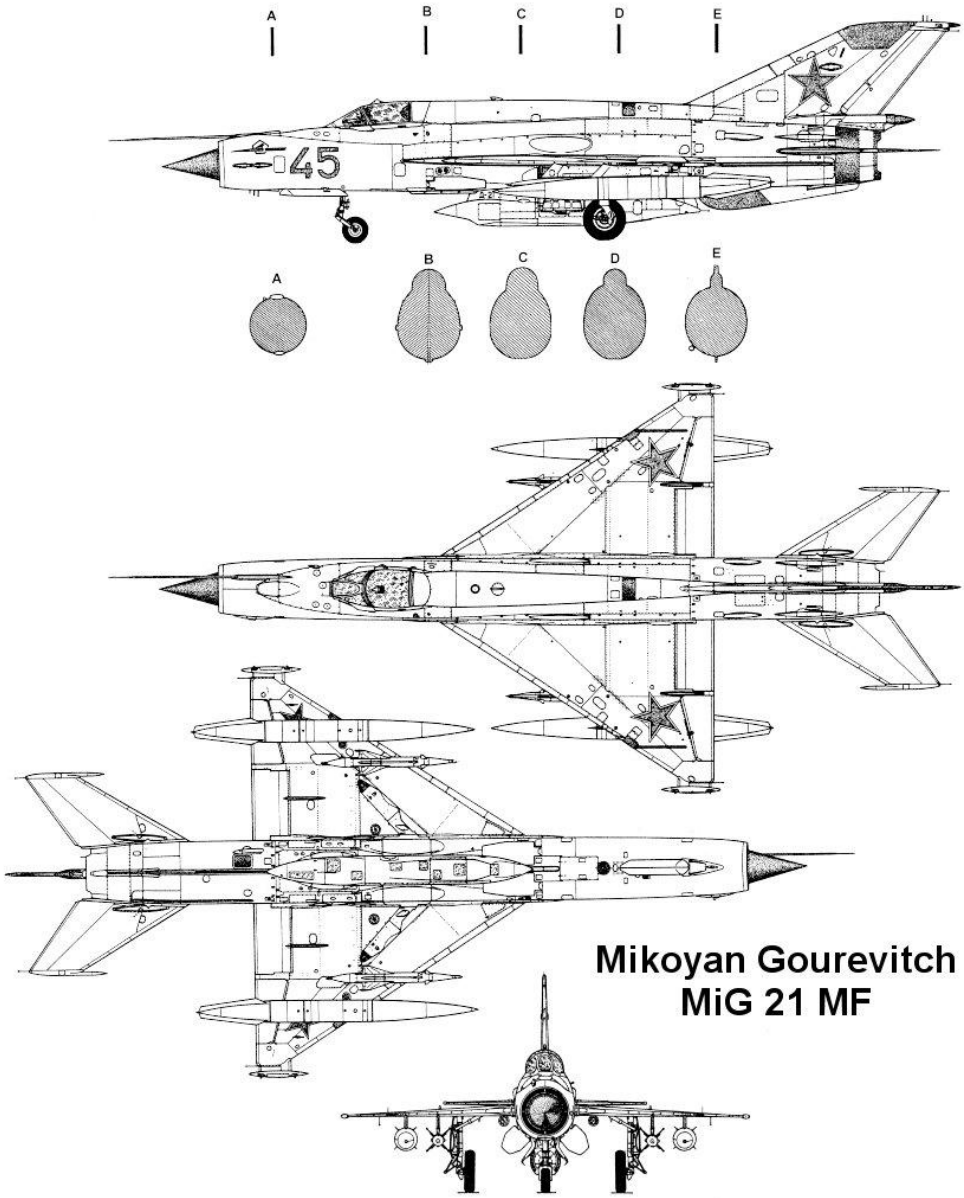
PERFORMANCE ANALYSIS



Mig-21MF-izd.96F / L-16
Mikoyan-Gourevitch Corporation
(Tumanskiy R-13-200)

CAUTION STATEMENT : This document is to be use only for simulation. Do not try to apply the procedures and or advices contained in it if you have the opportunity to fly this plane in real life. By the way, if you had (or still have) flew this aircraft, your comments, criticism and more are welcome

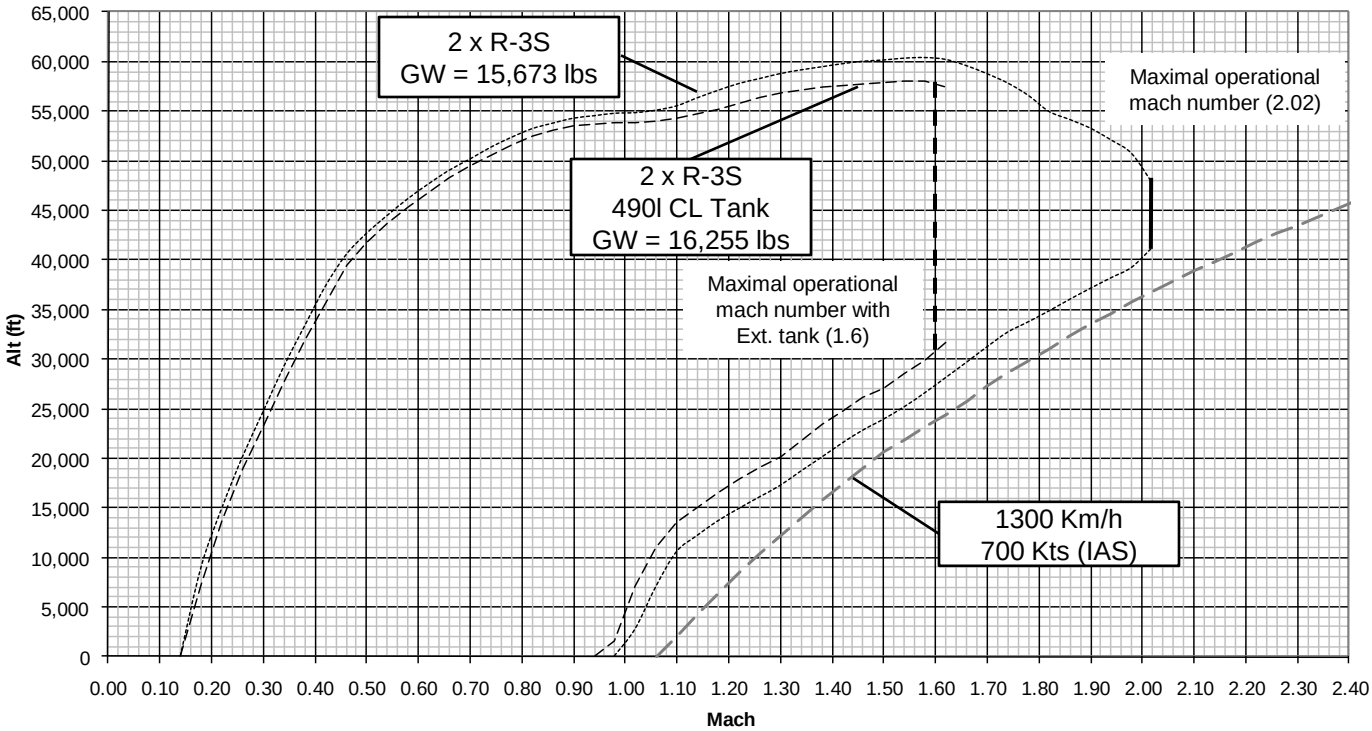
Level Flight Envelope

Level Flight Envelope

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

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

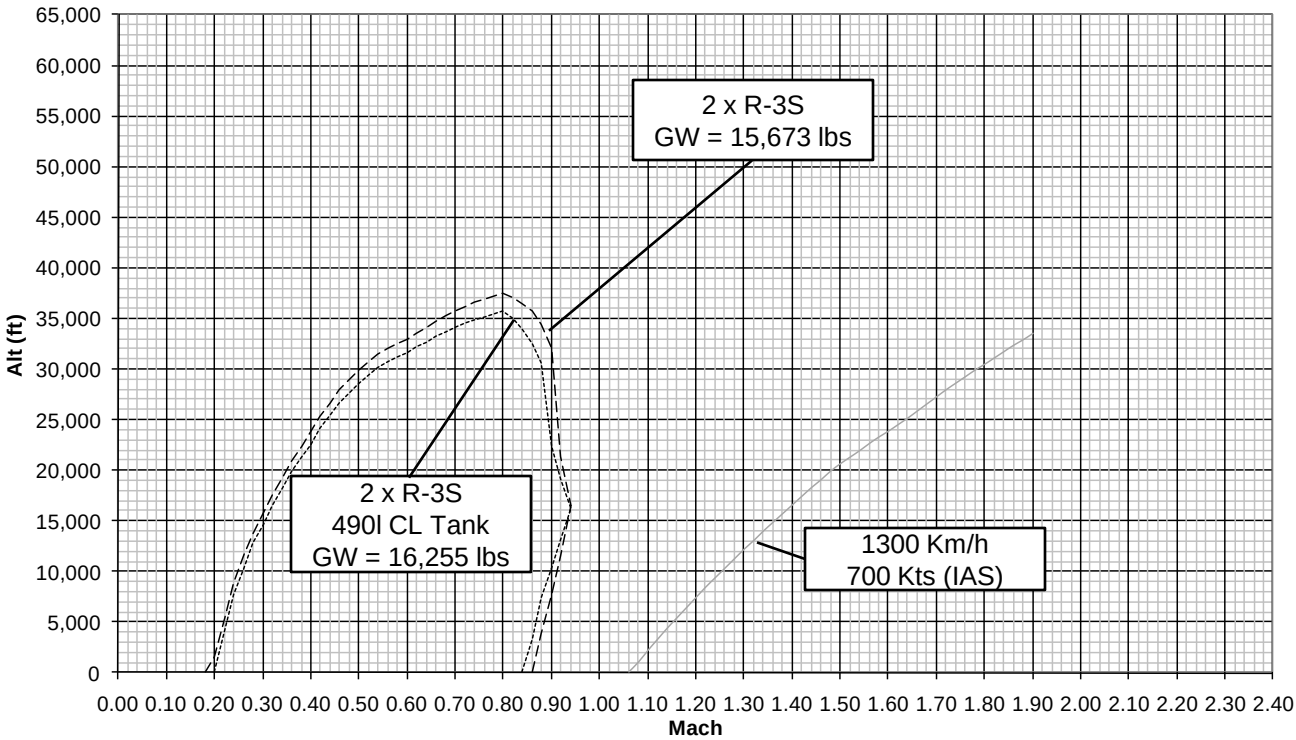
Level Flight Enveloppe
Full AB



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

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

Level Flight Enveloppe
MIL Power



Turn Performance

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONFIGURATIONS :
- **DRAG INDEX = 12 (2xR-3S)**
- **50% internal fuel**
- **GW= 15,673 lbs / 7,100 Kg**

Turn Rate – Summary

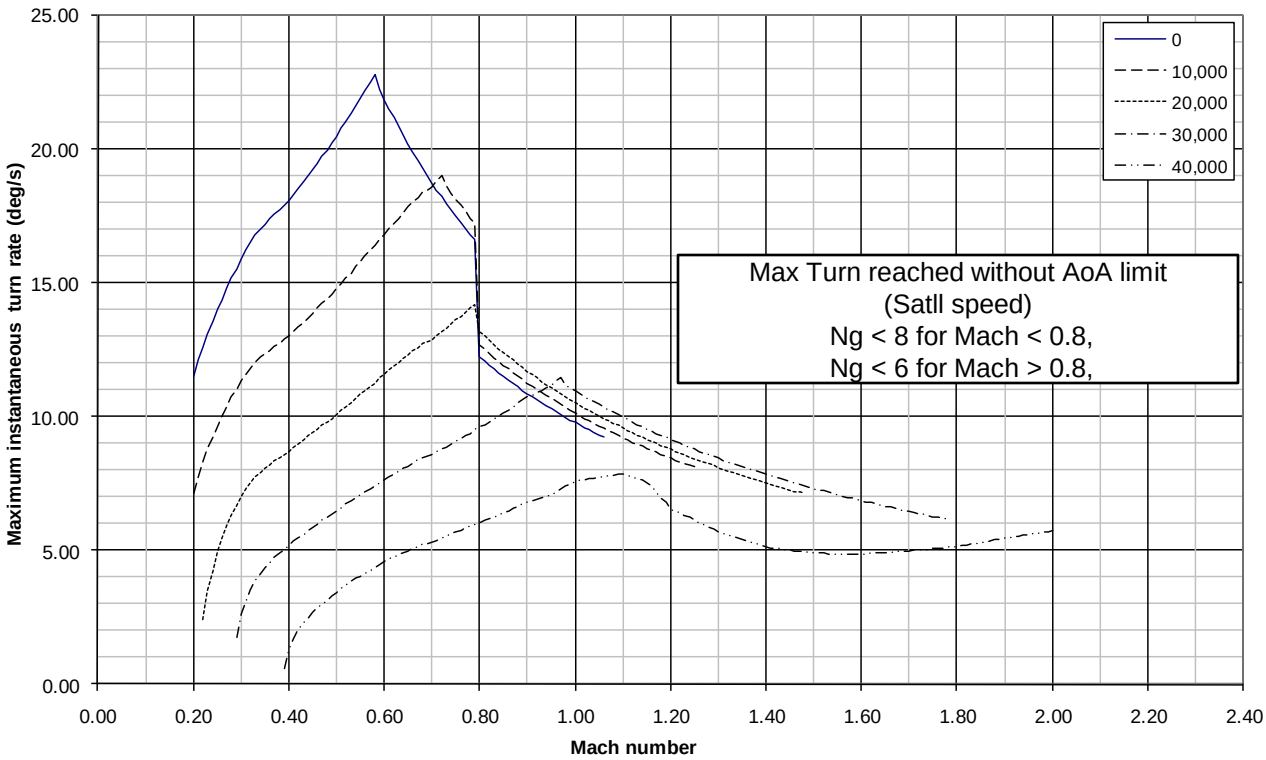
DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

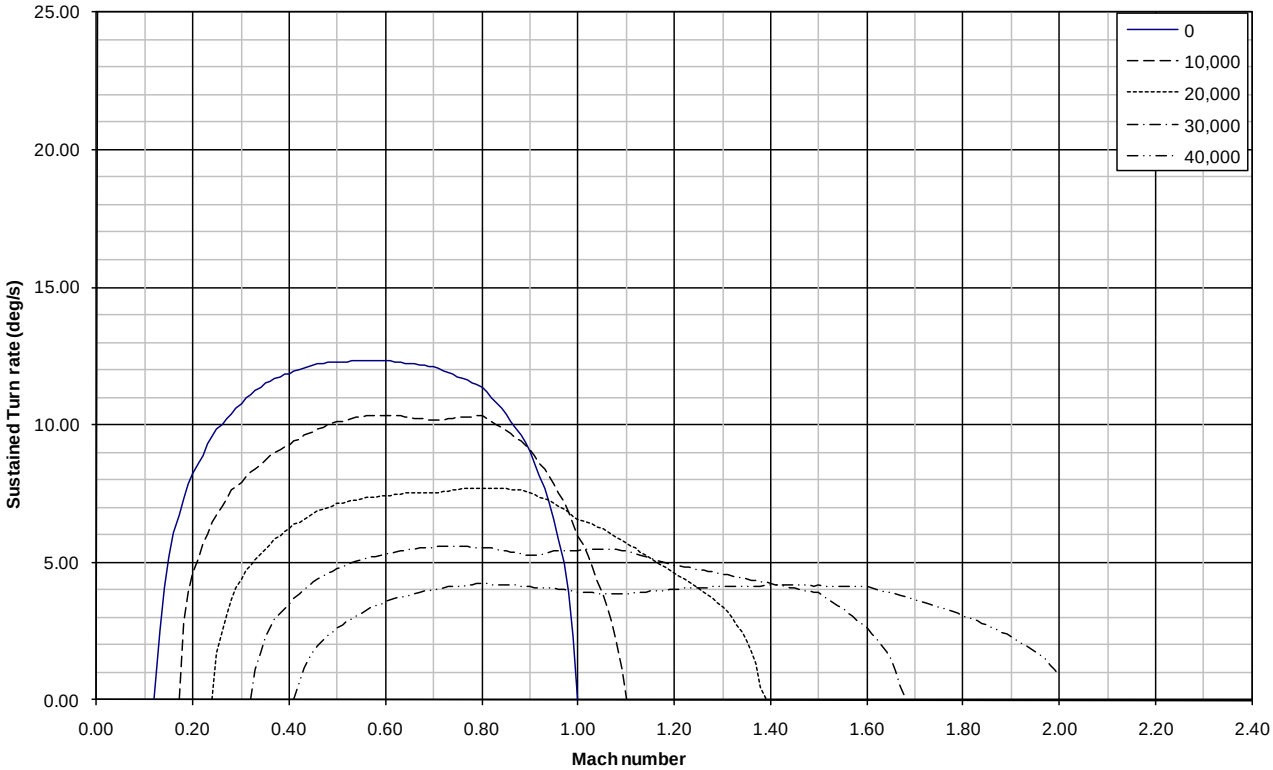
CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 12 (2xR-3S)
•GW=15,673lbslbs

