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The Sukhoi Su-27/Su-33 Super

Drawings in 3D

Henschel Hs 126 was a two-seater, all-metal hinged monoplane with fixed landing gear. The first prototype - Hs 126 V-1 (D-UBYN) - had its flight-test in August 1936. It was powered by a 12-cylinder liquid-cooled JUMO 210 C engine. By the end of 1937 ten preproduction Hs 126 A-0's were delivered. Aircrafts were

produced at the Henschel-Werke plant and also at AGO Flugzeugwerke. Hs 126 had exceptional short landing performances. Armament consisted of two machine guns cal. 7.92 mm: pilot's fixed MG-17 in front (with 500 rounds) and defense MG-15 in the observer cockpit (with 975 rounds). For the optional close support missions it was capable to carry bombs on two side racks (2♦10 kg or 2♦50 kg). It also had radio equipment and, after gaining combat experience, some machines were equipped with side armor plates of 8 mm steel. The first combat employment of

several Hs 126's took place in Spain, where they were used as tactical reconnaissance within Aufklärungsgruppe 35, and where they received the code name "Super Pavo". Losses in the Spanish civil war were minor. Some Henschels were also sold to Greece, Bulgaria and Estonia. At the beginning of World War II (invasion of Poland) the Hs 126's were the backbone of reconnaissance units of the Luftwaffe. From 29 staffeln this machine was deployed in 23 of them (267 Hs 126's were in combat units, of which 234 were combat-ready). However, the Polish

campaign showed that Hs 126 was a vulnerable airplane. Germany lost about 41 of them to a AA fire and Polish fighter actions, and another 40 were seriously damaged. The Hs 126 participated in missions over all WW2 fronts: from Africa, the Soviet Union, and West Europe to the Balkans. On the 1st of June 1941, Hs 126's were still used by operational combat units as well as flying schools. However, rising losses resulted in withdrawing the type from combat units, but it was still presented in big numbers. For example, in March 1942 from 35 Aufklärer Staffeln on East Front 16 operated Hs 126's. On the first day of Operation "Barbarosa," Germany lost 13 Hs 126's and by the December 1941 they lost 381 of them. Germans tried to accompany Hs 126's with fighter escorts during missions but this did not help much. For this reason from autumn 1941 the obsolete Henschels were replaced by the more modern Fw 189. It is worth noting that the Hs 126 played a role in the rescue of Benito Mussolini on 12th of September 1943. It made a reconnaissance mission to spot landing positions for gliders. By March 1944 only 174 Hs 126's still remained in the

Luftwaffe, some of which were in service with the following combat squadrons on the Eastern Front: 13./NSGr-11 with a base in Estonia, 2./NSGr-12 with a base in Estonia/Lithuania and 2./NSGr-7 with a base in the Balkans. At that time, used as night light bombers. Behind the front line the Hs 126 was used as daytime light bomber and scout to fight the partisans, as well as communication planes in which role they served until the end of the war. Today not many parts of the Hs 126 are preserved as most were lost to the Soviet Union.

The Battleship HMS King George V MMP
The next book in the popular Polish Wings series is on the famous Russian WW2 bombers in Polish Air Forces. Covers duty of these aircraft during WW2 and postwar period. More than 120 photos, mostly unpublished, and many color profiles.
Hawker Hurricane IIc Top Drawings
The intent of this volume is to detail the Sukhoi Su-33 (Su-27K) fourth generation naval strike fighter aircraft design procured for service aboard the Soviet Union (later Russian Federation) Project 1143.5 Aircraft Carrying Heavy Cruiser, Admiral of the Fleet of the Soviet Union,

Kuznetsov. The volume covers the evolution of the T-10K, which was developed for service as the Su-33, and the limited updates introduced. All technical information regarding the aircraft, systems and weapons have been provided by the respective designers/developers, as has most of the graphic material, with technical and graphic input from other entities such as the Ministry of Defence of the Russian Federation. Certain elements of text, where pertinent, are taken from the volume 'Sukhoi Su-27SM(3)/SKM' (Harkins, 2016) and 'Russian/Soviet Aircraft Carrier & Carrier Aviation Design & Evolution Volume 2' (Harkins, 2017). No attempt is made to detail the Su-27KUB experimental design or the Chinese Su-33 copy, the Shenyang J-15, which are outside the scope of the volume, although both are referred to in the addendum.

