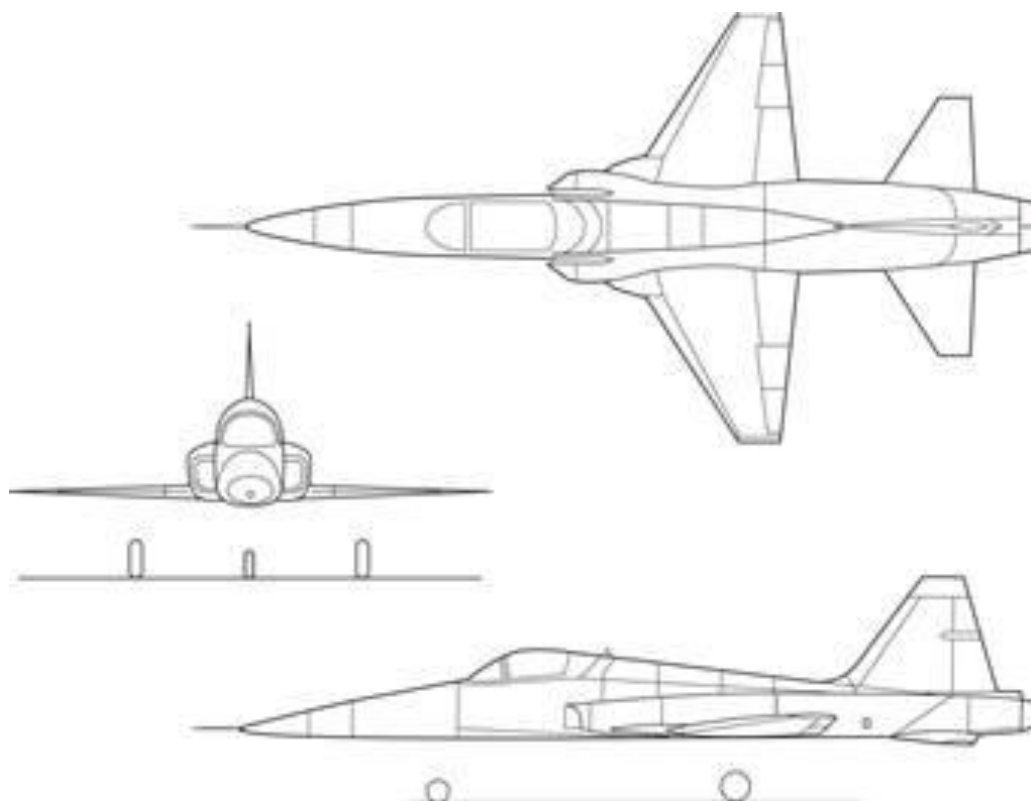


# PERFORMANCE ANALYSIS



## **F-5E-3 Tiger II Northrop Corporation (J85-GE-21)**

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**

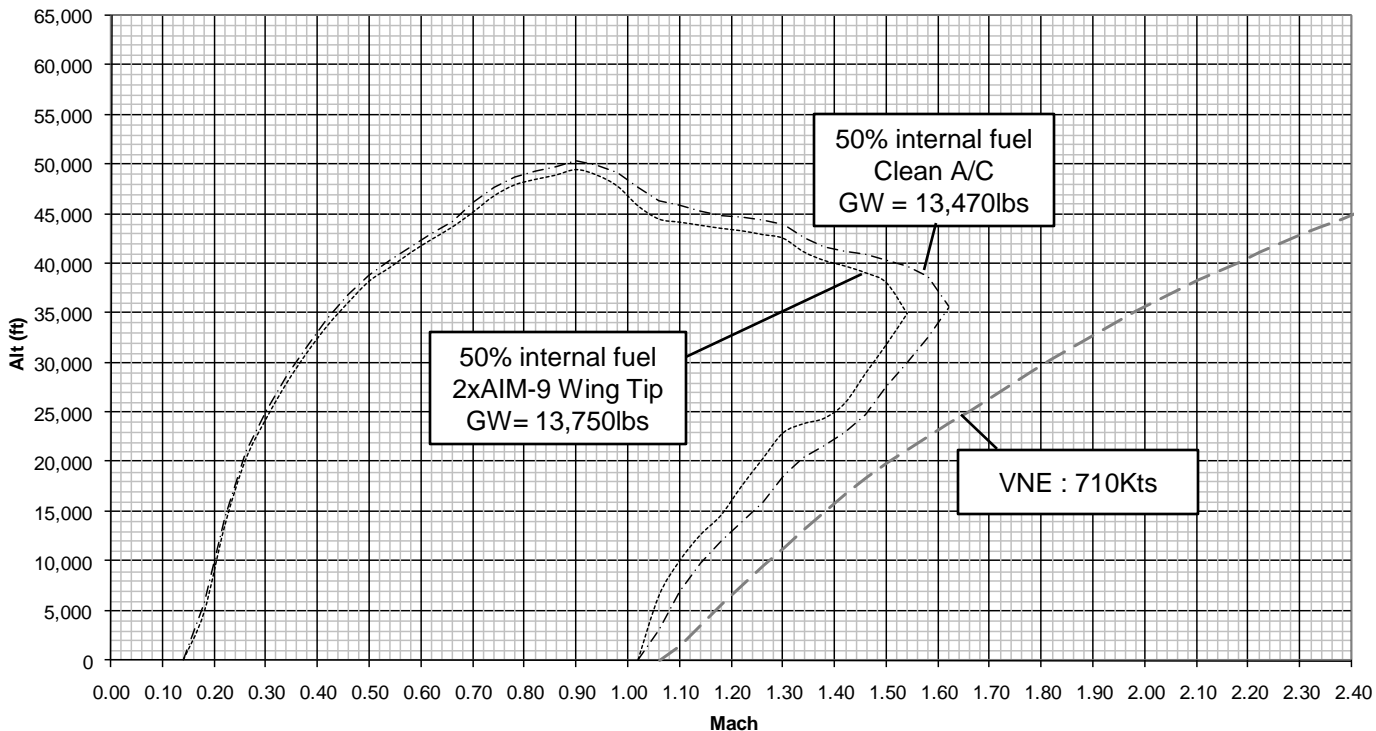
**CONDITIONS:**

- Standard Day
- Max AB

**Aircraft : NORTHROP F-5E-3**

**Engine :J85-GE-21**

**Level Flight Envelope  
Full AB**



**DATA BASIS : ESTIMATED**

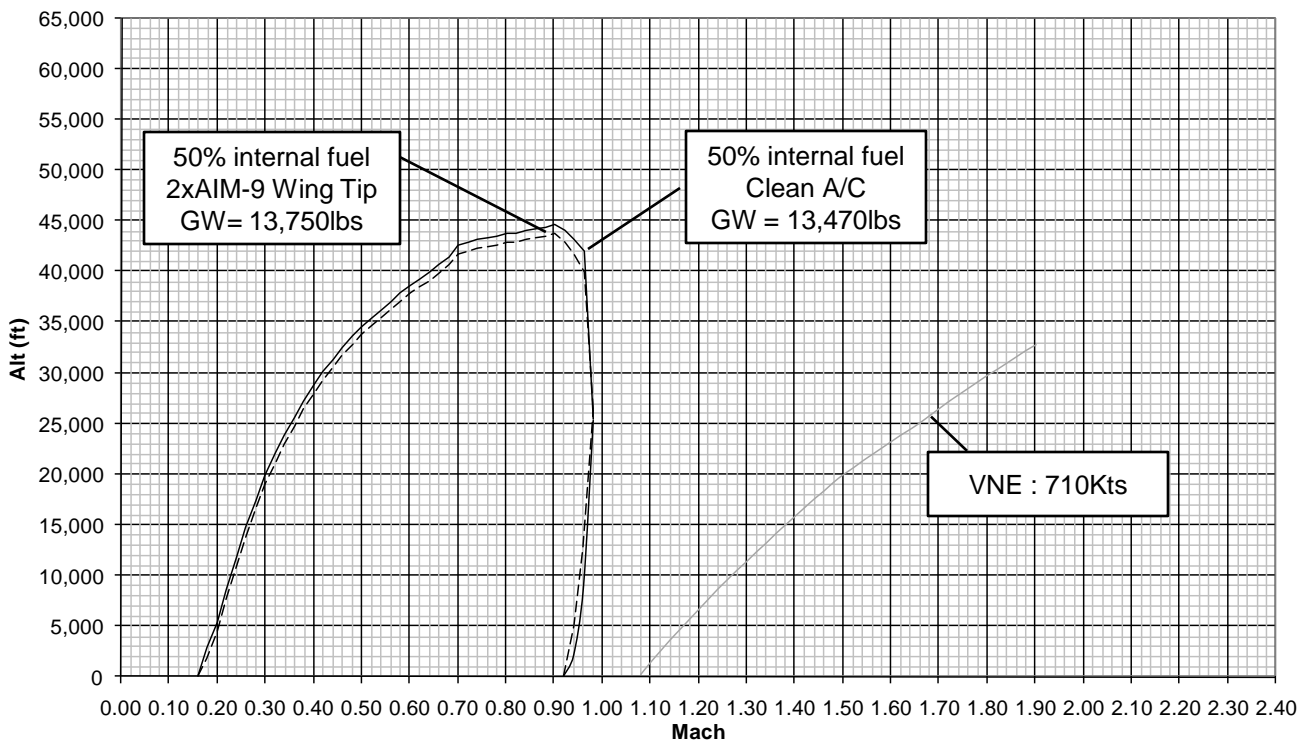
**CONDITIONS:**

- Standard Day
- MILL Power

