# CAPR 60-1

## Air Force Approved Proficiency Flight Profiles

(update to Profile #7 – 3 Mar 10)
(update to Profile #4 – 14 Jul 10)

The following flight profiles authorized by CAPR 60-1 are to be used in accordance with the instructions at the beginning of each profile. While designed for pilot proficiency, other aircrew members may also be on board the flight if compatible training can be accomplished concurrently. For example, on Profile #1, Visual Search Mission Profile, a Scanner or Observer trainee with instructor may accompany the flight to fulfill Scanner or Observer training tasks.

The profile number will be annotated in the eFlight Release/"Mission/Sortie #" box of the CAPF 99 as "P1" etc.

**APPROVED MISSION PILOT PROFICIENCY FLIGHT**
**PROFILE #1**
**Visual Search Mission Profile**

This profile may only be flown by qualified SAR/DR Mission Pilots or properly supervised trainees. Supervisors must be qualified PICs in the aircraft flown since they are expected to be able to assume command of the flight as needs dictate. The following is an approved profile for "Proficiency Flight Training for Mission Pilots." Proficiency flights are designed to prepare crews to fly Air Force missions, and though routine flight procedures can be practiced, the majority of a proficiency flight must be focused on the training outlined in the profiles below. For example, crews flying the visual search mission profile can reasonably conduct pattern work with multiple touch and go landings, but should not plan to spend the majority of the flight time in the airport traffic pattern. PICs will fly as much of the approved mission profile as safely possible understanding that requirements for trainees, weather, or other factors may prevent the completion of all listed events. This proficiency flight can be an Air Force assigned non-reimbursed mission authorized by the State Director that is released by a flight release officer using mission symbol B-12. Monthly mission number and mission profile number will be noted on the CAPF 99 by the FRO. Alternatively, this proficiency flight can be an Air Force assigned reimbursed mission authorized by the wing commander, SD, and LR and released by a flight release officer using mission symbol A-7. Requests for this training profile under this option will be made through WMIRS.

☐ Plan for and brief the crew on one or more of the visual search missions below. Special emphasis should be placed on mission risk assessments, the routes to and from the search area, aircraft limitations and operating procedures, and communications procedures.
- ☐ Route search.
- ☐ Parallel track search.
- ☐ Point-based search.
- ☐ Creeping line search.

☐ Brief crew member mission responsibilities as appropriate. Review ground and in-flight emergency procedures, taxi, takeoff, and in-flight procedures with each crew member.

☐ Prepare and file a flight plan if necessary.

☐ Conduct an aircraft pre-flight inspection as a crew.

☐ En route to the search area practice one or more of the following:
- ☐ Slow flight.
- ☐ Stalls.

- [ ] Steep turns.
- [ ] Turns around a point.

- [ ] Practice simulated in-flight emergency procedures.

- [ ] Practice visual search as planned and briefed.
  - [ ] Practice a route search.
  - [ ] Practice a parallel track search.
  - [ ] Practice a point-based search.
  - [ ] Practice a creeping line search.

- [ ] Review landing procedures with crew members.

- [ ] Practice approach and landing procedures by completing one or more of the following:
  - [ ] Perform a normal landing, using full flaps, to a touch and go (if runway and conditions allow).
  - [ ] Perform a short field landing to a full stop, with a simulated obstacle using the procedures recommended in the Aircraft Flight Manual (AFM)/Pilot Operating Handbook (POH) and the FAA Practical Test Standards (PTS).
  - [ ] Perform a soft field landing to a full stop using the procedures recommended in the AFM/POH.
  - [ ] If instrument qualified, practice one or more of the following approaches to a full stop:
    - [ ] ILS approach.
    - [ ] VOR approach.
    - [ ] NDB approach.
    - [ ] GPS approach.
  - [ ] Perform a simulated forced landing to a low approach or full stop (as appropriate).
  - [ ] Perform a normal landing or no-flap landing to a full stop.

- [ ] Shut-down, Tie-Down, and Refuel as appropriate.

- [ ] Close the flight plan if necessary.

- [ ] Debrief the sortie with the crew.