Sukhoi Su-27 MMP

Photographic documentation of the plane, with visible construction details. Album contains photos without texts. Aeroplane: Sukhoi Su-22 M4 (NATO: Fitter-K) USSR fighter-bomber
Technical data
Span: 10,02 m (32.8 ft) swept - 13,65 m (42.65 ft)

spreadLength: 62.3 ftTake-off: weight 36,155 lbMaximum speed: 1,000 ktCeiling: 49,870 ftRange: 1,376 NMArmament two 30 mm NR-30 cannons, R-60 guided air to air missiles, Ch-25 and Ch-29 guided air to surface missiles, rocket launchers and bombs of total weight of 8,818 lbPowerplant :AL-21F-3 turbojet engine rated at 30,000 lbf with afterburner Fighter - bomber aircraft with variable wing geometry, a subsequent development version of Su-17 (export designation Su-20), equipped with more modern navigation and targeting systems. Su-17M4 (export designation Su-22M4) was the most advanced version, introduced in 1980, equipped with PrNK-54 mission system, coupled with the Orbita computer, enabling the automatic target approach and bomb release without the visual contact, and Klon laser targeting device for laser guided missiles. About 100 Su-22 were delivered to Poland during 1984 - 1985. After multiple overhauls and upgrades, these aircraft are still operated by Polish Air Force as the main type of strike aircraft.

Messerschmitt Bf 109 F-G Kagero Pub Su-24 (Fencer) is a Soviet jet bomber with

variable-geometry wings. The aircraft was supposed to be a response to the American F-111, and therefore it's structurally similar. Su-24 can operate in any weather conditions, also at night. It was designed to carry tactical nuclear weapons. In the 1960s, the military command of the Soviet Union set requirements for a new attack aircraft that would be able to operate despite strong ant-aircraft defense of NATO troops. An aircraft was expected to fly on a very low altitude at a very high speeds. Initially, it was based on Su-7 and Su-15 airframes, but due to the decision to use variable-geometry wing, it was necessary to build a completely new structure. Variable geometry allowed to achieve high speeds while maintaining good takeoff and landing characteristics. This is how Su-24 was born. The first prototype was flown on July 2, 1967 (marked as T6-1), and the second on January 17, 1970 (T6-2I). Variable-geometry wings were only used in the second prototype. In December 1971, the first serial Su-24 was built, but due to the prolonged acceptance tests (lasting until 1974), the aircraft officially did not become operational until February

1975. Su-24 was named Fencer in the NATO code.

Allied Armored Fighting Vehicles

Airlife Publishing

The Soviet answer to the F-15 Eagle and response to the trend in US fighters design toward improved maneuverability. A supersonic all-weather counter-air fighter, the Su-27 is equipped with a look-down/shoot-down weapons system and beyond-visual-range air-to-air missiles. Its range, thrust-to-weight ratio and maneuverability are all significant improvements over earlier Soviet fighters; one of the world's foremost combat aircraft and a potent adversary. Over 200 color and b/w photos, line drawings and 10 color profiles; 80 pages.

Dornier Do 17/Do 215 Polygon Press (RU) Filled with 1:72-scale drawings of armored vehicles from the U.S., Britain, Canada, and Russia.

Sukhoi Su-24 Monographs

In the late 1960s Soviet Union started working on fighters that would be a counterbalance for the American F-15 Eagle. In 1969, a competition for a new fighter was announced, but when the parameters to be met were given, Pavel

Sukhoi withdrew from it. He considered that the required performance could not be reached. Despite this, the designers from his office - Oleg Samojtowicz, Valery Nikolaenko and Vladimir Antonov - developed the plane and presented it for the competition as T-10 prototype. The aircraft was constructed as a heavy interceptor fighter (light version was the MiG-29, which was submitted in the same competition).

