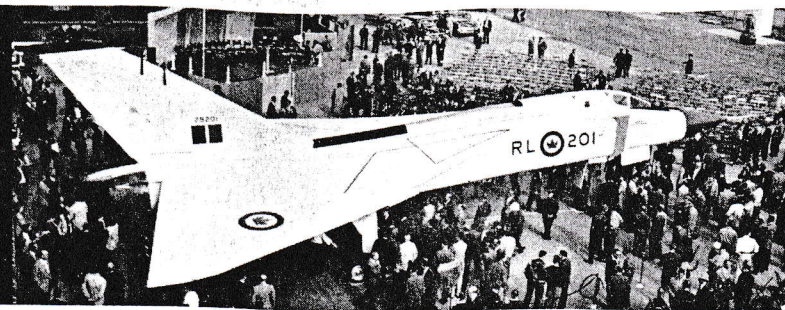


# CANADA'S AVRO CF-105 ARROW



Canada's first supersonic aircraft. Avro's delta wing, area-ruled fuselage CF-105, was designed and built in a record 4 years. Eleven large scale free-flight models with rocket-propelled boosters simulated full scale flight. Scheduled to get two Orenda Iroquois engines of 23,000 lb. thrust each, first Arrow will fly with J-75's. Span is 50 ft.; length, 78 ft.; rudder, 21 1/4 ft. high. Long-range day-and-night interceptor has crew of 2; gross weight is about

30 tons; will operate almost VTOL since Iroquois thrust will about equal weight. Mach 2 speeds on threshold of heat barrier ("thermal thicket") required 1-inch thick tempered glass windshields. Saw tooth wing leading edge cuts act as aerodynamic fence; conical camber improves lift-drag forces; wing tips and trailing edges are blunt. Perforations at fixed air inlet ramp bleed air to set up efficient shock wave. Note control hinges under wing.

