
Australian Ski Patrol Association

National Ski Patrol

On – Snow Assessment

Revised by : Andy Zwar, July 2004

NATIONAL SKI PATROL

The National Patroller concept is based on a common level of excellence which already exists amongst the best patrollers in Australia.

It offers a stimulus to individuals and patrols to improve their skills and raise the overall standard of patrollers throughout Australia.

It further acts as a forum to compare ideas, share expertise and develop camaraderie between patrollers and patrols. The ultimate aim is to develop one recognized standard of skills common to all patrols in Australia and ideally every patroller should aim to attain this standard.

The current structure for assessment follows more traditional concepts, but in the future video or DVD could be used as both a teaching aid and to assist during the assessment.

This revised manual now covers the requirements for alpine skiers, telemark skiers and snowboarders.

The text has been prepared to advise candidates what skills will be assessed, what levels of competency are expected, and how the tests will be conducted and scored. It further advises the assessors what aspects they are assessing and provides procedural guidelines for the examination.

LOGISTICS

For a patroller to attain National Patrol status he/she must successfully complete four categories of assessment. All four categories must be completed within two consecutive years.

These four categories are:

- Akja or Cascade Lead
- Akja Assist
- Skiing (alpine or telemark) or Boarding
- First Aid

This manual covers the requirements for three of the four categories:

- Akja or Cascade Lead
- Akja Assist
- Skiing (alpine or telemark) and Boarding.

ASSESSORS:

Are patrollers who have passed the National Patrol assessment at examiner level. This pool of examiners may be added to with patrollers who pass the National Patroller assessment at a suitably high level.

CANDIDATES:

Are selected by their Resort Captains.

Each candidate must meet the following criteria:

1. Be of a suitably senior and responsible position in the patrol, and
2. Possess a sufficiently high level of skills in both akja and skiing/riding to satisfy the requirements of the local on-snow examiner and/or patrol captain.

DEMONSTRATORS:

Prior to each category, two of the assessors will demonstrate what is expected of the candidates. Two demonstrators will be used for all assessments. In addition, each candidate will be given a preamble before each test.

AKJA TEST

As a prerequisite for the examination candidates will have made, to the satisfaction of a resident on-snow examiner or chief patroller, a number of akja descents in their 'home resort'. These descents should have met, or have been very close to meeting, the required standards of competency. These standards of competency are outlined below.

The National Patrol level tests will be held on a suitably steep slope with challenging terrain in regard to moguls and snow conditions. The chosen terrain shall enable the candidates to demonstrate all required skills.

Each candidate must complete a full run in both the lead and assist position over a pre-set course.

The course consists of two sections:

1. Section one:
In this section the candidates are required to show three changes of direction as well as an emergency stop and some traversing. The course will include a high traverse and sharp turns, but the terrain itself will dictate where the other direction changes take place.
2. Section two:
This section shall run continuously from the first, and will allow the lead patroller to show his/her discretion on path selection.

Note: Marks will be lost if a candidate initiates events leading to a fall of one of the patrollers, tipping of the akja or loss of control of the akja.

AKJA PREAMBLE

The run consists of two sections. The top section is to be completed as directed (refer to Change of Direction on Page 7), the lower section allows the candidates' full discretion in terms of path selection and direction changes.

The candidates must show controlled continuous speed throughout the decent.

At some stage during the run an emergency stop will be called by one of the examiners. The patrollers and the akja must halt instantly. If the lead patroller is an alpine or telemark skier, he/she must then demonstrate a stop kick turn. After the kick turn the candidates will be asked to continue their descent.

If the lead person is on a snow board the candidate is expected to demonstrate an emergency stop and then, upon request by one of the examiners, continue his/her descent.

A minimum of three obvious changes of direction must be demonstrated in the top section, followed by terrain dependent turns on the bottom section.

CATEGORIES TO BE ASSESSED

AKJA LEAD

1. Change of direction
2. Path selection
3. Overall competence

AKJA ASSIST

1. Change of direction
2. Akja stability
3. Overall competence

There are four main categories in the assessment of the akja run:

- **Path Selection**
- **Change of direction**
- **Akja Stability**
- **Overall Competence**

PATH SELECTION

The candidates are expected to choose the best possible line of descent to avoid unnecessary moguls, ruts or traverse ledges. Depending on terrain and snow conditions, the steeper the slope the more important it is for the akja to be traveling closer to the fall line.

The lead person shall, by careful observation and anticipation, choose the best snow conditions and terrain to ensure a safe descent of the akja to the designated destination.

