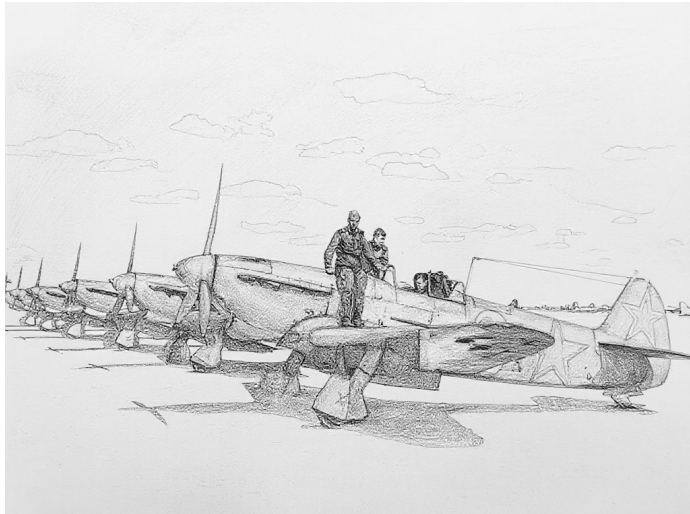


Yakovlev Yak-9



The Yakovlev Yak-9 was a propeller-driven fighter developed during WWII and which first entered service in 1942. After WWII, later versions were supplied to many Soviet allies. The NATO reporting name for the aircraft is “Frank.”

Versions

There were many versions of the Yak-9; these are the most relevant.

Yak-9

The first Yak-9 version was developed from the Yak-7B fighter. It was armed with one 20 mm ShVAK cannon firing through the spinner and one 12.7 mm UBS machine gun in the left wing. It entered service with the Soviet VVS in 1942.

Yak-9T

The Yak-9T was armed with a 37 mm NS-37 cannon in place of the 20 mm. The cockpit was moved backwards slightly to accommodate the cannon.

Yak-9D

The Yak-9D is a long-ranged escort fighter derived from the original Yak-9. It had additional fuel tanks in the wings, but otherwise was very similar.

Yak-9M and Yak-9U

The Yak-9M was also derived from the original Yak-9, but had the cockpit move backwards like the Yak-9T for commonality and a stronger construction, with the fuselage being skinned by plywood rather than fabric. It added a second 12.7 mm UBS machine gun in the right wing. The Yak-9U was an iteration of the Yak-9M with modifications to re-

duce defects during construction.

The Yak-9M entered service in the spring of 1944 and the Yak-9U followed before the end of WW2.

Yak-9P

The Yak-9P was a post-war development of the Yak-9U with completely metal wings.

The Yak-9U entered service with the VVS in 1946. It also served with many Soviet allies, including the Albanian Air Force, Bulgarian Air Force, Chinese PLAAF, Hungarian Air Force, North Korean KPAF (from 1949), Polish Air Force and Polish Navy, and the Yugoslav Air Force.

Armament and Stores

Most versions of the Yak-9 were armed with one 20 mm ShVAK cannon firing through the spinner and one or two 12.7 mm UBS machine guns in the wings.

Two 100 kg bombs could be carried under the wings.

Combat

Early versions of the Yak-9 fought in WW2. The Yak-9U/-9P were also used by the North Korean KPAF and saw extensive service in the first weeks of the Korean War.

ADCs

- Yak-9D
- Yak-9U
- Yak-9P

Photo Credit

- Yak-9D: USAAF photographer (Public Domain)

