

ACCELERATED FREE FALL

CONTENTS		
1	INTRODUCTION	2
2	EQUIPMENT	3
3	AIRCRAFT DRILLS	4
4	EXIT, ARCH AND COUNT	4
5	LEVELS 1 THROUGH 10	6



1 INTRODUCTION

Both AFF and static line, on completion of the full course, qualify the student as a GRADUATE SKYDIVER.

NOTE: A Student who has begun an AFF course remains an AFF student:

- until he is signed off as a graduate by an AFF Instructor; or
- until he is released by specific logbook entry by an AFF Instructor.

Overall Objectives:

To teach the candidate to be safe and independent.

Levels (1 - 3) - Two instructors per jump.

Survival skills in priority

- Student to pull own rip cord.
- Student to be altitude aware.
- Student to have basic body position and be able to do manoeuvres.
- Student to show general awareness.
- Student to demonstrate safe canopy control including the landing.

The student's ability to perform these skills will give the instructor an indication as to the safety level of the student.

Levels (4 - 7) - One instructor per jump.

These levels place the emphasis on " solo " skill of the student.

All skills as above and;

- Student must initiate and stop turns on a heading.
- Student must demonstrate ability to regain stability – frontloops / backloops
- Student must show ability to move forward - delta / track.
- Student must show more individual mind work i.e. start sequence on own.

Here the student must show independence as well as safety skills.

Levels 8, 9 and 10 - Solo jumps which may be done in any order:

- As briefed by AFF Instructor - a repeat of level 7 tasks.
- Spin test.
- Clear and pull (hop & pop).

Student is now a graduate skydiver, and must complete the Intermediate Skills Programme before progressing via any recognised sub-discipline's category system in order to obtain further licences. See PANAM MOPs Section 2 - licences.

Notes:

All altitudes referred to in this manual are "AGL" (above ground level).

Only PANAM rated AFF instructors may operate within the bounds of Namibia. See PANAM MOPs Section 2 - licences and ratings.

The club must have a designated senior AFF Instructor if the CI is not AFF rated. He must liaise with the CI on AFF matters.

AFF must be taught from Level 1.

An AFF Instructor, after consultation with the senior AFF Instructor, may adapt/modify a level to suit an individual student's needs.

2 EQUIPMENT (Full lecture as for first jump course)

Objectives:

- To teach the student to perform a basic check and to fit the equipment
- To demonstrate the deployment sequence
- To familiarise the student with additional ground equipment

Training aids:

Video, batons, radios, trolley, mannequin, clock altimeter, wrist altimeter, jump suit, clear goggles, hard helmet, packed rig.

i. Peripheral equipment

- Jump suit - NB for choice, no flap on arms
- Clear goggles
- Hard helmet
- Altimeter - wrist mount
- Shoes (no hooks, jewellery etc.)
- Gloves - (be aware of temperature)

ii. Operational equipment

- Packed rig to explain component parts and their purpose
- AAD compulsory
- PANAM approved student canopy - canopy control assistance on at least L1
- Secondary handle recommended, not compulsory
- Square reserve
- RSL compulsory
- Audible altimeter recommended

iii. Instructor equipment

- Neat clothing and jump suit.
- Frappe hat recommended. Instructor must be able to talk to student in aircraft and on step.

- Clear goggles.
- Audible altimeter highly recommended.
- Wrist mount altimeter.
- Well maintained rig - (with AAD highly recommended)

Evaluation questions review & critique

3 AIRCRAFT DRILLS (Full lecture as for first jump course)

NB Student must be checked out and AAD on before getting in.

Helmet on for take off

1000 ft **E** - equipment check

S - sequence rehearsal

S - signals - recap and do

A - abnormalities

bad exit - do what - arch harder

1 instructor - carry on and arch harder

no instructor - L1, L2 wave and open

Helmet off

5000 ft pass over DZ if possible, for student to see and orientate

Discuss canopy control and show

Sequence rehearsal

Student to read alti on way up - 1000ft, 5000ft, 9000ft

At 9000ft student gets ready and ESSA again with pin checks and AAD on.