CHANGE OF DIRECTION

There are a variety of techniques, but the most important consideration should be the safety and comfort of the patient in relation to the degree of difficulty of the slope.

The four direction changes for the purpose of the assessment are:

- 1 Stop, kick turn (not applicable to Snowboard)
- 2 Snow plough turn (not applicable to Snowboard)
- 3 Assist hold turn
- 4 Side slipping forwards and backwards

1. THE STOP KICK-TURN:

Only alpine and telemark skiers are expected to perform this maneuver after the “emergency stop” has been called.

Whilst the akja weight is held by the assist role the lead undertakes a basic kick turn. Throughout the maneuver both lead and assist maintain contact with the akja handles. When the lead resumes his weight holding role the assist then performs a pivot turn so that both lead and assist have identical ski direction, before continuing with their descent.

NB: If such a maneuver is required other than as part of the emergency stop, it probably means that the lead patroller has chosen the wrong route and has come across an obstruction e.g. a rock, trees, crevice etc. Marks will be lost for failing to show fluidity.

2. SNOW PLOUGH TURN:

This turn is only for alpine and telemark skiers.

The turn is initiated by the lead and he/she must allow sufficient time, radius and space for the assist to follow safely. During this maneuver the akja also changes direction from the fall line and care must be exercised not to rock or tip the akja. This technique should only be used on less steep slopes.

3. ASSIST-HOLD CHANGE OF DIRECTION:

This maneuver requires good communication between the lead and assist.

Alpine and telemark skiers:

As the lead initiates a 180 degree pivot turn, the assist holds the majority of the akja weight with the skis across the slope in a blocking position. Once the lead has changed direction he/she then resumes the major weight holding role and the assist changes by a pivot turn to the same direction as the lead. The akja should travel at a constant speed and remain close to the fall line throughout the maneuver.

Snowboarders:

1. Snowboarder on both lead and assist:

The Assist-Hold change of direction would require both snowboarders to perform an edge change from heel-side edge to toe-side edge.

Note: This maneuver should only be used if the snowboarders must do a high traverse.

2. Snowboarder on lead, skier (telemark or alpine) on assist:

While the snow boarder changes direction by simply side-slipping forwards or backwards on his/her heel-side edge the skier performs pivot turns to alter his/her direction. There is no need for the skier to take the weight of the akja as the snowboarder changes from one side-slipping direction to the other. The snowboarder however, must bring the akja into the fall-line between direction changes to allow the skier to perform a pivot turn.

4. SIDE SLIP ~ FORWARDS OR BACKWARDS:

This method of directional change is recommended on steep or mogul terrain, because numerous directional changes can be undertaken without having to risk a turn. Smooth terrain or the side walls of moguls are the most suitable places to undertake such directional changes. Alpine and telemark skiers should allow a comfortable distance between their skis to aid in overall stability and the sharing of the load over both skis. Care should be taken not to accumulate loose snow and 'build-up' should be 'washed off' regularly.

Backwards side-slipping should not be performed for prolonged periods.

If the lead patroller is on a snow board and the assist is on skis, the lead must be careful not to drag the skier backwards for long periods.

The lead patroller (skier or boarder) should not initiate dramatic changes in direction as the assist patroller will find it difficult to maintain the akja in the direction sought.

AKJA STABILITY

The akja is designed to run on snow and should at all times have all four runners edging simultaneously. The exceptions are if the akja is being short shafted or during high traverses.

During the descent the akja should remain in the fall-line as much as possible. Traversing should be kept to a minimum especially on steep terrain. If traversing is necessary, increased uphill handle pressure is required to ensure that the upper runners are in maximum contact with the snow surface. With the akja as close as possible to level this will also provide the best possible patient comfort. During such a traverse variations in the hand/akja handle position are permissible.

When descending in mogul terrain the akja should travel over the shoulders and ridges and not in the ruts or troughs. This ensures maximum ski/snow contact. During such a descent it is essential that the handles of the akja rise and fall proportionally to the ridges and troughs. Firstly, this ensures that the akja runners and running surface are in continuous contact with the snow and secondly, provides patient comfort through a smooth ride.

During short shafting (applies only to alpine and telemark skiers), the akja must rise from the snow to the air and back onto snow in a smooth transition. Good communication between lead and assist is essential. It is advisable to test the loaded akja's weight, against the assist's/lead's strength before this maneuver is undertaken.

Short shafting should only be performed on smooth terrain with a gentle gradient.

OVERALL COMPETENCE

This includes the areas of arm, leg and body position as well as visual and verbal communication between lead and assist.

