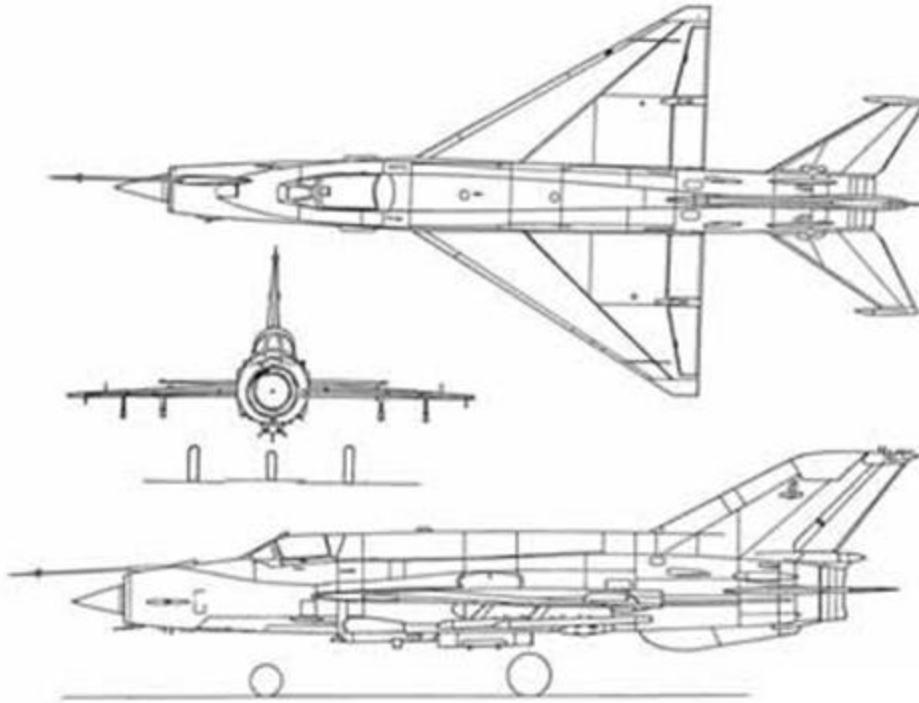


PERFORMANCE ANALYSIS



MIG-21bis iz.75A / L-17 Mikoyan-Gourevitch Corporation (Tumanskiy R-25-300)

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

LICENSE : This document has been created by J.M. LANGERON / TOPOLO, (<http://topolo.free.fr/>) all the values used to model the aircraft behavior have been computed by him, like all performance charts presented here. If you want to use these data, or part of it, please contact the author by personal message to TOPOLO on check-six forum: (<http://www.checksix-forums.com/>)

Level Flight Envelope

Level Flight Envelope

DATA BASIS : ESTIMATED

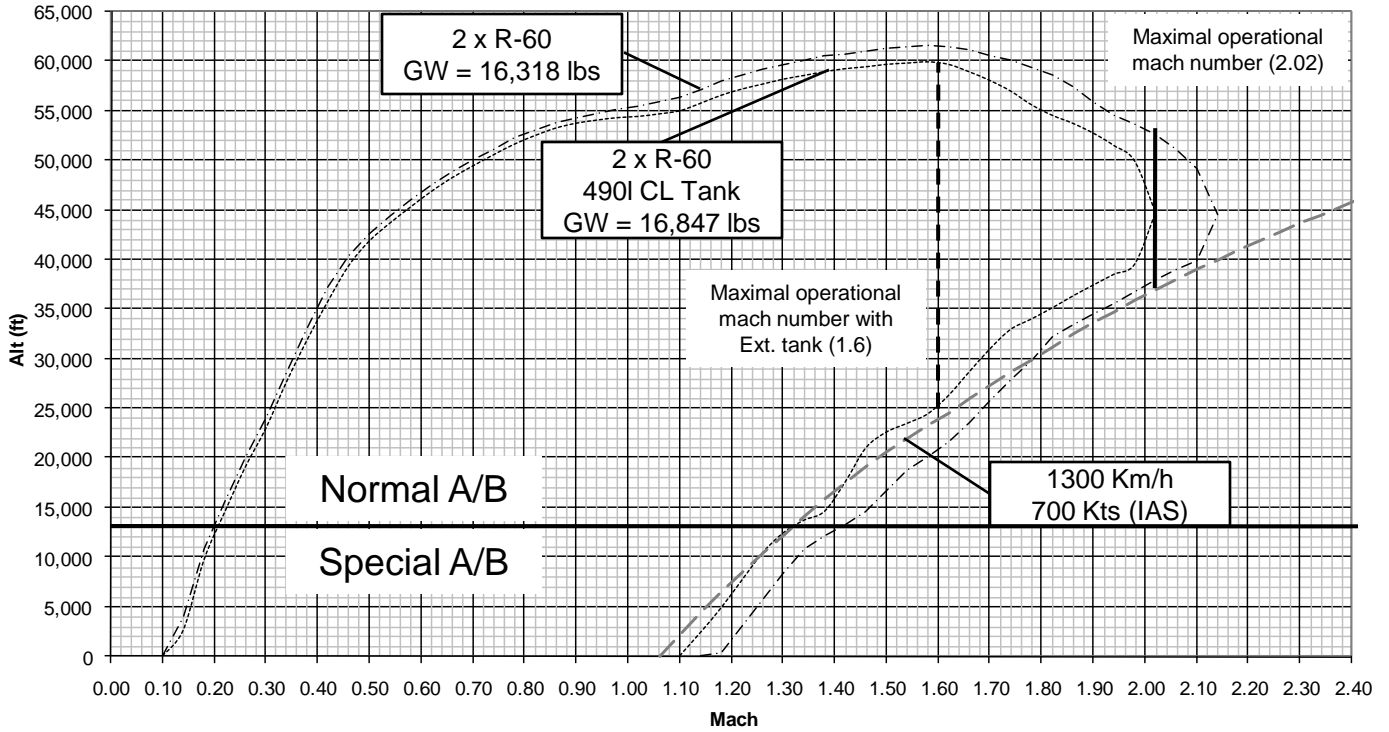
CONDITIONS:

- Standard Day
- Max AB

Aircraft : MIG-21bis iz.75A

Engine :Tumanskiy R-25-300

**Level Flight Envelope
Full AB**



DATA BASIS : ESTIMATED

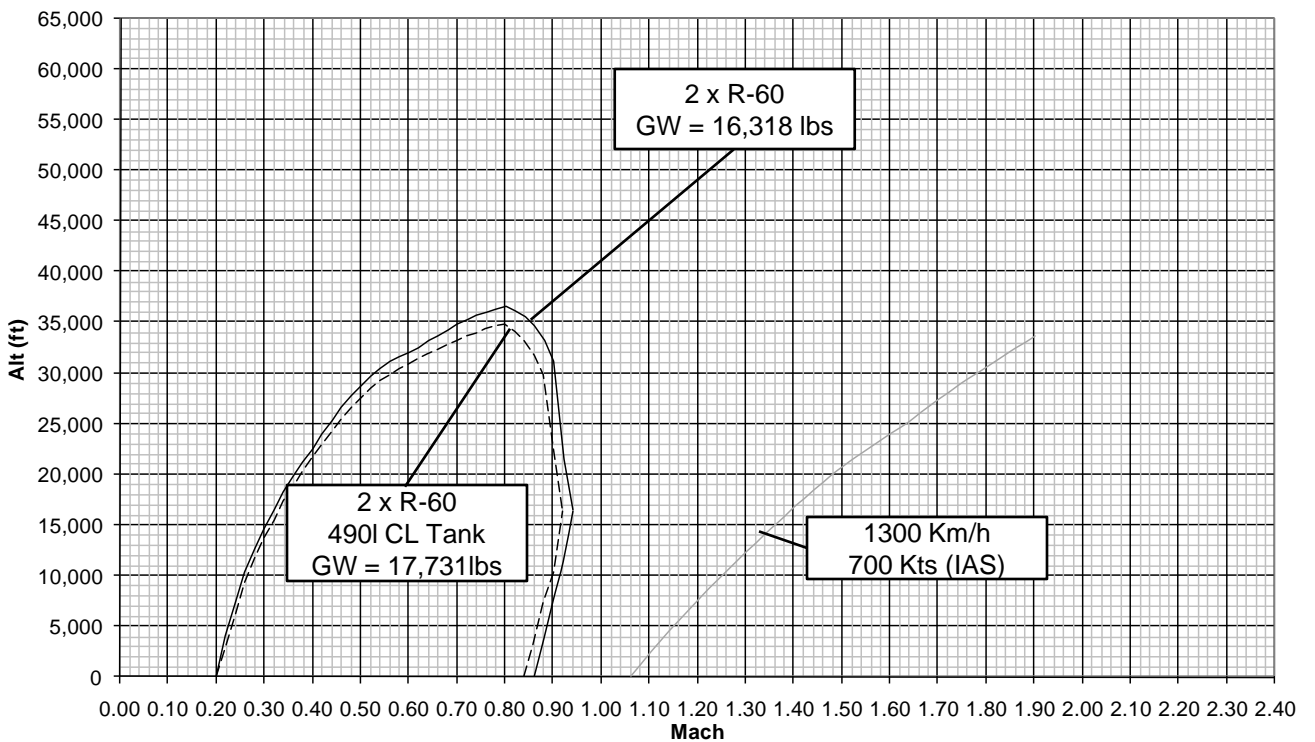
CONDITIONS:

- Standard Day
- MILL Power

Aircraft : MIG-21bis iz.75A

Engine :Tumanskiy R-25-300

**Level Flight Envelope
MIL Power**



Turn Performance

Aircraft : MIG-21bis iz.75A

Engine :Tumanskiy R-25-300

CONFIGURATIONS :

•DRAG INDEX = 11 (2xR-60)

•50% internal fuel

•GW= 16,318 lbs / 7,392 kg

Turn Rate – Summary

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine :Tumanskiy R-25-300

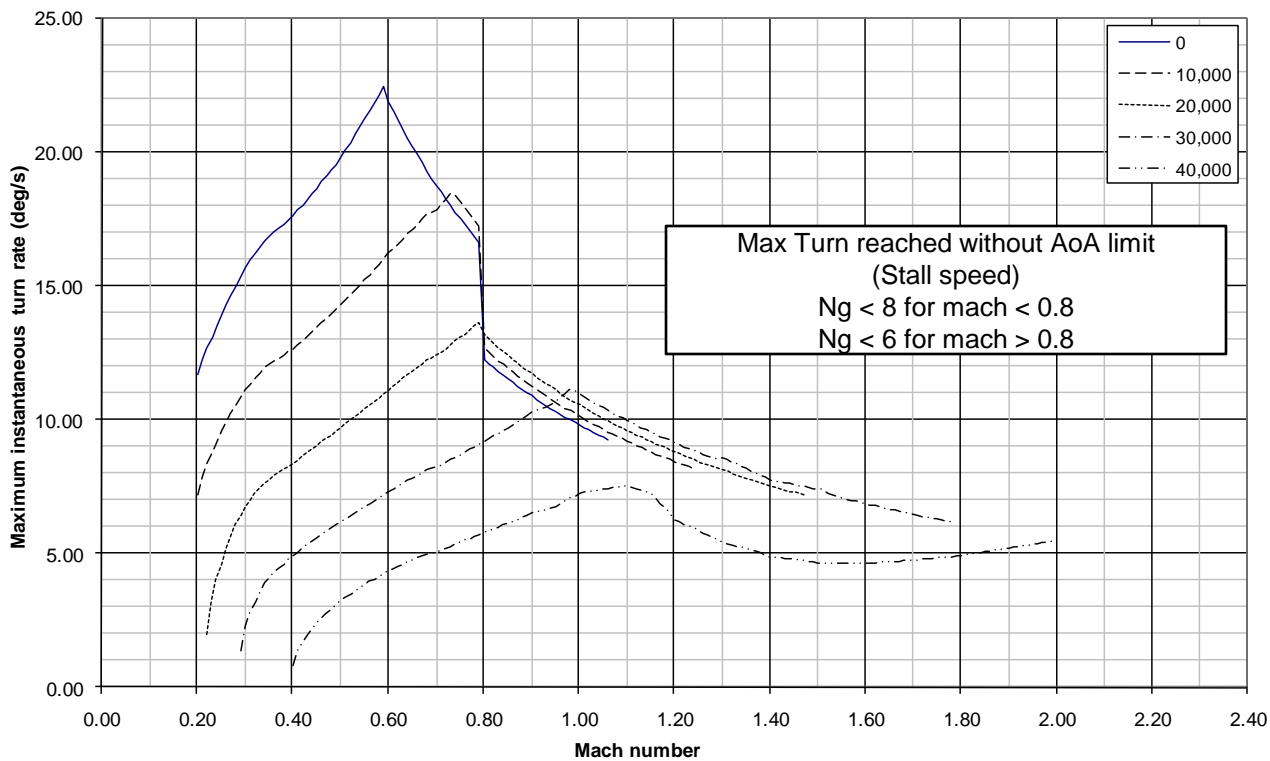
CONDITIONS:

- Standard Day
- Special AB up to 10,000ft
- Max AB from 15,000ft

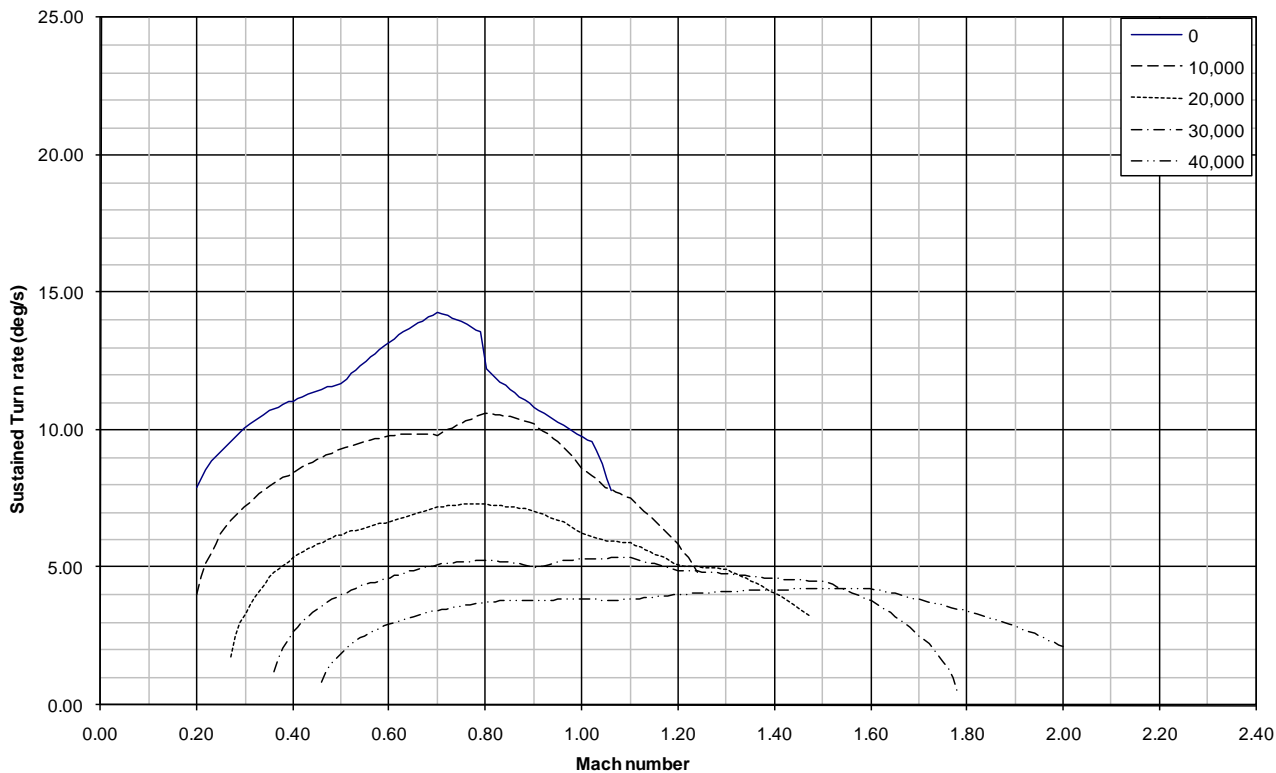
CONFIGURATIONS :

- DRAG INDEX = 11 (2xR-60)
- GW=16,318 lbs / 7,392 kg

Maximum Available Turn Rate



Maximum Sustained Turn rate (deg/s)



Load Factor – Summary

DATA BASIS : ESTIMATED

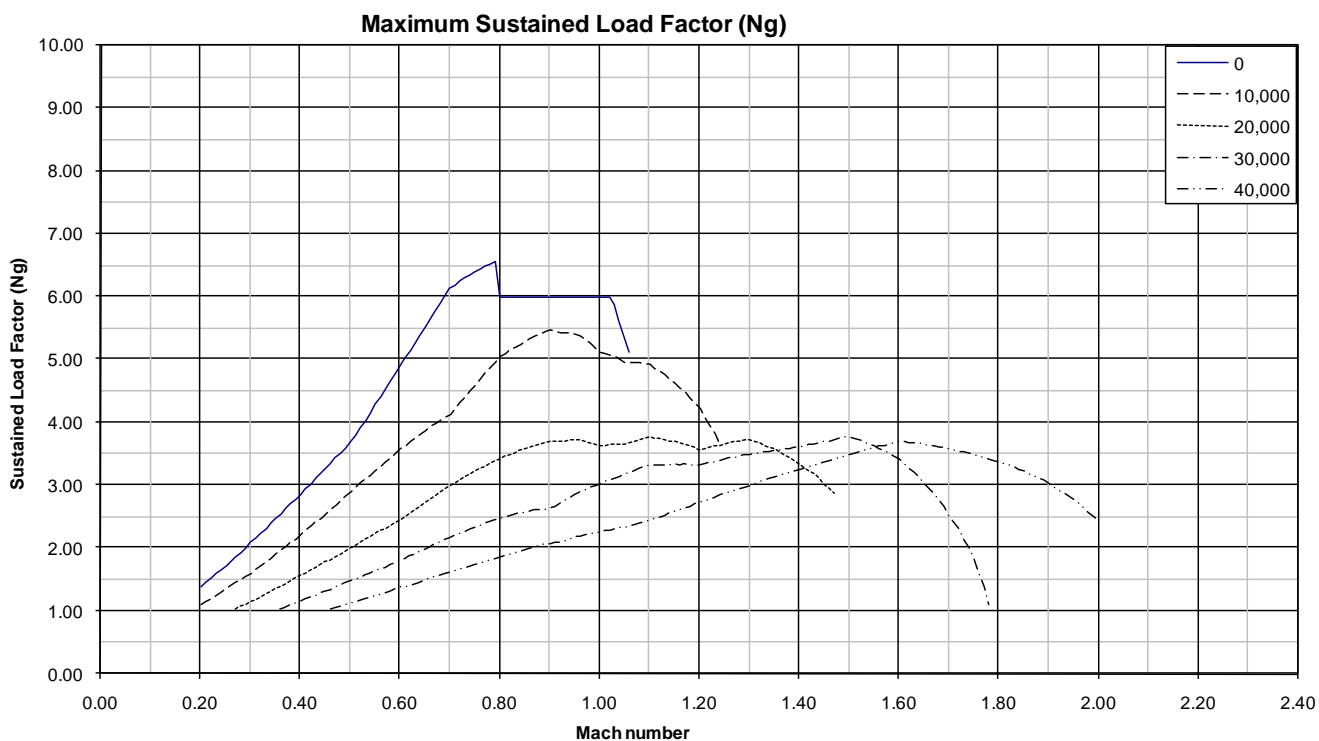
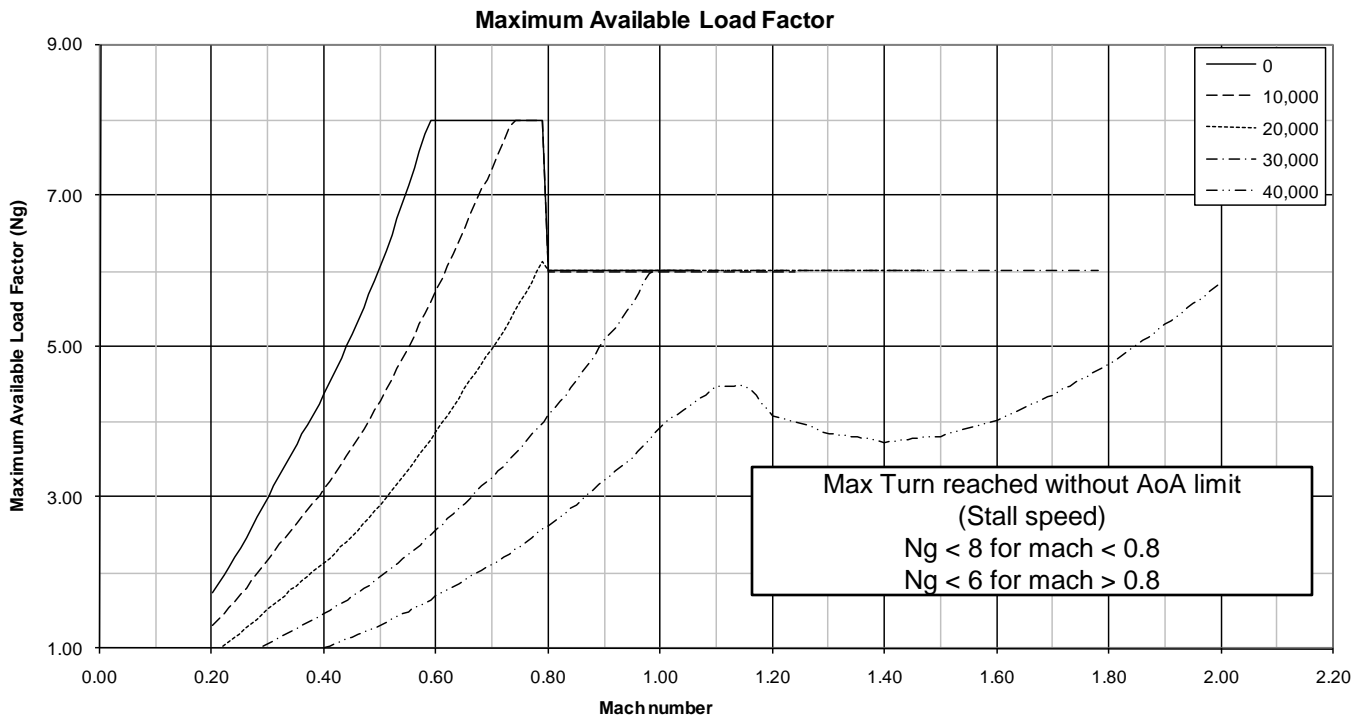
Aircraft : MIG-21bis iz.75A
Engine :Tumanskiy R-25-300