**Aircraft : NORTHROP F-5E-3**

**Engine :J85-GE-21**

**Level Flight Envelope  
MIL Power**



# Turn Performance

**Aircraft : NORTHROP F-5E-3**

**Engine :J85-GE-21**

**CONFIGURATIONS :**

**•DRAG INDEX = 18 (2xAIM-9)**

**•GW= 13,750 lbs**

*F-5E-3 is assumed to use its AutoFlaps device.*

# Turn Rate – Summary

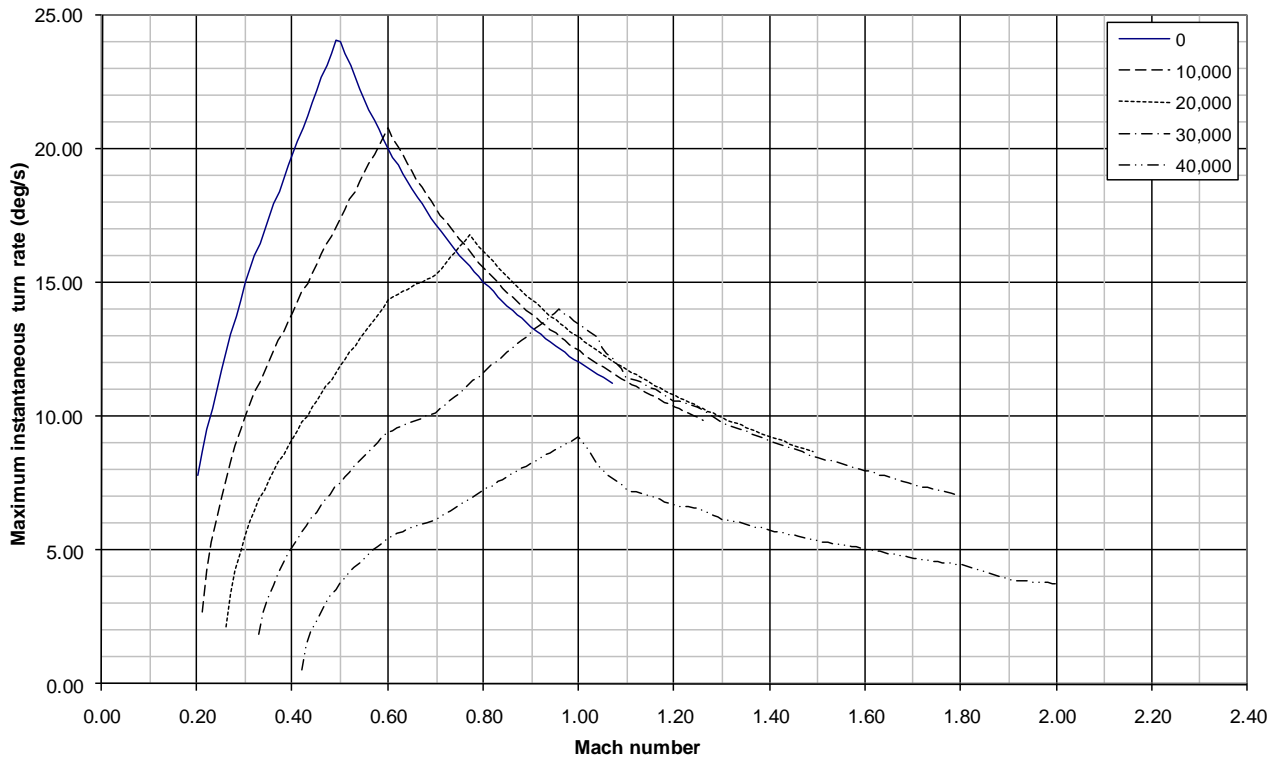
**DATA BASIS : ESTIMATED**

**Aircraft : NORTHROP F-5E-3**  
**Engine : J85-GE-21**

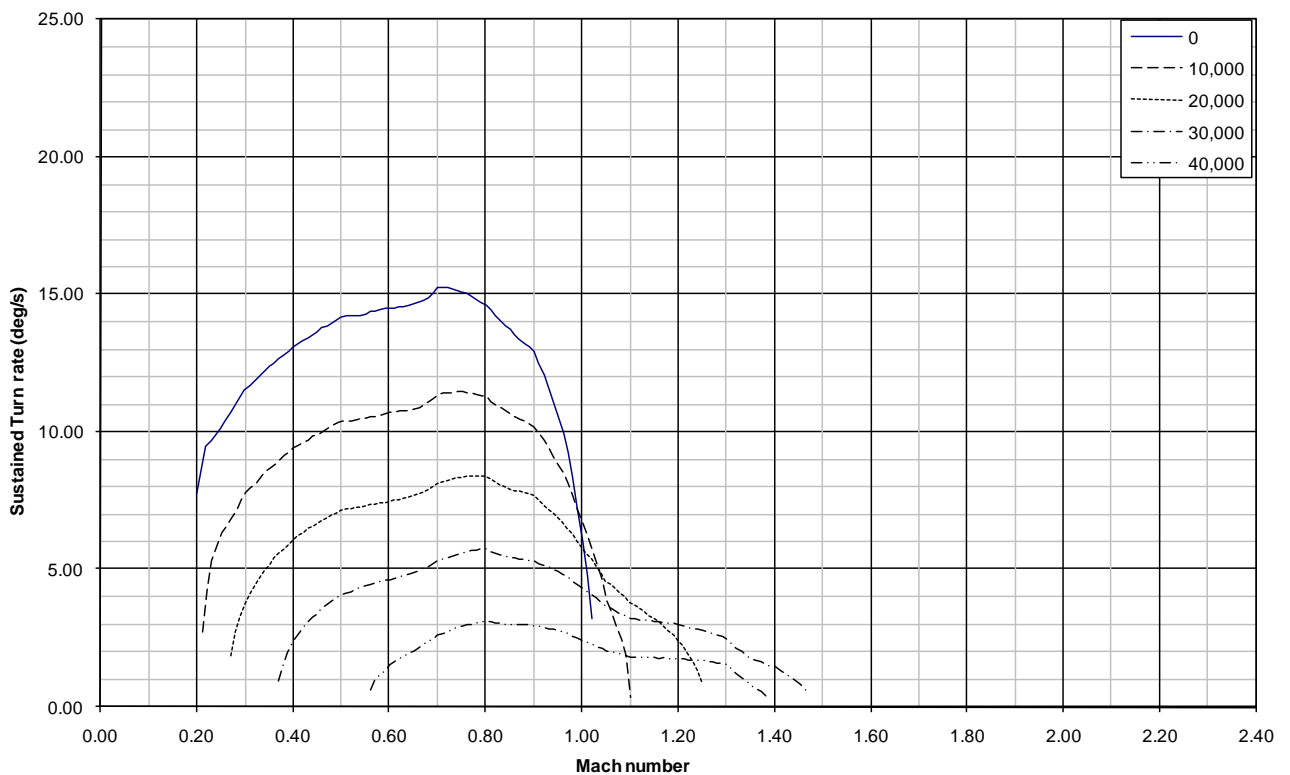
**CONDITIONS:**  
 •Standard Day  
 •Max AB

