



Category F Training Aid

All training to be conducted by instructors of the:



Categories F-H: Group Skydiving Skills

Skydiving is a sport for individualists who like to do things together. In the first portion of the USPA Integrated Student Program, Categories A-E, you focused on the skills required to survive independent freefall: stability control, deployment at the correct altitude, landing in a clear area, and using the equipment.

The remaining three categories, F-H, prepare you for more advanced freefall control. More importantly, you get ready for skydiving in groups: in freefall and under canopy.

Your education continues in canopy flight, equipment, and aircraft skills essential for safety. Soon, you will graduate and become independent of supervision. Detailed review also continues on the emergency procedures introduced in the first-jump course.

With the direct assistance of other qualified staff members, such as the USPA Coach, the USPA Instructor continues to supervise your training and monitor your progress during all remaining student jumps until you obtain your USPA A-License.

The freefall portions of Categories F through H address group flying techniques and skills. Under the supervision of a USPA Instructor, a USPA Coach may train you for the freefall skills in these last three categories and accompany you in freefall.

After completing all training and jumps at the end of Category H, you may sign up for a USPA A-License check dive with a USPA Instructor.

Category F

Two Clear-and-Pulls and Two Tracking Jumps with One USPA AFF Instructor or Coach

Tracking is a basic group skydiving skill that enables jumpers to gain sufficient freefall separation for a safe opening. It is such an important skill that the freefall training in this category is devoted entirely to tracking techniques. To begin, while supervising yourself in freefall, practice the basics of the delta position, the first step toward a flat track. The USPA Coach will evaluate and refine your tracking skills as part of the jumps in Categories G and H. Tracking evaluation is part of the A-License check dive with the USPA Instructor. Flying the canopy slowly and performing flat, altitude-conserving turns is an important skill that can help you out of a difficult landing approach in a tight area. You will also learn more about how to handle aircraft emergency exit procedures independently. Emergency review includes power line recognition, avoidance, and landing procedures. During this category, you will also make a practice clear-and-pull from 5,500 feet, followed by a clear-and-pull jump from 3,500 feet, as required for the A-License. By now, you are ready to learn how to pack and should begin working with a packing instructor. The staff continues to build your understanding of aircraft procedures on jump run with emphasis on separation between groups exiting on the same pass. You also learn the specific procedures for coordinating with the pilot or jumpmaster in the event of an aircraft emergency.

Learning and Performance Objectives

- Introduction to tracking
- Two clear and pulls
- Braked turns, approaches, and landings
- Extending the glide
- Power-line landing review
- Packing with assistance
- Checking others' equipment
- Procedures following inactivity
- Winds-aloft and the exit point
- Separating groups during exit

Rules and Recommendations

Study USPA BSRs applicable to USPA A-License holders

1. Compliance with Federal regulations (BSR 2-1.B):
 - a. **No skydive may be made in violation of Federal Aviation Administration regulations.**
 - b. **FAA regulations include the use of restraint systems (seatbelts) in the aircraft by all skydivers during movement on the surface (taxiing), takeoff, and landing.**
2. Medical requirements (BSR 2-1.C):
 - a. All persons engaging in skydiving must:
 - (1) Carry a valid Class 1, 2, or 3 Federal Aviation Administration Medical Certificate; or
 - (2) Carry a certificate of physical fitness for skydiving from a registered physician; or
 - (3) Have completed the USPA recommended medical statement in the DZ liability release waiver.
 - b. Any skydiver acting as parachutist in command on a tandem jump must possess a current FAA Third-Class Medical Certificate or equivalent medical certificate acceptable to USPA, or, if residing outside the United States or its territories or possessions, a current Aviation Medical Certificate recognized by the Civil Aviation Authority of the residence country.
3. Age requirements (BSR 2-1.D):
 - a. For skydives made within the U.S. and its territories and possessions, skydivers are to be at least 18 years of age.
 - b. For skydives made outside the U.S. and its territories and possessions, the minimum age is specified by the country's (or its national air sport control's) requirements. Such skydivers who are under 16 years of age will not be issued a USPA license.



