ALABAMA FORM 5 FLIGHT CHECK PACKAGE

October, 2002

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FORWARD

This Package was prepared for the sole purpose of aiding those pilots wishing to take a Form 5 check-ride. The documentation contained within this package was taken from the Alabama's website (http://www.alwg.cap.gov) and compiled into a comprehensive package making it easier to obtain the all the information and forms needed to complete a Form 5 Flight Check.

The Check Pilot Form 5 Evaluation Guidelines, the NCPSC Form 5 Flight Profile (SEL) and the Practical Test Standards (PTS) summary were taken from the Check Pilot Certification Course Handbook. The information contained within the PTS sheet is just a summary or over view of what is expected on a check ride. A pilot taking a check ride will be held to the PTS based upon the ratings currently held.

The aircraft information pertaining to the Cessna 172P Skyhawk and Cessna 182R Skylane were copied straight from their respective Pilot Operating Handbooks (POH). This information is here only as a guide and it is the pilot's responsibility to obtain the correct information from the POH of the specific aircraft that they intend to fly. Examples of aircraft differences would be in the weight and balance and fuel consumption.

In order to aid a pilot in the information gathering process, a list of website hyperlinks are provided below.

CAP National Form 5 Test
https://ntc.cap.af.mil/ops/tests/default.cfm?Message=Ok&grp=dov&CFID=323809&CFTOKEN=28556792

CAP Pilot Standardization Evaluation
http://www.alwg.cap.gov/hq/staneval.html
Warning: The charts linked on these pages must NOT be used as a substitute for the POH and other FAA or Manufacturer's bulletins or directives.

FAA Practical Test Standards
http://afs600.faa.gov/srchFolder.asp?Category=practicalteststandard

CAPR 60-1 Publication
http://level2.cap.gov/documents/u_082503073227.pdf

It is hoped that this package will make it easier for an individual to find the necessary information needed to complete the flight check. This package is a work in progress and future revisions are anticipated. If you have any comments or suggestions as to the content of this package, please contact:

CPT Ray Hara
(205) 655-2697
rhara@charter.net

DD MM YY
MEMORANDUM FOR ALL UNITS

FROM: ALWG DOV

SUBJECT: Funded Form 5/91 Evaluation Clinic

PROJECT OFFICER: Capt. John R. DAVIS

1. On Saturday, DD MM YY, Alabama Wing will conduct a funded mission for the purpose of administering Form 5/91 Flight Evaluations. Form 5 checks are available for current Mission Pilots and Mission Transport Pilots only. Form 91
Mission Pilots checks are available for renewals and initial check rides.
All attendees should plan to be at the Clinic by 0800. Ferry time to and from the Mission Base at Jack Edwards Airport (JKA) Gulf Shores,
and the evaluations will be reimbursed per Form 108 procedures.

2. This one-day mission will be limited to the first 20 applicants that reply with a request to participate. The Project Officer must receive a Paperwork Package containing ALL the required documents no later than 1700 on DD MM YY, Paper Work packages received after this date WILL NOT be accepted.

3. Initial E-mail application:
a. Name, rank, capid, unit and charter number.
b. Mailing address and e-mail address
c. Phone numbers, including fax, pager, home, work and cell phone.
d. Type of check ride 5 or 91
aircraft type
and whether IFR or VFR.
d. If you are bringing an aircraft to the mission:
type
tail number
CAP Flight number

4. Paper Work package:
a. All documents described under the CAPR 60-1(E)(C3) paragraph 2-8 with the exception of items e and h.
AND
b. Two (2) Forms 5 or Form 91 with all information items completed.

5. Notification
The Project Officer will notify applicants of acceptance by email upon receipt of the Paper Work package described in paragraph 4 above.
This will include any additional information.
If this is not received by Wednesday, June 23rd, please call the Project Officer.

****

WARNING WARNING
You will no longer be able to come unannounced or "drop in" to the clinic. There will be no reimbursement for Aircraft which are not on the approved list. This list must be filed forty eight (48) hours ahead of time.
End of Warning

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COMMUNICATION INFO

Email applications and Questions to: alwg_stan_eval@yahoo.com

MAIL Paper Work Packages to
John R. DAVIS
8319 Heathrow Downs
Montgomery, AL 36117-5122

TELEPHONE: (334) 270-9580

JOHN R. DAVIS CAPT/CAP
ALWG STAN/EVAL OFFICER

ATTACHMENT 5 – ADMINISTRATION OF CAPF 5/5G FLIGHT CHECKS

CAPR 60-1 requires specific actions and steps be taken for the successful completion of a CAPF 5 flight check. The following guidelines are provided to assist in the administration of CAPF 5 flight checks. Their purpose is to standardize the administration of flight checks throughout CAP, enable all check pilots and applicants to clearly understand what is expected of them during a flight check.

1. Advance Preparation. The applicant shall:

a. Unless satisfactorily accomplished as part of CAPF 5 flight check within the preceding 12 months, complete the CAPF 5 written examination.

(1) This examination is a take home, open book review of FAA and CAP flight procedures. The applicant is expected to refer to the applicable regulations and procedures in accomplishing this examination.

(2) The completed and graded examination (80% minimum score required) is presented to the check pilot who will administer the remainder of the flight check. The flight check must be accomplished within 90 days of the date on which the written examination is completed. The examination may be taken on-line from the NHQ CAP web site.

b. Obtain a blank CAPF 5 and complete the identifying information.

c. For an annual standardization flight evaluation, complete an airplane or glider questionnaire for all aircraft (within category) the CAP pilot is authorized to fly. Other evaluations require a completed aircraft questionnaire for the aircraft used during the flight evaluation.

d. The applicant must provide proof of FAA passenger carrying proficiency [as stated in FAR 61.57(a)(1)] in category and class prior to beginning a CAP flight check.

e. Contact an authorized CAP check pilot to schedule the flight check.

2. Preflight. At the time of the flight check:

a. <u>The applicant shall:</u>

(1) Obtain a flight release for the flight check from a designated flight release officer and inform the check pilot of the release (the applicant is pilot-in-command unless specific circumstances dictate the check pilot function as such for a portion or all of the flight). (If the check pilot is to function as the pilot-in-command, the check pilot will obtain the flight release.)

(2) Wear an appropriate CAP uniform.

(3) Present the following items to the check pilot:

(a) Completed and graded CAPF 5 written examination or evidence that it has been satisfactorily accomplished within the preceding 12 months.

(b) Completed aircraft questionnaires in accordance with 1.c. above.

(c) Partially completed (identifying data) CAPF 5.

(d) Valid FAA pilot certificate and current FAA medical certificate.

(e) Current CAP membership card. (Exception: CAP LOs are not required to have a membership card.)

(f) Aircraft log books (or other evidence to verify the airworthiness status) for the airplane used for the flight check.

b. <u>The check pilot shall:</u>

(1) Verify both the applicant and check pilot wears an appropriate CAP uniform.

(2) Obtain the following documents from the applicant:

(a) A completed and graded CAPF 5 written examination, if applicable (see paragraph 3-5f).

(b) CAPF 5 with identifying data entered.

(c) Completed aircraft questionnaire(s).

(d) Valid FAA pilot certificate and current FAA medical certificate.

(e) Current CAP membership card. (Exception: CAP LOs are not required to have a membership card.)

(2) Review the CAPF 5 written examination and discuss incorrect answers or obvious problem areas. For flight checks in a particular aircraft type, review the aircraft questionnaire and ensure the applicant has a thorough knowledge of the aircraft, it's operating limitations, procedures, performance, loading and systems.

(3) Proceed with the flight check by accomplishing an oral review of those items on the CAPF 5 that cannot be accomplished in flight. The appropriate items shall be marked “V” to indicate verbal discussion.

(4) Question the applicant on any material related to the flight check deemed necessary to determine the qualifications of the applicant.

(5) Verify the aircraft to be used is in an airworthy condition and that all required documents are in order.

3. In-Flight Evaluation.

a. The applicant is usually pilot-in-command unless specific circumstances require the check pilot to function as such for a portion of the fight. Any such conditions will be clearly discussed and agreed to prior to conducting the flight check. If circumstances require the check pilot to assume command of the aircraft during the flight check to prevent a dangerous situation, the flight check shall be considered unsatisfactory and immediately terminated.

b. The check pilot will observe the applicant accomplish requested flight maneuvers and demonstrations in accordance with the criteria contained in the appropriate FAA Pilot Practical Test Standards without assistance from the check pilot. The check pilot may exercise some discretion in providing limited instruction to correct minor deficiencies observed, however, such activity will be restricted to a few minor items. Numerous deficient areas and unfavorable trends are evidence of substandard pilot proficiency and will be considered evidence of unsatisfactory performance.

c. For applicants holding an instrument rating or Airline Transport Pilot (ATP) certificate and desiring to exercise instrument privileges on CAP flight activities, the check pilot will observe the applicant demonstrate instrument proficiency during at least partial panel unusual attitude recovery, holding patterns, and at least one instrument approach. Additional demonstrations can be required by the check pilot if considered necessary to demonstrate an acceptable level of instrument proficiency. (This minimum instrument proficiency demonstration is NOT intended to satisfy the requirements for an instrument competency check.) A FAA recognized flight check requiring a demonstration of instrument competency within 180 days preceding the CAPF 5 flight check may satisfy the requirement.

4. Post-Flight - Review and Documentation.

a. The check pilot shall:

(1) Review the applicant's performance during the flight check and discuss any comments or suggestions.

(2) Complete the appropriate entries on the CAPF 5. Any notations or limitations should be entered in the remarks section. Once the check pilot indicates the flight check is begun, a completed CAPF 5 is required.