**CONFIGURATIONS :**  
 •DRAG INDEX = 18 (2xAIM-9)  
 •GW=13,750 lbs

**Maximum Available Turn Rate**



**Maximum Sustained Turn rate (deg/s)**



# Load Factor – Summary

**DATA BASIS : ESTIMATED**

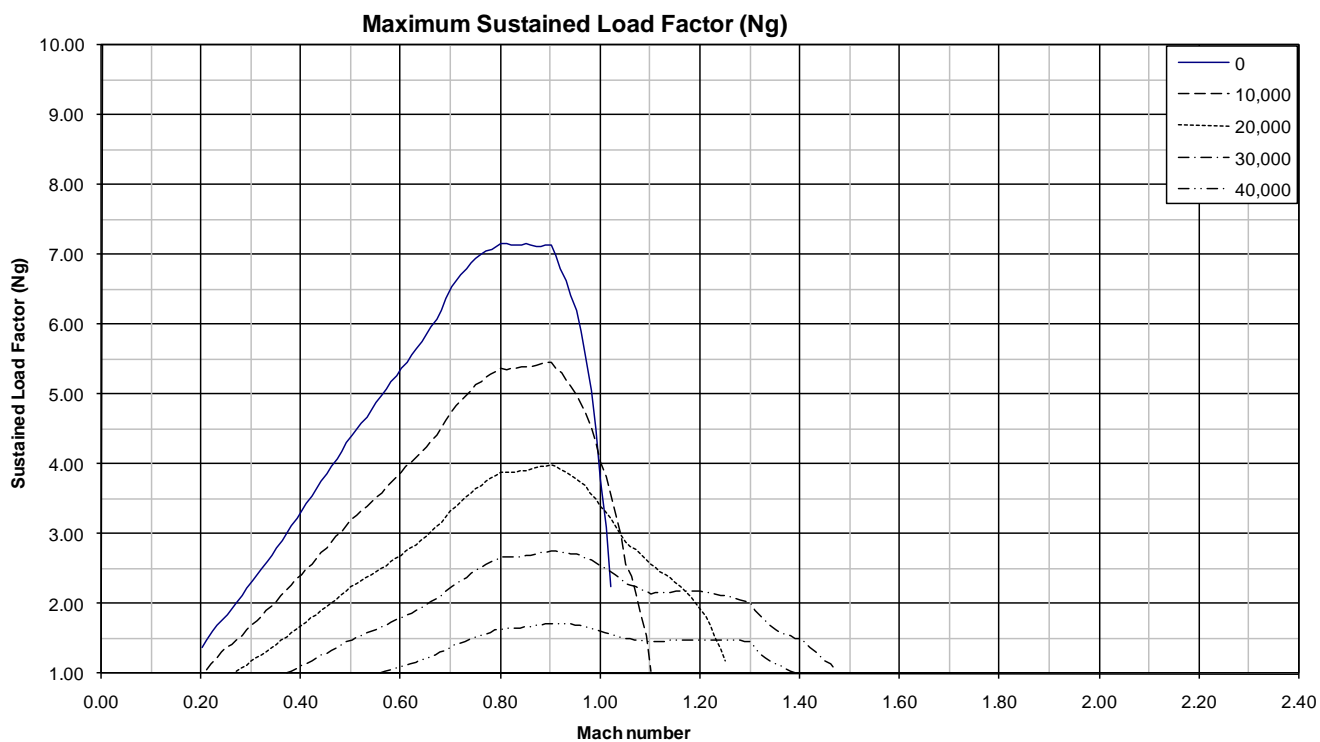
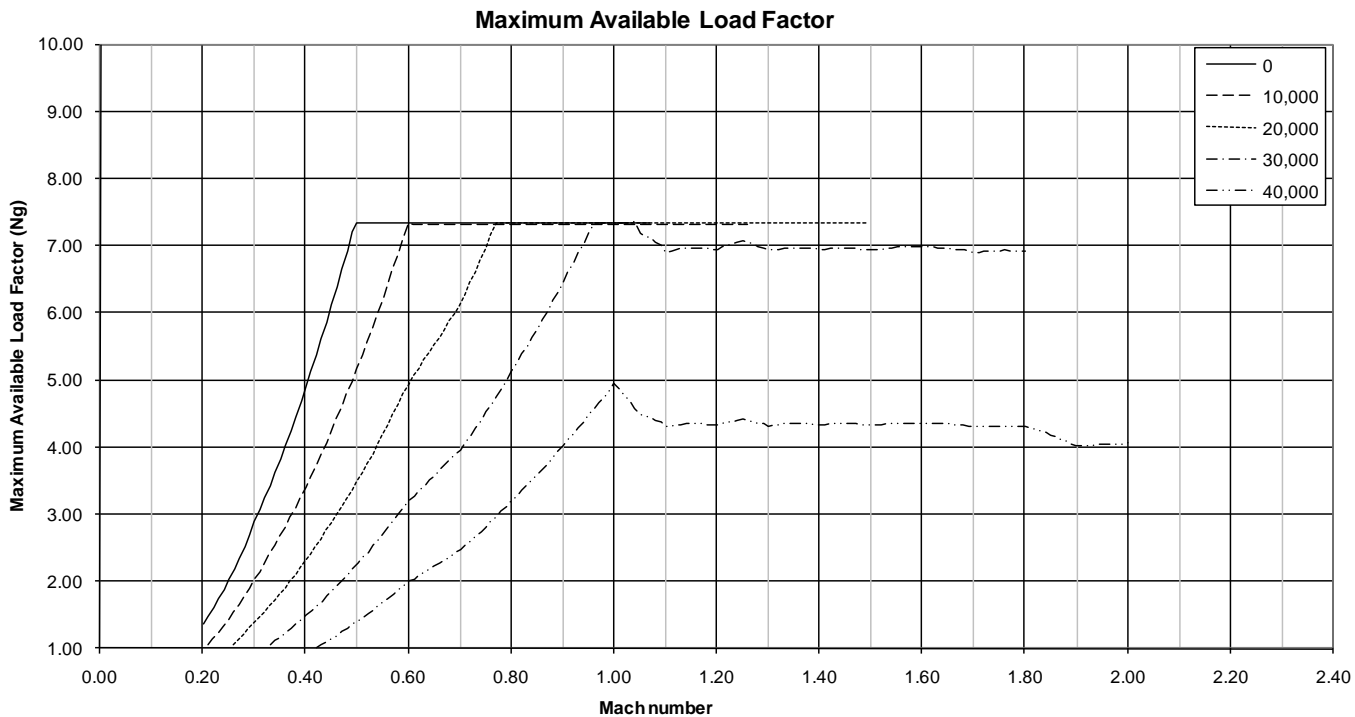
**Aircraft : NORTHROP F-5E-3**  
**Engine :J85-GE-21**

**CONDITIONS:**

- Standard Day
- Max AB

**CONFIGURATIONS :**

- DRAG INDEX = 18 (2xAIM-9)
- GW=13,750 lbs



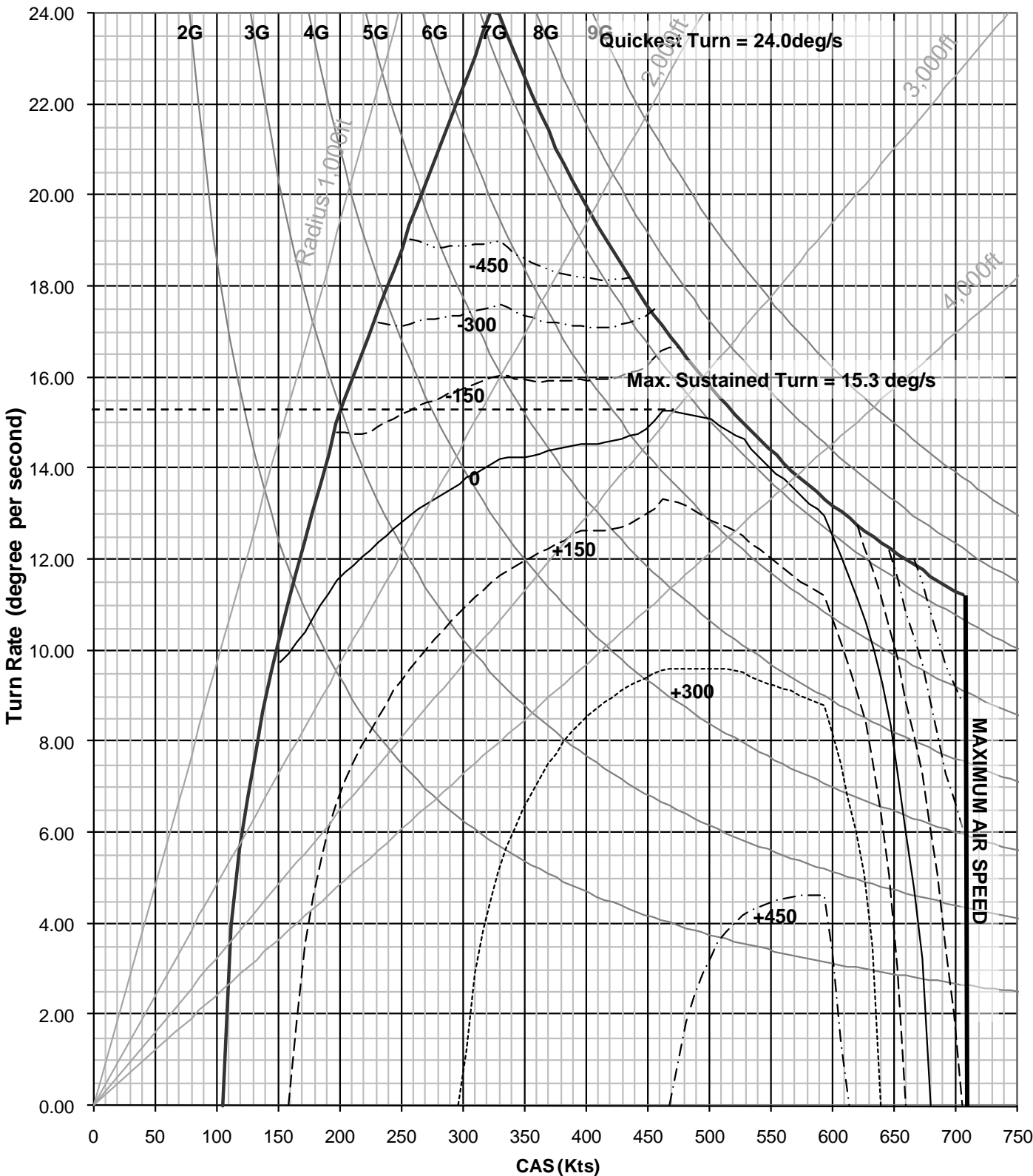
# Turn Performance – Sea Level

DATA BASIS : ESTIMATED

Aircraft : NORTHROP F-5E-3  
 Engine : J85-GE-21

CONDITIONS:  
 •Standard Day  
 •Max AB

CONFIGURATIONS :  
 •DRAG INDEX = 18 (2xAIM-9)  
 •GW=13,750 lbs



# Turn Performance – 5,000 ft

DATA BASIS : ESTIMATED

Aircraft : NORTHROP F-5E-3

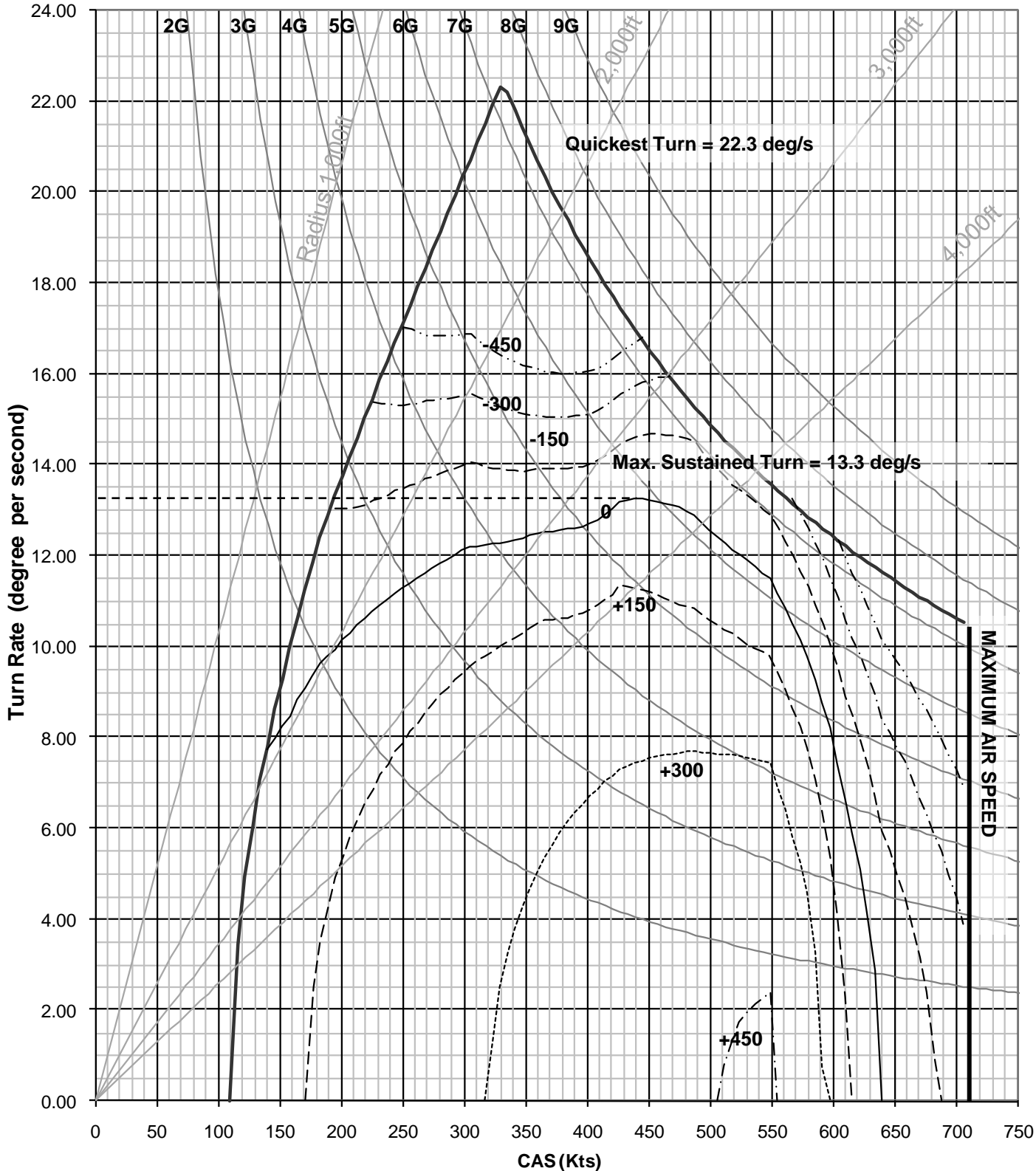
Engine : J85-GE-21

**CONDITIONS:**

- Standard Day
- Max AB

**CONFIGURATIONS :**

- DRAG INDEX = 18 (2xAIM-9)
- GW=13,750 lbs