Yak-9D					<div>Crew: Pilot</div> <div>Maneuver HFPs/DPs:<div>LR/DR1.01.0VR1.0</div></div> <div>Turn DPs:<div>CL1/2DTTT0.00.00.0HT0.00.01.0BT1.01.0—ET1.5— —</div></div> <div>Cruise Speed: 3.0Restr. Arcs: —Climb Speed: 1.5Blind Arcs: 30–Visibility: 5Internal Fuel: 35Size: –1AtA Refuel: NoVulnerability: –1Ejection Seat: None</div>						
Power APs/DPs/FPs: ☉ <div>CL1/2DTFuelFT2.01.51.50.5HT0.50.50.50.2N0.00.00.00.1I0.50.50.50.0SPBR— — — —</div>											
If speed ≥ 3.5, reduce power by 0.5.											
Speeds and Ceilings						Climb Capabilities					
Alt. Band	Conf. Ceil.	CL33	1/227	DT19	Dive Speed	CLABOth	1/2ABOth	DTABOth	Alt. Band		
EH+	46+	—	—	—	—	— —	— —	— —	EH+		
VH	36–45	—	—	—	—	— —	— —	— —	VH		
HI	26–35	1.5 – 3.0	1.5 – 3.0	—	5.0	— 0.25	— 0.25	— —	HI		
MH	17–25	1.0 – 3.5	1.5 – 3.0	1.5 – 3.0	5.0	— 0.50	— 0.25	— 0.25	MH		
ML	8–16	1.0 – 3.5	1.5 – 3.5	1.5 – 3.0	5.0	— 1.00	— 0.50	— 0.50	ML		
LO	0–7	1.0 – 3.5	1.0 – 3.5	1.5 – 3.0	5.0	— 1.00	— 1.00	— 0.50	LO		

Radar: —		ECM: —		Weapon Stations Diagram:	
ECCM: —		RWR: —			
Arcs: —		DDS: —			
Search: —		DJM: —			
Track: —		AJM: —			
Lock-On: —		BJM: —			
Guns: One 20 mm ShVAK One 12.7 mm UBS		Technology: None		Load Point Limits: CL : 0–0	
To Hit: 5/3/0				1/2: 1–2	
Ammunition: 6.0				Weight Limit: 450DT : 3+	
Gunsight: TT+0/HT+1/BT+2				StationLimitAllowed Loads	
Ranging: —				1 and 2225BB	
AtA/AtG: 2/2*					
Bomb System: Manual					
Notes: 1. The Yakovlev Yak-9D is a propeller-driven, long-range day fighter. The NATO reporting name for aircraft is Frank. 2. High roll rate (HRR) if CL. High transonic drag (HTD). Low bleed rate (LBR). 3. The normal fuel load is 35 fuel points. These guns may be overloaded to 55 fuel points, but doing so reduces power by 0.5 and increases vulnerability to –2 until the fuel drops to 35 fuel points.					
				VPs: 4/3/1/1	
				v1 0000000 0000-00-00T00:00:00	

Yak-9U										Crew: Pilot									
										Maneuver HFPs/DPs: LR/DR 1.0 1.0 VR 1.0									
Turn DPs: CL 1/2 DT TT 0.0 0.0 0.0 HT 0.0 0.0 1.0 BT 1.0 1.0 — ET 1.5 — —																			
															Cruise Speed: 3.0 Restr. Arcs: — Climb Speed: 1.5 Blind Arcs: 30– Visibility: 5 Internal Fuel: 35 Size: –1 AtA Refuel: No Vulnerability: –1 Ejection Seat: None				
					If speed ≥ 3.5, reduce power by 0.5.														
Speeds and Ceilings						Climb Capabilities													
Alt. Band	Conf. Ceil.	CL 33	1/2 27	DT 19	Dive Speed	CL AB Oth	1/2 AB Oth	DT AB Oth	Alt. Band										
EH+	46+	—	—	—	—	— —	— —	— —	EH+										
VH	36–45	—	—	—	—	— —	— —	— —	VH										
HI	26–35	1.5 – 3.0	1.5 – 3.0	—	5.0	— 0.25	— 0.25	— —	HI										
MH	17–25	1.0 – 3.5	1.5 – 3.0	1.5 – 3.0	5.0	— 0.50	— 0.25	— 0.25	MH										
ML	8–16	1.0 – 3.5	1.5 – 3.5	1.5 – 3.0	5.0	— 1.00	— 0.50	— 0.50	ML										
LO	0–7	1.0 – 3.5	1.0 – 3.5	1.5 – 3.0	5.0	— 1.00	— 1.00	— 0.50	LO										

