

Summary Report for Individual Task  
011-218-1120  
Perform Steep Turns  
Status: Approved

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**Distribution Restriction:** Approved for public release; distribution is unlimited.

**Destruction Notice:** None

**Foreign Disclosure: FD5** - This product/publication has been reviewed by the product developers in coordination with the Fort Rucker foreign disclosure authority. This product is releasable to students from all requesting foreign countries without restrictions.

**Condition:** In a C-12 series airplane under VMC.

**Standard:** 1. Maintain angle of bank within 45 to 60 degrees.

2. Roll out on the desired heading 10 degrees.

3. Roll into a coordinated turn of 180 or 360 degrees with a bank of at least 45 degrees and MAX of 60 degrees.

4. Apply smooth coordinated pitch, bank, and power to maintain altitude and airspeed.

5. Avoid any indication of an approaching stall, abnormal flight attitude, or exceeding any structural or operating limitation during any part of the maneuver.

**Special Condition:** NIGHT CONSIDERATIONS: Before starting turns, the area should be cleared using the technique of off-center viewing. Steep banks at low altitudes should be avoided. When using the lights of cities or towns for a horizon reference, the crew should be aware that disorientation or vertigo may occur. If this happens, the P\* should discontinue the turn and return to level flight immediately. If no horizon is visible the P\* may have to use instruments as his primary reference.

**Safety Risk:** Medium

**MOPP 4:**

<b>Task Statements</b>
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**Cue:** None

<b>DANGER</b>
None

<b>WARNING</b>
None

<b>CAUTION</b>
None

**Remarks:** None

**Notes:** None

## Performance Steps

1. Crew actions. The P\* should monitor pitch attitude and bank angles by a combination of inside references (instruments) and outside the aircraft (horizon). The P will monitor flight and engine instruments, keeping his or her area of observation cleared, and perform actions requested by the P\*. The P\* will call out the direction of turn before starting the turn so that the P can thoroughly clear the area of observation. The P should acknowledge the area is clear before the turn is started.

2. Procedure. A steep turn is classified as 45- to 60-degree bank angle.

a. Entry. Establish level flight at a designated altitude at 160 KIAS in the clean configuration. If desired, set the heading bug or course deviation indicator (CDI) on the desired rollout heading. Increase power as required to maintain airspeed in the turn. Look over the instrument panel to determine a visual reference for level flight (adjust pitch to maintain altitude if the power application caused the nose to rise). When the altimeter is stationary, begin the turn by banking the aircraft with the aileron and coordinated rudder, which will result in a smooth and uniform rate of change in the bank angle.

b. Turn. For steep turns, the first 30 degrees of bank is a level turn. As approximately 30 degrees is being passed, adjust back pressure on the yoke to maintain the pitch attitude on the horizon, which will result in maintaining altitude. Continue the bank until the desired bank angle is reached. Use elevator trim as necessary to neutralize the control pressures. When the desired angle of bank is reached, apply sufficient opposite aileron to hold the desired bank angle (compensates for over-banking tendency). If the bank angle is constant throughout the turn the tendency of the airplane is to be stable. The only corrections should be minor pressure movements with the yoke to correct for minor variances in altitude (pitch) and power (airspeed).

c. Rollout. The P\* should begin the rollout to the desired heading using a smooth and uniform reduction of bank at the same rate used during the roll-in. Coordinate pitch attitude, power, and re-trim as required during the rollout to maintain altitude and airspeed.

**Note:**

The description above is a way to achieve meeting standards. Pilots may change the sequence to suit individual preferences as long as the standards are met.

Note. EGPWS systems may announce an aural BANK ANGLE call if the roll exceeds 55 degrees of bank angle despite being within standards for the task.

(Asterisks indicates a leader performance step.)

**Evaluation Guidance:**

Evaluation will be conducted in the aircraft or in an approved FS.

**Evaluation Preparation:**

Training will be conducted in the aircraft or in an approved FS.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Maintained angle of bank within 45 to 60 degrees.			
2. Rolled out on the desired heading $\pm 10$ degrees.			
3. Rolled into a coordinated turn of 180 or 360 degrees with a bank of at least 45 degrees and MAX of 60 degrees.			
4. Applied smooth coordinated pitch, bank, and power to maintain altitude and airspeed.			
5. Avoided any indication of an approaching stall, abnormal flight attitude, or exceeding any structural or operating limitation during any part of the maneuver.			

**Supporting Reference(s):**

Step Number	Reference ID	Reference Name	Required	Primary
	TM 1-1510-218-10	OPERATORS MANUAL FOR ARMY C-12C, C-12D, C-12T1, AND C-12C2 AIRCRAFT	No	No
	TM 1-1510-218-CL	OPERATORS AND CREWMEMBERS CHECKLIST FOR ARMY C-12C AIRCRAFT (NSN 1510- 01-070-3661);ARMY C-12D AIRCRAFT (1510-01-087-9129);ARMY C-12T AIRCRAFT (1510-01-470-0220)	No	No

**Environment:** Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT.

**Safety:** In a training environment, leaders must perform a risk assessment in accordance with FM 5-19, Risk Management. Leaders will complete a DA Form 7566 COMPOSITE RISK MANAGEMENT WORKSHEET during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination.

**Prerequisite Individual Tasks :** None

**Supporting Individual Tasks :** None

**Supported Individual Tasks :** None

**Supported Collective Tasks :** None