German tanks), 38(t), 47-48, 50, 63; 730(f), 46; 731(f), 47; 732(r), 66; 734(i), 64; II (*Flamm*) SdKfz 122, 49; *Panther II*, 53; *VIII Maus*, 55.
 PzKpfw IV variants, *Brummbär*, 49; *Wirbelwind and Kugelblitz*, 50.
 PZL P.11 "Jedenastka" plane, 98.
 PzSpähw 202(h) armored car, 41.
 PzSpähw 204(f) armored car, 34.
 R-35 and R-40 tanks, 47.
 Rafts, survival, 86.
 Raiden J2M plane, 94.
 Railroad, *armored trains*, 56-58; *wheels on armor*, 34, 39, 67.
 Ram tank, 45.
 Rations, 6, 71, 86, 110.
 Re.2000 Falco plane, 90.
 Recovering stuck vehicles, 8.
 Regelbau 687 fortress turret, 47.
 Reggiane Re.2000 Falco plane, 90.
 Remote-control vehicles, 35.
 Renault FT-17 and R-35 tanks, 46-47.
 Rescue boats, 123.
 Riveted armor, 12.
 Rockets as weapons, 15-16, 19, 21.
 Rockets for propulsion, 13.
 Rolls-Royce Pattern 20 armored automobile, 37.
 RSO/03 tractor, 30.
 Russian vehicles, *see Soviet vehicles*.
 Sails, 11.
 Salamander jet, 78.
 Sandbags, 12.
 Savoia-Marchetti SM.79 Sparviero plane, 91.
 Schlachtschiffgrau, 6-7.

SdAh 401 Feldküche trailer, 28.
 SdKfz 251 halftrack variants, 36.
 SdKfz 301 Borgward IV remote vehicle, 35.
 SE.3000 helicopter, 76.
 Sea mines, 16-17, 19, 21-22.
 Sedans, 29.
 Sexton I self-propelled gun, 45.
 sFH 396(r) 122mm howitzer, 26.
 Sherman variants, II *ARV III*, 70; *III BARV*, 62; *M-32B1*, 70; *VC Firefly*, 62.
 Ships, 110-125.
 Sikorsky R-4 Hoverfly, 109.
 Ski sleds, 32.
 SM.79 Sparviero plane, 91.
 Small naval craft, 110-112, 121, 123.
 Smoke dischargers, 22.
 South African Reconnaissance Vehicle Mk I, 40.
 Soviet vehicles, 26, 28-29, 32-33, 43-44, 46, 66-67, 99-101.
 Spare volume, 22.
 Squibs, 8.
 Standard Beaverette, armored car, 37.
 Starting engines, 7-8.
 Steyr Raupenschlepper Ost (RSO), 30.
 Storch light plane, 75.
 Strange vehicles, *see Weird vehicles*.
 Stridsvagn m/41SI tank, 48.
 Stuck vehicles, 8.
 Sturmboote, 112.
 Sturmpanzer IV SdKfz 166 Brummbär, 49.
 Sturmtiger, 54.
 Submarines, 115, 118-120, 122-123.
 Sumida 91 Shiki "Sō-Mo" armored car, 39.
 Superfortress, 102.
 Survival kits, 71, 86, 110.
 Synchronized weapons, 6, 14.
 T-18 obrazets 1930g, 46.
 T-1E1 "Earthworm" mine-clearing gear, 70.
 T-35 heavy tank, 67.
 T-37 and -38 amphibious tanks, 66.
 T-class submarine, 118.
 Tank guns, 14-15, 18, 20.
 Tanks, 45-55, 59-70.
 Tarpon plane, 107.
 TB-3 plane, 101.
 TBF Avenger plane, 107.

