

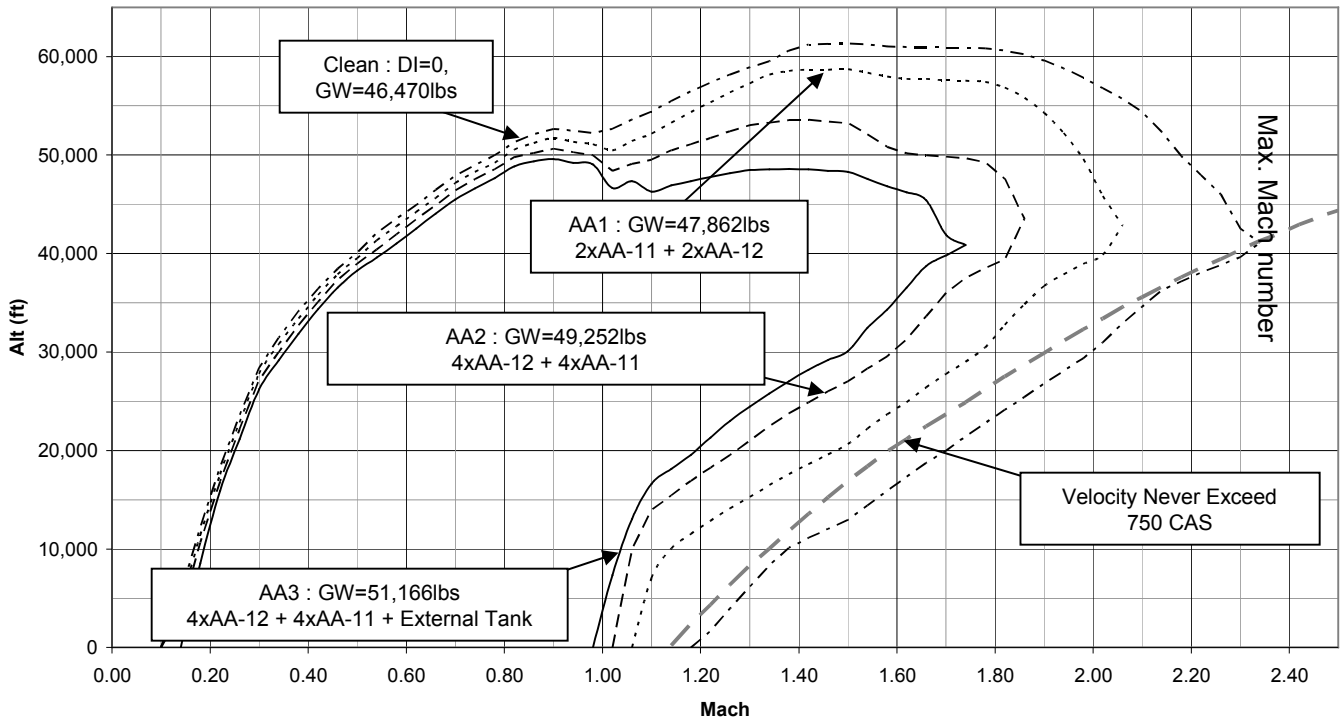
Level Flight Envelope Su-27 Flanker B

Level Flight Envelope



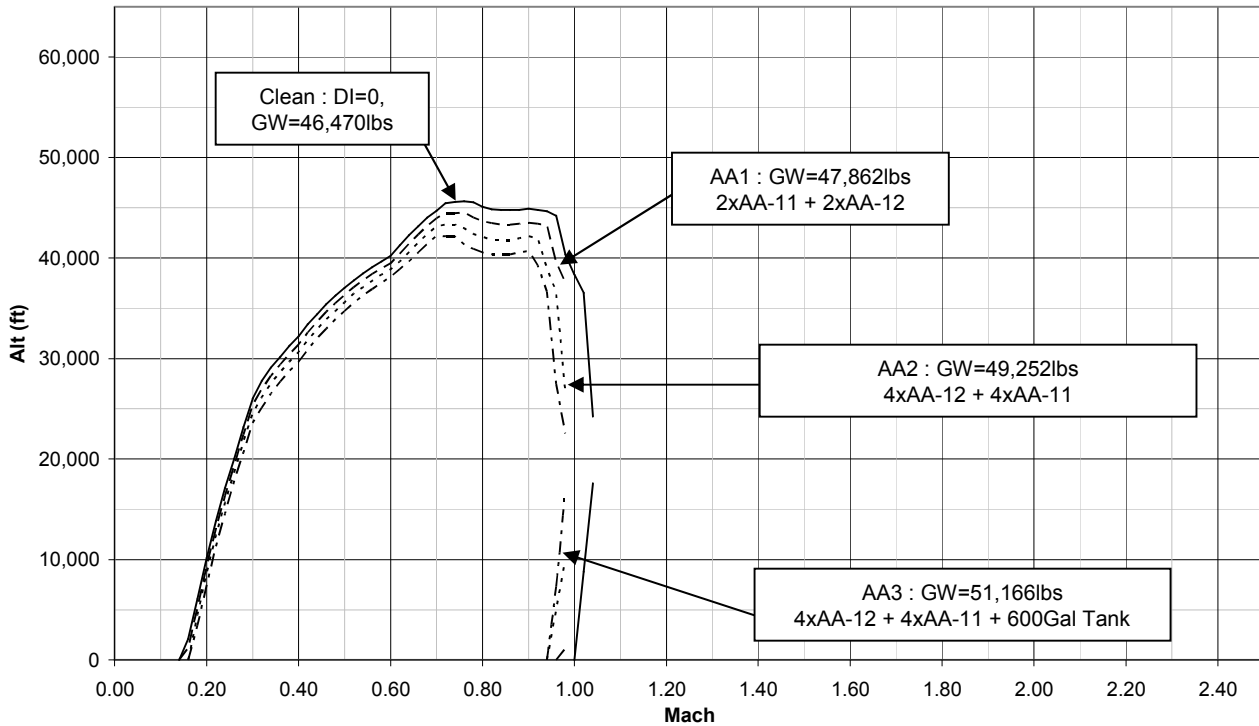
DATA BASIS : ESTIMATED
CONDITIONS:
 •Standard Day
 •Max AB

Aircraft : Su-27 Flanker B
Engine :AL-31F



DATA BASIS : ESTIMATED
CONDITIONS:
 •Standard Day
 •MILL Power

Aircraft : Su-27 Flanker B
Engine :AL-31F

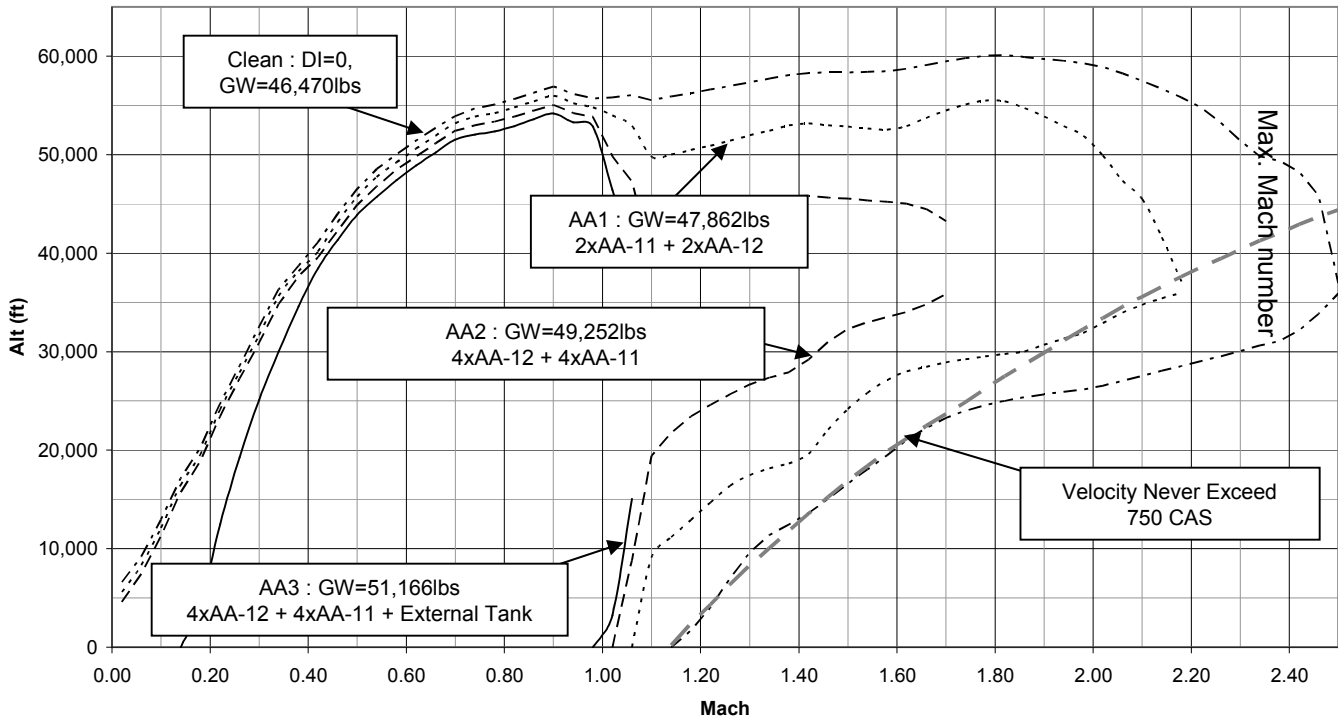


Level Flight Envelope



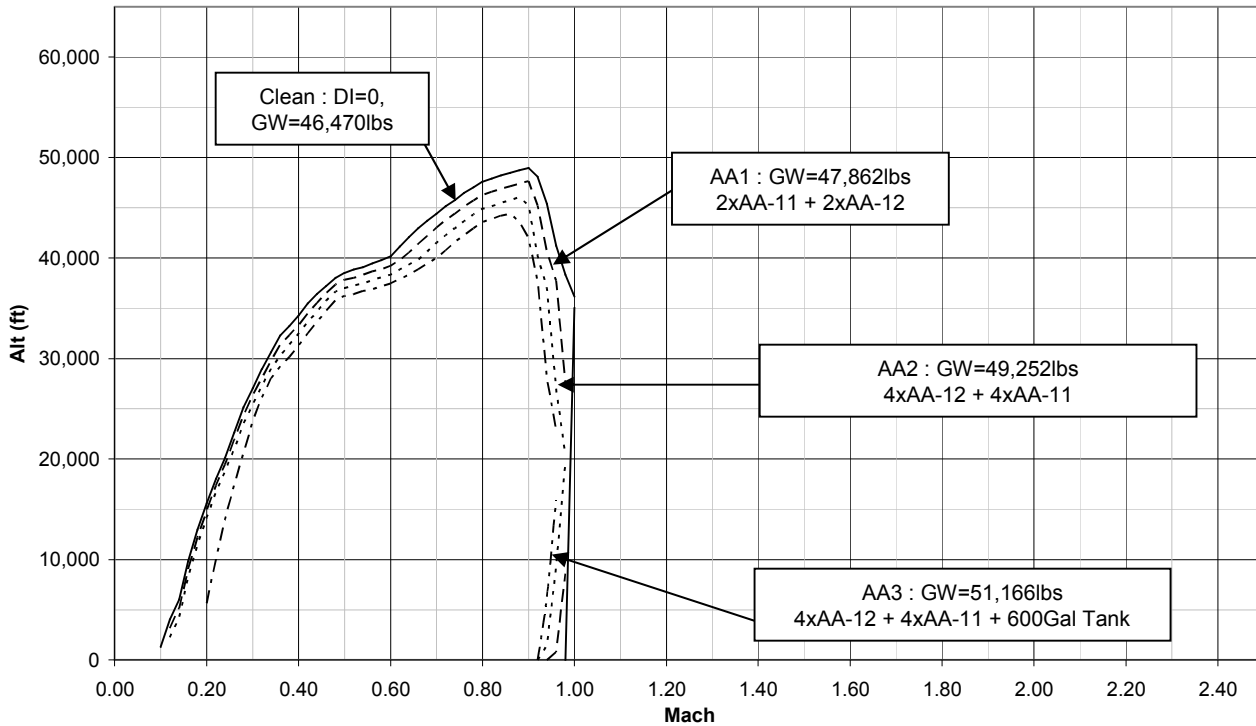
DATA BASIS : ESTIMATED
CONDITIONS:
 •Standard Day
 •Max AB