4. Maximum ground winds (BSR 2-1.G.2):
 - a. For all solo students:
 - (1) 14 mph for ram-air reserves (Start Skydiving is waived to 16 mph for ram-air canopies).
 - (2) 10 mph for round reserves.
 - b. For licensed skydivers are unlimited.**
5. Minimum container opening altitudes above the ground for skydivers are (BSR 2-1.H.2):
 - a. Tandem jumps—4,500 feet AGL
 - b. All students and A-License holders—3,000 feet AGL**
 - c. B-License holders—2,500 feet AGL
 - d. C- and D-License holders—2,500 feet AGL (waiverable to a minimum altitude of 2,000 feet AGL)
6. Drop-zone requirements (BSR 2-1.I.1.a, BSR 2-1.I.2, and BSR 2-1.I.3):
 - a. Areas used for skydiving should be unobstructed, with the following minimum radial distances to the nearest hazard:**
 - (1) Solo students and A-License holders: 330 feet**
 - (2) B- and C-License holders: 165 feet
 - (3) D-License holders: 40 feet
 - b. Hazards are defined as telephone and power lines, towers, buildings, open bodies of water, highways, automobiles, and clusters of trees covering more than 32,292 sq. ft.**
 - c. Manned ground-to-air communications (e.g., radios, panels, smoke, lights) are to be present on the drop-zone during skydiving operations.**
7. Parachute equipment (BSR 2-1.L.5):
 - a. FAA regulations (FAR 105.19) require that when performing night jumps, each skydiver must display a light that is visible for at least three statute miles from the time the jumper is under an open parachute until landing.
 - b. All students are to be equipped with the following until they have obtained a USPA A-License:
 - (1) A rigid helmet (except tandem students)
 - (2) A piggyback harness and container system that includes a single-point riser release and an RSL
 - (3) A visually accessible altimeter
 - (4) A functional AAD that meets the manufacturer's recommended service schedule
 - (5) A ram-air main canopy suitable for student use
 - (6) A steerable reserve canopy appropriate to the student's weight
 - (7) For freefall, a ripcord-activated and spring-loaded or BOC throw-out pilot-chute-equipped main
 - c. Students must receive additional ground instruction in emergency procedures and deployment-specific information before jumping any unfamiliar system.
 - d. For each harness-hold jump, each AFF rating holder supervising the jump must be equipped with a visually accessible altimeter.
 - e. All skydivers wearing a round main or reserve canopy and all solo students must wear flotation gear when the intended exit, opening, or landing point is within one mile of an open body of water (this is defined as one in which a skydiver could drown).**
8. Special altitude equipment and supplementary oxygen (BSR 2-1.M):
 - a. Supplementary oxygen available on the aircraft is mandatory on skydives made from higher than 15,000 feet MSL.**

Study USPA recommendations on training following periods of inactivity

1. Students

- a. **Students who have not jumped within the preceding 30 days should make at least one jump under the direct supervision of an appropriately rated USPA Instructor.**

2. Licensed skydivers

- a. Skydivers returning after a long period of inactivity encounter greater risk that requires special consideration to manage properly.
- b. Care should be taken to regain or develop the knowledge, skills, and awareness needed to perform the tasks planned for the jump satisfactorily.
- c. Jumps aimed at sharpening survival skills should precede jumps with other goals.

3. Changes in procedures

- a. If deployment or emergency procedures are changed at any time, the skydiver should be thoroughly trained and practice under supervision in a harness simulator until proficient.
- b. Ground training should be followed by a solo jump which includes several practice sequences and deployment at a higher than normal altitude.
- c. The jumper should repeat ground practice at short intervals, such as before each weekend's jump activities, and continue to deploy at a higher than normal altitude until thoroughly familiar with the new procedures.

4. Long lay-offs

- a. Jumpers should receive refresher training appropriate for their skydiving history and time since their last skydive.
 - (1) Jumpers who were very experienced and current but became inactive for a year or more should undergo thorough training upon returning to the sport.
 - (2) Skydivers who historically jump infrequently should review training after layoffs of even less than a year.
- b. Skydiving equipment, techniques, and procedures change frequently.
 - (1) During recurrency training following long periods of inactivity, jumpers may be introduced to new and unfamiliar equipment and techniques.
 - (2) Procedures change to accommodate developments in equipment, aircraft, flying styles, FAA rules, and local drop-zone requirements.
- c. Returning skydivers require thorough practical training in the following subject areas:
 - (1) aircraft procedures
 - (2) equipment
 - (3) exit and freefall procedures
 - (4) canopy control and landings
 - (5) emergency procedures
- d. **USPA A-License holders who have not made a freefall skydive within:**
 - (1) 60 days: should make at least one jump under the supervision of a currently rated USPA instructional rating holder until demonstrating altitude awareness, freefall control on all axes, tracking, and canopy skills sufficient for safely jumping in groups**
 - (2) 90 days: should make at least one jump beginning in Category D with a USPA AFF Instructor or in Category B with a USPA IAD Static-Line, or Tandem Instructor before proceeding to unsupervised freefall**
- e. USPA B-license holders who have not made a freefall skydive within the preceding 90 days:
 - (1) should make at least one jump under the supervision of a USPA instructional rating holder until demonstrating the ability to exercise the privileges of that license safely.
- f. USPA C & D-license holders who have not made a freefall skydive within the preceding six months:
 - (1) should make at least one jump under the supervision of a USPA instructional rating holder until demonstrating the ability to exercise the privileges of that license safely.



Equipment

1. Pack at least one parachute with the assistance of a knowledgeable packer.
2. Discuss the most important points of packing:
(Note: An FAA rigger is your best resource for this discussion.)
 - a. Lines straight and in place in the center of the completed pack job
 - b. Slider up (orientation closest to the canopy)
 - c. Tight line stows to prevent premature line deployment
3. Perform a pre-jump equipment check on another jumper who is in full gear:
 - a. "Check of threes" in the front:
 - (1) Three-ring assembly (and reserve static line)
 - (2) Three points of harness attachment for snap assembly, correct routing, adjustment, & no twists
 - (3) Three operation handles: main activation, cutaway, reserve
 - b. Pin check back of system, top to bottom:
 - (1) Automatic activation device on and set to correct mode
 - (2) Reserve pin at least halfway seated
 - (3) Main pin fully seated
 - (4) Ripcord cable movement or correct bridle routing
 - (5) If collapsible pilot-chute, check the indicator window
 - (6) Activation handle in place
 - c. Check personal equipment ("SHAGG"):
 - (1) **S**hoes: tied, no hooks
 - (2) **H**elmet: fit and adjustment
 - (3) **A**ltimeter: set for zero
 - (4) **G**oggles: tight and clean
 - (5) **G**loves: lightweight and proper size (only if below 40° at exit altitude)

Spotting and Aircraft

1. Acting without a rated USPA instructor during routine jump operations and aircraft emergencies:
 - a. The person spotting the load usually serves as the jumpmaster.
 - b. In larger aircraft, the jumpmaster should establish an exclusive chain of communication with pilot.
 - (1) A communication assistant should be able to communicate directly with the pilot and the jumpmaster simultaneously.
 - (2) Other jumpers should not get involved in communication among the pilot, communications assistant, and the jumpmaster.
2. Review of low-altitude exit procedures:
 - a. The jumpmaster must determine if jumpers are over a safe landing area and communicate this information to the pilot.
 - b. Establish firm altitudes at which certain aircraft emergency decisions would be made (DZ policy):
 - (1) Altitude below which all jumpers will land with the aircraft (less than 1,500 feet)
 - (2) Altitude below which all jumpers will jump using their reserves (1,500 feet to 3,500 feet)
 - (3) Altitude below which all jumpers will jump and immediately use their mains (3,500' to 5,500')
 - c. Jumpers must maintain correct weight distribution in the aircraft, especially during emergency exits