CONDITIONS:

- Standard Day
- Special AB up to 10,000ft
- Max AB from 15,000ft

CONFIGURATIONS :

- DRAG INDEX = 11 (2xR-60)
- GW=16,318 lbs / 7,392 kg



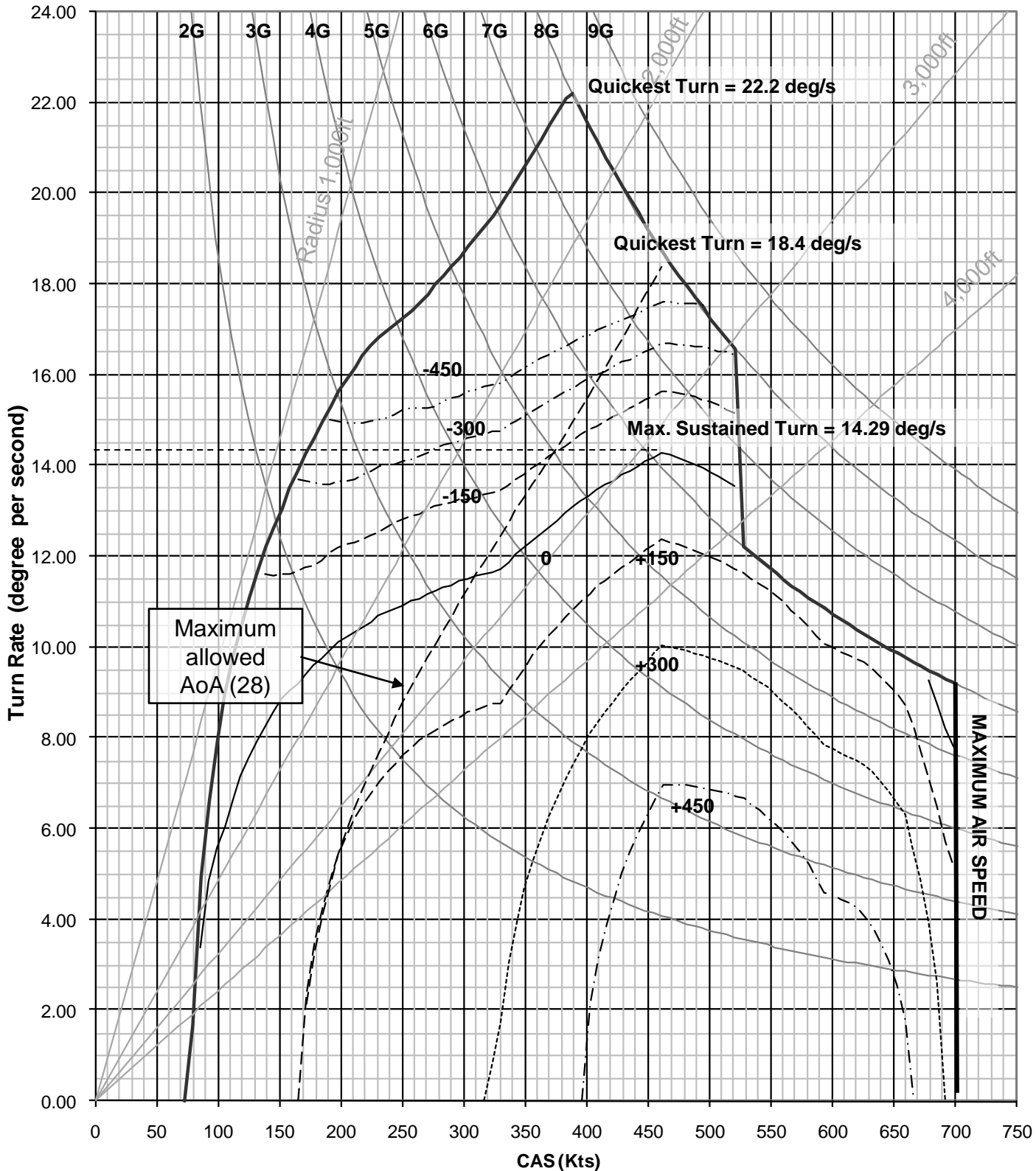
Turn Performance – Sea Level

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine :Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Special AB

CONFIGURATIONS :
 •DRAG INDEX = 11 (2xR-60)
 •GW=16,318 lbs / 7,392 kg



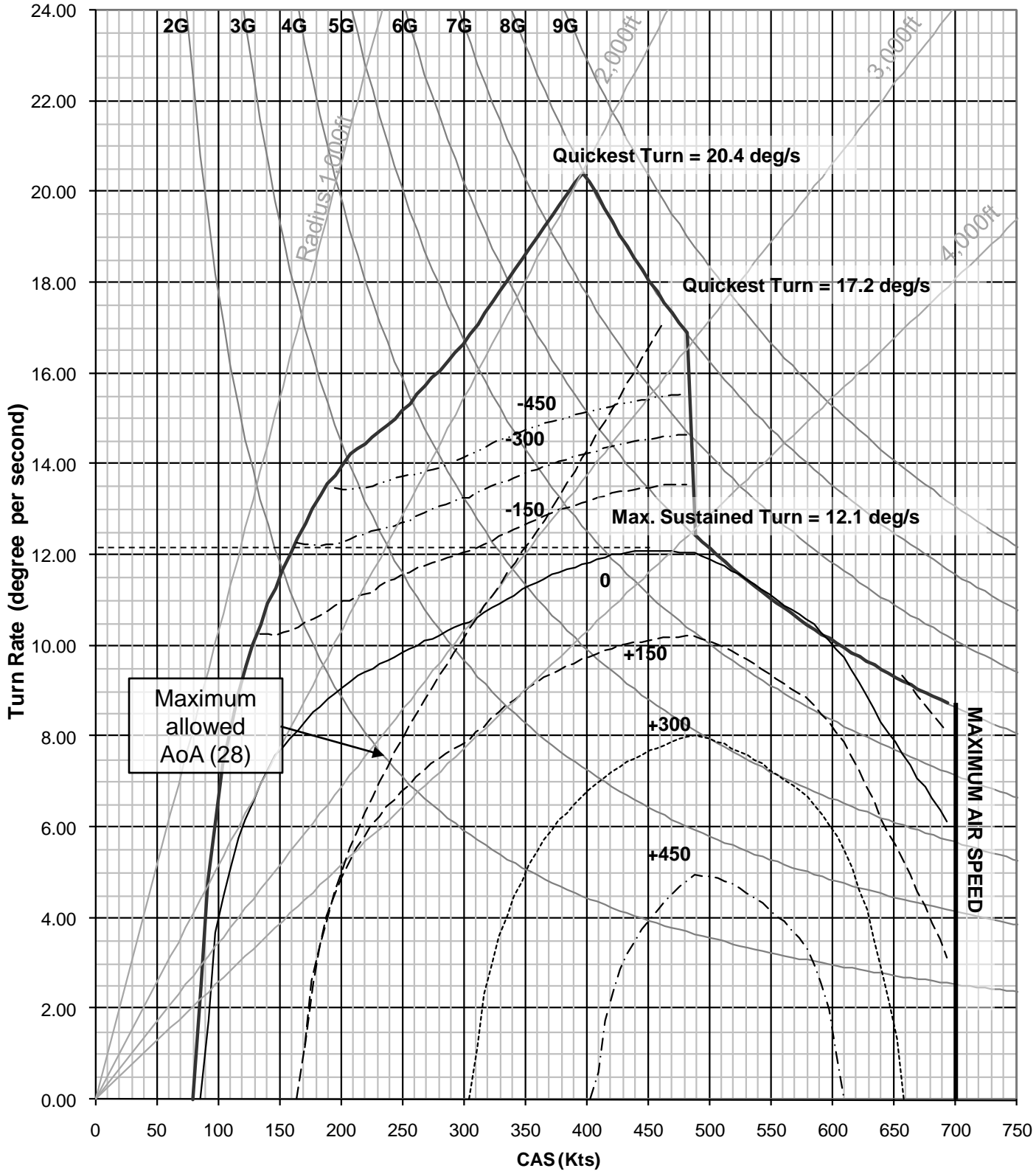
Turn Performance – 5,000 ft

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine : Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Special AB

CONFIGURATIONS :
 •DRAG INDEX = 11 (2xR-60)
 •GW=16,318 lbs / 7,392 kg



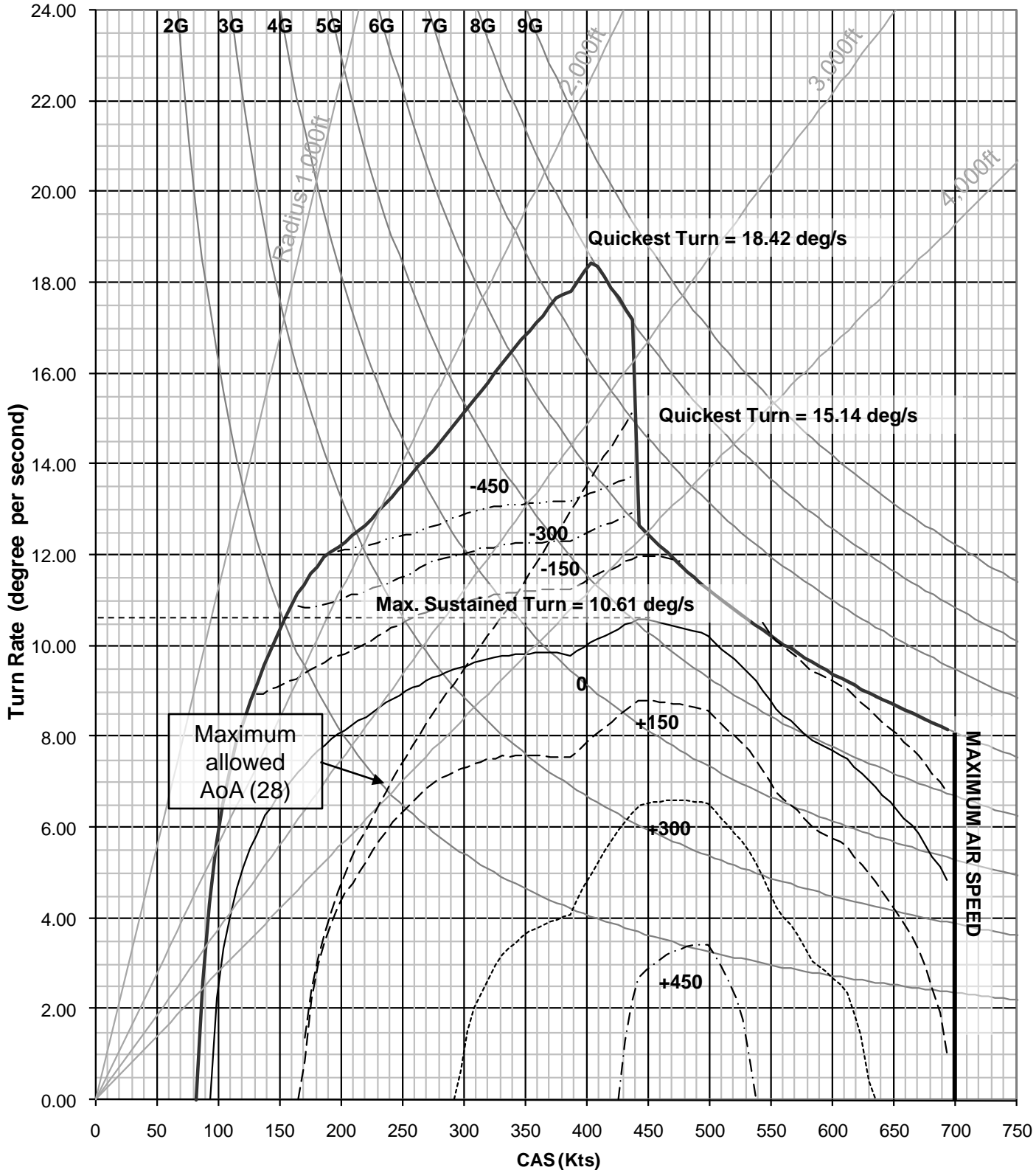
Turn Performance – 10,000 ft

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine : Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Special AB

CONFIGURATIONS :
 •DRAG INDEX = 11 (2xR-60)
 •GW=16,318 lbs / 7,392 kg



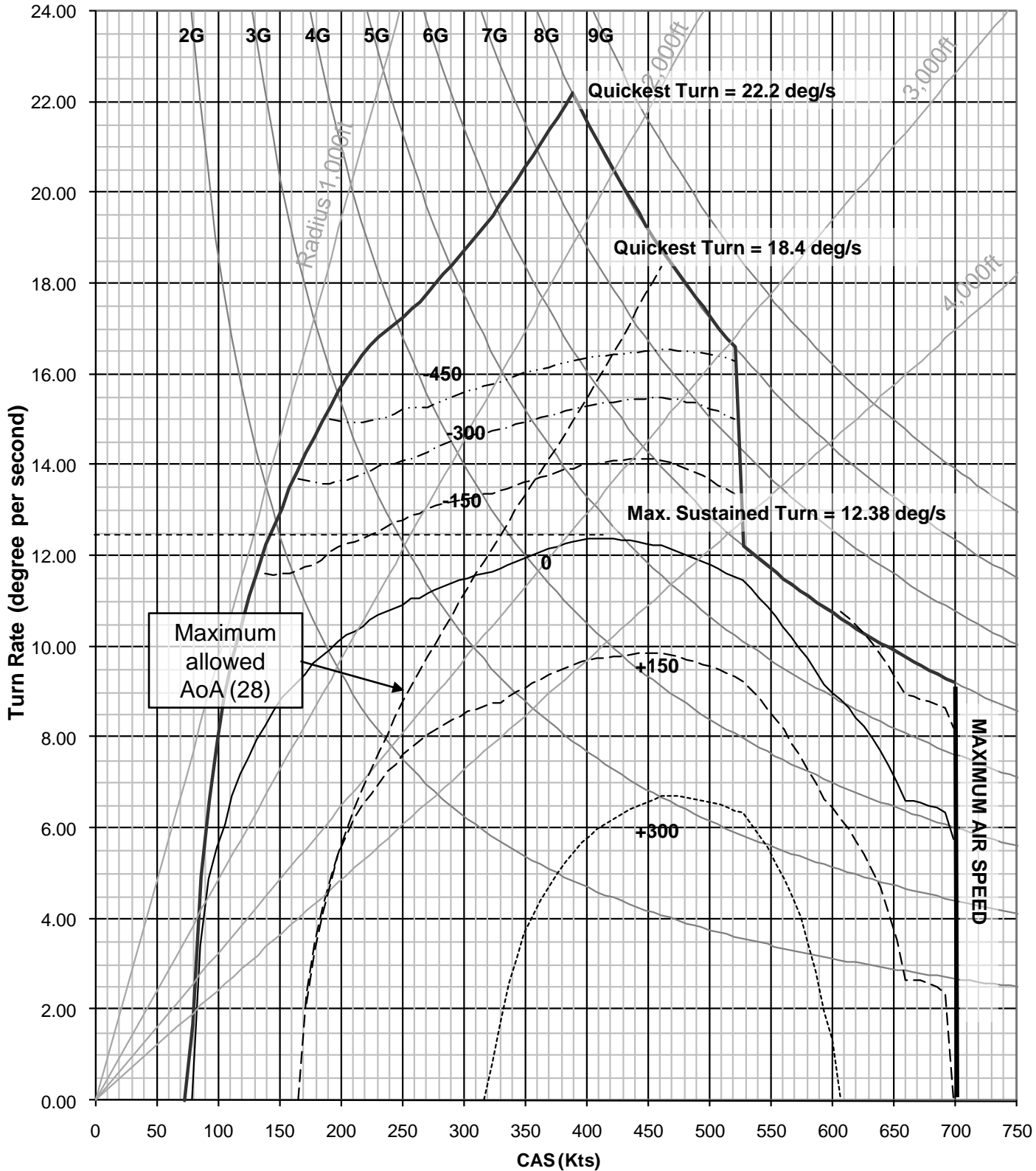
Turn Performance – Sea Level

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine :Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Max AB

CONFIGURATIONS :
 •DRAG INDEX = 11 (2xR-60)
 •GW=16,318 lbs / 7,392 kg



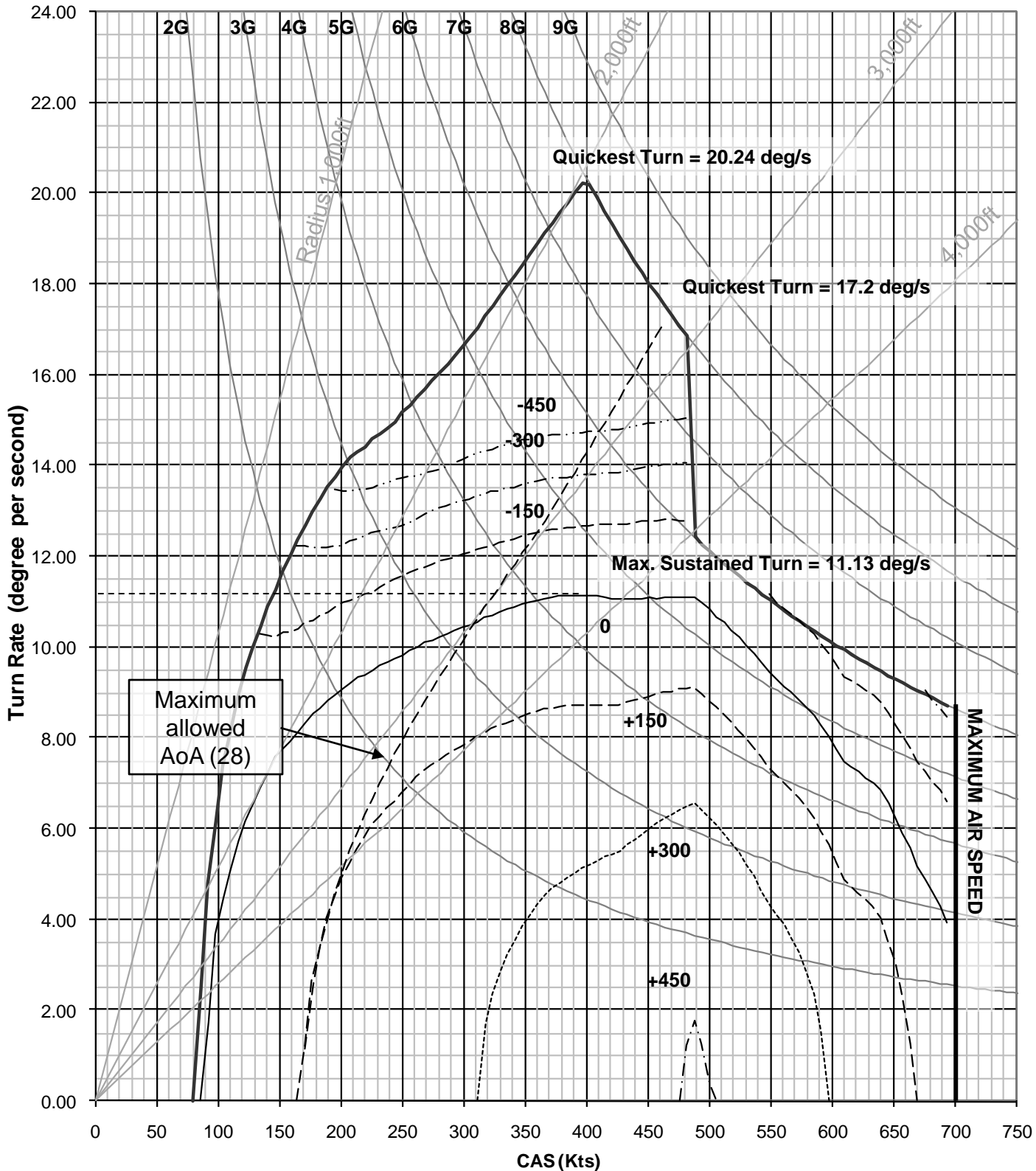
Turn Performance – 5,000 ft

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine : Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Max AB