Aircraft : Su-27 Flanker B
Engine :AL-31F



DATA BASIS : ESTIMATED
CONDITIONS:
 •Standard Day
 •MILL Power

Aircraft : Su-27 Flanker B
Engine :AL-31F

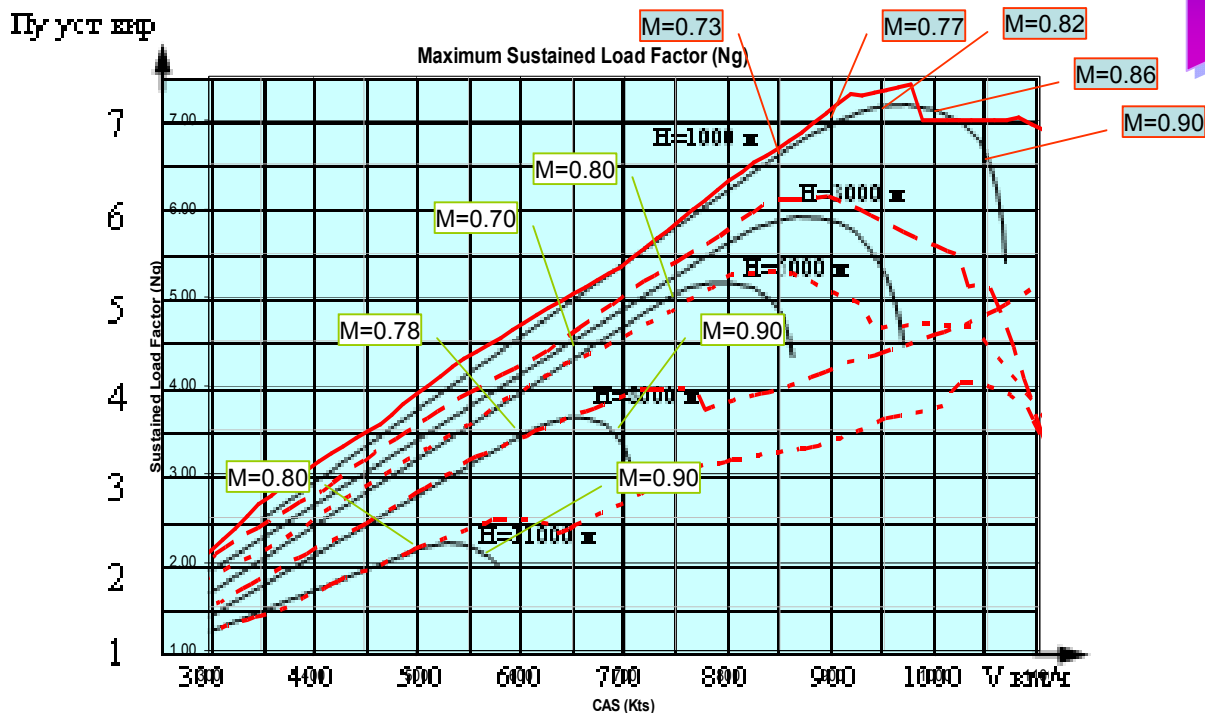


Turn Performance

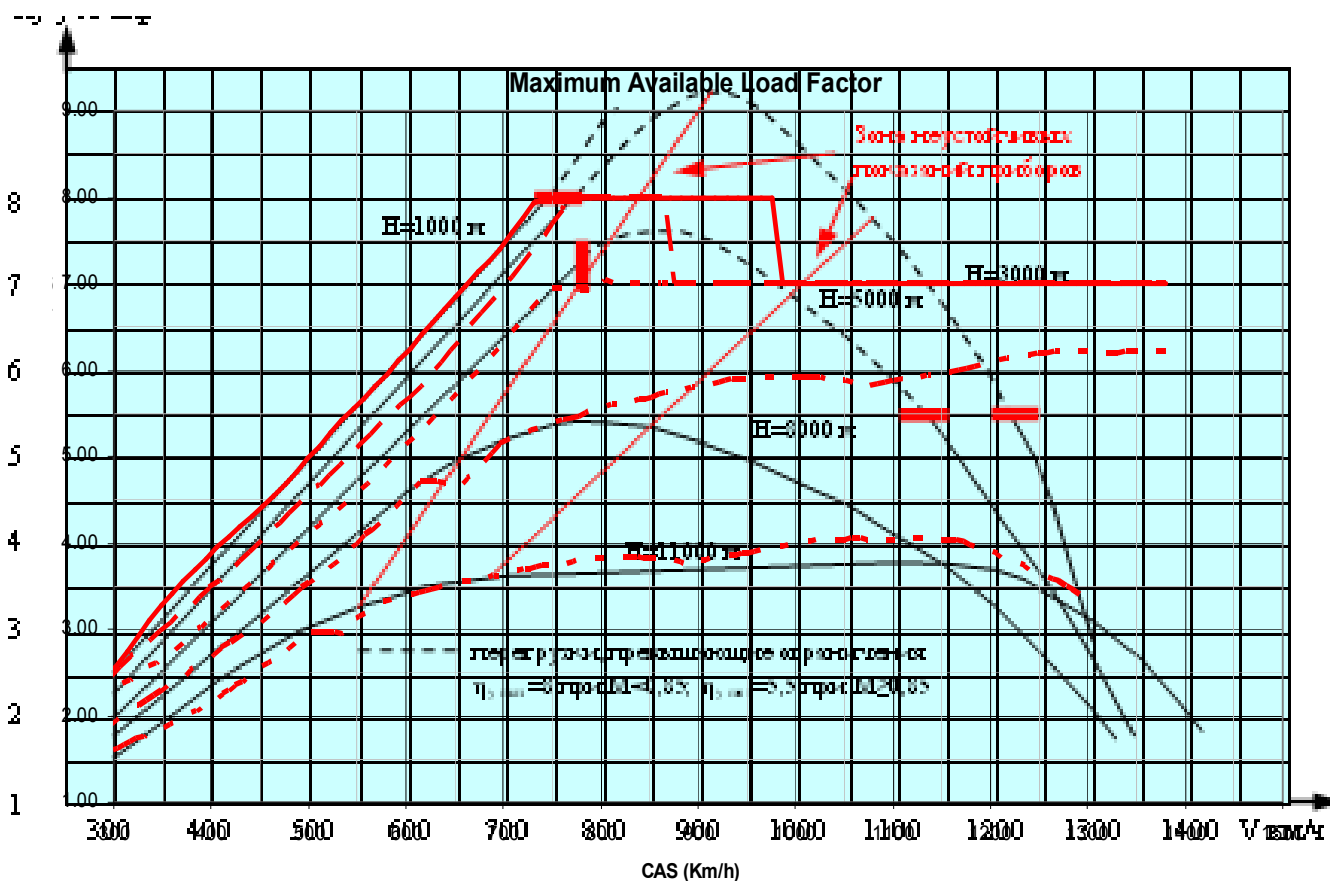
Aircraft : Su-27 Flanker B
Engine :AL-31F

CONFIGURATIONS :

- 2xAA-11 + 2xAA12**
- DRAG INDEX = 41**
- GW= 47,850 lbs**



Red curves describe performance of the Falcon flight model when black curves are extracted from Flight Manual



Turn Rate – Summary



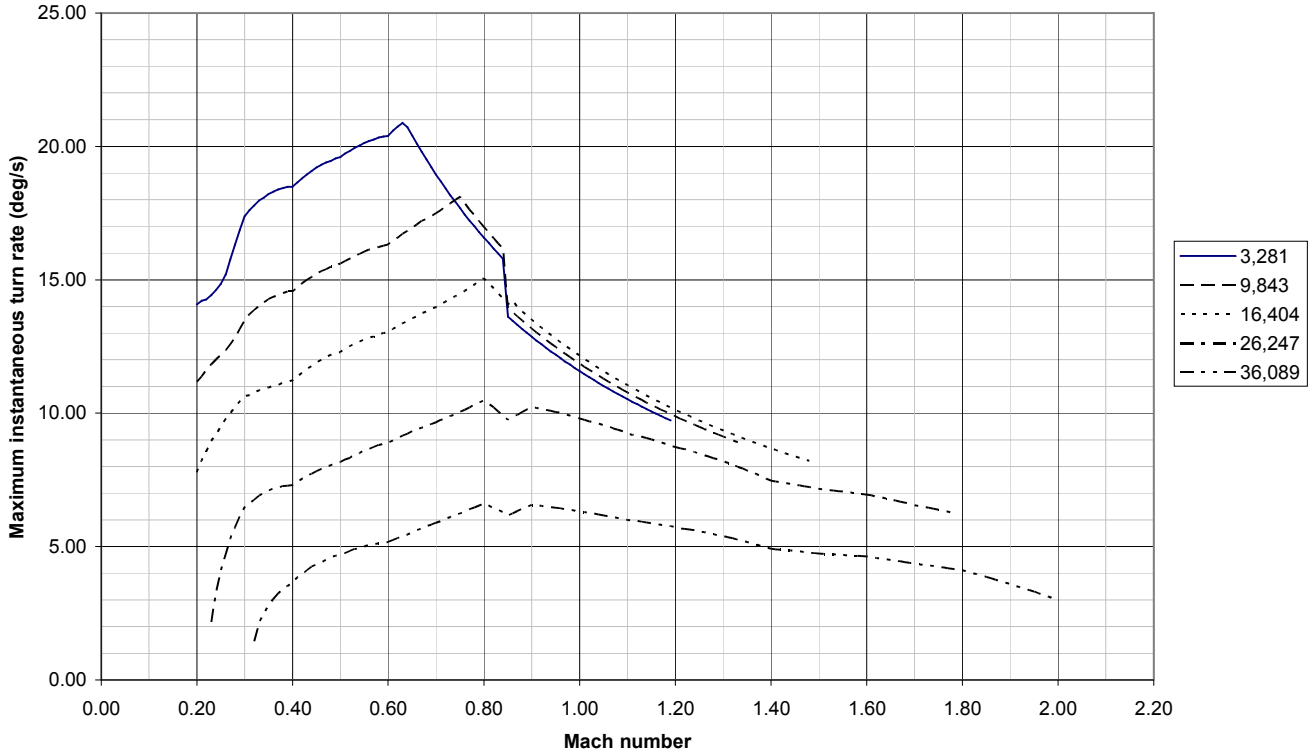
DATA BASIS : ESTIMATED

Aircraft : Su-27 Flanker B
Engine :AL-31F

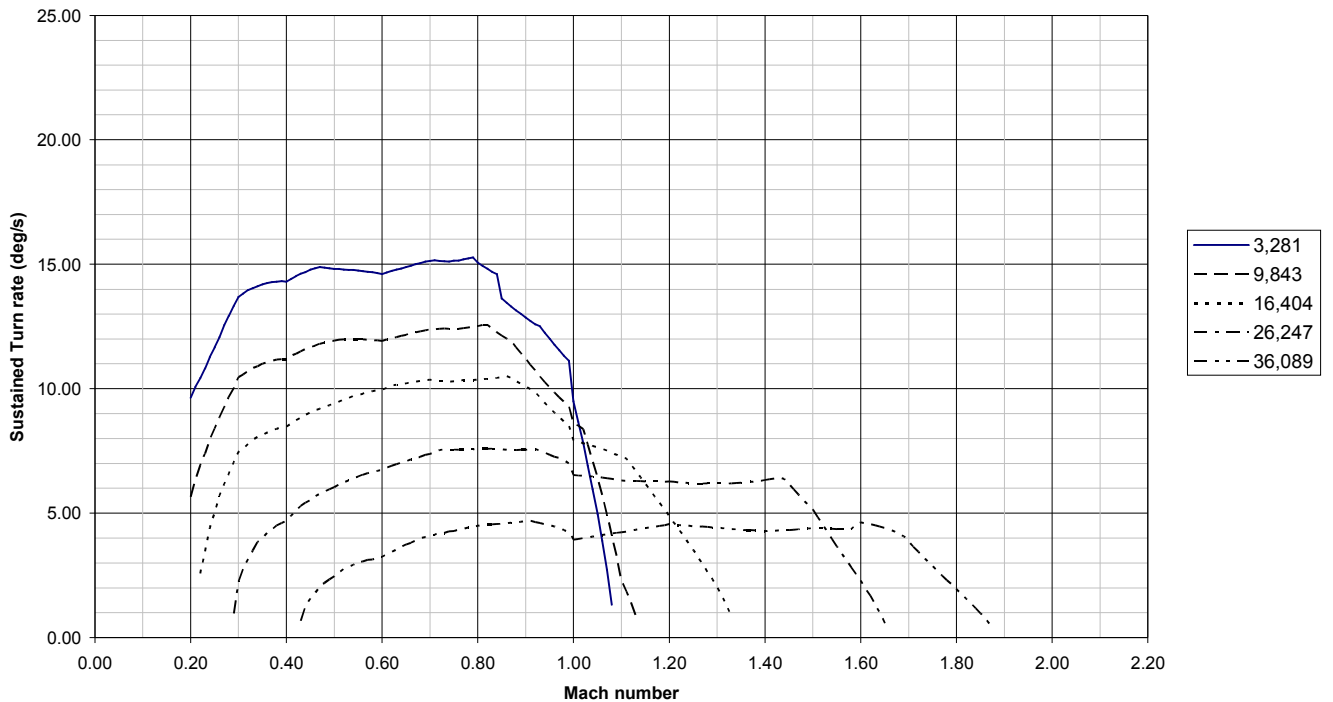
CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS : AA1
•DRAG INDEX = 41
•GW=47,850 lbs

Maximum Available Turn Rate



Maximum Sustained Turn rate (deg/s)