Maximum Available Turn Rate



Maximum Sustained Turn rate (deg/s)



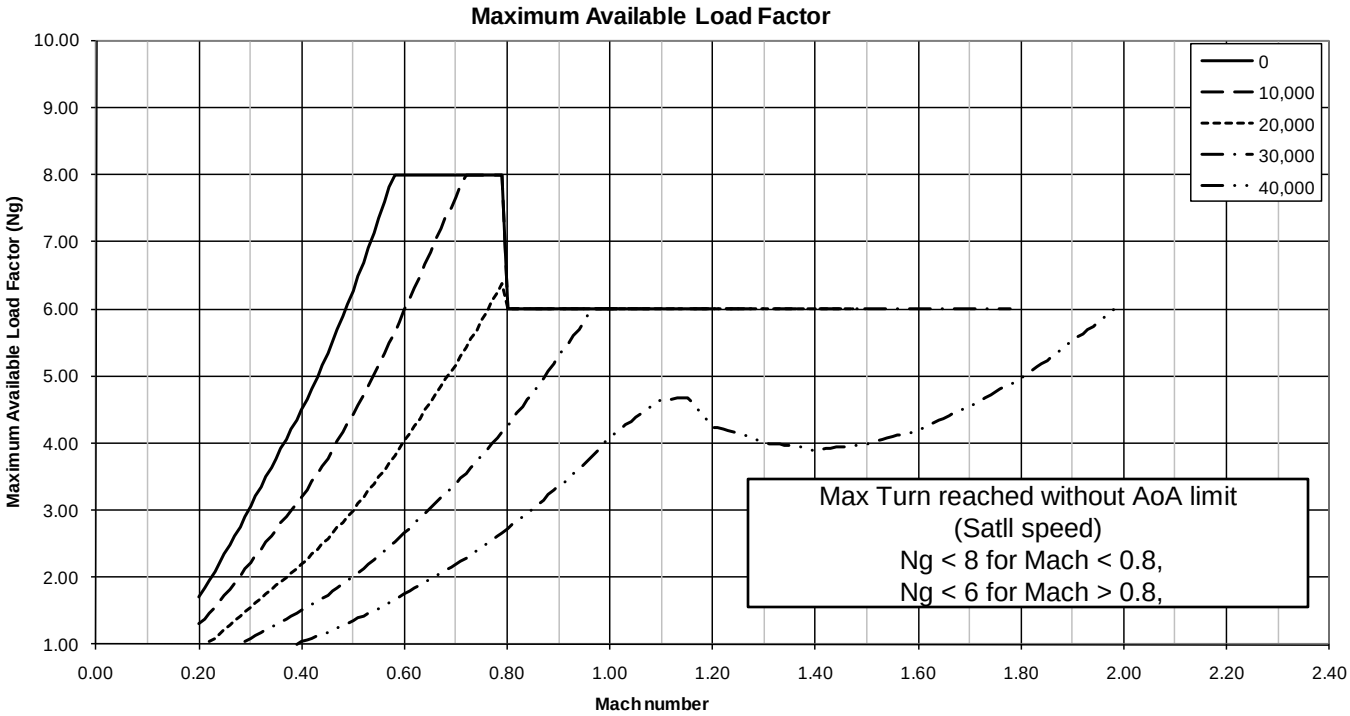
Load Factor – Summary

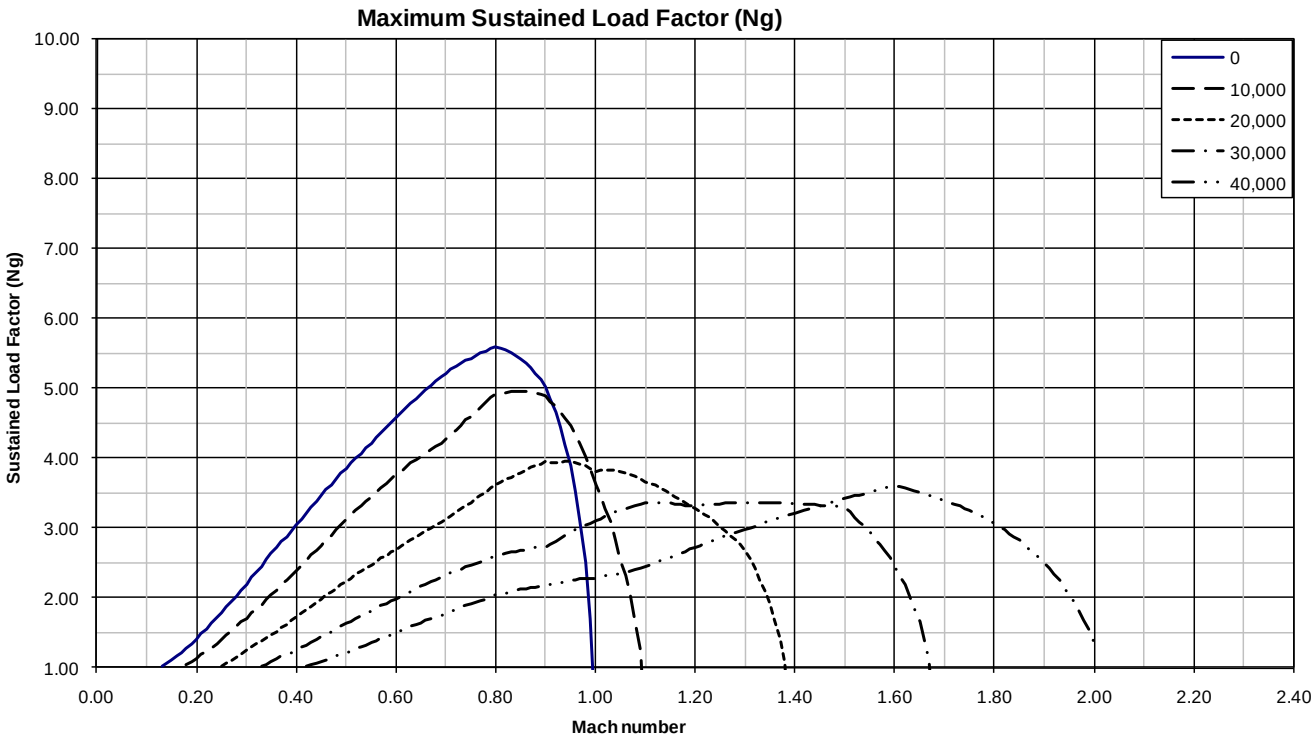
DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 12 (2xR-3S)
•GW=15,673lbslbs





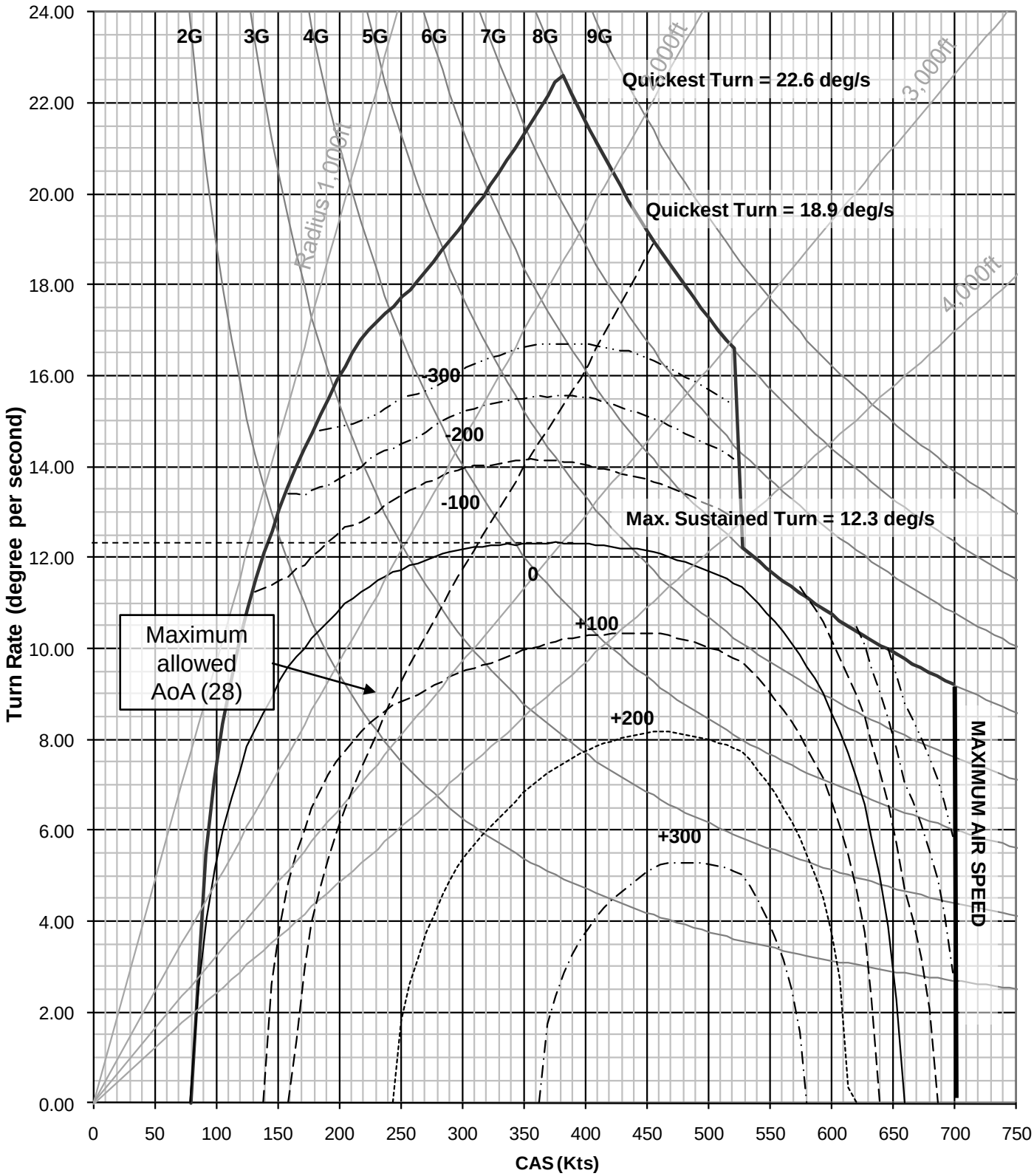
Turn Performance – Sea Level

DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 12 (2xR-3S)
•GW=15,673lbslbs



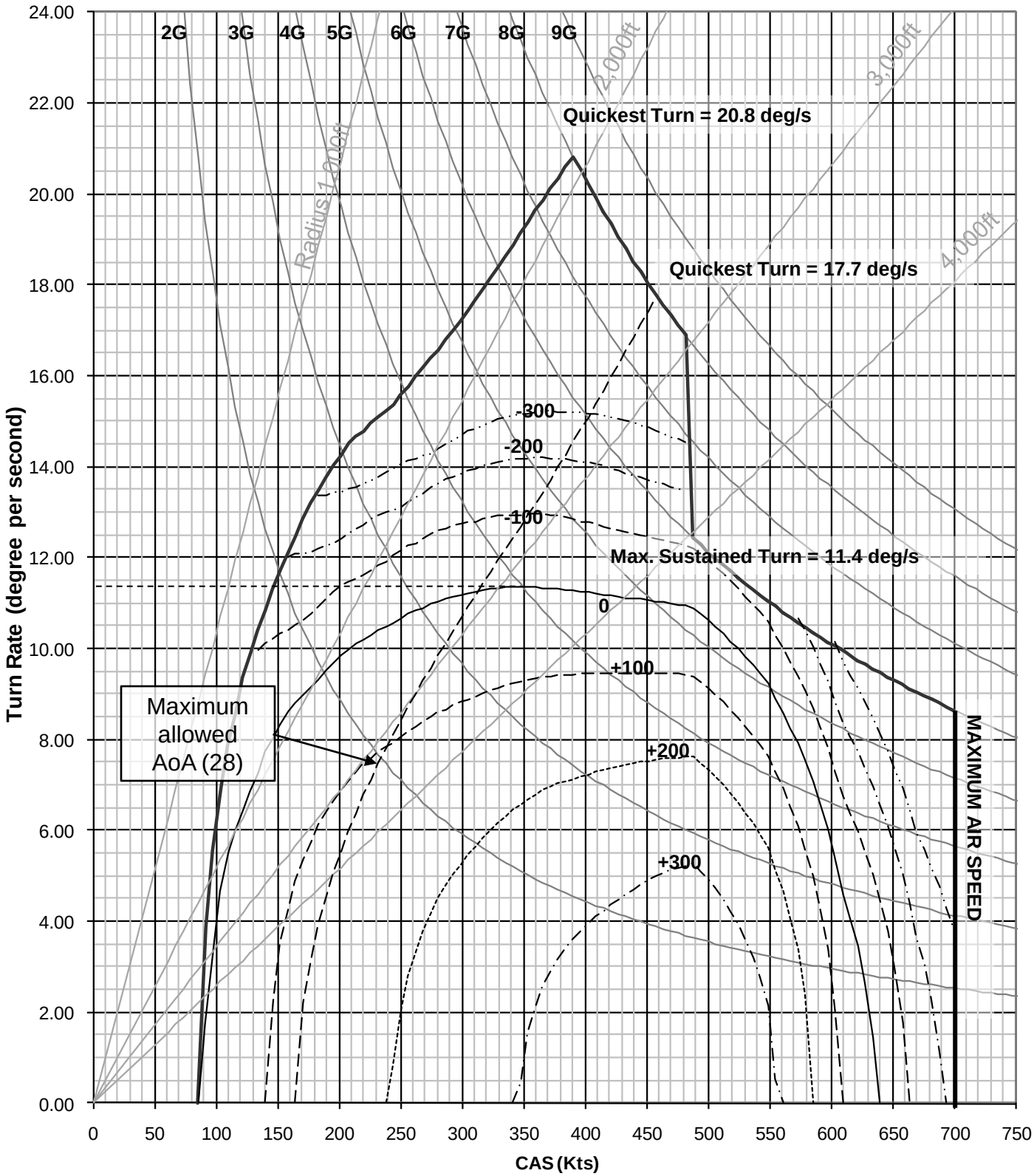
Turn Performance – 5,000 ft

DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 12 (2xR-3S)
•GW=15,673lbslbs



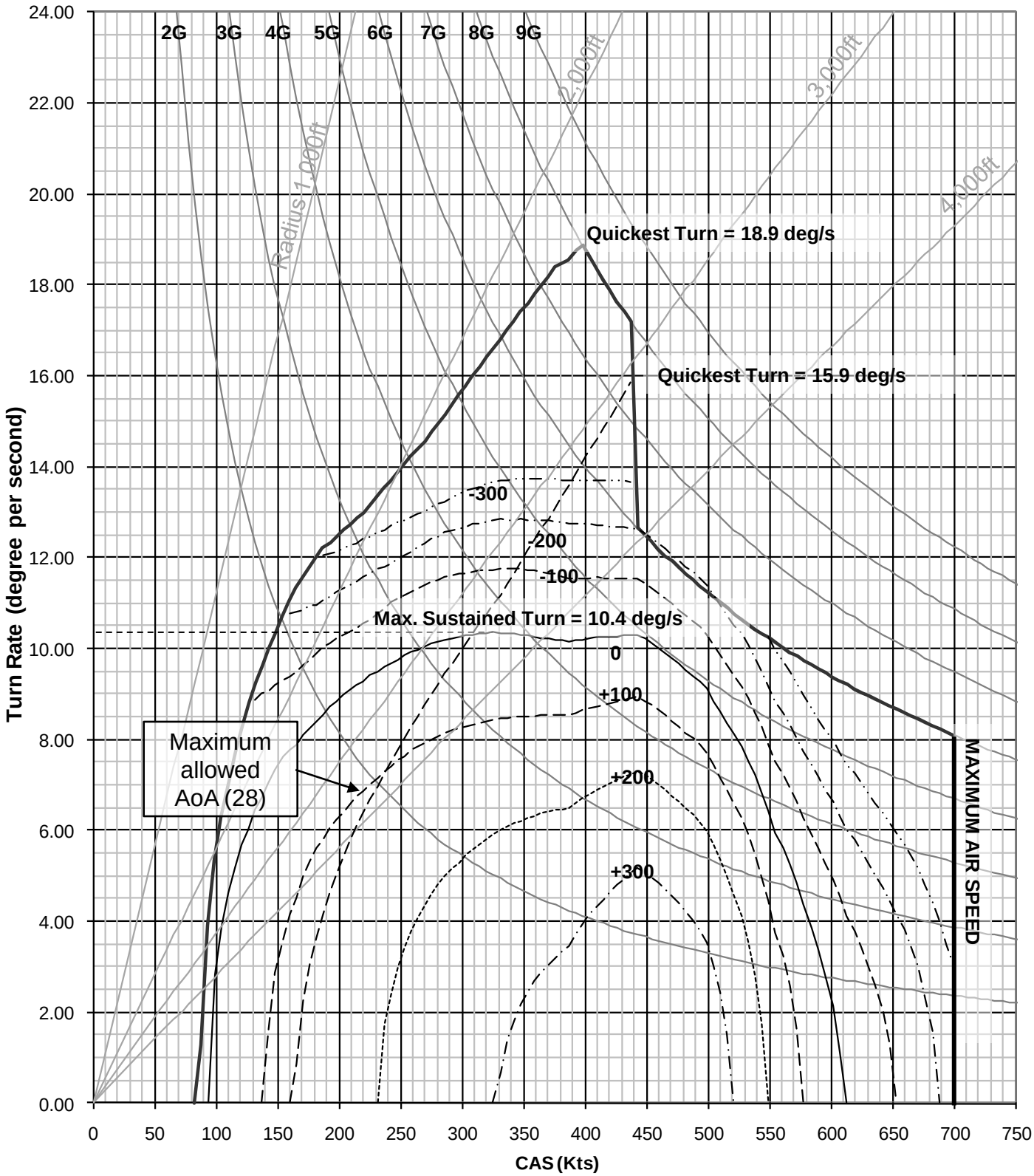
Turn Performance – 10,000 ft

DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 12 (2xR-3S)
•GW=15,673lbslbs