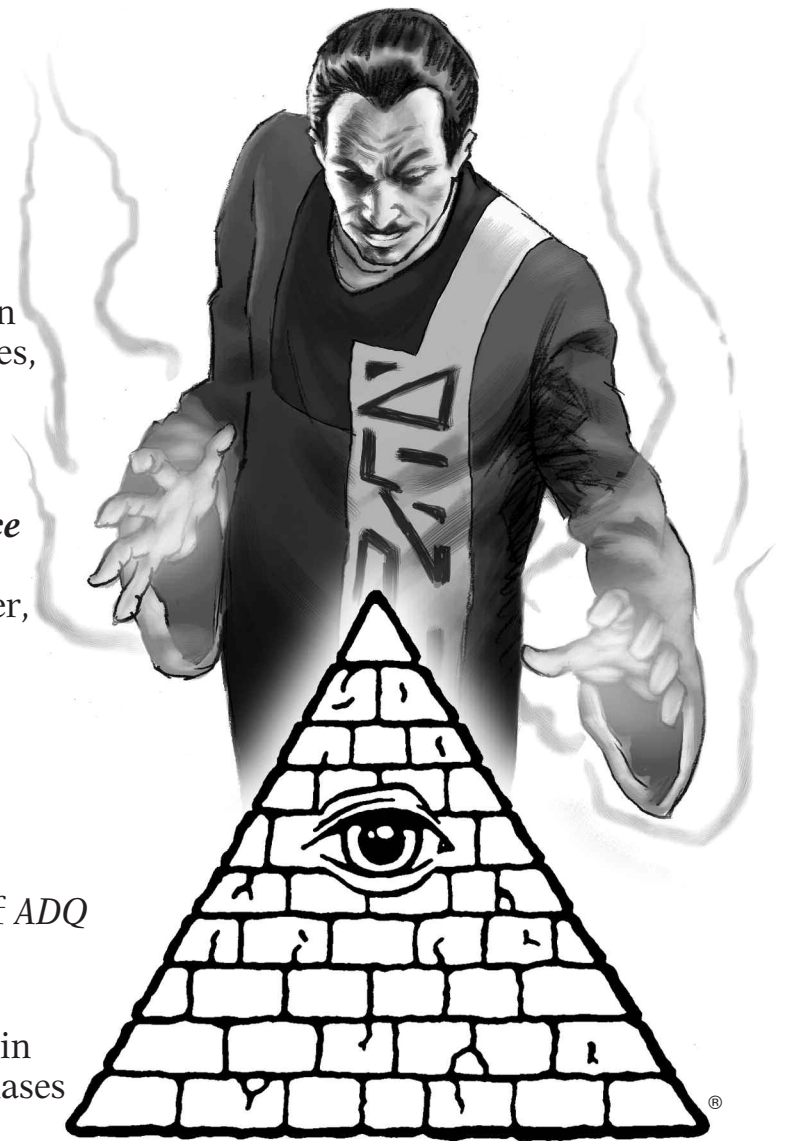
Tetrarch tank, 59, 87.
Thor merchant raider, 114.
 Tiger variant Sturmtiger, 54.
 Toilets, 22.
 "Tony" Ki-61 plane, 93.
 Torpedoes, 16, 19, 21.
 Towed vehicles, 25-28, 42.
 Track links as armor, 12.
 Tragflächen-Schnellboot (TS), 112.
 Trailers, 28, 42.
 Trains, 56-58.
 Tupolev ANT-IVS ski sled, 32.
 Tupolev TB-3 plane, 101.
 Turán tanks, 63.
 U-Boot Typ XB, 115.
 U.S. vehicles, *see American vehicles*.
 Unusual vehicles, *see Weird vehicles*.
 USS *Iowa*, 125.
 USS *Missouri*, 109, 125.
 Vehicle details, 7.
 Vehicle flamethrowers, 15, 19, 21.
 Vehicle mortars, 15, 18-19, 21.
 Vehicles key, 24.
Vesikko submarine, 123.
 Volume surplus uses, 22.
 Vought OS2U-3 Kingfisher seaplane, 109, 125.
 VW Schwimmwagen, 30.
 Wallaby ammunition carrier, 45.
 Ward LaFrance Heavy Wrecker M-1, 33.
 Warships, 113-114, 116-117, 121, 125.
 "Water Buffalo" trailer, 28.
 WC52 truck, 33.
 Weapons, 14-21; *tables*, 18-21.
 Weird vehicles, 35, 42, 55, 67, 76, 81, 87, 101, 106, 109, 120.
 Weisz-Straussler 39M Csaba armored car, 38.
 Whaling boat, 110.
 White M-3A1 armored car, 43.
 Winches, 8, 22, 52.
 Wind-based sailing speed, 11.
 Wirbelwind AA carrier, 50.
 Wood add-on armor, 12.
 Yokosuka, *D4Y Suisei "Judy" plane*, 96, 121; *E14Y "Glen" seaplane*, 97, 122; *MX77 'ka "Baka" plane*, 97.
Z 5 Paul Jacobi Zerstörer 1934, 113.
 Zimmerit antitank-mine paste, 12.
 Zrinyi armor, 63.
 Zveno experiments, 101.



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