

DOCUMENT RESUME

ED 338 882

CE 059 593

AUTHOR Upchurch, Richard
TITLE Aviation Pilot Training I & II. Flight Syllabus. Field Review Copy.
INSTITUTION Henrico County Public Schools, Glen Allen, VA. Virginia Vocational Curriculum Center.
SPONS AGENCY Virginia State Dept. of Education, Richmond. Div. of Vocational and Adult Education.
PUB DATE 90
NOTE 43p.; For related guides, see CE 059 589-592. Cover title varies slightly.
PUB TYPE Guides - Classroom Use - Teaching Guides (For Teacher) (052)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Aircraft Pilots; *Aviation Education; *Aviation Technology; *Behavioral Objectives; Competency Based Education; Course Descriptions; Criterion Referenced Tests; Decision Making; *Experiential Learning; Learning Activities; Navigation; Safety; Secondary Education; Task Analysis; Traffic Circulation

ABSTRACT

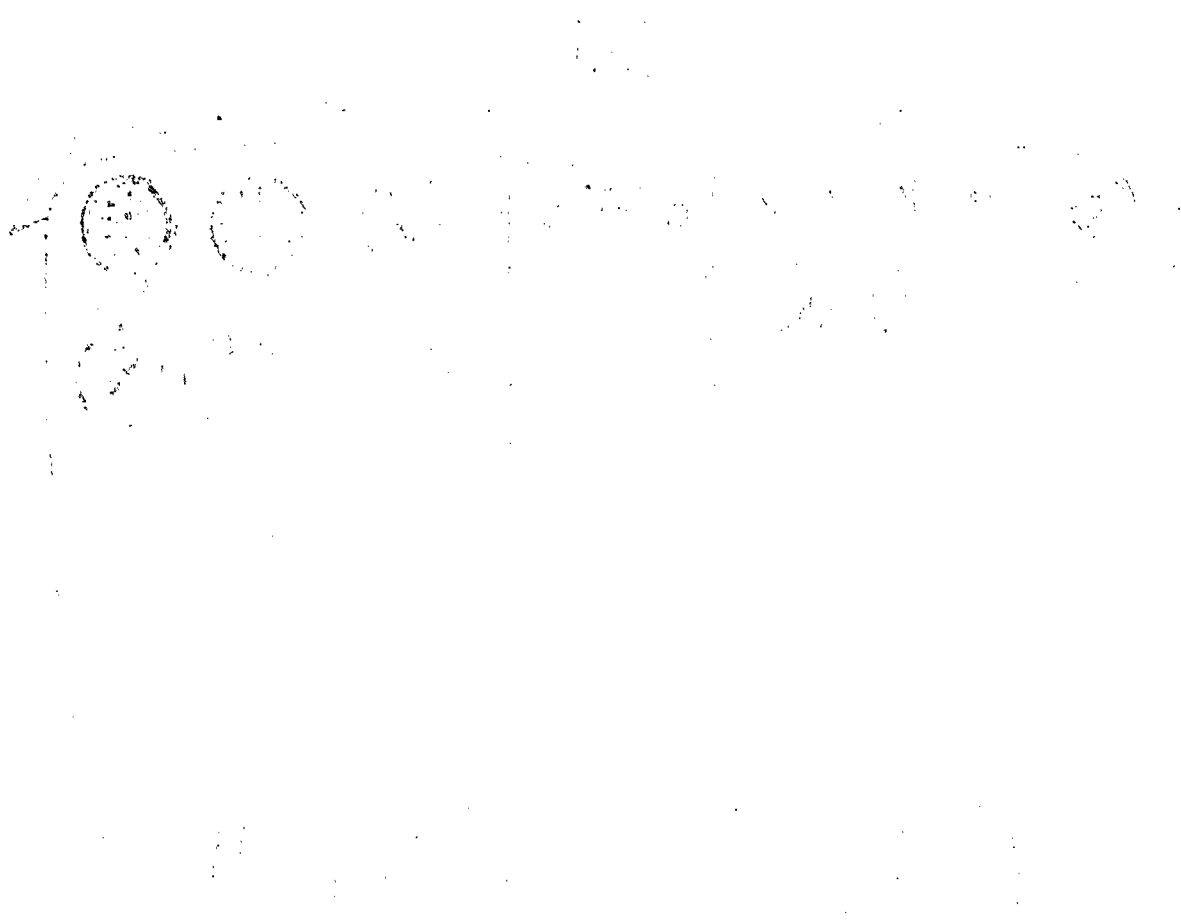
This guide for aviation pilot training I and II begins with a course description, resource information, and a course outline. The syllabus is designed to be used concurrently with the ground school program. A minimum of 29 flights are scheduled with a minimum of 40 hours total flight time. Tasks/competencies are categorized into five concept/duty areas: understanding how aircraft components and systems are used to maintain assigned flight attitudes and tracks over the ground (flights 1-5); understanding how to maneuver the training aircraft in the airfield traffic pattern (flights 6-12); understanding how to perform advanced maneuvers in takeoffs and landings and in flight (flights 13-16); understanding how to plan and conduct cross-country flights (flights 17-21); and understanding how to perform maneuvers and cross-country procedures required for the Federal Aviation Administration flight check (flights 22-29). Four to eight tasks are listed for each concept/duty. A performance objective and requirements for conducting the flight are provided for each task/competency. (YLB)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