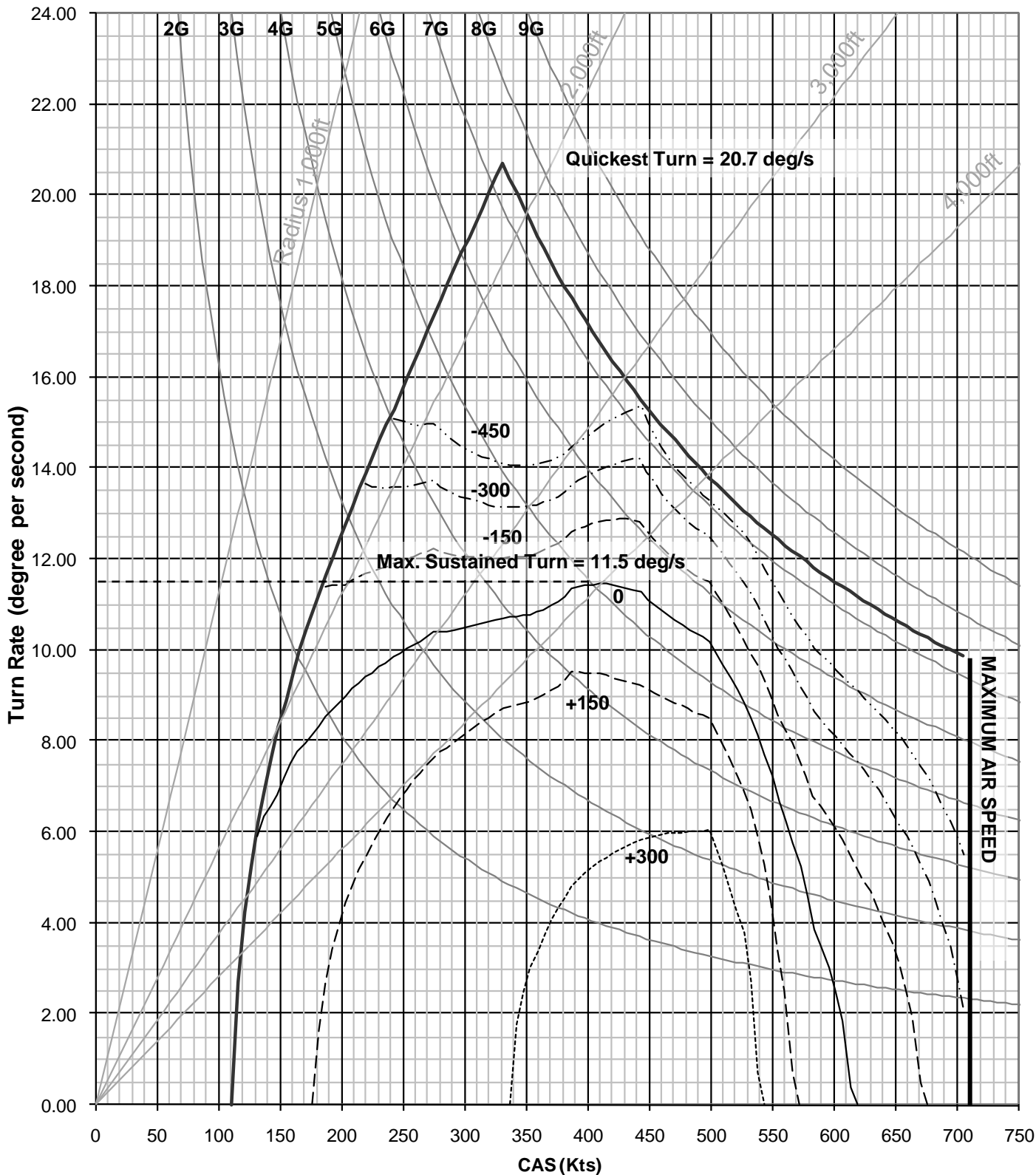
# Turn Performance – 10,000 ft

DATA BASIS : ESTIMATED

Aircraft : NORTHROP F-5E-3  
 Engine : J85-GE-21

CONDITIONS:  
 •Standard Day  
 •Max AB

CONFIGURATIONS :  
 •DRAG INDEX = 18 (2xAIM-9)  
 •GW=13,750 lbs



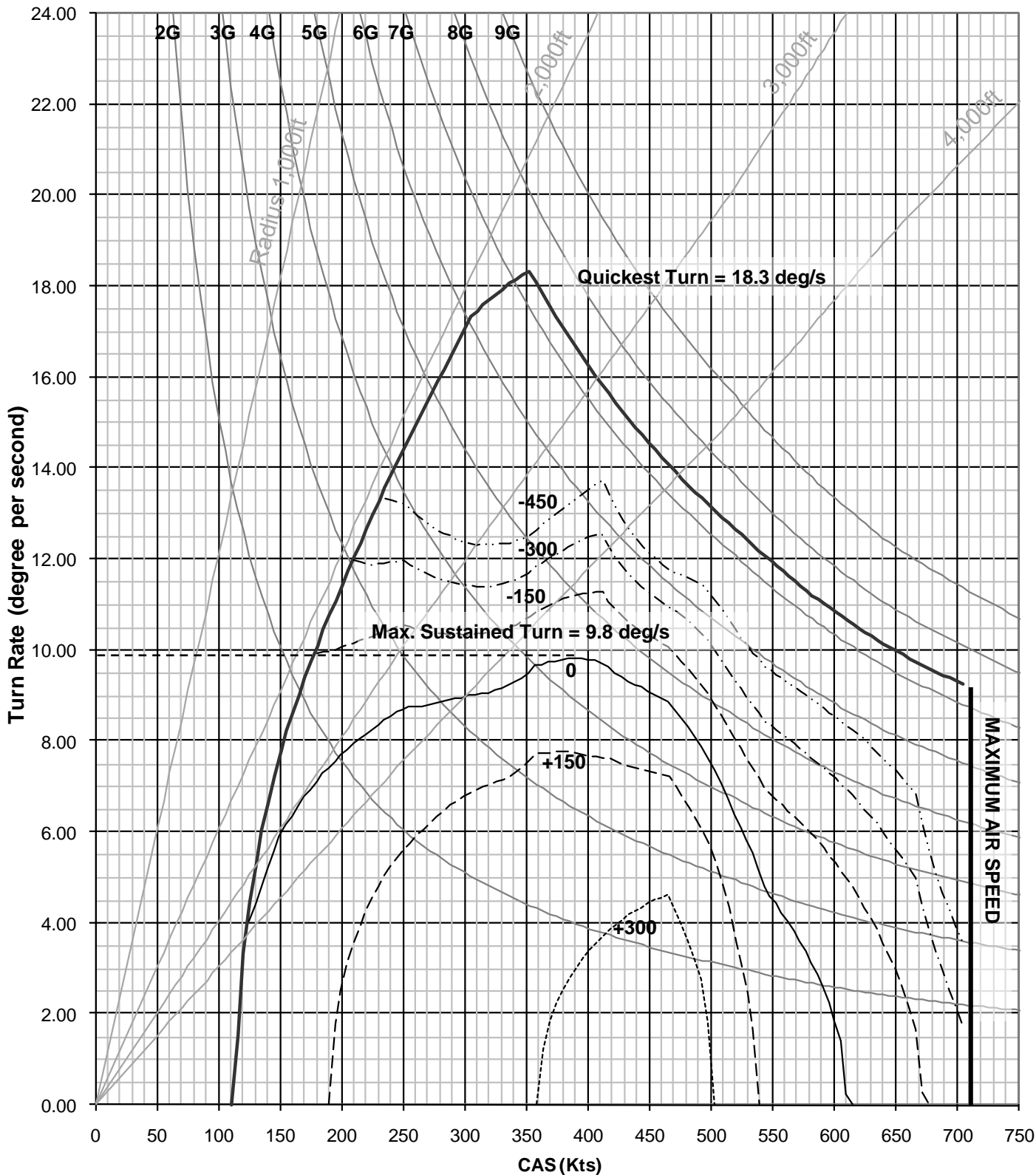
# Turn Performance – 15,000 ft

DATA BASIS : ESTIMATED

Aircraft : NORTHROP F-5E-3  
 Engine : J85-GE-21

CONDITIONS:  
 •Standard Day  
 •Max AB

CONFIGURATIONS :  
 •DRAG INDEX = 18 (2xAIM-9)  
 •GW=13,750 lbs



# Turn Performance – 20,000 ft

DATA BASIS : ESTIMATED

Aircraft : NORTHROP F-5E-3

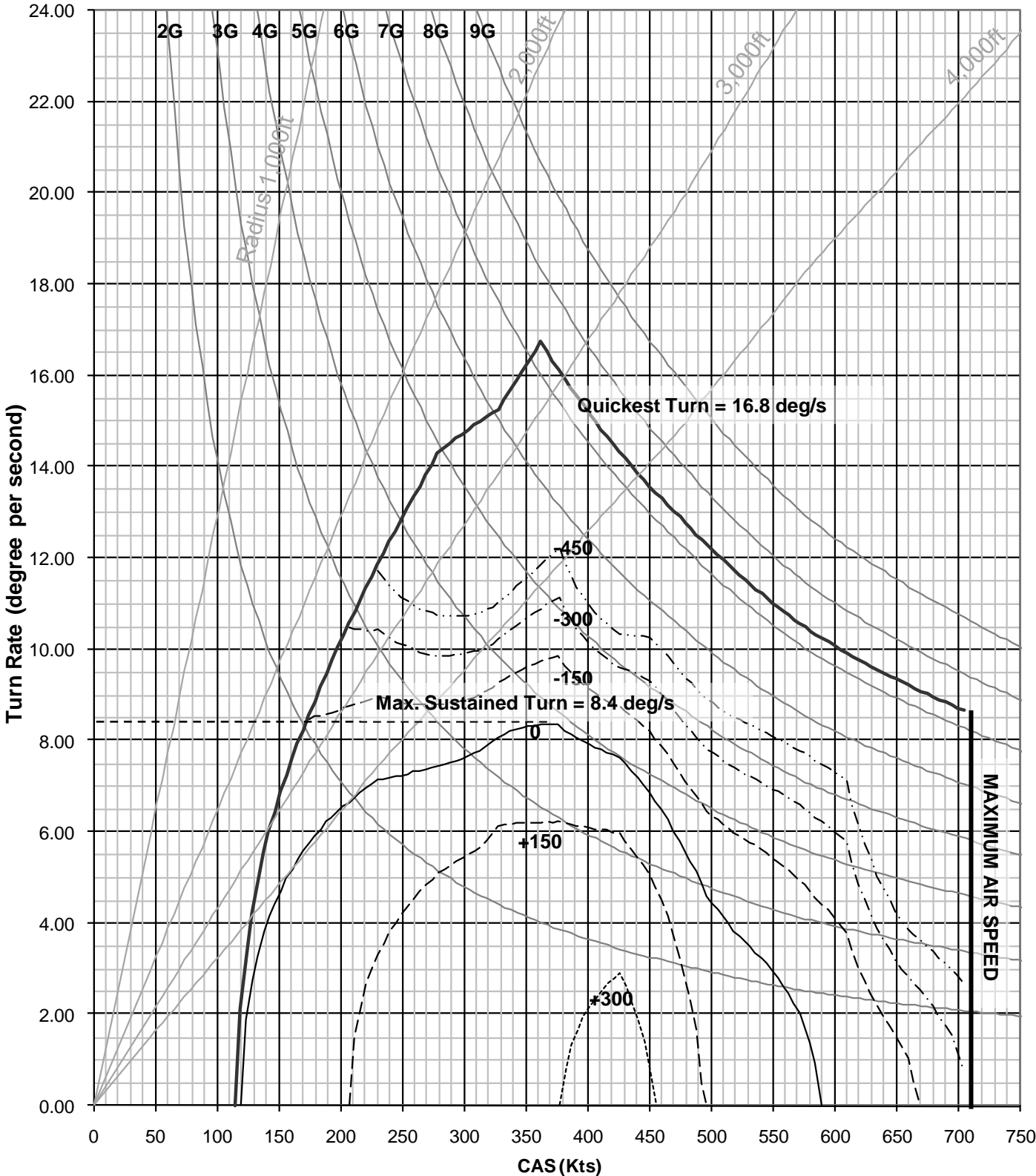