(3) Return the completed CAPF 5, aircraft questionnaire (if applicable), and written examination (if applicable) to the applicant for copying and distribution as necessary.

b. If the flight check is unsatisfactory, the applicant shall be informed as to the specific unsatisfactory items. These items shall be noted on the CAPF 5. The check pilot shall return all documents to the applicant. The applicant should be reminded that he/she is required to accomplish the recheck with the same check pilot unless that check pilot agrees to another. Advise the applicant what is necessary to prepare for retaking the flight check and make any necessary arrangements for scheduling it. Ensure the respective wing standardization/evaluation officer and the appropriate wing commander are notified of the failure.

c. Applicants who believe improprieties existed in the administration of their flight check should contact their unit commander to discuss the matter. If the unit commander agrees that a complaint is justified, the standardization/evaluation officer of the wing in which the flight check was given is provided the necessary details concerning the complaint. The standardization/evaluation officer shall promptly investigate any such situations. A report to the unit commander relating the complaint will be provided within 10 days. The unit commander shall notify the applicant of the disposition of the complaint. The decision of the responsible wing standardization/evaluation officer regarding the proper conduct of a flight check is final.

Check Pilot Form 5 Evaluation Guidelines

I. **CAP ORAL DISCUSSION**

A. CAPF 5 written exam passed prior to the check ride.

B. Review policies, CAPR 60-1 and wing/region supplements to CAPR 60-1. However, the first question might be: Do you own a copy of CAPR 60-1 and what is the date and change status of your copy of the regulation? If the answer is that the examinee does not have CAPR 60-1 a through oral examination to determine the examinee's knowledge of CAPR 60-1 is required. Remember, a working knowledge of CAPR 60-1 is a must for a healthy CAP flying program. Our entire flying program could literally hinge on whether CAPR 60-1 was violated during an aircraft incident. A poor knowledge of CAPR 60-1 is an adequate reason to stop and reschedule the evaluation, allowing the examinee time to reacquaint him/her self with the regulation.

C. The importance of liability release forms is obvious in current times.

D. A quality flight release is legally the most important part of your flight.

E. Local procedures as needed

II **PREFLIGHT PREPARATION**

III **GROUND OPERATIONS**

IV. **AIRPORT AND TRAFFIC PATTERN**

V. **TAKEOFF AND CLIMBS**

VI. **CROSS-COUNTRY FLYING**

VII. **INSTRUMENT REFERENCE MANEUVERING**

VIII. **FLIGHT AT CRITICALLY SLOW AIRSPEEDS**

A Full

B. Imminent stalls

IX. **GROUND REFERENCE MANEUVERS**

Should be evaluated as part of other more complex maneuvers.

X **NIGHT FLIGHT OPERATIONS**

A through oral examination is a must.

XI **EMERGENCY PROCEDURES**

Should always include a simulated emergency approach and landing. Positive control transfer must be emphasized. Plan your simulated emergency approach maneuver allowing altitude for a safe and FAA legal recovery. If the checkride aircraft has POH Bold Face, the examinee should be thoroughly evaluated on his knowledge of the bold face.

XII. **EVALUATE APPROACHES AND LANDINGS AS LISTED**

XIII. **EVALUATE INSTRUMENT PROFICIENCY AS LISTED.**

If the examinee holds an instrument rating he/she must demonstrate instrument proficiency. If he/she can not show proficiency or does not wish to maintain proficiency make note on this in the remarks section in addition to now marking the "demonstrated instrument proficiency block". It might also be worthy of a Wing position on the reporting of such a deficiency.

XIV. **While evaluating SAFETY AWARENESS insure the examinee has through knowledge of the checkride aircraft fuel system and fuel management procedures.**

XV. **Verify the examinee's certificates and documents.**

XVI. **Ensure the examinee reads, understands, dates and signs the examinee's certification.**

XVII. **Check the proper block indicating demonstrated proficiency. Remind the examinee that proficiency required to be a cadet orientation pilot does not constitute clearance to be a cadet orientation pilot without the National, Region and his Wind Commander's written authorization.**

NCPSC FORM 5 FLIGHT PROFILE (SEL)

This flight profile must be thoroughly briefed and understood before each flight. Each IP must be assured each check pilot candidate has covered all of the required items on CAPF 5.

AIRWORK MANEUVERS MUST BE COMPLETELY RECOVERED ABOVE 3000 ft. AGL!!

1. **Review and discuss item I, II, IV A., X and XIV of the CAPF 5.**
2. **Flight Sequence:**
   - **a.** Preflight, Engine Start and Taxi.
   - **b.** Soft Field Take-off.
   - **c.** Cross Wind Landing and Take-off.
   - **d.** Steep Turns (45 -55º of bank).
   - **e.** Flight at Minimum Controllable Airspeed.
   - **f.** Stalls – Power On & Off (Full and Imminent).
   - **g.** Unusual Attitudes (VFR & Hooded).
   - **h.** Determine Position from Electronic Aids.
   - **i.** Intercept & track assigned radial to/from VOR.
   - **j.** 1-ILS approach to DH and missed.
   - **k.** Holding.
   - **l.** 1-VOR approach or LOC/DME <u>Partial Panel.</u>
   - **m.** Forward Slip with No Flap Landing.
   - **n.** Short Field Landing to Full Stop.
   - **o.** Short Field Take-Off.
   - **p.** Emergency Procedures – Simulated Engine Out.
   - **q.** Soft Field Landing.
   - **r.** Normal Full Flap Landing to a Go-around.
   - **s.** Return to Ramp, Post Flight Debrief.
3. Complete all Forms and Answer any Questions.

*All instrument work will be hooded.

Private Pilot Practical Test Standards

(Examples of some Evaluation Areas)

Taken from (ASEL) FAA PTS GUIDE FAA-S-8081 – AUG` 2002

1. **Airport Operations**
   a. With regard to traffic pattern operations, the applicant must meet certain standards pertaining to:
      Altitude: ± 100 feet Airspeed: ± 10 knots.
   b. Takeoff maintains Vy: +10 / - 5 knots
   c. Landing: Not more then 1.3Vso; airspeed: +10 / -5 knots
   d. Short field take-off and climb; climb out airspeed is graded to + 10 / - 5 knots.
   e. With regard to a short field take-off the applicant should remain in Ground-effect, while accelerating to Vx within + 10 / -5 knots, then climb out at Vy +10 / -5 knots.
2. **Steep turns:** Rolls into a coordinated 360º turn, maintains an altitude, ±100 feet and a 45º bank, ±5º, and rolls out on the entry heading, ± 10º.
3. **Ground Reference Maneuvers:** Altitude, ± 100 feet; Airspeed, ± 10 knots
   a. Rectangular Course
   b. S Turns
   c. Turns about a point
4. **Navigation**: Altitude, ± 200 feet; Heading, ± 15º.
   a. Pilotage & Dead Reckoning
   b. Navigational Systems
   c. Diversions
   d. Lost Procedures
5. **Slow Flight Maneuvering**: Altitude, ± 100 feet; Airspeed, +10 / -0 knots; Heading, ± 10 knots; angle of bank ±10º.
6. **Stalls**
   a. **Power-off and Power on Stall**: **Objective.**
      1. Maintains a specified heading, ± 10º, in straight flight; maintains a specified angle of bank not to exceed 20º, ±10º, if in turning flight, while inducing the stall.
7. **Basic Instrument Maneuvers** : Heading: ± 20º; Altitude: ± 200 feet; Airspeed: ± 10 knots
   a. Straight and level
   b. Constant Airspeed Climbs
   c. Constant Airspeed Descents
   d. Turns to Heading
8. **Emergency Operations:**
   a. **Objectives**
      1. Exhibits knowledge of the elements related to emergency approach and landing prodcedures.
      2. Analyzes the situation and selects an appropriate course of action
      3. Establishes and maintains the recommended best-glide airspeed, ±10 knots.
      4. Selects a sutiable landing area.
      5. Plans and follows a flight pattern to the selected landing area considering altitude, wind, terrian, and obstructions.
      6. Prepares for landing, or go-around, as specified by the examiner.
      7. Follows the appropriate checklist.

CAPR 60-1 Form 5 Annual Examination-Powered (2004) Test

Question 1. After flying for CAP as a non-mission pilot for 1 1/2 years you have decided to work on your instrument rating. Can your flight be released as an AF authorized mission (B-99)? Can you pay a CAP instructor pilot to give you instruction?

- **A.** Yes, if he is a FAA designated examiner.
- **B.** No, flight instruction has to be donated and the mission may be released as an Air Force authorized flight.
- **C.** No, the flight instructor cannot be compensated and the mission cannot be flown as an Air Force authorized flight.

Question 2. Must the Statement of Understanding be accomplished yearly?

- **A.** Yes.
- **B.** No.

Question 3. What must you prove prior to beginning a CAPF 5 check ride?

- **A.** You are qualified in the specific aircraft.
- **B.** You have FAA passenger carrying proficiency in category only.
- **C.** You have FAA passenger carrying proficiency in category and class of aircraft being used during the check ride.

Question 4. What is the crosswind limit for an aircraft with a POH that does not specify a maximum demonstrated crosswind figure?

- **A.** 14 knots.
- **B.** 12 mph.
- **C.** 15 knots.

Question 5. Your annual checkride is due on the 31st of the month and you have scheduled a checkride at a wing sponsored checkride clinic to be held on the 25th of the month. Who must ensure the flight release is obtained for the checkride.

- **A.** The flight clinic organizer is responsible for the flight release.
- **B.** Since the checkpilot is the pilot-in-command, he/she has to obtain the flight release.
- **C.** The pilot-in-command must obtain the flight release.