CONFIGURATIONS :
 •DRAG INDEX = 11 (2xR-60)
 •GW=16,318 lbs / 7,392 kg



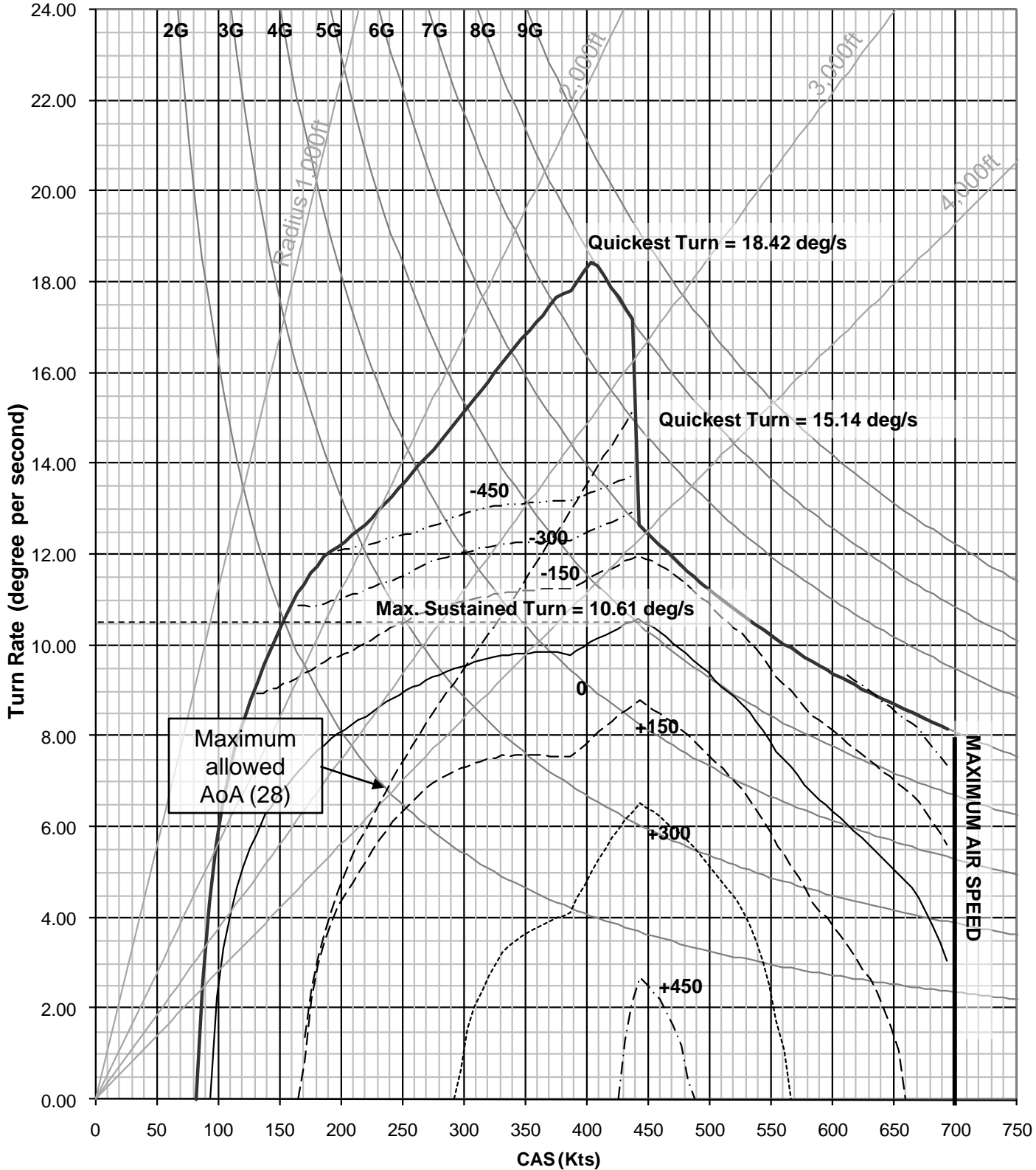
Turn Performance – 10,000 ft

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine :Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Max AB

CONFIGURATIONS :
 •DRAG INDEX = 11 (2xR-60)
 •GW=16,318 lbs / 7,392 kg



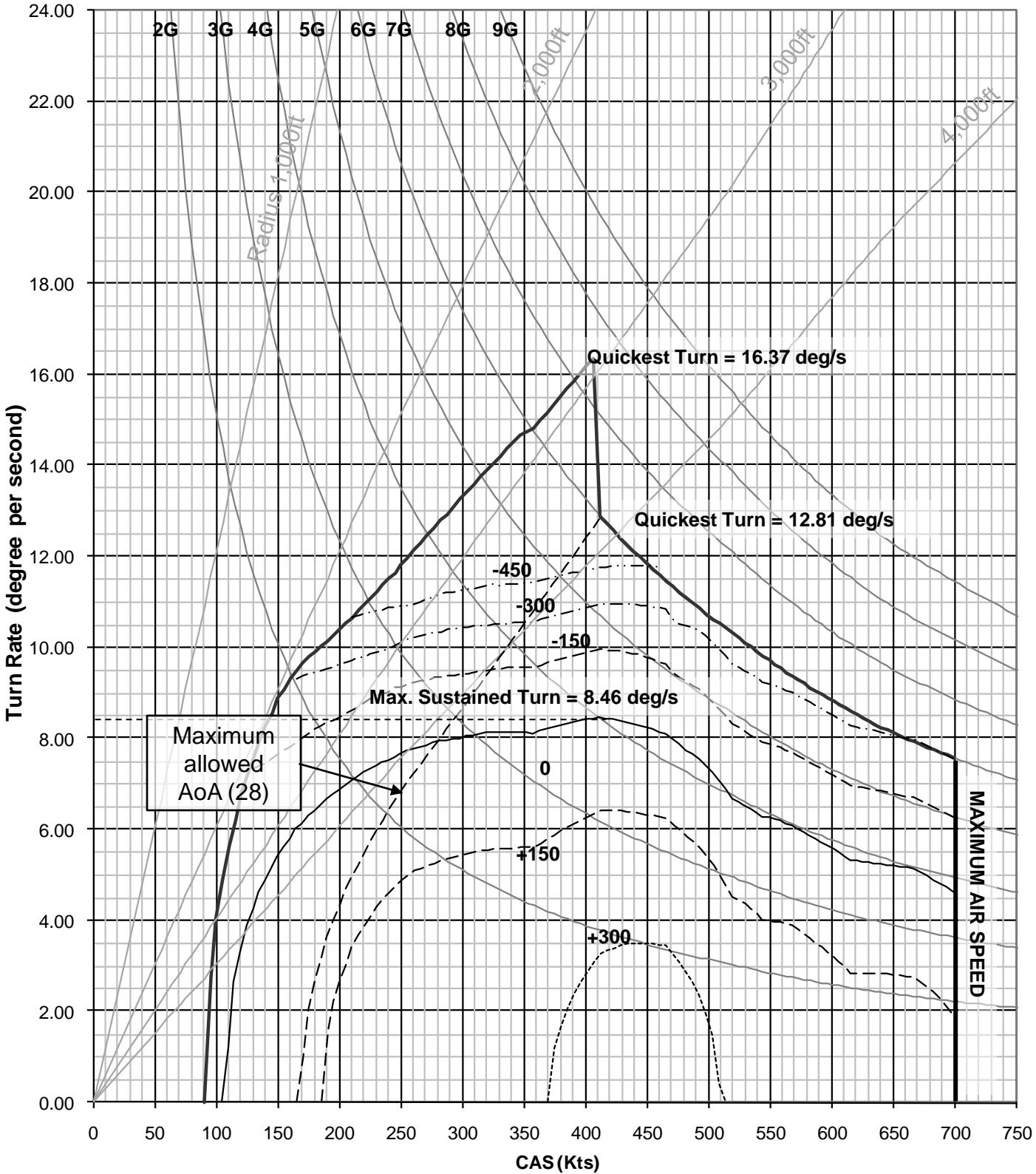
Turn Performance – 15,000 ft

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine :Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Max AB

CONFIGURATIONS :
 •DRAG INDEX = 11 (2xR-60)
 •GW=16,318 lbs / 7,392 kg



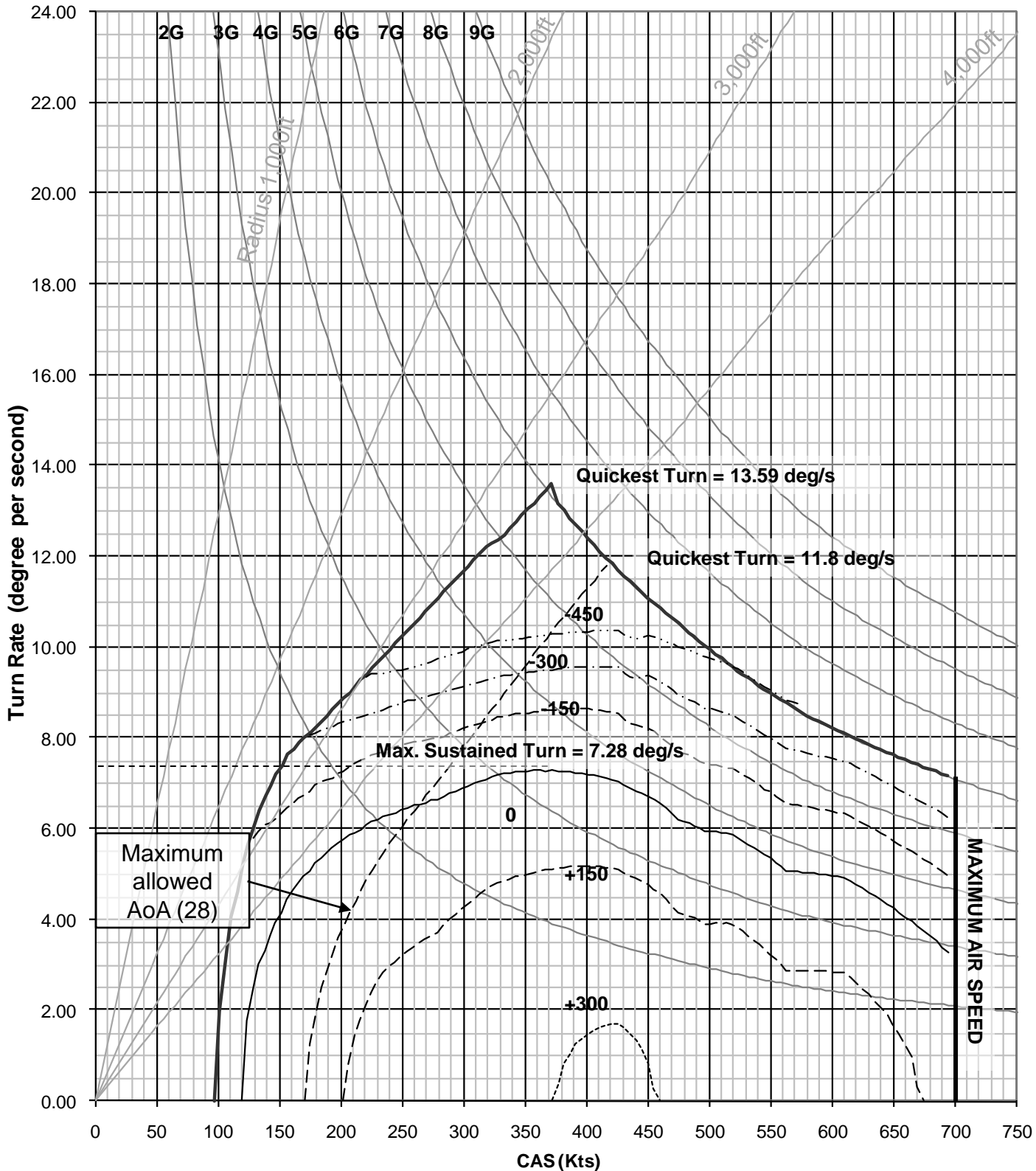
Turn Performance – 20,000 ft

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine : Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Max AB

CONFIGURATIONS :
 •DRAG INDEX = 11 (2xR-60)
 •GW=16,318 lbs / 7,392 kg



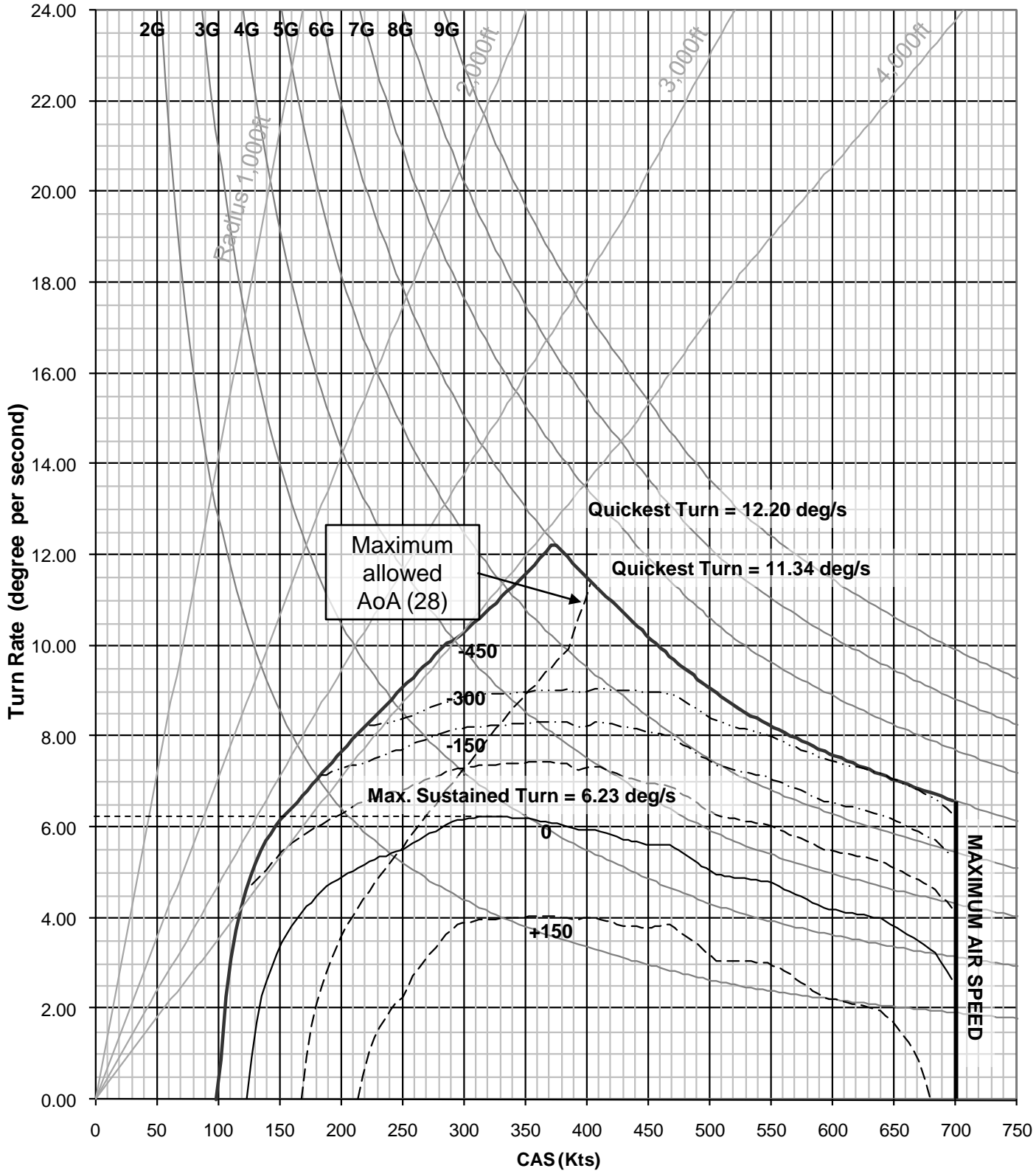
Turn Performance – 25,000 ft

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine :Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Max AB

CONFIGURATIONS :
 •DRAG INDEX = 11 (2xR-60)
 •GW=16,318 lbs / 7,392 kg



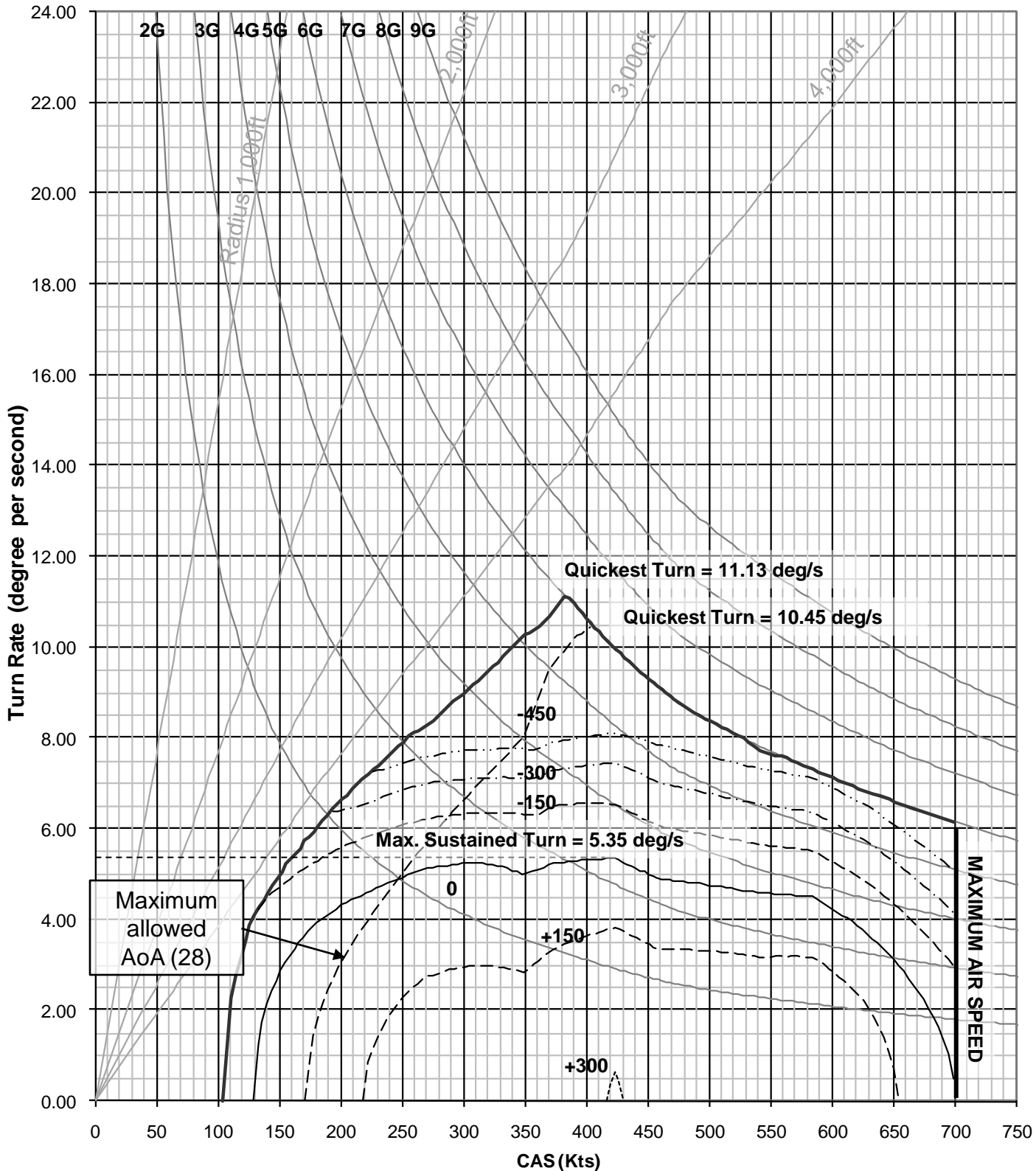
Turn Performance – 30,000 ft

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine : Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Max AB

