

PAKISTAN AERONAUTICAL COMPLEX PRODUCTS

by

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SUPER MUSHSHAK

(A friendly teacher in the lonely skies)

Super Mushshak is a variant upgraded version of Mushshak fitted with a more powerful 260 hp engine, cockpit air-conditioning, electrical instruments, and electric cum manual elevator and rudder trim. The aircraft has been developed to meet FAR part 23 certification in categories normal, utility and aerobatics. It has spacious side-by-side cockpit giving good contact between the pilot and the co-pilot/ observer or between the student and the instructor for effective “watch me” instruction. Super Mushshak meets the requirement of a modern primary training syllabus and is an ideal basic trainer for basic flight training and instrument flying.

Technical Specifications		
1	Span	29 ft
2	Length	23.5 ft
3	Height	8 ft 6 ½ inch
4	Wing Area	128 sq.ft
Weights		
1	Max take off weight	2645 lb
2	Max landing weight	2515 lb
Power Plant		
1	Type Textron Lycoming	10-540-V4A5
2	Power	260 HP
Performance		
1	Max SL Speed	145 kts
2	Cruise Speed SL	130 kts
3	TOD (50 ft)	900 ft
4	LD (50 ft)	970 ft
5	Rate of climb	1700 fpm
6	Range	440 nm
7	Endurance	4:15 hrs
8	Load Factor	+6, -3

MUSHSHAK

(A trainer you can trust)

The MF-17 (Mushshak- The Proficient) is a lightweight, robust, two/three seats, single engine, and predominantly all metal aircraft with tricycle landing gear. It is developed to meet US FAR 23 certification in categories normal, utility and aerobatics. It can operate from any short un-prepared strip and is completely independent of any kind of ground equipment. Mushshak meets the requirements of modern primary training syllabus and is ideal for basic flight training, instrument flying, night flying, aerobatics and navigation /formation flying.

Technical Specifications		
1	Span	29 ft
2	Length	23 ft
3	Height	8 ft 6 ¹ / ₂ inch
4	Wing Area	128 sq.ft
Weights		
1	Max take off weight	2645 lb
2	Max landing weight	2515 lb
Power Plant		
1	Type Textron Lycoming	AE10-360-A1B6
2	Power	200 HP
Performance		
1	Max SL Speed	130 kts
2	Cruise Speed SL	115 kts
3	TOD (50 ft)	825 ft
4	LD (50 ft)	1030 ft
5	Rate of climb	1220 fpm
6	Range	580 nm
7	Endurance	5:10 hrs
8	Load Factor	+6, -3

BAAZ **(Aerial Target System)**

Baaz is a recoverable aerial target designed for use with air defence gun and short range SAM systems; system includes optical tracking facilities. The airframe comprises simple high-wing monoplane, with parallel chord wings and horizontal tail; GFRP fuselage, epoxy laminated polystyrene wing. The Guidance & Control through Radio command, by seven –channel VHF/FM transceiver.

Technical Specifications		
1	Span	244 m (8 ft 0.0 in)
2	Length	2.10 m (6 ft 10.7in)
Weights		
1	Max Launching weight	19 kg (41.9 lb)
Power Plant		
1	Type	100 cc (British Origin)
2	Power	260 HP 9.0 HP with standard Muffler 11.0 HP with tuned Muffler QTM
Performance		
1	Max Level speed	113 kts 209 km/h; 130 mph)
2	Max Range: Visual	1.1 n miles (2 km; 1.2 miles)
3	Optical	1.9 n miles (3.5 km; 2.2 miles)
4	Endurance	35 min

ABABEEL (Aerial Target System)

Ababeel is designed as all-arms air defence target for use with small arms and machine guns. The airframe comprises, simple high-wing monoplane with GFRP fuselage and a polystyrene foam, epoxy laminated wing, full span flaperons and elevator. Current models have increased fin area and less tapered wings. The guidance and control is through Radio Command (four-channel VHF transceiver).

Technical Specifications		
1	Span	1.60 m (5 ft 3.0 in)
2	Length	1.41 m (4ft 7.5 in)
3	Tail plan Span	0.60 m (1ft 11.6 in)
Weights		
1	Max Launching weight	2.8 kg (6.2 lb)
Power Plant		
1	Type	0.9 kw 10 cc glow-fuel engine
2	Power	1.2 HP
Performance		
85 1	Max Level Speed	75 kts (140 km/h; 87 mph)
2	Endurance	20 min

KARAKORAM-8 (K-8 Jet Trainer)

Karakoram-8 is a basic cum-advanced jet trainer, jointly designed and manufactured by Aircraft Manufacturing Factory and Nanchang Aircraft China. The Aircraft is equipped with advanced features and can adequately be utilized in close support role. The aircraft has already been inducted in a number of air forces around the world.

Technical Specifications		
1	Span	31.60 ft
2	Length	38.06ft
3	Height	13.81 ft
4	Wing Area	183.21 sq.ft
Weights		
1	Empty weight	5923 lbs
2	Normal take off weight	7841 lbs
3	Max take off weight	9336 lbs
4	Internal Fuel Capacity	1720 lbs
5	Total Fuel Capacity	2576 lbs (Internal + 2 x 250 ltr Drop Tank)
Power Plant		
1	Type	Allied Signal (Garrett) TFE-731-2A-2A Turbo fan
2	Take off thrust	3600 lbs
Performance		
1	Max SL Speed	432 kts
2	Rate of Climb	5940 fpm
3	Range	1155 nm
4	Endurance	4.2 hrs
5	Service ceiling	43,865 ft
6	Take off run	1452 f
7	Landing run	1749 ft
8	Load Factor	+7.33, -3.0