Avro Canada CF-105 Arrow

History





- Supersonic All-weather Interceptor
- Operate from 6000' runway
- Capable of acceleration to Mach 1.5
- Operating range of 600 nautical miles
- Twin jet with a crew of two
- Carry advanced missiles and control system
- Operate in Canada's harsh northern environment
- Manoeuver at 50,000' altitude with 2g loads

The Avro CF-105 Arrow was the only aircraft in the world at the time that could meet these specifications.

The history of the Avro Arrow is a fascinating story. From its inception in 1953, the Arrow was to be an advanced interceptor aircraft for service in the RCAF. Its delta planform and high wing configuration was adopted from many experimental aircraft from around the world. It applied the latest of aerodynamic technology and theories. But the unique aspect that set it apart from so many other aircraft developments was its radically new Design to Production approach - which meant that no flying prototype would be made and the initial tooling would produce the first aircraft. In only 28 months from the release of the first design drawings, Arrow 25201 was rolled out to the public on October 4, 1957. Flight testing commenced March 25,1958 and continued until the Arrow program was cancelled February 20,1959.

For more pictures of the Avro Arrow, please click here

Dimensions of the Arrow:

Wingspan	50.0 ft.
Length	73.3 ft. [Mk 1]
Height	21.2 ft.
Wing Area	1225 sq. ft.
Root chord	45.0 ft. [on centerline]
Tip chord	4.4 ft.
Max Wt.	68,602 lbs. [Mk I Gross]

Configuration of the Arrow:

R1 893-2000

Wing	high mount		
	thin Delta planform		
	wing notch		
	leading edge droop		
	anhedral angle		
	integrated fuel cells (6)		
Fuselage	air-conditioned cockpit for two		
	clamshell canopies over ejection seats		
	large removable armament pack		
	stressed skin envelop around engines		
	internal rubber fuel cells (2)		
Engines	J-75 Pratt & Whitney [Mk I]		
	Orenda Iroquois PS13 [Mk II+]		

Significant Events

Roll out	October 4, 1957	
1st Flight	March 25, 1958	25201
Supersonic	April 3, 1958	25201
Max Speed	Mach 1.98 Nov. 11, 1958	25202
Total test hrs.	70.5 hrs.	all 5 aircraft
Cancelled	Feb. 20,1959	

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