1 Air data probe 54 Lower longeron 82 Fuel booster pump - one in each 104 Aileron main bellcrank lever No. 5 tank Total usable fuel, all tanks 105 Aileron hydraulic actuator 2 Radome - dielectric 55 Astra I electronic equipment 3 Radar equipment - part of Astra I - 2,850 imp. gals (12,950 litres) operated via control 56 Armament bay - with capacity for Advanced Electronic System four Sparrow 2 missiles (shown) 83 Fuel no-air valves cables from pilot's column 106 Aileron control box 4 Radar scanner or eight Falcon Gar I missiles 84 Fuselage rib - forward 5 Rallast weights 57 Armament bay doors - two 85 Auxiliary spar 139 Engine (two) - Orenda PS-13. per each Sparrow 2 missile 6 Radome latches 86 Fuselage rib - aft Iroquois MK II turbojet comprising 7 Radome de-icing tank and filler 58 Sparrow 2 missile 87 Wing front spar two compressors, twin spools and an 8 Astra I electronic equipment 59 Sparrow radar unit 88 Wing main spar integral afterburner. A power-to-9 Electronic equipment access door - left 60 Sparrow warhead 89 Wing rear spar weight ratio of 5:1 includes a dry and right sides 61 Sparrow electronics unit weight of 4,500 lb approx.. 90 Wing structure - inner 10 Radar dome/front fuselage production 62 Sparrow gyro and control actuator 91 Wing structure - outer developing 26,000 lb of thrust with 63 Sparrow electrical and hydraulic 92 Inner wing leading edge - partial droop break line full afterburner at sea-level static. 11 Nose wheel well 93 Inner wing leading edge structure 140 Engine nose bullet and air inlet frame power supplies 12 Nose landing gear - Jarry Hydraulics, 64 Sparrow solid-propellant rocket motor 94 Outer wing leading edge - drooped to 141 Low pressure compressor - 3-stage 65 Hydrautically-operated launch Montreal (Operated via a 4,000-psi increase buffet boundary by axial flow driven by a single-stage preventing leading edge aerodynamic auxiliary hydraulic system) mechanism - used to lower missile turbine breakaway at high angles of attack 13 Nose landing gear door - open only into firing position 142 High pressure compressor - 7-stage 66 Launch mechanism hydraulic actuator when gear is in transit 95 Outer wing leading edge structure axial flow, driven by a two-stage 14 Nose wheel steering links 67 Speed brake (2), left side shown 96 Wing tip - glass fibre turbine 68 Speed brake hinge position 15 Landing light 97 Wing tip navigation light 143 Combustion chamber - annular 16 Taxiing light 69 Speed brake operating actuator 98 Ailerons vaporizing type 17 Nose wheel steering actuator 70 Front fuselage/centre fuselage 144 Turbine stage 99 Aileron structure 18 Nose wheel steering cables follow-up 100 Aileron full-length piano hinge production break line 145 Afterburner 71 Centre fuselage/duct bay production 101 Aileron belicrank levers and 146 Afterburner variable nozzies 19 Nose wheel steering cables break line control links 147 Afterburner variable nozzles actuators 102 Underside control-link fairings 20 Nose landing gear retraction actuator 72 Dorsal fairings 148 Engine accessories 21 Nose landing gear fairing 73 Air conditioning discharged air 103 Aileron control rod 149 Engine tunnel 22 Electrical ground servicing supply deflector shield 150 Engine rear alignment fitting 74 Fuel tank No. 1 - 252 Imp. gals point 23 Pilot's compartment floor (1,145 litres) 24 Pilot's control column 75 Fuel tank No. 2 - 254 Imp. gals 25 Pilot's rudder pedals (1.155 litres) 26 Radar scope viewing hood 76 Fuel tanks No. 3 (each wing) 27 Pilot's instrument panel and radar - 151 Imp. gals (686 litres) 77 Fuel tanks No. 4 (each wing) scope 