At altitude, climb out

Student on knees (remember to spot short)

1. Are you ready to skydive ?
2. Climb out after me.
3. Student takes over the skydive.

Student does pre-exit check - check left OK - check right OK

Exit count - Ready/ Set /Go - arch

Aircraft Emergencies

- Student to take instructions from Instructor.
- 1000ft and below - land with the aircraft
- Major aircraft problems :1000ft - 3000ft - Bail out- reserve ripcord pull
- 3000ft and above - Bail out -main ripcord pull
- If nobody told him and he is outside the plane, he chooses reserve because of fast reliable opening OR normal exit if appropriate
- Parachute hook ups - cutaway and reserve
- AFF to exit last unless inappropriate.
- **NB:** for descending in aircraft with students - AAD to be turned off
- Instructor to have a system.

Evaluation questions review & critique

4 EXIT, ARCH AND COUNT

Objectives:

- To teach the free fall position - BOX / NEUTRAL
- To teach student the level sequence with hand signals

Free fall position

- Demonstrate box / neutral
- Symmetry and centre of gravity
- Practice student and review/critique.

Free fall sequence

- Demonstrate from start to finish
- Explain component parts
- Practise the student
- Review/critique

The signals - (for sequence and body position)

- Demonstrate signals with appropriate response
- Explain
- Practise student
- Review/critique

Evaluation questions review & critique

5 LEVELS 1 THROUGH 10

LEVEL ONE SKYDIVE

Objectives:

- Student to pull own rip cord - no pull then repeat
- Student must be altitude aware
- Student to have good body position
- Student to show general awareness
- Student to have a safe landing

The sequence: (demo, explanation, practise & review - incl. signals)

Student

"check left" Looks L
 "check right" Looks R
 "ready, set, go!" and arch
 circle of awareness-start on own
 "horizon" Look fwd and register
 "altimeter" Look at alti. and register
 report altitude to L Instructor
 report altitude to R Instructor
 3 x rip cord touches
 "Arch, touch/feel, arch"
 Student to look at alti when L hand
 in front for balance
 second circle of awareness – report altitude
 seen on last rip-cord touch (only to L acceptable)
 free time with short circle of awareness
 i.e. horizon / alti / ground
 5 500ft - wave- signal intention to open
 "arch" – emphasise body position
 "touch/pull"
 "arch" – emphasise body position
 "2000"
 "3000"
 "check" look and point up

 Exit 11 000ft, min 9 000ft
 Wave at 5 500ft
 Min opening 4 000ft then RHS Instructor takes over
 3 500ft then LHS Instructor takes over
 Min opening for Instructors 2 000ft

Instructor response

"OK" if ready
 "OK"

 shake / signal if necessary

 thumbs up or other signal
 thumbs up or other signal

 observe / assist / signal as
 necessary

 observe / assist / signal as
 necessary.
 observe / assist / signal as
 necessary. R Ins to leave after
 ripcord out

 L Ins. To leave as student lifts.

PULL THE RIP CORD
PULL AT THE CORRECT ALTITUDE
PREFERABLY PULL STABLE

Evaluation questions review & critique

LEVEL TWO SKYDIVE

Objectives:

- Student to pull own rip cord - no pull then repeat
- Student must be altitude aware
- Student to have good body position
- Student to show general awareness
- Student to have a safe landing
- Student to start and stop forward movement

The sequence: (demo, explanation, practise & review - incl. signals)

Student

"check left" Looks L
 "check right" Looks R
 "ready, set, go!" and arch
 circle of awareness-start on own
 "horizon" Look fwd and register
 "altimeter" Look at alti. and register
 report altitude to L Instructor
 report altitude to R Instructor
 2 x rip cord touches
 "Arch, touch/feel, arch"
 Student to look at alti when L hand in front
 for balance
 Above 7 000ft then forward movement for 6 sec.
 Straighten legs and sweep arms out to side.
 Relax to neutral-alti check

NB: after forward movement
 free time with short circles of awareness
 i.e. horizon / alti / ground
 5 000ft - wave- signal intention to open
 "arch" – emphasise body position
 "touch/pull"
 "arch" – emphasise body position
 "2000"
 '3000
 "check" look and point up

Exit 11 000ft, min 9 000ft

Wave at 5 000ft

Min opening 4 000ft then RHS Instructor takes over
 3 500ft then LHS Instructor takes over

Min opening for Instructors 2 000ft

Instructor response

"OK"
 "OK"
 shake / signal if necessary
 thumbs up or other signal
 thumbs up or other signal
 observe / assist / signal as
 necessary.
 observe / assist / signal as
 necessary.
 If student position/stability
 is good, L Ins. can release
 observe / assist / signal as
 necessary.
 observe / assist / signal as
 necessary. R Ins to leave after
 ripcord out
 L Ins. to leave as student lifts.