Turn Rate – Summary



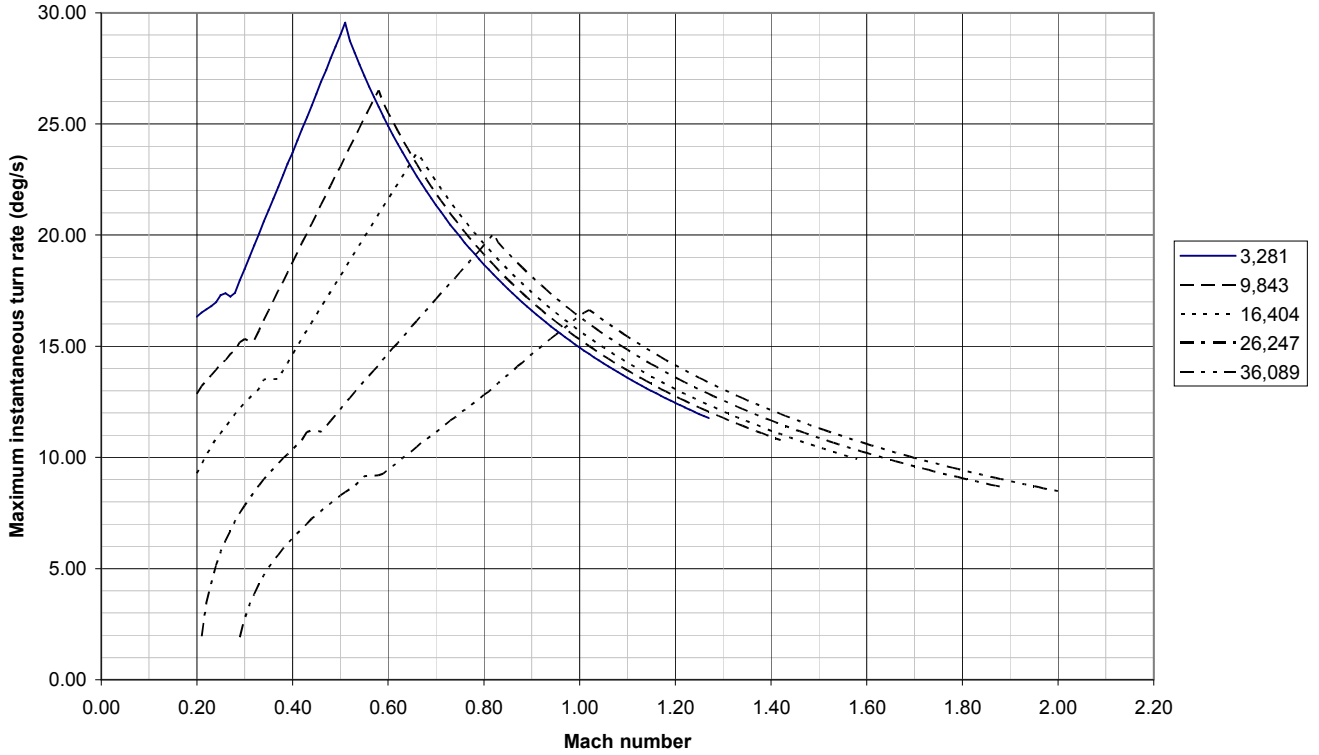
DATA BASIS : ESTIMATED

Aircraft : Su-27 Flanker B
Engine :AL-31F

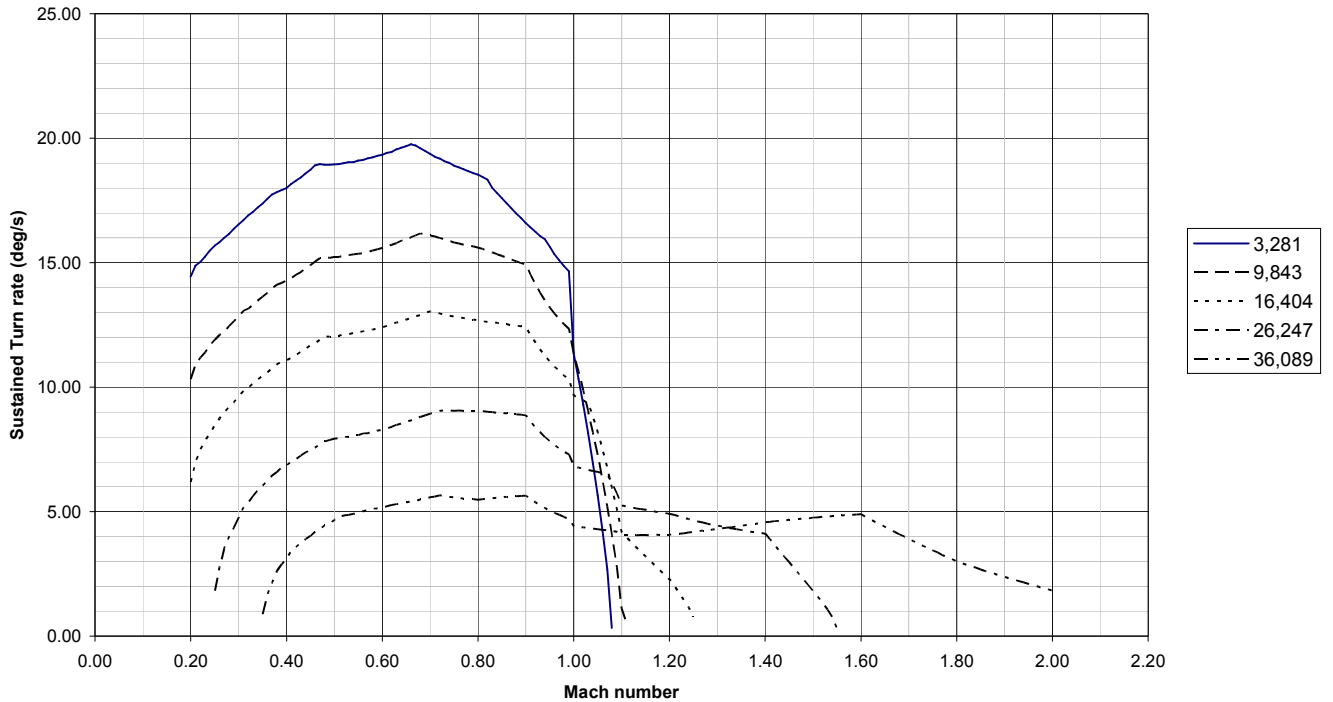
CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS : AA1
•DRAG INDEX = 41
•GW=47,850 lbs

Maximum Available Turn Rate



Maximum Sustained Turn rate (deg/s)



Load Factor – Summary



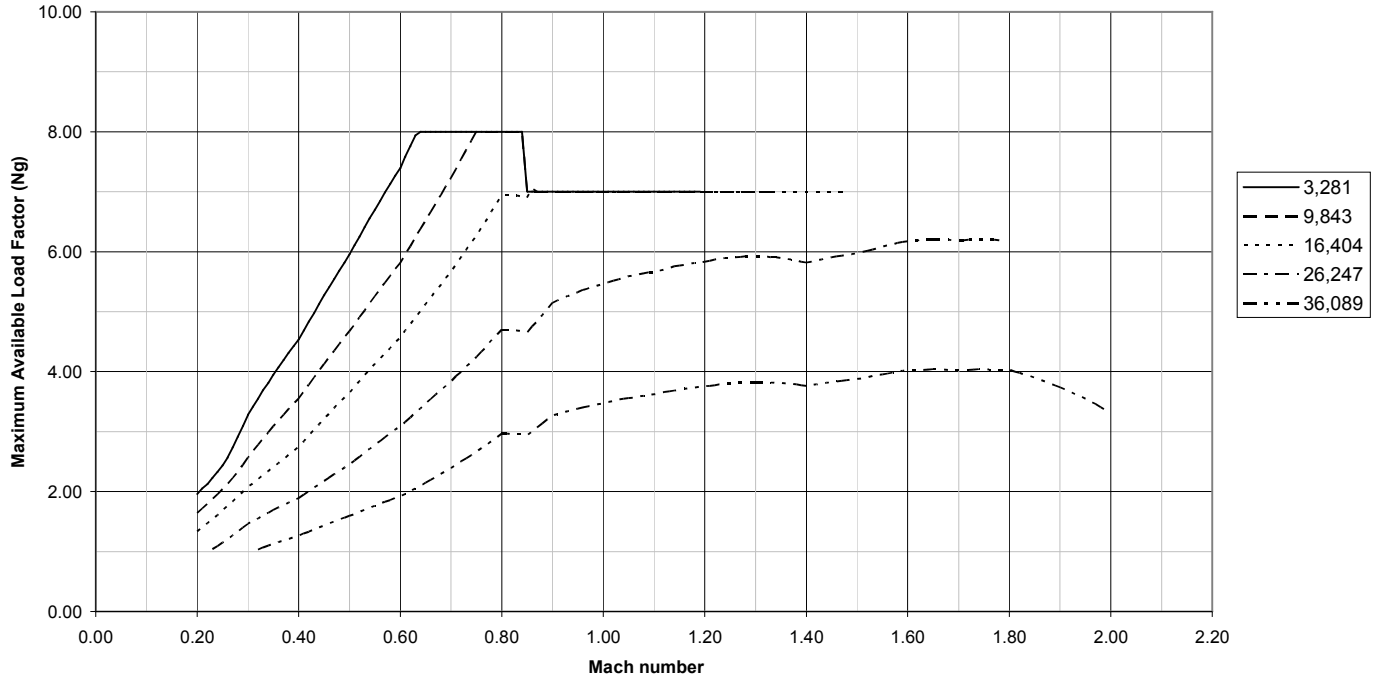
DATA BASIS : ESTIMATED

Aircraft : Su-27 Flanker B
Engine :AL-31F

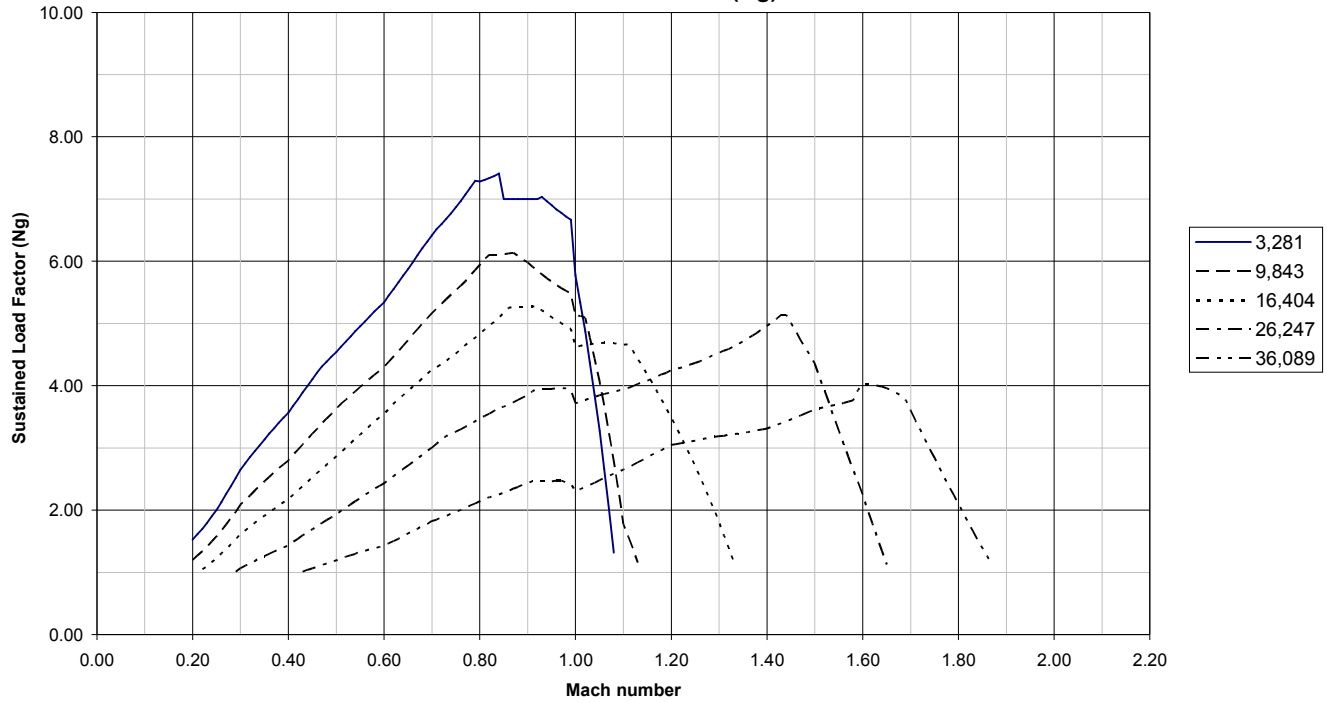
CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS : AA1
•DRAG INDEX = 41
•GW=47,850 lbs

Maximum Available Load Factor



Maximum Sustained Load Factor (Ng)