90 Imp. gals (409 litres) 28 Pilot's windshield 29 Pilot's clamshell-type canopy 78 Fuel tanks No. 5 (each wing) - right side shown - 146 Imp. gals (664 litres) 30 Observer's clamshell-type canopy No. 5 tanks are collector tanks right side shown 79 Fuel tanks No. 6 (each wing) 31 Canopy closed line 154 Imp. gals (700 litres) 32 Engine throttle levers - left and right 80 Fuel tanks No. 7 (each wing) - 279 lmp. gals (1268 litres) 33 Pilot's side panel - both sides 81 Fuel tanks No. 8 (each wing) 34 Martin Baker Mk 5C ejector - 173 Imp. gals (787 litres) seat - pilot 35 Martin Baker Mk 5C ejector seat - observer 36 Observer's side panel - both sides 151 Engine alignment centre fitting - rear. 37 Pilot's rear bulkhead - sloping Front fitting similar 38 Observer's rear bulkhead - sloping 152 Main landing gear - track = 30 ft 2.5 inches 39 Canopy centre arch 153 Dual main wheels - mounted in tandem 40 Canopy rear arch 41 Air conditioning system ram air duct on a bogie beam. (As gear retracts, a telescopic tie-rod (154) forces bogie 42 Ram air supply to air conditioning heat exchanger beam downward at the forward end 43 Air conditioning equipment bay via operating horn (155) to rotate wheels into position for nesting in 44 Air conditioning discharged air duct 45 Engine ram air intake ramp wheel bay) 154 Telescopic tie-rod 46 Intake ramp boundary layer air Editor's Note: This drawing has been prepared 155 Bogie beam operating horn bleed-off holes 47 Intake ramp boundary layer air 156 Bogie beam pivot point ot reflect any particular airplane 157 Main landing gear torque links 121 Pitot/static pressure heads plenum chamber 158 Main landing gear leg 48 Bleed air outlet guide vanes 122 UHF/L-Band antenna 49 Intake ramp boundary air bleed 123 Vertical stabilizer navigation lights 159 Main landing gear leg fairing 160 Main landing gear cross shaft 107 Elevators extractor 124 X-Band and IFF air-to-air 108 Elevator construction 161 Main landing gear back stay transponder antennas 109 Elevator full-length piano hinge 162 Main landing gear telescopic side stay 125 Rudder 110 Elevator bellcrank levers and 126 Rudder hinge points - typical 163 Main landing gear retraction actuator (A 4,000 psi auxiliary hydraulic control links 127 Rudder control links - typical 111 Elevator control rod system is used for the landing gear. 128 Rudder shroud covers - spring loaded 112 Elevator main bellcrank lever This permits the use of small 129 Rudder actuator 113 Elevator hydraulic actuator actuators capable of being installed 130 Rudder actuator access panel Arrow Mk II operated via control 131 Rudder hinge limiter access panel within the confines of the reducedcables from pilot's column chord wing section) 132 Rudder position transmitter 114 Elevator control quadrant 50 Ram cooling air supply to engines 164 Main landing gear door 133 Rudder fairing 115 Elevator control push-pull rod 165 Electronic equipment in the dorsal 51 Engine air intake ducts 134 Parabrake doors 52 Left side access panel to Astra I 135 Parabrake assembly - pilot chute, main tunnel - IFF air- to-air transponder. 116 Elevator control box electronic equipment - hinged at 117 Vertical stabilizer leading edge flight sensing equipment and canopy and deployment bag

lower longeron

53 Centre access panel to Astra I

electronic equipment

118 Vertical stabilizer construction

119 Vertical stabilizer tip - glass fibre

120 Vertical stabilizer attachment points

136 Engine nacelle

137 Engine bay

138 Duct bay

14.163-0054

ADF sense antenna, etc.

break line

166 Engine bay/rear fuselage production