PULL THE RIP CORD
PULL AT THE CORRECT ALTITUDE
PREFERABLY PULL STABLE

Evaluation questions review & critique

LEVEL THREE SKYDIVE

Objectives:

- Student to pull own rip cord - no pull then repeat
- Student must be altitude aware
- Student to have good body position
- Student to show general awareness
- Student to have a safe landing
- Student to start and stop turn
- Full release of student preferable

The sequence: (demo, explanation, practise & review - incl. signals)

Student

"check left" Looks L
 "check right" Looks R
 "ready, set, go!" and arch
 circle of awareness-start on own
 "horizon" Look fwd and register
 "altimeter" Look at alti. and register
 report altitude to L Instructor
 report altitude to R Instructor
 1 x rip cord touch - "arch, touch/feel, arch"
 Student to look at alti when L hand in front
 for balance
 If above 7000ft left turn 90 degrees
 to face Instructor - "look/bank/arch"
 alti check- then maintain contact with Instructor
 proximity - left, right, up, down
 Instructor / alti
 6000ft Shake head and maintain heading.
 5000ft - wave- signal intention to open
 "arch" – emphasise body position
 "touch/pull"
 "arch" – emphasise body position
 "2000"
 "3000"
 "check" look and point up
 NB if alone and OK (i.e. in control and on heading and altitude aware), then carry on with skydive to
 5000ft.
 NB priorities of free fall - pull a rip cord, pull at correct altitude, preferably pull stable
 NB student to understand i.e. must not sacrifice altitude for stability

 Exit 11 000ft, min 9 000ft
 Wave at 5 000ft
 Min opening 4 000ft then RHS Instructor takes over
 3 500ft then LHS Instructor takes over
 Min opening for Instructors 2 000ft

Instructor response

"OK"
 "OK"

 shake / signal if necessary

 thumbs up or other signal
 thumbs up or other signal
 observe / assist / signal as
 necessary. LHS Ins. to release

 RHS- observe / assist / signal
 as necessary.

 RHS to give full release
 if possible by 6000 ft
 observe / assist / signal as
 necessary.
 observe / assist / signal as
 necessary.

PULL THE RIP CORD

PULL AT THE CORRECT ALTITUDE

PREFERABLY PULL STABLE

Evaluation questions review & critique

LEVEL FOUR SKYDIVE

Objectives:

- Student to pull own rip cord - no pull then repeat
- Student must be altitude aware
- Student to have good body position
- Student to show general awareness
- Student to have a safe landing
- Student to start and stop turn
- Full release of student AND DEFINITE SOLO PULL

The sequence: (demo, explanation, practise & review - incl. signals)

Student

“check left” or “check right” as appropriate
 “ready, set, go!” and arch
 circle of awareness-start on own
 “horizon” Look fwd and register
 “altimeter” Look at alti. and register
 report altitude to Instructor
 1 x rip cord touch (Optional)
 “arch, touch/feel, arch”
 Student to look at alti when L hand in front necessary.
 for balance
 If above 7000ft turn 90 degrees
 to face Ins.
 “Look/bank/arch”
 alti check - then
 maintain contact with Instructor
 proximity - left, right, up, down
 Instructor / alti
 6000ft Shake head and maintain heading
 5000ft – wave - signal intention to open
 “arch” – emphasise body position
 “touch/pull”
 “arch” – emphasise body position
 “2000”
 “3000”
 “check” look and point up
 NB If alone and OK (i.e. in control and on heading and altitude aware), then carry on with skydive
 NB Priorities of free fall

Instructor response

“OK”

 shake / signal if necessary

 thumbs up or other signal

 observe / assist / signal as
 Ins. to release

 observe / assist / signal
 as necessary.

 Ins. to give full release

 observe / assist / signal as
 necessary
 observe / assist / signal as
 necessary.