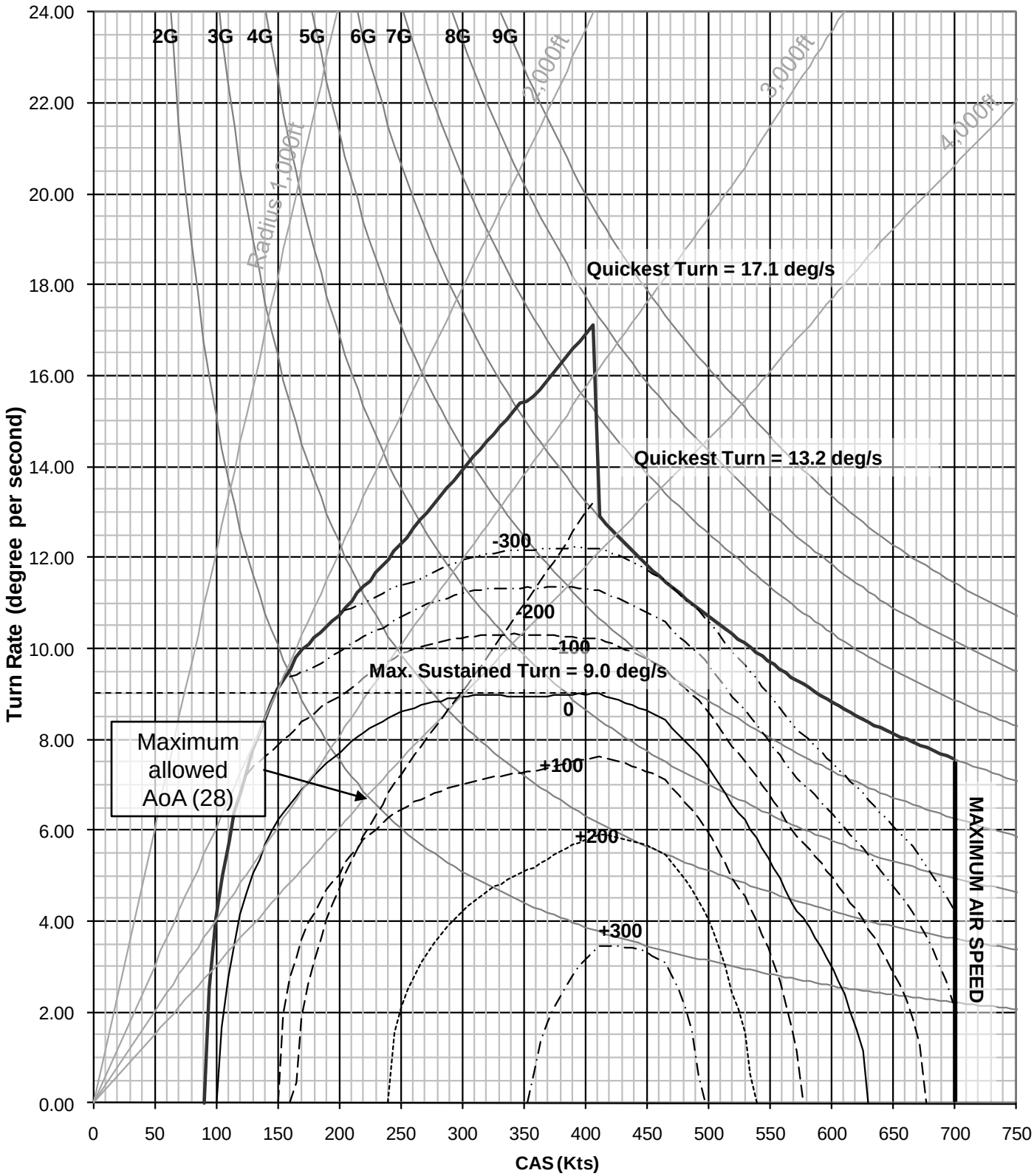
Turn Performance – 15,000 ft

DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 12 (2xR-3S)
•GW=15,673lbslbs



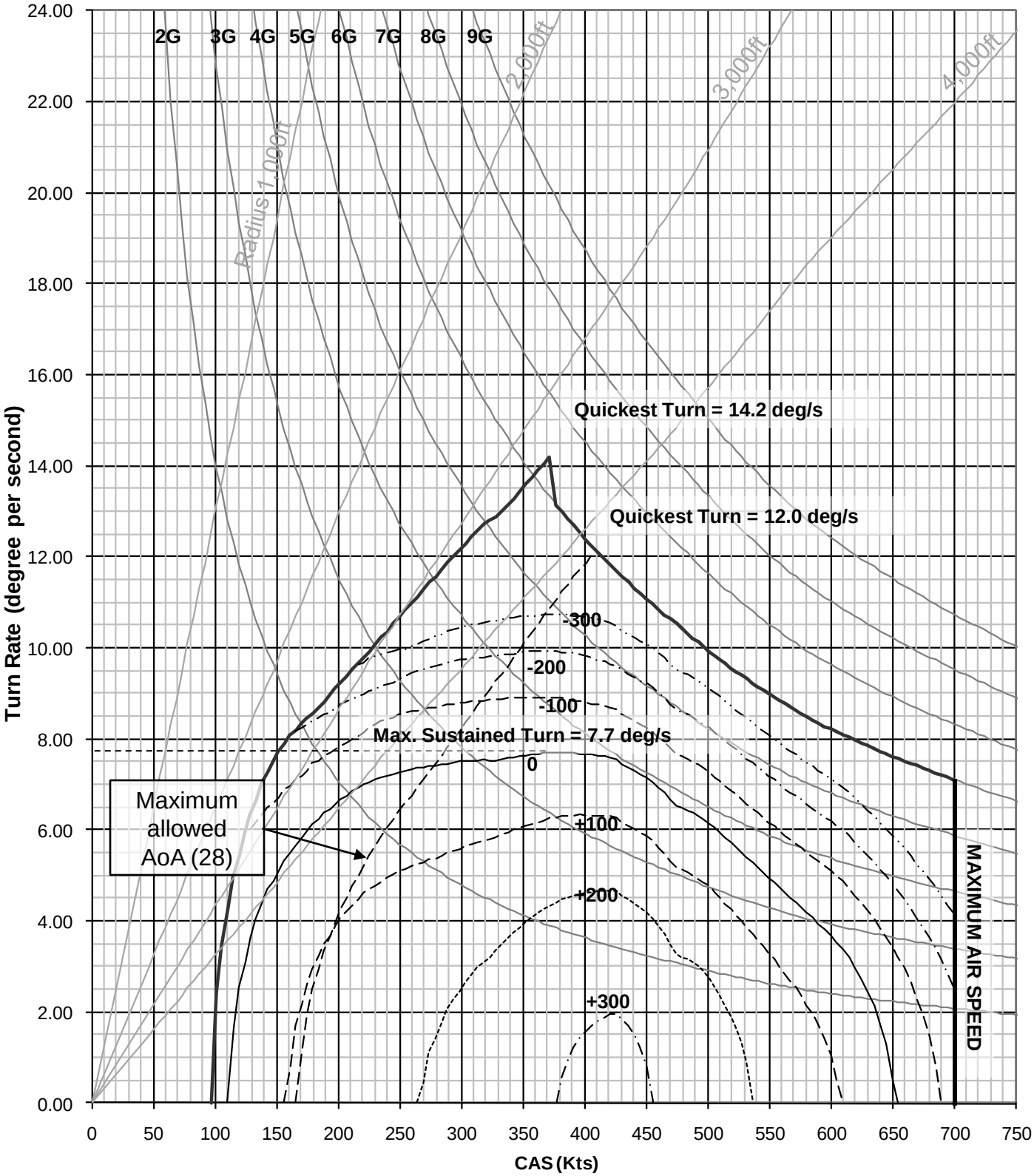
Turn Performance – 20,000 ft

DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 12 (2xR-3S)
•GW=15,673lbslbs



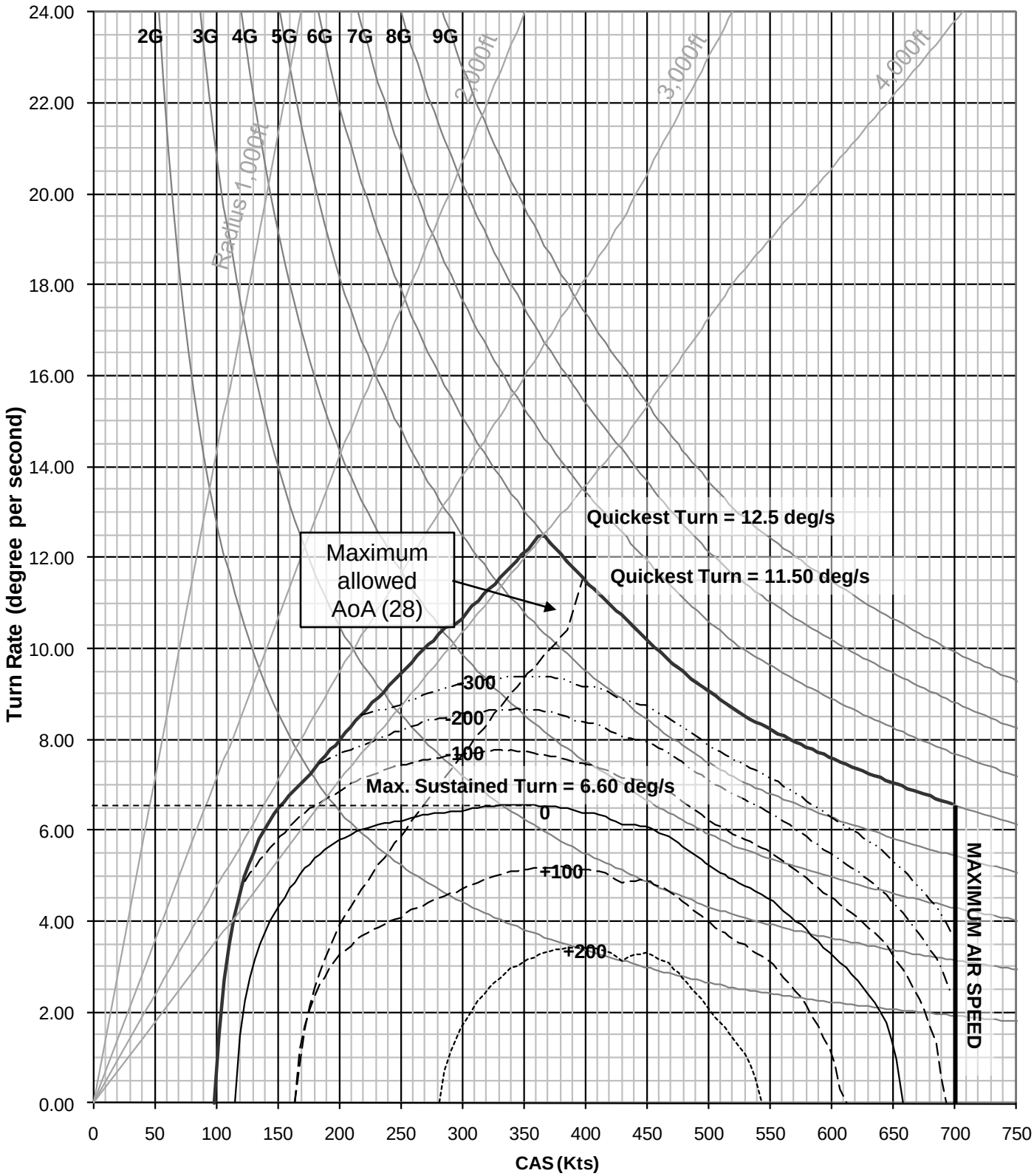
Turn Performance – 25,000 ft

DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 12 (2xR-3S)
•GW=15,673lbslbs



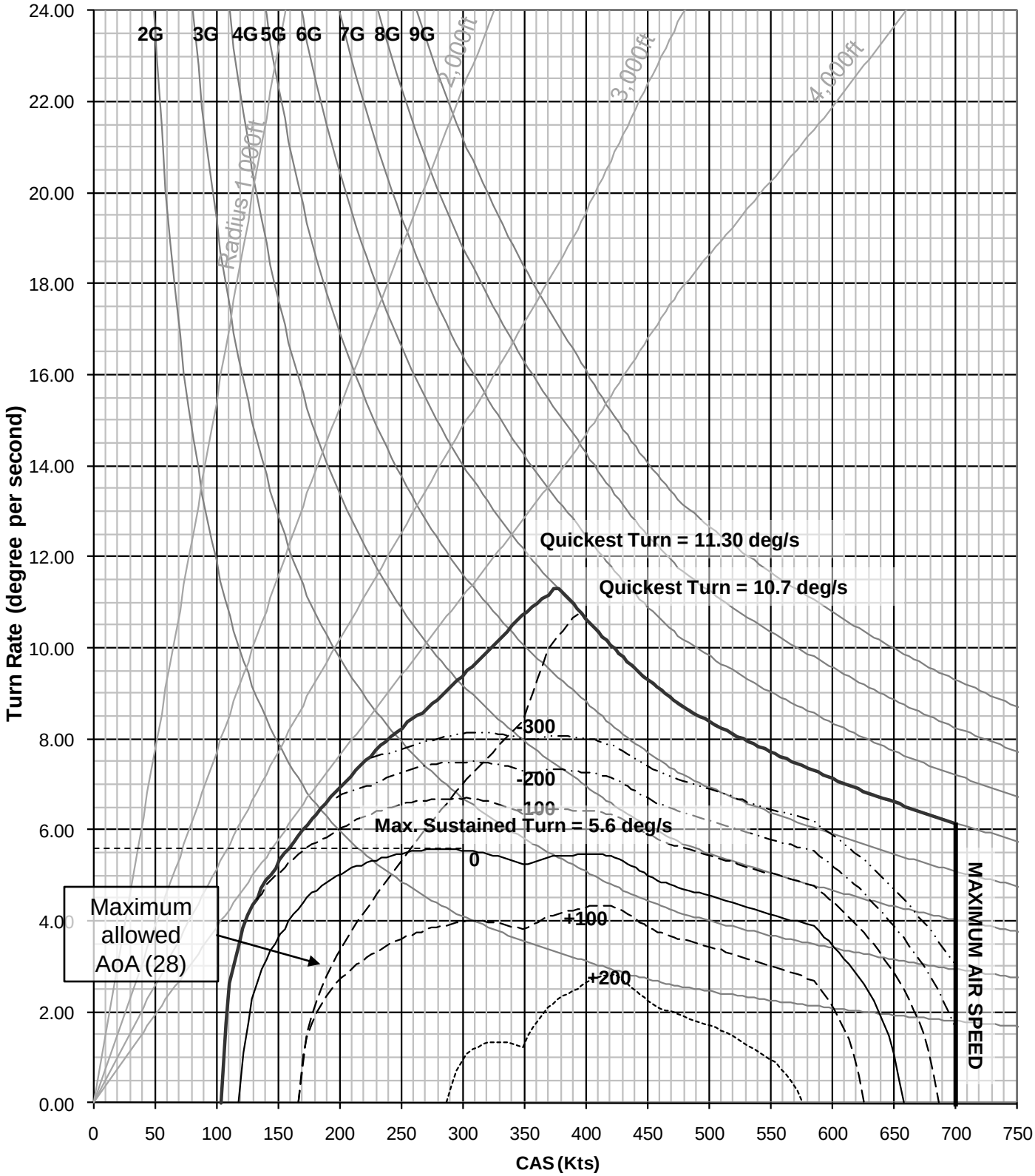
Turn Performance – 30,000 ft

DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 12 (2xR-3S)
•GW=15,673lbslbs