Question 6. CAP has two exemptions granted by the FAA. Where in CAPR 60-1 may additional information be found about these exemptions?

- **A.** Attachment 1.
- **B.** Attachment 2.
- **C.** Attachment 3.

Question 7. Which statement is correct?

- **A.** Since CAP is federally funded, the right to operate CAP aircraft is guaranteed by Congress.
- **B.** The authorization to operate CAP aircraft is a privilege, not a right.
- **C.** The USAF authorizes the right to fly CAP aircraft.

Question 8. Can a pilot who is involved in an aircraft mishap while on a CAP flight activity participate as a mission observer in subsequent missions while waiting for the results of the mishap investigation?

- **A.** Yes, as long as he is not the pilot-in-command.
- **B.** No, he may not participate in any CAP flight activity.
- **C.** Yes, with the Region Commanders written authorization.

Question 9. Can a CAP pilot who violates CAP flying directives or FARs have his/her CAP flying privileges permanently revoked and be subject ot loss of CAP membership?

- **A.** Yes.
- **B.** Only if he/she has had two or more incidents, as defined by NTSB 830, which involved gross negligence of the pilot.
- **C.** Only flying privileges can be revoked.

Question 10. What are the minimum standards for CAP flight operations?

- **A.** CAPR 60-1.
- **B.** FAA requirements and CAPR 60-1 when higher standards exist.
- **C.** CAPR 60-2.

Question 11. Who may charge for ground or flight training /flight checks in CAP aircraft?

- **A.** Only CAP flight instructors.
- **B.** No one.
- **C.** Designated pilot examiners when conducting a practical test for issuance of an FAA pilot certificate or rating.

Question 12. You just received your initial CAPF 5 flight check in your Cessna 175. Can you fly your buddy's Cessna 172 (160 hp) at the upcoming SAR evaluation without a flight check in the aircraft?

- **A.** No, an initial check ride has to be completed in each type of aircraft.
- **B.** No, the Cessna 175 is in group 1 and the Cessna 172 is in group two.
- **C.** Yes, an initial checkride in the Cessna 175 satisfies the initial checkride requirement for the C-172.

Question 13. Pilots will maintain adequate clearance from all obstacles during all ground operations. When taxiing within _____ feet of any obstacle, pilots shall bring the aircraft to a complete halt, and then proceed at a pace not to exceed a slow walk until clear of the obstacle.

- **A.** 5
- **B.** 10
- **C.** 15

Question 14. According to CAPR 60-1 for VFR night operations (FAA definition) the minimum clearance is how many feet except for takeoff and landing or when operating in controlled airspace under an ATC clearance?

- **A.** 1000
- **B.** 1500
- **C.** 2000

Question 15. You are a New Mexico CAP pilot living next to the Colorado border and want to take your CAPF 5 with a check pilot who is a member of the Colorado wing located only three miles from your unit. What approval if any must be obtained?

- **A.** Approval from the Colorado Wing Standardization and Evaluation Officer.
- **B.** No approval is necessary.
- **C.** Approval from the New Mexico Wing Standardization and Evaluation Officer.

Question 16. You are a CAP senior member who holds an FAA recreational pilot certificate. Can you obtain flight training in a CAP aircraft toward a private pilot certificate?

- **A.** Yes, if you have been an active member of CAP for over one year.
- **B.** Yes, if you have been appointed and functioned as a transport pilot for a minimum of 100 hours.
- **C.** No, instruction for FAA recreational pilots is considered powered student pilot instruction, which is prohibited for CAP senior members.

Question 17. Can a pilot take an annual CAPF 5 check ride from the same check pilot three years in a row?

- **A.** Yes.
- **B.** No.
- **C.** Yes, but only with your Wing Commanders written approval.

Question 18. Can a CAP-USAF Flight Examiner give you a CAPF 5 checkride?

- **A.** Yes.
- **B.** No.

Question 19. The minimum level of proficiency acceptable is that contained in the current FAA PTS for the certificate

- **A.** held.
- **B.** being exercised.

Question 20. You are transferring into a new Wing. Can the Wing Commander force you to take an additional CAPF 5 check ride

- **A.** Yes, the gaining Wing Commander may require a re-evaluation of your pilot skills.
- **B.** No, a CAPF 5 check ride is valid across all of CAP and re-evaluation of your skills is only required if you have an accident.
- **C.** Yes, but only if the Wing Commander suspects lack of proficiency.

Question 21. CAP pilots found at fault in a fuel exhaustion mishap shall

- **A.** have to answer in writing to the Wing Commander as to the reason for the violation.
- **B.** have their flying privileges temporarily suspended.
- **C.** lose their CAP flying privileges permanently.

Question 22. When CAPR 60-1 is changed, how can you note the changes?

- **A.** Shaded areas identify new and revised material.
- **B.** In the summary of changes.
- **C.** An asterisk denotes each change.

Question 23. Which of the following is a prohibited use of CAP aircraft?

- **A.** Flying in an airshow with authorization in writing by the Executive Director..
- **B.** Formation flying without being authorized in writing by the region commander or the Executive Director.
- **C.** Assistance to law enforcement officers.

C172 SKYHAWK

Emergency Procedures Memory Items
Chapter 3, Section 9 of supp

Engine Failure

Engine Failure During Takeoff Roll

Throttle ----- IDLE
Brakes ----- Apply

Engine Failure Immediately After Takeoff

Airspeed ---- 70 KIAS (flaps up)
65 KIAS (Flaps Down)

Engine Failure During Flight

(Restart Procedure)

Airspeed ----------75 KIAS
Carburetor Heat ----ON
Fuel Selector --------Both

FIRES

During Start on Ground

Cranking ---- Continue
If Engine fails to start:
Throttle ----Full Open
Mixture -----Idle Cut-Off
Cranking – Continue

Engine Fire In Flight

Mixture ------- Idle Cut-Off
Fuel Selector Valve ---Off

Electrical Fire In Flight

Master Switch ---------- Off
Vents/Cabin Air/Heat --- Closed
All Other Switches (exc. ignition switch)-OFF
Fire Extinguisher ------- Activate (if necessary)

Cabin Fire

Master Switch --- Off
Vents/Cabin Air/Heat --- Closed
Fire Extinguisher --- Activate (if necessary)

Wing Fire

Landing Light ---------- Off
Pitot Heat Switch (if installed) ------- Off
Navigation Light Switch ---------- Off
Strobe Light Switch (if installed) --- OFF
Fire Extinguisher – Activate (if necessary)

ICING

Inadvertent Icing Encountered

Turn Pitot Heat Switch On
Turn back or change altitude to obtain an outside air temperature that is less conductive to ice.
Pull Cabin Heat Control Full Out And open Defroster outlet to obtain maximum defrost heat and airflow.

04-Jul-01
Alabama Wing, Civil Air Patrol
Webmaster

CIVIL AIR PATROL ALABAMA WING
CESSNA 172P SKYHAWK
NORMAL OPERATION INFORMATION
180HP ! O-360

V-SPEEDS

Vso . . . . . 40 KIAS
Vs1 . . . . . 50 KIAS
Vx . . . . . 62 KIAS
Vy . . . . . 76 KIAS
Vfle (10 deg) . . 110 KIAS
(10 -30deg) . . . . 85 KIAS

Best Glide (KIAS)
2550 lbs - - - - - - - 65
2150 lbs - - - - - - - 62
1740 lbs - - - - - - - 56

Va (KIAS)
2550 lbs - - - - - - - 105
2150 lbs - - - - - - - - 95
1750 lbs - - - - - - - - 85

Vno . . . . . 127 KIAS

Vne . . . . . 158 KIAS

Window can be open up to 158 KIAS

PATTERN AIRSPEEDS
Down Wind 70-80
Final 60-70

Balked Landings
Throttle --- Full Open

Carb Heat --- Off

Reduce Flaps-- 20 deg (immediately).

Climb speed --55 KIAS

Flaps 10 deg until Obj cleared – Retract (after safe Altitude and reaching 60 KIAS).

Normal RPM **MAX RPM**
2100–2400 **2540**

Max Demonstrated X Wind 15 Kts

PROPELLER
McCAULEY 2 BLADE
MAX Dia 75 IN

FUEL
Total Capacity 43 Gal, 40 gal usable
Total Capacity in each tank 21.5 gal.

OIL
Use 15W-50 Aeroshell
1 Do not fly with less than 5 qt
7 Qts for extended flights

ELECTRICAL
28 volts system xx amp Alt
24 volt battery

WEIGHT LIMITS NORMAL/UTILITY CATEGORY

Max Takeoff Weight . . . . . 2550/2100 lbs. Max
Landing Weight . . . . . 2550/2100 lbs.
Max Baggage Weight . . . . . 120 lbs
Empty Weight -----lbs.
Useful Load ------lbs

TIRE PRESSURE
Nose: 40-45 psi
Main: 35-40 psi

These are found in Supplement SN 17274010 and sub serial nos. STC SA 21966E

180 CESSNA 172 SKYHAWK
CRUISE PERFORMANCE
Standard Temperature

Pressure Altitude Ft.	RPM	% BHP	GPH
2000	2550	76	10.2
	2500	72	9.6
	2400	64	8.7
	2300	58	7.9
	2200	52	7.2
	2100	46	6.6
4000	2600	76	10.2
	2500	68	9.2
	2400	62	8.3
	2300	55	7.6
	2200	49	6.9
	2100	44	6.3
6000	2650	76	10.1
	2500	69	9,2
	2400	62	8.4
	2300	56	7.7
	2200	53	7.3
8000	2700	76	10.1
	2600	69	9.2
	2500	62	8.4
	2400	56	7.7
	2300	53	7.3
	2200	47	6.7
10000	2700	72	9.6
	2600	65	8.8
	2500	59	8.1
	2500	53	7.4
	2300	48	6.8
12000	2650	65	8.8
	2600	62	8.4
	2500	56	7.7
	2400	51	7.1

2/12/02

Conditions:
Flaps 10, Full Throttle Prior to Brake Release.
Paved, Level, Dry Runway; Zero Wind

Notes: 1. Short field technique as specified in Section 4
2. Prior to takeoff, from fields above 3000 ft elev.,mixture leaned to give max. RPM in a full throttle static runup.
3. Decrease distance 10% for each 9 knots headwind. Operation with tailwinds up to 10 knots, increase dist by 10% for each 2 knots.
4. For operation on dry, grass runway, increase distances by 15% of the "ground roll" figure.