CONFIGURATIONS :
 •DRAG INDEX = 11 (2xR-60)
 •GW=16,318 lbs / 7,392 kg



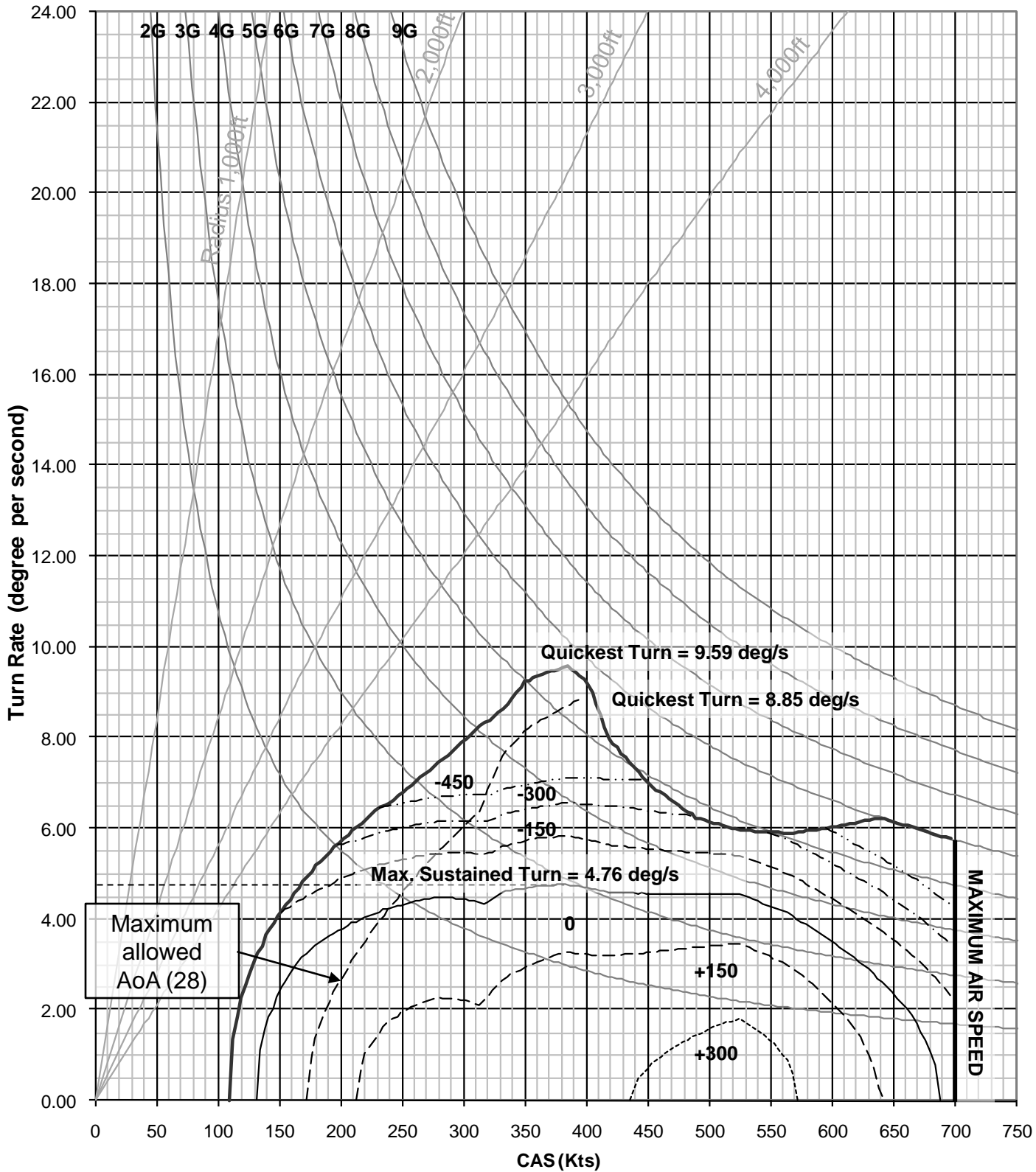
Turn Performance – 35,000 ft

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine :Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Max AB

CONFIGURATIONS :
 •DRAG INDEX = 11 (2xR-60)
 •GW=16,318 lbs / 7,392 kg



Climb Performance

Aircraft : MIG-21bis iz.75A

Engine :Tumanskiy R-25-300

CONFIGURATIONS :

•DRAG INDEX = 11 (2xR-60)

•50% internal fuel

•GW= 16,318 lbs / 7,392 kg

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
 Engine :Tumanskiy R-25-300

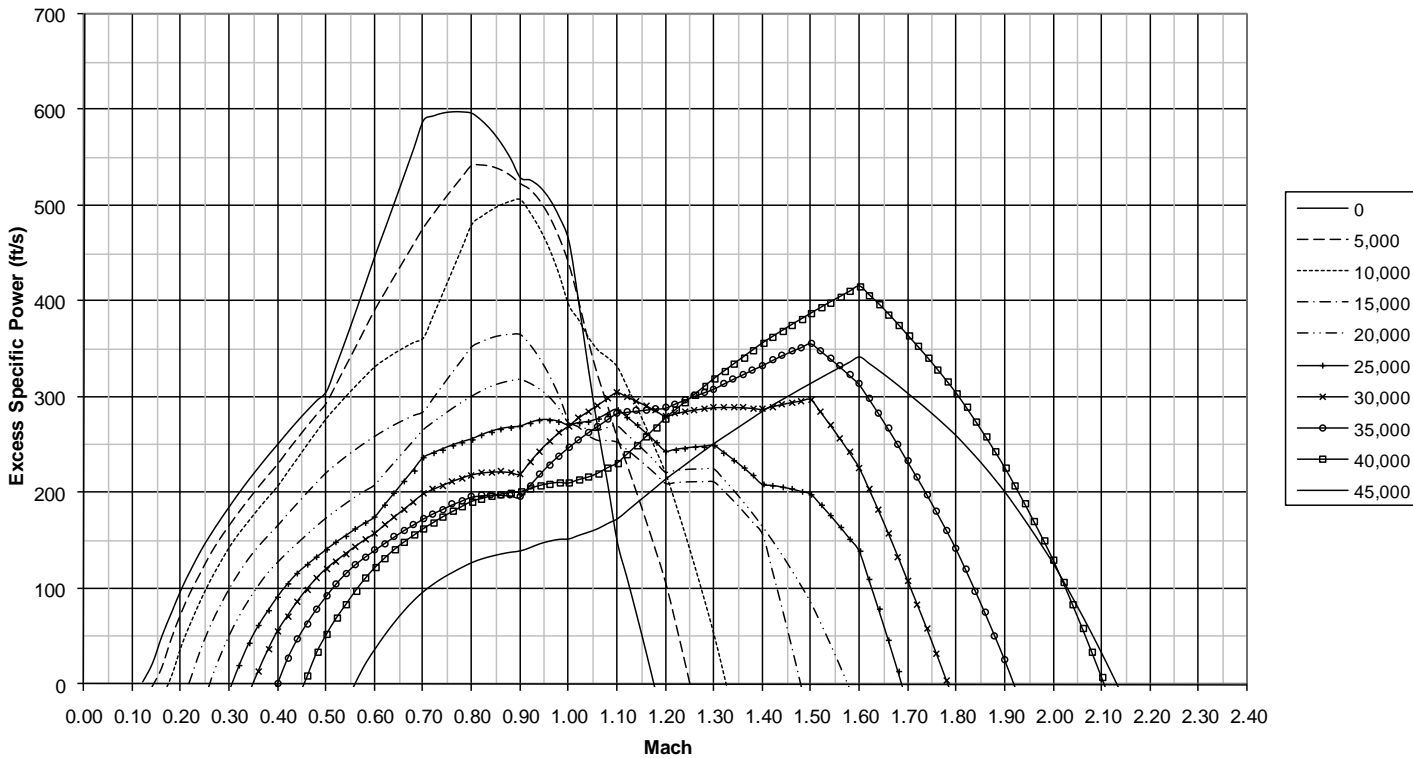
CONDITIONS:

- Standard Day
- Special AB up to 10,000ft
- Max AB from 15,000ft

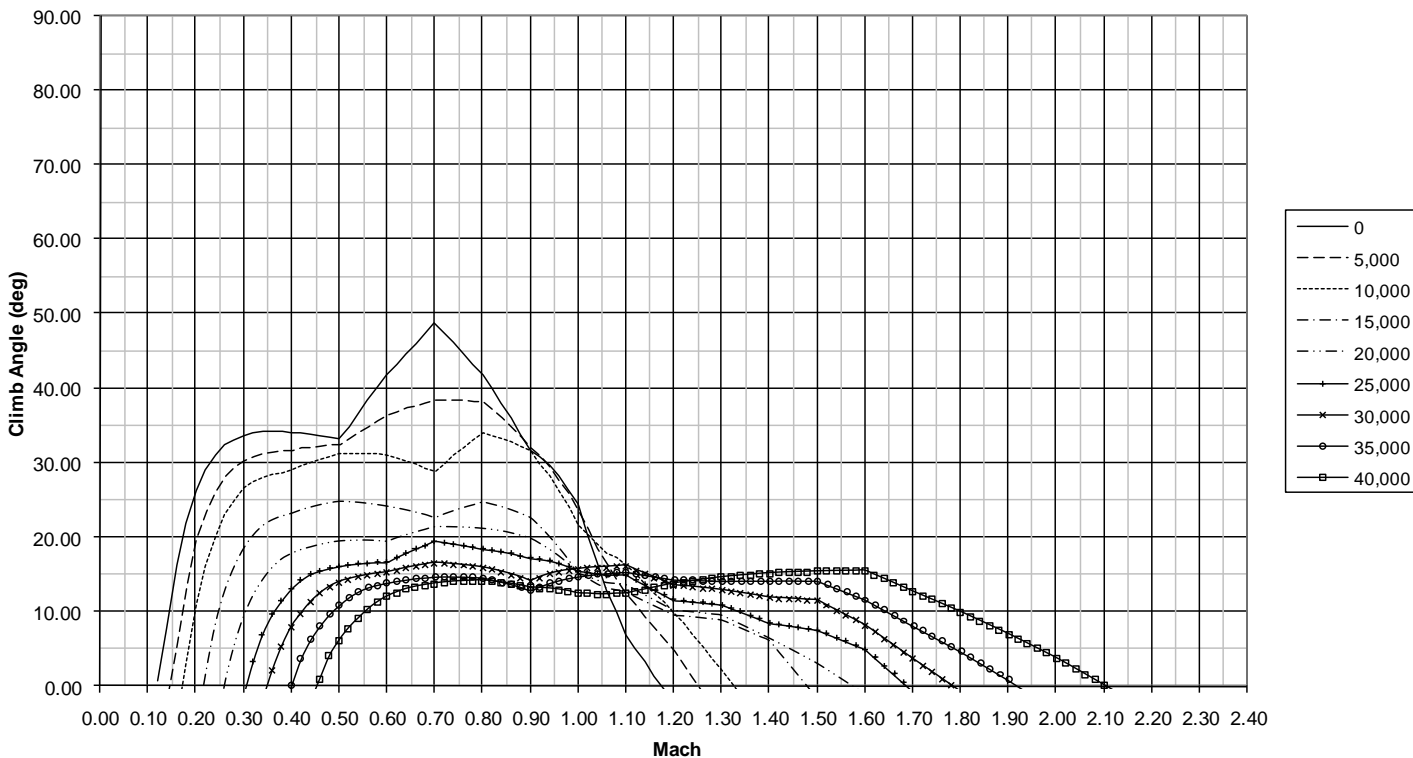
CONFIGURATIONS :

- DRAG INDEX = 11 (2xR-60)
- GW=16,318 lbs / 7,392 kg

Instantaneous Constant Speed Climb Rate



Constant Speed Climb Angle



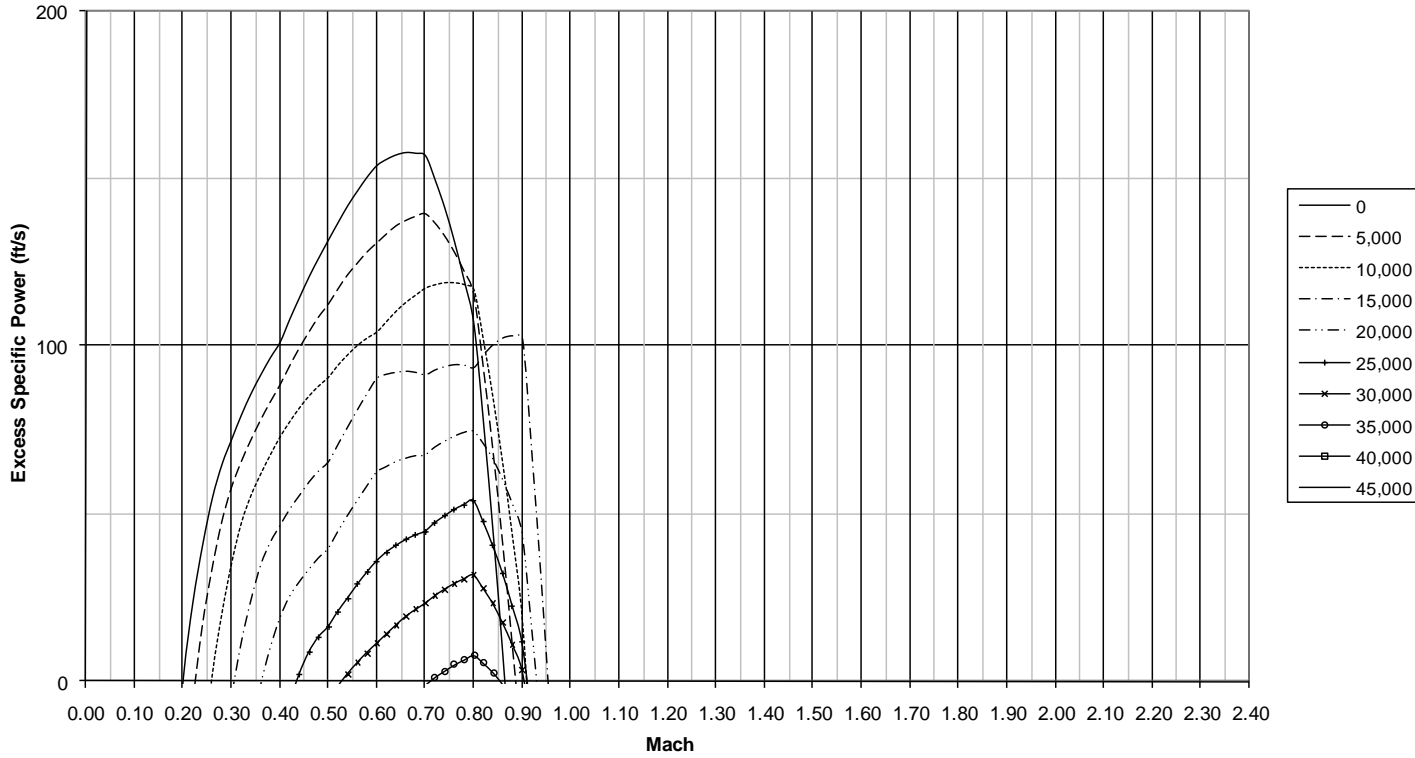
DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine :Tumanskiy R-25-300

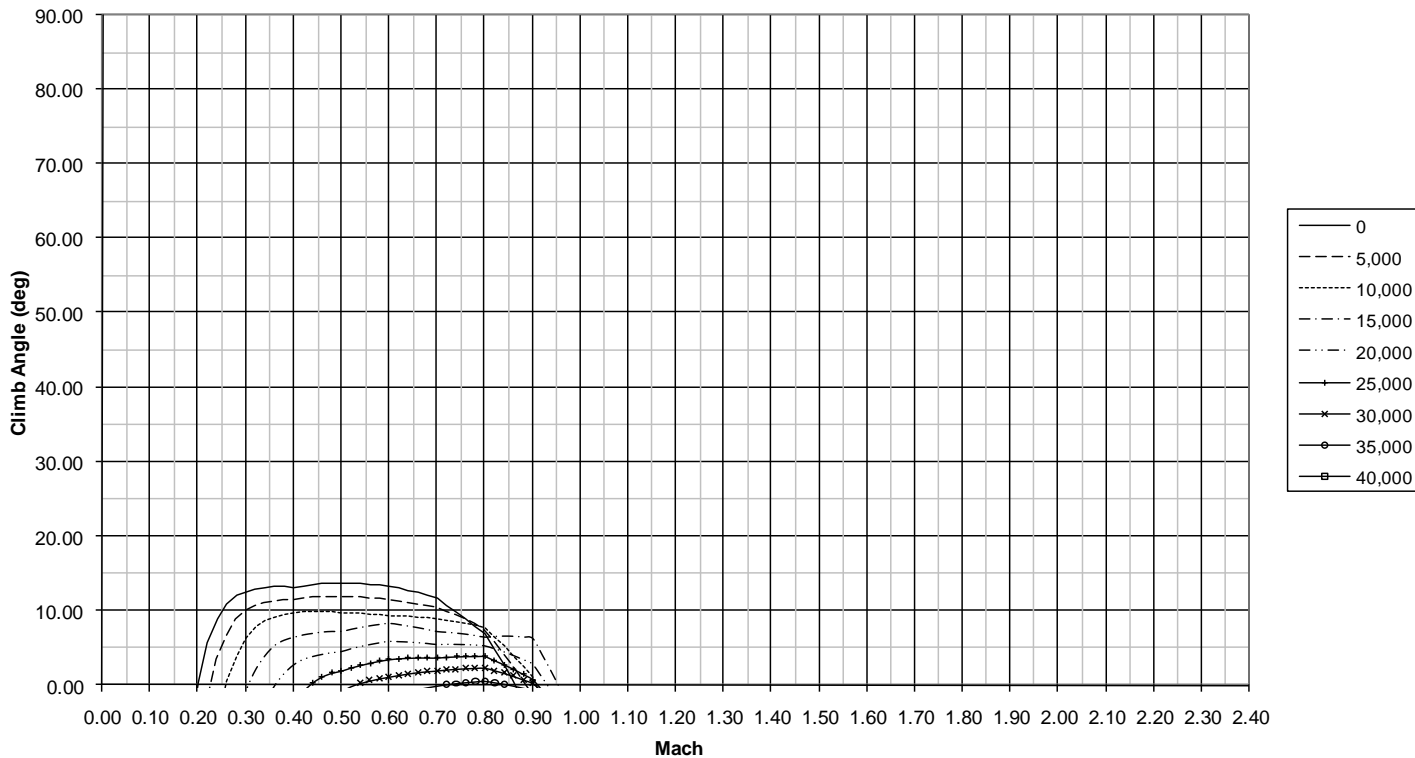
CONDITIONS:
 •Standard Day
 •MIL Power

CONFIGURATIONS :
 •DRAG INDEX = 11 (2xR-60)
 •GW=16,318 lbs / 7,392 kg

Instantaneous Constant Speed Climb Rate



Constant Speed Climb Angle



Acceleration Performances

Aircraft : MIG-21bis iz.75A
Engine :Tumanskiy R-25-300

CONFIGURATIONS :