Load Factor – Summary

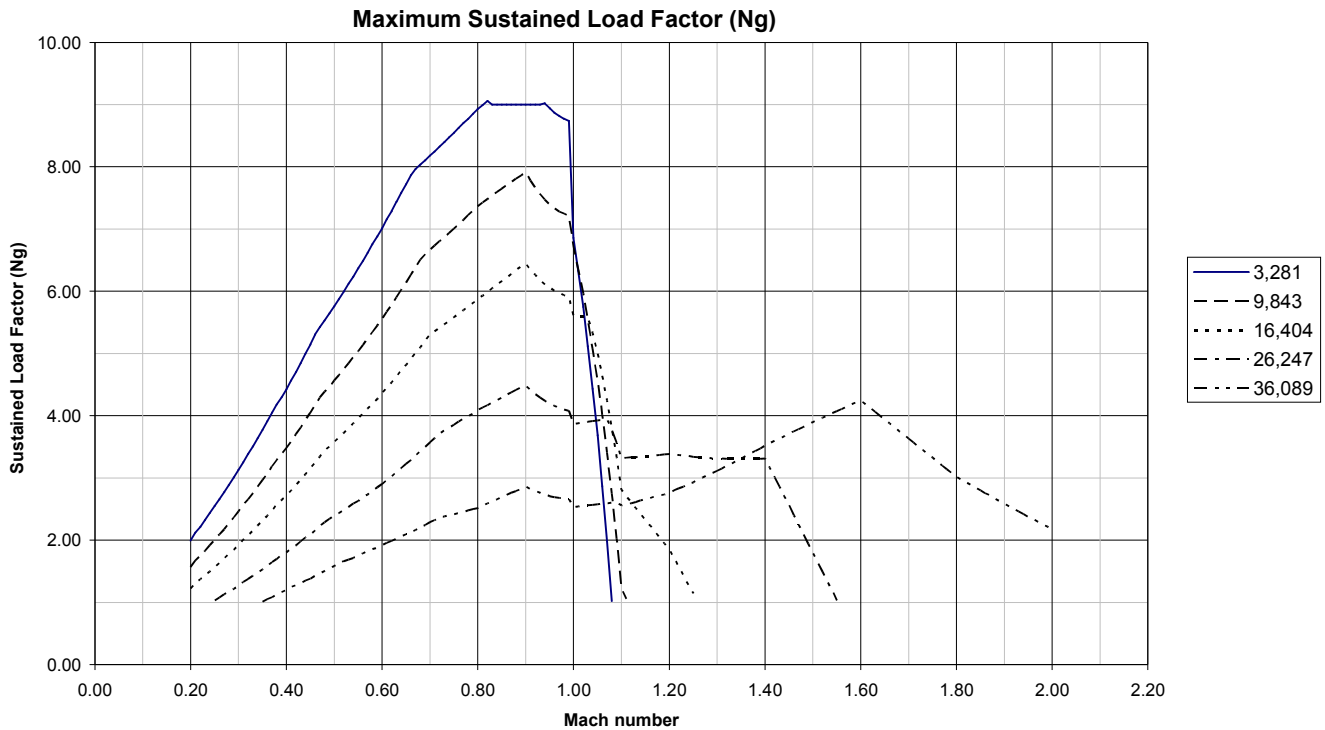
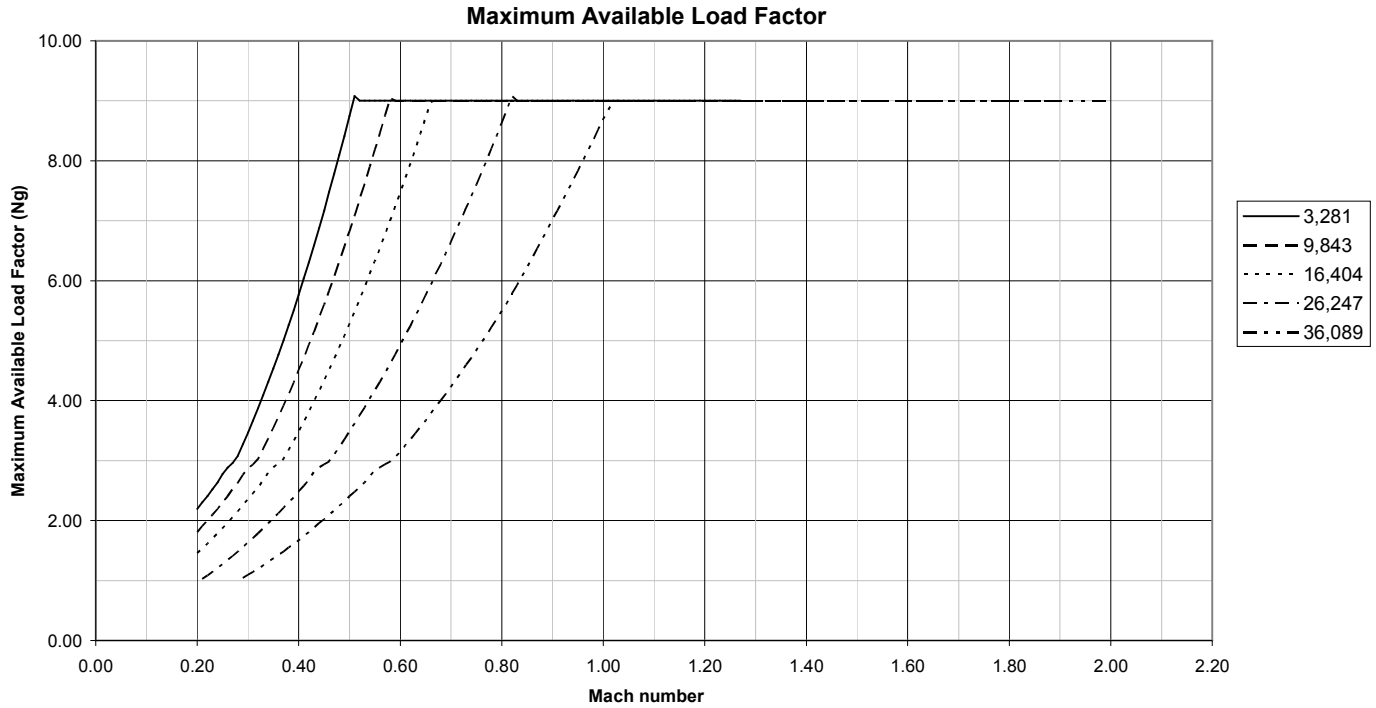


DATA BASIS : ESTIMATED

Aircraft : Su-27 Flanker B
Engine :AL-31F

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS : AA1
•DRAG INDEX = 41
•GW=47,850 lbs



Climb Performance

DATA BASIS : ESTIMATED

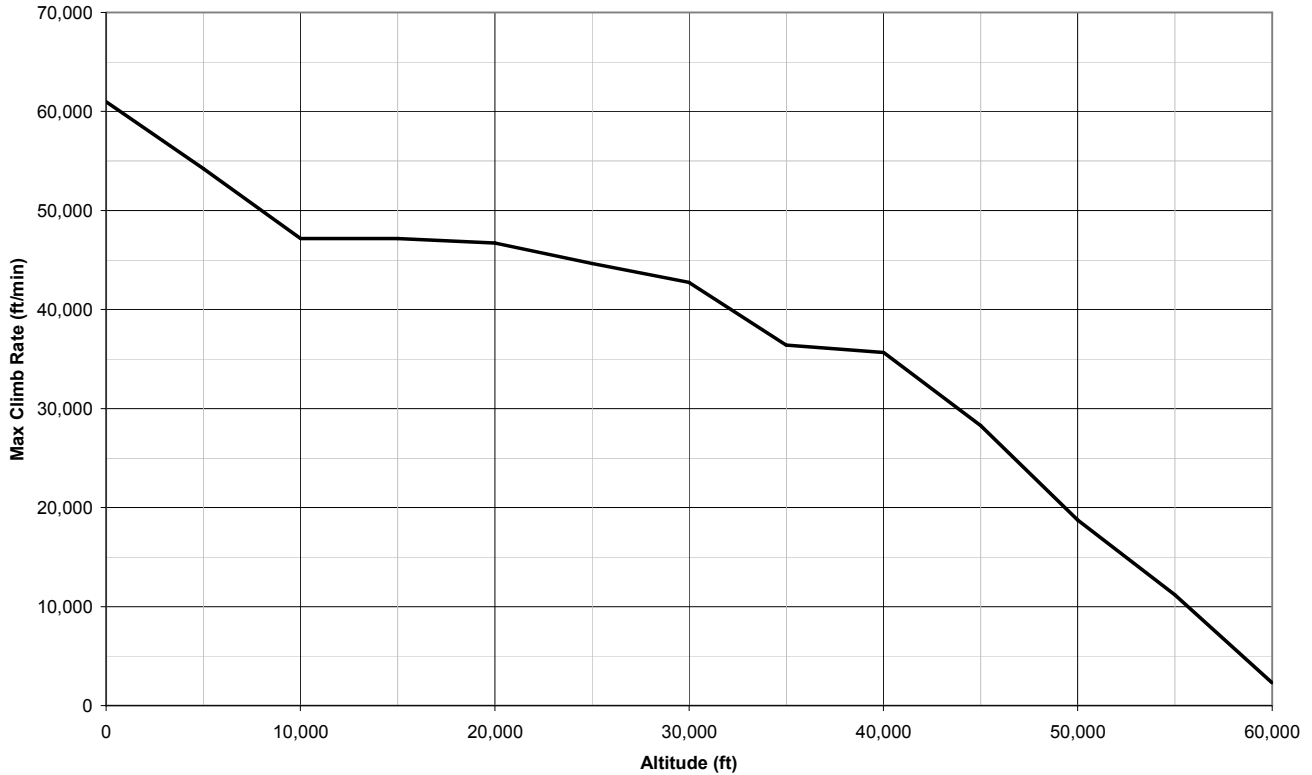
Aircraft : Su-27 Flanker B
Engine :AL-31F



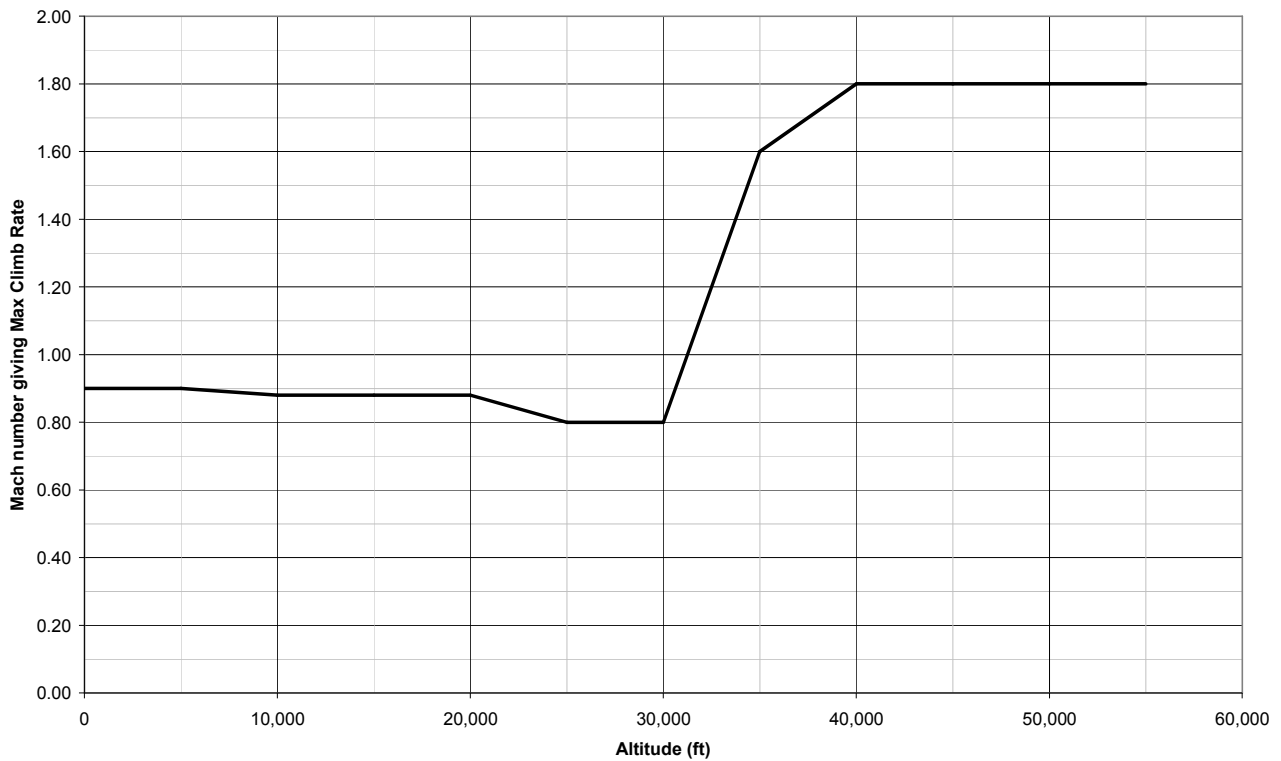
CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS : Clean
•GW=46,470 lbs

