

CELEBRATING THE AUTUMN OF ITS LIFE: SUKHOI Su-22.

A SPECIAL DAY

Place and date: June 28th at Swidwin Airbase Poland. It's a 'no' for having sunny weather, and a 'yes' for having a special day anyway. About 18.000 people visited the Open Day at Swidwin Airbase in Poland which is situated about 120 km's North-by-East of Szczecin near the Northern German border. In spite of clouds, many people were attracted to visit this special day which was marked by an official celebration, thirty years anniversary of the Sukhoi Su-22 Close-Air-Support / bomber plane in the Polish airforce.

AN OLD FRIEND: SUKHOI SU-22

Speaking in terms of plane-generation the SU-22 (Nato nickname 'Fitter') is not the most sophisticated and most modern plane there is. On the other hand it's still very operational within the Polish air force, marking its reliability and the plane will remain at least till 2018. Even there are plans to upgrade the type after 2018. The SU-22 (in a few different types) was designed for flying high speed medium range low level attack missions to ground targets and reconnaissance tasks. It was capable of doing air-to-air operations but definitely not designed for this purpose. To be able to fly low speed / high speed the wings have been designed to be able to set them forward for low- and backward to fly high speed (swing-wings) . As most planes in their advancing years the plane was continuously developed to a level as being the most powerful Warsaw pact Fighter-Bomber. In the recent held exercise 'Nato Tiger Meet' in Germany it was reported a spokesman said that an experienced pilot flying the SU-22 against a less experienced pilot in a Mig-29 Fulcrum can overrule the Mig !

VERY STRONG PLANE

The plane was delivered in the SU-22M-4K version to countries as Ukrain, Turkmenistan, Czechoslovakia (by that time) Eastern Germany, Afghanistan, Hungary, Peru and Bulgaria and the here visited 'Polski Wojska Lotnicze' or Polish Airforce. It played a major role in deterrence during the Cold-War, and would have been playing a major role in case it had become a real conventional war. However today in most air forces the type is phased out, but Poland is following a different vision on this. As armament it can carry 30mm cannons, a variety of missiles and rocket pods, chemical weapons and even bombs of 100 kg up to even a 1000 kg, such as cluster bombs, anti-runway bombs, slick, retarded incendiary and anti-tank bombs. After destroying an airfield the machine possibly had to be able to land anyway on or near the destructed airfield and to achieve that it is equipped with an extreme strong undercarriage.

DROGOWY ODCINEK LOTNISKOWY

This landing on heavy grounds or just a simple road was practiced for many years in the DOL exercises (*DOL* - Drogowy Odcinek Lotniskowy = Highway Strip Landing) which means the pilots are trained to land the plane on a narrow tarmac road or even a regular paved road. Also the other way around, in a war situation it allowed the military aircraft to operate even if their airbases, the most vulnerable targets in any war, were destroyed. It gave them an enormous flexibility even in the forest if the road has the minimum necessary length. The first highway strips were constructed near the end of World War II in Nazi Germany, where the well developed 'Reichsautobahn' system allowed aircraft to use the motorways. In the Cold War highway strips were systematically built on both sides of the Iron Curtain, mostly in the two Germanys, but also in a few other countries.

SWIDWIN AIRBASE HOME OF SU-22

A short aviation history of Swidwin goes back to 1951. The first pilots could not yet be trained at Swidwin, this happened at Krakow-Rakowice. The year 1953 gave a more permanent character to Swidwin airbase. After Poland became a NATO member the airbase had to be reorganized. In 1999 the airbase was named 11th Airbase, and since januari 1st 2002 by another reorganization it was named 21st Airbase, and since july 1st 2012 Swidwin became a permanent tactical post and was called 21st Tactical Airbase. The base now functions as a military logistic department supplying amongst others the units in Trzebiatow and Mrzezyno. The purpose of the unit is to maintain a steady Operational Readiness of the airport and secure Operational and Combat Readyness of own troops and allies which train in the vicinity of the airport at all times. Likewise the unit provides subordinate units technically and financially and is responsible for logistic security of allies operating on the territory of the Republic of Poland within the confines of Host Nation Support. 21st Tactical Air Base is the only unit of the Wing with two SU-22 squadrons in its structure. On the question how many SU-22's are in service in Swidwin it was said to be confidential and not to be published. May this plane survive many happy landings the forthcoming years.

Technical data: SU-22M-4K

Single-seat groundattack plane

Cruise speed	1400 km/hr without external load
Maximum speed	2220 km/uur Mach 1,7
Maximum range	2300 km
Wingspan	13,7 mtr
Length	19,2 mtr
Height	5,12 mtr
Crew	1 pilot
G-limit	Max. 7 G
Startweight	15.400 kg (max. 3770 kg fuel)
Startweight incl.full int. tank	19.430 kg (max. with 4 tons bombs)
Runway	950 mtr (normal weight with break-chute)
Ceiling	Maximum 14,2 km
External fuel tanks	PTB-800 (840 ltr), PTB-1,150 (1,160 ltr)
Engine	One 11250-kg afterburning thrust Lyul'ka AL-21F-3 turbojet
Hardpoints	9
Armament	Two 30mm NR-30 (80 rounds a loop), tactical nuclear weapons, guided AAM and ASM missiles, guided and unguided bombs (up to 500 kg), incendiary bombs, cluster bombs, napalm tanks, heavy caliber rockets, rocket launch pods, ECM pods.

Avionics and other devices: Attack and navigation system - Onboard computer - On-board digital device - Laser target illuminator and rangefinder- Doppler navigator - Sight tube - Digital mapping system - Television signals switching unit - HUD - Air-to-radar missile guidance with Luch display - Attitude and heading reference system - Short range radio navigation and landing system - Long range radio navigation system - Air data system - Automatic direction finder - Aircraft responder - Control signal generation equipment - Information input system - GPS system - Weapons control system - Autopilot system - Radio altimeter - Communications radio transceiver - IFF transponder - Marker radio receiver - Combat performance monitoring system - Flight recorder - Radar warning receiver - Radio jamming transmitter (in pod) - Infrared and passive jamming device - Sensors (in pod) - Kh-25MR missile (pod) guidance system - Infrared imaging system (in pod) - Kopyo search and track radar system - Power supply and CEJ pod CEJ blocks for Kh-31A