- DRAG INDEX = 11 (2xR-60)**
- 50% internal fuel**
- GW= 16,318 lbs / 7,392 kg**

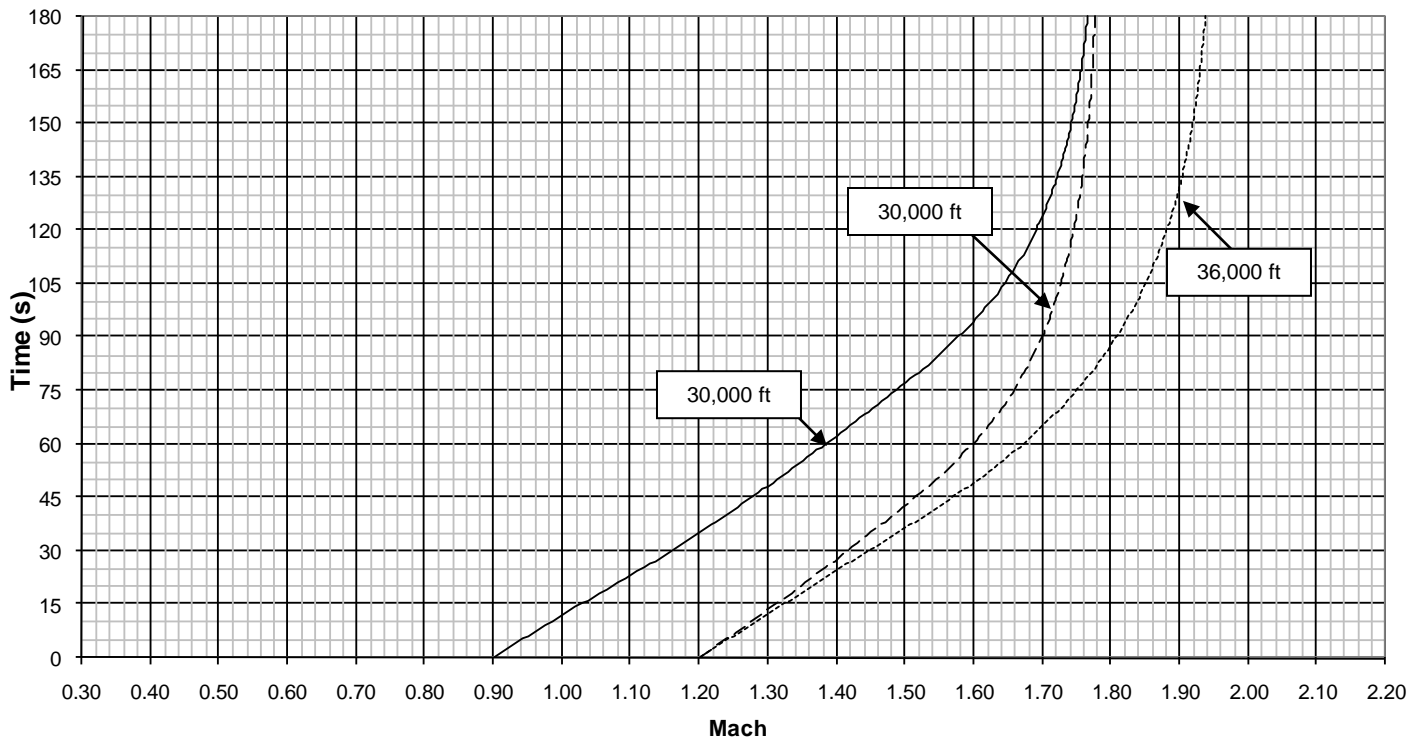
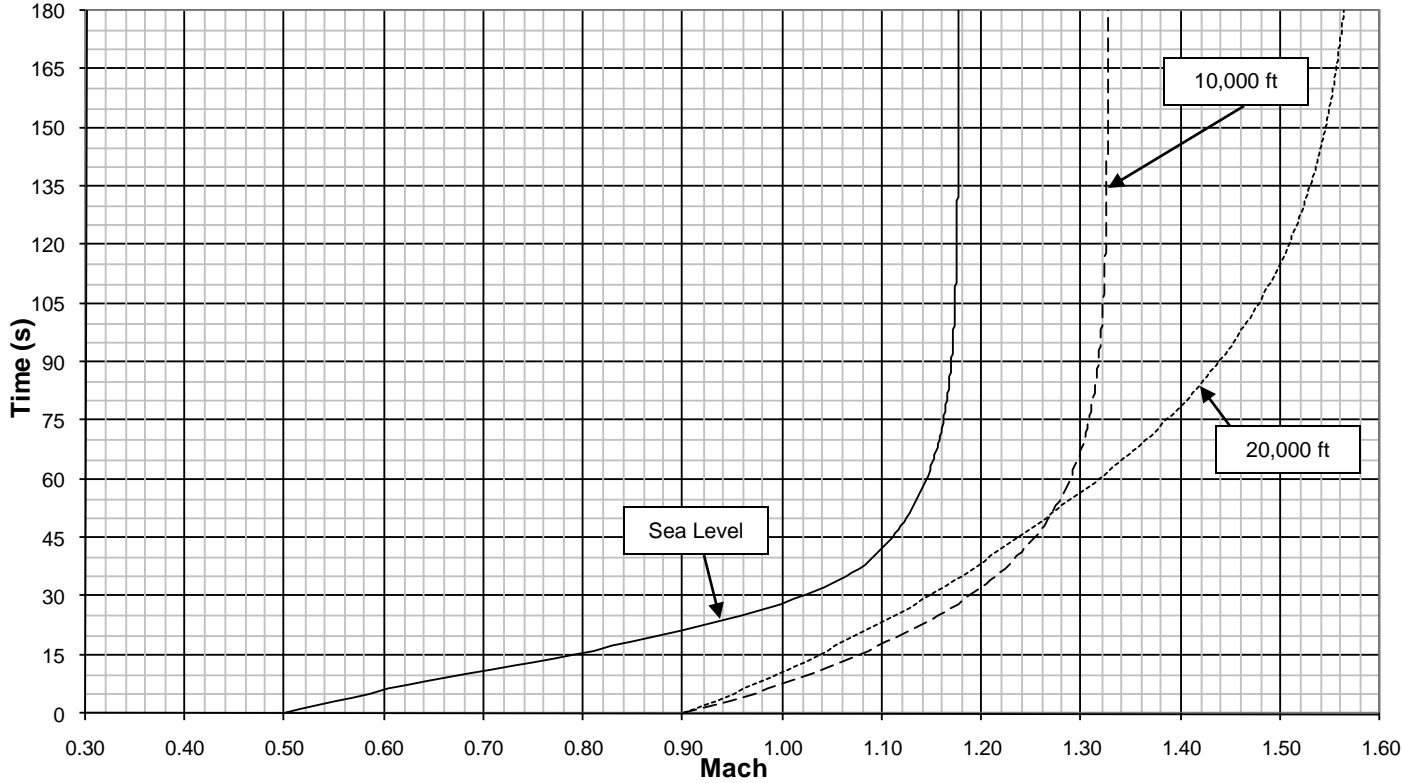
Acceleration Diagram

DATA BASIS : ESTIMATED
CONDITIONS:
 •Standard Day
CONDITIONS:
 •Standard Day
 •Special AB up to 10,000ft
 •Max AB from 15,000ft

Aircraft : MIG-21bis iz.75A
Engine :Tumanskiy R-25-300

CONFIGURATIONS :
 •DRAG INDEX = 11 (2xR-60)
 •GW=16,318 lbs / 7,392 kg

Acceleration (Max Thrust AB)



Turn Performance

Aircraft : MIG-21bis iz.75A

Engine :Tumanskiy R-25-300

CONFIGURATIONS :

•DRAG INDEX = 12 (2xR-60 + 2xR-13M)

•50% internal fuel

•GW= 16,967 lbs / 7,986 kg

Turn Rate – Summary

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine :Tumanskiy R-25-300

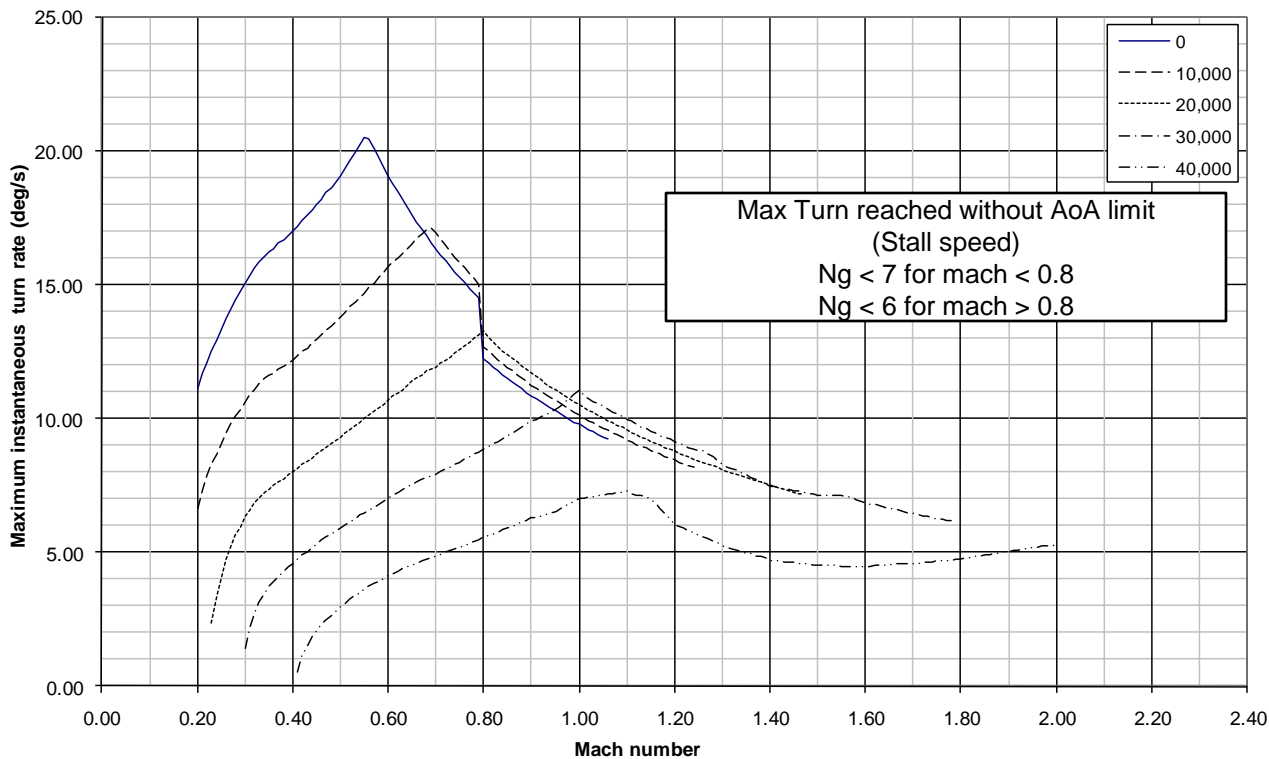
CONDITIONS:

- Standard Day
- Special AB up to 10,000ft
- Max AB from 15,000ft

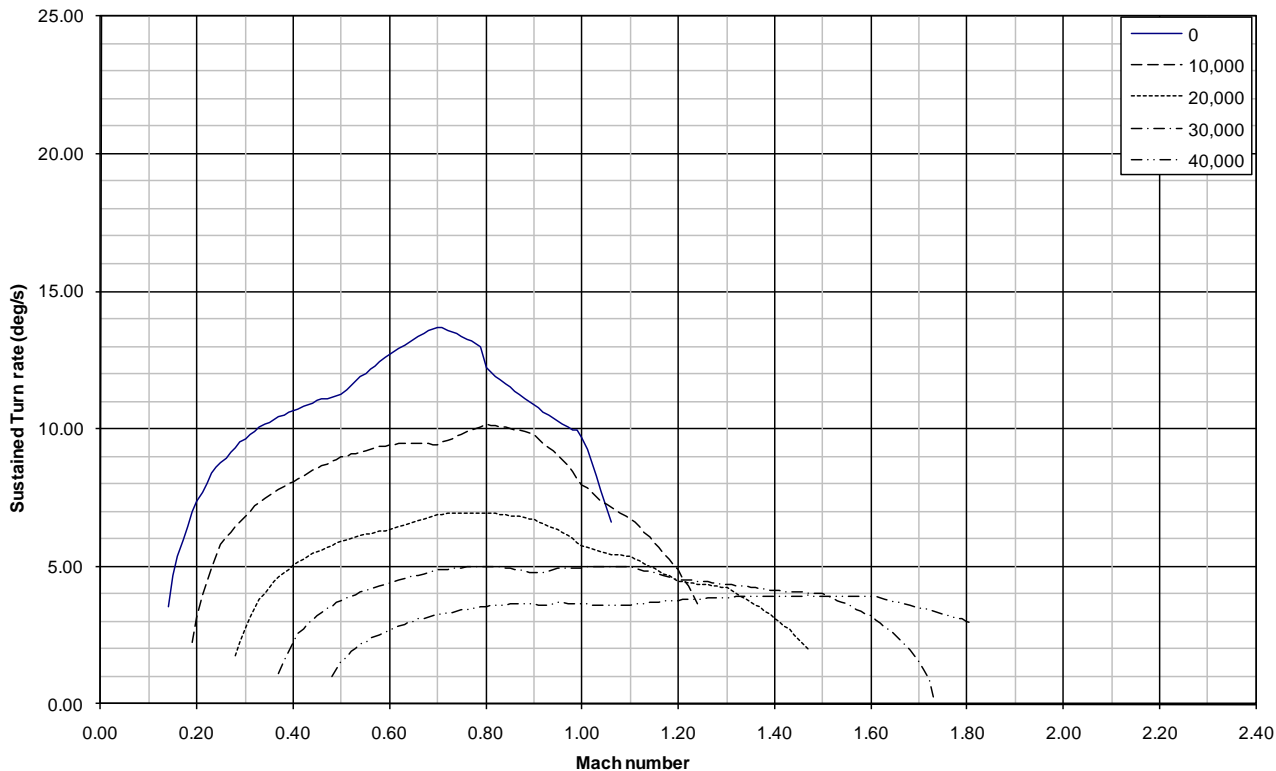
CONFIGURATIONS :

- DRAG INDEX = 12
- (2xR-60 + 2xR-13M)
- GW=16,967 lbs / 7,986 kg

Maximum Available Turn Rate



Maximum Sustained Turn rate (deg/s)



Load Factor – Summary

DATA BASIS : ESTIMATED

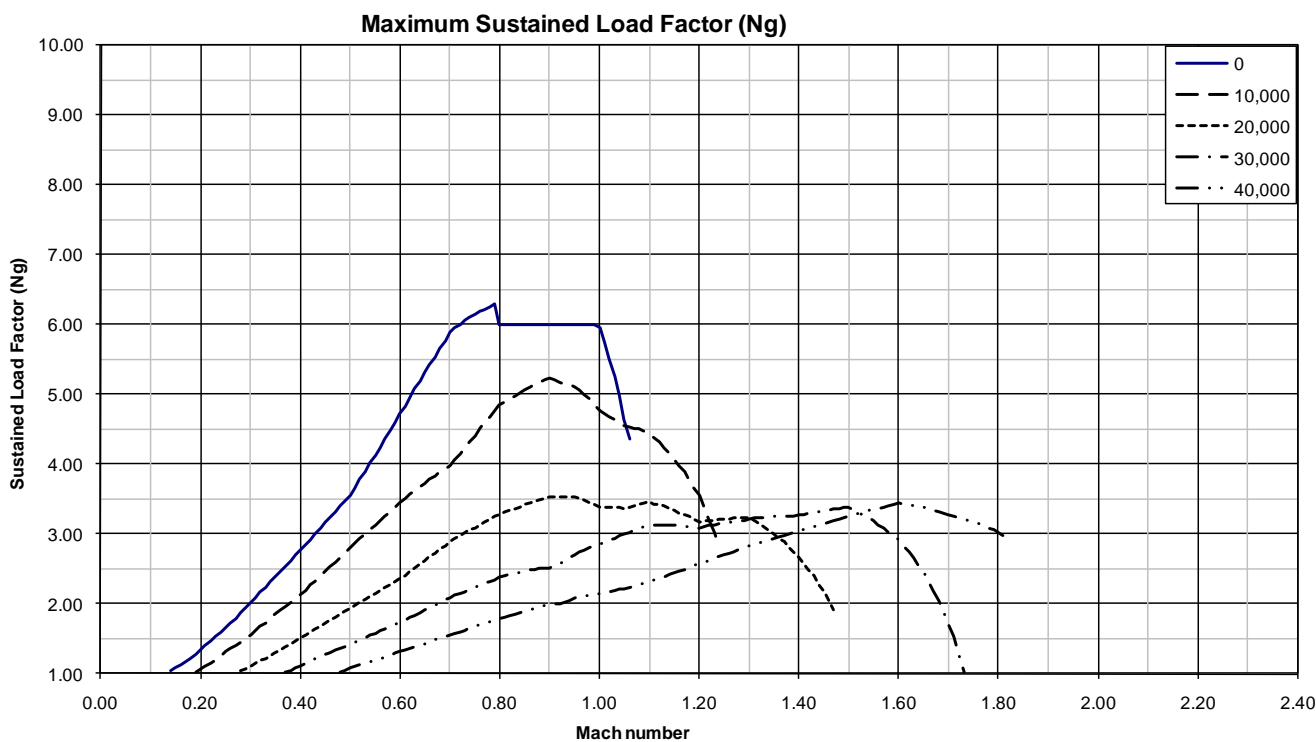
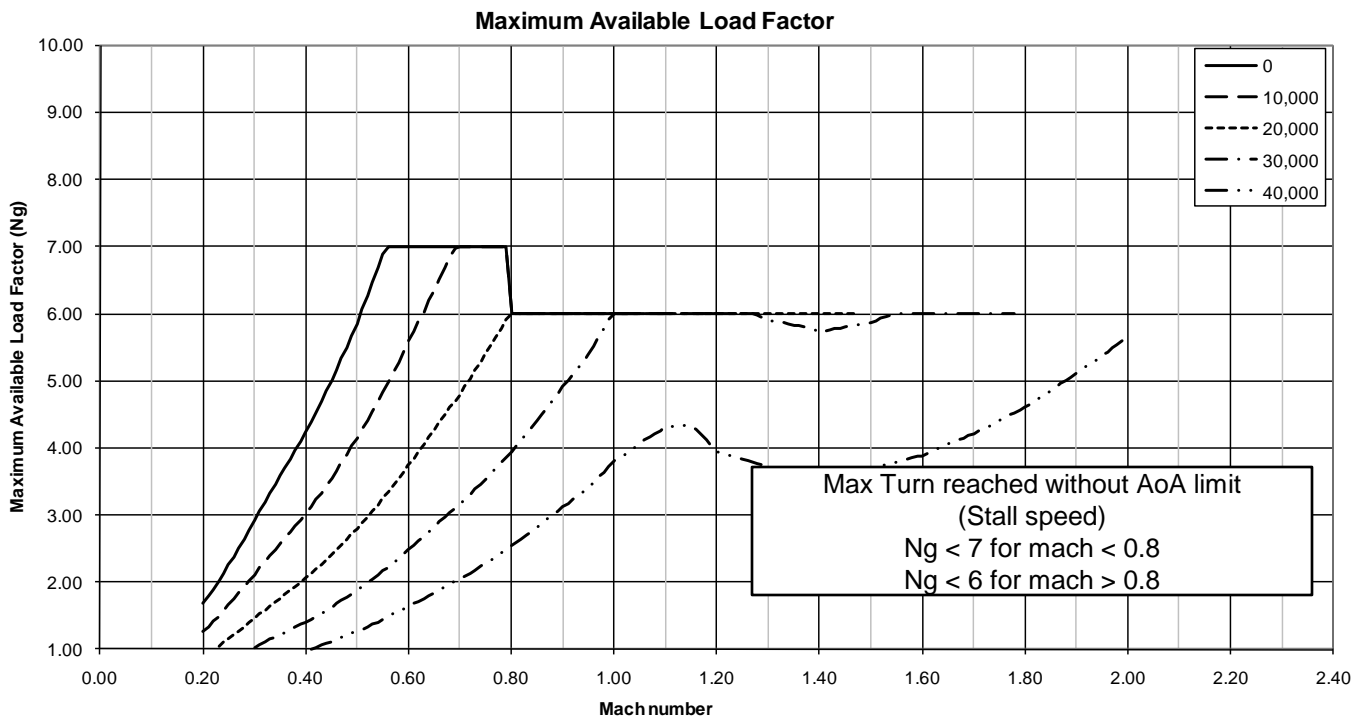
Aircraft : MIG-21bis iz.75A
Engine :Tumanskiy R-25-300

CONDITIONS:

- Standard Day
- Special AB up to 10,000ft
- Max AB from 15,000ft

CONFIGURATIONS :