Cessna 172P **Section 5 Performance**

Weight LBS	Takeoff Speed KIAS		PRESS ALT FT	0 C		10 C		20 C		30 C		40 C	
	Lift Off	AT 50FT		Gnd Roll	Total to clear 50 ft	Gnd Roll	Total to clear 50 ft obs	Gnd Roll	Total to clear 50 ft	Gnd Roll	Total to clear 50 ft	Gnd Roll	Total to clear 50 ft
2400	51	56	S.L.	795	1460	860	1570	925	1685	995	1810	1055	1945
			1000	875	1605	940	1725	1015	1860	1090	2000	1170	2155
			2000	960	1770	1035	1910	1115	2060	1200	2220	1290	2395
			3000	1056	1960	1140	2120	1230	2295	1325	2480	1425	2080
			4000	1165	2185	1260	2365	1355	2570	1465	2790	1575	3030
			5000	1285	2445	1390	2550	1500	2895	1520	3160	1745	3455
			6000	1425	2755	1540	3015	1665	3300	1800	3620	1940	3990
			7000	1580	3140	1710	3450	1850	3505	2000	4220	----	----
			8000	1755	3515	1905	4015	2050	4480	----	----	----	----

Figure 5-4. Takeoff Distance (Sheet 1 of 2)

TAKE OFF DISTANCE
2200 LBS and 2000LBS
SHORT FIELD

Cessna 172P **Refer to Sheet 1 for appropriate conditions and notes** **Section 5 Performance**

Weight LBS	Takeoff Speed KIAS		PRESS ALT FT	0 C		10 C		20 C		30 C		40 C	
	Lift Off	AT 50FT		Gnd Roll	Total to clear 50 ft	Gnd Roll	Total to clear 50 ft obs	Gnd Roll	Total to clear 50 ft	Gnd Roll	Total to clear 50 ft	Gnd Roll	Total to clear 50 ft
2200	49	54	S.L.	650	1195	700	1280	750	1375	805	1470	865	1575
			1000	710	1310	765	1405	825	1510	885	1615	950	1735
			2000	780	1440	840	1545	905	1660	975	1785	1045	1915
			3000	855	1585	925	1705	995	1835	1070	1975	1150	2130
			4000	945	1750	1020	1890	1100	2040	1180	2200	1270	2375
			5000	1040	1945	1125	2105	1210	2275	1305	2465	1405	2665
			6000	1150	2170	1240	2355	1340	2555	1445	2775	1555	3020
			7000	1270	2440	1375	2655	1485	2890	1605	3155	1730	3450
			8000	1410	2760	1525	3015	1650	3305	1785	3830	1926	4005
2000	46	51	S.L.	525	970	665	1035	605	1110	650	1185	695	1265
			1000	570	1060	615	1135	665	1215	710	1285	765	1385
			2000	625	1160	675	1240	725	1330	780	1425	840	1525
			3000	690	1270	740	1365	800	1465	800	1570	920	1685
			4000	755	1400	815	1500	880	1615	945	1735	1015	1865
			5000	830	1545	900	1660	970	1790	1040	1925	1120	2070
			6000	920	1710	990	1845	1070	1990	1150	2145	1235	2315
			7000	1015	1900	1095	2055	1180	2225	1275	2405	1370	2605
			8000	1125	2125	1215	2305	1310	2500	1410	2715	1520	2950

LANDING DISTANCE

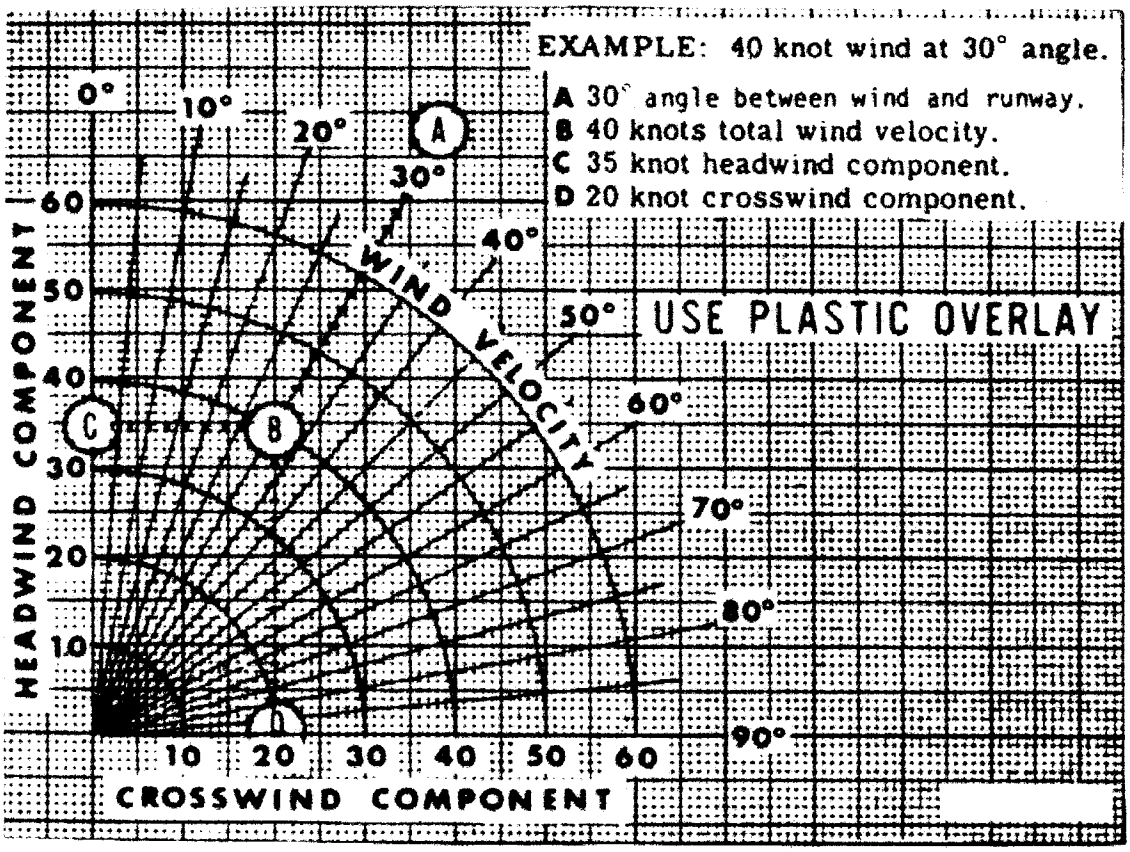
SHORT FIELD

CONDITIONS:
Flaps 30°
Power Off
Maximum Braking
Paved, Level, Dry Runway
Zero Wind

NOTES:
1. Short field technique as specified in Section 4.
2. Decrease distances 10% for each 9 knots headwind. For operation with tailwinds up to 10 knots, increase distances by 10% for each 2 knots.
3. For operation on a dry, grass runway, increase distances by 45% of the "ground roll" figure.

WEIGHT LBS	SPEED AT 50 FT KIAS	PRESS ALT FT	0°C		10°C		20°C		30°C		40°C	
			GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS
2400	61	S.L.	510	1235	530	1265	550	1295	570	1325	585	1350
		1000	530	1265	550	1295	570	1325	590	1360	610	1390
		2000	550	1295	570	1330	590	1360	610	1390	630	1425
		3000	570	1330	590	1360	615	1395	635	1430	655	1460
		4000	595	1365	615	1400	635	1430	660	1470	680	1500
		5000	615	1400	640	1435	660	1470	685	1510	705	1540
		6000	640	1435	660	1470	685	1510	710	1550	730	1580
		7000	665	1475	690	1515	710	1550	735	1590	760	1630
		8000	690	1515	715	1555	740	1595	765	1635	790	1675

Figure 5-10. Landing Distance



C182 SKYLANE

Emergency Procedures Memory Items
Chapter 3, Section 9 of supp

Engine Failure

Engine Failure During Takeoff Roll

Throttle ----- IDLE
Brakes ----- Apply

Engine Failure Immediately After Takeoff

Airspeed --------75 KIAS (flaps up)
70 KIAS (Flaps Down)

Engine Failure During Flight

(Restart Procedure)

Airspeed ----- 75 KIAS
Carburetor Heat ----ON
Fuel Selector ------- Both

FIRES

During Start on Ground

Cranking ---- Continue
If Engine fails to start:
Throttle ----Full Open
Mixture ----Idle Cut-Off
Cranking – Continue

Engine Fire In Flight

Mixture --- Idle Cut-Off
Fuel Selector Valve ---Off

Electrical Fire In Flight

Master Switch --- Off
Vents/Cabin Air/Heat --- Closed
All Other Switches (exc. ignition switch)-OFF
Fire Extinguisher --- Activate (if necessary)

Cabin Fire

Master Switch --- Off
Vents/Cabin Air/Heat --- Closed
Fire Extinguisher --- Activate (if necessary)

Wing Fire

Pitot Heat Switch (if installed) --- Off
Navigation Light Switch --- Off
Fire Extinguisher – Activate (if necessary)

ICING

Inadvertent Icing Encountered

Turn Pitot Heat Switch On
Turn back or change altitude to obtain an outside air temperature that is less conductive to ice.
Pull Cabin Heat Control Full Out And rotate Defroster Control Clockwise.

04-Jul-01
Alabama Wing, Civil Air Patrol
Webmaster

CIVIL AIR PATROL ALABAMA WING
CESSNA 182R SKYLANE
NORMAL OPERATION INFORMATION

V-SPEEDS

Vso . . . . . 40 KIAS
Vs1 . . . . . .50 KIAS
Vx . . . . . 59 KIAS
Vy . . . . . 81 KIAS
Vfle (10 deg) 140 KIAS
(10 –30deg) 120 KIAS
(full) 95 KIAS

Best Glide (Flap 0) 75 KIAS
(Flap full) 70 KIAS

Va (KIAS)
111 @ 3100 lbs
102 @ 2600 lbs
88 @ 2000 lbs

Vno . . . . . 143 KIAS
Vne . . . . . 179 KIAS

Window can be open up to 179 KIAS

PATTERN AIRSPEEDS

Down Wind 80-100 KIAS
Final-No Flap 70-80 KIAS
Full Flaps 60-70 KIAS

Balked Landings

Prop – Full forward

Throttle ----------Full Open

Carb Heat -------Off

Reduce Flaps---20 deg (immediately).

Climb speed ----59 KIAS

Flaps 10 deg until Obj cleared - Retract (after safe Altitude)

Normal RPM **MAX RPM**
2100–2400 **2400**
MP 15 – 23"

Max Demonstrated X Wind 15 Kts

PROPELLER
McCAULEY 2 BLADE
MAX Dia 82 IN

FUEL

Total Capacity	**Usable**
96 Gal	88 gal

48 Gal (in each tank)

OIL
Use 15W-50 Aeroshell
12 Qt. Max, 10 Qt. Min
Do not fly with less than 9 qt

ELECTRICAL
28 volts system xx amp Alt
24 volt battery

WEIGHT LIMITS NORMAL/UTILITY CATEGORY

Takeoff Weight----------3100 lbs.
Max Landing Weight----------2950 lbs.
Max Baggage Weight----------120 lbs
Empty Weight----------1883 lbs.
Useful Load----------1217 lbs.

Tire Pressure:	**Nose**	**Main**
	49 psi	42 psi

CRUISE PERFORMANCE

PRESSURE ALTITUDE 6000 FEET

CONDITIONS:
3100 Pounds
Recommended Lean Mixture
Cowl Flaps Closed

NOTE
For best fuel economy at 65% power or less, operate at the leanest mixture that results in smooth engine operation or at peak EGT if an EGT indicator is installed.

		20°C BELOW STANDARD TEMP -17°C			STANDARD TEMPERATURE 3°C			20°C ABOVE STANDARD TEMP 23°C		
RPM	MP	% BHP	KTAS	GPH	% BHP	KTAS	GPH	% BHP	KTAS	GPH
2400	22	---	---	---	77	141	13.3	75	142	12.8
	21	75	136	12.9	73	137	12.4	70	138	12.0
	20	71	133	12.1	68	133	11.6	66	134	11.2
	19	66	129	11.2	64	129	10.8	61	129	10.5
2300	22	77	137	13.1	74	138	12.6	71	139	12.2
	21	72	134	12.3	69	134	11.8	67	135	11.4
	20	67	130	11.5	65	130	11.1	63	131	10.7
	19	63	126	10.7	60	126	10.3	58	126	10.0
2200	22	72	134	12.3	69	135	11.9	67	135	11.5
	21	68	130	11.6	65	131	11.1	63	131	10.8
	20	63	126	10.8	61	127	10.4	59	127	10.1
	19	59	122	10.1	57	122	9.7	55	121	9.5
2100	22	67	130	11.5	65	131	11.1	63	131	10.7
	21	63	126	10.8	61	127	10.4	59	127	10.1
	20	59	122	10.1	57	122	9.8	55	122	9.5
	19	55	118	9.5	53	117	9.2	51	116	8.9
	18	51	113	8.8	49	111	8.6	47	110	8.3
	17	47	107	8.2	45	105	8.0	43	103	7.8

Figure 5-8. Cruise Performance (Sheet 3 of 7)

CRUISE PERFORMANCE

PRESSURE ALTITUDE 8000 FEET

CONDITIONS:
3100 Pounds
Recommended Lean Mixture
Cowl Flaps Closed

NOTE
For best fuel economy at 65% power or less, operate at the leanest mixture that results in smooth engine operation or at peak EGT if an EGT indicator is installed.

		20°C BELOW STANDARD TEMP -21°C			STANDARD TEMPERATURE -1°C			20°C ABOVE STANDARD TEMP 19°C		
RPM	MP	% BHP	KTAS	GPH	% BHP	KTAS	GPH	% BHP	KTAS	GPH
2400	21	77	140	13.3	74	141	12.7	72	142	12.3
	20	72	136	12.4	70	137	11.9	67	138	11.5
	19	68	132	11.5	65	133	11.1	63	133	10.7
	18	63	128	10.7	60	128	10.3	58	128	10.0
2300	21	74	137	12.6	71	138	12.1	69	139	11.7
	20	69	134	11.8	66	134	11.3	64	134	11.0
	19	64	130	11.0	62	130	10.6	60	129	10.2
	18	60	125	10.2	58	125	9.9	56	124	9.6
2200	21	69	134	11.8	67	135	11.4	65	135	11.0
	20	65	130	11.1	63	130	10.7	60	130	10.3
	19	61	126	10.3	58	126	10.0	56	125	9.7
	18	56	121	9.7	54	120	9.3	52	119	9.1
2100	21	65	130	11.1	63	130	10.7	60	130	10.3
	20	61	126	10.4	59	126	10.0	57	125	9.7
	19	57	122	9.7	54	121	9.4	53	120	9.1
	18	52	116	9.1	50	115	8.8	49	113	8.5
	17	48	110	8.5	46	108	8.2	45	106	8.0

Figure 5-8. Cruise Performance (Sheet 4 of 7)

TAKEOFF DISTANCE

MAXIMUM WEIGHT 3100 LBS

SHORT FIELD

CONDITIONS:
Flaps 20°
2400 RPM, Full Throttle and Mixture Set Prior to Brake Release
Cowl Flaps Open
Paved, Level, Dry Runway
Zero Wind

NOTES:
1. Short field technique as specified in Section 4.
2. Prior to takeoff from fields above 5000 feet elevation, the mixture should be leaned to give maximum power in a full throttle, static runup.
3. Decrease distances 10% for each 9 knots headwind. For operation with tailwinds up to 10 knots, increase distances by 10% for each 2 knots.
4. Where distance value has been deleted, climb performance after lift-off is less than 150 fpm at takeoff speed.
5. For operation on a dry, grass runway, increase distances by 15% of the "ground roll" figure.

WEIGHT LBS	TAKEOFF SPEED KIAS		PRESS ALT FT	0°C		10°C		20°C		30°C		40°C	
	LIFT OFF	AT 50 FT		GRND ROLL FT	TOTAL FT TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL FT TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL FT TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL FT TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL FT TO CLEAR 50 FT OBS
3100	50	59	S.L.	720	1365	775	1465	835	1570	895	1680	955	1800
			1000	785	1490	845	1600	910	1720	975	1845	1045	1980
			2000	860	1635	925	1760	995	1890	1065	2035	1140	2185
			3000	940	1800	1010	1940	1085	2090	1165	2255	1250	2430
			4000	1025	1990	1105	2150	1190	2320	1275	2510	1370	2715
			5000	1125	2210	1215	2395	1305	2595	1400	2815	1505	3060
			6000	1235	2470	1330	2685	1435	2925	1540	3190	1655	3490
			7000	1360	2780	1465	3040	1580	3330	1700	3665	- - -	- - -
			8000	1500	3170	1615	3485	1740	3855	- - -	- - -	- - -	- - -

Figure 5-5. Takeoff Distance (Sheet 1 of 2)

20 August 1982

TAKEOFF DISTANCE

2800 LBS AND 2500 LBS

SHORT FIELD

REFER TO SHEET 1 FOR APPROPRIATE CONDITIONS AND NOTES.

WEIGHT LBS	TAKEOFF SPEED KIAS		PRESS ALT FT	0°C		10°C		20°C		30°C		40°C	
	LIFT OFF	AT 50 FT		GRND ROLL FT	TOTAL FT TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL FT TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL FT TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL FT TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL FT TO CLEAR 50 FT OBS
2800	48	56	S.L.	575	1080	615	1155	660	1235	710	1320	760	1410
			1000	625	1175	670	1260	720	1350	770	1440	825	1540
			2000	680	1285	730	1375	785	1475	840	1580	900	1690
			3000	740	1405	800	1505	855	1615	920	1735	985	1860
			4000	810	1540	870	1655	935	1780	1005	1910	1075	2050
			5000	885	1695	955	1825	1025	1965	1100	2115	1180	2280
			6000	970	1875	1045	2025	1125	2185	1210	2355	1295	2545
			7000	1070	2085	1150	2255	1235	2440	1330	2640	1425	2865
			8000	1175	2330	1265	2525	1360	2745	1465	2990	1570	3265
2500	45	53	S.L.	445	845	475	900	510	960	545	1020	585	1085
			1000	485	915	520	975	555	1040	595	1110	635	1185
			2000	525	995	565	1060	605	1135	650	1210	695	1290
			3000	570	1080	615	1155	660	1235	705	1320	755	1410
			4000	625	1180	670	1265	720	1350	770	1445	825	1545
			5000	680	1290	735	1385	790	1480	845	1590	905	1700
			6000	745	1415	805	1520	860	1630	925	1750	990	1875
			7000	820	1560	880	1675	945	1800	1015	1935	1085	2080
			8000	900	1725	966	1855	1040	2000	1115	2155	1195	2320

Figure 5-5. Takeoff Distance (Sheet 2 of 2)

CESSNA
MODEL 182R

SECTION 5
PERFORMANCE

LANDING DISTANCE

SHORT FIELD

CONDITIONS:
Flaps FULL
Power Off
Maximum Braking
Paved, Level, Dry Runway
Zero Wind

NOTES:
1. Short field technique as specified in Section 4.
2. Decrease distances 10% for each 9 knots headwind. For operation with tailwinds up to 10 knots, increase distances by 10% for each 2 knots.
3. For operation on a dry, grass runway, increase distances by 40% of the "ground roll" figure.
4. If a landing with flaps up is necessary, increase the approach speed by 10 KIAS and allow for 40% longer distances.

WEIGHT LBS	SPEED AT 50 FT KIAS	PRESS ALT FT	0°C		10°C		20°C		30°C		40°C	
			GRND ROLL FT	TOTAL FT TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL FT TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL FT TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL FT TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL FT TO CLEAR 50 FT OBS
2950	61	S.L.	560	1300	580	1335	600	1365	620	1400	640	1435
		1000	580	1335	600	1365	620	1400	645	1440	665	1475
		2000	600	1370	625	1405	645	1440	670	1480	690	1515
		3000	625	1410	645	1445	670	1485	695	1525	715	1560
		4000	650	1450	670	1485	695	1525	720	1565	740	1600
		5000	670	1485	695	1525	720	1565	745	1610	770	1650
		6000	700	1530	725	1575	750	1615	775	1660	800	1700
		7000	725	1575	750	1615	780	1665	805	1710	830	1750
		8000	755	1625	780	1665	810	1715	835	1760	865	1805

Figure 5-11. Landing Distance

TEMPERATURE CONVERSION CHART

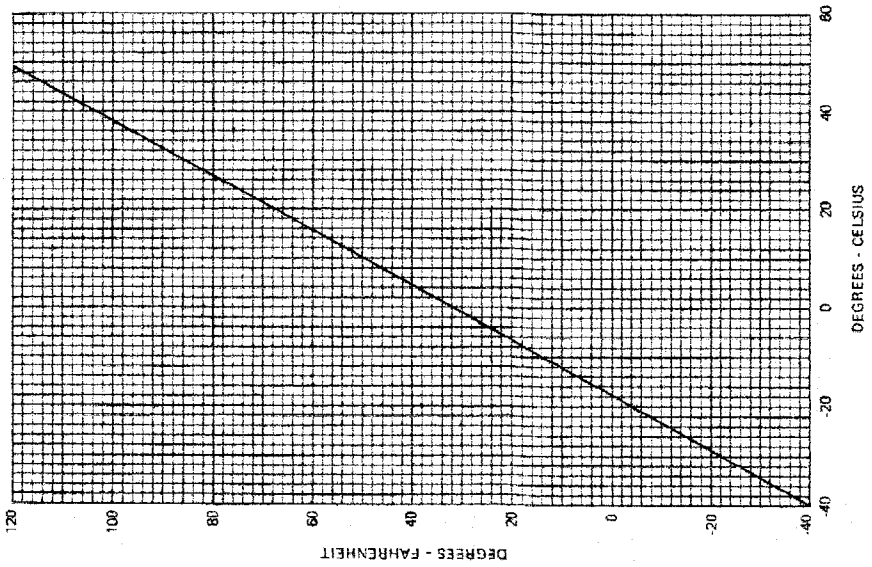


Figure 5-2. Temperature Conversion Chart

ATTACHMENT 3 – AIRPLANE QUESTIONNAIRE

AIRPLANE QUESTIONNAIRE

Name: _____ Grade: _____ CAPID: _____

Unit: _____ Date: _____

Check Pilot: _____ Grade: _____ CAPID: _____

Score: _____ Type/Model Aircraft: _____

Complete this open book questionnaire using the *Flight Manual/Pilot's Operating Handbook*. If a question or part of a question is not applicable, write in NA. The check pilot will review and grade the questionnaire. Minimum passing score is 80%. The completed questionnaire will be filed in the pilot's flight records.

1. Approved fuel grades and colors are: _____
2. Location/capacity of each fuel tank is: _____
3. Total usable fuel under all flight conditions is _____ gallons.
4. Endurance at 75% power, 7,500-foot MSL, with a 45-minute reserve is _____ hours.
5. What make and grade oil is used? Winter: _____ Summer: _____
6. Oil capacity is _____ quarts. Minimum oil quantity for take off is _____ quarts.
7. Minimum oil pressure is _____ psi. Maximum oil pressure is _____ .
8. Maximum oil temperature is _____ degrees (F or C) _____ .
9. Magnetos are checked at _____ RPM. RPM drop should not exceed _____ RPM on either magneto or _____ RPM differential between magnetos.
10. Maximum RPM and MP for takeoff are _____ and _____ in/Hg.
11. Maximum gross takeoff weight is _____ pounds. Empty weight is _____ pounds. Useful load is _____ pounds. Maximum landing weight is _____ pounds.
12. Baggage compartment locations/weights are: _____
13. Give the IAS at maximum gross weight for:
    a. Va (maneuvering speed). _____
    b. Vso (stall, landing config, power. off). _____
    c. Vs1 (stall, cruise config, power. off). _____
    d. Vy (best rate of climb, sea level). _____
    e. Vx (best angle of climb, sea level). _____
    f. Vmc (minimum control speed – multi-engine only). _____
    g. Best glide speed. _____
14. Give the immediate action/memory items for:
    a. Engine failure immediately after takeoff.

_____

    b. Fire during cranking and engine fails to start.

_____

    c. Engine fire in flight.

_____

    d. Electrical fire in flight.

_____

Continue on Reverse

15. Normal takeoff flap setting is _____ , short field takeoff setting is _____ , and soft field takeoff flap setting is _____ .

16. Maximum demonstrated takeoff/landing crosswind component is _____ knots.

17. Given: PA = 4,000 feet; Temp = 86° F; Runway 27; Wind 320° at 14 knots; runway is paved, level, and dry; aircraft is at maximum takeoff weight.

Find: Total takeoff distance to clear a 50-foot obstacle: _____

18. Given: PA = 6,000 feet; Temp = 68° F; wind calm; runway is paved, level, and dry; aircraft is at maximum landing weight.

Find: Total landing distance to clear a 50-foot obstacle: _____

19. Landing runway 22; wind 190o at 22 gusting to 30 knots. Will the maximum demonstrated crosswind component for this aircraft be exceeded? _____

PILOT DATA SUMMARY

This form must be filled out COMPLETELY each time it is submitted.

Complete two copies. Submit one to ALWG/HQ. Retain one in pilot's file.

Name (Last, First M) _____ Rank _____ CAPID _____Date _____

Charter # _____ Unit _____Telephone – Home _____ Work _____

In Case of Emergency, Contact _____ Relation _____Telephone _____

Flight Hours Total: _____ PIC: _____ Night: _____ Inst: _____

COPIES OF THE FOLLOWING WILL BE MAINTAINED AT THE PILOTS UNIT

( ) FAA Pilot Certificate Number _____ Type: STU PVT COM ATP

INST CFI CFII OTHER

( ) Current FAA Medical issued on (date): Class (circle one) First Second Third

Pilots with special expiration date: List expiration date: _____

	Date	Aircraft Used	Check Pilot	IFR/VFR
( ) National Check Pilot School	_____	_____	_____	_____
( ) Annual CAP Form 5 Glider Check	_____	_____	_____	_____
( ) Annual CAP Form 5 Flight Check	_____	_____	_____	_____
( ) Biennial Mission Pilot Flight Check	_____	_____	_____	_____
( ) Biennial FAA Flight Review	_____	_____	_____	_____

( ) Special Pilot Authorizations (circle all that apply)

CAP Chief Check CAP Check CAP Mission Check CAP Instructor Glider Check Glider Instructor Glider Orientation

Glider Tow CAP Mission Cadet Orientation AFROTC Cadet Orientation

( ) This pilot participated in the FAA Pilot Proficiency Program. The highest phase completed is:

Phase I II III IV V VI VII VIII IX X XI XII XIII XIV XV XVI XVII XVIII XIX XX

The following items must be completed for each CAP aircraft the pilot flies or any aircraft the pilot flies on CAP activities.

Aircraft Type, Make, Model	_____	_____	_____	_____	(example C-172)
( ) Initial CAP, Form 5 Checkout	_____	_____	_____	_____	(example) 15 June 92
( ) Completed A/C Questionnaire (CAPR 60-1, Atch 2)	_____	_____	_____	_____	(Current Form Date)

CAP PILOT FLIGHT EVALUATION - AIRPLANE DATE OF CHECK:

MEMBER'S NAME (print or type)	CAP MEMBER EXP DATE	CHARTER NO	AIRCRAFT

TYPE CHECK: (Check all satisfactorily completed flight checks)

___Initial ___Instructor/Check Pilot ___Night Orientation ___Annual Standardization
___Multi-Engine ___Instrument ___Cadet Orientation ___Other _____

INSTRUCTIONS

Sections I and II may be completed separately within a 30-day period before the flight check. All items for the appropriate type of check must be completed indicating S - Satisfactory, U - Unsatisfactory or V- Verbally. If a member can satisfactorily perform the more complex maneuvers, less complex maneuvers need not be accomplished at the discretion of the check pilot. Night orientation is for familiarization only and required only at the discretion of wing commanders or higher. Pilots are evaluated on their ability to satisfactorily perform the tasks assigned, knowledge of procedures, smoothness, judgment, and mastery of the aircraft. Failure to meet the standards of performance for any task performed will result in an unsatisfactory evaluation. Tolerances specified in the appropriate FAA Practical Test Standards represent the minimum performance expected in good flying conditions. Individuals holding an instrument rating or ATP certificate are required to demonstrate instrument proficiency on a CAPF 5 flight check or be restricted from exercising instrument privileges on CAP flight activities.