**APPROVED MISSION IMAGING PROFICIENCY FLIGHT**
**PROFILE #2**
**Video Imaging Mission Profile**

This profile may only be flown by qualified SAR/DR Mission Pilots or properly supervised trainees. Supervisors must be qualified PICs in the aircraft flown since they are expected to be able to assume command of the flight as needs dictate. The following is an approved profile for "Proficiency Flight Training for Mission Pilots." Proficiency flights are designed to prepare crews to fly Air Force missions, and though routine flight procedures can be practiced, the majority of a proficiency flight must be focused on the training outlined in the profiles below. For example, crews flying the visual search mission profile can reasonably conduct pattern work with multiple touch and go landings, but should not plan to spend the majority of the flight time in the airport traffic pattern. PICs will fly as much of the approved mission profile as safely possible understanding that requirements for trainees, weather, or other factors may prevent the completion of all listed events. This proficiency flight can be an Air Force assigned non-reimbursed mission authorized by the State Director that is released by a flight release officer using mission symbol B-12. Monthly mission number and mission profile number will be noted on the CAPF 99 by the FRO. Alternatively, this proficiency flight can be an Air Force assigned reimbursed mission authorized by the wing commander, SD, and LR and released by a flight release officer using mission symbol A-7. Requests for this training profile under this option will be made through WMIRS.

☐ Plan for and brief the crew on one or more of the below video imaging missions. Special emphasis should be placed on mission risk assessments, secondary targets, aircraft limitations and operating procedures, and communications procedures.
  ☐ Fly back video imaging.
  ☐ Single-Frame Video Imaging (SFVI).
  ☐ Satellite Digital Imaging System (SDIS).

☐ Brief crew member mission responsibilities as appropriate. Review ground and in-flight emergency procedures, taxi, takeoff, and in-flight procedures with each crew member.

☐ Prepare and file a flight plan if necessary.

☐ Conduct an aircraft pre-flight Inspection as a crew.

☐ En route to the search area practice one or more of the following:
  ☐ Slow flight.
  ☐ Stalls.
  ☐ Steep turns.
  ☐ Turns around a point.

☐ Practice simulated in-flight emergency procedures.

☐ Practice imaging sortie as planned and briefed.
  ☐ Take images of target(s).
  ☐ Download images (for SDIS).
  ☐ Select images for transmission (for SDIS or SFVI).

- [ ] Process images (for SDIS).
- [ ] Send images as briefed (for SDIS or SFVI).

- [ ] Review landing procedures with crew members. Don't forget to secure imaging equipment.

- [ ] Practice approach and landing procedures by completing one or more of the following:
  - [ ] Perform a normal landing, using full flaps, to a touch and go (if runway and conditions allow).
  - [ ] Perform a short field landing to a full stop, with a simulated obstacle using the procedures recommended in the Aircraft Flight Manual (AFM)/Pilot Operating Handbook (POH) and the FAA Practical Test Standards (PTS).
  - [ ] Perform a soft field landing to a full stop using the procedures recommended in the AFM/POH.
  - [ ] If instrument qualified, practice one or more of the following approaches to a full stop:
    - [ ] ILS approach.
    - [ ] VOR approach.
    - [ ] NDB approach.
    - [ ] GPS approach.
  - [ ] Perform a simulated forced landing to a low approach or full stop (as appropriate).
  - [ ] Perform a normal landing or no-flap landing to a full stop.

- [ ] Shut-down, Tie-Down, and Refuel as appropriate.

- [ ] Close the flight plan if necessary.

- [ ] Debrief the sortie with the crew. Be sure to upload or provide images taken as necessary.

