**Red Arrows BAe Hawk**

**Start-up Procedures**

**Left Console**Battery Switches - On
LP Cock - Fully On
Engine start switch - Off
Fuel pump switch - On
Pitot heater switch - Off
Trim indicators - Normal
Ignition Switch - On
Throttle - Free movement
Anti-skid switch - Off
Standby UHF switch - MAIN
Hyd 1 & 2 gauges - Check condition
Brake Gauges - Check pressures

**Left Instrument Panel**
U/C standby handle - Not pulled
Flap standby handle - Not pulled
Landing gear indicator - 3 greens
Voltmeter - 23 to 24 volts
Flap selector - Down
Flap indicator - Check indication with flap position
DGI - Check condition
CSI - Check condition
Turn and slip indicator - Check condition, window black
Tailplane trim indicator - Check condition
Accelerometer - Reset
Main attitude indicator - Check condition, flag retracted
HSI - Check condition, power flag restracted
ILS marker light - Test
UHF power switch - Normal
VSI - Zero, check condition
Main altimiter - check condition, flag retracted
SAI - Erect, flag restracted
Standby instruments switch - Normal

**Right Instrument Panel**
Standby altimeter - Check condition, flag restracted
Cabin altimeter - Check condition
Oxygen - OXY caption out
Fuel gauge - Check contents
TGT - Check condition
RPM Gauge - Zero, check condition
Rotation indicator - Black
GTS Indicator - Black
CWP - Test (remain on)
Red indicators - HYD GEN
Yellow indicators - HYD1 HYD2 TRANS FRP SKID OIL AC1 AC2 AC3
Lighting switches - set as required
Dimmers - set as required

**Right Console**
Parking brake - Set
VHF - Set as required
UHF Aerial Switch - Set as required
ILS - Set as required
Tacan - Set as required
Radio - Set as required
Cabin conditioning - Set to Normal
Cabin air temperature switch - Set to Auto
ADR status indicator - FAIL
IFF/SSR - SBY

**Pre-Start**
Engine start switch - Set to ON
Anti-collision lights - Set as required (Down=red Mid=off Up=white)

**Starting**
Relight button - Press and release
Throttle - set to idle

**During Start**
TGT and RPM - Monitor (if TGT > 570degC, set throttle to HP off)
At 45% RPM - GTS and rotation indicators black

**When RPM Stabilised**
Fire Warnings - Out
RMP - 52% approximate note reading
TGT - Note
OIL FPR TRANS warnings - Check out
Throttle - Close bleed valve
Hydraulics - Check control response and feel normal on HYD1
Electrics - GEN AC1 AC2 AC3 warnings - Check out
Voltmeter - 27-29 volts
CWP - All unlit except SKID

**After Start Checks**
Trims - Check tail plane, rudder and aileron in both directions
Tailplane external position - Confirm alignment, set elevator trim to +3deg
Flaps - Check operation, select Mid
All warning flags clear and erect
Synchronize compass
Pitot heat - set to On
Standby compass - Check
DGI - Set
Altimeters - Set and test
IFF - Set and test
ILS - Set as required
XMT - Set and test
ADR - Black
Tacan - Set as required and test
Oxygen - Check contents, set valve to On, OXY light out
Canopy - Closed and locked
Hydraulics - Check pressures within limits
Controls - Full free correct movement
Anti-skid - Set to On, check SKID light out