Maximum Instantaneous Climb Rate



Mach number given best Climb Rate



DATA BASIS : ESTIMATED

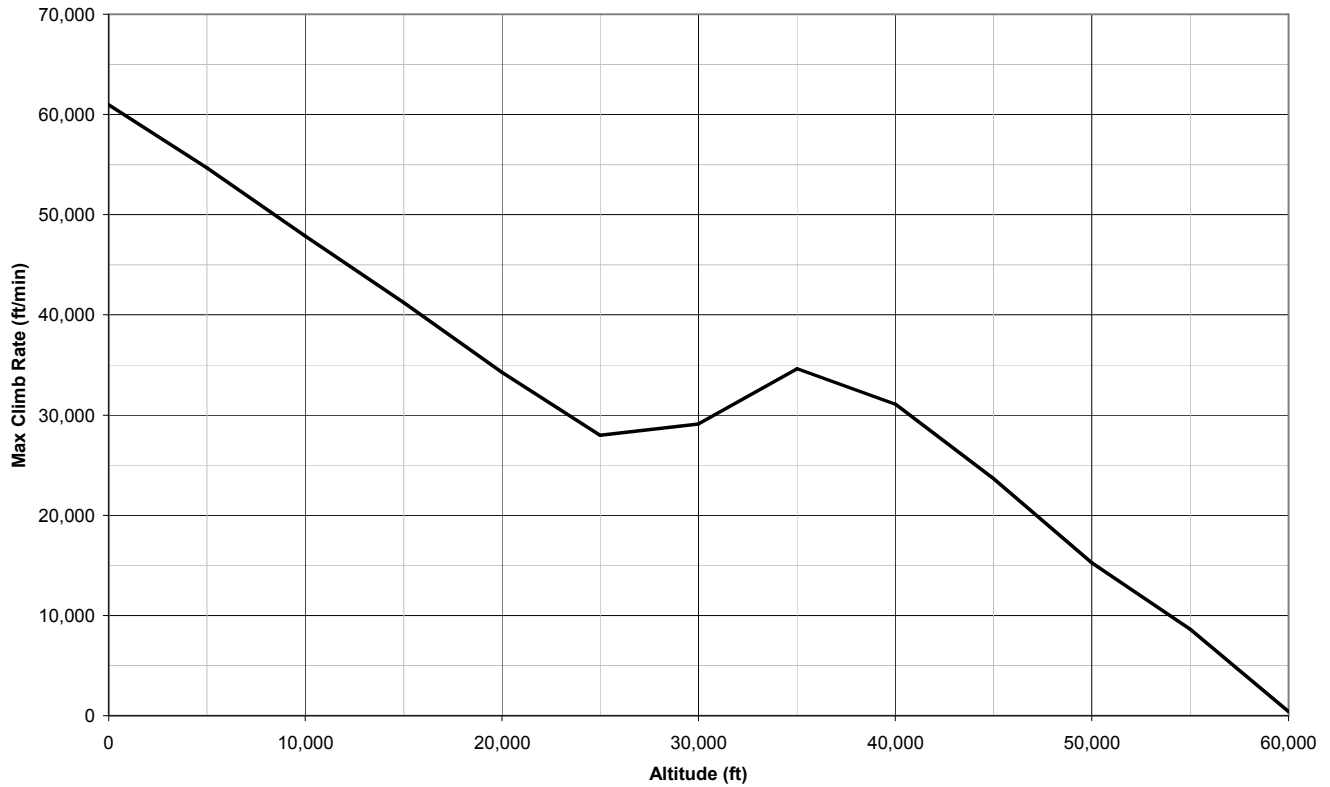
Aircraft : Su-27 Flanker B
Engine :AL-31F



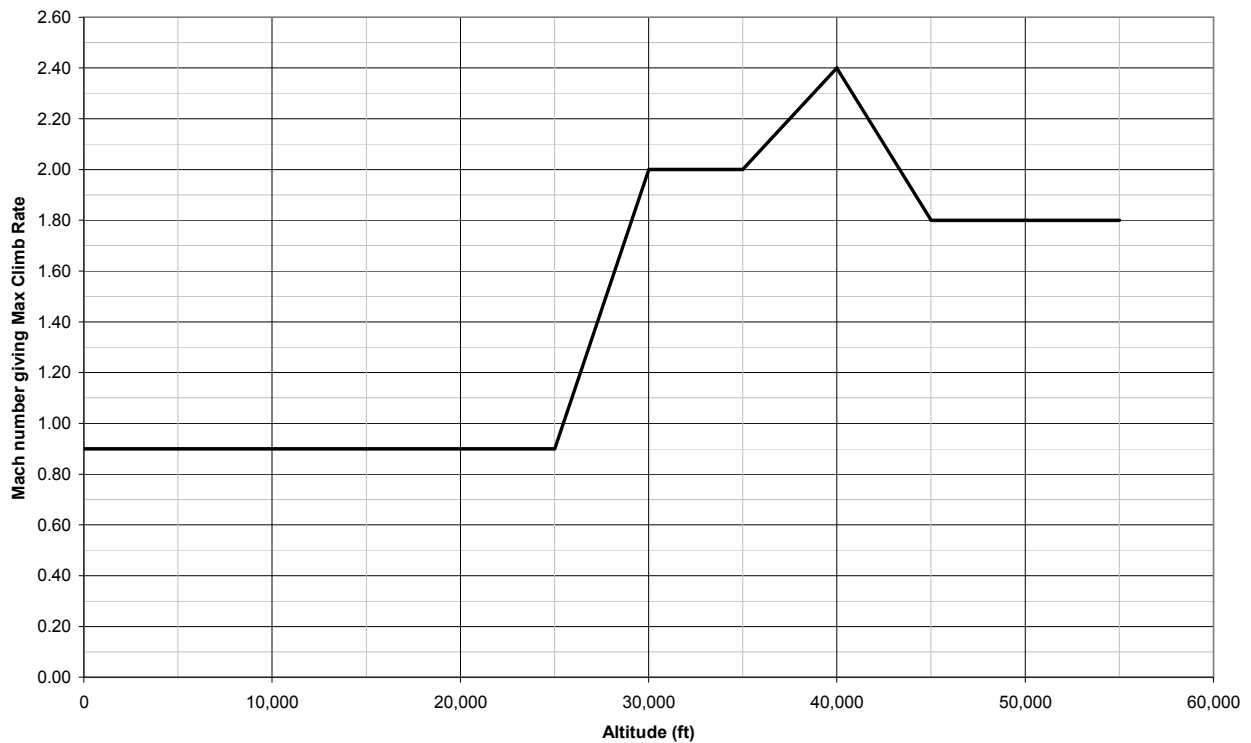
CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS : Clean
•GW=46,470 lbs

Maximum Instantaneous Climb Rate



Mach number given best Climb Rate





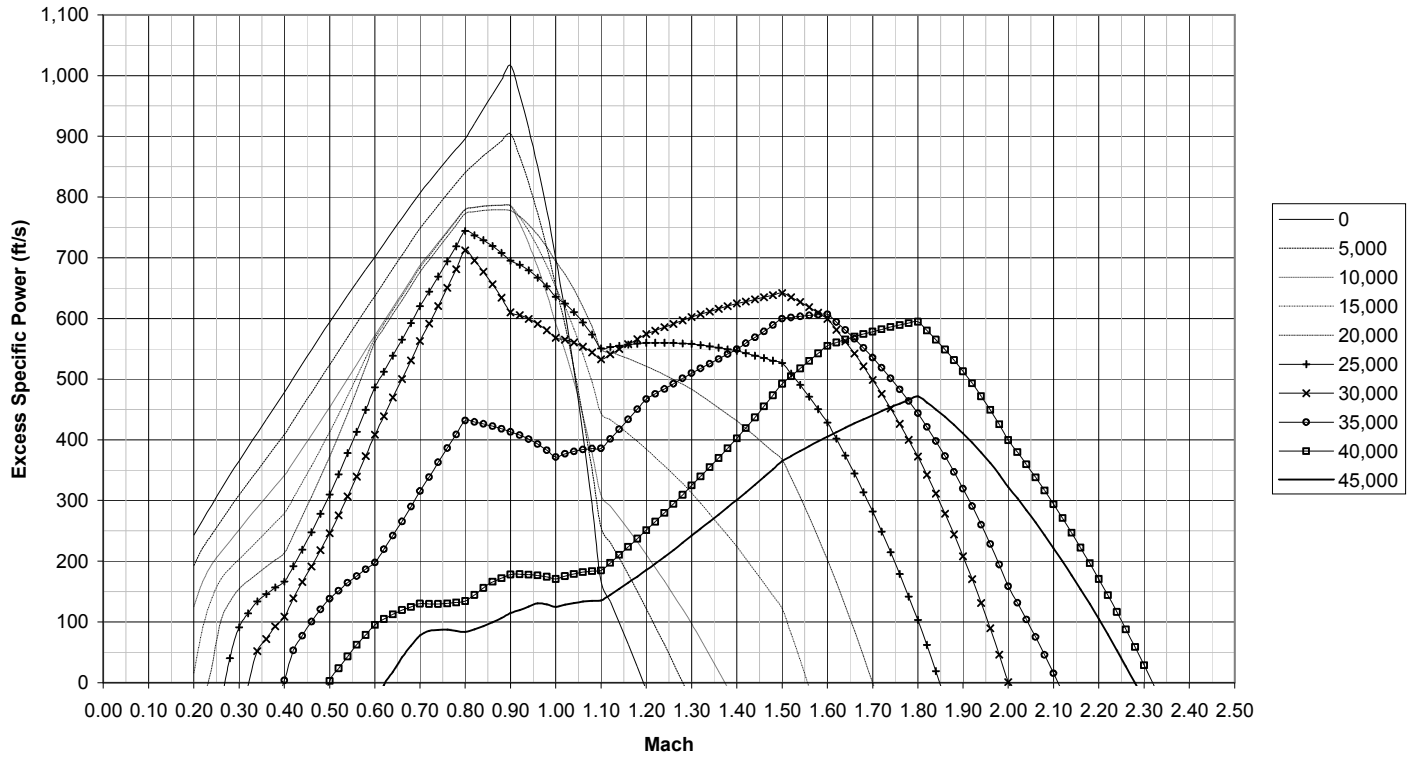
DATA BASIS : ESTIMATED

Aircraft : Su-27 Flanker B
Engine :AL-31F

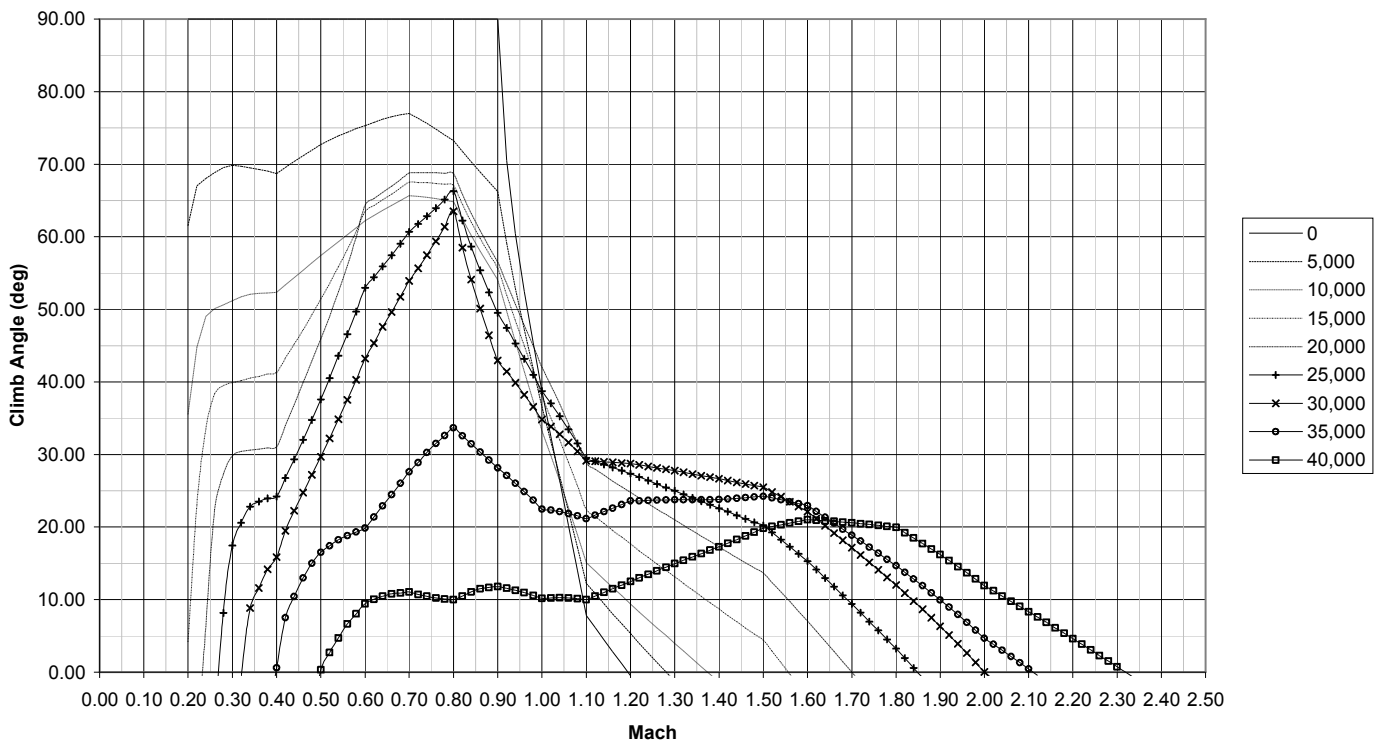
CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS : Clean
•GW=46,470 lbs