**APPROVED MISSION IMAGING PROFICIENCY FLIGHT**
**PROFILE #3**
**Electronic Search Mission Profile**

This profile may only be flown by qualified SAR/DR Mission Pilots or properly supervised trainees. Supervisors must be qualified PICs in the aircraft flown since they are expected to be able to assume command of the flight as needs dictate. The following is an approved profile for "Proficiency Flight Training for Mission Pilots." Proficiency flights are designed to prepare crews to fly Air Force missions, and though routine flight procedures can be practiced, the majority of a proficiency flight must be focused on the training outlined in the profiles below. For example, crews flying the visual search mission profile can reasonably conduct pattern work with multiple touch and go landings, but should not plan to spend the majority of the flight time in the airport traffic pattern. PICs will fly as much of the approved mission profile as safely possible understanding that requirements for trainees, weather, or other factors may prevent the completion of all listed events. This proficiency flight can be an Air Force assigned non-reimbursed mission authorized by the State Director that is released by a flight release officer using mission symbol B-12. Monthly mission number and mission profile number will be noted on the CAPF 99 by the FRO. Alternatively, this proficiency flight can be an Air Force assigned reimbursed mission authorized by the wing commander, SD, and LR and released by a flight release officer using mission symbol A-7. Requests for this training profile under this option will be made through WMIRS.

- ☐ Plan for and brief the crew on one or more of the below electronic search missions. Special emphasis should be placed on mission risk assessments, direction finding equipment familiarizations, aircraft limitations and operating procedures, and communications procedures.
  - ☐ Electronic Search Utilizing the Wing-Null Method.
  - ☐ Electronic search utilizing the L-Tronics Airborne Direction Finding Unit.
  - ☐ Electronic search utilizing the Becker Airborne Direction Finding Unit.

- ☐ Brief crew member mission responsibilities as appropriate. Review ground and in-flight emergency procedures, taxi, takeoff and in-flight procedures with each crew member.

- ☐ Prepare and file a flight plan if necessary.

- ☐ Conduct an Aircraft Pre-Flight Inspection as a crew.

- ☐ Enroute to the search area practice one or more of the following:
  - ☐ Slow flight.
  - ☐ Stalls.
  - ☐ Steep turns.
  - ☐ Turns around a point.

- ☐ Practice simulated in-flight emergency procedures.

- ☐ Practice electronic search sortie as planned and briefed.
  - ☐ Track the beacon to its source.
  - ☐ Lead a ground or urban direction finding team to the source.
  - ☐ Provide detailed location information to ground personnel of the source location.

- [ ] Provide a short verbal description of the target.
- [ ] Provide accurate latitude and longitude coordinates of the target.

- [ ] Review landing procedures with crew members.

- [ ] Practice approach and landing procedures by completing one or more of the following:
  - [ ] Perform a normal landing, using full flaps, to a touch and go (if runway and conditions allow).
  - [ ] Perform a short field landing to a full stop, with a simulated obstacle using the procedures recommended in the Aircraft Flight Manual (AFM)/Pilot Operating Handbook (POH) and the FAA Practical Test Standards (PTS).
  - [ ] Perform a soft field landing to a full stop using the procedures recommended in the AFM/POH.
  - [ ] If instrument qualified, practice one or more of the following approaches to a full stop:
    - [ ] ILS approach.
    - [ ] VOR approach.
    - [ ] NDB approach.
    - [ ] GPS approach.
  - [ ] Perform a simulated forced landing to a low approach or full stop (as appropriate).
  - [ ] Perform a normal landing or no-flap landing to a full stop.

- [ ] Shut-down, Tie-Down, and Refuel as appropriate.

- [ ] If the target is located at an airfield and ground search equipment is available, locate the beacon on the airfield.

- [ ] Close the flight plan if necessary.

- [ ] Debrief the sortie with the crew.

**APPROVED MISSION PILOT PROFICIENCY FLIGHT**
**PROFILE #4**
**Transportation Mission Profile**

The transportation mission profile may be flown by qualified FAA commercial rated pilots, SAR/DR mission pilots, and Transport Mission pilots. The following is an approved profile for "Proficiency Flight Training for Mission Pilots". Proficiency flights are designed to prepare crews to fly Air Force missions, and though routine flight procedures can be practiced, the majority of a proficiency flight must be focused on the training outlined in the profiles below. For example, crews flying the visual search mission profile can reasonably conduct pattern work with multiple touch and go landings, but should not plan to spend the majority of the flight time in the airport traffic pattern. PICs will fly as much of the approved mission profile as safely possible understanding that requirements for trainees, weather, or other factors may prevent the completion of all listed events. This proficiency flight can be an Air Force assigned non-reimbursed mission authorized by the State Director that is released by a flight release officer using mission symbol B-12. Monthly mission number and mission profile number will be noted on the CAPF 99 by the FRO. Alternatively, this proficiency flight can be an Air Force assigned reimbursed mission authorized by the wing commander, SD, and LR and released by a flight release officer using mission symbol A-7. Requests for this training profile under this option will be made through WMIRS.

- ☐ This flight will consist of a cross-country flight with a minimum of three navigation legs that culminate in landings at three airports. Total flight time should be approximately 1.5 hours.

- ☐ Plan the transportation mission as follows:
  - ☐ Obtain all passenger and cargo weight and description. For a flight with simulated passengers or cargo use one passenger weighing 180 lbs. and 150 lbs. of cargo. Passengers must be qualified CAP aircrew members.
  - ☐ Determine the load distribution and placement in the airplane.
  - ☐ Compute a weight and balance for the specific load.
  - ☐ Using the Aircraft Flight Manual, compute the takeoff and landing performance for the specific load.
  - ☐ Check your departure and destination airport runway lengths, services, ATC frequencies, and procedures.
  - ☐ Obtain a standard weather briefing, NOTAMS, and active TFRs from your local Flight Service Station.
  - ☐ Determine fuel requirements, alternates needed, and any known ATC delays.
  - ☐ Check the currency and appropriateness of all flight information publications.

- ☐ Prepare and file a flight plan, either IFR or VFR.

- ☐ Briefings:
  - ☐ Brief crewmembers, prior to the pre-flight inspection, using the attached crew briefing checklist. Assign duties at this time. Review ground and in-flight emergency procedures, taxi, takeoff, and in-flight procedures with each crew member.
  - ☐ Brief passengers on emergency and egress procedures prior to the pre-flight inspection.

- ☐ Conduct an aircraft pre-flight inspection as a crew using the Aircraft Flight Manual or an approved checklist.

- [ ] Complete pre-takeoff and takeoff checklists as appropriate. If there is another pilot on board, use the pilot not flying to read checklists and assist as appropriate with navigation and radio communication.

- [ ] Perform a normal takeoff.

- [ ] Perform an after takeoff, level off, and cruise checklist as appropriate. If available, have the pilot not flying assist. Lean the aircraft engine in accordance with the aircraft flight manual.

- [ ] During cruise flight compute true airspeed, ground speed, estimated time of arrival, fuel burn, and estimate landing fuel load.

- [ ] Practice or discuss simulated in-flight emergency procedures as conditions and airspace allows.

- [ ] Upon destination arrival, communicate with ATC as appropriate and complete a descent and before landing checklist.

- [ ] Perform a VFR or IFR approach procedure as appropriate.

- [ ] Perform a minimum of 3 landings at each destination as follows:
  - [ ] Perform a normal landing, using full flaps, to a touch and go (if runway and conditions allow).
  - [ ] Perform a short field landing to a full stop, with a simulated obstacle using the procedures recommended in the Aircraft Flight Manual (AFM)/Pilot Operating Handbook (POH) and the current FAA Airplane Flying Handbook.
  - [ ] Perform a soft field landing to a full stop using the procedures recommended in the Aircraft Flight Manual (AFM)/Pilot Operating Handbook (POH) and the current FAA Airplane Flying Handbook.

- [ ] Perform a simulated forced landing to a low approach or full stop (as appropriate).

- [ ] At the final destination: Shut-down, Tie-Down, and Refuel as appropriate.

- [ ] Close the flight plan if necessary.

- [ ] Debrief the sortie with the crew.

**APPROVED MISSION PILOT PROFICIENCY FLIGHT**
**PROFILE #5**
**Mission Pilot CAPF 91 Practice Profile**

This profile may only be flown by qualified SAR/DR Mission Pilots or properly supervised trainees. Supervisors must be qualified PICs in the aircraft flown since they are expected to be able to assume command of the flight as needs dictate. The following is an approved profile for "Proficiency Flight Training for Mission Pilots." Proficiency flights are designed to prepare crews to fly Air Force missions and, though routine flight procedures may be practiced, the majority of a proficiency flight must be focused on the training outlined in the profile below. For example, crews flying this mission profile can reasonably conduct pattern work with multiple touch and go landings, but should not plan to spend the majority of the flight time in the airport traffic pattern. PICs will fly as much of the approved mission profile as safely possible understanding that requirements for trainees, weather, or other factors may prevent the completion of all listed events. This proficiency flight can be an Air Force assigned non-reimbursed mission authorized by the State Director that is released by a flight release officer using mission symbol B-12. Monthly mission number and mission profile number will be noted on the CAPF 99 by the FRO. Alternatively, this proficiency flight can be an Air Force assigned reimbursed mission authorized by the wing commander, SD, and LR and released by a flight release officer using mission symbol A-7. Requests for this training profile under this option will be made through WMIRS.

☐ This training flight will consist of a flight exercising the trainee's knowledge of and ability to perform in various CAP mission pilot subject areas. The flight should be flown with a trainer, observer, and scanner, but may be flown solo.

☐ Plan the CAPF 91 training flight as follows:
- ☐ Ensure the trainee is familiar with and reviews CAPR 60-1, attachment 6, Administration of CAPF 91 Mission Pilot Checks, prior to the training flight.

☐ The Mission Pilot trainer shall:
- ☐ Verify the wear of an appropriate CAP uniform.
- ☐ Verify the aircraft to be used is in an airworthy condition and all required documents are in order.
- ☐ Conduct an oral review determining the trainee's qualifications as a mission pilot.

☐ The mission pilot trainer will conduct an oral review that is thorough enough to determine if the trainee has the appropriate knowledge base to successfully function as a CAP Mission Pilot. CAPF 91, section I, Oral Discussion, will be used as a guide during the training.

☐ The trainee must demonstrate thorough and appropriate preflight planning. CAPF 91, section II, Preflight Planning, will be used as a guide during the training.

☐ During flight the trainee must adequately demonstrate visual search patterns and procedures. CAPF 91, section III, Visual Search Patterns and Procedures, will be used as a guide during the training.

☐ During flight the trainee must adequately demonstrate electronic search patterns and procedures. CAPF 91, section IV, Electronic Search Patterns and Procedures, will be used as a guide during the training.

☐ When appropriate during flight the trainee must adequately demonstrate Mountainous Terrain Procedures. CAPF 91, section V, Mountainous Terrain Procedures, will be used as a guide during the training.

☐ During flight the trainee must adequately demonstrate the ability to successfully handle emergency procedures. CAPF 91, section VI, Emergency Procedures, will be used as a guide during the training.

☐ During flight the trainee must adequately demonstrate mission flight maneuvers. CAPF 91, section VII, Mission Flight Maneuvers, will be used as a guide during the training. All flight maneuvers will be flown to or train back up to Federal Aviation Administration Private Pilot Practical Test Standards as a minimum.

☐ During flight the trainee must demonstrate the highest level of safety awareness. CAPF 91, section VIII, Safety Awareness, will be used as a guide during the training.

☐ After the flight, review the CAPF 91 and debrief as appropriate.

**APPROVED MISSION PILOT PROFICIENCY FLIGHT**
**PROFILE #6**
**Mountain Search Mission Profile**

This profile may only be flown by qualified SAR/DR Mission Pilots or properly supervised trainees. Supervisors must be qualified PICs in the aircraft flown since they are expected to be able to assume command of the flight as needs dictate. The following is an approved profile for "Proficiency Flight Training for Mission Pilots for Mountain Search." Proficiency flights are designed to prepare crews to fly Air Force missions and, though routine flight procedures may be practiced, the majority of a proficiency flight must be focused on the training outlined in the profile below. For example, crews flying this mission profile can reasonably conduct pattern work with multiple touch and go landings, but should not plan to spend the majority of the flight time in the airport traffic pattern. PICs will fly as much of the approved mission profile as safely possible understanding that requirements for trainees, weather, or other factors may prevent the completion of all listed events. This proficiency flight can be an Air Force assigned non-reimbursed mission authorized by the State Director that is released by a flight release officer using mission symbol B-12. Monthly mission number and mission profile number will be noted on the CAPF 99 by the FRO. Alternatively, this proficiency flight can be an Air Force assigned reimbursed mission authorized by the wing commander, SD, and LR and released by a flight release officer using mission symbol A-7. Requests for this training profile under this option will be made through WMIRS.

☐ This training flight will consist of a flight exercising assessing the trainee's knowledge of and ability to perform in various CAP mission pilot mountain search subject areas. The flight should be flown with a trainer, observer, and scanner, but may be flown with only the mission pilot and a trainer.

☐ Plan for and brief one or more of the following mountain search missions:
- ☐ Contour Search.
- ☐ Steep Valley/Drainage Search.
- ☐ Cove Search.
- ☐ Canyon Search.

☐ The Mission Pilot trainer shall:
- ☐ Verify the wear of an appropriate CAP uniform.
- ☐ Verify the aircraft to be used is in an airworthy condition and all required documents are in order.
- ☐ Conduct an oral review determining the trainee's qualifications as a mountain search mission pilot.

☐ The mission pilot trainer will conduct an oral review that is thorough enough to determine if the trainee has the appropriate knowledge base to successfully function as a Mountain Search qualified CAP Mission Pilot.

☐ The trainee must demonstrate thorough and appropriate preflight planning.
- ☐ Calculate density altitude for departure/arrival airport(s) and the search area. Assess the impact of density altitude on aircraft performance at takeoff, landing, and during search.

☐ The trainee will prepare a flight plan, conduct an aircraft pre-flight, and brief the crew.

- [ ] During flight while enroute or after reaching the search area, practice one or more of the following:
  - [ ] Ridge crossing procedures.
  - [ ] Modified racetrack maneuver.
  - [ ] Teardrop course reversal.
  - [ ] Escape from high sink rates or turbulence.
  - [ ] Emergency course reversal (escape maneuver—to be practiced at a minimum of 2,000 AGL).

- [ ] During flight the trainee must adequately demonstrate the ability to successfully handle emergency procedures.

- [ ] During flight practice mountain search procedures as planned and briefed.
  - [ ] Contour search.
  - [ ] Steep valley/drainage search.
  - [ ] Cove search.
  - [ ] Canyon search.

- [ ] Review landing procedures and practice approach and landing procedures.

- [ ] During flight the trainee must demonstrate the highest level of safety awareness.

- [ ] After the flight:
  - [ ] Shut down, tie down, secure.
  - [ ] Close Flight Plan.
  - [ ] Review and debrief as appropriate.

**APPROVED MISSION PILOT PROFICIENCY FLIGHT**
**PROFILE #7**
**Proficiency Flight Mission Profile**

The following is the approved profile for proficiency flight training for mission pilots. Transport mission pilots that do not hold a commercial license, instrument rating, and FAA class II medical may only participate in this training with CAP-USAF/XO approval. There must be an instructor onboard and the instructor must be a qualified CFI/CFII, as required, in the aircraft flown. This profile includes ground training on a safety topic and three 1-hour blocks of in-flight training. PICs, in conjunction with the CFI/CFII, will choose which 1-hour block of training will be accomplished during the sortie. Mission pilots may fly any of these blocks of training with an instructor as often as needed as a non-reimbursed B-12 mission. The assigned mission number and mission profile number will be noted on the CAPF 99 by the FRO.

For missions reimbursed with AF training funds, the following additional rules apply: This profile must be flown by inexperienced SAR/DR/Transportation/Orientation Ride/ Mission Pilots or pilots designated as needing additional CAPF 5 proficiency training. These pilots must be designated in writing (email acceptable) by the CAP WG/CC or DO as needing additional proficiency training. CAP wing commander and State Director approval is needed before the mission is entered into WMIRS. There is no standard definition for which "inexperienced" pilots automatically qualify for flying this as a reimbursed AF training mission. Overall/recent flying experience, flying experience in CAP single-engine aircraft, overall/recent instrument flying experience, instructor/check pilot recommendations, and other factors the Wing/Region determine should all be considered. These pilots will not exceed 3 hours of reimbursed (using AF training funds) proficiency flying with this profile in any Fiscal Year. This proficiency flight is an Air Force assigned mission authorized by the LR and is released by a flight release officer using mission symbol A-7. Requests for this training profile will be made through WMIRS and include the mission pilot's name, total flight hours, flying hours for the last 30/60/90 days, and training blocks to be accomplished.

**Ground Training** (one of the following must be accomplished prior to the flight)

- ☐ Attend one of the AOPA Air Safety Foundation's Safety Seminars
- ☐ Complete one of the AOPA Air Safety Foundation's Online Courses
- ☐ Attend a CAP-USAF LR/CC approved CAP safety briefing
- ☐ Attend a briefing conducted by an FAA Safety Counselor

**Flight Training** (All Sorties)

- ☐ Brief crew member mission responsibilities as appropriate. Review ground and in-flight emergency procedures, taxi, takeoff, and in-flight procedures with each crew member.
- ☐ Prepare and file a flight plan if necessary.
- ☐ Conduct an aircraft pre-flight inspection as a crew.
- ☐ Shut-down, Refuel, and Tie-down/Hangar as appropriate.
- ☐ Close the flight plan if necessary.
- ☐ Debrief the sortie with the crew.

**Training Block 1 – Air Work**

- ☐ Review air work maneuvers to be accomplished.
- ☐ Slow flight.
- ☐ Stalls.
- ☐ Steep turns.
- ☐ Turns around a point.
- ☐ Practice partial-panel flight maneuvers.
- ☐ Practice simulated in-flight emergency procedures.

**Training Block 2 – Takeoffs and Landings**

- ☐ Review landing procedures with crew members.
- ☐ Perform a normal landing using full flaps.
- ☐ Perform a short field landing to a full stop, with a simulated obstacle using the procedures recommended in the Aircraft Flight Manual (AFM)/Pilot Operating Handbook (POH) and the FAA Practical Test Standards (PTS).
- ☐ Perform a soft field landing to a full stop using the procedures recommended in the AFM/POH.
- ☐ Practice proper crosswind landing techniques.
- ☐ Perform a simulated forced landing to a low approach or full stop (as appropriate).
- ☐ Perform no-flap landing to a full stop.

**Training Block 3 – Instrument Training**

- ☐ Review instrument procedures with crew members.
- ☐ Hood work in turns, climbs, descents, etc.
- ☐ Fly as many of the following approaches as time allows:
    - ☐ ILS approach. ☐ VOR approach.

☐ NDB approach☐ GPS approach

**APPROVED ARCHER AIRCREW PROFICIENCY FLIGHT**
**PROFILE #8**
**ARCHER Mission Profile**

This profile may only be flown by GA-8 pilots (who are qualified SAR/DR Mission Pilots) and ARCHER aircrew members or properly supervised trainees. If onboard, Instructor Pilots must be qualified PICs in the GA-8 flown since they are expected to be able to assume command of the flight as needs dictate. The following is an approved profile for "Proficiency Flight Training for Mission Pilots." Proficiency flights are designed to prepare crews to fly Air Force missions, and though routine flight procedures can be practiced, the majority of a proficiency flight must be focused on the training outlined in the profile below. For example, crews flying the ARCHER mission profile can reasonably conduct pattern work with multiple touch and go landings, but should not plan to spend the majority of the flight time in the airport traffic pattern. PICs will fly as much of the approved mission profile as safely possible understanding that requirements for trainees, weather, or other factors may prevent the completion of all listed events. This proficiency flight can be an Air Force assigned non-reimbursed mission authorized by the State Director that is released by a flight release officer using mission symbol B-12. The monthly mission number and mission profile number will be noted on the CAPF 99 by the FRO. Alternatively, this proficiency flight can be an Air Force assigned reimbursed mission authorized by the wing commander, SD, and LR and released by a flight release officer using mission symbol A-7. Requests for this training profile under this option will be made through WMIRS.

This profile is meant to exercise the entire ARCHER Crew (Archer Pilot, Archer Co-Pilot/Observer, ARCHER TRAC Operator, and ARCHER Console Operator). Successful completion of this training will require crew coordination and interaction to fly the ARCHER mission profile with good sensor coverage of the search area.

Primary ARCHER Crew Position Duties:

- **ARCHER Pilot:** Ensure safe operation of the aircraft, PIC; Provide stabilized platform for ARCHER data collection.
- **ARCHER Co-Pilot/Observer:** Clear for traffic; Provide situational awareness assistance to the ARCHER Pilot (especially when in the grid); Maintain radio communications with CAP mission base.
- **ARCHER TRAC Operator:** Conduct mission planning for sortie; Provide track guidance to ARCHER Pilot to maximize sensor coverage; Coordinate mission execution with ARCHER Console Operator.
- **ARCHER Console Operator:** Setup and operate ARCHER equipment and conduct in-air review of targets. Responsible for ground analysis of ARCHER data.

**Mission Commander:** The most experienced ARCHER aircrew member (no matter what position this person occupies in the plane) should be designated Mission Commander. This person has the responsibility for the overall success of the mission and is the final authority on all aspects of the mission. The Mission Commander will be responsible for prebriefing all mission details. The PIC (who could also be the Mission Commander) will brief (as a minimum) weather, NOTAMS, aircraft safety and emergency procedures. Note: This does not override the PICs responsibility for the aircraft and overall safety of flight.

☐ Plan and brief an ARCHER sortie as a crew. Special emphasis should be placed on mission risk assessments, the routes to and from the search area, aircraft limitations and operating procedures, and crew communications procedures.

☐ Brief the overall mission objectives, crew member in-flight communication procedures, mission responsibilities (ARCHER Console Operator, ARCHER TRAC Operator and ARCHER Pilot and CoPilot/Observer) as appropriate. Brief search area planning, coverage, estimated time, method of track alignment (turns) and return to base. Review ground and in-flight emergency procedures, taxi, takeoff, and in-flight procedures with each crew member.

Construct an ARCHER search grid using the following parameters:

Standard Quarter Grid Search or, Contour Search of a terrain feature.
Leg direction: Grid Search or Free rotate
Heading: 090º or as appropriate for Contour Search
Latitude: Appropriate for Locality
Longitude: Appropriate for Locality
Altitude: 2500 ft AGL
Leg overlap: 20%
Leg length: 5.0 nm

☐ The ARCHER TRAC Operator will guide the pilot to enter the search grid at the planned entry point. The aircraft should be at search speed, altitude and lined up for entry no less than 3 miles prior to grid entry.

☐ During the flight, the ARCHER TRAC Operator shall provide continuous course, altitude and ground speed corrections to the pilot to ensure proper sensor coverage of the search area. The ARCHER TRAC Operator will also complete the control manipulations and activities as outlined in the ARCHER TRAC Operator Task Guide.

☐ During the flight, the ARCHER Console Operator shall coordinate with the ARCHER TRAC Operator, and complete the control manipulations on the ARCHER Console and activities as outlined in the ARCHER Operator Task Guide.

☐ An ARCHER instructor may review the ARCHER TRAC mission data after the flight, so do not delete any mission data from ARCHER TRAC computer.

☐ An ARCHER instructor may review the ARCHER console mission data after the flight, so do not delete any mission data from the Archer System.

☐ Perform a normal landing to a full stop.
☐ Shut-down, tie-down, and refuel as appropriate.
☐ Close the flight plan as necessary.

After the flight, the Mission Commander will review the in-flight coverage data with the crew. Areas to be debriefed include: efficiency and search pattern coverage, inter-plane communications between all crew members, overall mission effectiveness and lessons learned/areas needing improvement. A review of ARCHER TRAC coverage data and ARCHER Console data should be done to help visualize the actual course flown and to aid in the debriefing of the training activities. The Mission Commander should also debrief each crew member on how well they accomplished their mission responsibilities.