**LESSON PLAN**

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| **Lesson** | Medium Turns | **Instructor** |  | **Class/Group** |  |
| **Location** | Maps & Simulation Room | **Date / Time** | / | **Equipment** | Flight Sim |

**INTRODUCTION**

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| **Interest** | To develop your piloting skills in preparation for a Gliding Scholarship in the Viking. | |
| **Need** | To turn the aircraft to a set heading. | |
| **Title** | Medium Turns **REF – ACP122 (P29- 31)** | |
| **Revision** | * About the Viking * Cockpit Layout * Axes of Aircraft * Further effects of control surfaces * Use of trimmer | * Primary effects of control surfaces * Secondary effects of control surfaces * Definition of datum attitude * Use of airbrakes |
| **Objectives** | * By the end of this lesson you will be able to:   + To turn on to specific headings using up to 30° of bank. | |
| **Scope** | This lesson will last 1 hours | |
| **Handouts** |  | |

**DEVELOPMENT**

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| **Content** | **Notes** |
| Flight Simulator Scenario: The simulator should be launched using the Grob G103a Twin ӀӀ Viking above an appropriate airfield. | |
| Each exercise should be followed by the cadet(s) practicing that exercise. | |
| **1. Airmanship.** | 2 min. Always do lookout before turn. |
| **2.** | 1 min. Recognise required attitude. |
| **3.** | Use co-ordinated controls. |
| **3.a. Maintaining the turn.** | 5 min. Lookout in the direction of the turn. Maintain correct angle of bank and pitch for 50 kts. |
| **3.b. Entering the turn.** | 5 min. Before entering any turn do full lookout above and below. Use co-ordinated controls to achieve 20 - 30° angle of bank. |
| **3.c. Exiting the turn.** | 5 min. Use co-ordinated controls and maintain LAI. |
| **4. Rolling out onto a selected feature.** | 10 min. Important to anticipate turning. REF Fig. 7 |
| **4.a.** | 1 min. Lookout to confirm area is clear. |
| **4.b.** | 1 min. Roll out 10 -15° before heading. |
| **4.c.** | 1 min. Use co-ordinated controls to achieve straight glide. |
| **4.d.** | 1 min. Use small amounts of co-ordinated control to re-select heading. |
| **4.e.** | Resume LAI. |
| **5. Recovery from an over banked turn.** | 10 min. To recover from over banked turn where airspeed increases. |
| **5.a.** | 1 min. Reduce angle of bank. |
| **5.b.** | 1 min. Adopt correct pitch. |
| **5.c.** | 1 min. Regain datum attitude. |

**CONSOLIDATION**

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| **Summary**  The cadet(s) have now learnt how to turn on to specific headings. |
| **Test Learning**  Ask cadet to turn on to a reference. |
| **Restate Objectives**  By the end of this lesson you will be able to:   * + To turn on to a specific heading. |
| **Student Questions** |
| **Review and Look Forward**  Next Lesson: Approach and Landing  AIMS: To fly the approach and landing. |