3. The effect of the winds-aloft on the exit point:

- a. Subtract the speed of the headwind on jump run (if flown into the wind) from the airspeed of the aircraft to determine the ground speed.
- b. Jumpers are first thrown forward on exit (approximately 0.2 miles in calm winds, less with headwind) from residual aircraft speed and then fall straight down or blow toward the target.
- c. The winds-aloft will cause freefalling jumpers to drift according to the wind's strength and direction.
- d. Winds generally diminish at lower altitudes.
- e. Average the speed and the direction of the winds from exit altitude to 3,000 feet AGL to estimate freefall drift. See the example in Table F.1 below for a sea-level drop-zone:

| Altitude | Heading | Speed (mph) |
|-------------|---------|-------------|
| 3,000 feet | 250 | 07 |
| 6,000 feet | 260 | 14 |
| 9,000 feet | 270 | 16 |
| 12,000 feet | 290 | 23 |
| Average | 270 | 15 |

(Note: 15 mph = ¼ mile per minute)

Table F.1 – Averaging the winds-aloft. Note: Averaging the force and direction of the winds-aloft works sufficiently in common jump conditions. A vector analysis provides results that are more accurate.

- (1) If flying jump run upwind, use the average heading of 270 degrees.
- (2) Aircraft forward throw is approximately 1/8-1/4 mile upwind in the light-to-moderate headwind.
- (3) Jumpers fall for one minute, drifting at 1/4 mile per minute for 1/4 mile of drift downwind.
- (4) Since the forward throw and the freefall drift approximately cancel each other, the ideal exit point is almost straight over the ideal opening point in this example.

4. Group separation on jump run:

- a. Slower-falling jumpers and groups are exposed to upper headwinds longer and are blown farther downwind than faster-falling jumpers and groups.
 - (1) Slower-falling groups should exit before faster-falling groups if jump run is flown into the wind.
 - (2) On days with strong upper headwinds, allow more time between groups on the same pass to get sufficient horizontal separation over the ground.
 - (a) Provide at least 1,000 feet of ground separation between individuals jumping solo.
 - (b) Provide at least 1,500 feet of ground separation between small groups, adding more as size of the groups increase.
 - (3) Once the parachute has opened, delay flying up or down the line of flight until:
 - (a) Any slower-falling group that exited before has opened their parachutes and turned toward the landing area.
 - (b) The group exiting after has completed their freefall and opened.
- b. Flying jump run across the upper winds (crosswind) helps achieve separation between groups.
- c. Whether flying one or more aircraft, each pass should allow enough time for jumpers on a previous pass to descend to a safe altitude before dropping jumpers from the next pass.

5. Perform all duties on jump run with minimum assistance, including:

- a. Operating the door (if the pilot allows)
- b. Monitoring progress during jump run
- c. Directing the pilot to the correct spot
- d. Choosing the correct exit point



Exit and Freefall

1. Initiating a track:
 - a. First, locate a point on the horizon.
 - b. Smoothly extend both legs fully to initiate forward motion.
 - c. Control in the delta and track positions:
 - (1) Dip one shoulder slightly in the direction of the turn to make heading corrections.
 - (2) Make only small corrections.
 - d. Slowly extend your torso by stretching your shoulders toward your ears and flatten your arch.
 - e. Fully extend your arms to the side 90° to your spine and level with your hips.
2. Refining the track:
 - a. Once establishing a heading in a positive forward dive, fully extend both legs with your knees locked and toes pointed.
 - b. Stiffen your body slowly into a slight reverse arch, pushing down and forward slightly with your shoulders, while keeping your hands level with your hips.
 - c. Continually adjust your body position to meet the relative wind effectively.
3. Tracking practice procedure:
 - a. Experienced jumpers often allow only five to ten seconds to obtain adequate separation.
 - b. Practice entering & refining an on-heading track for five seconds, reversing direction, & repeating.
4. Tracking jump safety:
 - a. Fly exactly perpendicular to the jump run to avoid others up and down the line of flight.
 - b. Always plan tracking dives with other groups in mind.
 - c. Learn to control a track on heading first, and then develop techniques for pitch and speed.
5. Clear and pull:
 - a. A clear and pull is used for emergency exits and pre-planned low-altitude jumps.
 - b. Use a familiar, stable, poised exit technique.
 - c. Present your hips to the relative wind and execute normal pull procedures (without wave-off) to deploy within five seconds of exit.
 - d. Expect the parachute to open in relation to the relative wind, not overhead as usual.
 - e. The sequence consists of a clear and pull from two altitudes:
 - (1) first from 5,500 feet
 - (2) once successful, from 3,500 feet