Flight Syllabus for Aviation Pilot Training

Years I and II

ED338882



Field Review Copy

A Joint Project of
Henrico County Public Schools
Vocational and Commercial Education
and
Commonwealth of Virginia
Department of Education
Vocational and Commercial Education

1980

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

[Handwritten Signature]

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CE 059 593

AVIATION PILOT TRAINING I & II FLIGHT SYLLABUS

Prepared by

**Colonel Richard Upchurch, USMC (Ret)
Aviation Programs Supervisor
Vocational and Community Education
Henrico County Public Schools**

In cooperation with

Virginia Vocational Curriculum and Resource Center

1990

PREFACE

The task analyses for Aviation Pilot Training I and II and Aviation Technician I and the flight syllabus were prepared by Colonel Richard Upchurch, USMC (Retired), Aviation Programs Supervisor for Henrico County Public Schools.

The curriculum will be field tested in the aviation programs at the Highland Springs Technical Center during the 1990-91 school year.

The guides were prepared for publication by the Virginia Vocational Curriculum and Resource Center, Vocational and Community Education, Henrico County Public Schools.

**Dewey T. Oakley Jr., Director
Vocational and Community Education**

**Peggy Watson, Director
Virginia Vocational Curriculum and
Resource Center**

**Phil R. Phelps, Writer/Editor
Virginia Vocational Curriculum and
Resource Center**

CONTENTS

	<u>Page</u>
AVIATION PROGRAMS ADVISORY COMMITTEE	1
COURSE DESCRIPTION AND RESOURCE INFORMATION	3
CONCEPT/DUTY AREAS	5
1. Understanding How Aircraft Components and Systems Are Used To Maintain Assigned Flight Attitudes and Tracks over the Ground (Flights 1-5)	7
2. Understanding How To Maneuver the Training Aircraft in the Airfield Traffic Pattern (Flights 6-12)	19
3. Understanding How To Perform Advanced Maneuvers in Takeoffs and Landings and in Flight (Flights 13-16)	35
4. Understanding How To Plan and Conduct Cross-Country Flights (Flights 17-21)	45
5. Understanding How To Perform Maneuvers and Cross- Country Procedures Required for the FAA Flight Check (Flights 22-29)	57

AVIATION PROGRAMS ADVISORY COMMITTEE

Members

Dr. Thomas Diamond, Chairman
Engineering and Applied Science Division
J. Sergeant Reynolds Community College

Mr. Tom Tyndall
Certified Flight Instructor and
Technical Instructor
Rice Aviation

Mr. Glenn James, Director
Customer Relations
US Air
Richmond International Airport

Mr. Gary Rice, Executive Director
Capital Region Airport Commission
Richmond International Airport

Mr. Jim Gray
Virginia Department of Aviation
Sandston-Airport Rotary Club

Ms. Betty Harris
Certified Flight Instructor
Education Representative
Virginia Aviation Museum
Virginia Department of Aviation

Mr. Benjamin L. Baines, Associate Director
Trade and Industrial Education
Virginia Department of Education

Mr. Reece Mitchell
Flight Standards District Office
Federal Aviation Administration
Richmond International Airport

Lt. Col. Roy Downs, USMC (Ret)
Flight Examiner
Federal Aviation Administration

Lt. Col. Bob Siefert
192 Tactical Group
Virginia Air National Guard
Richmond International Airport

Ex-Officio Members

Mr. Dewey Oakley, Jr., Director
Vocational and Community Education
Henrico County Public Schools

Mr. James Farr
Adult Education Administrator
Vocational and Community Education
Henrico County Public Schools

Mr. Roy Billingsley, Principal
Highland Springs Technical Center
Henrico County Public Schools

Col. R. L. Upchurch, USMC (Ret)
Aviation Programs Supervisor
Highland Springs Technical Center
Henrico County Public Schools

COURSE DESCRIPTION AND RESOURCE INFORMATION

Course Description: Aviation Pilot Training I & II (Flight Syllabus)

The pilot training flight syllabus closely follows the schedule of Cessna and Jeppesen Sanderson programs. Students fly the syllabus concurrently with the ground school program. A minimum of 29 flights are scheduled with a minimum of 40 hours total flight time, dual and solo flights combined. Students should expect to fly more than 29 flights because some flights will be reflown when the certified flight instructor is not satisfied with the student's progress or if a check flight receives an unsatisfactory grade. Experience indicates that most students require 45-50 hours to complete requirements for the private pilot license.

Resources:

Texts:

Aviation Fundamentals. 2nd ed.
Englewood, Colorado: Jeppesen
Sanderson, 1989.

