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U.S. Department
of Transportation

**Federal Aviation
Administration**

Instrument Rating – Airplane
Airman Certification Standards

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Flight Standards Service
Washington, DC 20591

Area of Operation VI. Instrument Approach Procedures

Task A. Non-precision Approach

References: 14 CFR part 91; AC 120-108; AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-15, FAA-H-8083-16, FAA-H-8083-25; Terminal Procedures Publications

Objective: To determine the applicant exhibits satisfactory knowledge, risk management, and skills associated with performing non-precision approach procedures solely by reference to instruments.

Note: *See Appendix 3: Aircraft, Equipment, and Operational Requirements & Limitations for information related to this Task.*

Knowledge:	The applicant demonstrates understanding of:
IR.VI.A.K1	Procedures and limitations associated with a non-precision approach, including the differences between Localizer Performance (LP) and Lateral Navigation (LNAV) approach guidance.
IR.VI.A.K2	Navigation system indications and annunciations expected during an area navigation (RNAV) approach.
IR.VI.A.K3	Ground-based and satellite-based navigation systems used for a non-precision approach.
IR.VI.A.K4	A stabilized approach, including energy management concepts.

Risk Management:	The applicant is able to identify, assess, and mitigate risk associated with:
IR.VI.A.R1	Deviating from the assigned approach procedure.
IR.VI.A.R2	Selecting a navigation frequency.
IR.VI.A.R3	Management of automated navigation and autoflight systems.
IR.VI.A.R4	Aircraft configuration during an approach and missed approach.
IR.VI.A.R5	An unstable approach, including excessive descent rates.
IR.VI.A.R6	Deteriorating weather conditions on approach.
IR.VI.A.R7	Operating below the minimum descent altitude (MDA) without proper visual references.

Skills:	The applicant exhibits the skill to:
IR.VI.A.S1	Accomplish the non-precision instrument approaches selected by the evaluator.
IR.VI.A.S2	Establish two-way communications with air traffic control (ATC) appropriate for the phase of flight or approach segment, and use proper communication phraseology.
IR.VI.A.S3	Select, tune, identify, and confirm the operational status of navigation equipment to be used for the approach.
IR.VI.A.S4	Comply with all clearances issued by ATC or the evaluator.
IR.VI.A.S5	Recognize if any flight instrumentation is inaccurate or inoperative, and take appropriate action.
IR.VI.A.S6	Advise ATC or the evaluator if unable to comply with a clearance.
IR.VI.A.S7	Complete the appropriate checklist(s).

IR.VI.A.S8	Establish the appropriate aircraft configuration and airspeed considering meteorological and operating conditions.
IR.VI.A.S9	Maintain altitude ±100 feet, selected heading ±10°, airspeed ±10 knots, no more than ¾ scale CDI deflection, and accurately track radials, courses, or bearings, prior to beginning the final approach segment.
IR.VI.A.S10	Adjust the published MDA and visibility criteria for the aircraft approach category, as appropriate, for factors that include Notices of Air Missions (NOTAMs), inoperative aircraft or navigation equipment, or inoperative visual aids associated with the landing environment, etc.
IR.VI.A.S11	Establish a stabilized descent to the appropriate altitude.
IR.VI.A.S12	For the final approach segment, maintain no more than ¾ scale CDI deflection, airspeed ±10 knots, and altitude, if applicable, above MDA +100/-0 feet to the Visual Descent Point (VDP) or missed approach point (MAP).
IR.VI.A.S13	Assess if the required visual references are available, and either initiate the missed approach procedure or continue for landing.
IR.VI.A.S14	Use a multi-function display (MFD) and other graphical navigation displays, if installed, to monitor position, track wind drift, and to maintain situational awareness.
IR.VI.A.S15	Use single-pilot resource management (SRM) or crew resource management (CRM), as appropriate.

Task B. Precision Approach

References: 14 CFR part 91; AC 90-105, AC 90-107; AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-15, FAA-H-8083-16, FAA-H-8083-25; Terminal Procedures Publications

Objective: To determine the applicant exhibits satisfactory knowledge, risk management, and skills associated with performing precision approach procedures solely by reference to instruments.

Note: *See Appendix 3: Aircraft, Equipment, and Operational Requirements & Limitations for information related to this Task.*

Knowledge:	The applicant demonstrates understanding of:
IR.VI.B.K1	Procedures and limitations associated with a precision approach, including determining required descent rates and adjusting minimums in the case of inoperative equipment.
IR.VI.B.K2	Navigation system displays, annunciations, and modes of operation.
IR.VI.B.K3	Ground-based and satellite-based navigation systems (orientation, course determination, equipment, tests and regulations, interference, appropriate use of navigation data, signal integrity).
IR.VI.B.K4	A stabilized approach, including energy management concepts.

Risk Management:	The applicant is able to identify, assess, and mitigate risk associated with:
IR.VI.B.R1	Deviating from the assigned approach procedure.
IR.VI.B.R2	Selecting a navigation frequency.
IR.VI.B.R3	Management of automated navigation and autoflight systems.
IR.VI.B.R4	Aircraft configuration during an approach and missed approach.
IR.VI.B.R5	An unstable approach, including excessive descent rates.

IR.VI.D.K1	Elements related to circling approach procedures and limitations, including approach categories and related airspeed restrictions.

Risk Management:	The applicant is able to identify, assess, and mitigate risk associated with:
IR.VI.D.R1	Prescribed circling approach procedures.
IR.VI.D.R2	Executing a circling approach at night or with marginal visibility.
IR.VI.D.R3	Losing visual contact with an identifiable part of the airport.
IR.VI.D.R4	Management of automated navigation and autoflight systems.
IR.VI.D.R5	Management of altitude, airspeed, or distance while circling.
IR.VI.D.R6	Low altitude maneuvering, including stall, spin, or controlled flight into terrain (CFIT).
IR.VI.D.R7	Executing a missed approach after the MAP while circling.

Skills:	The applicant exhibits the skill to:
IR.VI.D.S1	Comply with the circling approach procedure considering turbulence, windshear, and the maneuvering capability and approach category of the aircraft.
IR.VI.D.S2	Confirm the direction of traffic and adhere to all restrictions and instructions issued by ATC or the evaluator.
IR.VI.D.S3	Use single-pilot resource management (SRM) or crew resource management (CRM), as appropriate.
IR.VI.D.S4	Establish the approach and landing configuration. Maintain a stabilized approach and a descent rate that ensures arrival at the MDA, or the preselected circling altitude above the MDA, prior to the missed approach point.
IR.VI.D.S5	Maintain airspeed ±10 knots, desired heading/track ±10°, and altitude +100/-0 feet until descending below the MDA or the preselected circling altitude above the MDA.
IR.VI.D.S6	Visually maneuver to a base or downwind leg appropriate for the landing runway and environmental conditions.
IR.VI.D.S7	If a missed approach occurs, turn in the appropriate direction using the correct procedure and appropriately configure the airplane.
IR.VI.D.S8	If landing, initiate a stabilized descent. Touch down on the first one-third of the selected runway without excessive maneuvering, without exceeding the normal operating limits of the airplane, and without exceeding 30° of bank.

Task E. Landing from an Instrument Approach

References: 14 CFR parts 91; AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-15, FAA-H-8083-16, FAA-H-8083-25; POH/AFM

Objective: To determine the applicant exhibits satisfactory knowledge, risk management, and skills associated with performing procedures for a landing from an instrument approach.

Note: *For non-amphibious seaplanes, this task applies only when the applicant has immediate access to an instrument approach to a waterway.*

Knowledge:	The applicant demonstrates understanding of: