CAPF 5 On-line Course
TEST https://tests.cap.af.mil/ops/tests/default.cfm?grp=dov
Ability to schedule a flight using the MN Wing Intranet-based scheduling system
Ability to access and properly report flight times in WMIRS
Ability to enter pilot qualifications into the National eServices Operations Qualifications

Oral Discussion

The oral can be completed within the 30-day period before the flight check. Normally this is due to a weather cancellation on the day of the flight evaluation, however, other circumstances may make it convenient to complete the oral early.

CAPF 5 Written Exam - In accordance with CAPR 60-1, Paragraph 3-5. g. states "**All CAP pilots shall satisfactorily accomplish the CAPF 5 written examination once per year as a part of their annual flight check**.

> (The written examination is not required on subsequent CAPF 5 flight checks, such as an initial aircraft check, if it has been satisfactorily completed during the preceding 12 months.)"

Therefore, **the examinee must present a completed and preferably graded CAPF 5 written examination at the time of the evaluation.** Since this written test is a part of the annual flight check, it should be completed close to the date of the evaluation. **CAPR 60-1, Attachment 5, 1a(2) sets a 90 day limit for written exam completion prior to the evaluation**. The point of a yearly written examination in conjunction with the annual flight evaluation, is to ensure the examinee is familiar with the most current guidance. When CAPR 60-1 is changed, HQ CAP/DOV will include questions referring to the changes in the most current written examination. So without the most current guidance the examinee can not honestly pass the test.

There are a couple of ways the examinee can accomplish the written examination. The CAP Headquarters Standardization and Evaluation web site at **https://ntc.cap.af.mil/ops/dov/ allows the examinee to download the test and a current copy of CAPR 60-1. Or the examinee can use the on-line test located at the same site.** This test will be automatically graded. With successful completion of the on-line exam a certificate of completion will be supplied. The presentation of this certificate at the flight evaluation constitutes satisfactory performance on the CAPF 5 Written Exam item.

Review of CAPR 60-1 & Supplements - **Ask the examinee to produce his/her copy of CAPR 60-1.**

- Check to see the regulation is current.
- Have a few questions handy that would indicate familiarization with CAPR 60-1.
- **The examinee need not have the answer memorized, but should be capable of finding the answer in the regulation.**
- Check the examinee's knowledge of **current wing and/or region supplements to CAPR 60-1.** *These are particularly important documents for operating within the wing and/or region.*

Review of Flight Release Procedures - The examinee should know his/her responsibilities as a CAP pilot. CAPR 60-1, paragraph 4-9. b. spells out the responsibilities.

1) Furnish documentation and information requested to establish their qualifications to fly CAP aircraft. This information shall be placed in the individual pilot record maintained for each CAP pilot at his or her unit of assignment.

If the FRO needs documentation and information to establish qualification, it is the pilot's responsibility to provide it, regardless of the inconvenience.

2) Certify the eligibility of any proposed passenger to the FRO prior to obtaining a flight release. Again, the pilot must certify any and all passengers.

3) Obtain a flight release from a FRO prior to conducting any CAP flight activity. The pilot should know the value of a quality flight release. **Missions flown under a "B" mission symbol provide Federal Torts Claims Act (FTCA) protection and Federal Employment Compensation Act (FECA - workman's comp) coverage.** A flight completed with an incorrect or improper flight release risks losing that important personal protection.

4) Report total flight time, in accordance with local procedures. This is super important in the current CAP world. Our aircraft and the amount of support provide to us from Congress through the Air Force is contingent on accurate flight time reporting.

Review of CAPF 9 Requirements - Since we seldom have a requirement to use the CAPF 9, a thorough review of the requirements is appropriate. Current guidance on CAPF 9 is slim in CAP regulations. The form is designed to provide non-member adult passengers and parents of minor passengers a way to release CAP from liability.

When you do not need to use a CAPF 9:

- **When you are flying a CAP cadet**. The initial cadet membership process requires parents to sign a release of liability.
- **When you are flying a government official**, in accordance with a CAP approved Memorandum of Understanding (MOU). *An example would be a State Emergency Management official or a law enforcement official in accordance with an approved MOU.*

When you do require a CAPF 9:

- **When flying a non-member adult without an approved MOU**. An example would be a properly approved flight (all these type flights require wing commander or higher approval) carrying a reporter, government, industry or law enforcement official.
- **When flying a minor that is not a CAP member**. An example would be boy scouts, young eagles, etc. *Note these type of missions require CAP headquarters approval and are rarely approved.*

Local Procedures - Local procedures are important and could be written or unwritten. These could be part of official CAP supplements, local FAA procedures, local airport procedures, etc.

Preflight Preparation

Some of the items under Preflight Preparation can be completed during the oral while other items would be best evaluated at the aircraft.

Certificates & Documents - Ensure the examinee knows what documents are required to be in the aircraft.

Airworthiness Certificate
Registration
Operating limitations
Weight & Balance
The airworthiness and registration certificate should be clearly displayed.

Operating limitations could be contained in a pilot operating handbook, on cockpit placards, or a combination of both. Pay particular attention to aircraft that have received an engine upgrade, such as the 180hp conversion of our Cessna 172 aircraft. All of these conversions come with supplements to the original pilot operating handbook and those supplements contain revised operating limits that should be in the aircraft and available to the pilot in command. Ask the pilot to show you the revised operating limits.

Obtaining Weather Information - The examinee should be familiar and be able to obtain weather information from all weather service sources.

Determine Weight and Balance - The examinee should complete the weight and balance data as a part of the aircraft questionnaire and present the data at the time of the oral. Ensure the examinee is using the correct empty weight and can show the most current weight and balance document that fulfills the Certificates and Documents item.

Determine Takeoff Performance - The examinee should use the aircraft pilot operating handbook to compute takeoff data for the conditions at the time of the check ride.

Determine Cruise Performance - The examinee should use the aircraft pilot operating handbook to compute expected cruise performance for a specific altitude and power setting. Once airborne the examinee should demonstrate the ability to set the aircraft up for cruse flight using the pre-computed performance figures.

Determine Landing Performance - The examinee should use the aircraft pilot operating handbook to compute landing data for the conditions at the time of the check ride.

Cross-country Flight Planning - Prior to the actual flight the examinee should plan a short cross-country flight using a sectional chart. Ensure the examinee is familiar with airspace, **map symbols, and can plot a magnetic course. This is a great time to quiz the examinee on the different types of airspace and the requirements to operate in the airspace.**

Aircraft Systems - The examinee should be familiar with all aircraft systems. However, certain systems require more thorough knowledge. Ensure the examinee is thoroughly familiar with the components and operation of the **engine, flight control, and fuel systems. Effective operation of the communication and navigation systems should be evaluated during flight. If the aircraft has multiple communication and navigation systems, the examinee should be able to effectively operate every system.**

Aeromedical Facts Understanding - The understanding of aeromedical facts is probably an area that is under evaluated during most evaluations. However, aeromedical factors contribute to many of our accidents. Our pilot population is aging and with that comes special concerns. Ensure the examinee is familiar with all aeromedical facts, but particularly with aeromedical facts that directly effect the examinee due to personal physical limitations.

Aeromedical Factors

Medications
Pilot performance can be seriously degraded by both prescribed and over-the-counter medications, as well as the medical conditions for which they are taken. Many medications such as tranquilizers, sedatives, strong pain relievers, cough suppressant preparations, antihistamines, blood pressure drugs, muscle relaxants, agents to control diarrhea and motion sickness have side effects that may impair judgment, memory alertness, coordination, vision, and the ability to make calculations. Medications to especially watch are **antihistamines**. Many over-the-counter cold formulas and inhalers have antihistamines. A stuffy nose might just be a reason not to fly.

Alcohol
As little as 1 ounce of liquor, 1 bottle of beer, or 4 ounces of wine can impair flying skills, alcohol consumed in these small amounts is detectable on the breath and in the blood for 3 hours. Don't discount the hangover. Flying under the influence or with the effects of alcohol is stupid as well as illegal. Since a pilot may be under the influence 8 hours after drinking moderate amounts of alcohol, a good rule of thumb is "12 hours between the bottle and the throttle." This is obviously only a rule of thumb, heavy drinking might call for a 24-hour rest prior to flying. You have to be the judge.

Fatigue
The Aeronautical Manual (AIM) describes fatigue as either acute (short term) or chronic (long term). Acute fatigue occurs daily due to strenuous muscular effort, mental strain, etc. Adequate rest along with proper diet and exercise is the best prevention. Chronic fatigue occurs when one does not fully recover from acute fatigue. With chronic fatigue, judgment becomes impaired and recovery requires prolonged rest. Fatigue is an insidious killer. One may become fatigued slowly over a period of time and not be aware of his/her condition.

War Story: While flight instructing for the military, I taught night flying and the use of night vision goggles. I picked up my first student at 10 PM and my second around 2 AM. The first student always had a page of debriefing items; however the second was lucky to get a sentence of debriefing. Why? Because I was fatigued at 2 AM and I simply didn't care about the details. Sad thing is the details have killed a lot of people. If you're tired, rest up and fly another day.

Stress
Stress from everyday life can have a devastating effect on pilot performance. The fact is it's a rare person that can leave their difficulties on the ground. Stress like fatigue is insidious and when both are present, you are in an extremely dangerous situation.

Emotion
Severe emotionally upsetting events including family troubles, death of a family member, loss of a job, or financial troubles can affect your ability to fly safely. Give yourself some healing time before your next flight.

EFFECTS OF ALTITUDE

Hypoxia

Hypoxia is a state of oxygen deficiency in the body sufficient to impair functions of the brain and other organs. When you increase altitude, the level of oxygen remains the same as ground level; however, the pressure needed to get the oxygen into your lungs just isn't there. Therefore, at altitudes above 5,000 feet your night vision is impaired and above 12,000 feet of altitude you may start suffering the effects of hypoxia. Hypoxia causes problems with judgment, memory, alertness, coordination, and the ability to make calculations. Physical effects you might notice are headache, drowsiness, dizziness and most serious of all, a profound sense of well being or perhaps belligerence. As altitude is increased the period of time before the onset of symptoms is shortened.

5,000 feet	Night vision impairment.
12,000 to 15,000 feet	Hypoxic symptoms begin.
15,000 feet and above	Serious performance deteriorate within 15 minutes. Periphery vision narrows causing a tunnel vision effect. Fingernails and lips turn blue.
18,000 feet	Twenty to 30 minutes of useful consciousness. After the time period, the pilot will be unable to take corrective action.
20,000 feet	The pilot has 5 to 12 minutes until he/she is totally unconsciousness.

To prevent hypoxia above 10,000 feet during the day and 5,000 feet at night, pilots are encouraged to use supplemental oxygen. Federal Aviation Regulations (FARs) require that the flight crew use supplemental oxygen after 30 minutes of exposure to pressure altitudes between 12,500 and 14,000 feet. Above 15,000 feet, crew and passengers have to use supplemental oxygen.

Smoking and Carbon Monoxide

Hemoglobin in red blood cells transports oxygen to body tissue. Anything that adheres to hemoglobin takes up space on the cell and limits the amount of oxygen that gets to body tissue. Smoking deposits carbon monoxide on the hemoglobin and literally takes up space that should be carrying oxygen. If you smoke, realize your susceptibility to Hypoxia is heightened. A leaky exhaust system can certainly raise carbon monoxide levels in the cockpit to dangerous levels. **CAP Regulation 66-1, CAP Aircraft Maintenance Management, paragraph 11.g., requires all CAP corporate aircraft to have functioning carbon monoxide detectors. Ensure your examinee has a functioning detector and knows how to read the instrument.**

Ear Block

As the glider cockpit pressure decreases during ascent, the expanding air in the middle ear pushes the Eustachian tube open, allowing the air to escape down the nasal passages, equalizing the middle ear chamber pressure with the outside pressure. However, on descent

the pilot must periodically open the Eustachian tube to equalize pressure. This can be done by swallowing, yawning, tensing muscles in the throat or by doing the Valsalva Maneuver. The Valsalva Maneuver is done by closing your month, pinching your nose shut and attempting to blow through your nostrils. An ear block can produce severe pain and loss of hearing that can last for several hours. If an ear block does not clear shortly after landing, a physician should be consulted.

Sinus Block
A sinus block can produce the same excruciating pain as an ear block. Again, don't fly with a cold, sinusitis, or a nasal allergic condition.

Decompression Sickness After Scuba Diving
Pilots should allow their body to rid itself of excess nitrogen absorbed during diving. The recommended waiting time before going to flight altitudes of up to 8,000 feet is at least 12 hours after diving which has not required controlled ascent, and at least 24 hours after diving which has required controlled ascent. The waiting time for flights above 8,000 feet is 24 hours. Flying too soon after scuba diving could allow nitrogen gas bubbles to form around joints and muscles causing severe pain.

Hyperventilation in Flight
Hyperventilation is an abnormal increase in the volume of air breathed in and out of the lungs. This can occur during a stressful situation. During hyperventilation, the pilot blows off excessive carbon dioxide from his body. This can cause lightheadedness, suffocation, drowsiness, and tingling in the extremities. Incapacitation can result from disorientation and painful muscle spasms. A pilot can stop hyperventilation by breathing into a paper bag or simply recognizing the symptoms and making a conscious effort to slow down his/her breathing. Do you carry a paper bag, I don't. But singing works well also. Singing forces you to breath normally. It might not be audibly pleasant for your passengers, but you passing out might make them a little more uncomfortable.

Spatial Disorientation
Various complex motions and forces and certain visual scenes encountered in flight can create illusions of motion and position. **Spatial disorientation from these illusions can be prevented only by visual reference to reliable, fixed points on the ground or to flight instruments.** Spatial disorientation is mainly associated with flight in instrument conditions, but they can happen in visual flying conditions as well.

ILLUSIONS IN FLIGHT

Runway Width Illusion
A narrower-than-usual runway can create the illusion that the aircraft is at a higher altitude than it actually is. If you don't recognize this illusion, you may have a tendency to fly a low approach, risking a short landing. A wider-than-usual runway can have the opposite effect, with the risk of leveling out high or overshooting the runway. What is usual? Usual is what you are used to, so when you make your first landing at a new airfield, think about this illusion and deal with it.

Runway and Terrain Slopes Illusion
An up sloping runway, up sloping terrain, or both can create the illusion that the aircraft is at a higher altitude than it actually is. A low approach can result if the pilot allows this illusion to

convince him/her that the aircraft is high. A down-sloping runway will have the opposite effect causing the pilot to flare or round out too high.

Featureless Terrain Illusion
A pilot landing in a featureless area such as a dry lake bed or desert, will tend to fly a lower than normal approach, thinking he/she is to high.

Atmospheric Illusions
Rain on the canopy will give the illusion of greater height. Haze will give the illusion of being a greater distance from the runway.

VISION IN FLIGHT

Excessive Illumination
Light from the low sun levels, reflecting off the canopy or other surfaces can create a hazard when it obstructs other aircraft from you view. This is the perfect excuse to convince your significant other that a new pair of good sunglasses are needed. Sunglasses for protection from glare should absorb at least 85 percent of visible light (15 percent transmittance) and all colors equally (neutral transmittance), with negligible image distortion from refractive and prismatic errors. In other words, you need the good ones.

Scanning for Other Aircraft
Scanning is the key factor in collision avoidance. In order to scan, your eyes have to be looking out of the cockpit. We have more and more sophisticated equipment in our aircraft and each piece of electronic wizardry demands a certain amount of attention. It doesn't make a bit of difference if you are perfectly on course when you're on a collision course with a twin engine airplane.

While the eyes can observe an approximate 200 degree arc of the horizon at one glance, only a very small center area called the fovea, in the rear of the eye, has the ability to send a clear image to the brain. The rest of the area will be of less detail, in fact, an aircraft at a distance of 7 miles which appears in sharp focus within the center of vision would have to be as close as 7/10 of a mile in order to be recognized. Because of this physical limitation, one must scan a series of regularly spaced horizontal movements that bring successive areas of the sky into the central visual field. Break the scanning area up into 10-degree segments and stop and observe a few seconds at each area. When you stop to observe the area, look out and then back toward the aircraft. A successful scanning pattern is a very personal thing, and with practice, it will become a positive habit that will keep you safe as well as increase your flying enjoyment.

Empty-field Myopia is a condition that occurs when flying on hazy days. The haze provides nothing specific to focus on and this causes the eye to focus 10 to 30 feet in front of your aircraft. So while you are looking, you are not seeing. An effective scan will help you avoid Empty-field Myopia. Look out in front of the aircraft and focus on something on the ground, then raise your eyes up to and above the horizon. This will force your eyes to focus beyond the 10-to-30 foot distance.

JUDGMENT ASPECTS OF COLLISION AVOIDANCE

Determining Relative Altitude
Use the horizon as a reference point. If an approaching aircraft is above the horizon it is probably above you, if it is below the horizon it should be below you.

Taking Appropriate Action
Be familiar with the rules on right of way.

Collision Course Targets
Any aircraft that appears to have no relative motion and stays in one scan quadrant is likely to be on a collision course. If the target shows no lateral or vertical motion, but increases in size, **take immediate evasive action**.

Recognize High Hazard Areas
Airways, especially near navigation radio stations like a Very High Frequency Omnirange Station (VOR), and instrument approach courses at airports are areas to avoid. Knowing the locations of instrument approach courses at your local flying field and avoiding them is a must. Having a radio to monitor the common traffic advisory frequency (CTAF) is a must for aircraft operations and especially on an airport with different types of traffic. Take time to talk with the locals when first flying at a new field. Get the lay of the land and any particular traffic procedures for that field.

Cockpit Management
Preflight planning is the key to cockpit management. Organizing cockpit materials, studying your cross-country route, etc. prior to launch will allow more time out of the cockpit for scanning.

Canopy Conditions
Keep it clean. This is often overlooked; however, a dirty canopy or wind screen can greatly reduce a pilot's ability to avoid other aircraft.

Visibility Conditions
Be aware that smoke, haze, dust, rain and flying into the sun can greatly reduce your ability to avoid other aircraft.

Visual Obstructions in the Cockpit
Become aware of blind spots in different aircraft. Always move your head and look around potential blind spots. You may even need to drop or raise a wing or maneuver the aircraft to clear your flight path.

CAPR 66-1 Requirements

The examinee should know the required inspections and oil change intervals and be able to show inspection compliance in the aircraft maintenance records and/or Aircraft Information File.

Inspection Requirements

- **100 hour** - Even though CAP flies under FAR Part 91, the corporation elects to do 100 hour inspections. A ten percent (10 hours) over fly is authorized only to reach a designated place of inspection.
- **Annual Inspection** - Over fly is not authorized.
- **Pitot Static/Altimeter systems** - Inspection shall have been accomplished within the preceding 24 months.
- **Transponder** - Inspection shall have been accomplished within the preceding 24 months.
- **VOR** - Inspection shall meet the requirements of FAR Part 91, which includes a recorded operational check within the preceding 30 days.
- **ELT** - Inspection shall be accomplished within 12 calendar months after the last inspection.

Oil Changes

- **25 hour interval** - oil change and screen cleaning for all engines without oil filters.
- **40 to 60 hour interval** - oil change and filter replacement for all engines with oil filters.
- **Oil changes shall not exceed 4 calendar months** for both systems above.
- Engine break-in oil changes for new, overhauled, or rebuilt engines shall be in accordance with engine manufacturer's recommendations.

Aircraft Tie-Down

- Tie down ropes will be properly anchored and have a tensile strength of 3,000 pounds.
- Tie down chains shall not be used directly from aircraft mooring points to an anchor point because of excessive impact loads on wing spars. When chains are used they must be attached to a wire rope anchor.

Ground Operations

Visual Inspection - Ensure the examinee uses a checklist during the visual inspection. Failure to use a checklist could result in unsatisfactory performance in risk management, judgment and/or, visual inspection. This is also a good time to evaluate the examinees knowledge of aircraft systems, airworthiness directives and specific CAP equipment and inspection requirements. Go here for a list of CAPR 66-1, CAP Aircraft Management, items.

Cockpit Management - Preflight planning is the key to cockpit management. Organizing cockpit materials and studying the cross-country route, etc. prior to launch will ensure an efficient flight. Does the examinee have a cockpit plan? Are maps and other cockpit aids accessible and laid out in a manner that compliments the flight?

Starting Engines - Checklist usage is the key. Ensure the examinee uses the check list appropriately.

Taxiing - **From Oct 01 until Jul 02, 12 out of 30 CAP aircraft mishaps were directly related to taxi or improper ground handling.** The major contributing factor was improper attention to detail. Ensure the examinee is familiar with properly securing the aircraft in the hangar or tie down. What for impulsive behavior when ground handling the aircraft. A personality who is always in a rush is a ground handling accident waiting to happen. Ensure the examinee taxies at an appropriate speed, taxies only in designated areas and on the yellow line, is aware of wing tip clearance at all times. Ask the examinee what he/she would do if their wingtip clearance during taxi was questionable? Any answer other than shut down and look or deploying a wing walker is unacceptable. **Evaluate all ground operations closely, looking for behavior that may lead to a mishap.**

Pre-Takeoff Check - Checklist usage is essential. Look for appropriate use of the checklist. This is the examinee's last chance to find a problem prior to launch.

Take-off Briefing - A thorough, but concise, take-off briefing is essential. This a short term plan. The examinee should communicate his/her intentions during the takeoff phase of the flight. Duties can be assigned (Example: Co-pilot please check our engine instruments in the normal range and call out "good engine" during our takeoff run). The most important part of the briefing is a short term emergency plan that should include the best engine out glide speed, possible force landing areas off the takeoff runway, and control transfer during an emergency. The briefing should be concise and to the point taking only a minute or so.

Post-flight Procedures - An often over looked procedure. Post-flight procedures include the shut down checklist, properly securing the aircraft in accordance with CAP and local directives, and a last look at the overall aircraft. While not as extensive as a pre-flight inspection, ensure the examinee performs some type of post flight inspection.

Airport & Traffic Pattern Operations

Radio Comm & ATC Light Signals - Ensure the examinee uses proper radio procedure and phraseology in accordance with the Aeronautical Information Manual (AIM). Review the AIM radio procedures for non-towered airports here.

Communication/Broadcast Procedures

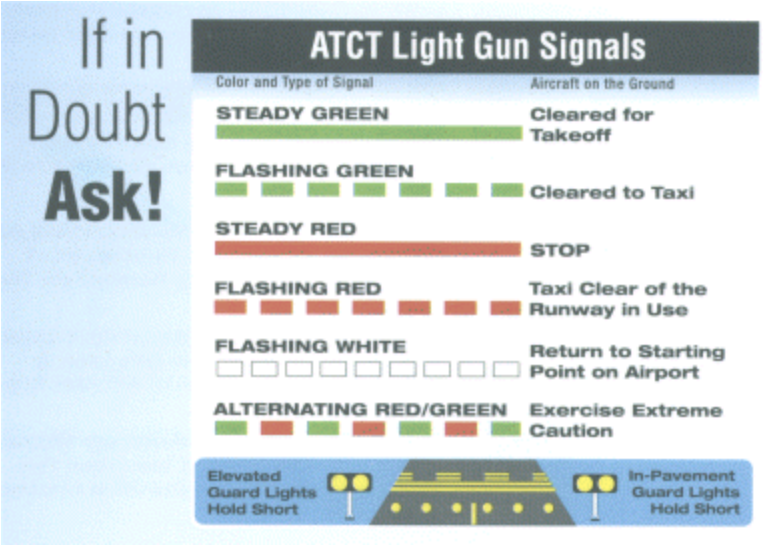
Facility at Airport	Frequency Use	Outbound	Inbound	Practice Instrument Approach
UNICOM (No tower or FSS)	Communicate with UNICOM station on published CTAF.	Before taxi and before taxiing onto the runway.	10 miles out. Entering downwind. Base. Final. Leaving the runway.	Departing final approach fix (name) or on final approach segment inbound.*
No tower, FSS, or UNICOM	Self-announce on MULTICOM frequency 122.9.	Before taxi and before taxiing onto the runway.	10 miles out. Entering downwind. Base. Final. Leaving the runway.	Departing final approach fix (name) or on final approach segment inbound.
No tower in operation, FSS open.	Communicate with FSS on CTAF frequency.	Before taxi and before taxiing onto the runway.	10 miles out. Entering downwind. Base. Final. Leaving the runway.	Departing final approach fix (name) or on final approach segment inbound.* Approach completed / terminated.
FSS Closed or tower or FSS not in operation.	Self-announce on CTAF.	Before taxi and before taxiing onto the runway.	10 miles out. Entering downwind. Base. Final. Leaving the runway.	Departing final approach fix (name) or on final approach segment inbound.*
*This table has additional requirements to the AIM in the interest of safety.				

Ensure the examinee follows the ATC/Flightcrew communication guidelines of ***AC 91-73, Part 91 Pilot and Flightcrew Procedures During Taxi Operations, dated 6/18/01.***

- Check to see if the examinee follows "sterile" cockpit procedures until clear the terminal area. The examinee should focus on his/her duties without being distracted by non-flight related matters such as non-essential conversation, etc.
- The examinee should use standard ATC phraseology at all times in order to facilitate clear and concise ATC/flightcrew communications.
- The examinee should focus on what ATC is instructing, without performing non-essential tasks while communicating with ATC.
- The examinee should readback all hold short and runway crossing instructions and clearances, including runway designors.
- The examinee should readback all takeoff and landing clearances, including runway designors.
- The examinee should clarify any misunderstanding or confusion concerning ATC

instructions or clearances to the satisfaction of all flight crewmembers.

Ensure the examinee knows the ATC Light Gun Signals below:



Surface and Traffic Pattern Operation - The FAA has put a tremendous amount of emphasis on surface operations. Ensure the examinee has a plan for his/her taxi operation and can anticipate airport surface movements by using Automatic Terminal Information Service (ATIS) and/or previous experience at the airport.

Ensure the examinee briefs his/her taxi plan or reviews the plan prior to taxi.

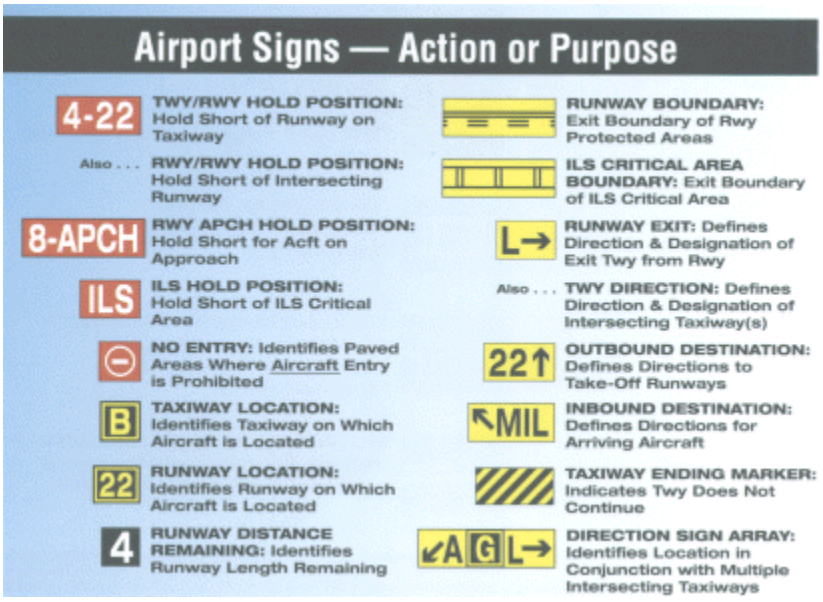
Ensure the examinee concentrates on the task at hand (taxi). Check lists and crew briefings should be held until the aircraft is stopped.

The examinee should demonstrate good **situational awareness** by always being aware of his/her situation as it relates to other aircraft and vehicle operations going on around them.

- The examinee should also know his/her aircraft's exact location on the movement area.
- If the examinee is unfamiliar ensure he/she uses an airfield diagram.
- Ensure the examinee clears the entire length of the runway in both directions prior to crossing the hold short line of a crossing runway.
- The examinee should be especially vigilant when instructed to taxi into position and hold, particularly at night or during periods of reduced visibility.
- Ensure the examinee uses extreme caution when directed to use a runway as a taxiway.
- Ensure the examinee clears the runway upon landing before engaging in nonessential communications and nonessential flight crew actions.

Airport & Runway Markings & Lighting

Ensure the examinee is familiar with the airport signs and markings below:


Airport Signs — Action or Purpose
4-22
TWY/RWY HOLD POSITION: Hold Short of Runway on Taxiway
Also . . .
RWY/RWY HOLD POSITION: Hold Short of Intersecting Runway
8-APCH
RWY APCH HOLD POSITION: Hold Short for Acft on Approach
ILS
ILS HOLD POSITION: Hold Short of ILS Critical Area
NO ENTRY: Identifies Paved Areas Where Aircraft Entry is Prohibited
B
TAXIWAY LOCATION: Identifies Taxiway on Which Aircraft is Located
22
RUNWAY LOCATION: Identifies Runway on Which Aircraft is Located
4
RUNWAY DISTANCE REMAINING: Identifies Runway Length Remaining
RUNWAY BOUNDARY: Exit Boundary of Rwy Protected Areas
ILS CRITICAL AREA BOUNDARY: Exit Boundary of ILS Critical Area
L
RUNWAY EXIT: Defines Direction & Designation of Exit Twy from Rwy
Also . . .
TWY DIRECTION: Defines Direction & Designation of Intersecting Taxiway(s)
22
OUTBOUND DESTINATION: Defines Directions to Take-Off Runways
MIL
INBOUND DESTINATION: Defines Directions for Arriving Aircraft
TAXIWAY ENDING MARKER: Indicates Twy Does Not Continue
AGL
DIRECTION SIGN ARRAY: Identifies Location in Conjunction with Multiple Intersecting Taxiways

Airport Markings

HOLDING POSITION: Hold Short of Intersecting Rwy Also Land and Hold Short Marking

ILS CRITICAL AREA: Hold Short During IMC Conditions

TAXIWAY/TAXIWAY HOLDING POSITION: Hold Short of Intersecting Taxiway When Directed by ATC

MOVEMENT AREA BOUNDARY: Defines Boundary of Movement Area and Non-Movement Area

TAXIWAY EDGE: Defines Edge of Usable Full Strength Taxiway Pavement. Adjoining Pavement NOT Usable

DASHED TAXIWAY EDGE: Defines Edge Taxiway Where Adjoining Pavement or Apron IS Available for Taxi

SURFACE PAINTED HOLDING POSITION: Hold Short of Intersecting Runway on Twy

SURFACE PAINTED TAXIWAY DIRECTION: Direction & Designation of Intersecting Twy

SURFACE PAINTED TAXIWAY LOCATION: Identifies Twy on Which Aircraft is Located

Takeoff & Climb

Normal and Crosswind Takeoff - Ensure the examinee performs a before takeoff check. During the check the examinee should exhibit the following:

- Exhibit knowledge of the elements related to the before takeoff check. This shall include **reasons for checking each item and how to detect malfunctions**. Ask the examinee to explain the significance and probable cause of items like excessive magneto drop, low vacuum pressure, etc.
- **Positions the airplane properly considering other aircraft, wind and surface conditions**. Being a good neighbor during the run-up is important. Look for the examinee to be considerate of the environment around him/her.
- The examinee should divide his/her attention inside and outside of the cockpit.
- **Ensure that engine temperature and pressure are suitable for run-up and takeoff**.
- The examinee **should physically refer to the printed checklist** while determining the aircraft is in safe operating condition.
- **The examinee should review takeoff performance airspeeds, takeoff distances, departure, and emergency procedures**.
- Expect to be briefed on a specific emergency plan for the takeoff at hand.
- **The examinee must avoid runway incursions and/or ensure no conflict with traffic prior to taxiing into takeoff position on the takeoff runway**. An examinee caused incursion or conflict should result in checkride failure and immediate termination of the flight evaluation.

When ready for takeoff the examinee should:

- Clear the area while taxiing into takeoff position and properly aligning the aircraft on the runway center/takeoff path.
- Position the flight controls for the existing wind condition.
- Advance the throttle smoothly to takeoff power.
- Lift off at the recommended airpseed and accelerates to V_Y.
- Establish a pitch attitude that will maintain V_Y +10/-5 knots.
- Retract landing gear, if appropriate, and flaps after a positive rate of climb is established.
- Maintain takeoff power and V_Y +10/-5 knots to a safe maneuvering altitude.
- Maintains directional control and proper wind-drift correction throughout the takeoff and climb.
- Complies with noise abatement procedures. (If appropiate)
- Completes the appropriate checklist.

Short-field Takeoff & Climb - During the check the examinee should exhibit the following:

- Exhibits knowledge of the elements related to a short-field (confined area ASES) takeoff and maximum performance climb.
- Positions the flight controls for the existing wind conditions; sets the flaps as recommended.
- Clears the area; taxies into takeoff position utilizing maximum available takeoff area and aligns the airplane on the runway center/takeoff path.
- Selects an appropriate take off path for the existing conditions (ASES).

- Applies brakes (if appropriate), while advancing the throttle smoothly to takeoff power.
- Establishes and maintains the most efficient planing/lift-off attitude and corrects for porpoising and skipping (ASES).
- Lifts off at the recommended airspeed, and accelerates to the recommended obstacle clearance airspeed or Vx.
- Establishes a pitch attitude that will maintain the recommended obstacle clearance airspeed, or Vx, +10/-5 knots, until the obstacle is cleared, or until the airplane is 50 feet (20 meters) above the surface.
- After clearing the obstacle, establishes the pitch attitude for Vy , accelerates to Vy , and maintains Vy , +10/-5 knots, during the climb.
- Retracts the landing gear, if appropriate, and flaps after clear of any obstacles or as recommended by manufacturer.
- Maintains takeoff power and V Y +10/-5 to a safe maneuvering altitude.
- Maintains directional control and proper wind-drift correction throughout the takeoff and climb.
- Completes the appropriate checklist.

Soft-field Takeoff & Climb - During the check the examinee should exhibit the following:

- Knowledge of the elements related to a soft-field takeoff and climb.
- Positions the flight controls for existing wind conditions and to maximize lift as quickly as possible.
- Clears the area; taxies onto the takeoff surface at a speed consistent with safety without stopping while advancing the throttle smoothly to takeoff power.
- Establishes and maintains a pitch attitude that will transfer the weight of the airplane from the wheels to the wings as rapidly as possible.
- Lifts off at the lowest possible airspeed and remains in ground effect while accelerating to Vx or Vy , as appropriate.
- Establishes a pitch attitude for V X or V Y , as appropriate, and maintains selected airspeed +10/-5 knots, during the climb.
- Retracts the landing gear, if appropriate, and flaps after clear of any obstacles or as recommended by the manufacturer.
- Maintains takeoff power and V X or V Y +10/-5 knots to a safe maneuvering altitude.
- Maintains directional control and proper wind-drift correction throughout the takeoff and climb.
- Completes the appropriate checklist.

Cross-Country Flying

While one might think evaluating cross-country flying can be done verbally or not at all, our pilot's continue to experience fuel exhaustion at an alarming rate. This trend points squarely to poor or nonexistence flight planning and insufficient cross-country execution.

Pilotage & Dead Reckoning - Ensure the examinee performs a before takeoff check. During the check the examinee should exhibit the following:

- Exhibits knowledge of the elements related to pilotage and dead reckoning.
- Follows the preplanned course by reference to landmarks.
- Identifies landmarks by relating surface features to chart symbols.
- Navigates by means of precomputed headings, groundspeeds, and elapsed time.
- Corrects for and records the differences between preflight groundspeed and heading calculations and those determined en-route.
- Verifies the airplane's position within three (3) nautical miles of the flight-planned route.
- Arrives at the en route checkpoints within five (5) minutes of the initial or revised ETA and provides a destination estimate.
- Maintains the appropriate altitude, ±200 feet (60 meters) and headings, ±15°.

Radio Navigation - During the check the examinee should exhibit the following:

- Exhibits knowledge of the elements related to navigation systems and radar services. Demonstrates the ability to use an airborne electronic navigation system.
- Locates the airplane's position using the navigation system.
- Intercepts and tracks a given course, radial or bearing, as appropriate.
- Recognizes and describes the indication of station passage, if appropriate.
- Recognizes signal loss and takes appropriate action.
- Uses proper communication procedures when utilizing radar services.
- Maintains the appropriate altitude, ±200 feet (60 meters) and headings ±15°.

Diversion - During the check the examinee should exhibit the following:

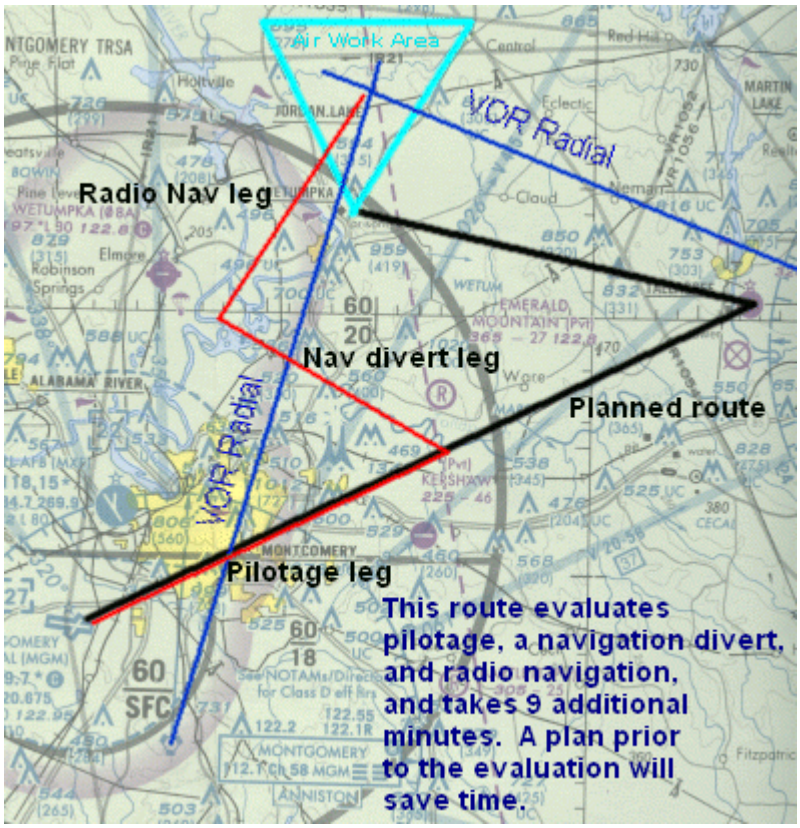
- Exhibits knowledge of the elements related to diversion.
- Selects an appropriate alternate airport and route.
- Makes an accurate estimate of heading, groundspeed, arrival time, and fuel consumption to the alternate airport.
- Maintains the appropriate altitude, ±200 feet (60 meters) and heading, ±15°.

Lost Procedures - During the check the examinee should exhibit the following:

- Exhibits knowledge of the elements related to lost procedures.
- Selects an appropriate course of action.
- Maintains an appropriate heading and climbs, if necessary.
- Identifies prominent landmarks.
- Uses navigation systems/facilities and/or contacts an ATC facility for assistance, as appropriate.

Check ride suggestion. Have the examinee plan a short cross-country to the area you will be doing your air work in. The course should not go straight from departure airport to the air work area, rather have the examinee go to a turn point enroute. Once the examinee gets to the first turn point using pilotage, introduce a diversion to another airfield. After the examinee demonstrates his/her ability to deal effectively with the divert ask the examinee to now navigate to the air work area using radio navigation (VOR, GPS, LORAN, etc.). The examinee should be able to use each type of radio navigation enroute to the air work area. Enroute to the air work area verbally evaluate the examinee on lost procedures. If properly planned and executed this portion of the evaluation should take no more than an additional 10 minutes of flying time.

The route below has the check pilot assigning (prior to the evaluation) the examinee the task of planning a cross-country to the air work area via the Tallasee, AL airport. Once the examinee departs Montgomery's Dannelly field and demonstrates his/her ability to use pilotage with only the sectional chart, a navigation divert to Wetumpka airport is given. With the navigation divert successfully handled the examinee is asked to use radio navigation to proceed to the air work area.



Instrument Reference Maneuvers

Straight-And-Level Flight - The examinee should be able to complete the following tasks.

- Maintain straight-and-level flight solely by reference to instruments using proper instrument cross-check and interpretation, and coordinated control application.
- Maintain altitude, ±200 feet; heading, ±20°; and airspeed, ±10 knots.

CONSTANT AIRSPEED CLIMBS - The examinee should be able to complete the following tasks.

- Establish the climb configuration specified by the Check Pilot.
- Transition to the climb pitch attitude and power setting on an assigned heading using proper instrument cross-check and interpretation, and coordinated control application.
- Demonstrate climbs solely by reference to instruments at a constant airspeed to specific altitudes in straight flight and turns.
- Level off at the assigned altitude and maintain that altitude, ±200 feet; maintain heading, ±20°; maintain airspeed, ±10 knots.

Constant Airspeed Descents - The examinee should be able to complete the following tasks.

Establish the descent configuration specified by the examiner.

Transition to the descent pitch attitude and power setting on an assigned heading using proper instrument cross-check and interpretation, and coordinated control application.

Demonstrate descents solely by reference to instruments at a constant airspeed to specific altitudes in straight flight and turns.

Level off at the assigned altitude and maintain that altitude, ±200 feet; maintain heading, ±20°; maintain airspeed, ±10 knots.

Turns To Headings - The examinee should be able to complete the following tasks.

Transition to the level-turn attitude using proper instrument crosscheck and interpretation, and coordinated control application.

Demonstrate turns to headings solely by reference to instruments; maintain altitude, ±200 feet ; maintain a standard rate turn and rolls out on the assigned heading, ± 10°; maintain airspeed, ±10 knots.

Recovery From Unusual Flight Attitudes - The examinee should be able to complete the following task.

Recognize unusual flight attitudes solely by reference to instruments; recover promptly to a stabilized level flight attitude using proper instrument cross-check and interpretation and smooth, coordinated control application in the correct sequence.

Flight at Critically Slow Airspeed

The examinee should exhibit knowledge of the elements related to maneuvering during slow flight as follows:

- **Ask the examinee to select an entry altitude that will allow the task to be completed no lower than 1,500 feet AGL.**
- **The examinee should establish and maintain an airspeed at which any further increase in angle of attack, increase in load factor, or reduction in power, would result in an immediate stall. (This is the definition of slow flight). Bottom line, the stall warning indicator (horn, light or both) should be on continually during this maneuver.**
- **Have the examinee accomplish coordinated straight-and-level flight, turns, climbs, and descents with different landing gear and flap configurations.**
- **The examinee should know his/her location at all time and adequately divide his/her attention between airplane control and orientation.**
- **During the maneuver the examinee must maintain the standards listed below:**

Private Pilot Standards			
Specified Altitude	**Specified Heading**	**Airspeed**	**Specified Angle of Bank**
±100 feet	**±10°**	**+10/-0 knots**	**±10°**

Commercial Pilot Standards			
Specified Altitude	**Specified Heading**	**Airspeed**	**Specified Angle of Bank**
±50 feet	**±10°**	**+5/-0 knots**	**±5°**

Evaluation tip

Have the examinee demonstrate slow flight with the aircraft in a clean configuration first. Then ask him/her to configure the aircraft for landing with full flaps (dirty). During both these configurations have the examinee turning to specific heading using different bank angles. Think about a profile that works for you and consistently ask examinees to perform it. Also let the examinee know ahead of time what you will be asking him/her to do.

Ground Reference Maneuvers

RECTANGULAR COURSE - Ensure the examinee does the following:

- He/she should exhibit knowledge of the elements related to a rectangular course.
- Selects a suitable reference area.
- Plans the maneuver so as to enter a left or right pattern, 600 to 1,000 feet AGL (180 to 300 meters) at an appropriate distance from the selected reference area, 45° to the downwind leg.
- Applies adequate wind-drift correction during straight-and-turning flight to maintain a constant ground track around the rectangular reference area.
- Divides attention between airplane control and the ground track while maintaining coordinated flight.
- Maintains altitude, ±100 feet (30 meters); maintains airspeed, ±10 knots.

This can and most likely should be evaluated during the examinee's traffic pattern work.

S-TURNS - Ensure the examinee can perform the following maneuver:

- He/she should exhibit knowledge of the elements related to S-turns.
- Select a suitable ground reference line.
- Plan the maneuver so as to enter at 600 to 1,000 feet (180 to 300
- meters) AGL, perpendicular to the selected reference line.
- Apply adequate wind-drift correction to track a constant radius turn
- on each side of the selected reference line.
- Reverse the direction of turn directly over the selected reference
- line.
- Divides attention between airplane control and the ground track
- while maintaining coordinated flight.
- Maintain an altitude, ±100 feet (30 meters); maintains airspeed, ±10 knots.

A maneuver that is easily forgotten, but one that could be very telling when it comes to wind drift correction during turns. A skill obviously needed during our mission flying.

TURNS AROUND A POINT - Ensure the examinee:

- Exhibits knowledge of the elements related to turns around a point.
- Selects a suitable ground reference point.
- Plans the maneuver so as to enter left or right at 600 to 1,000 feet (180 to 300 meters) AGL, at an appropriate distance from the reference point.
- Applies adequate wind-drift correction to track a constant radius turn around the selected reference point.
- Divides attention between airplane control and the ground track while maintaining coordinated flight.
- Maintains altitude, ±100 feet (30 meters); maintains airspeed, ±10 knots.

By the time you get to turns around a point you are going to have a pretty good ideal of the examinee's skill at correcting for wind during a turn. While his/her turns don't have to be perfect, the examinee should know the elements and be able to implement them.

Night Flight Operations

Night operations will normally be evaluated verbally. However, several wings have night flight evaluation requirements. Check with your individual wing to see if a night flight evaluation is required.
Determine that the applicant exhibits knowledge of the elements related to night operations by having him/her explain the following concepts:
Preparation & Equipment

- **Physiological aspects of night flying as it relates to vision.**
- **Personal equipment essential for night flight.**

Night Flight Procedures

- **Night orientation, navigation, and chart reading techniques.**

Factors Essential To Night Flight

- **Safety precautions and emergencies unique to night flying.**

Airplane and Airport Lighting Systems

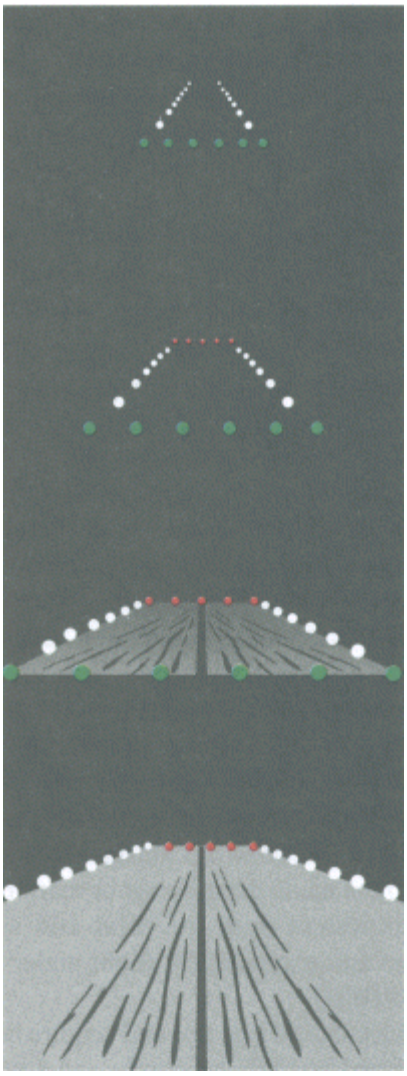
- **Lighting systems identifying airports, runways, taxiways and obstructions, and pilot controlled lighting.**
- **Airplane lighting systems.**

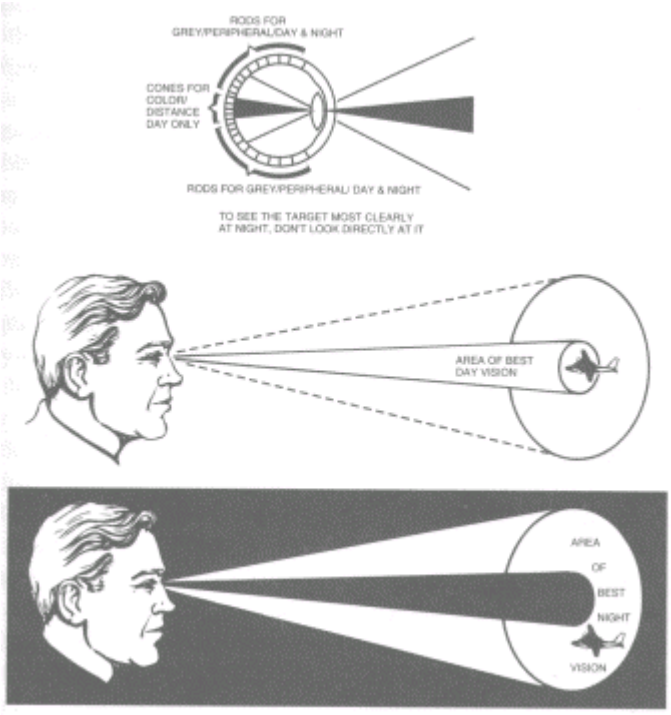
Night Flight Operations Review

Night Vision

In darkness, vision becomes more sensitive to light, a process called night adaptation. Although exposure to total darkness for at least 30 minutes is required for complete dark adaptation, the pilot can achieve a moderate degree of dark adaptation within 20 minutes under dim red cockpit lighting. Since red light severely distorts colors, especially on aeronautical charts, an can cause serious difficulty in focusing the eyes on objects inside the aircraft, its use is advisable only where optimum outside night vision is necessary. Even so, white cockpit lighting must be available when needed for map and instrument reading, especially under IFR conditions. Dark adaptation is impaired by exposure to cabin pressure altitudes above 5,000 feet MSL, carbon monoxide inhaled in smoking, from exhaust fumes, deficiency of Vitamin A in the diet, and by prolonged exposure to bright sunlight. The pilot should close one eye when using a light to preserve some degree of night vision.

Because of the position of two different types of cells, rods and cones, on the retina we will experience a **night blind spot**. Rods are very sensitive to light and when night adapted provide the best night vision. However, the rod cells are concentrated toward the sides of the retina, therefore making clear night vision straight ahead very difficult. To ensure you see objects clearly at night the rods must be exposed to the image. Do this by looking 5 to 10 degrees off center from the object. Looking directly at the image will expose the image to the cones, who need high levels of light to work, and the image will disappear in the darkness.





Personal Equipment

While there is not a requirement in CAPR 60-1 or the FARs to carry a flashlight during night flight, good judgment would dictate having a functional flashlight, with spare batteries, during night operations as a plus.

Cockpit resource management can be a big thing in a low light environment. Having, maps, light sources, switch locations, etc. figured out prior to the flight in a must.

Factors Essential To Night Flight

Approaches and landings - Identification of airport lights as soon as possible is important. Fly directly toward the rotating beacon until lights outlining the runway are visible. Runway edge and and threshold lights must be identified to fly a proper traffic pattern. Beware that distance, airspeed, and altitude interpretation may be deceptive due to lack of visual clues, so rely on your airspeed indicator and altimeter. Fly the pattern as you would during the daytime, with one exception. Do not allow your final approach to get low and shallow. The roundout and touchdown should be made in the same manner as in day landings. However, at night the judgment of height, speed, and sink rate is impaired by the scarcity of observable objects in the landing area. The inexperienced pilot may have a tendency to round out high. To aid in determining the proper roundout point, continue a constant approach descent until the landing lights reflect on the runway and tire marks on the runway can be clearly seen. At this point the roundout should be started smoothly and the throttle gradually reduced to idle as the airplane is touching down.

During landing without a landing light, the roundout may be started when the runway

lights at the far end of the runway first appear to be rising higher than the nose of the airplane. This demands a smooth, very timely, and well executed roundout ensuring the airplane touches down main gear first.

While night flight emergency procedures are handled the same as in the daytime, the reduce ability to focus quickly in the cockpit under low light conditions makes emergency procedure knowledge even more essential to a successful outcome. The memorization of **Bold Face** items is a must to ensure timely and correct accomplishment of the emergency procedure. Knowledge of switch positions and operation is also very important to successful night flying.

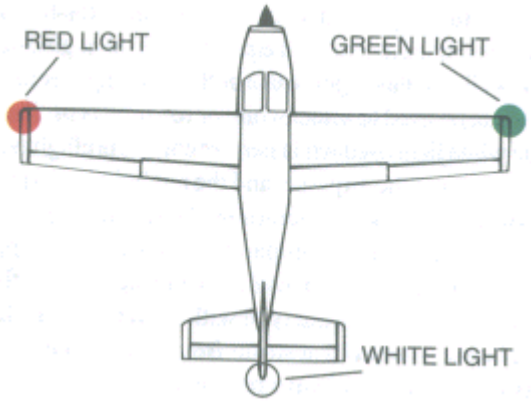
Engine failure at night - If the engine fails at night there are several important procedures and considerations to keep in mind.

- Maintain positive aircraft control and establish best glide configuration and airspeed. Turn the airplane towards an airport or away from congested areas.
- Check to determine the cause of the engine malfunction, such as position of fuel selectors, magneto switch, or primer. If possible, correct the problem and restart.
- Announce your emergency to Air Traffic Control or on UNICOM.
- If the condition of the nearby terrain is known, turn towards an unlighted portion of the area. Some prior planning or thought of areas around your normal flying area might come in handy in case of engine failure over known terrain.
- If possible, consider an emergency landing area close to public access to facilitate rescue or help, if needed.
- Maintain orientation with the wind to avoid a downwind landing.
- Complete the before landing checklist and check landing light operation at altitude. Ensure the landing light is on in sufficient time to illuminate terrain and obstacles. Complete a normal landing at the slowest speed possible. If your lights are unusable or visual reference is lost, hold the airplane in a level-landing attitude until ground contact.
- After landing, turn off all switches and evacuate the aircraft as quickly as possible.

Airplane and Airport Lighting Systems

During a period from sunset to sunrise your airplane must have:

- Lighted position lights.
- Lighted anticollision light system.



Airport beacons operate from dusk until dawn. A beacon on during daylight conditions may indicate ceiling less than 1000 feet and/or visibility less than 3 statute miles. The beacon may be an omnidirectional capacitor-discharge device or it may rotate at a constant speed which produces the visual effect of flashes at regular intervals.

A combination of lights from an airport beacon indicates the type of airport.

- Flashing white and green for a civilian land airport.
- Flashing white and yellow for a water airport.
- Flashing white, yellow, and green for a heliport.
- Two quick, white flashes followed by a green flash identifies a military airport.

Approach Lights are primarily intended to provide a means of transition from instrument flight to visual flight for landing. The system configuration depends on whether the runway is a precision or non-precision instrument runway. Some systems have sequence flasher and can obviously aid the VFR pilot at night.

Visual Approach Slope Indicator (VASI) installations are the most common visual glide path system in use. The VASI provides obstruction clearance with 10 degrees of the runway extended runway centerline, and to 4 nautical miles from the runway threshold. A VASI consists of light units arranged in bars. There are 2-bar and 3-bar VASIs. The 2-bar has near and far light bars and the 3-bar VASI has near, middle, and far light bars. The two bar VASI provides one visual glidepath which is normally set at 3 degrees. The 3-bar system provides two glidepaths, with the lower glidepath normally set at 3 degrees and the upper glidepath one-forth degree above the lower glidepath.

The basic principle of the VASI is that of color differentiation between red and white. White over white, you are above the glidepath, red over white you are on glidepath and red over red you are below glidepath.

Runway End Identifier Lights (REIL) are installed at many airfields to provide rapid and positive identification of the approach end of a particular runway. They will consist of a pair of synchronized flashing lights located laterally on each side of the runway.

Runway Edge Lights are used to outline the edges of runways at night. These lights are classified according to the intensity they are capable of producing. High intensity runway lights (HIRL), medium intensity runway lights (MIRL), or low intensity runway

lights (LIRL). These lights are white except on instrument runways where the last 2,000 feet or half the runway, whichever is less. The lights marking the end of the runway are red.

In-Runway Lighting consists of Touchdown zone light (TDZL), runway centerline light (RCLS), and taxiway turnoff lights. These are installed on some precision instrument runways to facilitate landing under adverse visibility conditions.

Control of Airport Lighting - Airport lighting is controlled by air traffic controller at controlled airports. At uncontrolled airports, the lights may be on a timer, or where an FSS is located at an airport, the FSS personnel may control the lighting. At selected uncontrolled airports, the pilot may control the lighting using the radio. This is done by selecting the specified frequency and clicking the radio microphone.

Key Mike	Function
7 times within 5 seconds	Highest intensity available
5 times within 5 seconds	Medium or lower intensity
3 times within 5 seconds	Lowest intensity available

Taxiway Lights - Taxiway lights outline the edges of the taxiway and are blue in color.

Obstruction Lights - Obstructions are marked or lighted to warn pilots of their presence during daytime and nighttime conditions. Obstruction lighting can be found both on and off an airport to identify obstructions. They may be marked or lighted in any of the following conditions.

Red Obstruction Lights - either flash or emit a steady red color during nighttime operations.

High Intensity White Obstruction Light - flash high intensity white lights during the daytime with the intensity reduced for nighttime.

Dual Lighting - is a combination of flashing red beacons and steady red lights for nighttime operations

Emergency Procedures

Emergency Approach & Landing (Simulated)

CAPR 60-1, Chapter 2 discusses emergency procedures training restrictions and sets the following regulatory rules for EP training:

- Simulated emergency procedures will only be conducted during day, VMC conditions.
- Simulated forced landings will be discontinued prior to descending below 500 feet above the surface, unless initiated with the intent to land at an airfield that complies with CAPR 60-1. (CAPR 60-1 defines authorized fields, which are airfields listed in the current FAA Airports Facility Directory or an airfield for which prior written permission has been obtained.)
- No CAP pilot may descend below 500 feet above obstructions within a two (2) mile radius. (Think about where you will be giving the evaluation to ensure the area complies with this rule.)
- Practice of in-flight emergency procedures and emergency maneuvers will be conducted at an altitude high enough to allow recovery from an inadvertent stall/spin entry and complete a recovery at no lower than 2,000 feet AGL or the aircraft manufacturer's, FAA, or CAP-USAF approved training syllabi, recommended altitude whichever is higher.

In addition to the previous limitations, FAR 91.119, Minimum safe altitudes: General, applies.

FAR 91.119 Minimum Safe Altitude Review

§ 91.119 Minimum safe altitudes: General.

Except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes:

(a) ***Anywhere.*** An altitude allowing, if a power unit fails, an emergency landing without undue hazard to persons or property on the surface.

(b) ***Over congested areas.*** Over any congested area of a city, town, or settlement, or over any open air assembly of persons, an altitude of 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft.

(c) ***Over other than congested areas.*** An altitude of 500 feet above the surface, except over open water or sparsely populated areas. In those cases, the aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure.

When doing simulated forced landings with the intent to land at an authorized airfield, good judgment would dictate the examinee perform in such a manner as to touch down in the first one-third of the landing runway. Depending on runway length, consider going around if the

examinee can not touch down in the first one-third.

System and Equipment Malfunction

System and equipment malfunctions should normally be evaluated verbally. While the examinee does not need to have each malfunction solution memorized, he/she should be able to refer to the Pilot Operating Handbook or other appropriate reference. Example of system and equipment malfunctions follow:

- Fires to include: During start, electrical, cabin, and wing.
- Icing
- Landing with a flat main tire
- Landing with a flat nose tire
- Electrical Power Supply System malfunctions
- Vacuum System Failure
- Landing without elevator control
- Emergency operations in clouds
- Rough engine operations to include: spark plug fouling, magneto malfunction, engine-driven fuel pump failure, and low oil pressure.
- Bird strikes

Spin Recovery and Spiral Dive Recovery knowledge should be evaluated. The examinee should know the difference between both maneuvers and how to distinguish each by feel and instrument indications.

POH Bold Face Knowledge

Bold face maneuvers are those that have immediate action items in the POH that should be committed to memory. Some pilot operating handbooks have bold face maneuvers denoted in the emergency procedures section. If the POH for the evaluation aircraft contains bold faced items, the examinee must have those items committed to memory.

Emergency Descent

Few POHs have specific emergency descent procedures, if one is spelled out in the evaluation aircraft POH, expect the examinee to know and be able to perform that maneuver. If the POH does not have a specific maneuver ask the examinee if he/she has a plan for emergency descent. CAP does not accept maneuvers that include abrupt or aerobatic elements. For most aircraft a descent with the throttle at idle (carburetor heat as required), flaps full down, and airspeed in the top portion of the airspeed indicator white arc, will provide acceptable emergency descent rates. The most important question to ask the examinee is "does he/she have a plan for an emergency descent". Prior planning is obviously the key to effectively handling an aircraft emergency.

Emergency Equipment and Survival Gear

CAPR 60-1 and CAPR 66-1 stipulate emergency equipment, as well as when and what survival gear must be carried on CAP flight activities. Where appropriate, the examinee should be familiar with the following requirements.

The following equipment is required:

- A functional fire extinguisher shall be carried. CAPR 66-1 further states the aircraft fire extinguisher must be serviceable, appropriate for use in the aircraft, have a gauge indicating serviceability, and be permanently mounted in the cockpit.
- For over water flights, each occupant will wear an individual flotation vest. The aircraft will also contain inflatable rafts of sufficient number and size to accommodate all occupants and at least on pyrotechnic signaling device. All flotation equipment will meet an FAA Technical Standard Order or be Coast Guard Approved.
- Each CAP aircraft shall have carbon monoxide detectors. These detectors should be disposable in nature and replaced every 12 calendar months. (CAPR 66-1)
- Each CAP wing shall determine an appropriate survival kit with items to be carried. This kit shall be carried at all times, for every flight. Contents may be adjusted for seasonal requirements. (CAPR 66-1)

Approaches and Landings

Normal & Crosswind Approaches and Landings

Determine if the examinee:

- **Considers the wind conditions, landing surface, obstructions, and selects a suitable touchdown point.** The ideal touchdown spot is within the first one-third or the landing runway. **Ask the examinee to identify a specific touchdown spot prior to final approach.**
- **Establishes the recommended approach and landing configuration and airspeed, and adjusts pitch attitude and power as required.** The examinee should review the approach airspeed from the checklist for a particular aircraft landing configuration.
- **Maintains a stabilized approach and recommended airspeed,** or in its absence, not more than 1.3 V SO , (+10/-5 knots - private) (+5/-5 knots - commercial), with wind gust factor applied.
- **Makes smooth, timely, and correct control application during the roundout and touchdown.** The touchdown should be on the main gear first (Tricycle gear aircraft). Any tendency to touchdown nose gear first should be thoroughly evaluated. If there is any doubt as to the examinees ability to consistently touchdown main gear first, do not pass the individual.
- **Touches down smoothly at approximate stalling speed.** Note the word "approximate", while a full stall landing is great, aircraft control, especially elevator control is imperative. If the examinee touches down slightly above stall speed or with some power applied to ensure appropriate elevator effectiveness, that's fine.
- **Touches down at or within (400 feet - private)(200 feet - commercial) beyond a specified point, with no drift, and with the airplane's longitudinal axis aligned with and over the runway center/landing path.** Again the examinee needs to be clear on where the specified point is located and it needs to be within the first one-third of the landing runway.
- **Maintains crosswind correction and directional control throughout the approach and landing sequence.** Crosswind correction is a BIG emphasis item. We have had high time pilot's be unable to consistently perform crosswind landings. Any weakness in this area is grounds for an unsatisfactory evaluation, with a requirement for crosswind training prior to reexamination.
- **Completes an appropriate "before landing checklist."**

Forward Slips to Landing

Determine if the examinee:

- **Considers the wind conditions, landing surface and obstructions,** and selects the most suitable touchdown point.
- **Establishes the slipping attitude at the point from which a landing can be made** using the recommended approach and landing configuration and airspeed; adjusts pitch attitude and power as required.
- **Maintains a ground track aligned with the runway center/landing path and an airspeed, which results in minimum float during the roundout.**

- **Makes smooth, timely, and correct control application** during the recovery from the slip, the roundout, and the touchdown.
- Continues the landing as above.

Go-Around/Rejected Landing

- **Makes a timely decision** to discontinue the approach to landing.
- **Applies takeoff power immediately and transitions to climb pitch attitude for V Y , and maintains V Y (+10/-5 knots - private) (+5/-5 knots - commercial).**
- **Retracts the flaps** as appropriate.
- **Retracts the landing gear**, if appropriate, after a positive rate of climb is established.
- **Maneuvers to the side of the runway/landing area to clear** and avoid conflicting traffic.
- **Maintains takeoff power V Y (+10/-5 knots - private) (+5/-5 knots - commercial) to a safe maneuvering altitude.**
- **Maintains directional control and proper wind-drift correction** throughout the climb.
- Completes the appropriate checklist.

Short-field Approach & Landing

Determine if the examinee:

- **Considers the wind conditions, landing surface, obstructions,** and selects the most suitable touchdown point.
- **Establishes the recommended approach and landing configuration and airspeed;** adjusts pitch attitude and power as required.
- **Maintains a stabilized approach and recommended approach airspeed,** or in its absence not more than 1.3 V SO , (+10/-5 knots - private) (+5/-5 knots - commercial), with wind gust factor applied.
- **Makes smooth, timely, and correct control application** during the roundout and touchdown.
- **Touches down smoothly at minimum control airspeed main gear first** (Tricycle gear aircraft).
- **Touches down at or within (200 feet - private) (100 feet - commercial) beyond a specified point,** with no side drift, minimum float and with the airplane's longitudinal axis aligned with and over the runway center/landing path.
- **Maintains crosswind correction and directional control** throughout the approach and landing sequence.
- **Applies brakes, or elevator control, as necessary**, to stop in the shortest distance consistent with safety. **Braking can and will be simulated**, but not forgotten, in CAP aircraft.
- Completes the appropriate checklist.

Soft-field Approach and Landing

Determine if the examinee:

- **Considers the wind conditions, landing surface and obstructions,** and selects the most suitable touchdown area.

- **Establishes the recommended approach and landing configuration**, and airspeed; adjusts pitch attitude and power as required.
- **Maintains a stabilized approach and recommended airspeed**, or in its absence not more than 1.3 V SO , (+10/-5 knots - private) (+5/-5 knots - commercial), with wind gust factor applied.
- **Makes smooth, timely, and correct control application** during the roundout and touchdown.
- **Touches down softly with no drift in the 1st one-third of the runway**, and with the airplane's longitudinal axis aligned with the runway/landing path.
- **Maintains crosswind correction and directional control** throughout the approach and landing sequence.
- **Maintains proper position of the flight controls and sufficient speed to taxi** on the soft surface.
- Completes the appropriate checklist

Safety Awareness

Clearing Turns and Collision Avoidance

Prior to starting a set of maneuvers the examinee shall appropriately clear the area for other aircraft.

Turns in high-wing aircraft should also be preceded by lifting the wing to clear above the wing in the direction of turn.

The examinee will be cognizant or aircraft activity in the area of operation. This should be a combination of aircraft position awareness and traffic position awareness using the radio to establish a listening watch as well as visual techniques.

Radio calls, especially at un-controlled airfield must be made in accordance with the Aeronautical Information Manual.

Vigilance, Risk Management & Judgment

Vigilance is the act of being vigilant. To be vigilant is to be alert and watchful, avoiding danger. Is the examinee watchful? Does he or she have a significant about of attention to detail? If the examinee is depending on others, i.e. ATC, etc. to keep the primary watch, he/she is not being vigilant. Taxiing to fast, not paying attention to the environment around them, and poor checklist usage are all examples of not being vigilant. **Vigilance in our pilots is important. If the examinee displays symptoms of not being vigilance, stop the evaluation and up channel your findings to the Wing Commander or his/her designee. Not paying attention is a problem that probably can not be fixed with additional training and the command structure may have to weigh in on whether the examinee should be allowed to fly CAP aircraft.**

Judgment - A pilot prerogative is, effectively, a demonstration of judgment. It's the ability to make an "instant" decision which assures the safest possible continuation of the flight. Judgment is a series of evaluations the examinee makes, over a period of minutes, hours, or even days, to keep him or herself out of danger.

Since the best way to learn good judgment is through flying. The best way to evaluate judgment is to look at the examinee's past flight experiences. Does he/she only fly a few hours each year, depending on the CAP flight evaluation to help bring him or her up to speed? Bottom line, judgment comes with experience and recent experience can more readily be drawn upon when needed. You don't have to fly every day to be sharp, but you do have to fly and to practice often. Practice makes better pilots. What we would like to see the examinee have done, is to gain exposure to flying in small, digestible chunks, and to effectively self-evaluate this experience. This is how judgment is developed.

Ironically, many carefully and meticulously preflight their aircraft but frequently fail to preflight themselves, even in a cursory manner. Too often we forget that man is usually the weakest link in that crucial "man-machine" interface. Our CAP accidents continue to show individuals flying under the influence of mood and mind altering drugs. That's right, from powerful cancer medication to a lethal dose of morphine. If the examinee's health appears to be an

issue, take a moment during the oral to question him/her about current medications they may be taking. If you have a question about a certain medication, stop the evaluation and call a aviation medical professional to see if the drugs are acceptable. Obviously prescription pain killers and antihistamines would immediately disqualify an individual.

Some behaviors to look for that show good judgment.

Before Takeoff

- Tuning in ATIS, AWOS, or ASOS if available, and writing down the recorded information.
- Ensuring the takeoff runway is appropriate, both into the wind and long enough for takeoff.
- Being aware of wake turbulence.
- Selecting or asking ATC for another runway if the crosswind is more than one thinks he can handle, or waiting until the wind abates or shifts.

During Flight

- Uses the radio during your takeoff and landing pattern and monitors the radio throughout you flight, especially around the airport.
- When flying cross country avoid routes that take one beyond gliding distance from a suitable landing area.
- Stays abreast of the weather situation.

Descent and Landing

- Tunes in the common traffic advisory frequency prior to arrival in the landing pattern. Listens to get a mental picture of the airfield activity. Ask the examinee to explain the airfield picture verbally.
- Makes the appropriate radio calls.
- Plans their descent to the traffic pattern in such a way that allows other aircraft to be seen.
- On landing, as on takeoff, if you don't like the crosswind, select another runway if available.
- Maintains adequate separation between your aircraft and large, heavy aircraft, to avoid wake turbulence.

Good judgment is the priceless element gained through proper training, through purposeful proficiency flying, and through experience.

While most individuals can continue to improve their judgment over time, there are those, especially the anti-authority types, who may be beyond repair. It is your job, albeit a tough one, to root out those personalities in our ranks and identify them to the leadership for appropriate action.

Instrument Proficiency

NOTE: Where current weather reports, forecasts, or other pertinent information is not available, this information will be simulated by the evaluator in a manner which will adequately measure the examinee's competence.

Ground Preparation - The examinee should have a working knowledge of the following:

- **Weather reports and forecasts.** Download a METAR/TAF quiz here.
- **Pilot and radar reports.** Download a PIREP and Radar report here.
- **Surface analysis charts.** Download a Surface analysis chart here.
- **Radar summary charts.** Download a Radar summary chart here.
- **Significant weather prognostics.** Download a Sig. Weather Prog. here.
- **Winds and temperatures aloft.** Download a winds aloft forecast here.
- **Freezing level charts.** Download a Freezing level chart here.
- **Stability charts.** Download a Stability chart here.
- **Severe weather outlook charts.** Download a Severe weather outlook chart here.
- **SIGMET's and AIRMET's.** Download a SIGMET and AIRMET here.
- **ATIS** reports.

Correctly analyzes the assembled weather information pertaining to the proposed route of flight and destination airport, and determines whether an alternate airport is required, and, if required, whether the selected alternate airport meets the regulatory requirement.

Exhibits adequate knowledge of the elements by presenting and explaining a preplanned cross-country flight, as previously assigned by the examiner (preplanning is at evaluator's discretion). It should be planned using real time weather and conform to the regulatory requirements for instrument flight rules within the airspace in which the flight will be conducted.

The examinee should display adequate knowledge of the aircraft's performance capabilities by calculating the estimated time en route and total fuel requirement based upon factors, such as—

- **Power settings.**
- **Operating altitude or flight level.**
- **Wind.**
- **Fuel reserve requirements.**

The examinee should:

- Select and correctly interpret the current and applicable en route charts, instrument departure procedures (DP's), Standard Terminal Arrival (STAR), and Standard Instrument Approach Procedure Charts (IAP).
- Obtains and correctly interprets applicable NOTAM information.
- Determines the calculated performance is within the aircraft's capability and operating limitations.
- Completes and files a flight plan in a manner that accurately reflects the conditions of the proposed flight. (Does not have to be filed with ATC.)
- Demonstrates adequate knowledge of Global Positioning Systems (GPS) and Receiver

Autonomous Integrity Monitoring (RAIM) capability, when aircraft is so equipped.

The examinee should display adequate knowledge of the elements related to applicable aircraft flight instrument system(s) and their operating characteristics to include—

- Pitot-static.
- Altimeter.
- Airspeed indicator.
- Vertical speed indicator.
- Attitude indicator.
- Horizontal situation indicator.
- Magnetic compass.
- Turn-and-slip indicator/turn coordinator.
- Heading indicator.
- Electrical systems.
- Vacuum systems.
- VHF omnirange (VOR), Distance measuring equipment (DME), and Instrument landing system (ILS).

Air Traffic Procedures and Compliance with ATC Clearances - The examinee should be able to complete the following tasks.

Have knowledge of the elements related to ATC clearances and pilot/controller responsibilities to include tower en route control and clearance void times.

Copy correctly, in a timely manner, the ATC clearance as issued and determine if compliance is possible. Reads clearance back correctly using standard phraseology and, if need, requests clarification.

Sets the appropriate communication and navigation frequencies and transponder codes in compliance with the ATC clearance.

Has adequate knowledge of the elements related to DP's, Enroute Low Altitude Charts, STAR's, and related pilot/controller responsibilities.

Uses the current and appropriate navigation publications.

Holding - The examinee should be able to complete the following tasks.

Selects and changes to the proper holding airspeed at least 3 miles from the initial holding fix.

Uses an entry procedure that ensures proper pattern entry remaining in the holding pattern airspace.

Recognized arrival at the holding fix and initiates prompt entry into the holding pattern while complying with ATC reporting requirements.

Complies with pattern leg lengths and uses proper wind correction procedures to maintain the desired pattern while arriving at the fix at the appropriate time.

Maintains airspeed with + or - 10 knots, altitude with 100 feet, headings with 10 degrees, and tracks a selected course, radial, or bearing.

Flight by Reference to Instruments - The examinee should be able to complete the following tasks.

- **Straight and Level Flight** - Heading with 10 degrees, altitude within 100 feet, and airspeed with 10 knots.
- **Change of Airspeed** - Establishes proper power setting, maintains heading with 10 degrees, altitude within 100 feet, and airspeed with 10 knots.
- **Constant Airspeed Climbs and Descents** - Enters constant airspeed climbs and descents from a specified altitude, airspeed, and heading, establishing the appropriate change of pitch and power to establish the desired climb and descent performance. Maintains the airspeed within 10 knots, heading within 10° or, if in a turning maneuver, within 5° of the specified bank angle. Levels-off within 100 feet of the specified altitude.
- **Rate Climbs and Descents** - Enters rate climbs and descents from a specified altitude, airspeed, and heading while maintaining the specified rate of climb and descent within 100 feet per minute, airspeed within 10 knots, heading within 10°, or if in a turning maneuver, within 5° of the specified bank angle.
- **Timed Turns to Magnetic Compass Headings** - Establishes indicated standard rate turns, both right and left while applying the clock correctly to the calibration procedure. Makes timed turns to specified compass headings while maintaining altitude within 100 feet , airspeed within 10 knots, bank angle 5° of a standard or half-standard rate turn, and rolls out on specified headings within 10°.
- **Steep Turns** - Enters a turn using a bank of approximately 45° maintaining a specified angle of bank for either 180° or 360° of turn, both left and right, while maintaining altitude within 100 feet, airspeed within 10 knots, 5° of specified bank angle, and rolls out within 10° of the specified heading.

Recovery From Unusual Flight Attitudes - The examinee will use proper instrument cross-check and interpretation, and will apply the appropriate pitch, bank, and power corrections in the correct sequence to return the aircraft to a stabilized level flight attitude.

Note: Any intervention by the check pilot to the aircraft from exceeding any operational limitations or unsafe flight condition will result in a failure of the instrument portion of the check ride.

Intercepting and Tracking Navigational Systems and DME Arcs - The examinee should tune and correctly identify the navigation facility, and set and correctly orient the radial to be intercepted into the course selector. He/she should Intercept the specified radial at a predetermined angle, inbound or outbound from a navigational facility while maintaining the airspeed within 10 knots, altitude within 100 feet, and selected headings within 5°. For arcs the examinee should become established on the radial applying proper correction to maintain a radial, allowing no more than three-quarter-scale deflection of the CDI and maintaining the DME arc within 1 nautical or determines the aircraft position relative to the navigational facility or from a waypoint in the case of GPS.

Precision ILS Instrument Approach - The examinee should do the following:

- Establish two-way communications with ATC, as appropriate to the phase of flight or

approach segment, and uses proper radio communications phraseology and technique.
- Select, tune, identify, and confirm the operational status of ground and aircraft navigation equipment to be used for the approach procedure.
- Complies with all clearances issued by ATC or the check pilot and advises ATC or the check pilot anytime the aircraft is unable to comply with a clearance.
- Establishes the appropriate aircraft configuration and airspeed, considering turbulence and wind shear, and completes the aircraft checklist items appropriate to the phase of flight.
- Maintains, prior to beginning the final approach segment, specified altitude within 100 feet , heading or course within 10°, and airspeed within 10 knots. Establishes a proper initial rate of descent at the point where the electronic glide slope is intercepted and allows, while on the final approach segment, no more than three-quarter-scale deflection of either the localizer or glide slope indications, maintain the specified airspeed within 10 knots.
- Avoids descent below the DH before initiating a missed approach procedure or transitioning to a normal landing approach.
- Initiates an immediate missed approach procedure when at the DH and the required visual references for the intended runway are not distinctly visible and identifiable or transitions to a normal landing approach when the aircraft is in a position to make a normal approach and landing.

Nonprecision Instrument Approach - The examinee should do the following:

- Establish two-way communications with ATC, as appropriate to the phase of flight or approach segment, and uses proper radio communications phraseology and technique.
- Select, tune, identify, and confirm the operational status of ground and aircraft navigation equipment to be used for the approach procedure.
- Complies with all clearances issued by ATC or the check pilot and advises ATC or the check pilot anytime the aircraft is unable to comply with a clearance.
- Establish the appropriate aircraft configuration and airspeed, considering turbulence and wind shear, and completes the aircraft checklist items appropriate to the phase of flight.
- Maintain, prior to beginning the final approach segment, altitude within 100 feet, heading within 10° and allows less than a full-scale deflection of the CDI, and maintains airspeed within 10 knots.
- Establish a rate of descent and track that will ensure arrival at the MDA prior to reaching the MAP with the aircraft continuously in a position from which a normal landing on the intended runway can be made.
- Allow, while on the final approach segment, no more than a three-quarter-scale deflection of the CDI, and maintains airspeed within 10 knots.
- Maintain the MDA, when reached, within +100 feet, -0 feet to the MAP.
- Execute the missed approach procedure when the required visual references for the intended runway are not distinctly visible and identifiable at the MAP.
- Execute a normal landing from a straight-in or circling approach when instructed by the check pilot.

Missed Approach - The examinee should do the following:

- Initiate the missed approach promptly by applying power, establishing a climb attitude, and reducing drag in accordance with the aircraft manufacturer's recommendations.

- Report to ATC beginning the missed approach procedure and complies with the published or alternate missed approach procedure.
- Advise ATC or the check pilot anytime the aircraft is unable to comply with a clearance, restriction, or climb gradient.
- Follow the recommended checklist items appropriate to the go-around procedure and requests, if appropriate, ATC clearance to the alternate airport, clearance limit, or as directed by the check pilot.
- Maintain the recommended airspeed within 10 knots; heading, course, or bearing within 10°; and altitude(s) within 100 feet during the missed approach procedure.

Circling Approach - The examinee should do the following:

- Selects and complies with the appropriate circling approach procedure considering turbulence and wind shear and considering the maneuvering capabilities of the aircraft.
- Confirms the direction of traffic and adheres to all restrictions and instructions issued by ATC and the check pilot.
- Does not exceed the visibility criteria or descend below the appropriate circling altitude until in a position from which a descent to a normal landing can be made.
- Maneuvers the aircraft, after reaching the authorized MDA and maintains that altitude within +100 feet, -0 feet and a flight path that permits a normal landing on a runway at least 90° from the final approach course.
- Transitions at the DH, MDA, or VDP to a visual flight condition, allowing for safe visual maneuvering and a normal landing.
- Adheres to all ATC (or examiner) advisories and completes appropriate checklist items for the pre-landing and landing phase while maintaining positive aircraft control throughout the complete landing maneuver.

Review of Certificates & Documents

Most of the information requested in this area is pretty straight forward with a couple of exceptions.

- The FCC Telephone Permit is only required when a flight crosses international borders. CAP's policy is we will not fly our aircraft internationally. The reason for this decision is a lack of Federal Torts Claims Act and Federal Employment Compensation Act coverage. Bottom line, we do not have Federal insurance protection in international airspace.
- The FAA BFR date should be the date the flight review was issued, not the expiration date.

Pilot Certification

The signing of the pilot certification by the examinee constitutes a signed statement that he or she has reviewed the applicable parts of all FARs, CAP regulations, and state regulations. "Applicable parts" leaves a lot open for interpretation. The point to this statement is not to make the examinee totally responsible for all applicable regulations because the examinee is all ready responsible as a pilot in command. The purpose is to remind the examinee of his or her responsibilities. Obviously refusal to sign the certification is an admission that the individual is not comfortable with the rules and therefore should not be certified as a CAP pilot.

Check Pilot Certification

In this area the check pilot certifies that the examinee has demonstrated proficiency in certain areas. The check pilot must initial each item certifying his/her approval. Let's look at each line individually.

Has a current CAPR 60-1 and is aware of the Statement of Understanding requirements.

- Ensure the examinee has a current CAPR 60-1 to include all appropriate changes.
- The examinee should be instructed to bring his/her copy of the regulation to the check ride.
- If examination shows the examinee does not have a current copy of the regulation and appropriate changes, the evaluation can not be completed and the above pilot certification would be suspect.

Has demonstrated proficiency required to fly the indicated aircraft.

- The check pilot is certifying the examinee is proficient in the check ride aircraft (indicated aircraft), not all aircraft in which the examinee has an initial CAPF 5.

Has demonstrated proficiency required to be a cadet orientation pilot.

- The proficiency required refers to knowledge of the cadet orientation ride syllabus. If in the opinion of the check pilot the individual would not be proficient or safe enough the fly CAP cadets, the individual is not safe enough to fly CAP aircraft. In other words if the check pilot does not have enough confidence in the examinees ability to fly one of his/her family members, then the examinee does not have the proficiency to

fly CAP aircraft.

Has demonstrated instrument proficiency.

- The examinee either demonstrates proficiency in accordance with section XIV or not. If the does not satisfactory demonstrate proficiency or elects not to demonstrate proficiency the check pilot should line through the item.

Is not qualified. Requires additional training and recheck.

- The check pilot should initial the item and line through the appropriate items above.
- Deficient areas of the check ride should be identified in the comment section. This will help the next check pilot identify areas for the re-evaluation. Only the deficient items need be re-evaluated, however, all items accomplished on the second evaluation are open for evaluation regardless of the first evaluation.

Comments

For an annual standardization evaluation, list all airplanes the member is qualified to fly. CAPR 60-1, paragraph 3-5.g. requires an aircraft questionnaire for each aircraft within a specific aircraft category, be completed and presented to the check pilot at the time of the check ride. If the examinee does not present a completed aircraft questionnaire for an aircraft in which he/she has completed an initial evaluation, the aircraft should not be listed in the comment section and the examinee is not authorized to fly that particular aircraft in a CAP flight activity.