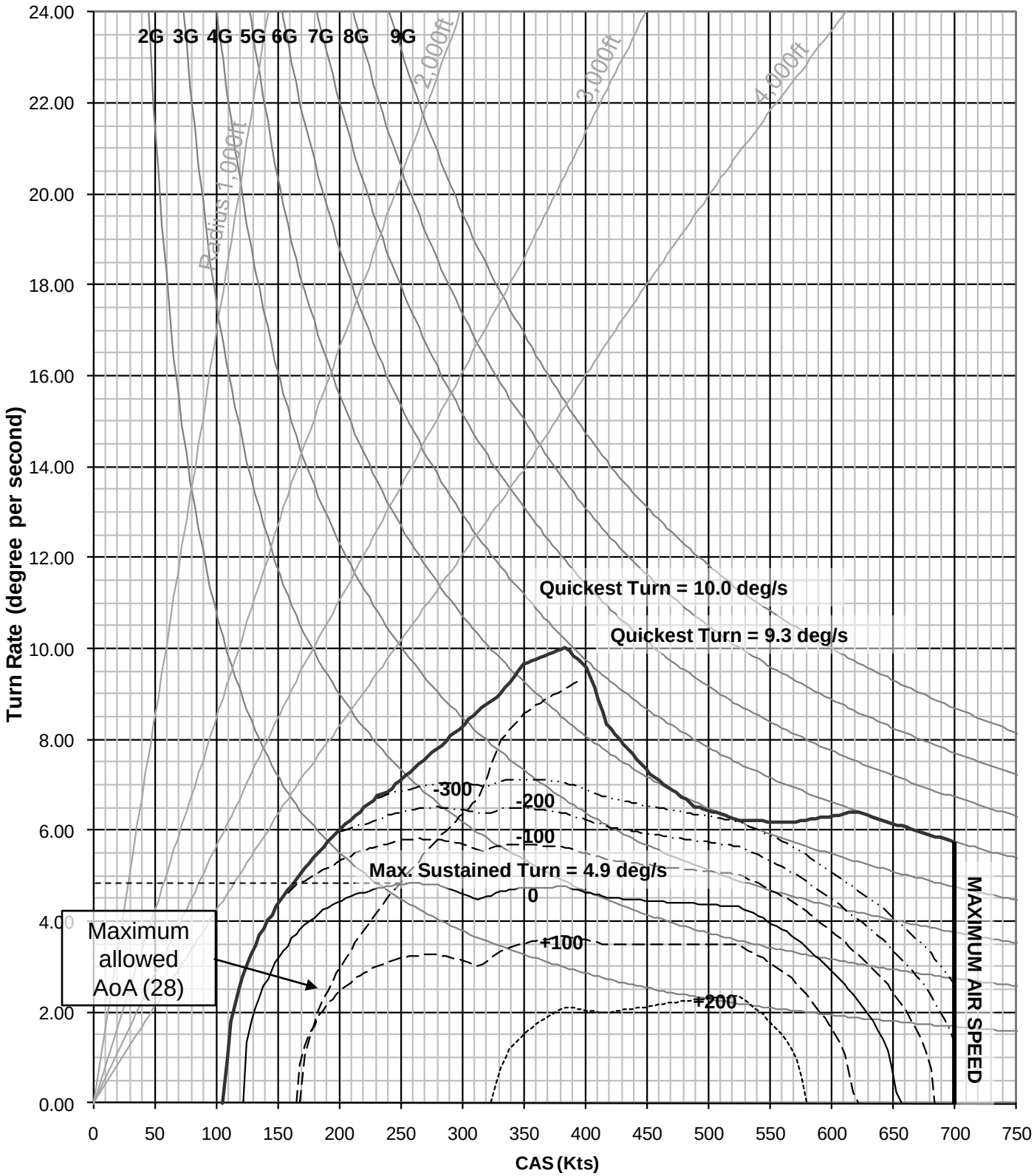
Turn Performance – 35,000 ft

DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 12 (2xR-3S)
•GW=15,673lbslbs



Climb Performance

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONFIGURATIONS :
•DRAG INDEX = 12 (2xR-3S)
•50% internal fuel
•GW= 15,673 lbs / 7,100 Kg

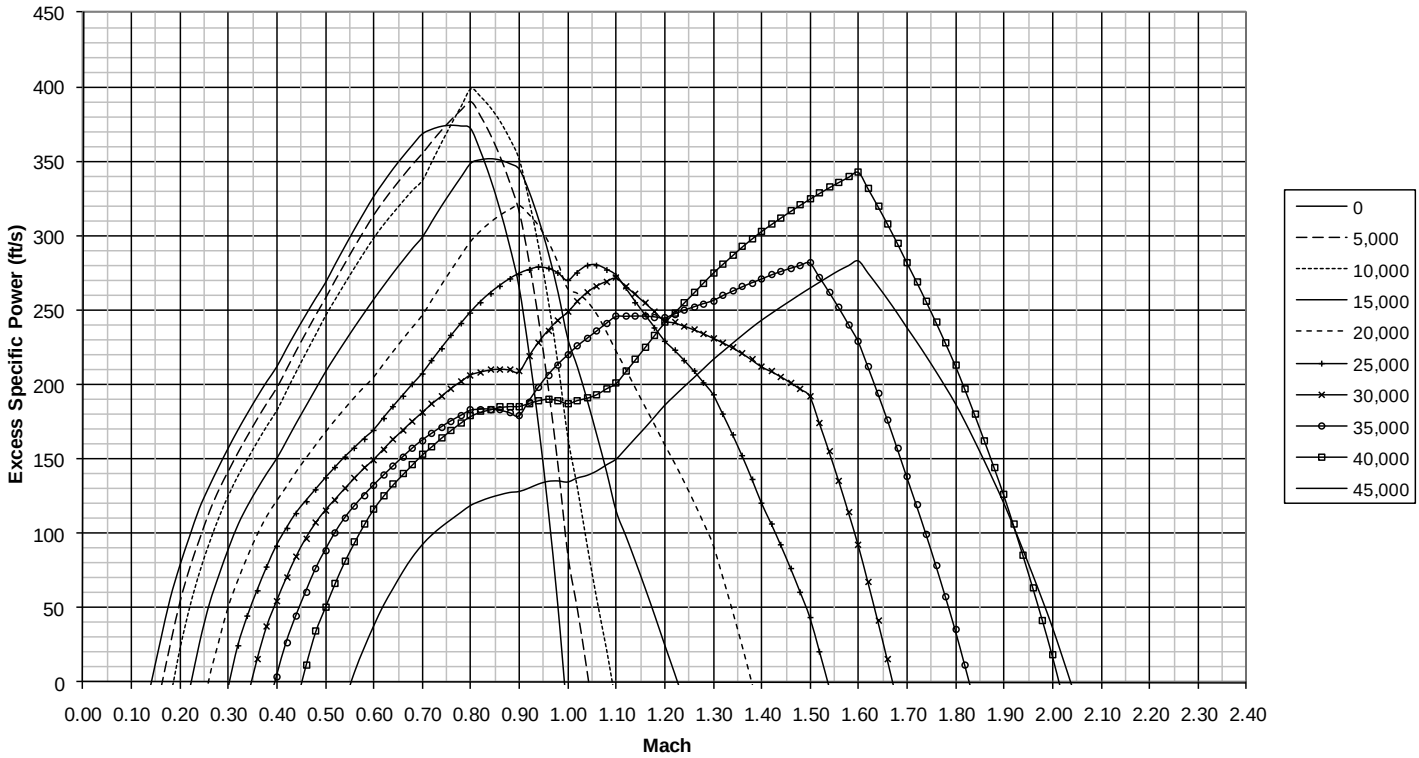
DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

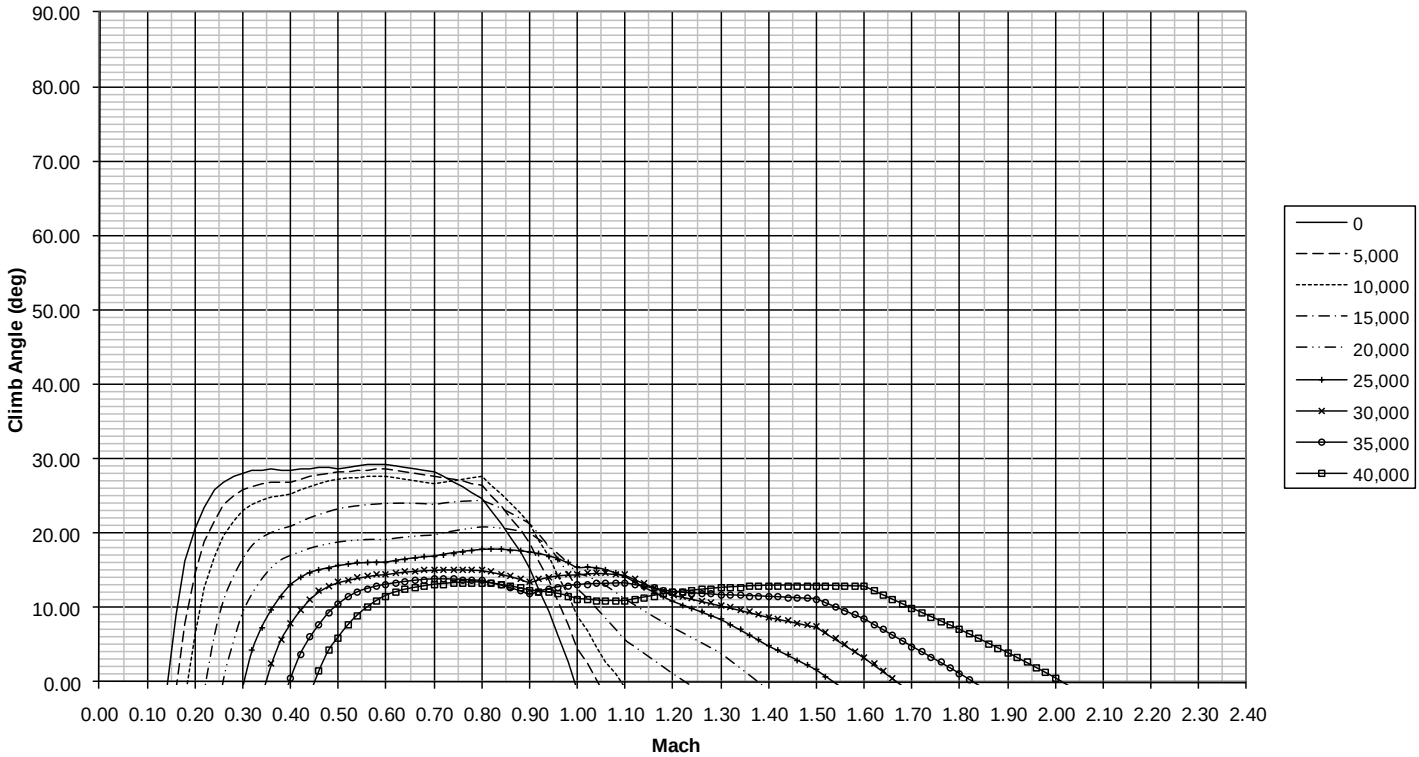
CONDITIONS:
- **Standard Day**
- **Max AB**

CONFIGURATIONS :
- **DRAG INDEX = 12 (2xR-3S)**
- **GW=15,673lbslbs**

Instantaneous Constant Speed Climb Rate



Constant Speed Climb Angle



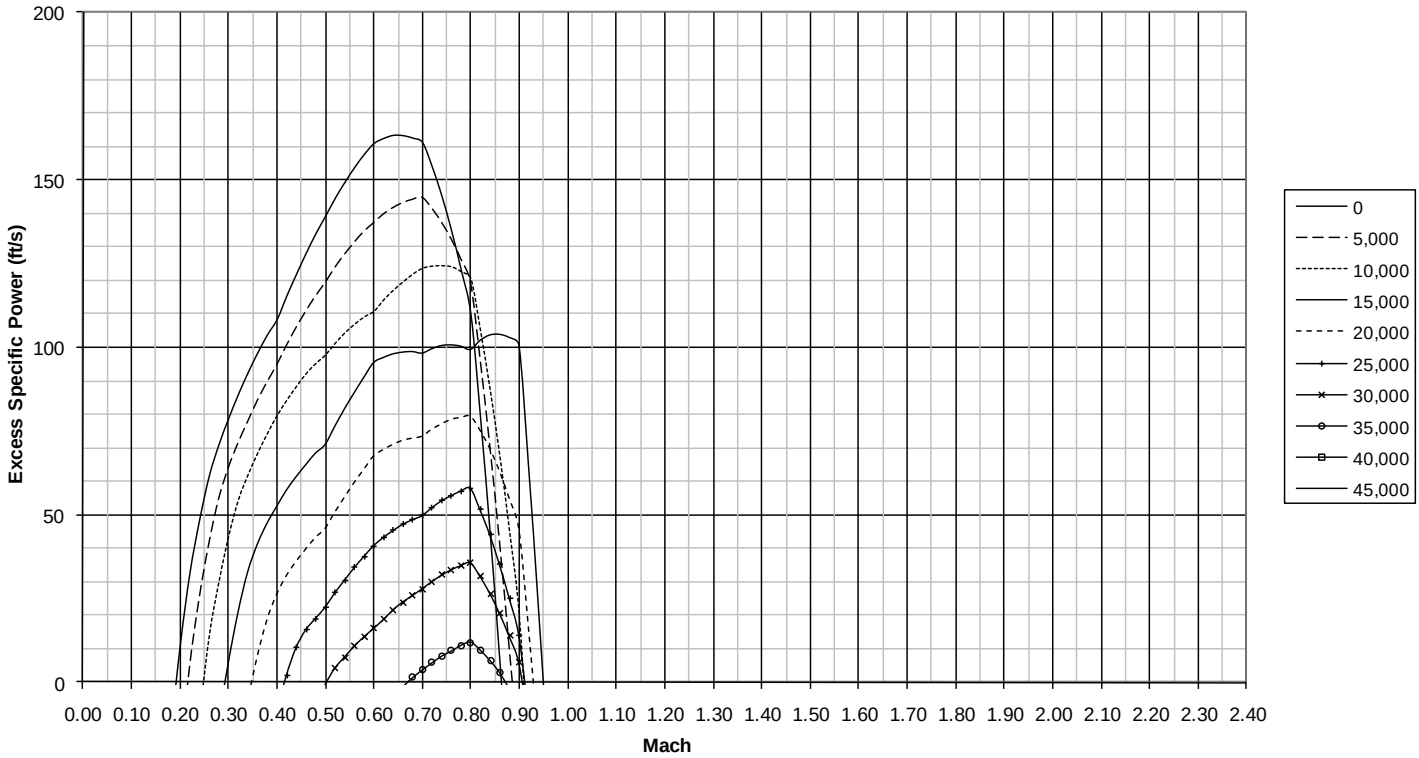
DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

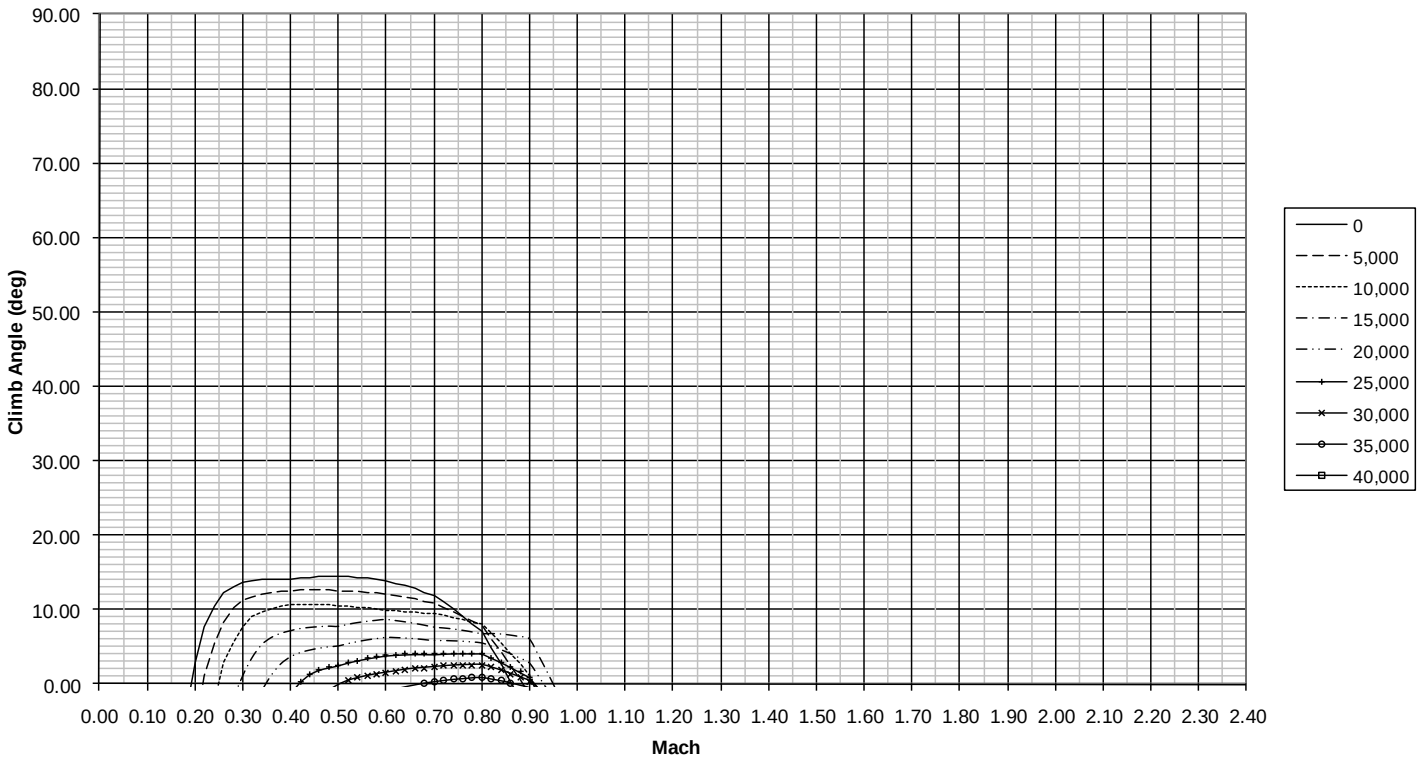
CONDITIONS:
•Standard Day
•MIL Power

CONFIGURATIONS :
•DRAG INDEX = 12 (2xR-3S)
•GW=15,673lbslbs

Instantaneous Constant Speed Climb Rate



Constant Speed Climb Angle



Acceleration Performances

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONFIGURATIONS :
•DRAG INDEX = 12 (2xR-3S)
•50% internal fuel
•GW= 15,673 lbs / 7,100 Kg