The Private Pilot Manual. 2nd ed.
Englewood, Colorado: Jeppesen
Sanderson, 1989.

Private Pilot Question Book. Oklahoma
City, Oklahoma: FAA, United States
Department of Transportation, 1988.

Equipment and Material:

Training aircraft

CONCEPT/DUTY AREAS

1. UNDERSTANDING HOW AIRCRAFT COMPONENTS AND SYSTEMS ARE USED TO MAINTAIN ASSIGNED FLIGHT ATTITUDES AND TRACKS OVER THE GROUND (Flights 1-5)
2. UNDERSTANDING HOW TO MANEUVER THE TRAINING AIRCRAFT IN THE AIRFIELD TRAFFIC PATTERN (Flights 6-12)
3. UNDERSTANDING HOW TO PERFORM ADVANCED MANEUVERS IN TAKEOFFS AND LANDINGS AND IN FLIGHT (Flights 13-16)
4. UNDERSTANDING HOW TO PLAN AND CONDUCT CROSS-COUNTRY FLIGHTS (Flights 17-21)
5. UNDERSTANDING HOW TO PERFORM MANEUVERS AND CROSS-COUNTRY PROCEDURES REQUIRED FOR THE FAA FLIGHT CHECK (Flights 22-29)

CONCEPT/DUTY AREA

1. UNDERSTANDING HOW AIRCRAFT COMPONENTS AND SYSTEMS ARE USED TO MAINTAIN ASSIGNED FLIGHT ATTITUDES AND TRACKS OVER THE GROUND
-

TASKS/COMPETENCIES

FLIGHT NUMBER

- | | |
|---|----------|
| 1.1 Demonstrate a basic understanding of the aircraft preflight, postflight, and straight and level maneuvers. | 1 (Dual) |
| 1.2 Demonstrate a basic understanding of shallow banked turns using the horizon and cockpit instruments for reference. | 2 (Dual) |
| 1.3 Demonstrate a basic understanding of airspeed control and how to recognize an aircraft stall. | 3 (Dual) |
| 1.4 Demonstrate a basic understanding of how to recover from aircraft stalls and land the aircraft under normal conditions. | 4 (Dual) |
| 1.5 Demonstrate a basic level of proficiency in the maneuvers covered on the first four flights. | 5 (Dual) |
-

FLIGHT NUMBER

1 (Dual)

CONCEPT/DUTY AREA

UNDERSTANDING HOW AIRCRAFT COMPONENTS AND SYSTEMS ARE USED TO MAINTAIN ASSIGNED FLIGHT ATTITUDES AND TRACKS OVER THE GROUND

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

- 1.1 Demonstrate a basic understanding of the aircraft preflight, postflight, and straight and level flight maneuvers.

PERFORMANCE OBJECTIVE

- P1.1 Given access to a training aircraft, demonstrate with 75% accuracy an understanding of the aircraft preflight, postflight, and straight and level flight.

CONDUCT OF THE FLIGHT

1. The certified flight instructor (CFI) demonstrates the first preflight and how to keep the aircraft straight and level. The student then performs the same tasks under the supervision of the CFI.
2. CFI demonstrates the procedures for returning to the ramp and securing the aircraft.

FLIGHT NUMBER

2 (Dual)

CONCEPT/DUTY AREA

UNDERSTANDING HOW AIRCRAFT COMPONENTS AND SYSTEMS ARE USED TO MAINTAIN ASSIGNED FLIGHT ATTITUDES AND TRACKS OVER THE GROUND

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

- 1.2 Demonstrate a basic understanding of shallow banked turns using the horizon and cockpit instruments for reference.

PERFORMANCE OBJECTIVE

- P1.2 Given access to a training aircraft, demonstrate a basic understanding of shallow banked turns using the horizon and cockpit instruments for reference.

CONDUCT OF THE FLIGHT

1. CFI demonstrates gentle turns. Student then performs the same tasks under the supervision of the CFI.
2. Student flies the aircraft in most maneuvers and returns to the field with the assistance of the CFI.

FLIGHT NUMBER

3 (Dual)

CONCEPT/DUTY AREA

UNDERSTANDING HOW AIRCRAFT COMPONENTS AND SYSTEMS ARE USED TO MAINTAIN ASSIGNED FLIGHT ATTITUDES AND TRACKS OVER THE GROUND

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

- 1.3 Demonstrate a basic understanding of airspeed control and how to recognize an aircraft stall.**

PERFORMANCE OBJECTIVE

- P1.3 Given access to a training aircraft, demonstrate with 75% accuracy how to maintain constant airspeed and recognize two types of aircraft stall.**

CONDUCT OF THE FLIGHT

- 1. CFI demonstrates several types of aircraft stalls. Student feels the controls with the CFI and identifies the point at which the aircraft begins to stall.**
- 2. CFI demonstrates normal landings with the aircraft and lets student attempt landings under close supervision.**

FLIGHT NUMBER

4 (Dual)

CONCEPT/DUTY AREA

**UNDERSTANDING HOW AIRCRAFT
COMPONENTS AND SYSTEMS
ARE USED TO MAINTAIN ASSIGNED
FLIGHT ATTITUDES AND TRACKS
OVER THE GROUND**

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

- 1.4 Demonstrate a basic understanding of how to recover from aircraft stalls and land the aircraft under normal conditions.