Canopy

1. Braked turns:
 - a. Performed correctly, braked turns provide the quickest heading change with the least altitude lost.
 - b. A braked turn may be the best choice when a quick heading change is needed:
 - (1) When suddenly encountering another jumper under canopy or someone in the landing area
 - (2) Recognizing an obstacle
 - (3) Too low to recover from a full-flight turn
 - c. Practice braked turns:
 - (1) From the slowest speed at which the canopy will fly, raise one toggle slightly to initiate a heading change in the opposite direction.
 - (2) Try to change heading as quickly as possible without banking or stalling.
2. Using brakes to attain the maximum glide and minimum descent:
 - a. On lower-glide designs, the minimum descent may begin nearer the half-braked position.
 - b. On higher-glide designs, the minimum descent may be nearer the three-quarter braked position or just prior to a full stall (reverse flight).
 - c. Some canopies achieve minimum descent using the rear-risers instead of the toggles.
 - d. Minimum sustainable descent (float):
 - (1) Allows the jumper to remain above other jumpers on descent
 - (2) Allows the canopy to cover a greater distance
3. Recognizing and adjusting for minimum descent and maximum glide ("accuracy trick"):
 - a. Look ahead to the point on the ground that appears not to rise or sink in your field of vision:
 - (1) Everything before that point appears to fall.
 - (2) Everything beyond it appears to rise.
 - (3) That point is the projected landing point on the canopy's current glide slope.
 - b. Pull the toggles down slightly to see if the stationary point moves farther away:
 - (1) If so, the glide slope has flattened.
 - (2) The canopy will cover more distance.
 - c. Repeat until the point begins to move closer, then return to the maximum glide position that you have just determined.
4. When flying downwind in maximum glide:
 - a. As the winds decrease at lower altitudes, your glide slope will degrade.
 - b. The actual landing area will be closer than you initially anticipated.
5. Increasing the glide when flying against the wind:
 - a. In lighter winds, may improve distance.
 - b. In stronger winds, may slow the canopy too much and reduce its upwind range.
6. Braked pattern and landing approach:
 - a. Fly one entire landing pattern in at least half brakes, to determine the effect on glide path.
 - b. Plan for a change in glide slope:
 - (1) A lower-glide design may require a smaller pattern when flown in brakes.
 - (2) A higher-glide design may require a bigger pattern when flown in brakes; extend the final approach to avoid overshooting the target.
 - c. Fly final approach in quarter to half brakes.
 - d. Flare carefully from the braked position:
 - (1) Practice high to avoid a stall.
 - (2) To get the best flare may require a shorter, quicker stroke initiated lower to the ground.
 - (3) The stall may occur more abruptly. Plan for a PLF.
 - e. A smaller canopy may descend too quickly in deep brakes for a safe braked landing.
7. Accumulate two unassisted landings within 80 feet of the planned target.