Engine : J85-GE-21

**CONDITIONS:**

- Standard Day
- Max AB

**CONFIGURATIONS :**

- DRAG INDEX = 18 (2xAIM-9)
- GW=13,750 lbs



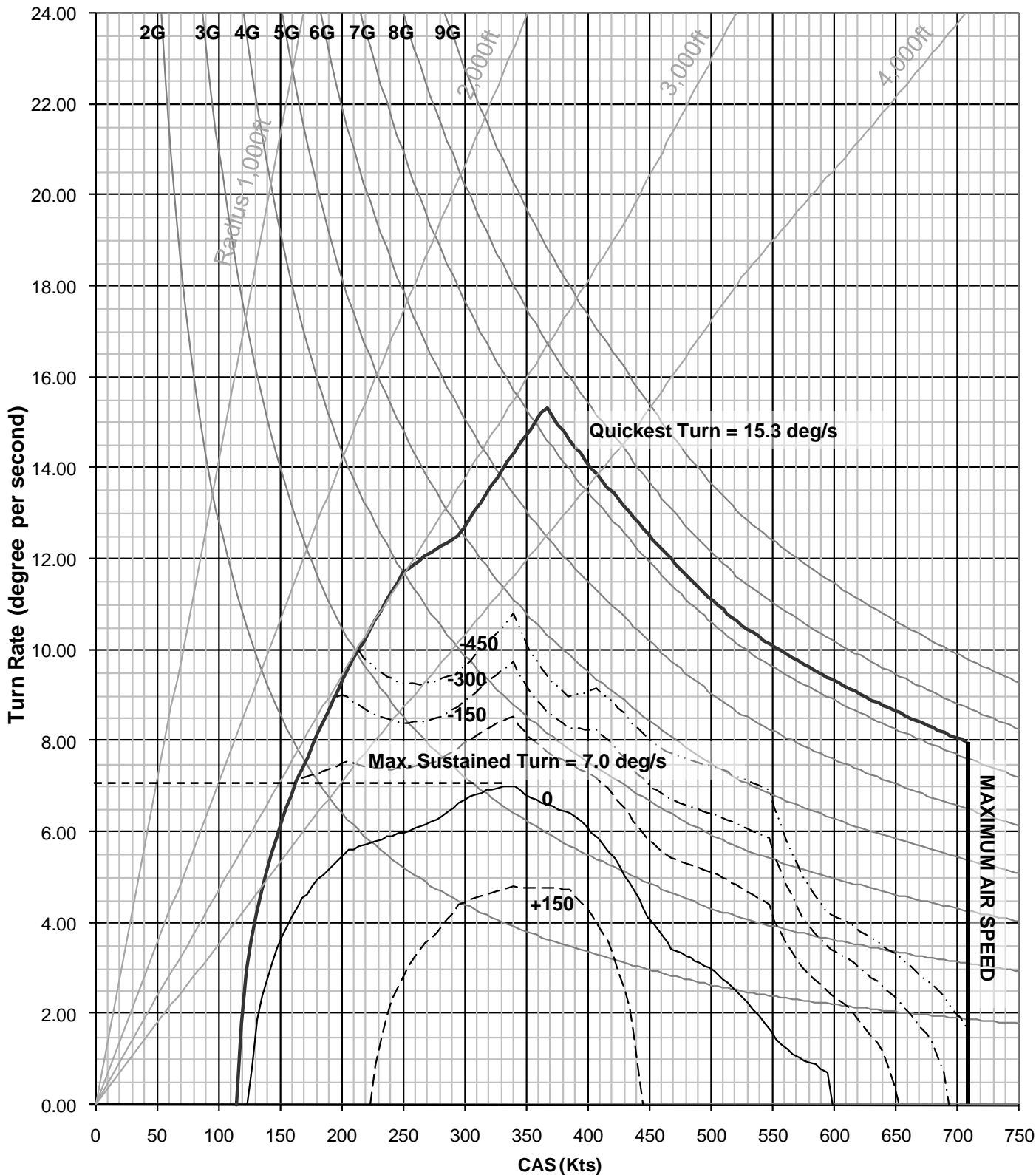
# Turn Performance – 25,000 ft

DATA BASIS : ESTIMATED

Aircraft : NORTHROP F-5E-3  
 Engine : J85-GE-21

CONDITIONS:  
 •Standard Day  
 •Max AB

CONFIGURATIONS :  
 •DRAG INDEX = 18 (2xAIM-9)  
 •GW=13,750 lbs



# Turn Performance – 30,000 ft

DATA BASIS : ESTIMATED

Aircraft : NORTHROP F-5E-3

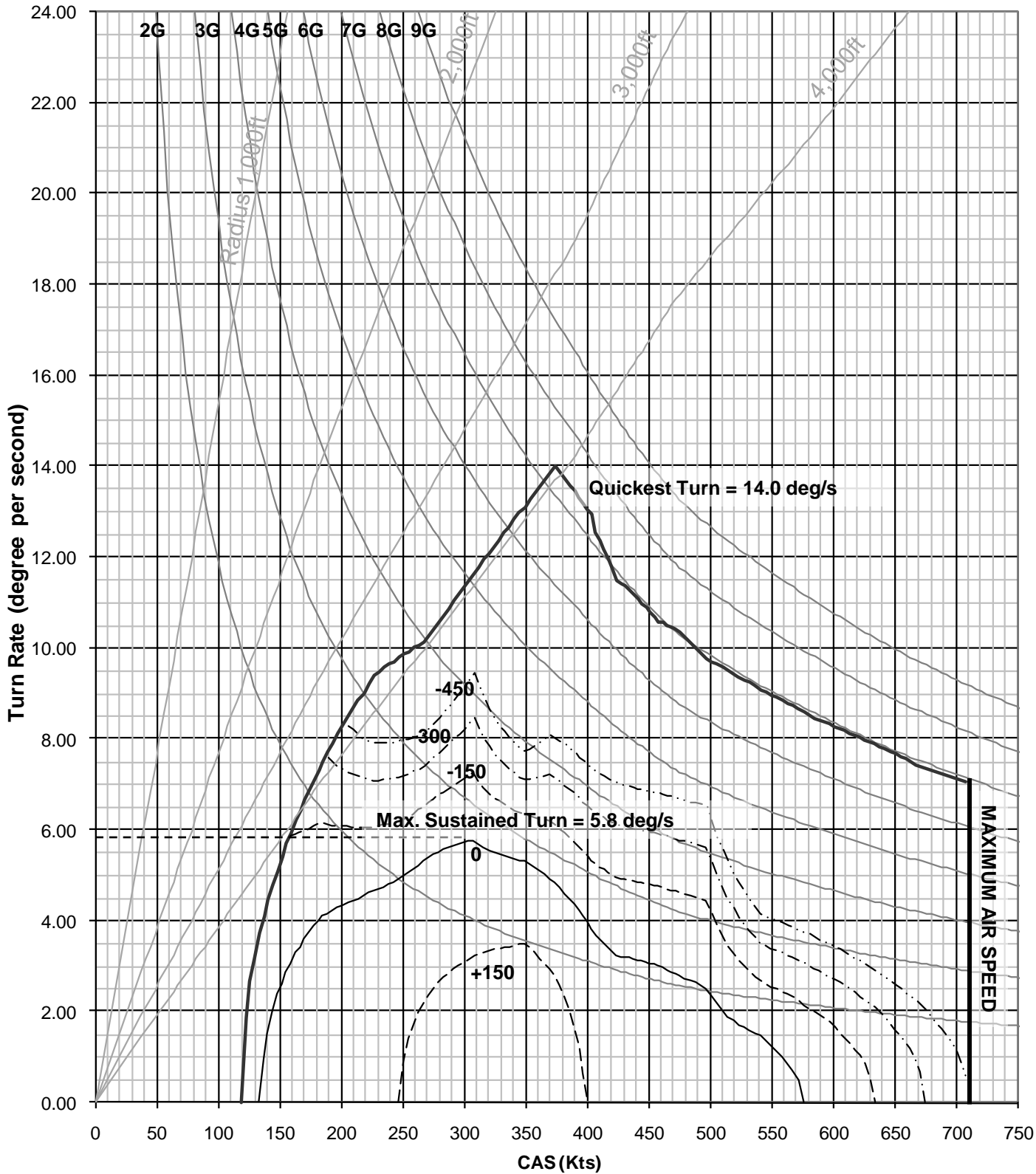
Engine : J85-GE-21

**CONDITIONS:**

- Standard Day
- Max AB

**CONFIGURATIONS :**

- DRAG INDEX = 18 (2xAIM-9)