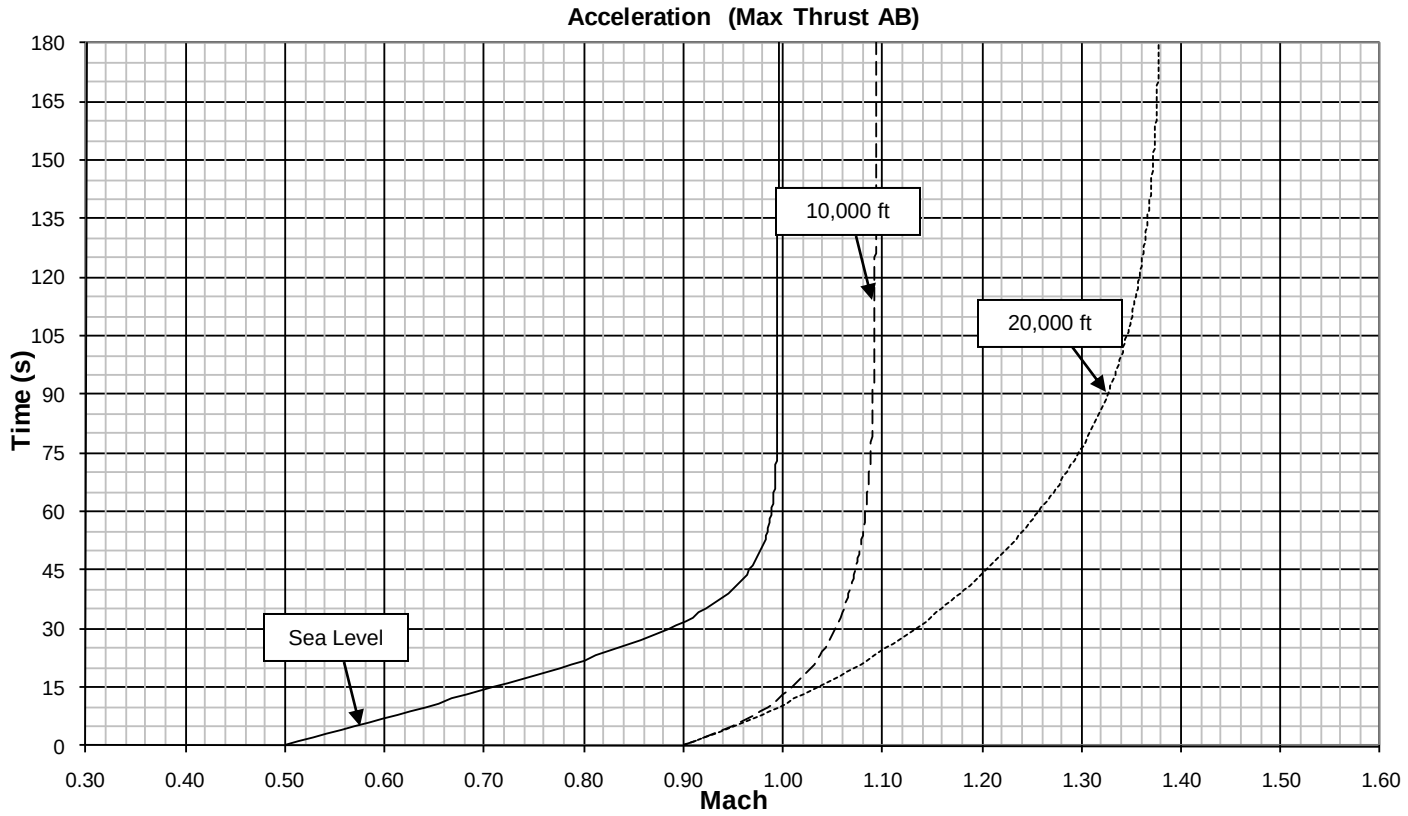
Acceleration Diagram

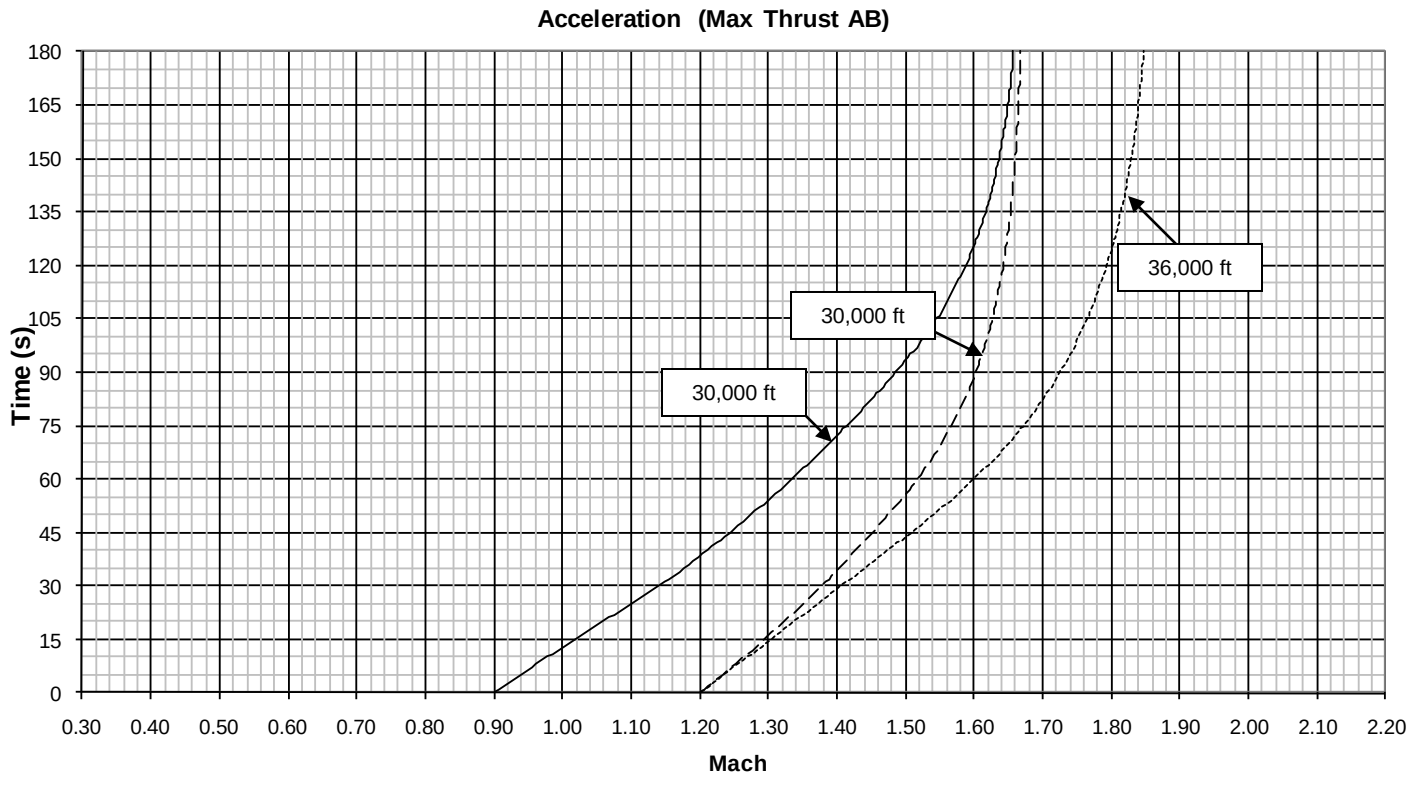
DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 12 (2xR-3S)
•GW=15,673lbslbs





Turn Performance

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONFIGURATIONS :
- **DRAG INDEX = 13 (4xR-3S)**
- **50% internal fuel**
- **GW= 16,194 lbs / 7,336 Kg**

Turn Rate – Summary

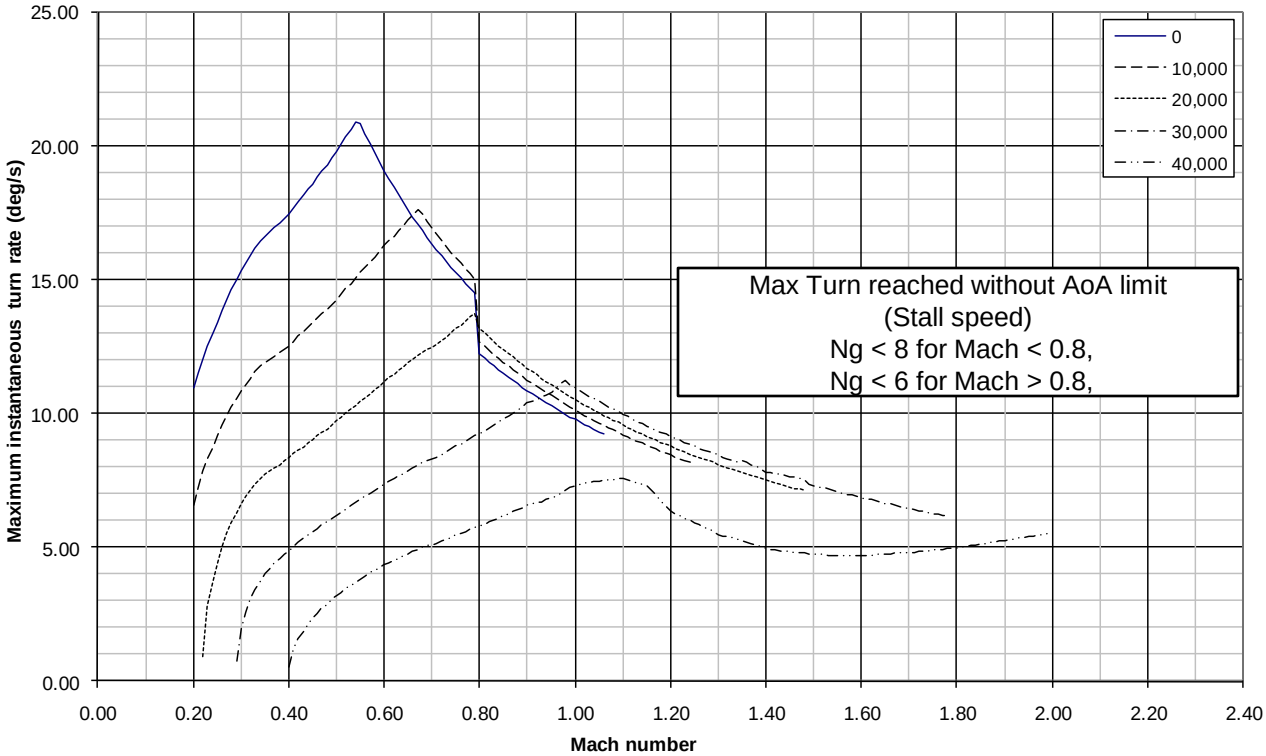
DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

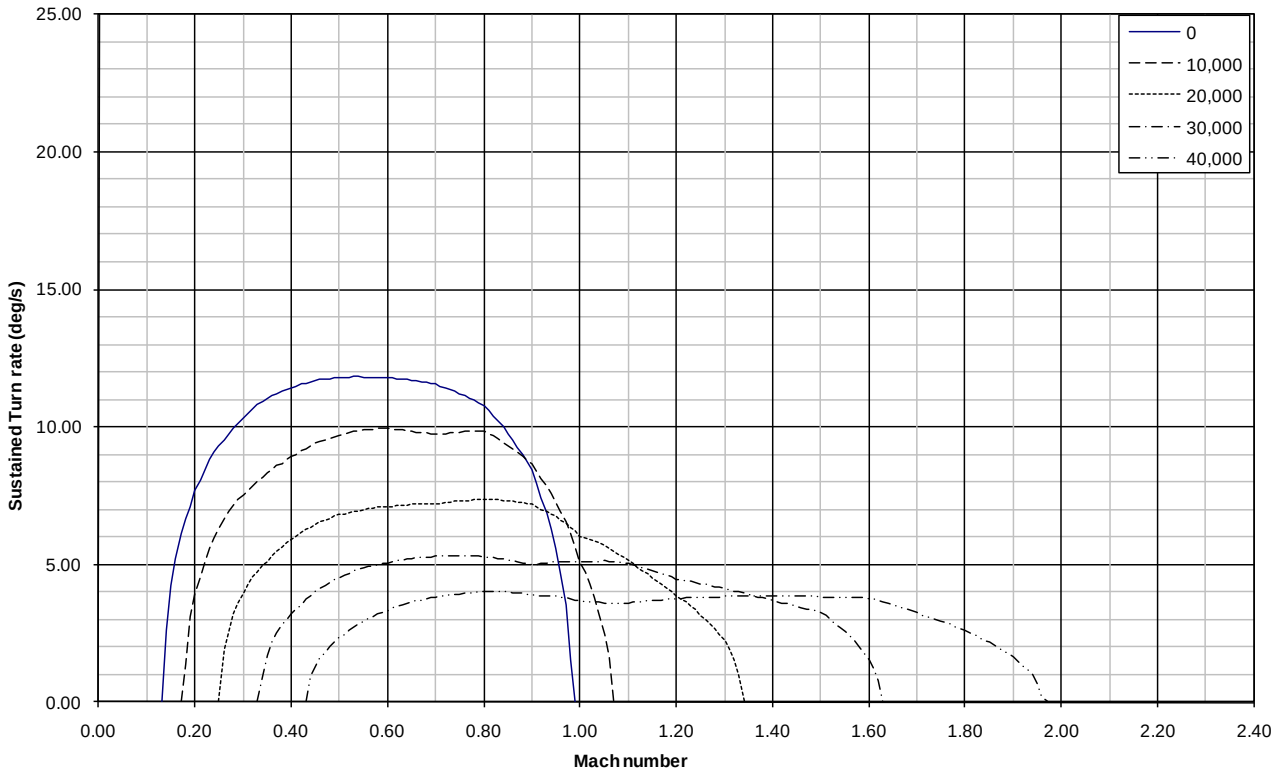
CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 13 (4xR-3S)
•GW=16,194lbslbs

Maximum Available Turn Rate



Maximum Sustained Turn rate (deg/s)