Emergency Procedure Review

1. Recognizing and avoiding power lines:
 - a. Power lines present a serious hazard to all aviators; know where they are near your DZ.
 - (1) Expect power lines to appear typically along roads, between buildings, in and along straight-line paths through wooded areas and in the forest, and randomly in open fields, as well as other random places.
 - (2) They may be invisible, except for their poles.
 - b. Identify power lines in the landing area as early as possible and steer to avoid them.
 - (1) Scan every 500 feet of descent into an unfamiliar landing area.
 - (2) Continually scan below 500 feet.
2. Review and practice emergency procedures for a powerline landing in a training harness:
 - a. Power lines can be extremely dangerous: if there is no other alternative, landing in or on trees, water, or a small obstacle may be preferable to landing in power lines.
 - b. A steep dive following sharp turns from full flight close to the ground can be equally dangerous, so it is important to identify power lines and wires near your landing area and continue steering to avoid them while enough altitude remains to do so safely, avoiding sharp turns near the ground.
 - (1) If a low-altitude avoidance turn is necessary to avoid power lines:
 - (a) Prepare for a hard landing (PLF) with your feet and knees tightly together.
 - (b) Only make the minimum, flat, braked turn necessary to avoid the lines.
 - (c) Attempt to land parallel to the power lines and wires when possible.
 - (d) Execute a braked landing and flare.
 - c. Emergency procedures for landing in a power line if a power line landing is unavoidable:
 - (1) Drop any ripcords or other objects.
 - (2) Pull both toggles to the halfway position to bring the canopy to slow flight.
 - (3) Protect your face by covering it with your forearms.
 - (4) Prepare for a hard landing (PLF) with your feet and knees tightly together.
 - (5) Turn your head to one side away from wires with chin down to protect your chin.
 - (6) Try to avoid touching any power lines or wires if possible.
 - (a) Do not touch more than one power line or wire at a time.
 - (7) If suspended in the wires:
 - (a) Stay still and keep your helmet on.
 - (b) Prepare to drop the rest of the way to the ground at any moment.
 - (c) Wait for competent, knowledgeable help from drop-zone staff and power company personnel for help in getting down.
 - (d) The parachute's nylon can conduct electricity at higher voltages, so the power needs to be off before making contact with anyone or anything on the ground.
 - (e) Verify and confirm only with the power company that the electrical power is turned off and will stay off until recovery operations are complete.
 - (8) If the computer controlling the power distribution senses a fault in the line, computer-controlled resets may attempt to turn the power back on without warning.



Category F Quiz

(Must be passed before Category F-1 jump.)

- 1. What is the best way to change direction of canopy flight while conserving the most altitude**
 - a) Braked turns.
 - b) Rear-riser turns.
 - c) Front riser turns.
- 2. What happens if a canopy is controlled too deeply in brakes?**
 - a) It dives.
 - b) It bucks.
 - c) It stalls.
- 3. Describe the difference between flaring from half brakes and full glide?**
 - a) Flaring from half brakes requires a quicker stroke, the stroke is shorter, and stalls occur sooner.
 - b) Flaring from half brakes requires a slower stroke, the stroke is shorter, and stalls occur sooner.
 - c) Flaring from half brakes requires a slower stroke, the stroke is longer, and stalls occur sooner.
- 4. How does the half-braked position affect the canopy's flight?**
 - a) Speeds descent, changes glide
 - b) Slows descent, changes glide
 - c) Slows descent
- 5. What is a glide path?**
 - a) The direction the parachute travels horizontally across the ground.
 - b) The angle at which the parachute descends towards its projected landing point.
 - c) The pattern that is ultimately flown when landing.
- 6. How do you determine your glide path?**
 - a) Look straight down between your feet to see which direction you are traveling.
 - b) Look straight out at the horizon to determine if you are flying level.
 - c) Look ahead to find the point on the ground that appears not to rise or sink.
- 7. How does wind affect the glide path of your canopy?**
 - a) The glide path will degrade (become steeper) as the wind speed decreases when flying with the wind
 - b) The glide path will degrade (become steeper) as the wind speed increases when flying into the wind
 - c) Both a) and b)
- 8. How is heading corrected during a track?**
 - a) Dip leg in direction of the turn.
 - b) Turn head slightly towards direction of the turn.
 - c) Dip one shoulder slightly in the direction of the turn.
- 9. When making tracking jumps from large plane, why is it important to track perpendicular to the jump run?**
 - a) To stay clear of FAA controlled airspace
 - b) To avoid other groups ahead and behind
 - c) To avoid plane on its descent
- 10. What is the ground speed of a jump aircraft with an airspeed of 90 mph when flying against a 50 mph headwind on jump run?**
 - a) 40 mph
 - b) 140 mph
 - c) 90 mph