- GW=13,750 lbs



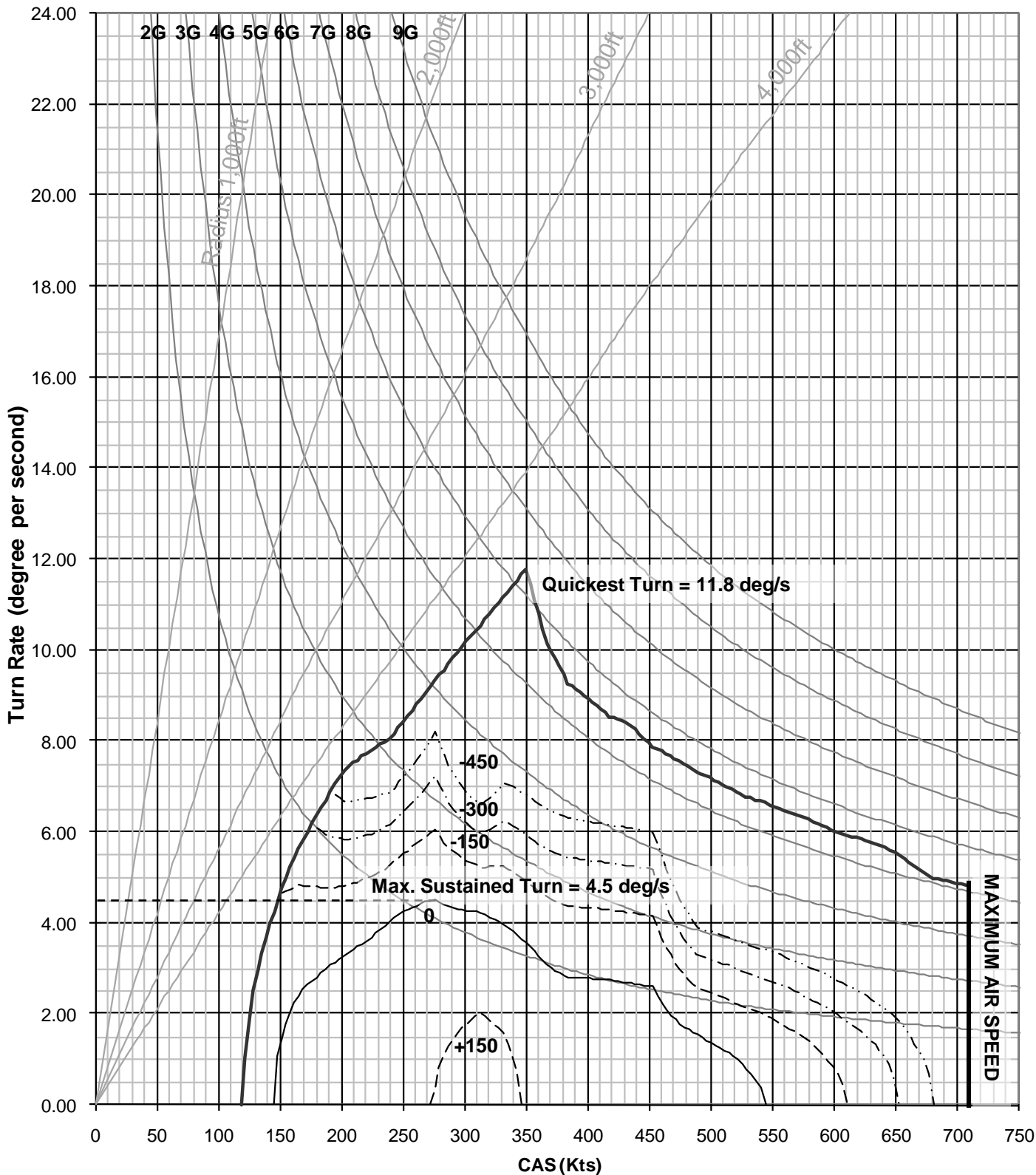
# Turn Performance – 35,000 ft

DATA BASIS : ESTIMATED

Aircraft : NORTHROP F-5E-3  
 Engine : J85-GE-21

CONDITIONS:  
 •Standard Day  
 •Max AB

CONFIGURATIONS :  
 •DRAG INDEX = 18 (2xAIM-9)  
 •GW=13,750 lbs



# Climb Performance

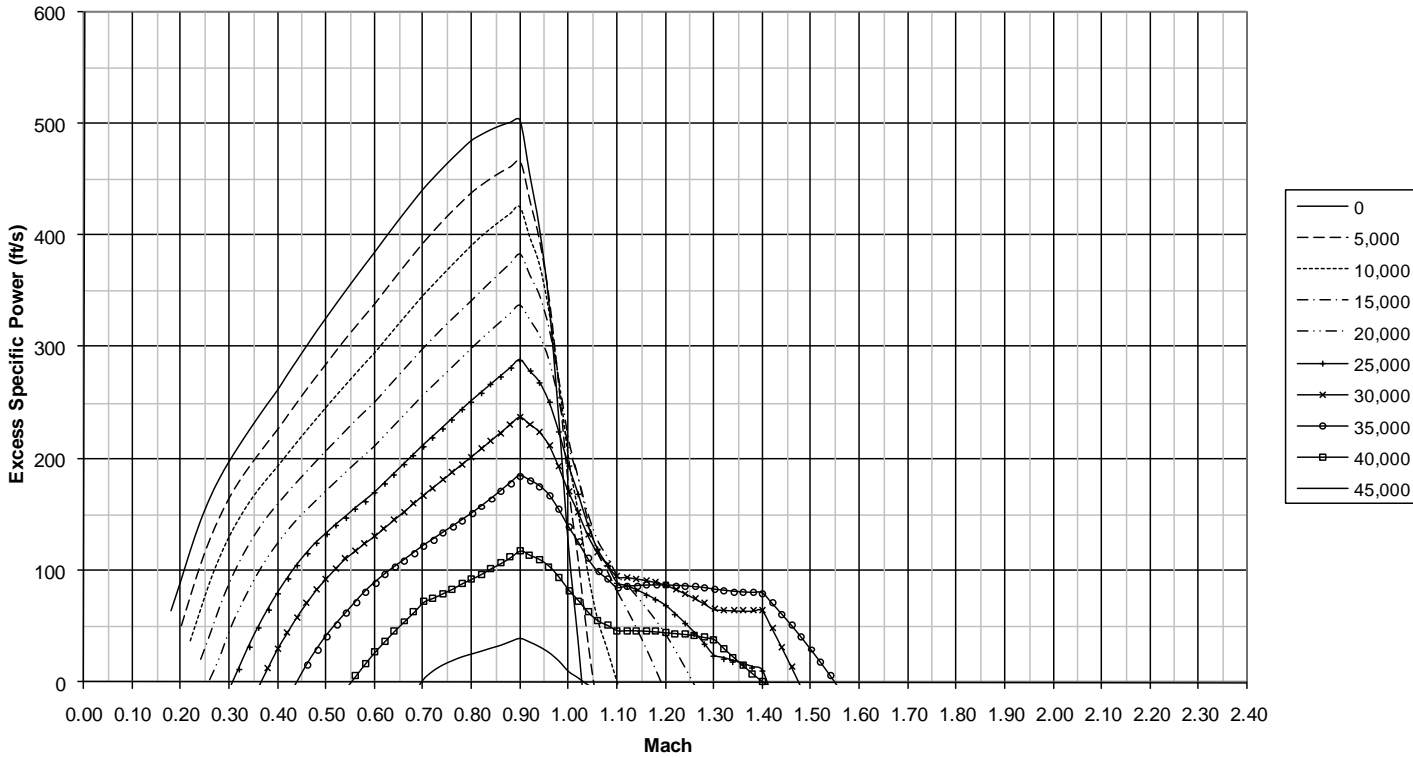
DATA BASIS : ESTIMATED

Aircraft : NORTHROP F-5E-3  
 Engine : J85-GE-21

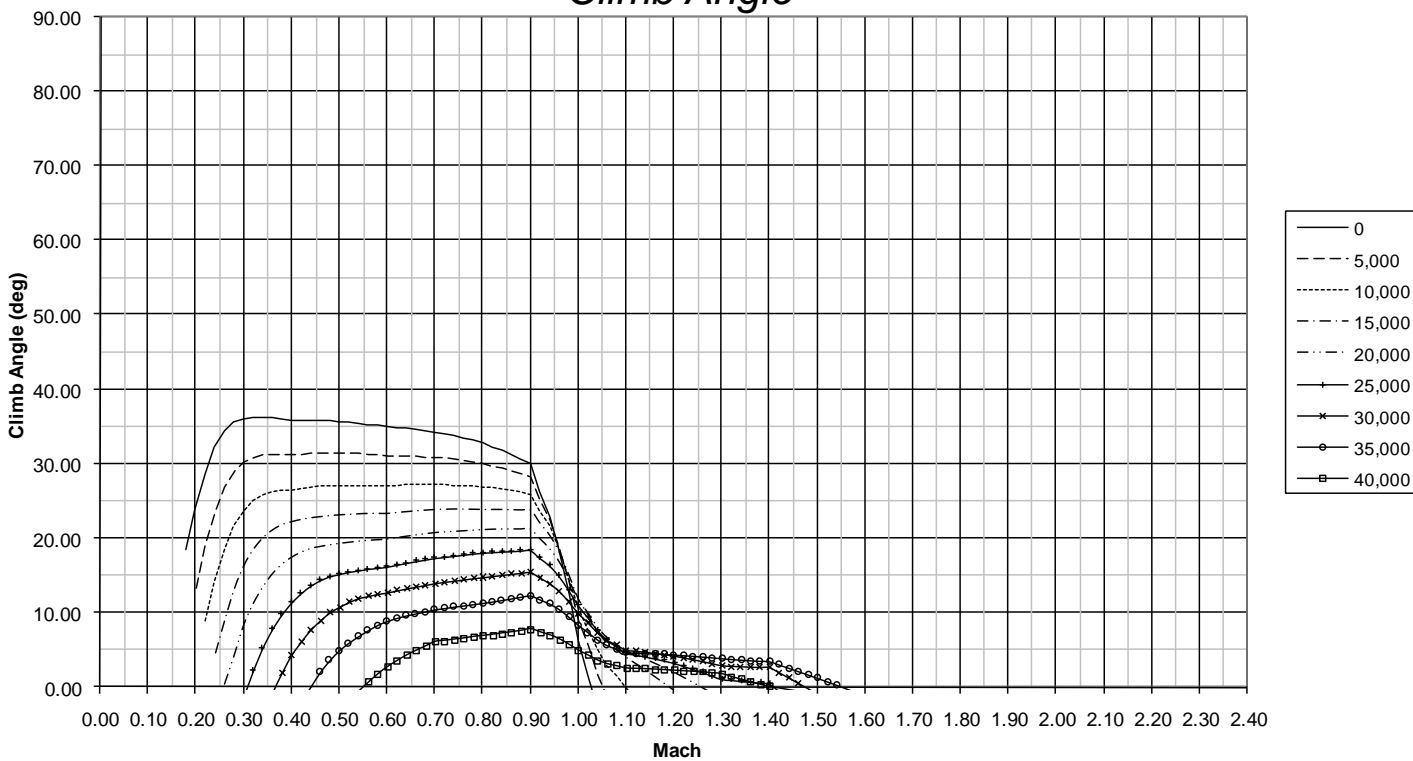
CONDITIONS:  
 •Standard Day  
 •Max AB

CONFIGURATIONS :  
 •DRAG INDEX = 18 (2xAIM-9)  
 •GW=13,750 lbs

### Climb Rate



### Climb Angle





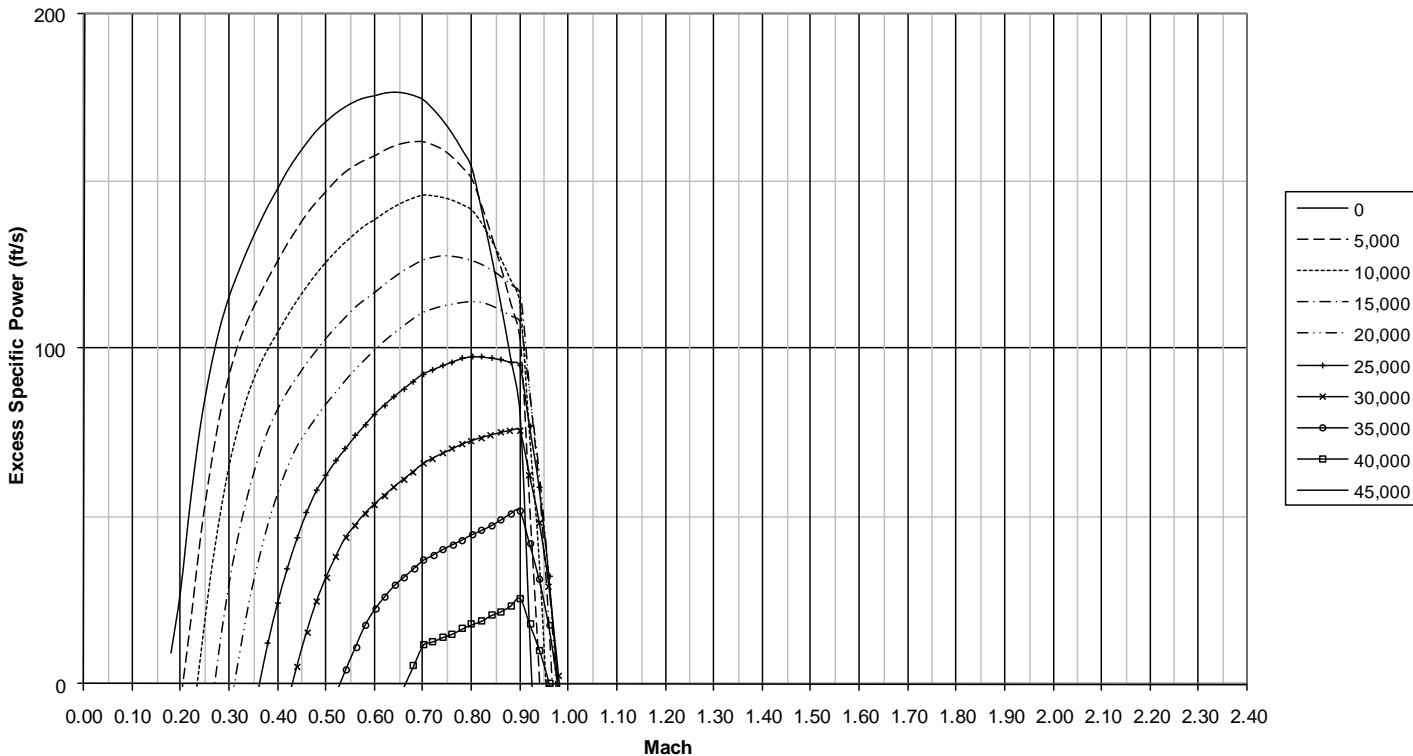