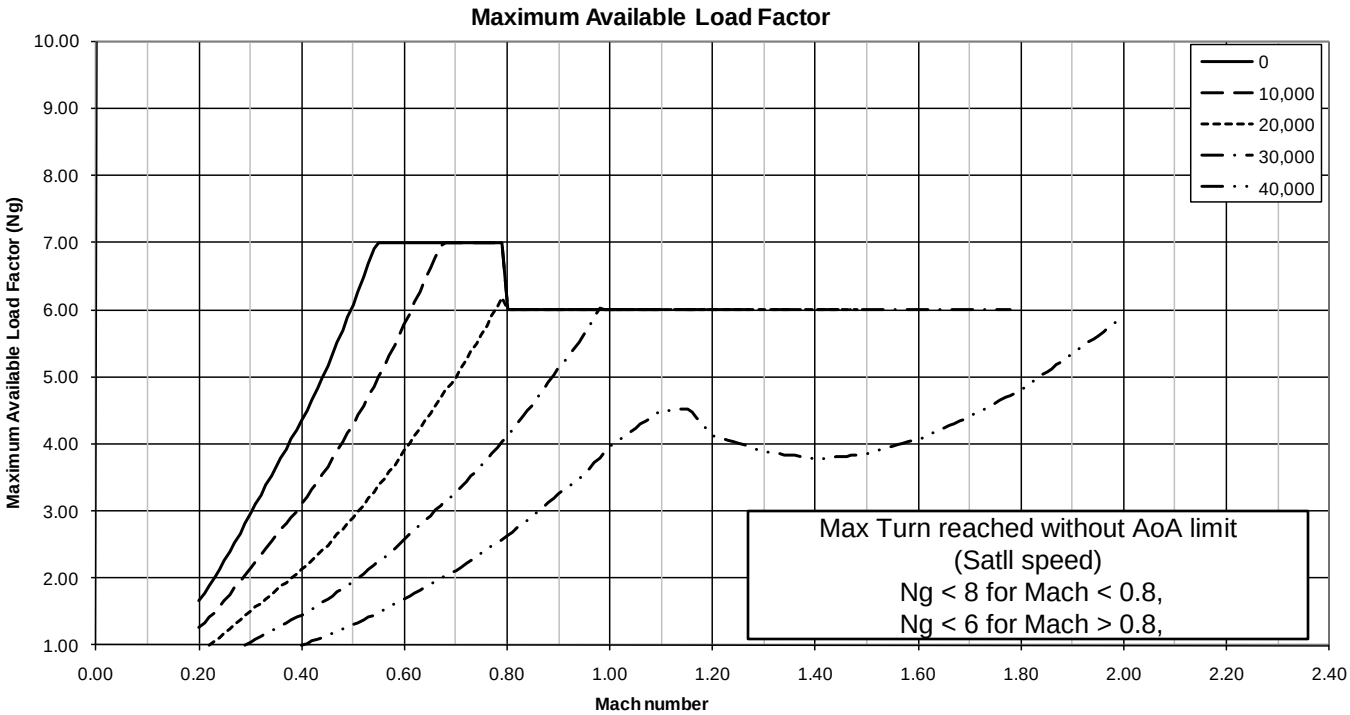
Load Factor – Summary

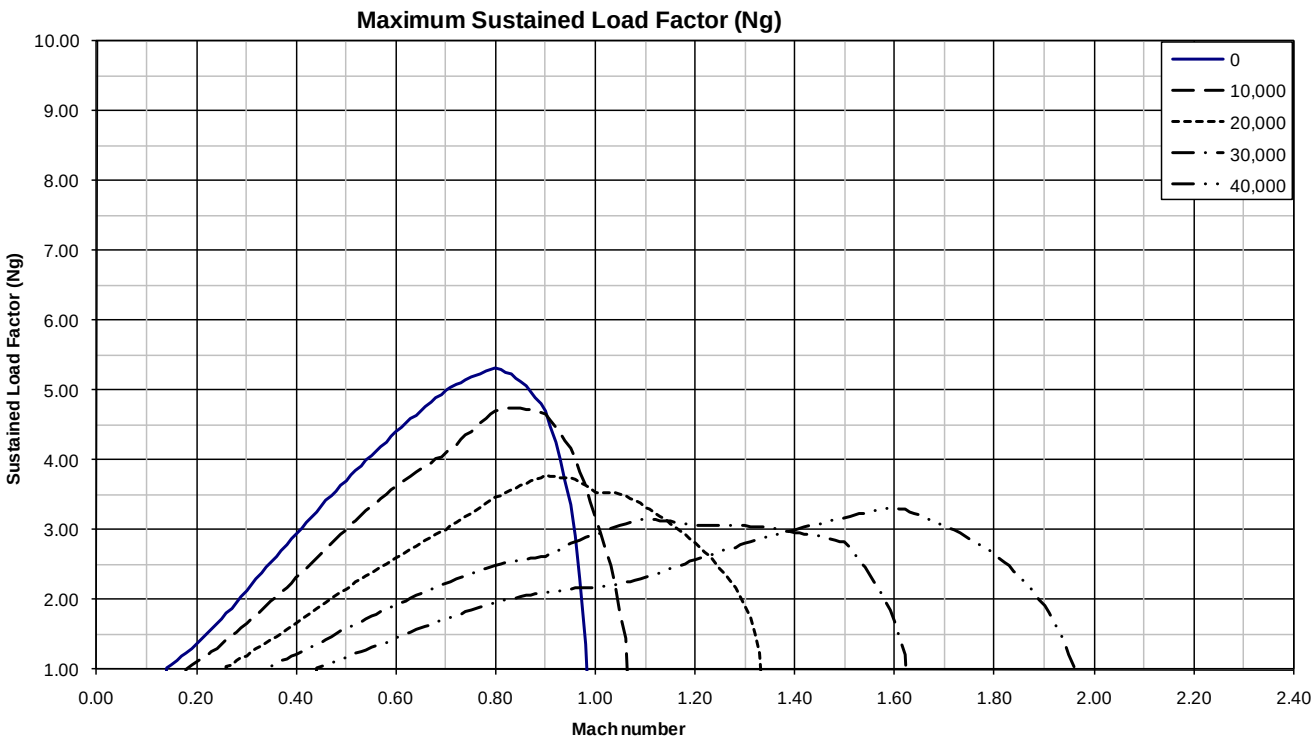
DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 13 (4xR-3S)
•GW=16,194lbslbs





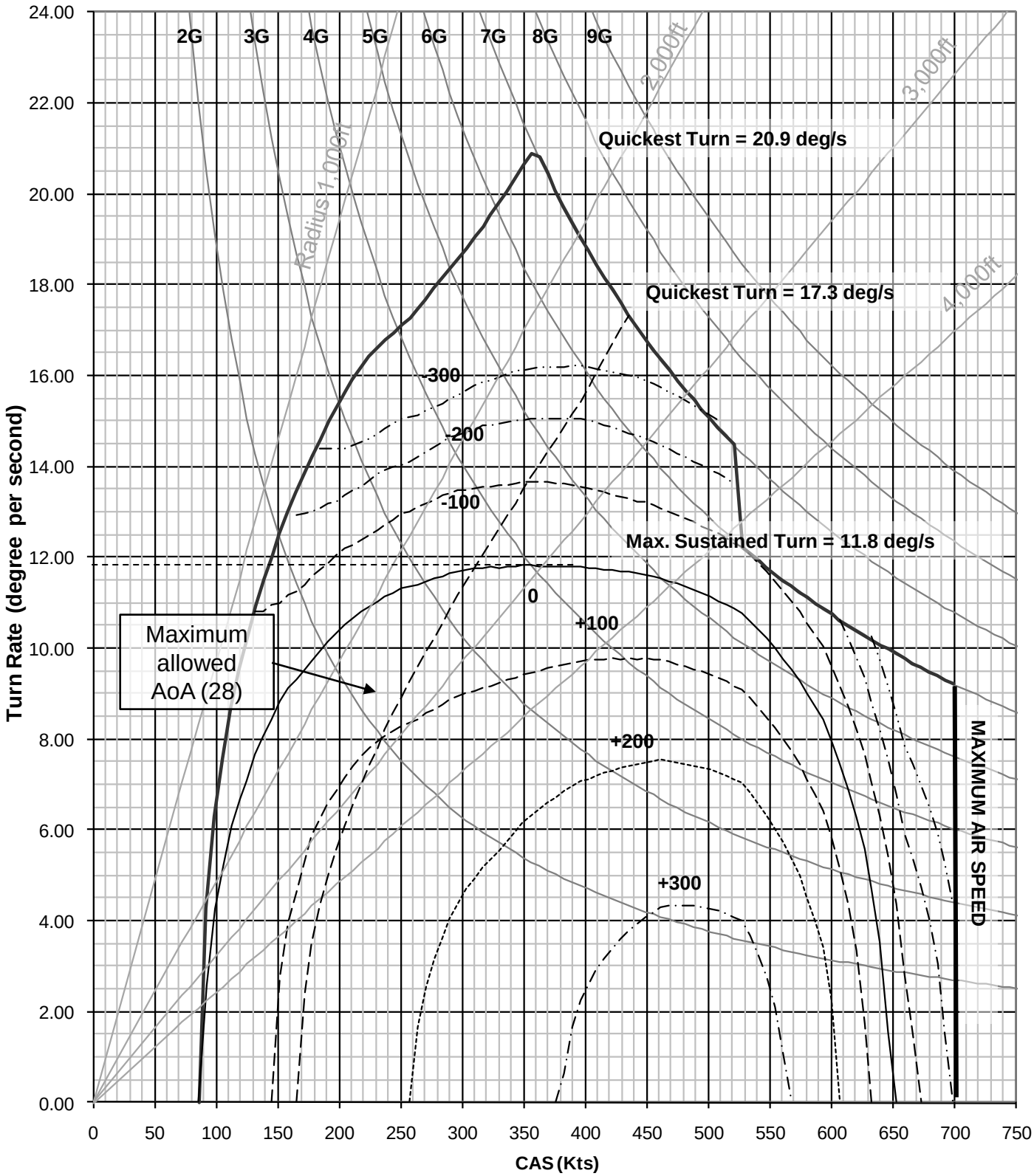
Turn Performance – Sea Level

DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 13 (4xR-3S)
•GW=16,194lbslbs



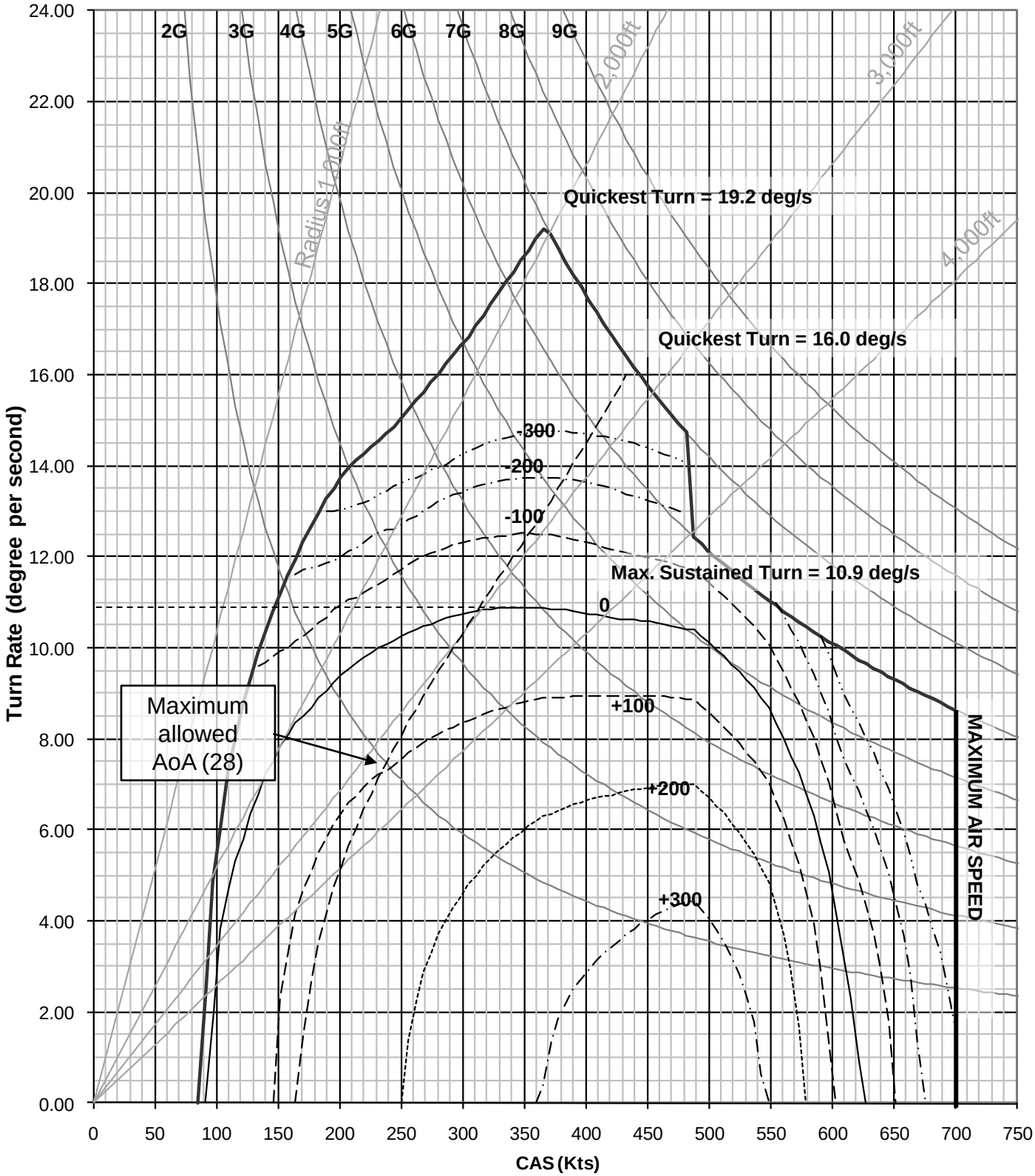
Turn Performance – 5,000 ft

DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 13 (4xR-3S)
•GW=16,194lbslbs



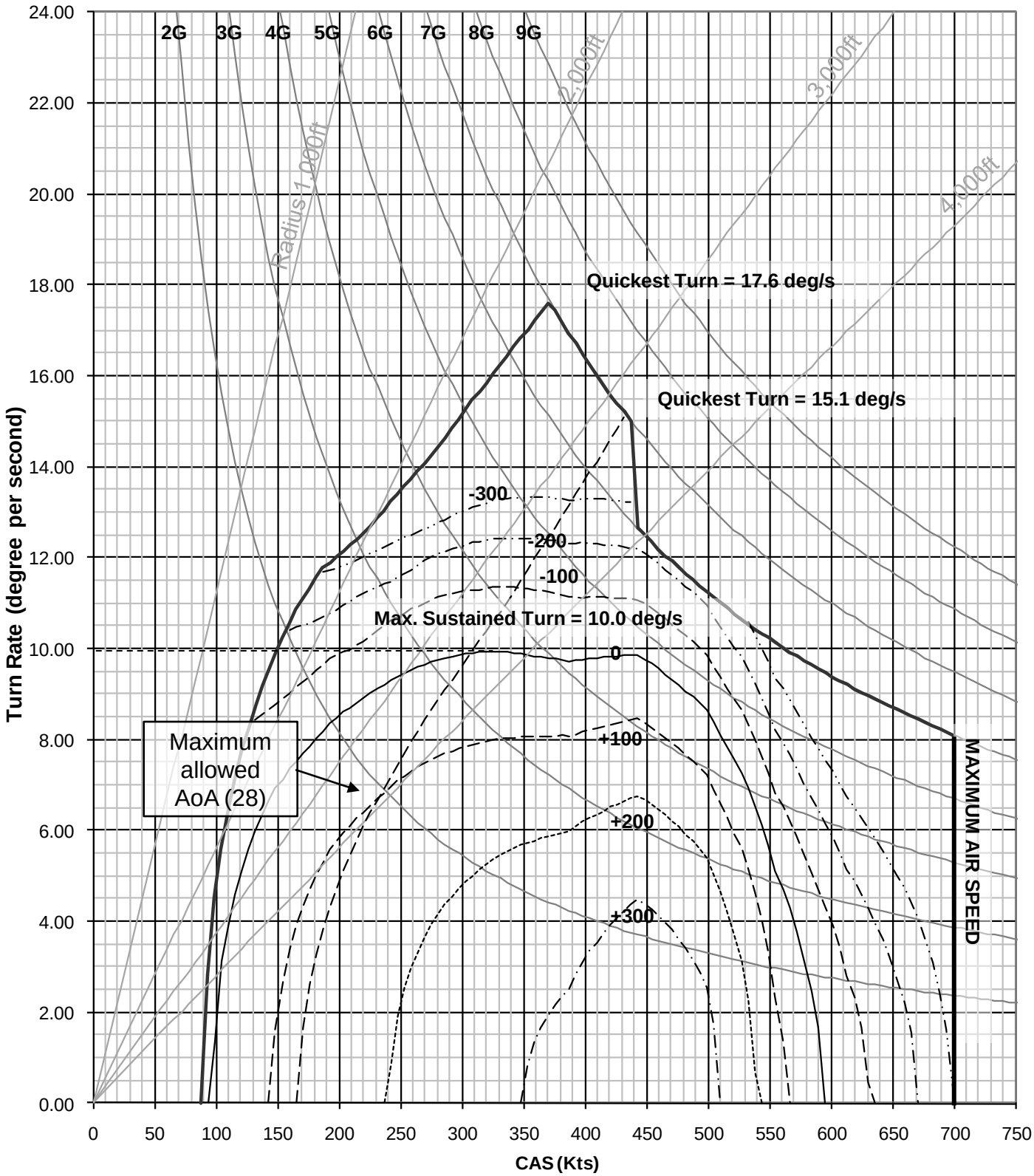
Turn Performance – 10,000 ft

DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 13 (4xR-3S)
•GW=16,194lbslbs