Mil Mi-24d/V Topdrawings

In 1915 a machine christened Little Willie changed the way that wars were fought. Little Willie was a fully tracked armoured vehicle that could break a trench system. Its development was completed in December 1915, but by then it had already been superseded by an improved design, Mother. This was the first rhomboid tank, and the prototype for the Mark 1 which would influence a whole generation of tank building. This book details the development of the Mark I, and its surprise arrival in France in the middle of 1916 during the closing weeks of the battles of the Somme.

Panavia Tornado Topdrawings

In June 1943 the production of Pz.Kpfw. IV

Ausf. H began in order to increase the armor piercing capabilities of its main armament. Although the new model received the modified 75-mm KwK43 L/48 tank gun, the Ausf. H was still sharing many components with the previous version. This Panzer IV version first saw combat in the summer of 1943 during the German retreat on the Eastern front. The tank proved to be quite complicated and labor-consuming in production which led to simplifying its design. As a result, the less complex Ausf. J model was introduced into production in June 1944.

The Soviet Fighter Yakovlev Yak-3 Stackpole Books

The first close-up look at the newest version of the Flanker, recently taken into service by the Russian Air Force. Including spectacular, never before seen details such as cockpit, thrust-vectoring engine exhausts and more.

Sd. Kfz. 161 Panzer IV Polish Wings

At the beginning of the 1930s Britain was obliged not to build new battleships due to signed naval treaties. Standard displacement for any new battleship was limited to 35,000 tons with the caliber of main armament not exceeding 406

millimeters. Britain was trying to impose the next treaty decreasing guns caliber even further to 356 mm. Five King George V-class battleships eventually were armed with guns of such caliber. Standard displacement limits compelled placing main guns in three separate turrets with two of them carrying four cannons each. King George V-class entered service in 1940. Out of the five battleships of this class ever built one was sunk (HMS Prince of Wales) while the other four survived the war and were scrapped in the 1950s. This book by Witold Koszela starts with the set of perfectly made detailed line drawings/scale plans of all King George V-class vessels. **REVIEWS** ...page after page of detailed line drawings...provides a vast amount of detail of great use to model makers.. very clearly and logically organized, making it easy to locate material. **Nautical Research Journal**
Messerschmitt Me 262 Schwalbe
Aviation Supplies & Academics
Although the German Me 163 Komet rocket fighter was created as a remedy for the mass air raids of the Allied air force on Germany, its origins date back to 1938. Alexander Lippisch then began work at the

DFS factory on a tailless rocket-propelled aircraft, designated as DFS 194. At the beginnings of 1939, the project was handed over to the Messerschmitt factory and there it developed into the Me 163A. Two prototypes of this aircraft - V4 and V5 - were completed in 1941 and flown as gliders. Then the V4 received a Walter HWK R.II rocket engine with a thrust of 7.5 kN, and on October 2, 1941 H. Dittmar achieved a speed of 1003 km/h on mentioned plane. Thirteen Me 163As were built for training.

Su-33: Russia's Carrier-Borne Strike Fighter Top Drawings

- Illustrates the Sukhoi Su-24's development and service history, including operations in Russia, the Ukraine, Iran, and Iraq. - To this day the Su-24 remains the principal Russian tactical bomber. - Contains approximately 200 black & white and color photos with detailed captions.

British Mark I Tank 1916 Midland Publishing

Su-34 The Su-34 'Fullback' was developed from the Su-27 'Flanker' interceptor/fighter as a fourth plus generation strike aircraft for service with the Russian Air Force. Conceived in the twilight years of the

Soviet Union, the aircraft weathered the financial crisis that gripped post communist Russia following the collapse of the Soviet Union in the early 1990's, maturing into an advanced strike aircraft, deliveries to the Russian Air Force commencing in late 2006. The aircraft is currently in service with increasing numbers being ordered to replace that country's aging fleet of Su-24M/M2 strike aircraft. It is also planned for the Su-34 to replace the Su-24MR in the tactical reconnaissance role. This volume covers the program from conception to operational service with chapters describing the aircraft, systems and weapons, production, flight testing and initial service. The text is complimented by black and white photographs

North American P-51 Mustang Aerofax Scale plans in 1/48 scale of the Mil Mi-24D/V. A3 size pages in A4 pb. 12 A3 size scale plans.