DATA BASIS : ESTIMATED

Aircraft : NORTHROP F-5E-3  
 Engine : J85-GE-21

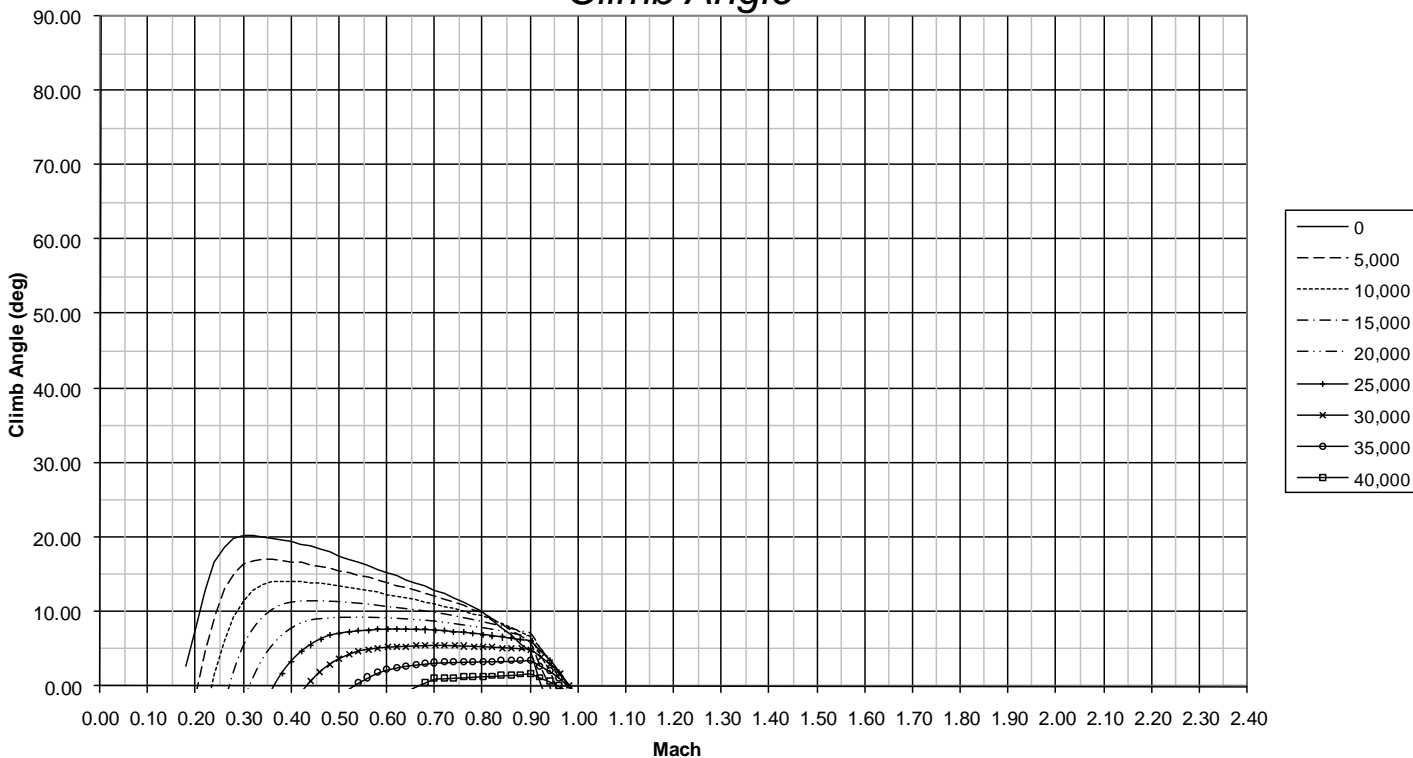
CONDITIONS:  
 •Standard Day  
 •MIL Power

CONFIGURATIONS :  
 •DRAG INDEX = 18 (2xAIM-9)  
 •GW=13,750 lbs

### Climb Rate



### Climb Angle



# Acceleration Performances

# Acceleration Diagram

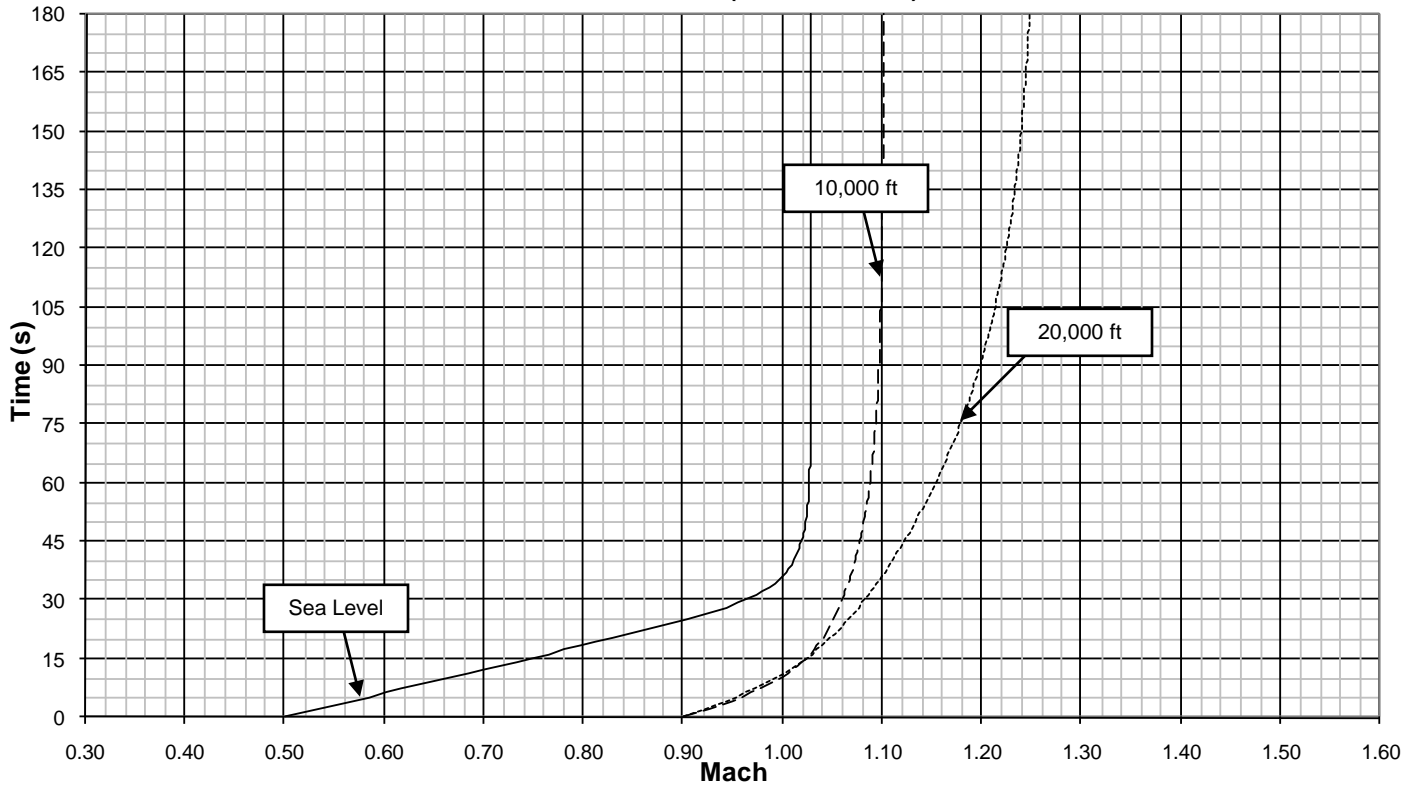
**DATA BASIS : ESTIMATED**

**Aircraft : NORTHROP F-5E-3**  
**Engine : J85-GE-21**

**CONDITIONS:**  
•Standard Day  
•Max AB

**CONFIGURATIONS :**  
•DRAG INDEX = 18 (2xAIM-9)  
•GW=13,750 lbs

**Acceleration (Max Thrust AB)**



**Acceleration (Max Thrust AB)**