I. ORAL DISCUSSION		**VII. INSTRUMENT REFERENCE MANEUVERS**	
A. CAPF 5 Written Exam		A. Straight & Level Flight	
B. Review CAPR 60-1 & Supplements		B. Constant Airspeed Climbs	
C. Review Flight Release Procedures		C. Constant Airspeed Descents	
D. Review CAPF 9 Requirements		D. Turns to A Heading	
E. Local Procedures		E. Unusual Flight Attitudes	
II. PREFLIGHT PREPARATION		F. Radio Nav & Radar Services	
A. Certificates & Documents		**VIII. FLIGHT AT CRITICALLY SLOW AIRSPEEDS**	
B. Obtaining Weather Information		A. Full Stalls - Power Off	
C. Determine Weight & Balance		B. Full Stalls - Power On	
D. Determine Takeoff Performance		C. Maneuvering At Crit Slow Airspeed	
E. Determine Cruise Performance		D. Constant Altitude Turns	
F. Determine Landing Performance			
G. Cross-country Flight Planning		**IX. GROUND REFERENCE MANEUVERS**	
H. Airplane Systems		A. Rectangular Course	
I. Aeromedical Facts Understanding		B. S - Turns Across A Road	
III. GROUND OPERATIONS		C. Turns Around A Point	
A. Visual Inspection		**X. NIGHT FLIGHT OPERATIONS**	
B. Cockpit Management		A. Preparation & Equipment	
C. Starting Engines		B. Night Flight Procedures	
D. Taxiing		C. Factors Essential To Night Flight	
E. Pre-takeoff Check		D. Airplane & Airport Lighting	
F. Takeoff Briefing		**XI. EMERGENCY PROCEDURES**	
G. Post-flight Procedures		A. Emergency Approach & Landing (sim)	
IV. AIRPORT & TRAFFIC PATTERN OPS		B. System & Equipment Malfunction	
A. Radio Comm & ATC Light Signals		C. POH Bold Face Knowledge	
B. Surface & Traffic Pattern Operations		D. Emergency Descent	
C. Airport & Runway Markings & Lighting		**XII. APPROACHES & LANDINGS**	
V. TAKEOFF & CLIMBS		A. Normal Approaches and Landings	
A. Normal Takeoff & Climb		B. X-wind Approaches and Landings	
B. Crosswind Takeoff & Climb		C. Forward Slips to Landing	
C. Short-field Takeoff & Climb		D. Go-around	
D. Soft-field Takeoff & Climb		E. Short-field Approach & Landing	
VI. CROSS COUNTRY FLYING		F. Soft-field Approach & Landing	
A. Pilotage & Dead Reckoning		**XIII. SAFETY AWARENESS**	
B. Radio Navigation		A. Clearing Turns	
C. Diversion		B. Vigilance & Risk Management & Judgment	
D. Lost Procedures		C. Fuel Management	

(Continue on reverse)

XIV. INSTRUMENT PROFICIENCY		F. Determine Weight & Balance	
A. Ground Prep (WX, AC systems, Flt Plan)		G. Normal & Crosswind Takeoffs	
B. Air Traffic Procedures		H. Normal Climb	
C. Compliance with ATC Clearances		I. Maximum Performance Takeoff & Climb	
D. Holding Procedures		J. Flight at Critically Slow Airspeed	
E. Flight By Reference to Instruments		K. Emergency Procedures	
F. Recovery from Unusual Attitudes		(1) System & Equipment Malfunctions	
G. Intercept & Tracking (VOR & NDB)		(2) One-engine Operation	
H. Instrument Approach Procedures		(3) Engine Failure/Takeoff Below VMC	
ILS/MLS Approach		(4) Engine Failure/After Liftoff	
VOR/VORTAC Approach		(5) Engine Failure/En Route	
NDB Approach		(6) Engine Out Maneuvering	
Circling Approach		(7) Approach & Landing	
Missed Approach		(8) Minimum Controllable A/S Demo	
XV. MULT-ENGINE PROCEDURES		(9) Instrument Flight Procedures	
A. Airplane Systems and Operation		(a) Single-engine Non-prec Approach	
B. Use of Minimum Equipment List		(b) Single-engine Non-prec Approach	
C. Determine Takeoff Performance		(c) Single-engine Circling Maneuver	
D. Determine Cruise Performance		(10) Normal & Xwind Approach/Landing	
E. Determine Landing Performance		(11) Go-around	

REVIEW OF CERTIFICATES AND DOCUMENTS (VERIFIED BY CHECK PILOT)
FAA Pilot Certificate No: _____ FCC Radio Telephone Permit Date (If Applicable):_____
FAA _____Class Medical, Issue Date:_____ FAA BFR DATE:_____

I certify that I have read and understand all applicable FAA, CAP, and state regulations pertaining to flying subject aircraft. I acknowledge any restrictions or training requirements stated above. I also understand that maintaining currency, recurring requirements, and compliance with applicable directives is my personal responsibility.

DATE	MEMBER'S NAME & GRADE (Print or Type)	MEMBER'S SIGNATURE

I certify that I have administered a CAP flight check as indicated and that the below named CAP member:

(Evaluator initial blanks)

_____ Has a current CAPR 60-1 and is aware of the Statement of Understanding requirements.
_____ Has demonstrated proficiency required to fly the indicated aircraft.
_____ Has demonstrated proficiency required to be a cadet orientation pilot
_____ Has demonstrated instrument proficiency.
_____ Is not qualified. Requires additional training and recheck.

COMMENTS (For annual standardization evaluation: List all aircraft the member is qualified to fly):

DATE:	FLIGHT TIME:	EVALUATOR'S NAME & CERT NO:	EVALUATOR'S SIGNATURE:

NAME & GRADE OF UNIT OPERATIONS OFFICER:	SIGNATURE:	DATE:

CAP PAYMENT/REIMBURSEMENT DOCUMENT FOR
AVIATION/AUTOMOTIVE/MISCELLANEOUS EXPENSES

FOR CAP-USAF USE ONLY

PRINTED/TYPED NAME, OFFICE SYMBOL, SIGNATURE, DATE REVIEWED

1. Mission Number: | Start Date (dd/mmm/yy): | Stop Date (dd/mmm/yy):

2. Type Mission: ☐ SAR/DR ☐ EVAL/TRNG ☐ CD ☐ HLS ☐ OTHER _____

3. Claimant (Wing/Member):

4A. Mailing Address: Check here if new address ☐

4B. Phone Number:

5. Invoice (Refer to Instructions): ☐ FINAL ☐ PARTIAL

Estimate Outstanding: $

A. DATE (dd/mmm/yy)	B. TYPE ACFT OR VEH MAKE/MODEL	C. ACFT HP	D. ACFT ID/VEH LICENSE	E. ACFT/VEH OWNER		F. HOURS FLOWN/ NO. MILES	G. HOURLY RATE ACFT MINOR MX	H. ACFT COST CLAIMED	I. FUEL AND OIL COST CLAIMED	J. ADMIN (IF APPLICABLE)	K. COMM/ OTHER COST CLAIMED	L. SUB TOTAL CLAIMED
				Corp	Mbr							
TOTAL CLAIMED BY CATEGORY								6. ACFT COST	7. FUEL/OIL	8. ADMIN	9. OTHER	10. TOTAL

11. CERTIFICATIONS. The parties signing in Blocks 11A and 11B are responsible for the accuracy and validity of the facts recited in the claims and supporting documentation. The parties shall not claim costs on the CAPF 108 if expenses are being reimbursed from another source. Dual compensation is prohibited.

A. CAP MEMBER (PRINTED/TYPED NAME): I CERTIFY THAT THE AMOUNTS PAID WERE FOR PARTICIPATION IN THE LISTED USAF AUTHORIZED MISSION AND ACCURATELY REFLECT HOURS FLOWN, AUTOMOTIVE FUEL/OIL USED, AND/OR OTHER MISCELLANEOUS COSTS INCURRED.

SIGNATURE AND DATE

B. WING COMMANDER OR DESIGNATED OFFICIAL (PRINTED/TYPED NAME): I CERTIFY THE ABOVE EXPENSES ARE A DIRECT RESULT OF SUPPORT/PARTICIPATION IN THE ABOVE LISTED USAF AUTHORIZED MISSION AND THAT THIS CLAIM IS TRUE AND PROPER FOR PAYMENT.