Radar:		—	ECM:		Weapon Stations Diagram:				
ECCM:		—	RWR:						—
Arcs:		—	DDS:						—
Search:		—	DJM:						—
Track:		—	AJM:						—
Lock-On:		—	BJM:		—				
Guns:		One 20 mm ShVAK Two 12.7 mm UBS	Technology:		Load Point Limits: CL : 0–0 1/2: 1–2 Weight Limit: 450 DT : 3+				
To Hit:		5/3/0	None						
Ammunition:		6.0							
Gunsight:		TT+0/HT+1/BT+2							
Ranging:		—							
AtA/AtG:		3/3*							
Bomb System:		Manual							
Notes:						VPs: 4/3/1/1			
1. The Yakovlev Yak-9U is a propeller-driven day fighter. The NATO reporting name for aircraft is Frank. 2. High roll rate (HRR) if CL. High transonic drag (HTD). Low bleed rate (LBR).									
						v1 0000000 0000-00-00T00:00:00			

Yak-9P										Crew: Pilot									
										Maneuver HFPs/DPs:									
LR/DR		1.0		1.0															
VR				1.0															
Power APs/DPs/FPs: ☉										Turn DPs:									
CL		1/2		DT	Fuel		CL		1/2		DT								
FT		2.0		1.5	1.5	0.5	TT		0.0		0.0								
HT		0.5		0.5	0.5	0.2	HT		0.0		1.0								
N		0.0		0.0	0.0	0.1	BT		1.0		—								
I		0.5		0.5	0.5	0.0	ET		1.5		—								
SPBR		—		—	—	—													
If speed ≥ 3.5, reduce power by 0.5.							Cruise Speed: 3.0 Restr. Arcs: —												
							Climb Speed: 1.5 Blind Arcs: 30–												
							Visibility: 5 Internal Fuel: 35												
							Size: –1 AtA Refuel: No												
							Vulnerability: –1 Ejection Seat: None												
Speeds and Ceilings						Climb Capabilities													
Alt. Conf.		CL		1/2		DT		Dive		CL		1/2		DT		Alt.			
Band Ceil.		33		27		19		Speed		AB Oth		AB Oth		AB Oth		Band			
EH+		46+		—		—		—		—		—		—		EH+			
VH		36–45		—		—		—		—		—		—		VH			
HI		26–35		1.5 – 3.0		1.5 – 3.0		—		5.0		— 0.25		— 0.25		HI			
MH		17–25		1.0 – 3.5		1.5 – 3.0		1.5 – 3.0		5.0		— 0.50		— 0.25		MH			
ML		8–16		1.0 – 3.5		1.5 – 3.5		1.5 – 3.0		5.0		— 1.00		— 0.50		ML			
LO		0–7		1.0 – 3.5		1.0 – 3.5		1.5 – 3.0		5.0		— 1.00		— 0.50		LO			
Radar:				—		ECM:				Weapon Stations Diagram:									
ECCM:				—		RWR:												—	
Arcs:				—		DDS:												—	
Search:				—		DJM:												—	
Track:				—		AJM:												—	
Lock-On:				—		BJM:				—									
Guns:				One 20 mm ShVAK Two 12.7 mm UBS		Technology:				Load Point Limits:									
To Hit:				5/3/0		None				CL : 0–0									
Ammunition:				6.0						1/2: 1–2									
Gunsight:				TT+0/HT+1/BT+2						Weight Limit: 450									
Ranging:				—						DT : 3+									
AtA/AtG:				3/3*															
Bomb System:				Manual						Station Limit Allowed Loads									
										1 and 2 225 BB									
Notes:																			
1. The Yakovlev Yak-9P is a propeller-driven day fighter. The NATO reporting name for aircraft is Frank.																			
2. High roll rate (HRR) if CL. High transonic drag (HTD). Low bleed rate (LBR).																			
VPs: 4/3/1/1												v1.0000000 0000-00-00T00:00:00							