- DRAG INDEX = 12
- (2xR-60 + 2xR-13M)
- GW=16,967 lbs / 7,986 kg



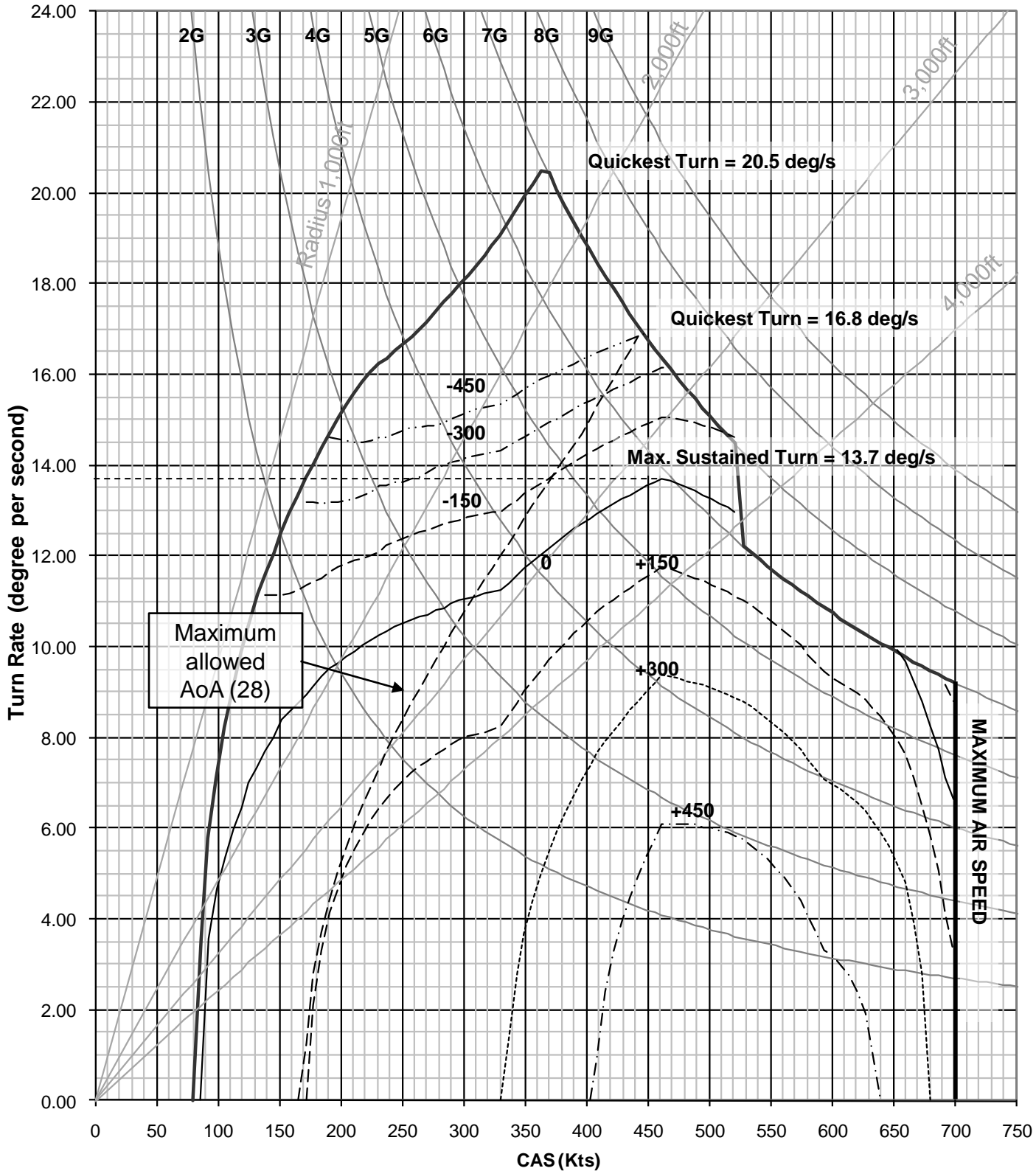
Turn Performance – Sea Level

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
 Engine :Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Special AB

CONFIGURATIONS :
 •DRAG INDEX = 12
 (2xR-60 + 2xR-13M)
 •GW=16,967 lbs / 7,986 kg



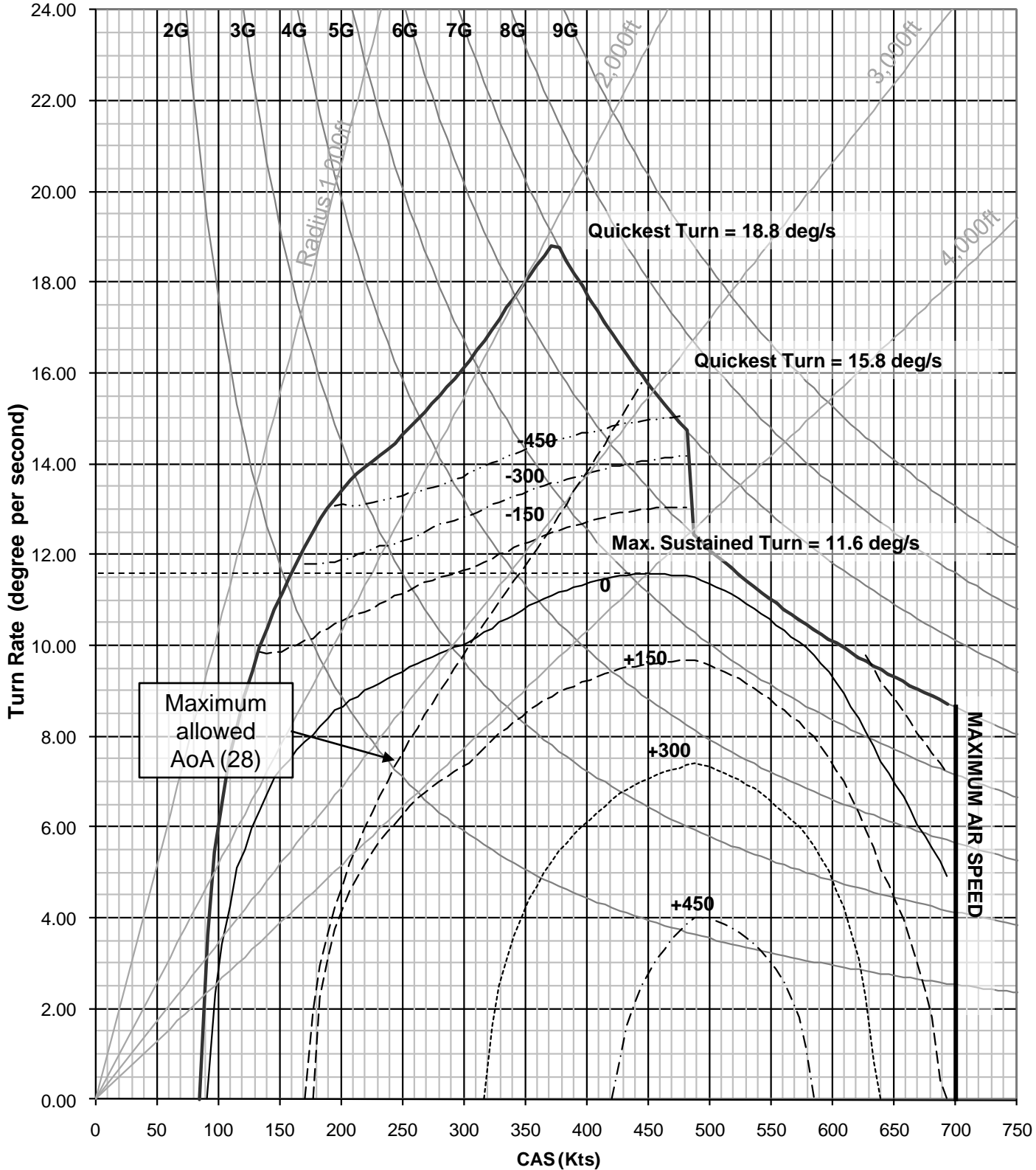
Turn Performance – 5,000 ft

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine :Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Special AB

CONFIGURATIONS :
 •DRAG INDEX = 12
 (2xR-60 + 2xR-13M)
 •GW=16,967 lbs / 7,986 kg



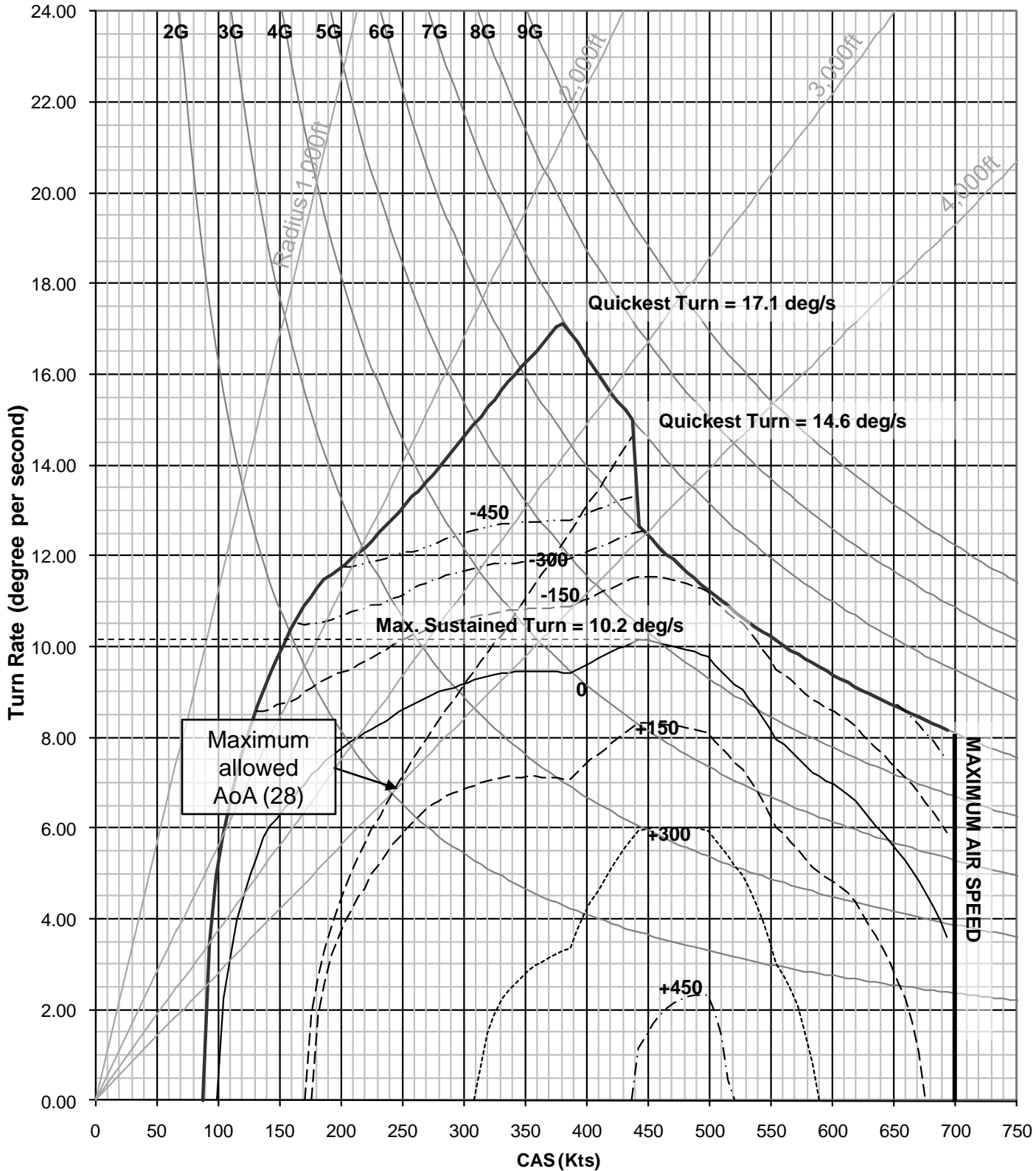
Turn Performance – 10,000 ft

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine :Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Special AB

CONFIGURATIONS :
 •DRAG INDEX = 12
 (2xR-60 + 2xR-13M)
 •GW=16,967 lbs / 7,986 kg



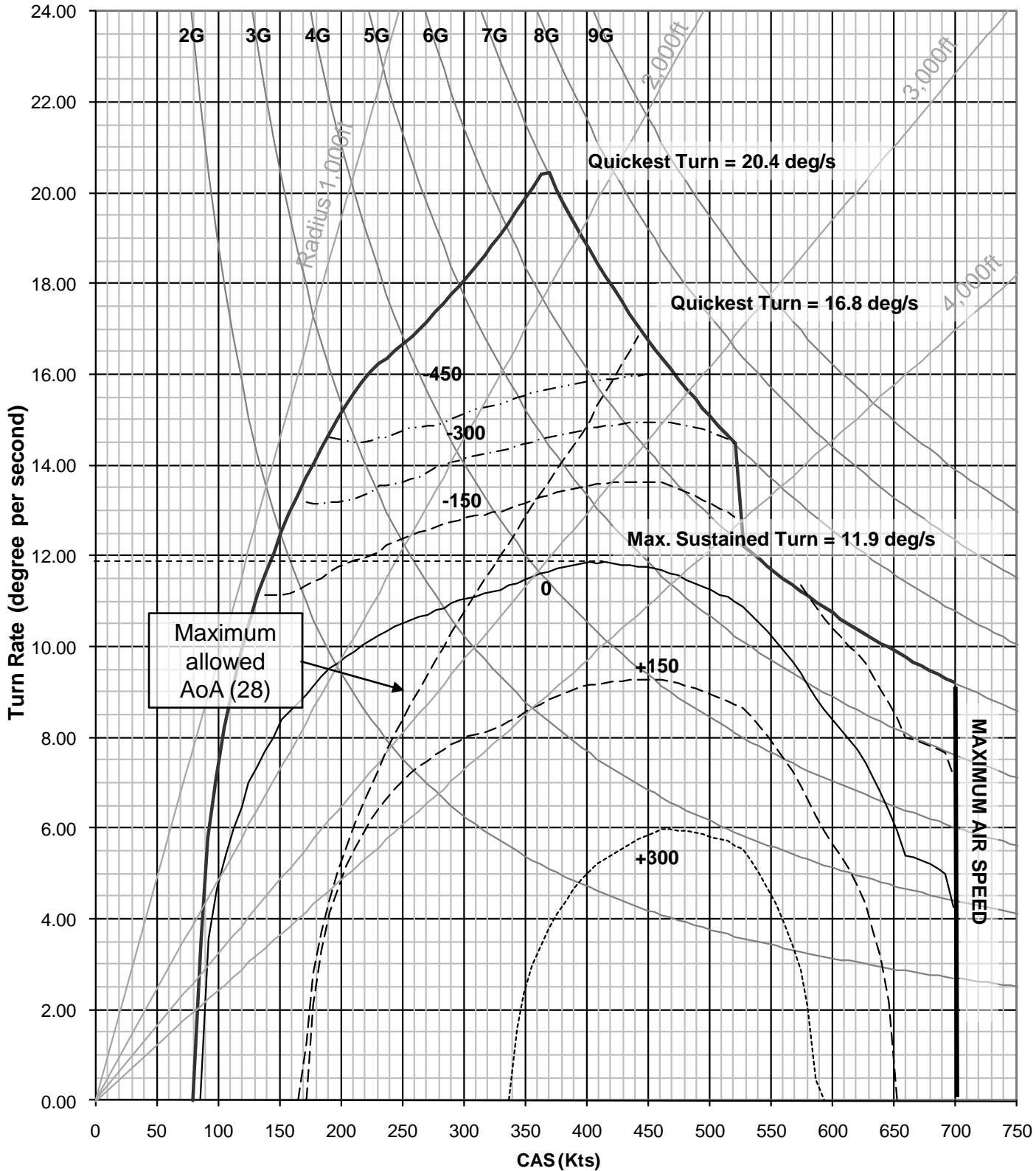
Turn Performance – Sea Level

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine : Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Max AB

CONFIGURATIONS :
 •DRAG INDEX = 12
 (2xR-60 + 2xR-13M)
 •GW=16,967 lbs / 7,986 kg



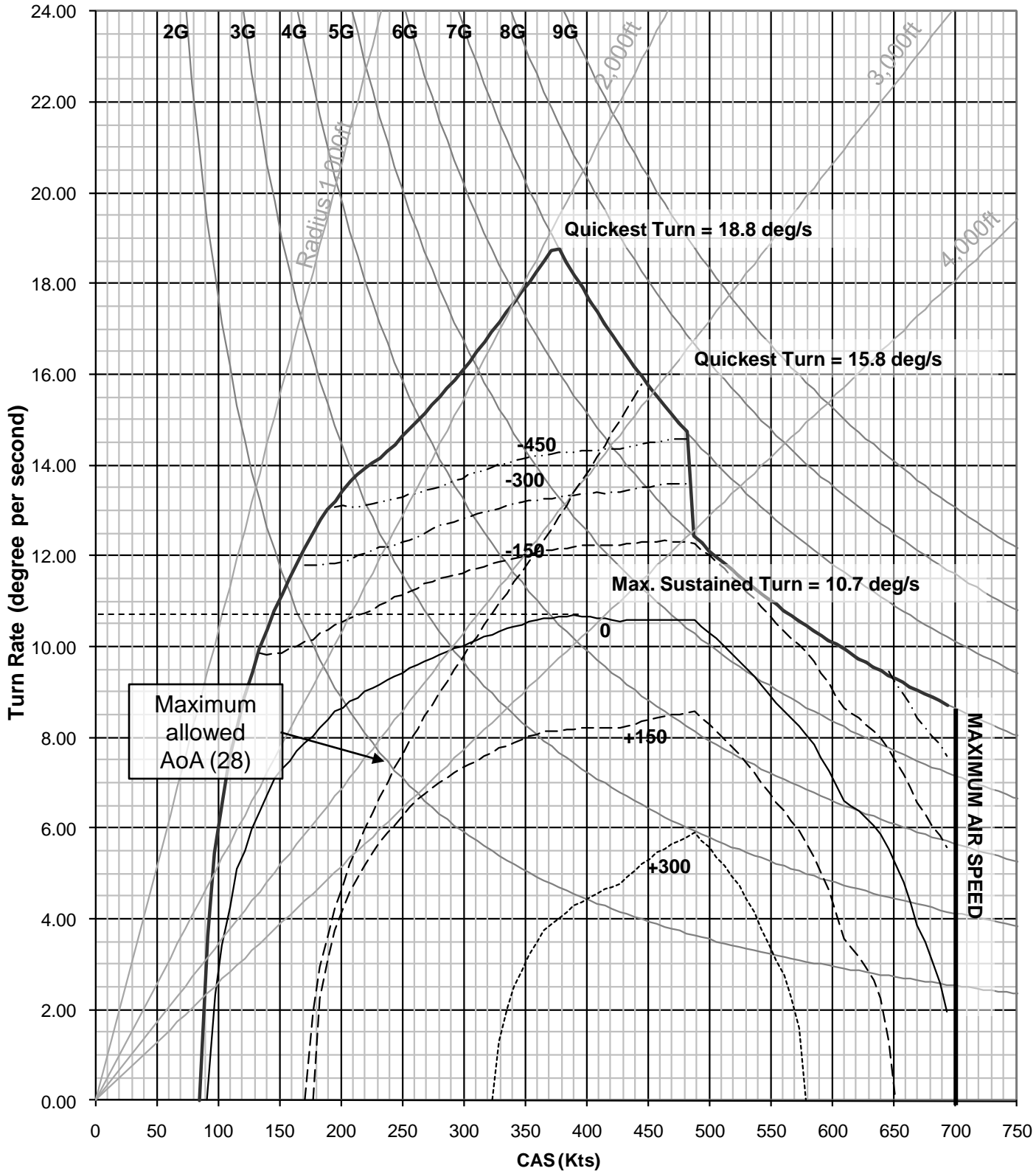
Turn Performance – 5,000 ft

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine :Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Max AB

CONFIGURATIONS :
 •DRAG INDEX = 12
 (2xR-60 + 2xR-13M)
 •GW=16,967 lbs / 7,986 kg