 Exit 11 000ft, min 9 000ft
 Wave at 5 000ft
 Min opening 4 000ft then Instructor takes over
 Min opening for Instructor 2 000ft

PULL THE RIP CORD

PULL AT THE CORRECT ALTITUDE PREFERABLY PULL STABLE

Evaluation questions review & critique

LEVEL FIVE SKYDIVE

Objectives:

- Student to pull own rip cord - no pull then repeat
- Student must be altitude aware
- Student to have good body position
- Student to show general awareness
- Student to have a safe landing
- Student to start and stop turn - 360 degrees to right and left
- Unassisted climb out and linked exit

The sequence: (demo, explanation, practise & review - incl. signals)

Student

"check left" or "check right" as appropriate
 "ready, set, go!" and arch
 circle of awareness-start on own
 "horizon" Look fwd and register
 "altimeter" Look at alti. and register
 report altitude to Instructor
 Ins. to release
 If above 6000ft turn 360 degrees L
 "Look/bank/arch"
 alti check
 If above 6000ft turn 360 degrees R
 "Look/bank/arch" then
 maintain contact with Instructor
 proximity - left, right, up, down, forward
 Instructor / alti - free time NB: no docking
 6000ft Shake head and maintain heading.
 4500 ft – wave - signal intention to open
 "arch" – emphasise body position
 "touch/pull"
 "arch" – emphasise body position
 "2000"
 "3000"
 "check" look and point up

Exit 11 000ft, min 9 000ft

Wave at 4 500ft

Min opening 3 500ft then Instructor takes over

Min opening for Instructor 2 000ft

Instructor response

"OK"

shake / signal if necessary

thumbs up or other signal

observe / assist / signal
 as necessary.

observe / assist / signal as
 necessary.

observe / assist / signal as
 necessary.

PULL THE RIP CORD

PULL AT THE CORRECT ALTITUDE

PREFERABLY PULL STABLE

Evaluation questions review & critique

LEVEL SIX SKYDIVE

Objectives:

- Student to pull own rip cord - no pull then repeat
- Student must be altitude aware
- Student to have good body position
- Student to show general awareness
- Student to have a safe landing
- Student to recover stability twice-start and continue at own discretion
- Unassisted climb out and unlinked exit

The sequence: (demo, explanation, practise & review - incl. signals)

Student

“check left” or “check right” as appropriate
 “ready, set, go!” and arch
 heading , alti check
 if above 6500ft – backloop
 heading, alti check
 if above 6500ft - backloop
 heading, alti check
 if above 5500ft -delta 5 sec on heading
 5500ft Shake head and maintain heading.
 4 000ft - wave- signal intention to open
 “arch” – emphasise body position
 “touch/pull”
 “arch” – emphasise body position
 “2000”
 “3000”
 “check” look and point up

Instructor response

“OK”

observe / assist / signal as necessary.

observe / assist / signal as necessary.

observe / assist / signal as necessary.

Note: An available option is to have the student perform a front loop on exit.
 After recovering from this he only has to perform one backloop to have demonstrated recovery twice.

Exit 11 000ft, min 9 000ft
 Wave at 4 000ft
 No backloop below 6 500ft
 No delta below 5 500ft
 Min opening 3 500ft then Instructor takes over
 Min opening for Instructor 2 000ft

PULL THE RIP CORD
PULL AT THE CORRECT ALTITUDE
PREFERABLY PULL STABLE

Evaluation questions review & critique

LEVEL SEVEN SKYDIVE

Objectives:

- Student to pull own rip cord - no pull then repeat
- Student must be altitude aware
- Student to have good body position
- Student to show general awareness
- Student to have a safe landing
- Student to do half series starting with backloop- start and continue at own discretion
- Unassisted climb out, opposite of last exit i.e. dive / surf and unlinked
- Student to clearly demonstrate safety and independence

The sequence: (demo, explanation, practise & review - incl. signals)

Student

“check left” or “check right” as appropriate
 Look L or Look R “OK”
 “ready, set, go!” and arch
 heading , alti check
 if above 6500ft – backloop
 heading, alti check
 if above 5000ft - 360 right
 heading, alti check
 if above 5000ft - 360 left
 heading, alti check
 if above 5000ft - delta and turn
 5000ft shake head and maintain heading.
 3 500ft – wave - signal intention to open
 “arch” – emphasise body position
 “touch/pull”
 “arch” – emphasise body position
 “2000”
 “3000”
 “check” – look and point up

