

# Weight & Balance

Archer: N351MK

PRACTICE USE ONLY	Weight	Arm	Moment
<b>Basic Empty Weight</b>	1657.2	87.89	145653.2
Pilot/Copilot		80.5	
Rear Passengers		118.1	
Baggage Area (200 lbs max)		142.8	
<b>Zero Fuel Weight</b>			
Fuel Weight		95.0	
<b>Ramp Weight</b>			
Start / Taxi / Run-up	-8	95.0	-665
<b>Takeoff Weight</b>			
Tail # Adjustment (if applicable)			
New Takeoff Weight (if applicable)			
Trip Fuel Burn		95.0	
<b>Landing Weight</b>			
Tail # Adjustment (if applicable)			
New Landing Weight (if applicable)			

New Tail Number (if switched by dispatch): N3\_\_\_MK

## Persons on Board

PIC Name: \_\_\_\_\_ Weight: \_\_\_\_\_

Additional Pilot Name: \_\_\_\_\_ Weight: \_\_\_\_\_

Passenger #1 Name: \_\_\_\_\_ Weight: \_\_\_\_\_

Passenger #2 Name: \_\_\_\_\_ Weight: \_\_\_\_\_

Passenger  
Current?



## Limitations

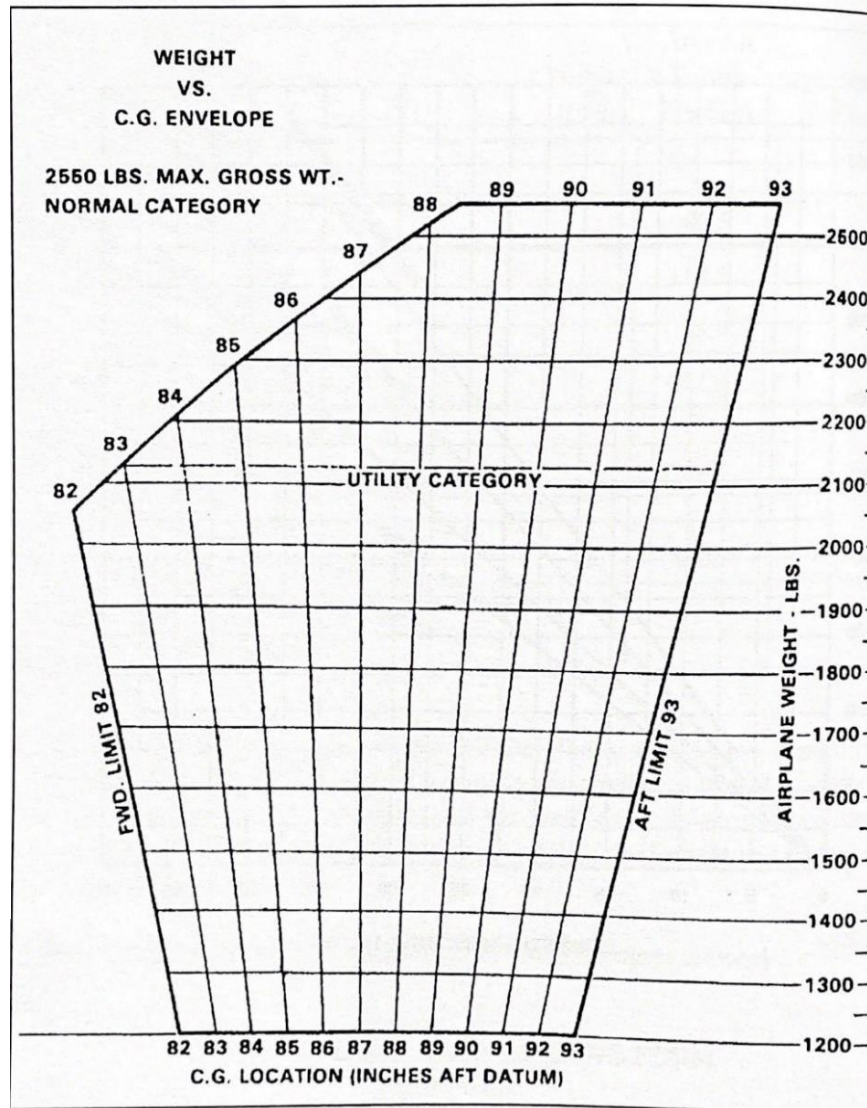
Maximum Ramp Weight 2558 lbs

Maximum Takeoff Weight 2550 lbs

Maximum Landing Weight 2550 lbs

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

REQUIRED: The takeoff weight and landing weight must be plotted on the diagram below.



## Important Weights

Chocks = 1 lb

Airplane Blanket = 8 lbs

Cold Weather Kit = 15 lbs

Cross-Country Kit = 20 lbs

Survival Kit = 4 lbs

# FAR 91.103 – Preflight Action

## Weather

### Departure Weather

Temp\_\_\_\_\_°C Dewpoint\_\_\_\_\_°C Surface Winds\_\_\_\_\_° @\_\_\_\_\_kts  
Crosswind Component\_\_\_\_\_kts Headwind Component\_\_\_\_\_kts  
Barometric Pressure\_\_\_\_\_ "Hg Pressure Altitude\_\_\_\_\_  
Density Altitude\_\_\_\_\_

### Destination Weather (required for flights to another airport that isn't MKT)

Temp\_\_\_\_\_°C Dewpoint\_\_\_\_\_°C Surface Winds\_\_\_\_\_° @\_\_\_\_\_kts  
Crosswind Component\_\_\_\_\_kts Headwind Component\_\_\_\_\_kts  
Barometric Pressure\_\_\_\_\_ "Hg Pressure Altitude\_\_\_\_\_  
Density Altitude\_\_\_\_\_

## Performance Calculations

Departure Runway Length\_\_\_\_\_ft Takeoff Weight\_\_\_\_\_ft  
Arrival Runway Length\_\_\_\_\_ft Service Ceiling\_\_\_\_\_ft  
Takeoff Distance: Ground Roll\_\_\_\_\_ft 50' Obs\_\_\_\_\_ft  
Landing Distance: Ground Roll\_\_\_\_\_ft 50' Obs\_\_\_\_\_ft

## Passenger Approval

*This section is utilized if a passenger is not a North Star Aviation student. This form must be accompanied by a passenger waiver form. Appointments for aircraft rentals and passenger approval must be reserved at least 5 business days in advance to ensure an appointment can be scheduled on the day of the rental.*

The following passenger(s) is/are approved to accompany this flight:

\_\_\_\_\_  
Chief/Assistant Chief Signature \_\_\_\_\_

## Certification

By signing below, I acknowledge the following:

1. The information on this form is true, accurate, and it was prepared for the specific conditions of my flight today.
2. I am on Lesson #\_\_\_\_\_, and I have reviewed the lesson objective, completion standards, reading/study materials, and all training items required to complete the lesson.
3. I have checked all NOTAMS for my route of flight.
4. IMSAFE
5. I am responsible for ensuring my flight is completed by the next maintenance event, and I have checked the deferred squawks binder.

Student Signature: \_\_\_\_\_

IP Signature: \_\_\_\_\_