The arms should be slightly flexed in an athletic position and able to extend or flex as necessary. Full extension or flexion is not recommended. The upper body should be erect and shoulders should face the fall line. Upper body and legs should rotate independently from the hip. The knees should be slightly flexed, and not over extended, to avoid stiff-legged edge vibration. In the case of alpine or telemark skiers care should be taken to ensure both legs share the overall weight and edging - emphasis should be on the upper leg and ski working in unison with the lower leg.

It is essential for the lead patroller to clearly indicate changes in direction and to communicate other intentions with sufficient time for the assist to follow. The assist should show a high degree of anticipation and react calmly and confidently to all instructions.

Overall competence also includes a fluid descent, and the elimination of all but essential stoppages.

Controlled continuous speed will allow the candidates to better demonstrate their skills.

Over the length of the descent the assessors will also have a look at the candidate's stamina. Stamina is important for a safe and controlled descent. Effective body position and good teamwork will make a significant difference in the condition of the candidates towards the completion of the run. Conversely bad edge control, inappropriate body position and poor co-ordination will prove exhaustive as well as unsafe in a long akja descent.

LOGISTICS NOTE

The 'patients' should preferably be local patrollers who will return the akjas to the top of the slope for the next run. The system of assessment should be efficient and must show consideration for the skiing/riding public. The use of several akjas will minimize delays between candidates.

SKI / BOARD TEST

As a prerequisite for the skiing/riding assessment the candidate will have demonstrated, to the satisfaction of a resident on-snow examiner or chief patroller, a number descents in their 'home resort'. These descents should have met, or have been very close to meeting, the required standards of competency. These standards of competency are outlined below.

The ski/board test is not seeking a specific style and at all times the emphasis is on performance and sound technique.

Although the candidate(s) are not expected to demonstrate instructor style skiing/riding, marks will be lost for e.g. gross upper body rotation and the like. The emphasis is on strong functional skiing/riding and overall competence and confidence. A fall does not necessarily mean disqualification. The patroller is to be in control of the ski/board, not vice versa and should therefore be able to execute the following maneuvers with total competence. Prior to each assessment, all skills will be explained and demonstrated by the examiners.

The ski/board test consists of 3 categories:

1. **CONTROL RUN**
 - Varying Radius
 - Constant Radius
2. **FREE RUN**
3. **CRUD RUN**

1 CONTROL RUN

The control run is made up of two sub-categories:

- Varying radius turns
- Constant radius turns.

This assessment will be conducted on an intermediate to advanced slope of sufficient length to allow the candidate to find his/her rhythm as well as demonstrate his/her endurance.

CATEGORIES TO BE ASSESSED

CONSTANT RADIUS

1. Linked turns
2. Terrain absorption
3. Overall control

VARYING RADIUS

1. Overall control
2. Transition
3. Edge control

AIM OF THIS ASSESSMENT

The candidate is to demonstrate good functional skiing/riding with variations of technical skill. It will reflect the patroller's ability to "mirror" a demonstrated run and perform pre-determined turns showing full control of the skis/board over the snow.

Candidates will be penalized for not performing the demonstrated run.

For the Constant Radius assessment a series of poles may be set up at the examiners discretion to provide a 'corridor' to ensure the radius of the turns are constant.

PREAMBLE

VARYING RADIUS

The candidate is expected to show a series of short radius turns directly in the fall line, changing clearly and smoothly to a series of longer radius turns, changing back to a series of short radius turns and so on for the length of the course. The purpose of this assessment is to enable the candidate to show controlled speed throughout the transitions.

PREAMBLE cont'd.

CONSTANT RADIUS

The candidate is “responding to a serious accident” and is expected to show continuous linked turns while maintaining constant speed.

Good control is paramount. Terrain absorption is critical and for overall control the candidate must show maximum ski/board to snow contact.

The candidate must ski/ride to the boundaries of a ‘set’ corridor.

2 FREE RUN

This assessment will be held on a frequently skied/boarded steep slope.

The descent should be ‘long enough’ to test the stamina and endurance of the candidate. The run assesses the candidate’s skiing/riding ability on ‘most difficult’ terrain and emphasis will be on strong functional skiing/riding with the candidate expected to perform linked turns (without traversing) indicating a competent descent. A fall does not necessarily mean disqualification.

CATEGORIES TO BE ASSESSED

1. Linked turns
2. Overall control
3. Edge control

AIM OF THIS ASSESSMENT

To demonstrate the standard of skiing/riding required to confidently and competently ski in any resort in Australia.

It is the type of skiing / riding which is observed by the public and should therefore be of an appropriately high standard.

PREAMBLE

The candidate is expected to ski/ride to the best of their ability on the given terrain. Emphasis is on strong functional skiing/riding making linked turns (without traversing) demonstrating the patroller’s overall competence and confidence. The candidate is expected to ski/ride like a patroller in uniform but aggressively.

3 CRUD RUN

This assessment is intended to test the candidate's ability to ski/ride a slope competently under adverse snow conditions e.g. heavy untracked snow, hard rutted snow, ice etc. Again, the emphasis is on function rather than style, which should result in a safe controlled descent.

Should such 'adverse' conditions not exist on the day of the assessment the examiners may decide to alter this run. In this case the candidate may be expected to descend a run while transporting rescue equipment (e.g. danger poles, conduits, signs etc.).

CATEGORIES TO BE ASSESSED

1. Overall Control
2. Linked Turns
3. Strength

AIM OF THIS ASSESSMENT

To demonstrate the ability to ski/ride competently on a run with adverse conditions. It will reflect the patroller's ability to show full control over his/her skis/board in these conditions.

PREAMBLE

The candidate is expected to ski/ride the slope competently under adverse snow conditions. Emphasis is on strong functional skiing/riding showing linked turns.

Zed or Zorro turns are not acceptable.

SOME DEFINITIONS

Edge Control:

The adjustment of the angle between the ski/board and the snow. It is controlled by the position of ankle/knee/hip.

Independent Leg Action: (does not apply to snowboarders)

Using each leg individually regardless of stance (narrow or wide) such as during weight transfer, stepping and terrain absorption.

Linked Turns:

This essentially means that there should be no traversing between turns and that the finish of one turn should immediately lead into the initiation of the next one.

Sound Technique:

Through sound technique the candidate controls the skis/boards performance and therefore the speed and safety of the descent rather than the terrain or the ski controlling the skier.

Strength:

Resulting directly in the amount of edge control, the way the skier/rider 'attacks' and uses the terrain to his/her advantage and how comfortable the skier/rider looks on his/her skis or board.

MARKING SYSTEM

NATIONAL PATROLLER ON-SNOW TESTS

Assessment Guidelines for the assessor:

As the candidate demonstrates the required skill the assessor progressively places ticks in the 3, 5, 7, 9 boxes according to the candidates level of competency.

The levels of competency are:

Poor	Average	N.P. Level	Very Good
3	5	7	9

Each tick to the left of the double line represents one point.

Each tick to the right represents half a point.

A crossed tick on the left side of the double line is scored as half a point, a crossed tick on the right side scores nil.

Example:

Akja Lead		3	5	7	9	Comments
	Path Selection	✓	✓	✓	×	2.5
	Direction Change	✓	✓	×		2.0
	Overall Competence	✓	×	×		1.5
						Total 6.0

To pass at National Patroller level the candidate must score 6.5 or above.

If the candidate does not score at N.P. level comments must be added.

Comments can be added even if the score is 6.5 or above, but should be kept brief and to the point.

AKJA TEST

The akja test consists of two runs.

Each candidate must show competency in the Akja “lead role” as well as in the Akja “assist role”.

The marking card for the akja assessment looks as follows:

CANDIDATES NAME:

ASSESSOR:.....

Akja Lead		3	5	7	9	Comments
	Direction Change					
	Path Selection					
	Overall Competence					
						Total

Akja Assist		3	5	7	9	Comments
	Direction Change					
	Akja Stability					
	Overall Competence					
						Total

SKIING / RIDING TEST

The skiing/riding test consists of three sections.

1) **Control run:** where candidates are asked to perform specific tasks. This section is divided into two areas:

Varying Radius assessment and Constant Radius assessment.

The overall mark is the average of the two areas.

2) **Free run:** where the candidate demonstrates his/her skiing/riding ability on the given terrain.

3) **Crud Run:** where the candidate is asked to ski/ride in adverse snow conditions – e.g. crud.

The marking card for the skiing/riding assessment looks as follows:

CANDIDATES NAME:

ASSESSOR:.....

Control Run		3	5	7	9	Comments
Varying Radius	Overall Control					
	Transition					
	Edge Control					
						Total
Constant Radius	Linked Turns					
	Terrain Absorption					
	Overall Control					
						Total
						Average

Free Run		3	5	7	9	Comments
	Linked Turn					
	Overall Control					
	Edge Control					
						Total

Crud Run		3	5	7	9	Comments
	Linked Turns					
	Overall Control					
	Strength					
						Total