The Battleship Haruna Topdrawings New book series for all warfare and scale modeling fans, describing the most famous aircrafts and vehicles. In each issue you will find a work in progress article, paint schemes and Cartograf's

decals! F-14 Tomcat - American, supersonic deck fighter, with variable-sweep wing, developed by the Grumman Corporation. Initially it was used mainly for the fleet defense, gaining the air advantage and providing the tactical recon, but eventually Tomcats were adapted for the ground strikes too. Decals: Grumman F-14A Tomcat, BuNo 160678, no. 207, VF-111 "Sundowners", USS "Carl Vinson", November, 1982.

Sukhoi Su-24 Centurion Publishing The Fencer, with its distinctive three-position variable-geometry wings, is the Soviet counterpart to the American F-111, though somewhat smaller and lighter, and to a lesser extent the Tornado. Its origins certainly owed a lot to Soviet observation of the American TFX competition and the resulting swing-wing variable-geometry solutions. First flown in 1971, it entered service from 1974 as a replacement for the Yak-28 and remains an important part of the Russian VVS inventory, with several hundred having been in service. It is able to carry a wide range of air-to-surface missiles and is capable of carrying out precision attacks in hostile airspace at night or during poor weather. Much larger

and more capable than previous Soviet aircraft, it combines great penetrative ability with a heavy and varied bomb load, but is such a versatile airframe that it has also been developed in various other versions including tactical bomber, electronic warfare, and reconnaissance. As usual with the Aerofax series, this book includes extensive detail of systems, equipment, weapons, etc., and a plethora of previously unpublished photographs and drawings.

The Sukhoi Su-24 Topdrawings

The Sukhoi Design Bureau was tasked in 1969 with developing a fourth-generation heavy fighter and thus began the story of the Su-27, known to the western world as the Flanker--an aircraft which turned out to be one of the most successful Soviet fighter designs. This book tells the story of how the original project developed, how the final configuration of what was known as the T-10 was selected and why the brave decision to scrap the original project and rework it as the T-10S was taken, a decision that proved to be justified. The book covers the design and testing of the prototypes in both configurations, the production entry of the basic Su-27 single-

seat fighter and the Su-27UB two-seat combat trainer together with the efforts of Sukhoi to keep them up to date with mid-life upgrades to Generation 4++' (Su-35S) level. The operational histories of Su-27 versions including the Su-30/Su-34/Su-35 are also described. When the Soviet Navy decided to bolster its fleet with carriers optimized for conventional take-off and landing (CTOL) aircraft, Sukhoi responded by developing the Su-27K, which later entered service as the Su-33, Russia's first operational CTOL shipboard fighter. These naval variants are included in the book as is a chapter describing the story of how China purchased license manufacturing rights for the Su-27 and went on to develop its own versions with indigenous avionics and weapons, including the basic J-11 fighter and the J-15 Flying Shark--a clone of the Su-33. The post-Soviet republics included, the Su-27/Su-30/Su-34/Su-35 family has seen service with nearly 20 nations, including places as far apart as Vietnam, Malaysia, Ethiopia, Indonesia, Angola, India and Venezuela. The book describes in depth the development and operational career of the Su-27 family, including mid-life

upgrades and the latest variants, and features detailed fleet lists. Richly illustrated with color photographs, line drawings and color profiles of the various color schemes carried by the type, this is the definitive work on a truly outstanding aircraft.

Fairey Swordfish Centurion Publishing
Developed in the Soviet Union in the 1960s, the Su-24 tactical bomber has become one of the most successful aircraft in its class. Featuring delta wings and auxiliary lift engines meant to improve its field performance, the first prototype turned out to be more of a liability than an asset and the aircraft was redesigned to have variable geometry wings. The Su-24 had its baptism of fire in the Afghan War and was also exported to Iraq, Iran, Algeria, Libya and Syria, seeing action in some of these countries. At home, Russian Air Force Su-24s were heavily involved in the first and second Chechen campaigns and the type has undergone a mid-life update allowing it to carry precision-guided munitions, and is still going strong. Illustrated with over 750 photographs, many previously unpublished, as well as line drawings, color side views, insignia,

unit badges and nose art this latest

addition to the Famous Russian Aircraft
series will be of interest to aviation

enthusiasts and scale modelers alike.