PERFORMANCE OBJECTIVE

- P1.4 Given access to a training aircraft, demonstrate with 75% accuracy a safe recovery from four stalls and a landing under normal conditions.

CONDUCT OF THE FLIGHT

1. CFI demonstrates several types of aircraft stalls and the methods of recovering from each one. Student then enters several stalls and demonstrates a safe recovery from each one.
2. Student makes several landings under close supervision of the CFI.

FLIGHT NUMBER

5 (Dual)

CONCEPT/DUTY AREA

UNDERSTANDING HOW AIRCRAFT COMPONENTS AND SYSTEMS ARE USED TO MAINTAIN ASSIGNED FLIGHT ATTITUDES AND TRACKS OVER THE GROUND

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

- 1.5 **Demonstrate a basic level of proficiency in the maneuvers covered on the first four flights.**

PERFORMANCE OBJECTIVE

- P1.5 **Given access to a training aircraft, demonstrate with 90% accuracy knowledge and skill in the preflight, taxi, takeoff, level turns, stall recovery, landings, and postflight.**

CONDUCT OF THE FLIGHT

1. **Student operates the aircraft in the maneuvers covered in the first four flights while the CFI evaluates student's progress.**

CONCEPT/DUTY AREA

2. UNDERSTANDING HOW TO MANEUVER THE TRAINING AIRCRAFT IN THE AIRFIELD TRAFFIC PATTERN

TASKS/COMPETENCIES	FLIGHT NUMBER
2.1 Demonstrate an understanding of crosswind takeoffs, crosswind landings, and slips.	6 (Dual)
2.2 Demonstrate basic skill in instrument flight maneuvers, normal landings, slips, and crosswind landings.	7 (Dual)
2.3 Demonstrate safe performance in preflight, taxi, takeoff, basic and instrument flight maneuvers, and landings.	8 (Dual)
2.4 Demonstrate safe performance in takeoffs, the airfield traffic pattern, and landings without supervision.	9 (Dual--Solo check flight)
2.5 Demonstrate safe performance in the airfield landing pattern while under ground supervision of the CFI.	10 (Solo)
2.6 Demonstrate safe performance in all maneuvers required for flights away from the airfield.	11 (Dual--Stage I check flight)
2.7 Demonstrate safe performance in a flight away from the airfield and in the traffic pattern while under ground supervision of the CFI.	12 (Solo)

FLIGHT NUMBER

6 (Dual)

CONCEPT/DUTY AREA

**UNDERSTANDING HOW TO MANEUVER
THE TRAINING AIRCRAFT IN THE
AIRFIELD TRAFFIC PATTERN**

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

- 2.1 Demonstrate an understanding of crosswind takeoffs, crosswind landings, and slips.

PERFORMANCE OBJECTIVE

- P2.1 Given access to a training aircraft, demonstrate with 75% accuracy an understanding of crosswind takeoffs, crosswind landings, and slips.

CONDUCT OF THE FLIGHT

1. CFI demonstrates crosswind takeoffs, crosswind landings, and slips. Student then practices these maneuvers under the close supervision of the CFI.

FLIGHT NUMBER

7 (Dual)

CONCEPT/DUTY AREA

**UNDERSTANDING HOW TO MANEUVER
THE TRAINING AIRCRAFT IN THE
AIRFIELD TRAFFIC PATTERN**

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

- 2.2 Demonstrate basic skill in instrument flight maneuvers, normal landings, slips, and crosswind landings.

PERFORMANCE OBJECTIVE

- P2.2 Given access to a training aircraft, demonstrate with 80% accuracy basic skill in instrument flight maneuvers, normal landings, slips, and crosswind landings.

CONDUCT OF THE FLIGHT

1. Student practices instrument flight maneuvers, normal and crosswind takeoffs and landings, and slips.

FLIGHT NUMBER

8 (Dual)

CONCEPT/DUTY AREA**UNDERSTANDING HOW TO MANEUVER
THE TRAINING AIRCRAFT IN THE
AIRFIELD TRAFFIC PATTERN****COURSE**

Aviation Pilot Training I and II

TASK/COMPETENCY

- 2.3 Demonstrate safe performance in preflight, taxi, takeoff, basic and instrument flight maneuvers, and landings.

PERFORMANCE OBJECTIVE

- P2.3 Given access to a training aircraft, demonstrate skill in preflight, taxi, takeoff, basic and instrument flight maneuvers, and landings.

