

I. Preflight Preparation

Task	<i>F. Performance and Limitations</i>
References	FAA-H-8083-1, FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-25; POH/AFM
Objective	To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with operating an airplane safely within the parameters of its performance capabilities and limitations.
Knowledge	The applicant demonstrates understanding of:
<i>PA.I.F.K1</i>	Elements related to performance and limitations by explaining the use of charts, tables, and data to determine performance.
<i>PA.I.F.K2</i>	Factors affecting performance, to include:
<i>PA.I.F.K2a</i>	a. Atmospheric conditions
<i>PA.I.F.K2b</i>	b. Pilot technique
<i>PA.I.F.K2c</i>	c. Airplane configuration
<i>PA.I.F.K2d</i>	d. Airport environment
<i>PA.I.F.K2e</i>	e. Loading (e.g., center of gravity)
<i>PA.I.F.K2f</i>	f. Weight and balance
<i>PA.I.F.K3</i>	Aerodynamics.
Risk Management	The applicant demonstrates the ability to identify, assess and mitigate risks, encompassing:
<i>PA.I.F.R1</i>	Inaccurate use of manufacturer's performance charts, tables, and data.
<i>PA.I.F.R2</i>	Exceeding airplane limitations.
<i>PA.I.F.R3</i>	Possible differences between calculated performance and actual performance.
Skills	The applicant demonstrates the ability to:
<i>PA.I.F.S1</i>	Compute the weight and balance, correct out-of-center of gravity (CG) loading errors and determine if the weight and balance remains within limits during all phases of flight.
<i>PA.I.F.S2</i>	Utilize the appropriate airplane manufacturer's approved performance charts, tables, and data.