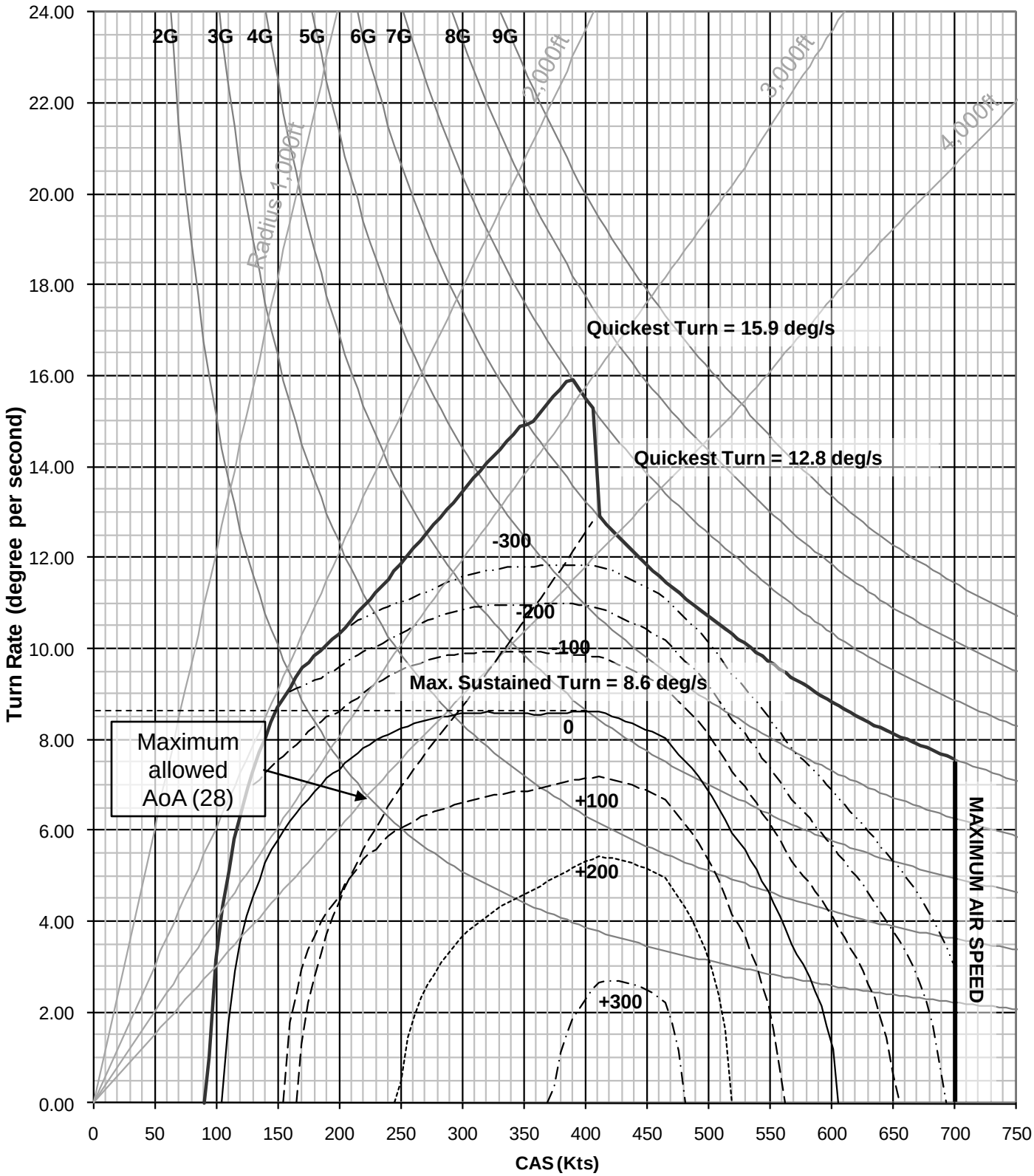
Turn Performance – 15,000 ft

DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 13 (4xR-3S)
•GW=16,194lbslbs



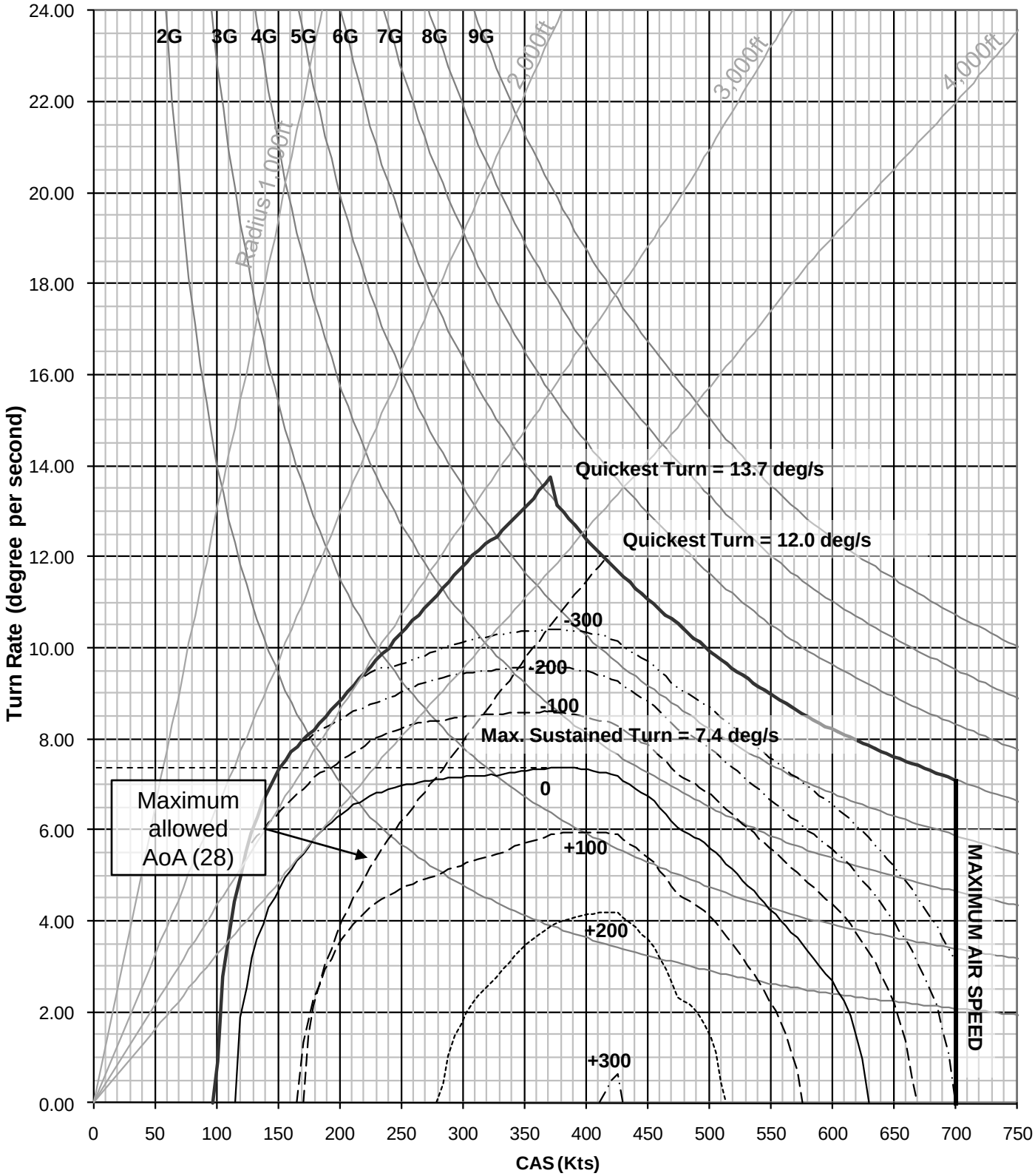
Turn Performance – 20,000 ft

DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 13 (4xR-3S)
•GW=16,194lbslbs



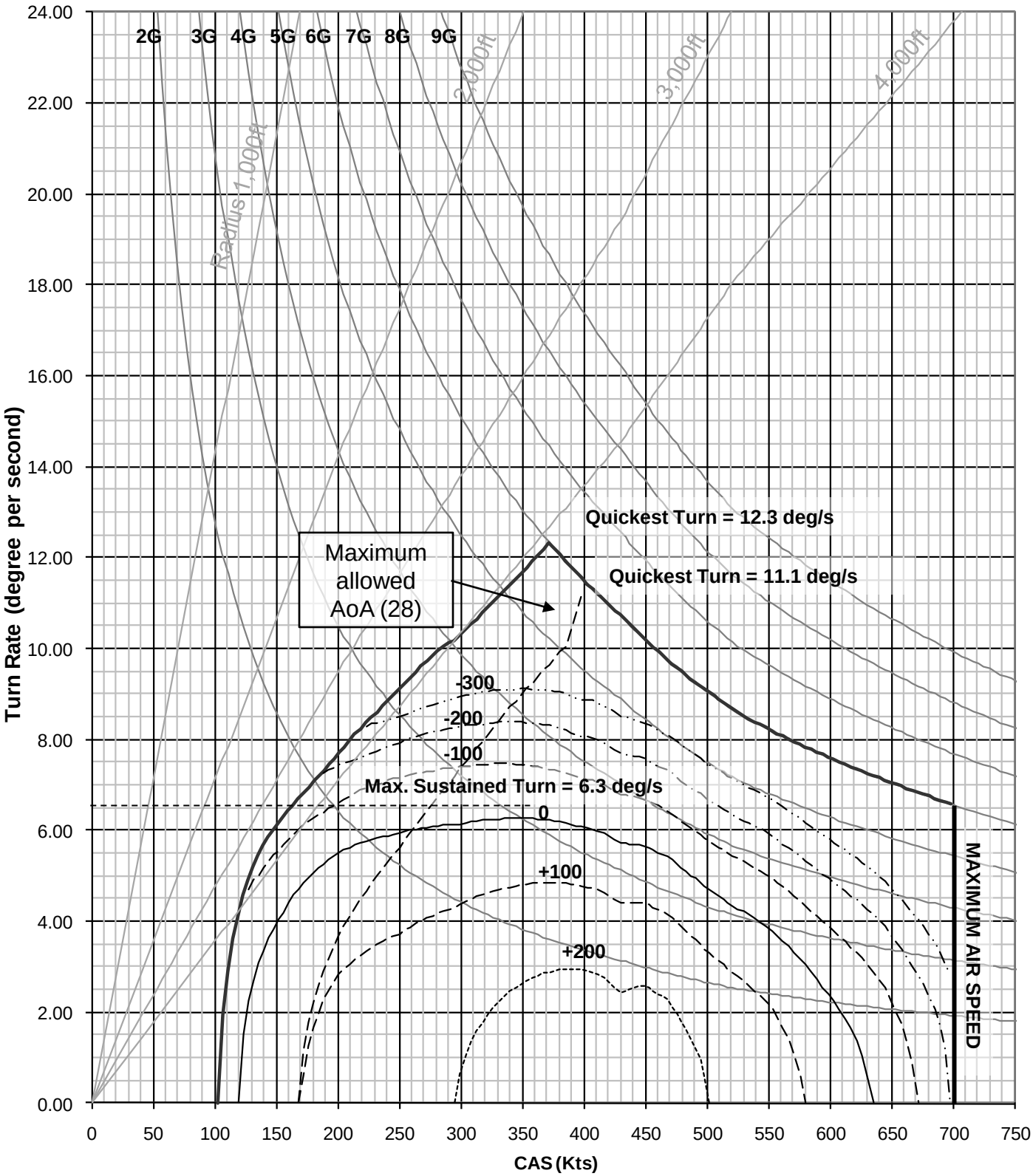
Turn Performance – 25,000 ft

DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 13 (4xR-3S)
•GW=16,194lbslbs



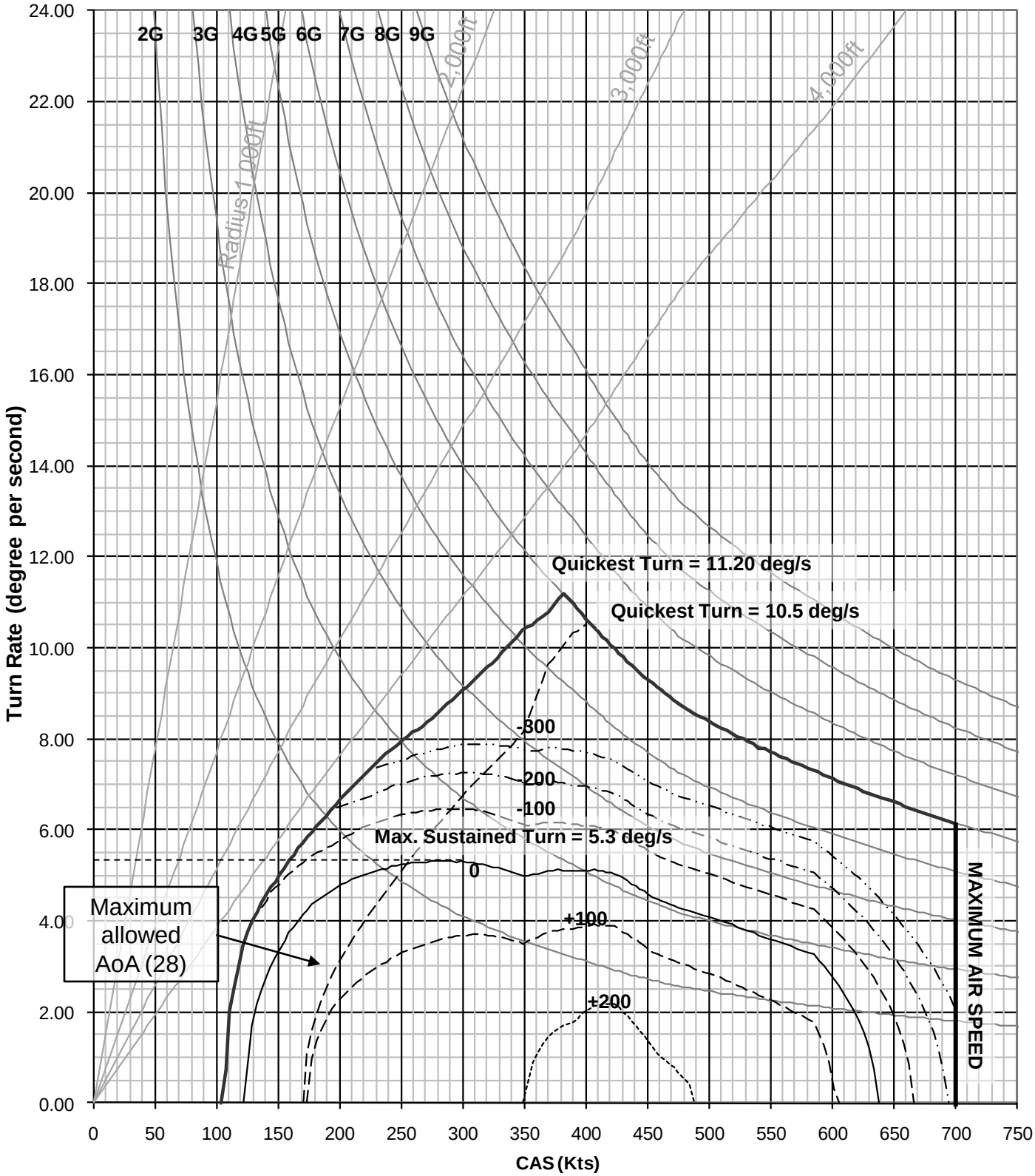
Turn Performance – 30,000 ft

DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 13 (4xR-3S)
•GW=16,194lbslbs