CONDUCT OF THE FLIGHT

1. Student practices all maneuvers learned to date under the close supervision of the CFI.

FLIGHT NUMBER

9 (Dual)

CONCEPT/DUTY AREA

**UNDERSTANDING HOW TO MANEUVER
THE TRAINING AIRCRAFT IN THE
AIRFIELD TRAFFIC PATTERN**

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

- 2.4 Demonstrate safe performance in takeoffs, the airfield traffic pattern, and landings without supervision.**

PERFORMANCE OBJECTIVE

- P2.4 Given access to a training aircraft, demonstrate safe performance in takeoffs, the airfield traffic patterns, and landings without supervision.**

CONDUCT OF THE FLIGHT

- 1. Student conducts a flight around the traffic pattern, making several landings while the CFI evaluates whether student is ready for first solo.**

FLIGHT NUMBER

10 (Solo)

CONCEPT/DUTY AREA

**UNDERSTANDING HOW TO MANEUVER
THE TRAINING AIRCRAFT IN THE
AIRFIELD TRAFFIC PATTERN**

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

- 2.5 Demonstrate safe performance in the airfield landing pattern while under ground supervision of the CFI.**

PERFORMANCE OBJECTIVE

- P2.5 Given access to a training aircraft in the holding area on the airfield, demonstrate with 100% accuracy safe performance in the airfield landing pattern.**

CONDUCT OF THE FLIGHT

- 1. CFI determines student is safe for solo and exits the aircraft on the ramp.**
- 2. Student makes three solo takeoffs and landings while the CFI monitors the flight visually and by radio.**

FLIGHT NUMBER

11 (Dual--Stage I check flight)

CONCEPT/DUTY AREA

**UNDERSTANDING HOW TO MANEUVER
THE TRAINING AIRCRAFT IN THE
AIRFIELD TRAFFIC PATTERN**

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

2.6 Demonstrate safe performance in all maneuvers required for flights away from the airfield.

PERFORMANCE OBJECTIVE

P2.6 Given access to a training aircraft, demonstrate with 100% accuracy safe performance in all maneuvers required for flights away from the airfield.

CONDUCT OF THE FLIGHT

1. Student takes control of the aircraft from the start. With no help from the CFI, student safely demonstrates the following: (a) start; (b) taxi; (c) takeoff; (d) climb; (e) shallow and steep turns; (f) descent; (g) landing pattern; and (h) return to ramp.

FLIGHT NUMBER

12 (Solo)

CONCEPT/DUTY AREA

**UNDERSTANDING HOW TO MANEUVER
THE TRAINING AIRCRAFT IN THE
AIRFIELD TRAFFIC PATTERN**

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

- 2.7 Demonstrate safe performance in a flight away from the airfield and in the traffic pattern while under ground supervision of the CFI.**

PERFORMANCE OBJECTIVE

- P2.7 Given access to a training aircraft, demonstrate with 100% accuracy safe performance in a flight away from the airfield and in the traffic pattern while under ground supervision of the CFI.**

CONDUCT OF THE FLIGHT

- 1. CFI exits the aircraft in the ramp area.**
- 2. Student departs the airfield traffic pattern, returns, and makes two takeoffs and landings before returning to the ramp area. CFI monitors visually and by radio.**

CONCEPT/DUTY AREA

3. UNDERSTANDING HOW TO PERFORM ADVANCED MANEUVERS IN TAKEOFFS AND LANDINGS AND IN FLIGHT

TASKS/COMPETENCIES	FLIGHT NUMBER
3.1 Demonstrate a basic understanding of the procedures for maximum takeoffs and landings.	13 (Dual)
3.2 Demonstrate a basic understanding of the procedure for short and soft field landings.	14 (Dual)
3.3 Demonstrate safe performance in normal and crosswind takeoffs and landings, stalls, and maneuvers with a ground reference, without supervision of the CFI.	15 (Solo)
3.4 Demonstrate safe performance in all maneuvers covered to date and a basic understanding of controlling the aircraft with only instruments as a reference.	16 (Dual--stage check)

FLIGHT NUMBER

13 (Dual)

CONCEPT/DUTY AREA

**UNDERSTANDING HOW TO PERFORM
ADVANCED MANEUVERS IN TAKEOFFS
AND LANDINGS AND IN FLIGHT**

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

- 3.1 Demonstrate a basic understanding of the procedures for maximum performance takeoffs and landings.**

PERFORMANCE OBJECTIVE

- P3.1 Given access to a training aircraft, demonstrate with 75% accuracy a basic understanding of the procedures for maximum performance takeoffs and landings.**

CONDUCT OF THE FLIGHT

- 1. CFI demonstrates maximum performance takeoffs and landings and allows students to practice several procedures under close supervision.**

FLIGHT NUMBER

14 (Dual)

CONCEPT/DUTY AREA

**UNDERSTANDING HOW TO PERFORM
ADVANCED MANEUVERS IN TAKEOFFS
AND LANDINGS AND IN FLIGHT**

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

- 3.2 Demonstrate a basic understanding of the procedure for short and soft field landings.**

PERFORMANCE OBJECTIVE

- P3.2 Given access to a training aircraft, demonstrate with 75% accuracy a basic understanding of the procedures for short and soft field landings.**