Climb Rate



Climb Angle





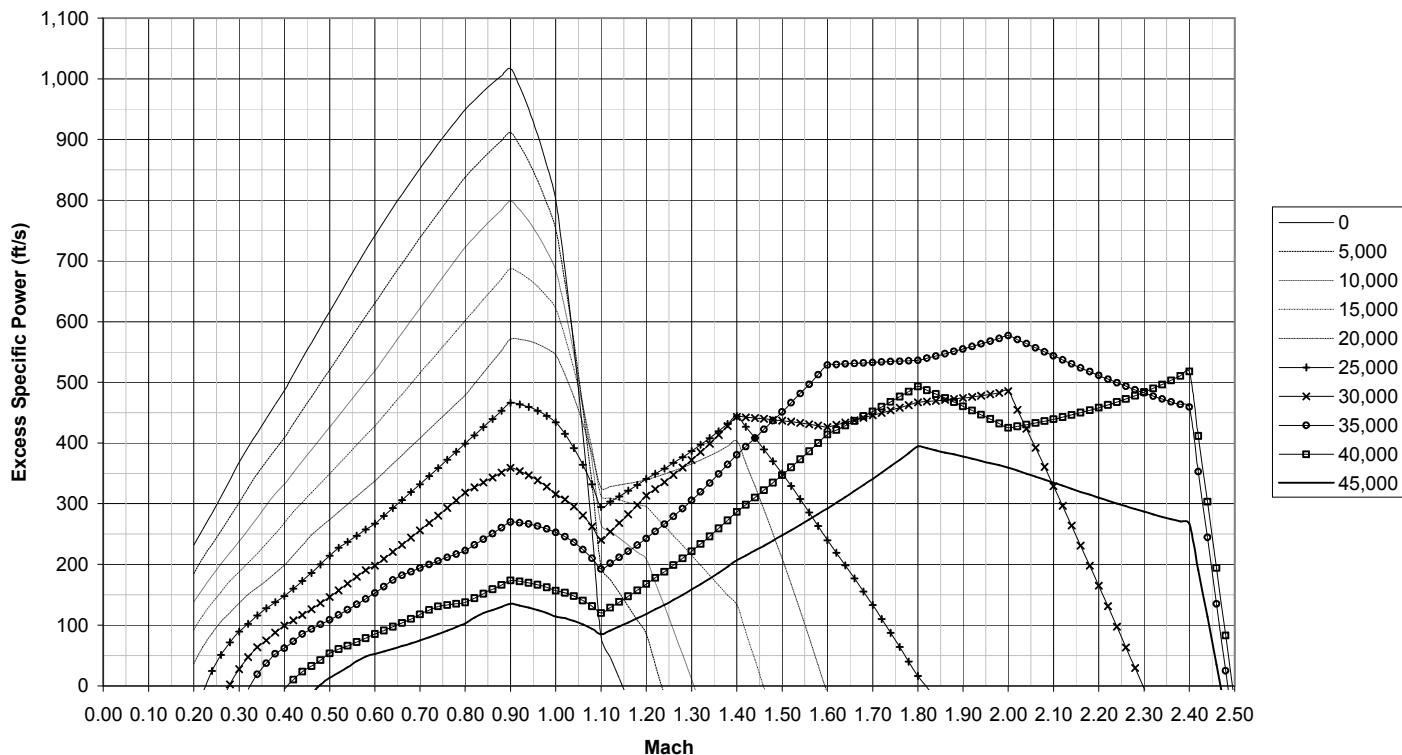
DATA BASIS : ESTIMATED

Aircraft : Su-27 Flanker B
Engine :AL-31F

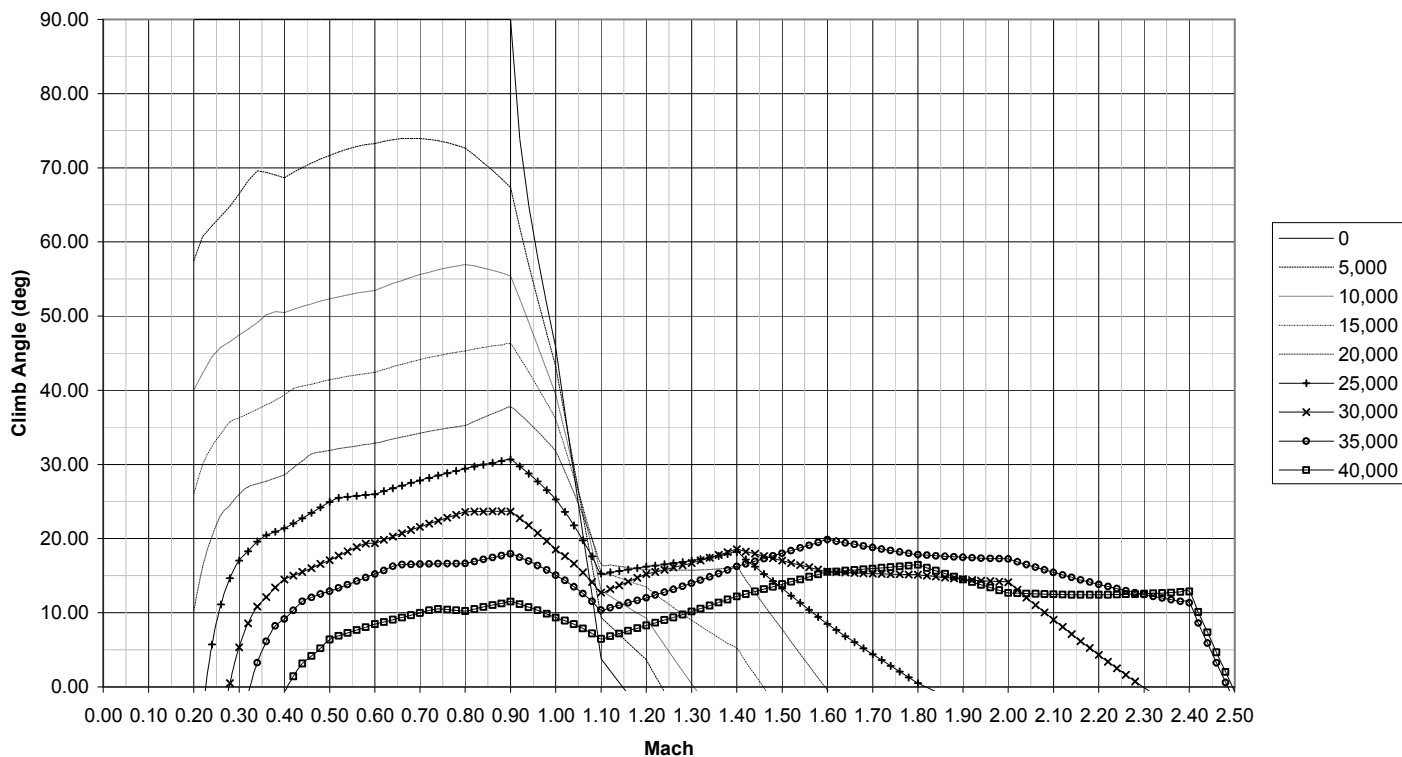
CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS : Clean
•GW=46,470 lbs