-
- 11. How can jumpers assure adequate separation between groups exiting the aircraft?**
- Count slowly to five.
 - Gauge separation according to position over the ground.
 - Gauge separation according to GPS instruments.
- 12. What are the three most important aspects of packing the main canopy?**
- Stow brakes, lines straight and in place in the center, nose rolled tightly.
 - Lines straight and in place in the center, slider up, tail rolled tightly.
 - Lines straight and in place in the center, slider up, tight line stows.
- 13. How can you tell if the RSL is routed correctly?**
- Clear path from snap shackle to guide ring.
 - Buckle is fully closed.
 - Red tab is visible.
- 14. What is the make and model of your main canopy?**
- Aerodyne Solo
 - Icarus Student Canopies
 - PD Navigator
- 15. What is the make and model of your harness and container?**
- UPT Vector SE
 - Javelin Student Odyssey
 - Aerodyne Icon Student
- 16. What is the make and model of your automatic activation device (AAD)?**
- Cypres 2
 - Vigil I
 - Mars m2
- 17. What is the minimum pull altitude allowed for student skydivers and A-License holders?**
- 3,000 feet
 - 2,500 feet
 - 2,000 feet
- 18. What are the maximum winds allowed for student skydivers?**
- 10 mph
 - 14 mph
 - 18 mph
- 19. If a jumper falls for one minute through upper winds averaging 30 mph from the west: How far will the jumper drift?**
- $\frac{1}{2}$ mile
 - $\frac{1}{4}$ mile
 - $\frac{3}{4}$ mile
- 20. (Continued from 19) In which direction will the jumper drift?**
- West
 - East
 - North-Northeast
- 21. What is the procedure for landing in power lines?**
- Make any maneuvers necessary to avoid landing in power lines.
 - Avoid the area early during the descent, minimum braked turn necessary to avoid lines, land parallel to the wires, braked landing, prepare for PLF, try to touch only one line at a time, wait for help and confirmation that the power has been turned off and will remain off until recovery operations are complete.
 - Get as big as possible, disconnect RSL (if time), cutaway, prepare to PLF.

- 22. In the event of an aircraft emergency with no students or instructors aboard, who should coordinate procedures between the pilot and the other jumpers on the load?**
- a) The person closest to the pilot
 - b) The most senior jumper
 - c) Jumpmaster or spotter
- 23. At Start Skydiving, what is the lowest altitude the pilot would likely ask jumpers to leave the plane during a routine engine-out emergency?**
- a) 1,500 feet AGL
 - b) 2,500 feet AGL
 - c) 3,500 feet AGL
- 24. In an aircraft emergency, what is the lowest exit altitude that an A-license holder should deploy the main parachute before choosing the reserve instead?**
- a) 1,500 feet AGL
 - b) 2,500 feet AGL
 - c) 3,500 feet AGL
- 25. How many jumps are required for the USPA A-License?**
- a) 20
 - b) 25
 - c) 30
- 26. What does a USPA A-License permit a skydiver to do?**
- a) Compete in USPA competitions and events.
 - b) Jump without supervision and pack anyone's main parachute.
 - c) Jump without supervision, pack his or her main parachute, and engage in basic group jumps
- 27. What should an A-Licensed jumper do to regain currency after ten weeks of inactivity?**
- a) Make at least one jump under the supervision of a USPA instructional rating holder.
 - b) Go through the first jump course and repeat all necessary ISP categories.
 - c) Make at least one static line jump.
- 28. What should an A-Licensed jumper do to regain currency after four months of inactivity?**
- a) Make at least one jump beginning in Category D with a USPA AFF Instructor or in Category B with a USPA IAD Static-Line, or Tandem Instructor before proceeding to unsupervised freefall.
 - b) Make at least one jump under the supervision of a USPA instructional rating holder.
 - c) Go through the first jump course and repeat all necessary ISP categories.