CONDUCT OF THE FLIGHT

- 1. CFI demonstrates procedures for short and soft field takeoffs and landings.**
- 2. Students then practice short and soft field operations under close supervision of the CFI.**

FLIGHT NUMBER

15 (Solo)

CONCEPT/DUTY AREA

**UNDERSTANDING HOW TO PERFORM
ADVANCED MANEUVERS IN TAKEOFFS
AND LANDINGS AND IN FLIGHT**

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

- 3.3 Demonstrate safe performance in normal and crosswind takeoffs and landings, stalls, and maneuvers with a ground reference, without supervision of the CFI.**

PERFORMANCE OBJECTIVE

- P3.3 Given access to a training aircraft, demonstrate with 100% accuracy safe performance in normal and crosswind takeoffs and landings, stalls, and maneuvers with a ground reference, without supervision of the CFI.**

CONDUCT OF THE FLIGHT

- 1. Student performs all procedures for a VFR local flight, including practicing of all maneuvers learned to date, without supervision of the CFI.**

FLIGHT NUMBER

16 (Dual--stage check)

CONCEPT/DUTY AREA

**UNDERSTANDING HOW TO PERFORM
ADVANCED MANEUVERS IN TAKEOFFS
AND LANDINGS AND IN FLIGHT**

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

- 3.4 Demonstrate safe performance in all maneuvers covered to date and a basic understanding of controlling the aircraft with only instruments as a reference.

PERFORMANCE OBJECTIVE

- P3.4 Given access to a training aircraft, demonstrate with 100% accuracy safe performance in all maneuvers covered to date, and demonstrate with 85% accuracy a basic understanding of controlling the aircraft with only instruments as a reference.

CONDUCT OF THE FLIGHT

1. Student controls aircraft from preflight to shutdown.
2. CFI evaluates student's performance in all maneuvers to date.
3. CFI includes some basic instrument work in stage check.

CONCEPT/DUTY AREA

4. UNDERSTANDING HOW TO PLAN AND CONDUCT CROSS-COUNTRY FLIGHTS

TASKS/COMPETENCIES	FLIGHT NUMBER
4.1 Demonstrate a basic understanding of planning and navigation procedures for cross-country flights.	17 (Dual)
4.2 Demonstrate a basic understanding of planning and performing a local flight during hours of darkness.	18 (Dual)
4.3 Plan and conduct a safe flight to an unfamiliar airport during hours of darkness.	19 (Dual)
4.4 Plan and conduct a safe cross-country flight, including the navigation of three legs with a landing at an airport at the end of each leg, without the supervision of the CFI.	20 (Solo)
4.5 Demonstrate safe cross-country procedures, including all types of navigation, fuel management, emergency procedures, and cockpit management.	21 (Dual--stage check by chief CFI)

FLIGHT NUMBER

17 (Dual)

CONCEPT/DUTY AREA

UNDERSTANDING HOW TO PLAN AND CONDUCT CROSS-COUNTRY FLIGHTS

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

- 4.1 Demonstrate a basic understanding of planning and navigation procedures for cross-country flight.

PERFORMANCE OBJECTIVE

- P4.1 Given access to a training aircraft, demonstrate with 75% accuracy a basic understanding of planning and navigation procedures for cross-country flight.

CONDUCT OF THE FLIGHT

1. Student plans and conducts a flight out of the local area, under the close supervision of the CFI.
2. The CFI observes and assists as required.

FLIGHT NUMBER

18 (Dual)

CONCEPT/DUTY AREA

UNDERSTANDING HOW TO PLAN AND CONDUCT CROSS-COUNTRY FLIGHTS

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

4.2 Demonstrate a basic understanding of planning and performing a local flight during hours of darkness.

PERFORMANCE OBJECTIVE

P4.2 Given a proposed night flight and access to a training aircraft, plan and conduct with 75% accuracy a local flight during the hours of darkness.

CONDUCT OF THE FLIGHT

1. Student plans and conducts a local night training flight, under the close supervision of the CFI.
2. The CFI assists as required.

FLIGHT NUMBER

19 (Dual)

CONCEPT/DUTY AREA

UNDERSTANDING HOW TO PLAN AND CONDUCT CROSS-COUNTRY FLIGHTS

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

- 4.3 Plan and conduct a safe flight to an unfamiliar airport during hours of darkness.

PERFORMANCE OBJECTIVE

- P4.3 Given a route and access to a training aircraft, plan and conduct with 100% accuracy a safe flight to an unfamiliar airport during hours of darkness, under the supervision of the CFI.

CONDUCT OF THE FLIGHT

1. Student plans route and conducts a night cross-country flight, under the close supervision of the CFI.
2. Student should be able to conduct the flight with minimum assistance from the CFI.

FLIGHT NUMBER

20 (Solo)

CONCEPT/DUTY AREA**UNDERSTANDING HOW TO PLAN AND CONDUCT CROSS-COUNTRY FLIGHTS****COURSE**

Aviation Pilot Training I and II

TASK/COMPETENCY

- 4.4 Plan and conduct a safe cross-country flight, including the navigation of three legs with a landing at an airport at the end of each leg, without the supervision of the CFI.