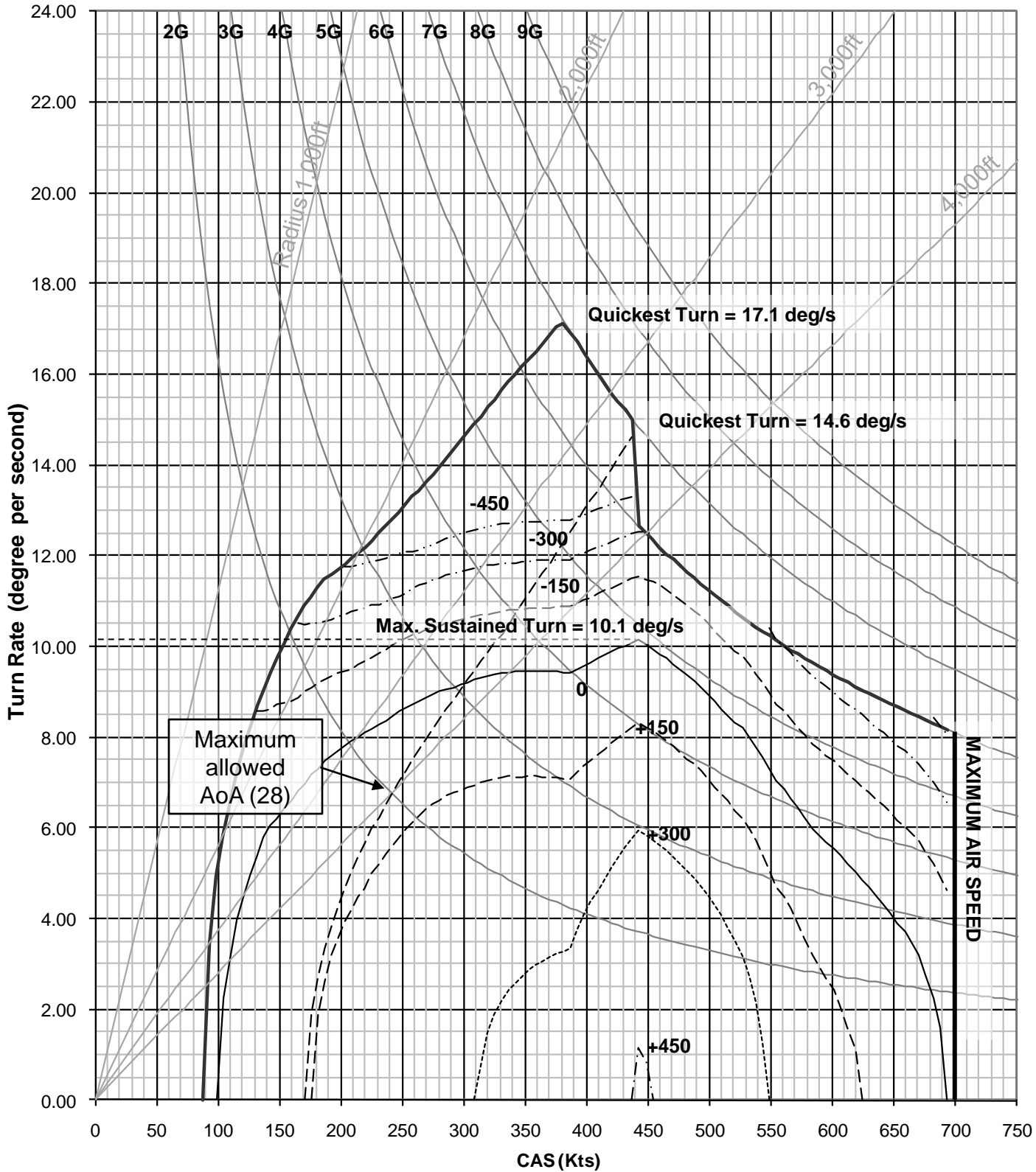
Turn Performance – 10,000 ft

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine :Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Max AB

CONFIGURATIONS :
 •DRAG INDEX = 12
 (2xR-60 + 2xR-13M)
 •GW=16,967 lbs / 7,986 kg



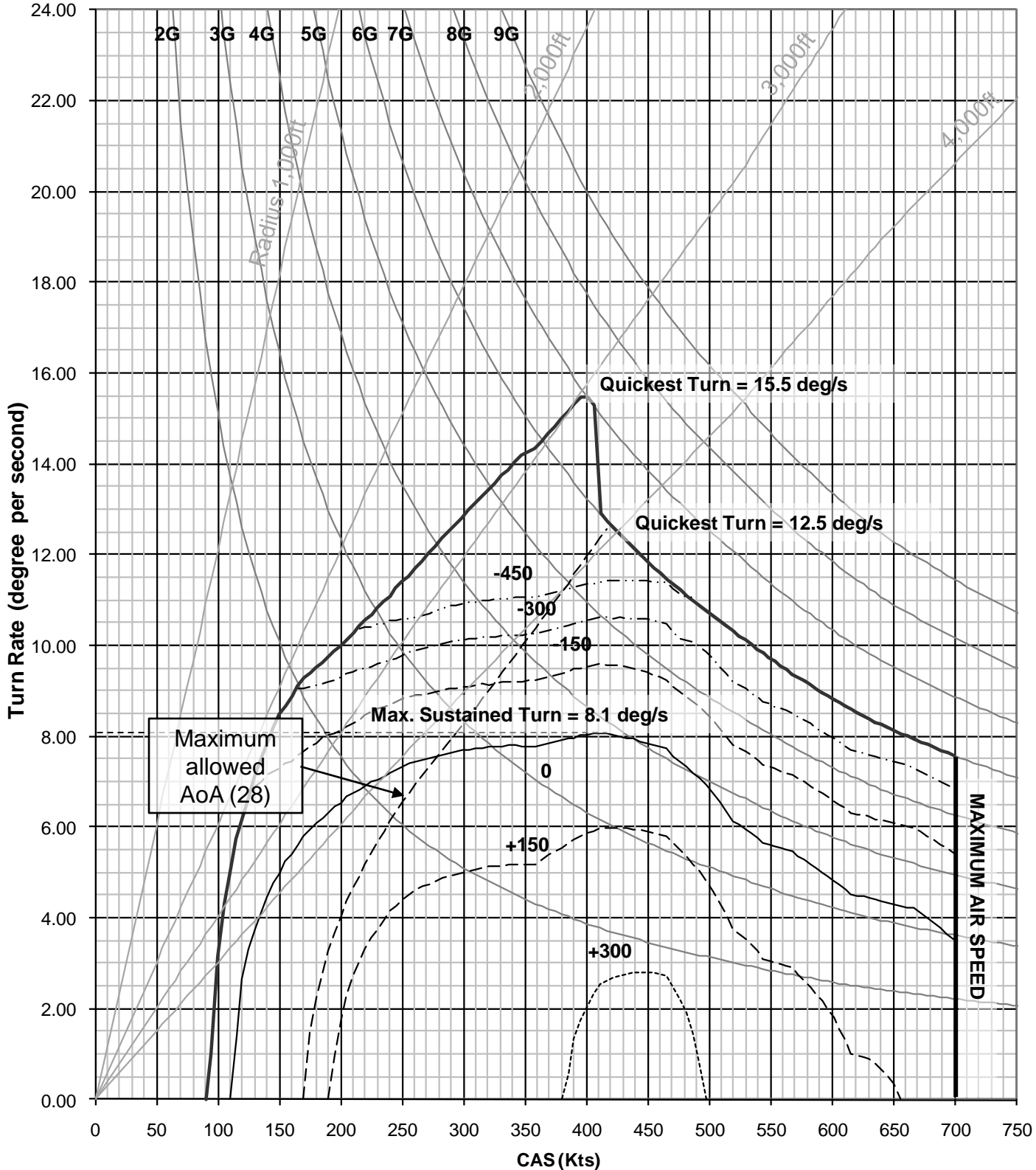
Turn Performance – 15,000 ft

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine :Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Max AB

CONFIGURATIONS :
 •DRAG INDEX = 12
 (2xR-60 + 2xR-13M)
 •GW=16,967 lbs / 7,986 kg



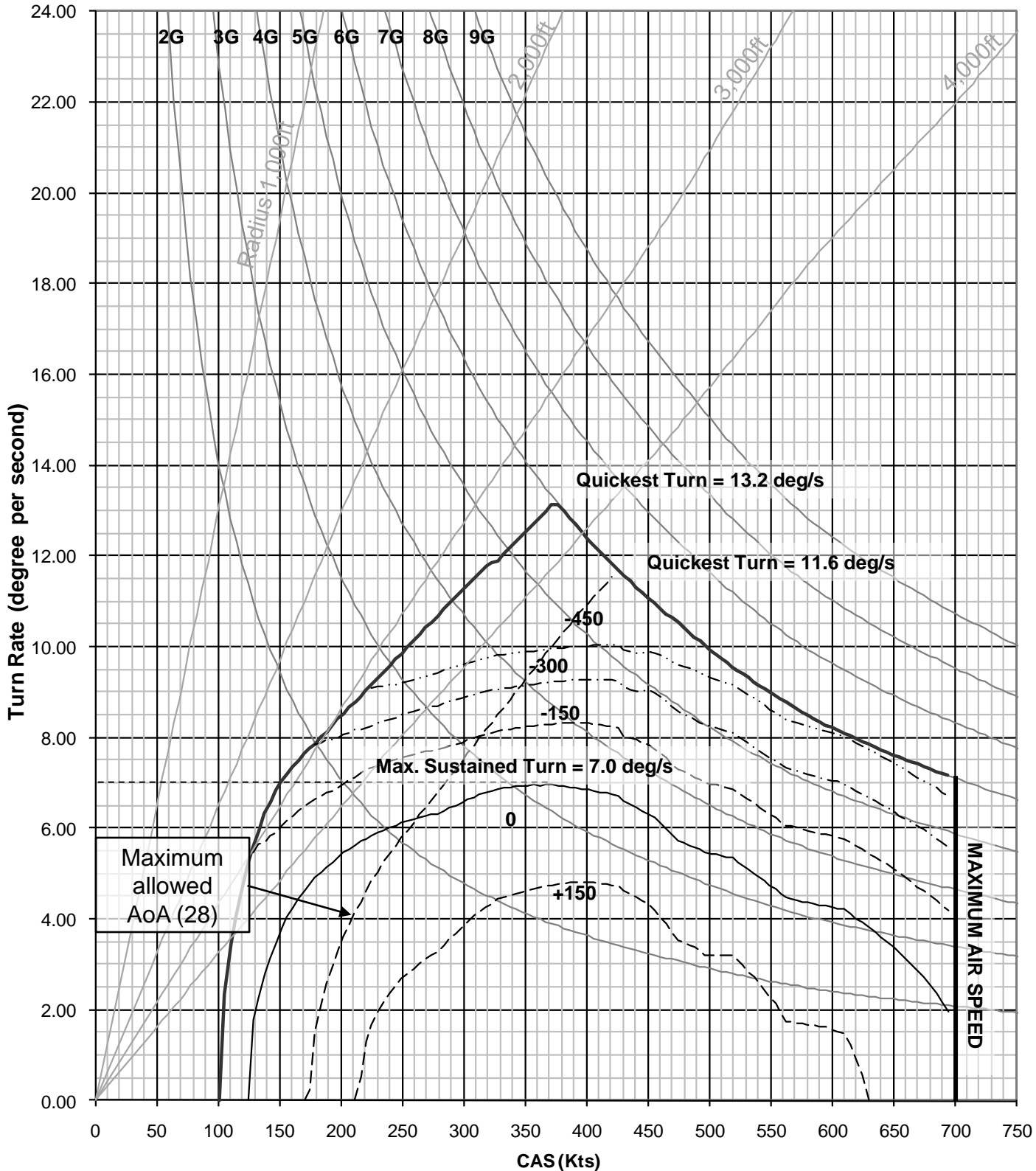
Turn Performance – 20,000 ft

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine : Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Max AB

CONFIGURATIONS :
 •DRAG INDEX = 12
 (2xR-60 + 2xR-13M)
 •GW=16,967 lbs / 7,986 kg



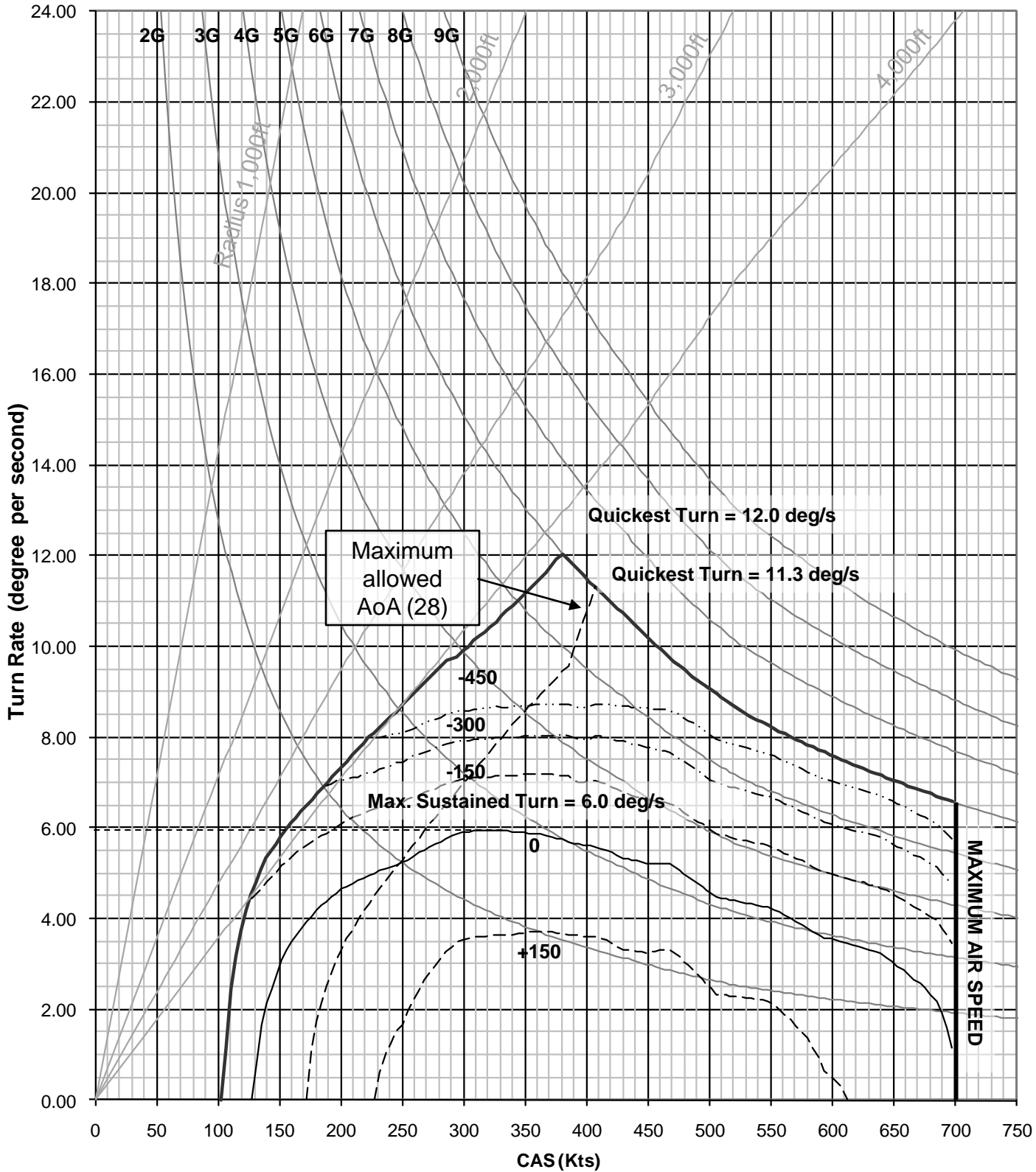
Turn Performance – 25,000 ft

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine : Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Max AB

CONFIGURATIONS :
 •DRAG INDEX = 12
 (2xR-60 + 2xR-13M)
 •GW=16,967 lbs / 7,986 kg



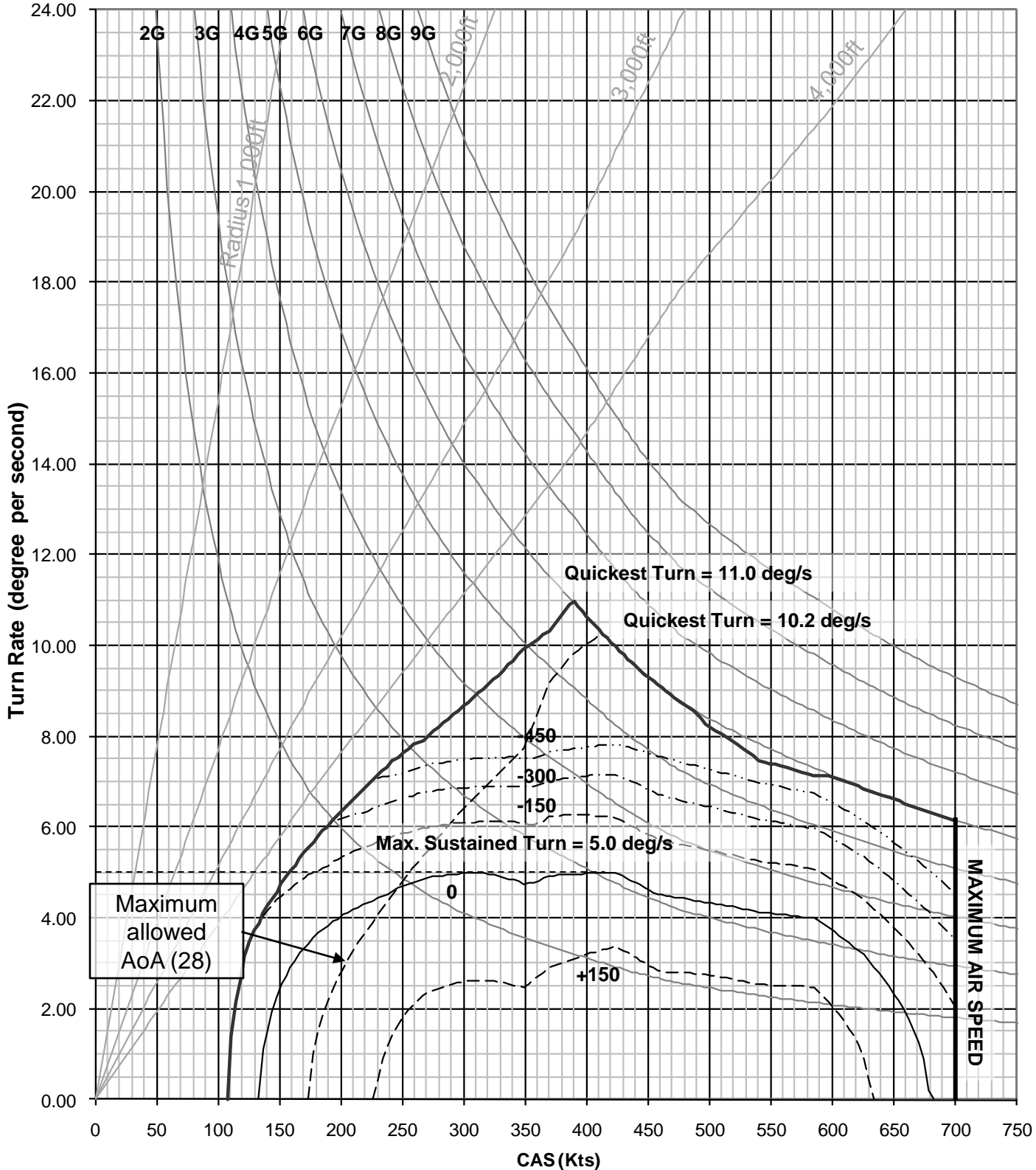
Turn Performance – 30,000 ft

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine : Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Max AB

CONFIGURATIONS :
 •DRAG INDEX = 12
 (2xR-60 + 2xR-13M)
 •GW=16,967 lbs / 7,986 kg



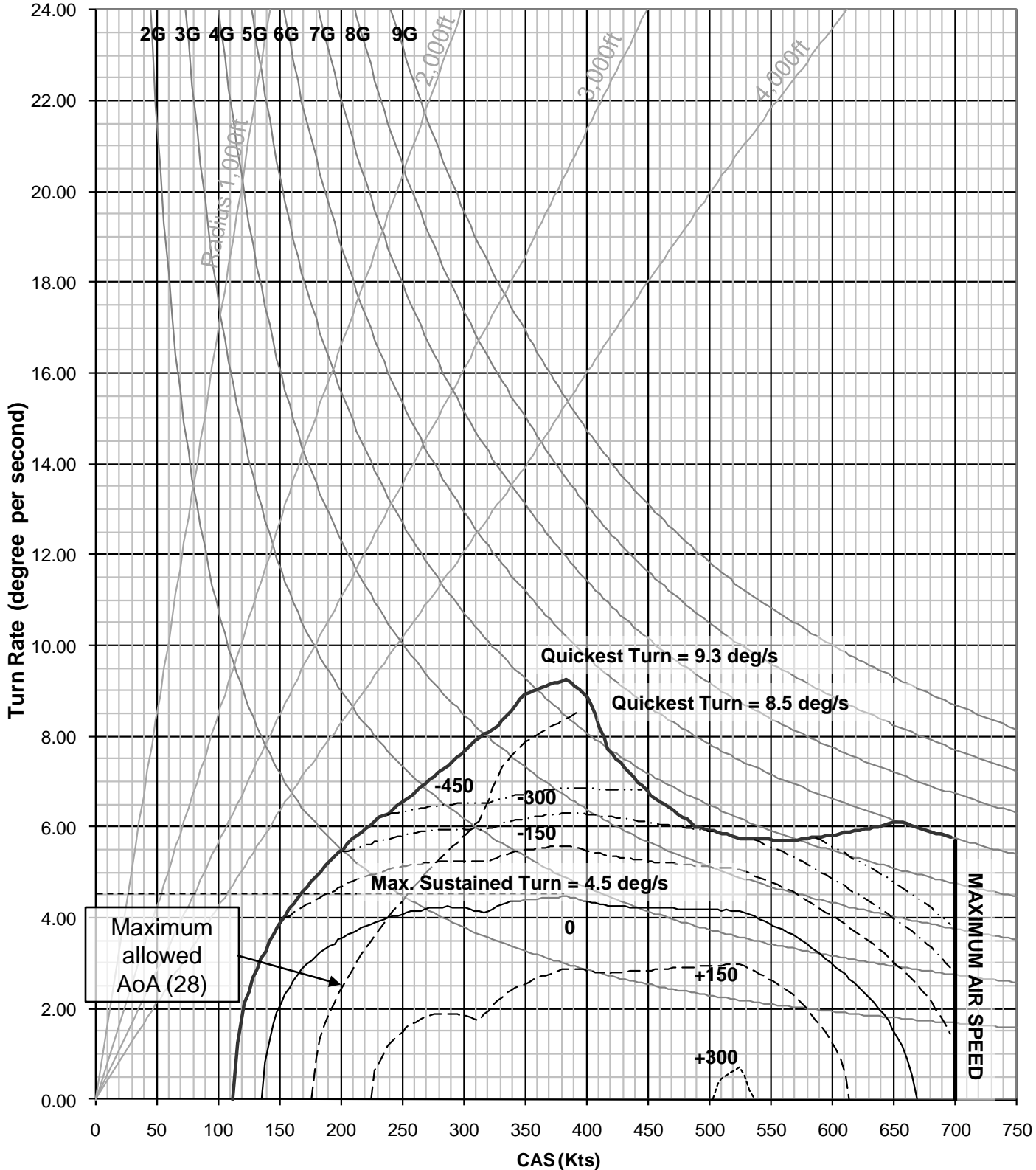
Turn Performance – 35,000 ft

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine : Tumanskiy R-25-300

CONDITIONS:
 •Standard Day
 •Max AB

CONFIGURATIONS :
 •DRAG INDEX = 12
 (2xR-60 + 2xR-13M)
 •GW=16,967 lbs / 7,986 kg