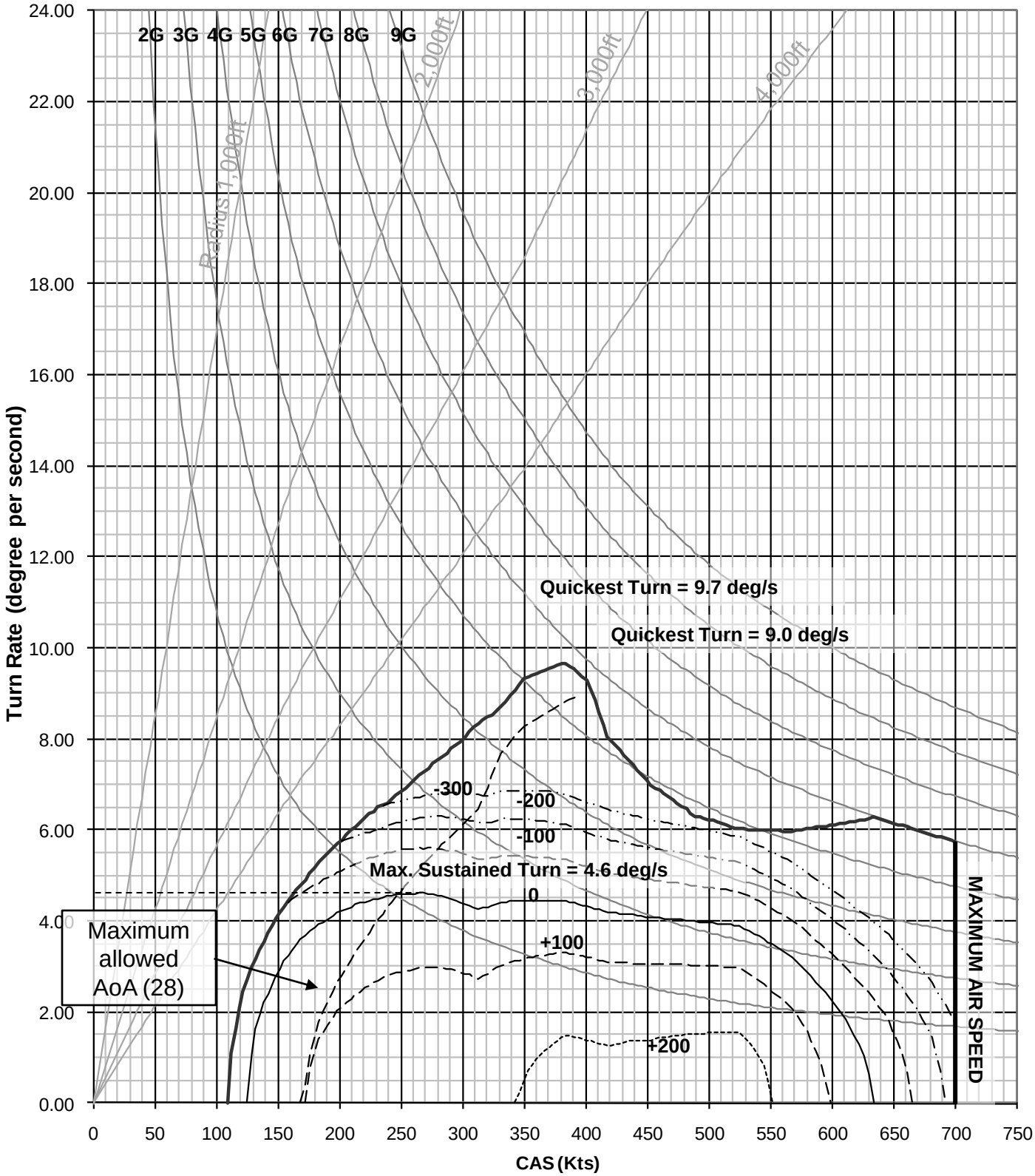
Turn Performance – 35,000 ft

DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 13 (4xR-3S)
•GW=16,194lbslbs



Climb Performance

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONFIGURATIONS :
•DRAG INDEX = 13 (4xR-3S)
•50% internal fuel
•GW= 16,194 lbs / 7,336 Kg

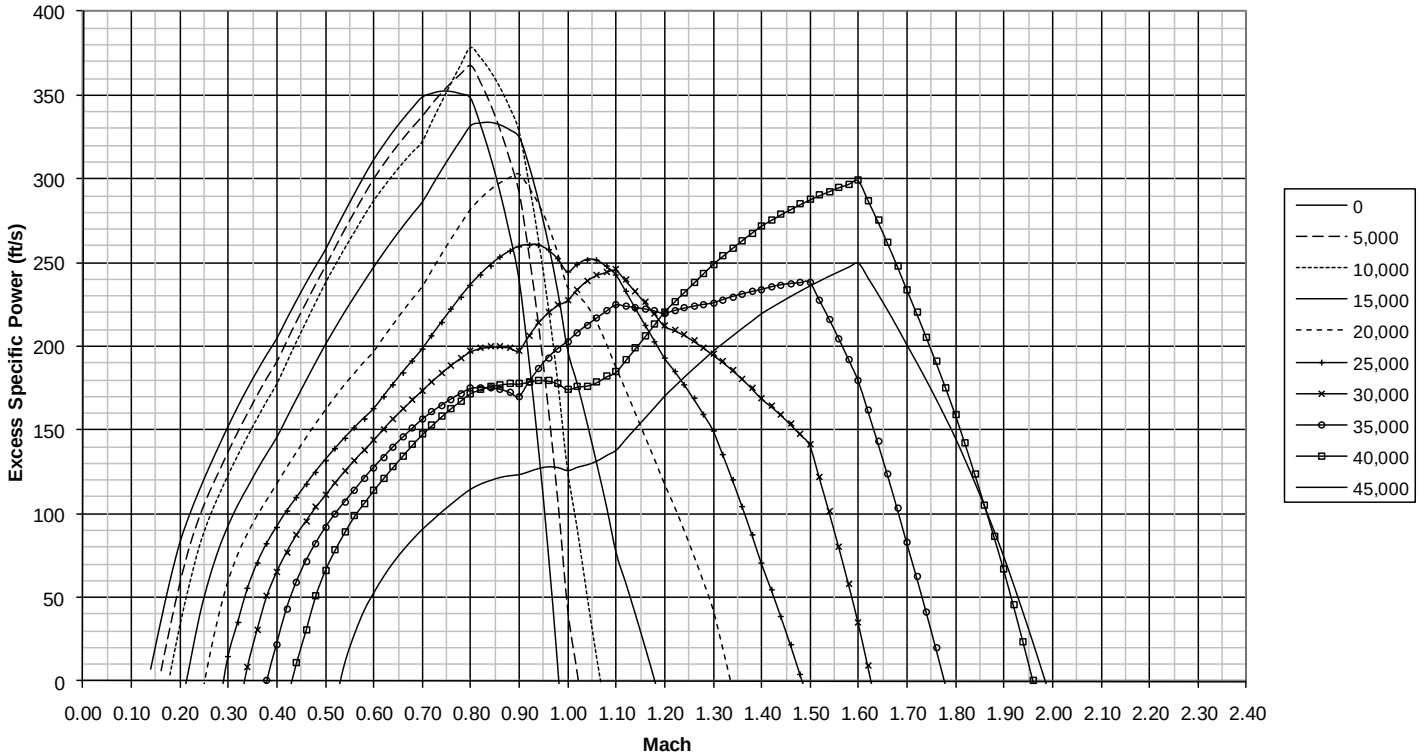
DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

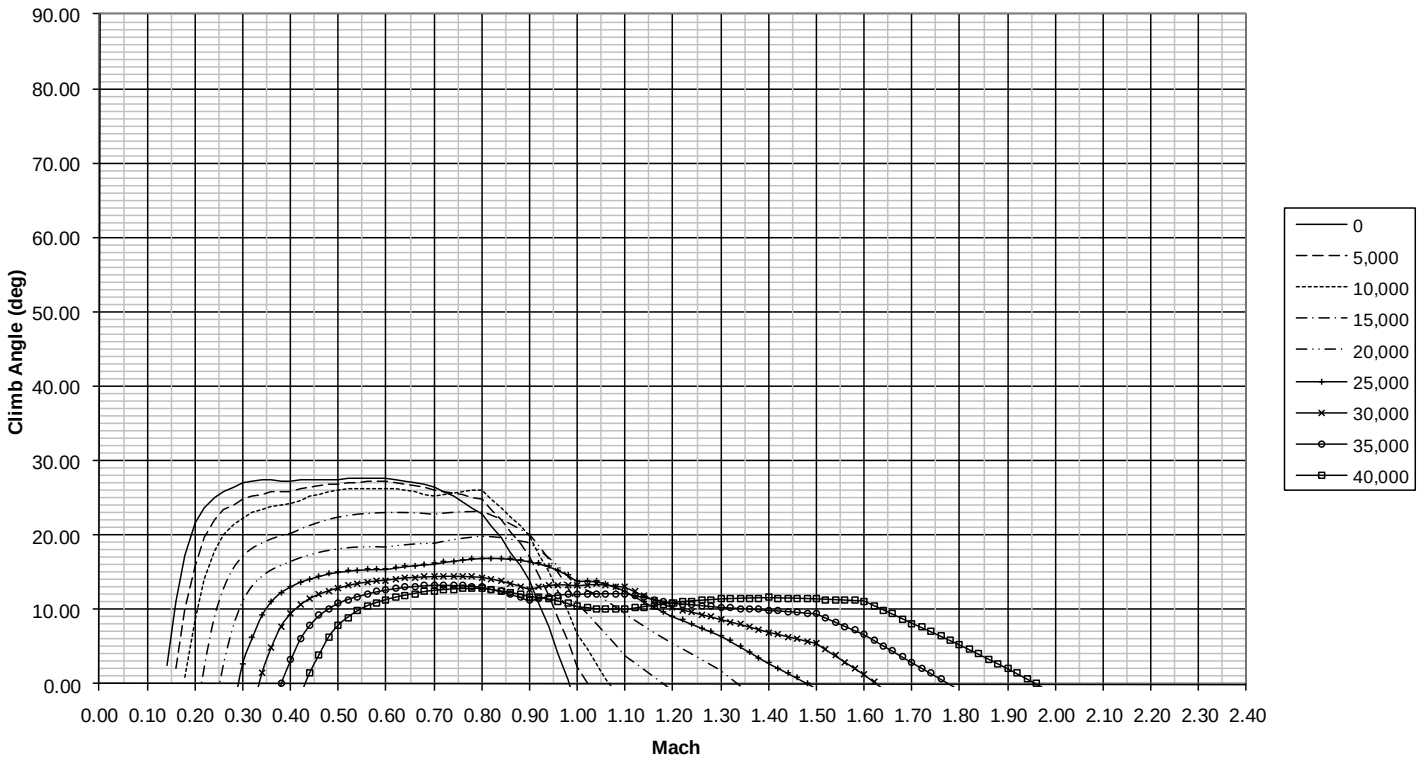
CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 13 (4xR-3S)
•GW=16,194lbslbs

Instantaneous Constant Speed Climb Rate



Constant Speed Climb Angle



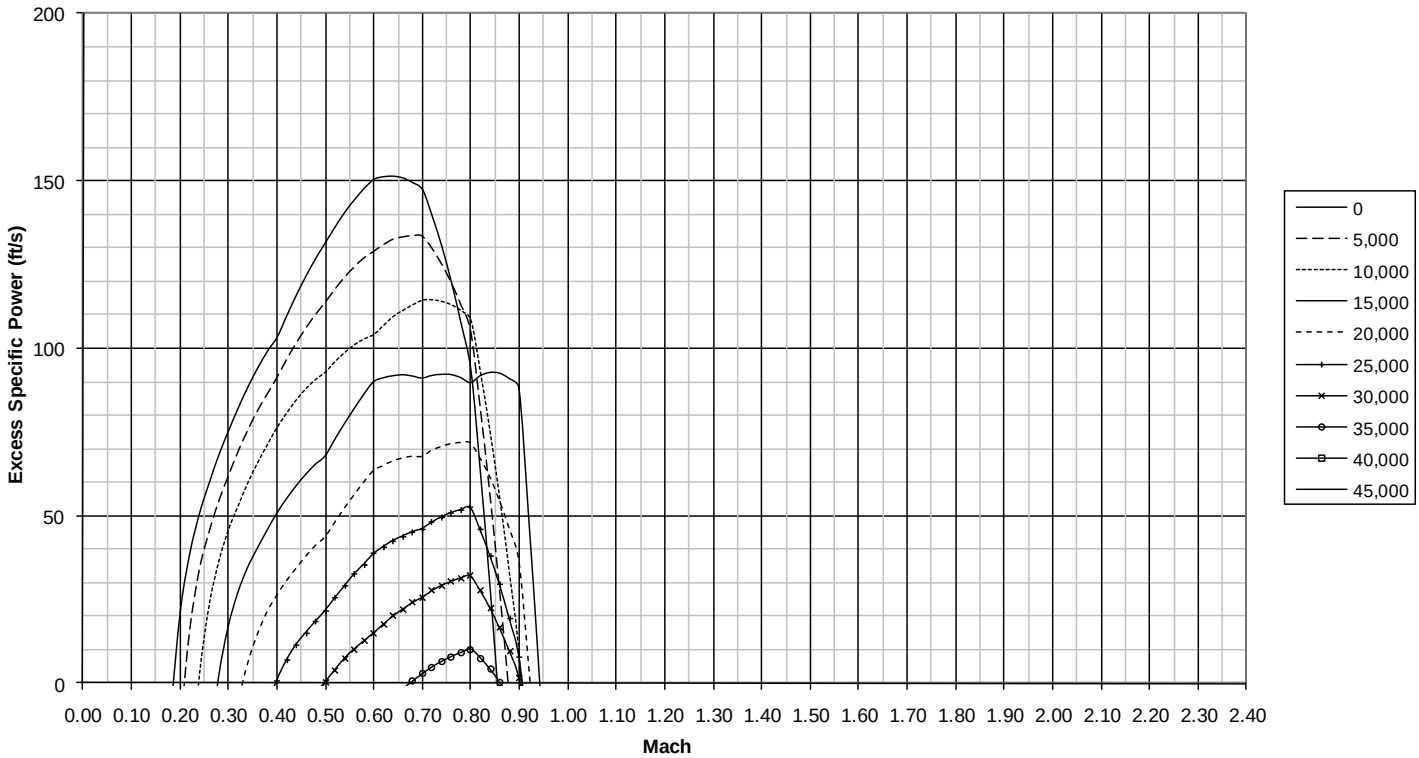
DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

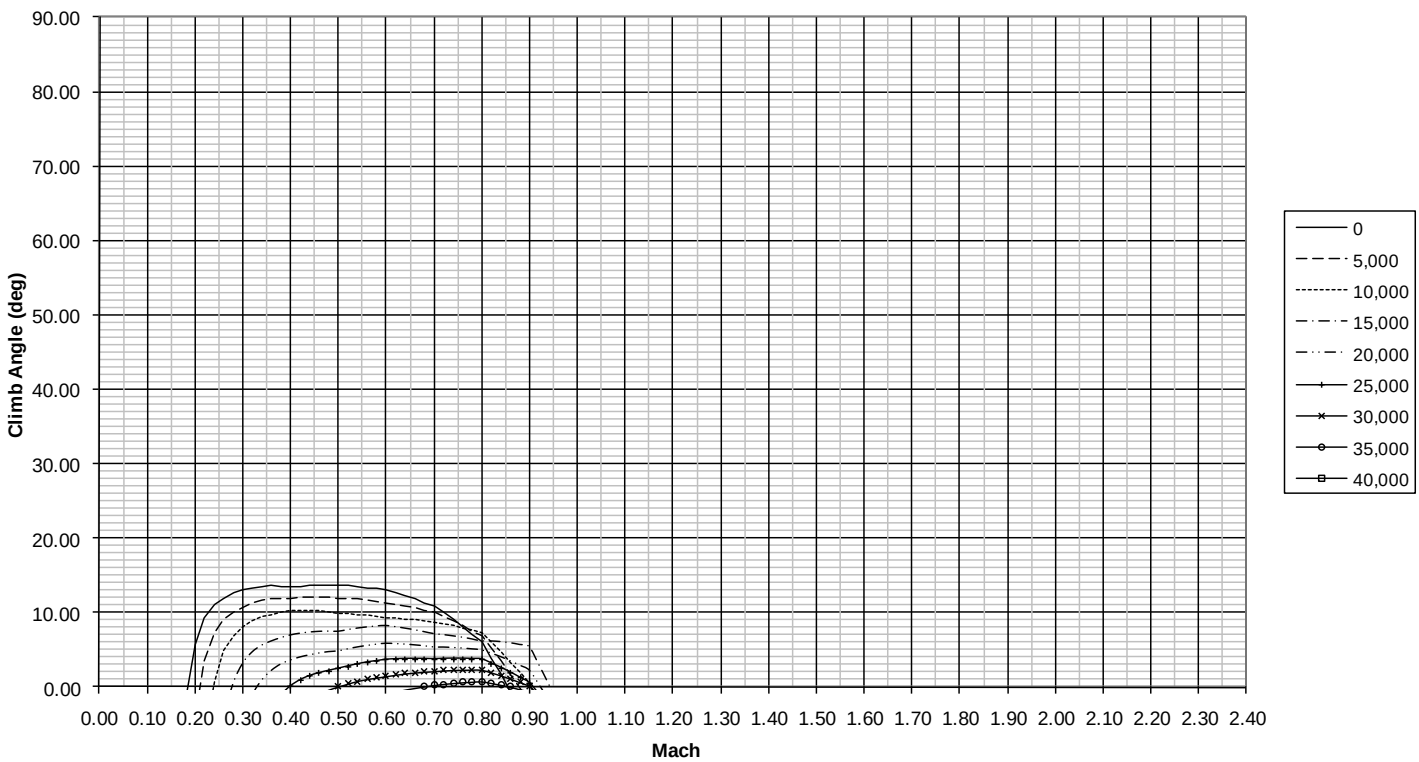
CONDITIONS:
•Standard Day
•MIL Power

CONFIGURATIONS :
•DRAG INDEX = 13 (4xR-3S)
•GW=16,194lbslbs

Instantaneous Constant Speed Climb Rate



Constant Speed Climb Angle



Acceleration Performances

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONFIGURATIONS :
•DRAG INDEX = 13 (4xR-3S)
•50% internal fuel
•GW= 16,194 lbs / 7,336 Kg

Acceleration Diagram

DATA BASIS : ESTIMATED

Aircraft : Mig-21 MF
Engine :Tumansky R-13-200

CONDITIONS:
•Standard Day
•Max AB

CONFIGURATIONS :
•DRAG INDEX = 13 (4xR-3S)
•GW=16,194lbslbs