PERFORMANCE OBJECTIVE

- P4.4 Given access to a training aircraft, plan and conduct with 100% accuracy a safe cross-country flight, including the navigation of three legs and with a landing at an airport at the end of each leg, without the supervision of the CFI.

CONDUCT OF THE FLIGHT

1. Student plans and conducts a solo cross-country flight.
2. CFI monitors the student's planning only and assists as necessary.

FLIGHT NUMBER

21 (Dual--stage check by chief CFI)

CONCEPT/DUTY AREA

UNDERSTANDING HOW TO PLAN AND CONDUCT CROSS-COUNTRY FLIGHTS

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

4.5 Demonstrate safe cross-country procedures, including all types of navigation, fuel management, emergency procedures, and cockpit management.

PERFORMANCE OBJECTIVE

P4.5 Given access to a training aircraft, demonstrate with 100% accuracy safe cross-country procedures, including all types of navigation, fuel management, emergency procedures, and cockpit management.

CONDUCT OF THE FLIGHT

1. Chief CFI evaluates performance as student conducts a flight using all basic maneuvers and cross-country procedures learned to date. Assistance is not provided except in an emergency.
2. Chief CFI determines whether student is ready to progress to the final stage of the syllabus.

CONCEPT/DUTY AREA

5. UNDERSTANDING HOW TO PERFORM MANEUVERS AND CROSS-COUNTRY PROCEDURES REQUIRED FOR THE FAA FLIGHT CHECK

TASKS/COMPETENCIES	FLIGHT NUMBER
5.1 Plan and conduct a cross-country flight of at least 300 miles, with landings at three or more airports, and with one of the landings 100 miles or more from the departure point.	22 (Solo)
5.2 Plan and conduct a cross-country flight using an unfamiliar route and landing at unfamiliar airports.	23 (Solo)
5.3 Demonstrate high-level proficiency in all maneuvers required of a private pilot.	24 (Solo)
5.4 Demonstrate adequate proficiency in all maneuvers required of a private pilot.	25 (Dual)
5.5 Demonstrate increased proficiency in all maneuvers required of a private pilot.	26 (Solo)
5.6 Demonstrate increased proficiency in all maneuvers required of a private pilot.	27 (Solo)
5.7 Demonstrate a level of proficiency that meets or exceeds FAA performance standards for a private pilot.	28 (Dual--stage check by chief CFI)
5.8 Demonstrate a level of proficiency that meets or exceeds FAA performance standards for a private pilot.	29 (Dual--FAA examiner's flight check for private pilot)

FLIGHT NUMBER

22 (Solo)

CONCEPT/DUTY AREA

**UNDERSTANDING HOW TO PERFORM
MANEUVERS AND CROSS-COUNTRY
PROCEDURES REQUIRED FOR THE
FAA FLIGHT CHECK**

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

- 5.1 Plan and conduct a cross-country flight of at least 300 miles, with landings at three or more airports, and with one of the landings 100 miles or more from the departure point.

PERFORMANCE OBJECTIVE

- P5.1 Given access to a training aircraft, demonstrate with 90% accuracy the procedures for a cross-country flight of at least 300 miles, with landings at three or more airports, and with one of the landings 100 miles or more from the departure point.

CONDUCT OF THE FLIGHT

1. Student plans a solo 300-mile cross-country flight, under the supervision of the CFI. Flight is conducted without assistance from the CFI.
2. Upon return, student confers with the CFI on the events of the flight.

FLIGHT NUMBER

23 (Solo)

CONCEPT/DUTY AREA

**UNDERSTANDING HOW TO PERFORM
MANEUVERS AND CROSS-COUNTRY
PROCEDURES REQUIRED FOR THE
FAA FLIGHT CHECK**

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

- 5.2 Plan and conduct a cross-country flight using an unfamiliar route and landing at unfamiliar airports.**

PERFORMANCE OBJECTIVE

- P5.2 Given access to a training aircraft, plan and conduct with 95% accuracy a cross-country flight using an unfamiliar route and landing at unfamiliar airports.**

CONDUCT OF THE FLIGHT

- 1. CFI and student review past cross-country flights and discuss methods to increase proficiency in any maneuvers or procedures where student needs additional work.**
- 2. Student then plans and conducts a solo cross-country flight over an unfamiliar route and landing an unfamiliar airports.**
- 3. Upon return, student and CFI confer on the events of the flight.**

FLIGHT NUMBER

24 (Solo)

CONCEPT/DUTY AREA

**UNDERSTANDING HOW TO PERFORM
MANEUVERS AND CROSS-COUNTRY
PROCEDURES REQUIRED FOR THE
FAA FLIGHT CHECK**

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

- 5.3 Demonstrate high-level proficiency in all maneuvers required of a private pilot.

PERFORMANCE OBJECTIVE

- P5.3 Given access to a training aircraft, demonstrate with 95% accuracy proficiency in all maneuvers required of a private pilot.