Climb Rate



Climb Angle





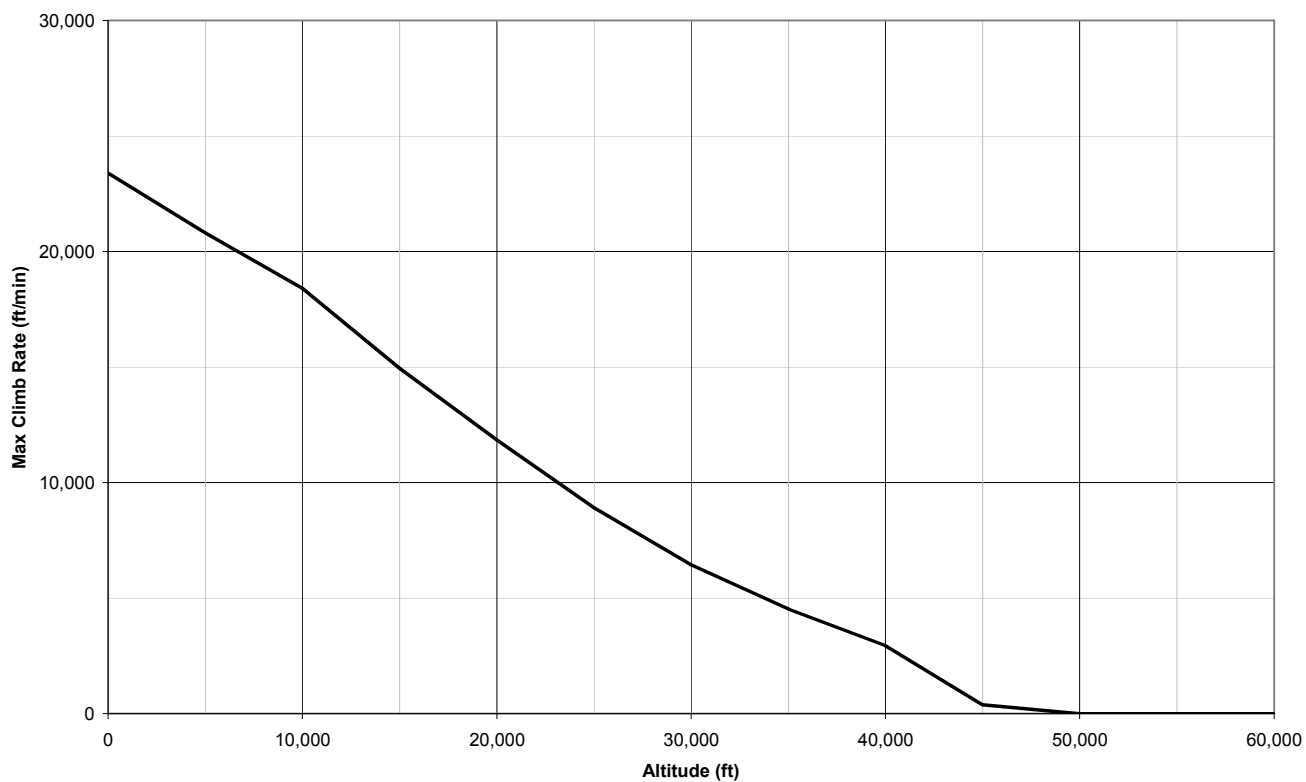
DATA BASIS : ESTIMATED

Aircraft : Su-27 Flanker B
Engine :AL-31F

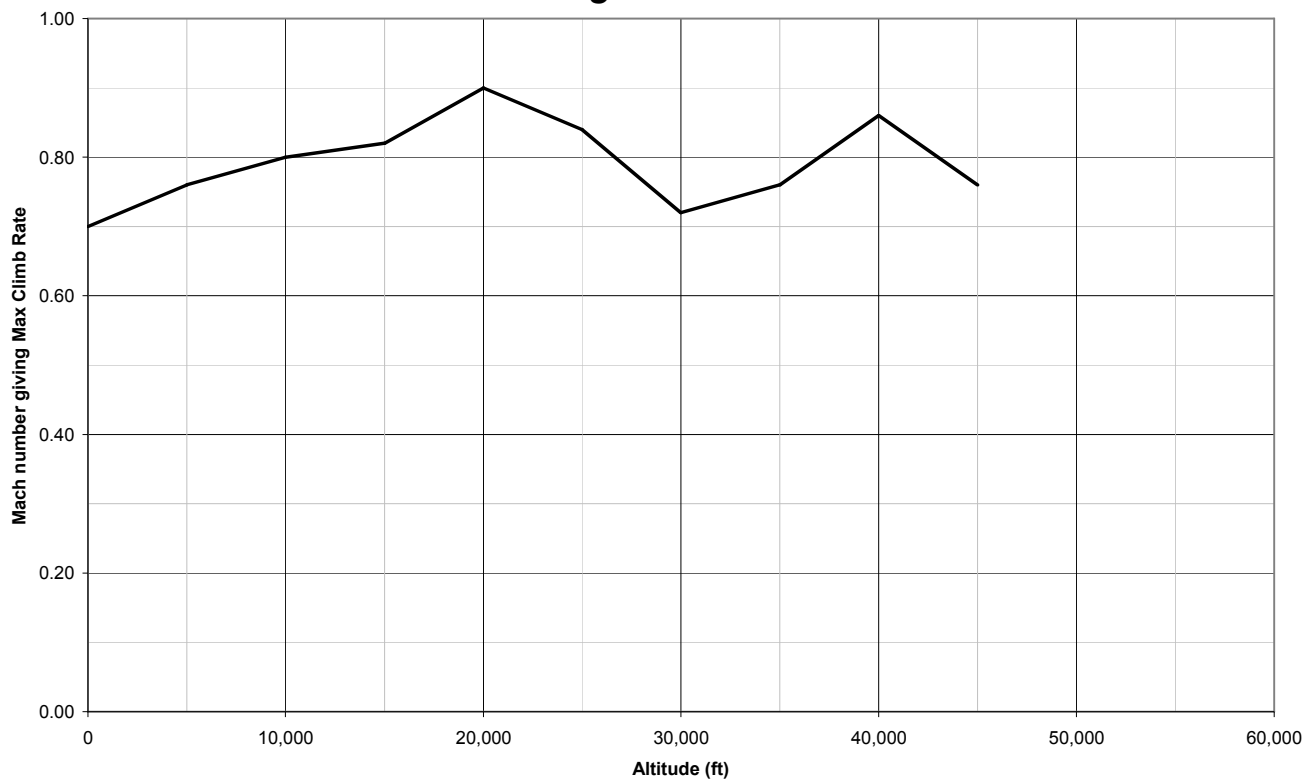
CONDITIONS:
•Standard Day
•MIL Power

CONFIGURATIONS : Clean
•GW=46,470 lbs

Maximum Instantaneous Climb Rate



Mach number given best Climb Rate





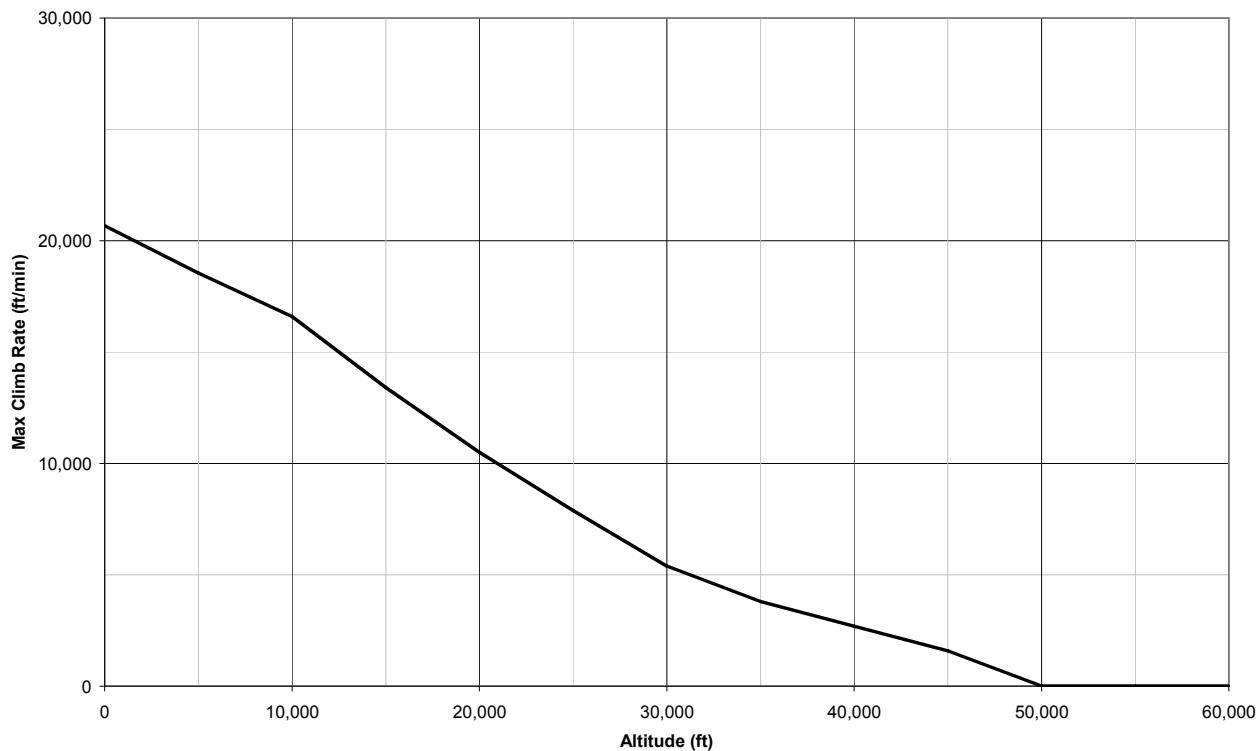
DATA BASIS : ESTIMATED

Aircraft : Su-27 Flanker B
Engine :AL-31F

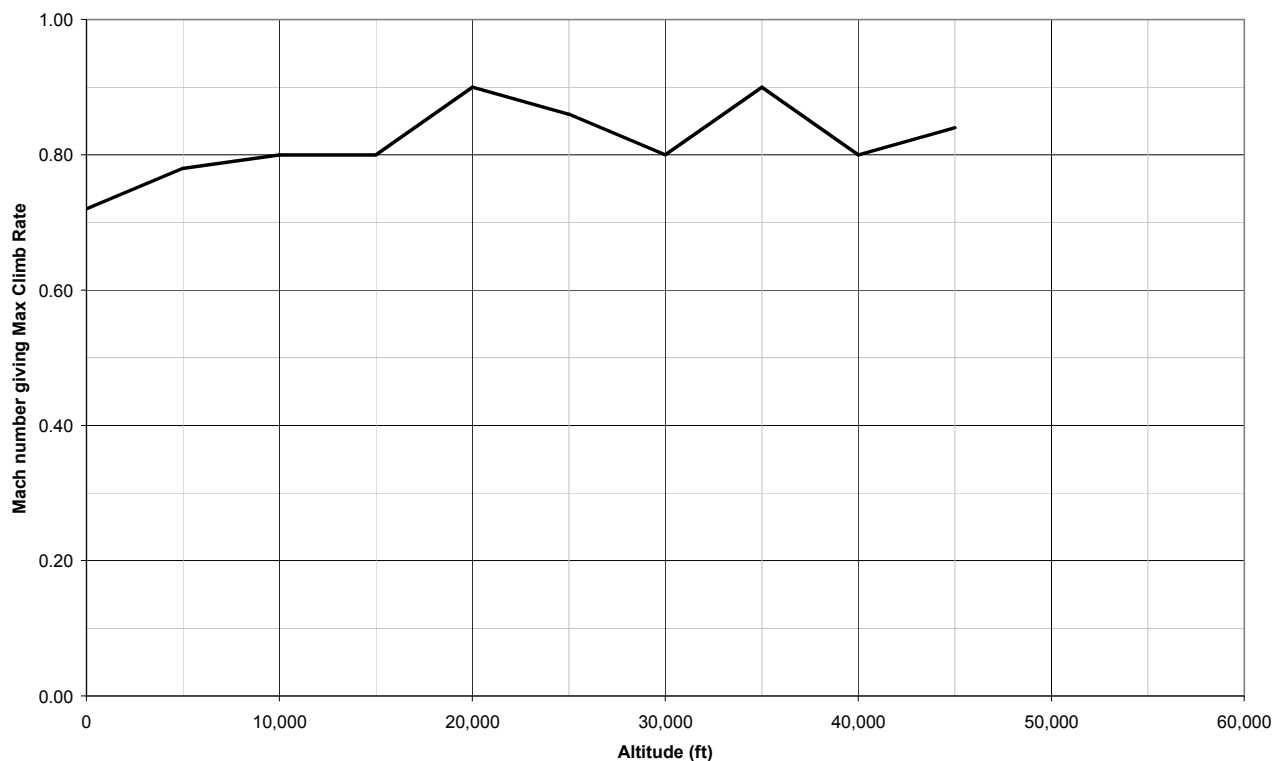
CONDITIONS:
•Standard Day
•MIL Power

CONFIGURATIONS : Clean
•GW=46,470 lbs

Maximum Instantaneous Climb Rate



Mach number given best Climb Rate





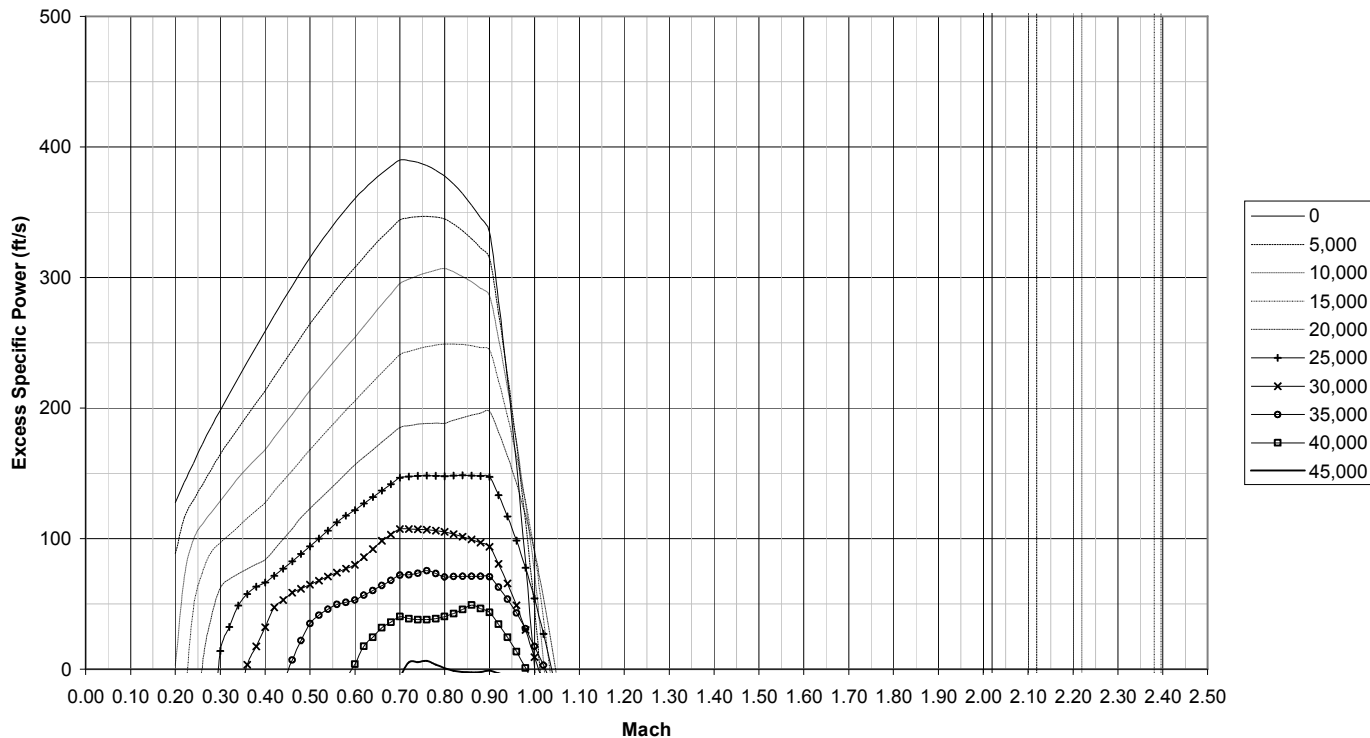
DATA BASIS : ESTIMATED

Aircraft : Su-27 Flanker B
Engine :AL-31F

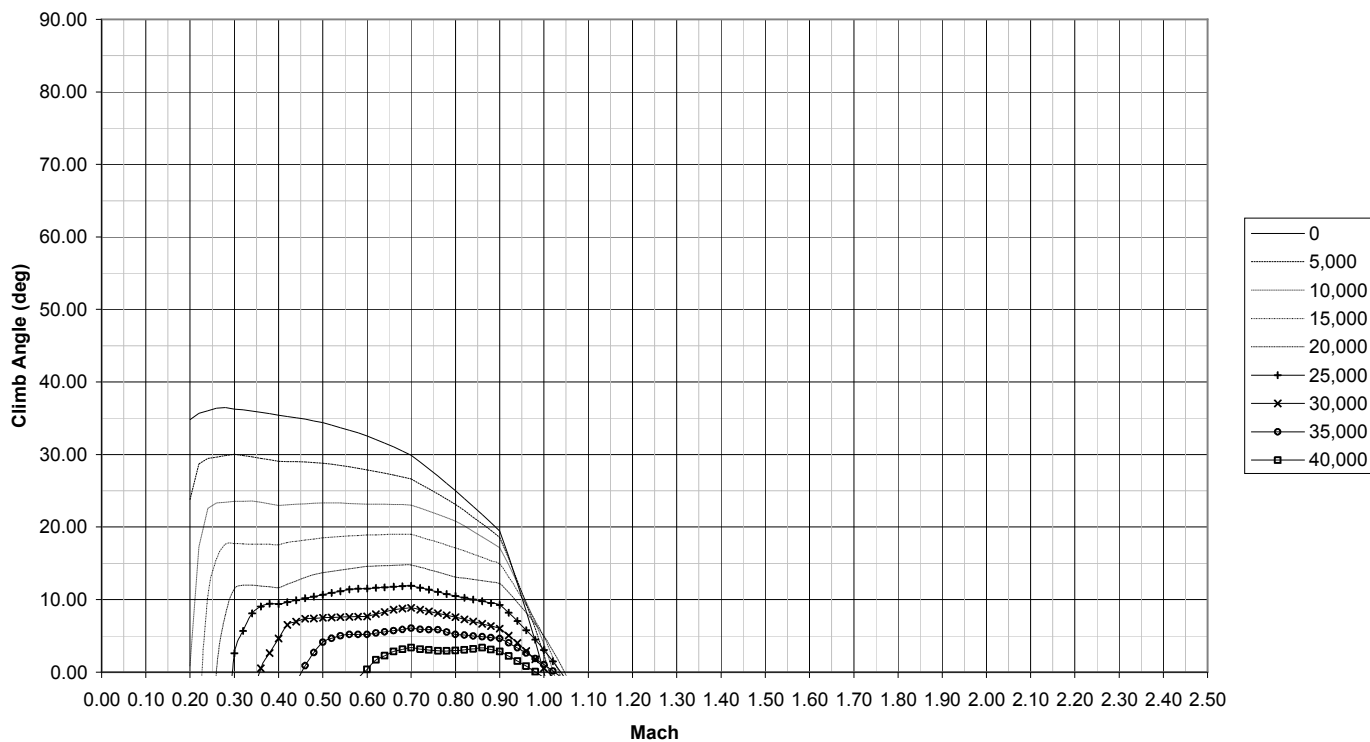
CONDITIONS:
•Standard Day
•MIL Power