SIGNATURE AND DATE

C. CONTRACT/COOPERATIVE AGREEMENT NUMBER:
F41689-00-2-0001

D. OTHER FUNDING SOURCE:

CIVIL PENALTY FOR PRESENTING FRAUDULENT CLAIM.
"THE CLAIMANT SHALL FORFEIT AND PAY TO THE UNITED STATES THE SUM OF FIVE TO TEN THOUSAND DOLLARS PLUS THREE TIMES THE AMOUNT OF DAMAGES SUSTAINED BY THE UNITED STATES." (SEE 31 U.S.C. 3729) (APPLICABLE TO ALL SIGNATORIES)

CRIMINAL PENALTY FOR PRESENTING FRAUDULENT CLAIM.
"FINE OF NOT MORE THAN TEN THOUSAND DOLLARS OR NOT MORE THAN FIVE YEARS IN PRISON OR BOTH." (SEE 18 U.S.C. 287)
(APPLICABLE TO ALL SIGNATORIES)

INSTRUCTIONS FOR COMPLETING THE CAPF 108
(Applicable to all personnel/units submitting reimbursement/payment claims)

- All pilots flying on USAF authorized reimbursable missions MUST SUBMIT a CAPF 108 to the wing showing aircraft flown, ownership, and flying time (blocks 5A-K) even if no individual claim for reimbursement is made. This information is required for statistical purposes.
- Members must submit original CAPF 108 and appropriate receipts to the wing not later than 30 days after the close of the mission (60-day adjustment period).
- Wings must prepare a consolidated mission CAPF 108 and include corporate aircraft expenses.

BLOCK 1. Enter mission number and mission inclusive dates. Add sequential alpha character to adjustment claims.
BLOCK 2. Check the appropriate block for the type mission, one block only!
If "Other," describe.
BLOCK 3. Enter member name (or wing name on the consolidated 108).
BLOCKS 4A & 4B. Enter appropriate mailing address/phone number for entry in block 3.
BLOCK 5. Check the appropriate block to identify if this is a partial or the final claim for the mission (block 1). If there are more claims, enter the estimated dollar amount required for the closure of the mission. NOTE: A separate line entry must be made for each aircraft/vehicle unitized.
BLOCK 5A. Enter date expense incurred (as shown on receipt).
BLOCK 5B. Enter the type of aircraft or vehicle make and model.
BLOCK 5C. Enter aircraft horsepower (hp).
BLOCK 5D. Enter the aircraft registry number or vehicle license plate number corresponding to 5B.
BLOCK 5E. Check appropriate block to identify entry in 5B.
BLOCK 5F. Enter aircraft hours (hobbs) flown or number of miles driven for entry in 5B.
BLOCK 5G. Enter the hourly aircraft minor maintenance rate for aircraft type entered in 5B. Reference current rates published in CAPR 173-3.
BLOCK 5H. Multiply the entry in 5F by 5G and enter the result.
BLOCK 5I. Enter the amount claimed for the entry in 5B and attach original receipt(s).
BLOCK 5J. For consolidated CAPFs 108, the wing calculates the amount claimed for administration for missions so authorized (CD, INS, etc.). Add block 5H and 5I. Multiply the result by 15% and enter the result in Block 5J. This calculation is based on corporate and member owned aircraft and no other items.
BLOCK 5K. Enter amounts claimed for communications cost, aircraft oxygen service, authorized TDY expenses, etc., and attach original receipts.
BLOCK 5L. Enter the sum of 5H through 5K as appropriate.
BLOCK 6. Enter the total of column H.
BLOCK 7. Enter the total of column I.
BLOCK 8. Enter the total of column J.
BLOCK 9. Enter the total of column K.
BLOCK 10. Enter the total of entries in blocks 6 through 9 OR total of column 5L (both should be equal).
BLOCKS 11A AND 11B. Read, print/type name, sign and date the appropriate block.
BLOCK 11C Contract/Cooperative Agreement number is F41689-00-2-0001.
BLOCK 11D List other funding source, when not funded by the Air Force Cooperative Agreement.

Cap Aircraft Inspection Checklist

Wing:_____ Date/Tach Time Last 50-Hour Insp/Oil Change:_____
Tail #: _____ Date/Tach Time @ Last 100-Hour Insp: _____
Make/Model/Year: _____ Date/Tach Time @ Last Annual Insp: _____
Tach Time: _____

Inspection Item (Installed/Serviceable/Current ⇒)	Y	N	Remarks / Discrepancy
1. Aircraft Records			
A. Aircraft Logbooks- 50-Hour Insp/Oil Change, 100-Hour Insp, Annual Insp, & Airworthy Directives (AD) Compliance Listing Current (Ref: FAR 91.417)			
B. Equipment List (CAPF 37) Matches Equipment Installed			
C. Instrument Requirements			
1) Altimeter System Current – Entry in Logbook (24 Mo. Ref: FAR 91.411)			
2) Pitot / Static System Current – Entry in Logbook (24 Mo. Ref: FAR 91.411)			
3) Transponder Current – Entry in Logbook (24 Mo. Ref: FAR 91.413)			
4) VOR Operational Check – IFR Only (30 Days Ref: FAR 91.171)			
5) ELT Battery Current – Entry in Logbook (Ref: FAR 91.207)			
2. Aircraft Interior			
A. Obvious Defects, Leaks, Corrosion, Cleanliness, and Condition of Interior			
B. "Not for Hire" Placard Displayed (Ref: CAPR 66-1)			
C. "Max Crosswind" Placard Displayed (Ref: CAPR 66-1)			
D. "Cessna Seat Slippage Warning" Placard Displayed (CAPR 66-1)			
E. Operating Limits / Placards (Ref: FAR 91.9)			
F. Avionics and Control Locks Installed (Ref: CAPR 66-1)			
G. Serviceable Fire Extinguisher Installed (Ref: CAPR 66-1)			
H. Shoulder Harnesses Installed (Ref: FAR 91.205)			
I. Carbon Monoxide Detector – Serviceability, Expiration Date (CAPR 66-1)			
J. Cessna Seat Rails for Cracks & Wear (Ref: AD 87-20-03, Rev 2)			
K. Secondary Seat Stop Installed (All Cessna Aircraft, Excluding 172R)			
L. Cargo Tie-Down Or Net Installed (Ref: FAR 91.525)			
M. Required Documents in Aircraft A-R-O-W			
1) Airworthiness Certificate (Ref: FAR 91.203)			
2) Registration (Ref: FAR 91.203)			
3) Operating Handbook (Ref: FAR 91.9)			
4) Weight & Balance Data (Ref: Acft Flight Manual / POH)			
N. Survival Kit. (Ref CAPR 66-1)			
3. Aircraft Exterior			
A. Aircraft Properly Chocked, Tied Down, and Condition of Ropes			
B. Obvious Defects, Leaks, Corrosion, Cleanliness, and Condition of Paint			
C. Condition of Prop – Nicks, Dents, Leaks, Corrosion, Evidence of Prop Strike			
D. External Aircraft Identification Plate (Ref: FAR 45.11)			
E. CAP Seal Installed on Vertical Stabilizer			
F. Brakes for Leaks, Wear, and Obvious Defects (Ref: Acft Service Manual)			
G. Tires for Proper Air Pressure and Serviceability (Ref: Acft Service Manual)			
H. Engine Cowling for Proper Fit And Contour / Fasteners Serviceable and Secure			
I. Cessna Door Hinge Pins Installed			
4. Exterior And Interior Lighting For Proper Operation			
A. Interior Overhead (Flood/Dome)			
B. Landing / Taxi / Pulselite			
C. Anti-Collision Strobe (Ref: FAR 91.209)			
D. Navigation / Position (Ref: FAR 91.209)			
E. Flashing Beacon			
F. Instrument			
Name Of Inspector:		**Date:**	

PART I **RELEASE ***
(For Non-CAP Members)

KNOW ALL MEN BY THESE PRESENTS: WHEREBY I, _____ am about to take a flight or flights in certain Civil Air Patrol/United States of America instrumentality aircraft on or about _____ and whereas I am doing so entirely upon my own initiative, risk, and responsibility; now, therefore, in consideration of the permission extended to me by the Civil Air Patrol/United States of America through its officers and agents to take said flight or flights, I do hereby for myself, my heirs, executors, and administrators release and forever discharge the Civil Air Patrol , Inc./United States of America, and all its officers, agents, and employees acting official or otherwise, from any and all claims, demands, actions, or causes of action, on account of my death or on account of any injury to me or my property which may occur as a result of the negligence of the Civil Air Patrol/United States of America, its agents or employees during said flight or flights or continuances thereof, as well as all ground and flight operations incident thereto.

DATE _____ _____
(SIGNATURE OF RELEASOR)

_____ _____
(SIGNATURE OF WITNESS) (NAME OF PERSON TO BE NOTIFIED IN EMERGENCY)

_____ _____
(SIGNATURE OF WITNESS) (ADDRESS OF PERSON TO BE NOTIFIED IN EMERGENCY)

PART II **RELEASE ***
(For Parents of Minors)

KNOW ALL MEN BY THESE PRESENTS: WHEREBY my child(ren), _____ is (are) about to take a flight or flights in certain Civil Air Patrol/United States of America instrumentality aircraft on or about _____ and whereas am doing so entirely upon my own initiative, risk, and responsibility; and with full knowledge and approval; now, therefore, in consideration of the permission extended to my child(ren) by the Civil Air Patrol/United States of America through its officers and agents to take said flight or flights, I do hereby for myself, my heirs, executors, and administrators release and forever discharge the Civil Air Patrol, Inc./United States of America, and all its officers, agents, and employees acting official or otherwise, from any and all claims, demands, actions, or causes of action, on account of the death or on account of any injury to my child(ren) or my property which may occur as a result of the negligence of the Civil Air Patrol/United States of America, its agents or employees during said flight or flights or continuances thereof, as well as all ground and flight operations incident thereto.

DATE _____ _____
(SIGNATURE OF PARENT/GUARDIAN) **

_____ _____
(SIGNATURE OF WITNESS) (SIGNATURE OF PARENT/GUARDIAN) **

_____
(SIGNATURE OF WITNESS)

* Complete appropriate part(s) of this form.
** All parents/guardians must sign.