CONDUCT OF THE FLIGHT

1. CFI and student critique past performance and discuss methods to increase proficiency in all deficient areas.
2. Student practices all areas of weakness on a local solo flight.

FLIGHT NUMBER

25 (Dual)

CONCEPT/DUTY AREA

**UNDERSTANDING HOW TO PERFORM
MANEUVERS AND CROSS-COUNTRY
PROCEDURES REQUIRED FOR THE
FAA FLIGHT CHECK**

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

5.4 Demonstrate adequate proficiency in all maneuvers required of a private pilot.

PERFORMANCE OBJECTIVE

P5.4 Given access to a training aircraft, demonstrate with 95% accuracy proficiency in all maneuvers required of a private pilot.

CONDUCT OF THE FLIGHT

1. Student conducts all procedures and maneuvers required for the private pilot check.
2. CFI critiques student performance during and after the flight.

FLIGHT NUMBER

26 (Solo)

CONCEPT/DUTY AREA

**UNDERSTANDING HOW TO PERFORM
MANEUVERS AND CROSS-COUNTRY
PROCEDURES REQUIRED FOR THE
FAA FLIGHT CHECK**

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

5.5 Demonstrate increased proficiency in all maneuvers required of a private pilot.

PERFORMANCE OBJECTIVE

P5.5 Given access to a training aircraft, demonstrate with 100% accuracy increased proficiency in all maneuvers required of a private pilot.

CONDUCT OF THE FLIGHT

1. CFI and student discuss progress to date.
2. CFI assists student in planning a local flight designed to increase proficiency in maneuvers not yet meeting standards required for the private pilot check.

FLIGHT NUMBER

27 (Solo)

CONCEPT/DUTY AREA

**UNDERSTANDING HOW TO PERFORM
MANEUVERS AND CROSS-COUNTRY
PROCEDURES REQUIRED FOR THE
FAA FLIGHT CHECK**

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

5.6 Demonstrate increased proficiency in all maneuvers required of a private pilot.

PERFORMANCE OBJECTIVE

P5.6 Given access to a training aircraft, demonstrate with 100% accuracy increased proficiency in all maneuvers required of a private pilot.

CONDUCT OF THE FLIGHT

1. CFI and student discuss progress to date.
2. CFI assists student in planning a local flight designed to increase proficiency in all maneuvers required for the private pilot check.
3. CFI determines if student requires additional training flights prior to the stage check.

FLIGHT NUMBER

28 (Dual--stage check by chief CFI)

CONCEPT/DUTY AREA

**UNDERSTANDING HOW TO PERFORM
MANEUVERS AND CROSS-COUNTRY
PROCEDURES REQUIRED FOR THE
FAA FLIGHT CHECK**

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

- 5.7 Demonstrate a level of proficiency that meets or exceeds FAA performance standards for a private pilot.

PERFORMANCE OBJECTIVE

- P5.7 Given access to a training aircraft, demonstrate with 100% accuracy a level of proficiency that meets or exceeds FAA performance standards for a private pilot.

CONDUCT OF THE FLIGHT

1. Chief CFI gives the final stage check and thoroughly evaluates the student in preparation for the FAA examiner's flight check. All maneuvers and procedures are evaluated.
2. A thorough critique follows the flight. If the chief CFI does not consider the student ready for the private pilot check with an FAA examiner, student schedules additional flights with the regular CFI.

FLIGHT NUMBER

29 (Dual--FAA examiner's flight check for private pilot)

CONCEPT/DUTY AREA

**UNDERSTANDING HOW TO PERFORM
MANEUVERS AND CROSS-COUNTRY
PROCEDURES REQUIRED FOR THE
FAA FLIGHT CHECK**

COURSE

Aviation Pilot Training I and II

TASK/COMPETENCY

5.8 Demonstrate a level of proficiency that meets or exceeds FAA performance standards for a private pilot.

PERFORMANCE OBJECTIVE

P5.8 Given access to a training aircraft and general guidelines on the conduct of a cross-country flight, demonstrate with 100% accuracy proficiency that meets or exceeds FAA performance standards for a private pilot.

CONDUCT OF THE FLIGHT

1. FAA flight examiner instructs student as to the conduct of the flight, including maneuvers, route, etc.
2. Student plans and conducts a cross-country flight in accordance with FAA examiner's guidelines.
3. FAA examiner observes the entire flight and critiques it upon pilot's return to home field.
4. Following a successful check flight, the student is certified by the FAA as a licensed private pilot. If the check flight is not successful, the FAA examiner counsels the student concerning where the performance was unsatisfactory, confers with the CFI, and recommends specific additional training flights to be accomplished before student's next FAA flight check.

The Virginia Department of Education does not unlawfully discriminate on the basis of sex, race, color, religion, handicapping conditions, or national origin in employment or in its educational programs and activities.

The activity which is the subject of this report was supported in whole or in part by the U. S. Department of Education. However, the opinions expressed herein do not necessarily reflect the position or policy of the U. S. Department of Education, and no official endorsement by the U. S. Department of Education should be inferred.