Climb Performance

Aircraft : MIG-21bis iz.75A

Engine :Tumanskiy R-25-300

CONFIGURATIONS :

•DRAG INDEX = 12 (2xR-60 + 2xR-13M)

•50% internal fuel

•GW= 16,967 lbs / 7,986 kg

DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
 Engine :Tumanskiy R-25-300

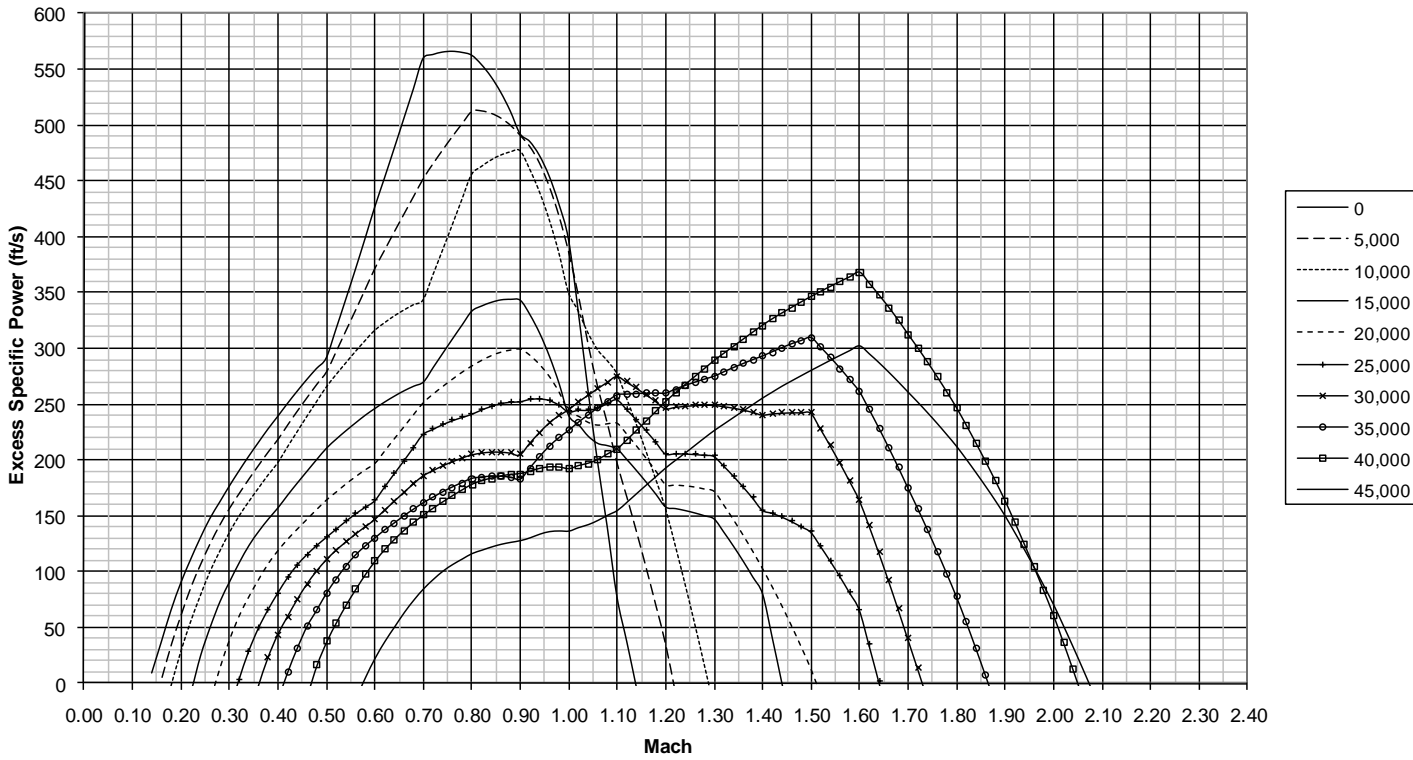
CONDITIONS:

- Standard Day
- Special AB up to 10,000ft
- Max AB from 15,000ft

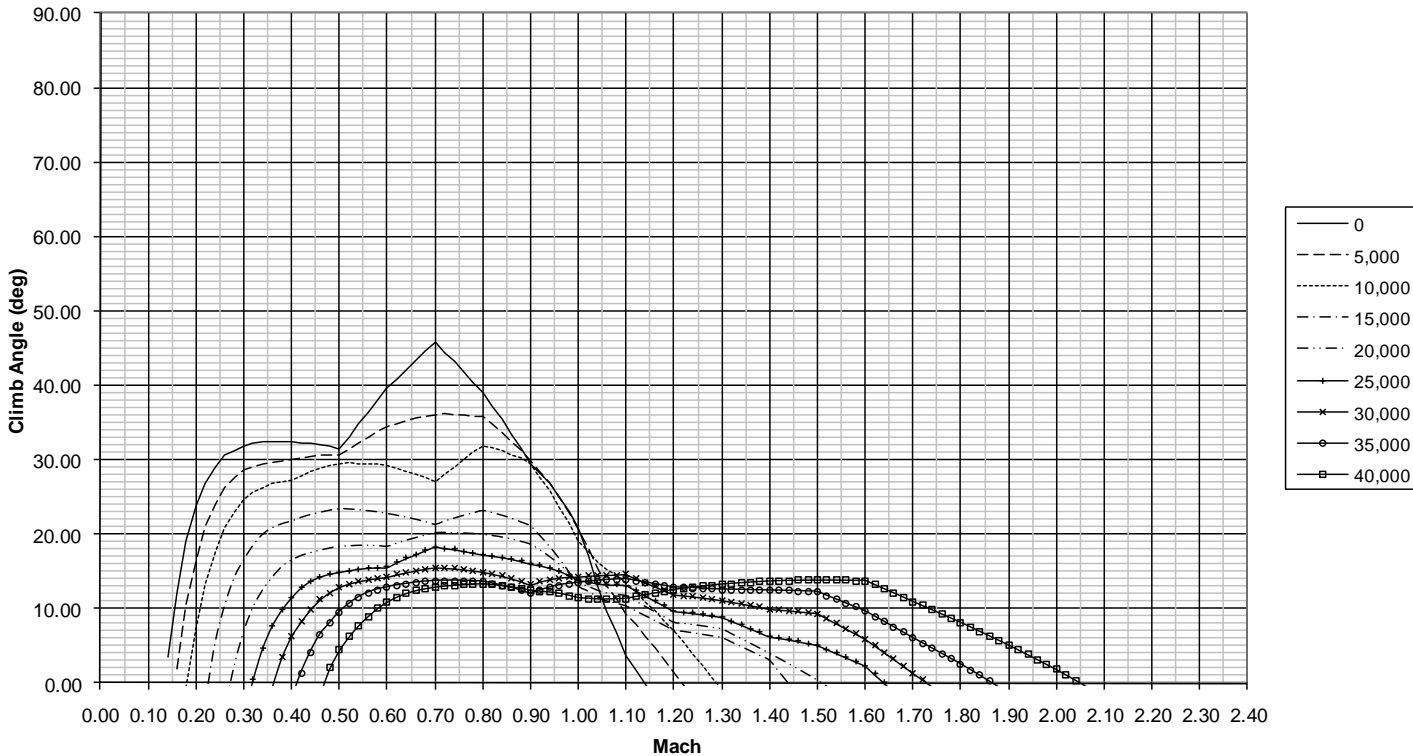
CONFIGURATIONS :

- DRAG INDEX = 12
- (2xR-60 + 2xR-13M)
- GW=16,967 lbs / 7,986 kg

Instantaneous Constant Speed Climb Rate



Constant Speed Climb Angle



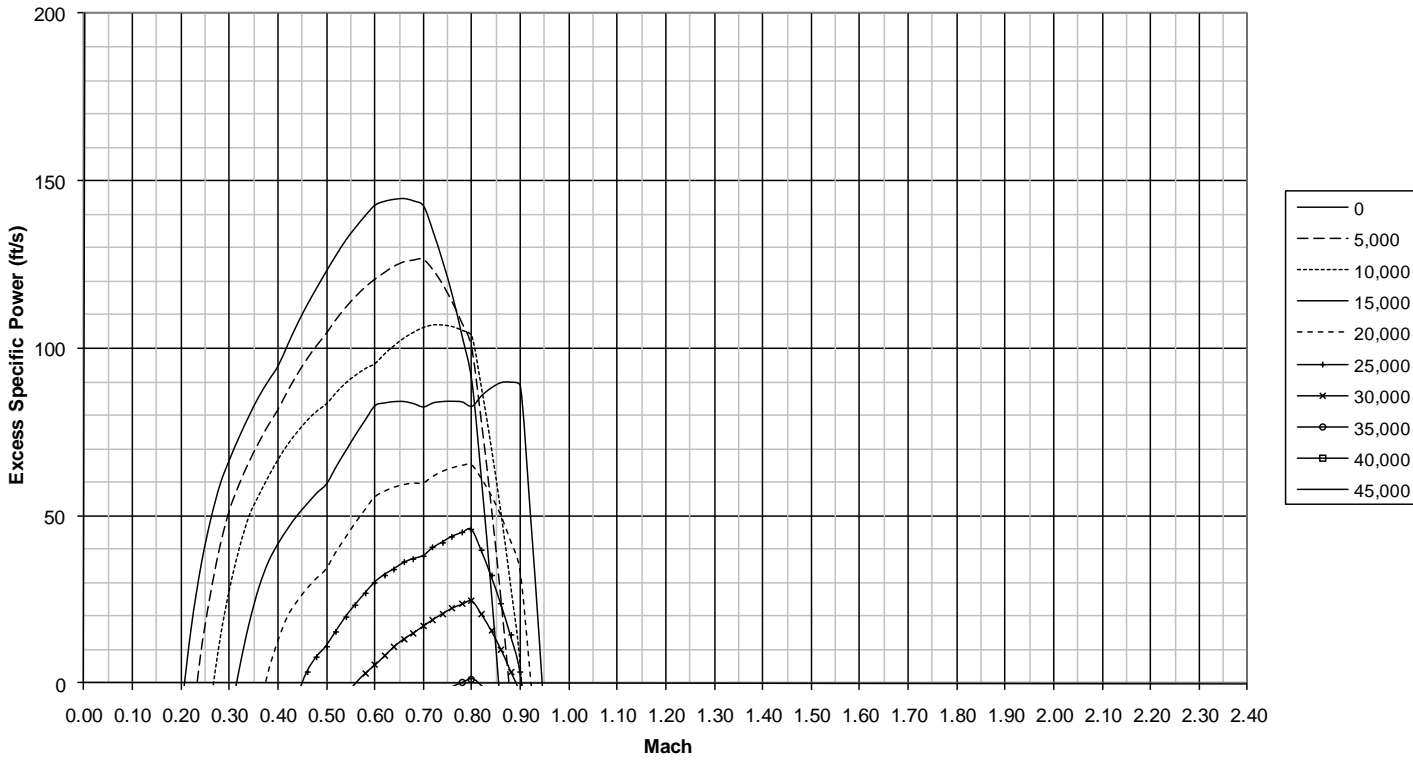
DATA BASIS : ESTIMATED

Aircraft : MIG-21bis iz.75A
Engine :Tumanskiy R-25-300

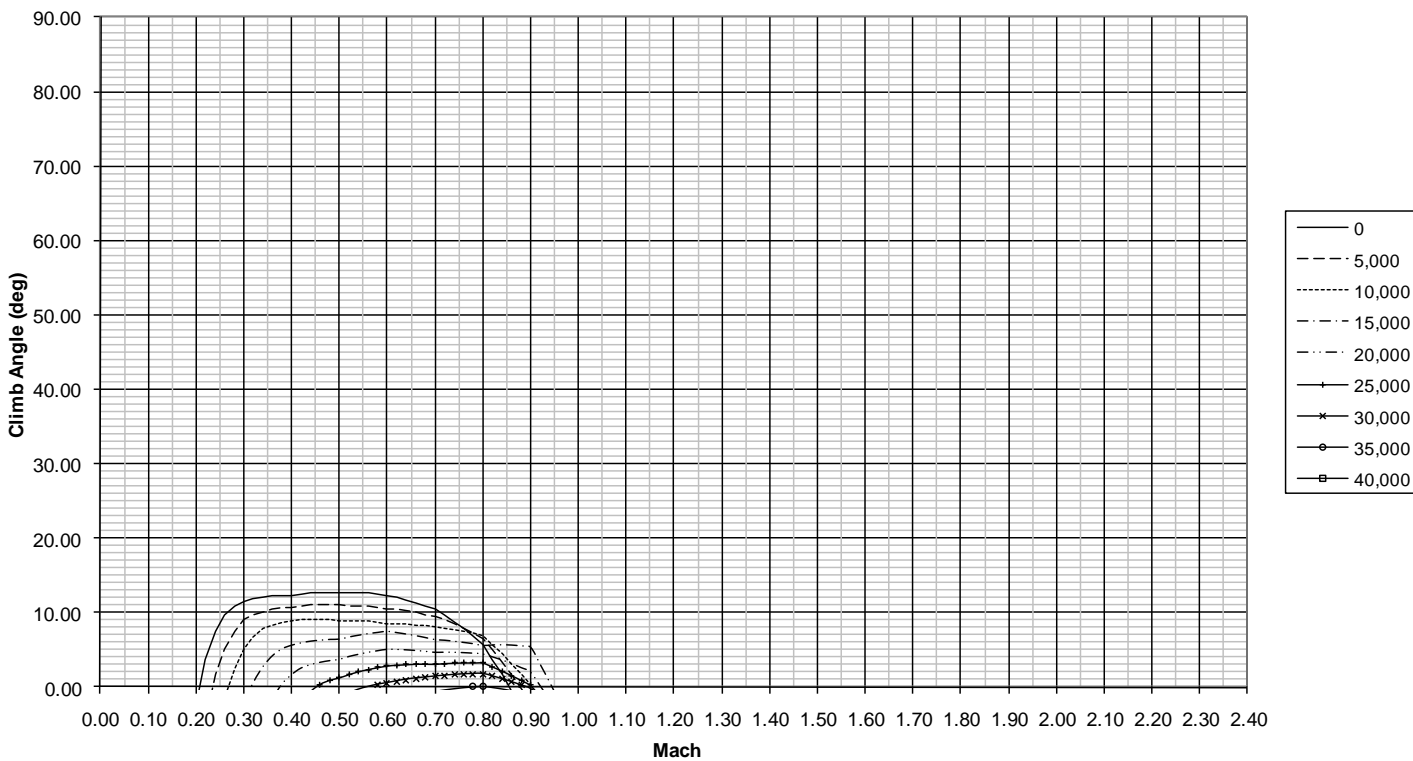
CONDITIONS:
 •Standard Day
 •MIL Power

CONFIGURATIONS :
 •DRAG INDEX = 12
 (2xR-60 + 2xR-13M)
 •GW=16,967 lbs / 7,986 kg

Instantaneous Constant Speed Climb Rate



Constant Speed Climb Angle



Acceleration Performances

Aircraft : MIG-21bis iz.75A

Engine :Tumanskiy R-25-300

CONFIGURATIONS :

•DRAG INDEX = 12 (2xR-60 + 2xR-13M)

•50% internal fuel

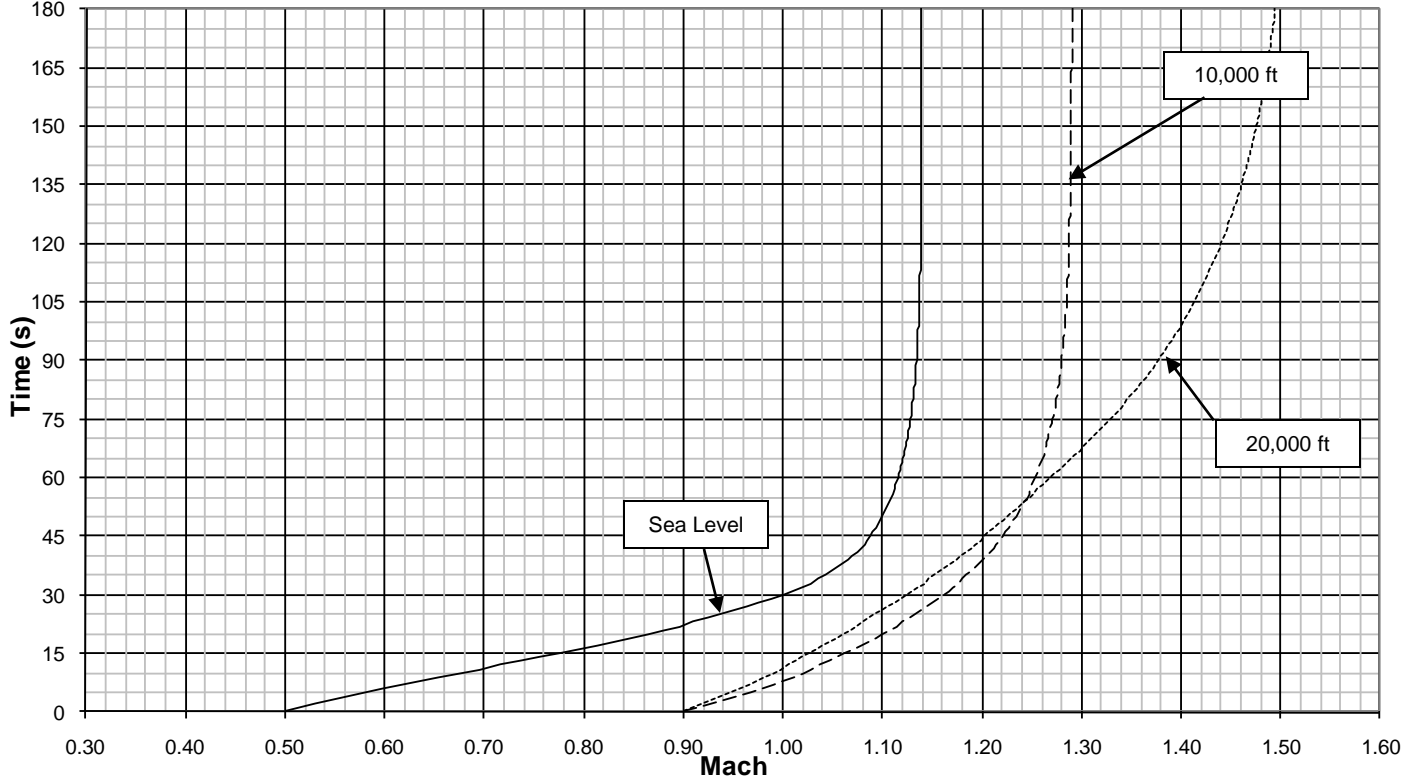
•GW= 16,967 lbs / 7,986 kg

Acceleration Diagram

DATA BASIS : ESTIMATED
CONDITIONS:
 •Standard Day
CONDITIONS:
 •Standard Day
 •Special AB up to 10,000ft
 •Max AB from 15,000ft

Aircraft : MIG-21bis iz.75A
Engine :Tumanskiy R-25-300
CONFIGURATIONS :
 •DRAG INDEX = 12
 (2xR-60 + 2xR-13M)
 •GW=16,967 lbs / 7,986 kg

Acceleration (Max Thrust AB)



Acceleration (Max Thrust AB)