CONFIGURATIONS : Clean
•GW=46,470 lbs

Climb Rate



Climb Angle





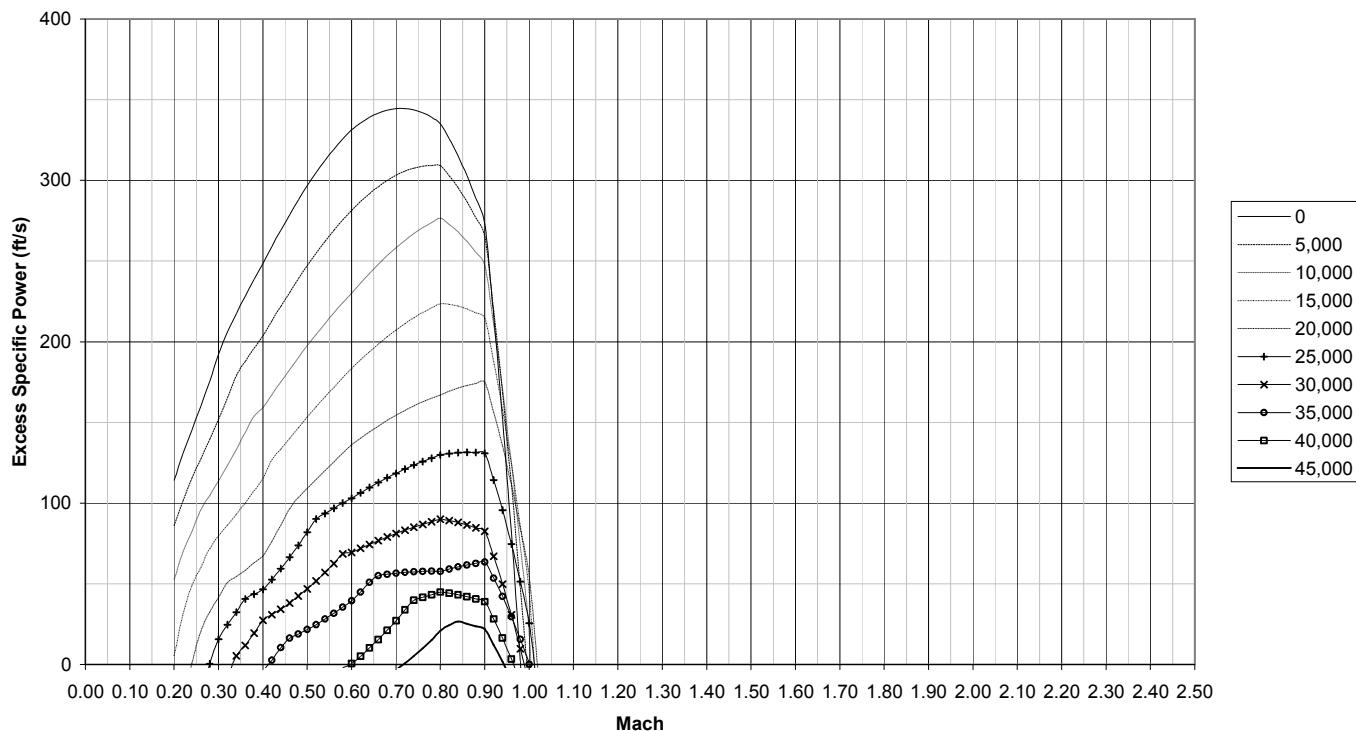
DATA BASIS : ESTIMATED

Aircraft : Su-27 Flanker B
Engine :AL-31F

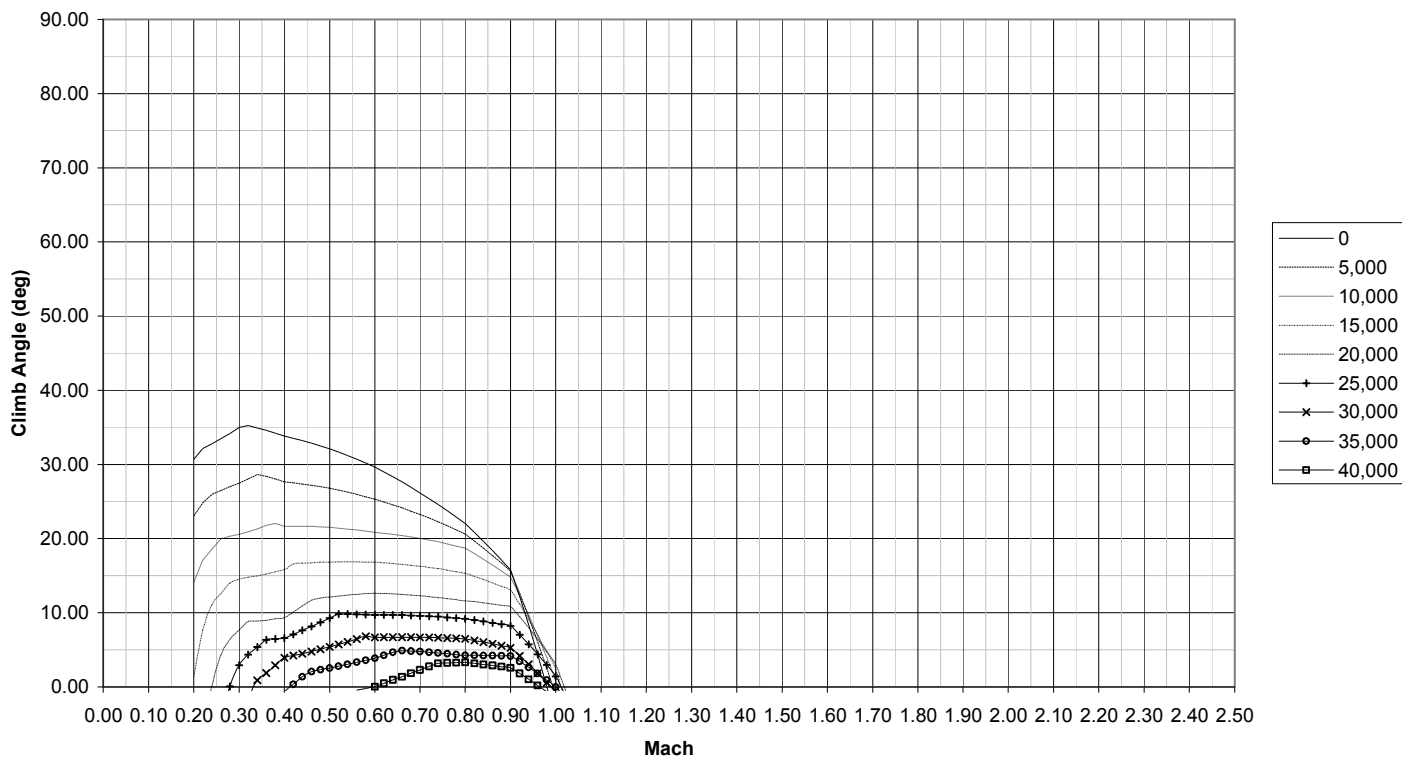
CONDITIONS:
•Standard Day
•MIL Power

CONFIGURATIONS : Clean
•GW=46,470 lbs

Climb Rate



Climb Angle



Acceleration Performances

Su-27 Flanker B

Acceleration Diagram

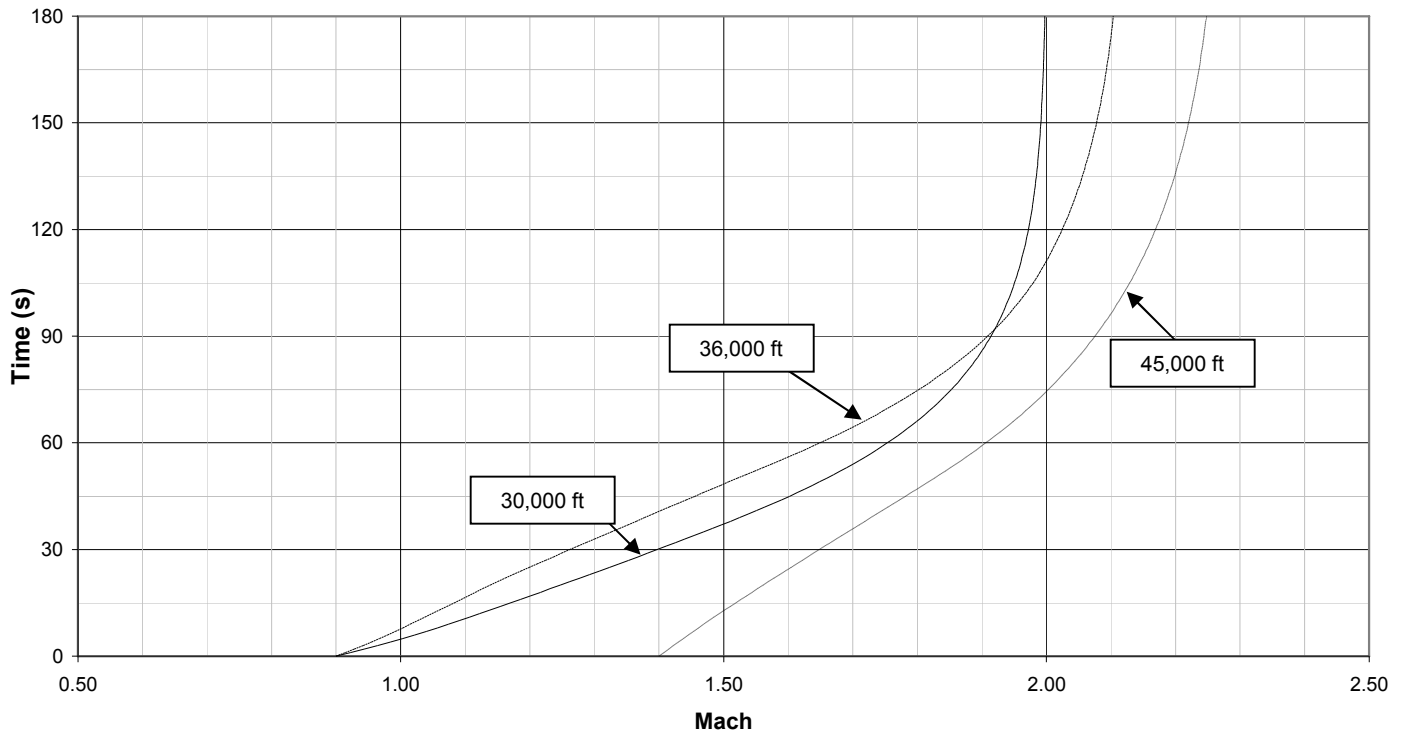
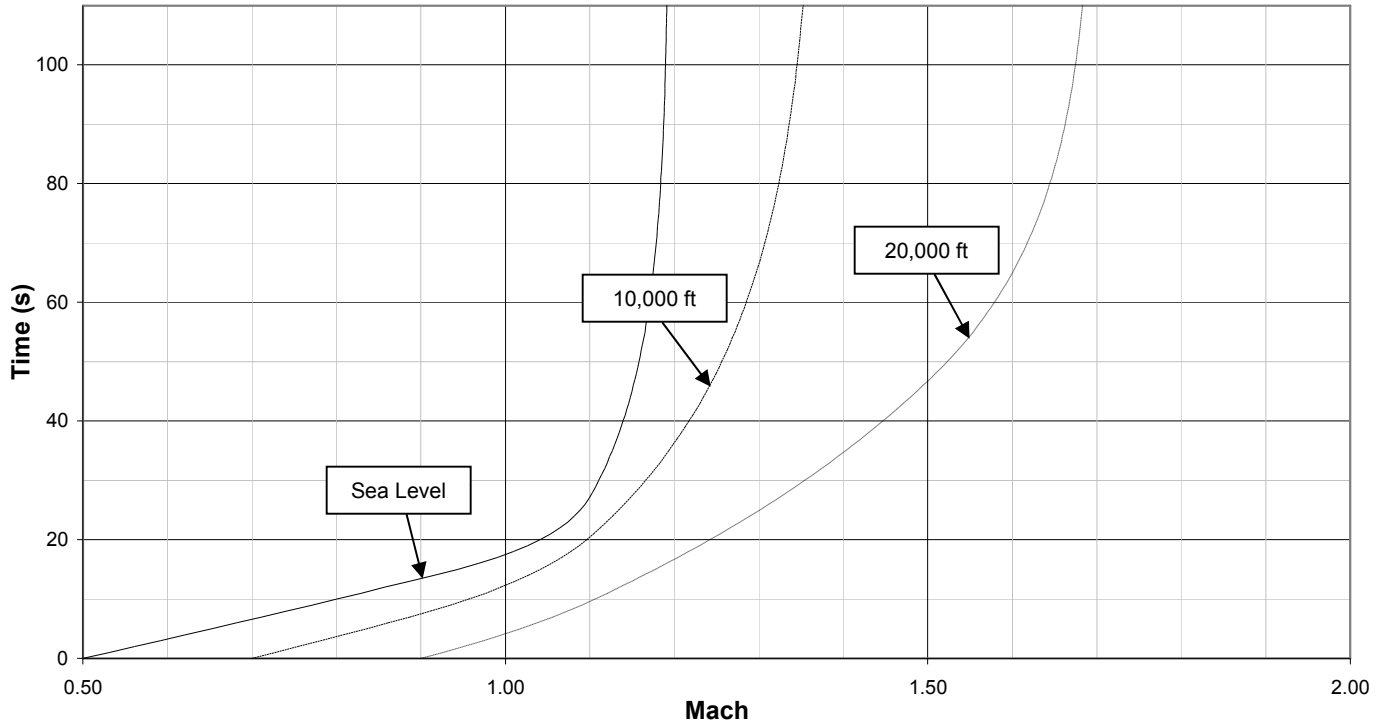


DATA BASIS : ESTIMATED

Aircraft : Su-27 Flanker B
Engine :AL-31F

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS : Clean
•DRAG INDEX = 0
•GW=46,470 lbs



Acceleration Diagram



DATA BASIS : ESTIMATED

Aircraft : Su-27 Flanker B
Engine :AL-31F

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS : Clean
•DRAG INDEX = 0
•GW=46,470 lbs