Category F Dive Flows

Two Clear-and-Pulls and Two Tracking Jumps with One USPA AFF Instructor or Coach

F1 & F2 Freefall Dive Flow

(Same dive flow for both tracking jumps.)

- Perform all spotting procedures with minimal assistance. Coach observes spot to ensure safety.
- Solo poised “praying” exit with a relaxed arch.
(Must be stable within five seconds of exit to pass.)
- Perform one smooth PPCT w/in 5 seconds of exit.
- Altitude, arch, legs, relax, correct turn if needed.
- Turn 90° from the line of flight.
- Altitude, arch, legs, relax, correct turn if needed.
- Track for 5 secs w/in 30° using start, coast, stop.
- Altitude, arch, legs, relax, correct turn if needed.
- Turn 180°, remaining perpendicular to jump run.
- Altitude, arch, legs, relax, correct turn if needed.
- Track for 5 secs w/in 30° using start, coast, stop.
- Altitude, arch, legs, relax, correct turn if needed.
- Repeat tracking sequences until 6,000 feet.
- Stop final track by no lower than 5,000 feet.
- Wave-off at 4,500 feet (must do so to pass).
- Pull by 4,000 ft. (must do so while stable to pass).

F3 & F4 Clear-and-Pulls

(Same dive flow for both clear-and-pull jumps.)

- Category F-3 is a clear-and-pull from 5,500 feet.
- Category F-4 is a clear-and-pull from 3,500 feet.
- Perform all spotting procedures with minimal assistance. Coach observes spot to ensure safety.
- Stable, solo, poised “praying” exit position.
- Initiate deployment within five seconds without waving off (must be stable within 3 secs to pass).

Canopy Dive Flow

(Same dive flow for all jumps in Category F.)

- Check altitude, air traffic, & position over ground.
- Correct any common canopy problems.
- Release brakes, conduct a canopy controllability check, and move to the holding area.
- Check altitude, air traffic, & position over ground.
- Discovery of stall point.
- Discovery of flattest glide; lowest descent.
- Practice flaring from half to three-quarters brakes.
- Practice 180° left and right turns while flying in deep brakes. Check altitude, air traffic, & position over ground before and after each maneuver.
- Always look in the direction of the turn before and during each turn to ensure clear airspace.
- Find landing area and pattern entry point.
- Divide flight path by thousands of feet.
- Look at runway and determine compass heading.
- Identify suspect areas of turbulence.
- Identify all power lines in the area during descent.
- Continue to scan for obstacles every 500 feet.
- Verify landing pattern and adjust as necessary.
- Steer over the correct portion of the flight path & continue to stay in the holding area until 1,000 ft.
- Follow pre-assigned pattern in half-brakes over the planned or alternate landing area.
- Scan for obstacles from base until landing.
- Prepare to PLF once on final at 300 feet.
- Continue flying at half-brakes until time to flare.
- Flare for landing from half-brakes & perform a PLF (shorter, quicker stroke initiated lower to ground).
- Coach measures the student’s landing distance from a planned target.

Advancement Criteria

Aircraft and Spotting

- Spot the aircraft, including all procedures, with minimum assistance.

Exit and Freefall

- Cumulative three tracking sequences: track for five seconds within 30° of the planned heading, turn 180°, and track back for five seconds
- One stable clear-and-pull from 5,500 feet (must deploy within 5 secs of exit while stable).
- One stable clear-and-pull from 3,500 feet (must deploy within 5 secs of exit while stable).

Canopy

- Cumulative four 180° turns under canopy while flying in deep brakes
- Braked approach and landing on a canopy that allows for a safe braked landing
- Cumulative two unassisted landings within 80 feet of the planned target (jumps from previous categories count toward accuracy requirements)

Equipment

- One complete pack job with assistance
- Perform a pre-jump equipment check on another jumper fully rigged and ready to jump