Instructor response

“OK”

observe / assist / signal as necessary

observe / assist / signal as necessary
 observe / assist / signal as necessary

Exit 11000ft, min 9000ft
 Wave at 3500ft
 No backloop below 6500ft
 No turns or delta below 5000ft
 Min opening 3000ft then Instructor takes over
 Min opening for Instructor 2000ft

PULL THE RIP CORD PULL AT THE CORRECT ALTITUDE PREFERABLY PULL STABLE

Evaluation questions review & critique

LEVEL EIGHT SKYDIVE – SOLO SKYDIVE

Objectives:

- Student to pull own rip cord - no pull then repeat
- Student must be altitude aware
- Student to have good body position
- Student to show general awareness
- Student to have a safe landing
- Student to do half series starting with backloop- start and continue at own discretion
- Unassisted climb out, opposite of last exit i.e. dive / surf and unlinked
- Student to clearly demonstrate safety and independence

Repeat Level 7 skydive.

Sequence

“ready, set, go!” and arch
 heading , alti check
 if above 6500ft – backloop
 heading, alti check
 if above 5000ft - 360 right
 heading, alti check
 if above 5000ft - 360 left
 heading, alti check
 if above 5000ft - delta and turn
 5000ft shake head and maintain heading.
 3 500ft – wave - signal intention to open
 “arch” – emphasise body position
 “touch/pull”
 “arch” – emphasise body position
 “2000”
 “3000”
 “check” – look and point up

Exit 11000ft, min 9000ft
 Wave at 3500ft
 No backloop below 6500ft
 No turns or delta below 5000ft

PULL THE RIP CORD
PULL AT THE CORRECT ALTITUDE
PREFERABLY PULL STABLE

Evaluation questions review & critique

LEVEL NINE SKYDIVE – SOLO SKYDIVE – SPIN TEST**Objectives:**

- To teach the student to regain control at any time, i.e. being knocked unstable on break-off.
- Student to pull own rip cord - no pull then big problem.
- Student must be altitude aware
- Student to have good body position
- Student to show general awareness
- Student to have a safe landing
- Unassisted climb out
- Student to clearly demonstrate safety and independence

Sequence

Exit (procedure depends on aircraft)

Heading for 10 seconds

Start 360° turn, grab ankle with one hand and "salute" with opposite hand

If the turn is to the right, the right ankle must be grabbed and the salute done with the left hand and vice versa for the left turn.

To recover from spin, arch hard and force turn in opposite direction

If no recovery within 5 seconds, arch and pull

3 500ft – wave - signal intention to open

"arch" – emphasise body position

"touch/pull"

"arch" – emphasise body position

"2000"

"3000"

"check" – look and point up

Exit 11000ft, min 9000ft

Wave at 3500ft

**PULL THE RIP CORD
PULL AT THE CORRECT ALTITUDE
PREFERABLY PULL STABLE**

Evaluation questions review & critique

LEVEL TEN SKYDIVE – SOLO SKYDIVE – CLEAR AND PULL

Objectives:

- Student to pull own rip cord
- Student must be altitude aware
- Student to have good body position
- Student to show general awareness
- Student to have a safe landing
- Student to show control and open within 5 seconds of leaving aircraft
- Unassisted climb out
- Student to clearly demonstrate safety and independence

Exit 4 500ft, min

Open within 5 seconds of exit

The student is now an AFF graduate skydiver.

ALWAYS REMEMBER THE THREE PRIORITIES OF FREEFALL

PULL THE RIP CORD

PULL AT THE CORRECT ALTITUDE

PREFERABLY PULL STABLE

Evaluation questions review & critique

The Student is now a graduate skydiver for all disciplines. He is known as an Intermediate parachutist.
(See PANAM MOPs Section 2, 1.4)

AFF Instructor to note this in student's logbook and to explain further progression to student. CI to countersign in logbook. The AFF Instructor must continually develop the student's safety and independence skills from level 1 to level 10. By level 6 he should ideally be performing all required checks, drills and routines without prompting. The AFF graduate should clearly understand his own responsibilities and limitations, and have an idea of the route forward.