Kokoda Track Preparation

“It’s not the critic that counts; not the man who points out how the strong man stumbles. Or where the doer of deeds could have done better. The credit belongs to the man who is actually in the arena, whose face is marred by dust and sweat and blood; who strives valiantly; who errs, and comes short again and again, because there is no effort without error and short coming; who knows the great enthusiasms, the great devotions; who spends himself in a worthy cause; who at best knows in the end of triumph of high achievement. And at worst, if he fails, atleast fails while daring greatly, so that his place shall never be with those cold and timid souls who know neither victory nor defeat.” – US President Theodore Roosevelt, “The Man in the Arena”, Paris, 1910

“They gave their tomorrow’s so that you could have a today”

Introduction

The purpose of this booklet is to assist clients participating in Our Spirit Pty Ltd Kokoda Track Programs to be as physically, mentally and logistically prepared for the challenge as possible. The booklet assumes the reader has limited knowledge of outdoor adventure activities.

How To Use This Booklet

Our aim is to ensure your safety on the trek while making the experience as memorable and meaningful as possible. Our thorough program will prepare you for the gruelling physical demands of the trek, so that you will be able to appreciate the full experience of the Kokoda Track - the countryside, the people and the history of the area.

Please use this booklet as a guide for your preparation, remembering the information it contains has been compiled by a variety of expert sources and with the benefit of many years of experience conducting this type of activity. We would also appreciate your confidence in ensuring this booklet is not made available to any source that may be considered a competitor of Our Spirit Pty Ltd. It is provided purely for your benefit as a valued Our Spirit Pty Ltd client.

ABOUT PAPUA NEW GUINEA

Is it New Guinea, Papua, Irian Jaya or Papua New Guinea?

These names can be confusing, and are sometimes used incorrectly. It is correct to refer to the whole island (second only in size to Greenland, if one counts Australia as a continent) as New Guinea. Its land mass is 818,000 square kilometres and it has a population of over 6 million people.

Two political units – Irian Jaya, and Papua New Guinea – occupy the main island of New Guinea, together with some smaller, nearby islands. Irian Jaya, formerly called West Irian, and prior to that (up to the end of World War Two) 'Dutch New Guinea', covers the western half of New Guinea and is now one of the provinces of Indonesia. Papua New Guinea occupies the eastern half of the island. Formerly comprising two separate territories of Australia ('Papua' and 'New Guinea'), it became a combined trusteeship (Papua New Guinea) in 1945, and an independent nation in 1975. Port Moresby is the capital.

European Intrusion

Evidence suggests humans have inhabited the country for the last 27,000 years. Most tribes lived in extremely primitive conditions until the last century, surviving by hunting with stone tools and wooden spears. Cultivation began only in relatively recent times. Early European sailors recorded visits as early as 1526. Jorge de Meneses, a Portuguese, gave the land the name 'Papua', a Malay term meaning 'fuzzy-haired man'. Another Portuguese, Ortiz de Retes, called the island 'Nova Guinea' in 1545. Torres, a Spanish navigator (after whom the Strait separating Australia and New Guinea is named), sailed along the entire south coast of the island in 1606-7.

The Dutch took possession of the western parts of the island in the 1600's to stop the British and French from laying their claims. However, many English sailors explored the island's coasts including Dampier, Carteret and John Moresby (who named Port Moresby after his father). Moresby chartered the southern and north-eastern coasts in the mid-1800's for the British Navy. Traders and whalers of all nationalities called in regularly for food and water. European traders, planters, scientists and missionaries began to settle on the island.

Papua New Guinea

Up to the end of WWII, both the territories had separate administrations, but in 1945 the United Nations accepted Australia's proposal that they be combined to form one 'trusteeship' and be called 'Papua New Guinea'. The administrations were combined and headquartered in Port Moresby. When independence was granted to the country in 1975, the name Papua New Guinea was retained.

Track or Trail?

Either term is correct, but 'Track' was the original name used by Europeans before WWII, and by the Australian Diggers during the Kokoda Campaign. Some claim it was American journalist, Geoff Reading, who first used it when filing his stories from Papua to Sydney in mid-1942. The Track originally led all the way from Port Moresby on the south coast to Buna on the north coast, and so for the purposes of this booklet the whole section is referred to as the 'Track'.

The History of the Track

The Track is centuries old and was used by natives to commute from the coast to the hinterland and to move further away from the inter-tribal warfare that was commonplace. In the early years of white settlement, apart from a few handy locals, it was considered impassable to white men.

The route of the Track used during the war was already established and even now has changed very little. It was pioneered in the 1890's by Sir William MacGregor, the first Administrator of British New Guinea (Papua). In 1904 Captain Francis Rickman Barton was appointed administrator in Port Moresby. Resident Magistrate Monckton of the northern region of Papua (the Track lies within the old Territory of Papua), agreed to establish a fortnightly mail service over the Ranges by a native runner. Both men shocked the white population by inaugurating the service by actually walking the Track themselves, Barton heading north and Monckton south. They met at the top of the Track, and opened a bottle of champagne to celebrate!

In 1927-8, when gold was discovered in the Yodda Valley (in which Kokoda is situated), two separate parties set out from Port Moresby to seek their fortune – and were never heard from again!

The Track passes over Papua's great central mountain range, the Owen Stanley Range. This range was named after a British naval Captain who, in 1850, was on an exploratory voyage along the southern coast of Papua in his ship the HMS 'Rattlesnake'. Lost in mist and unsure of his position, Stanley was fortunate to make a planned rendezvous with his assistant, Lieutenant Charles Yule, who was travelling in a second vessel, the 'Bramble', in Orangerie Bay, some 320 kilometres east of Port Moresby. Yule led the way into a safe anchorage in the mist-enshrouded bay while the intensely anxious Stanley followed. Then, towards evening, the mist and clouds lifted 'as if a curtain had been drawn upon' and before them was a magnificent chain of mountains, their summits clearly defined and brilliantly illuminated by the setting sun. The highest peak, at 13,400 feet, is that of Mount Victoria which is plainly visible from part of Port Moresby when the clouds lift, usually in the early morning.

The Australian Militia Forces

The militia had been formed in peacetime and consisted of part-time volunteers. In subsequent times they were called Citizen Military Forces (CMF) and are now known as the Army Reserve. After the outbreak of World War Two, the militia was brought up to strength with men conscripted under wartime regulations. Officially they were only required to serve on Australian soil, but so serious was the military situation in 1942 that the Government changed the law to include Papua and New Guinea which, at the time, were separate Australian Territories. The militiamen were commonly referred to as 'Chocos', a derogatory term deriving from 'The Chocolate Soldier', a well-known musical from pre-war days.

When the Japanese arrived on the north coast of New Guinea in July 1942 to begin the Kokoda Campaign, the only troops on PNG soil were militia. These consisted of:

The 30th BRIGADE comprising:	The 14th BRIGADE comprising:
The 39th Battalion	The 3rd Battalion
The 49th Battalion	The 36th Battalion
The 53rd Battalion	The 55th Battalion

Many scholars have voiced their opinions on the Australian commanders at the time, and there is much condemnation of the fact that inadequately trained 18-year-old militia conscripts should have been placed in such a strategically vulnerable position, as opposed to the professional AIF divisions. However, such is the wisdom of hindsight, and it should be remembered that virtually the whole of the 8th Division had fallen into captivity in Singapore in February 1942, while the Australian garrison at Rabaul, New Britain (just to the north of PNG) was over-run and either slaughtered or taken captive. There can be little doubt that the Australian commanders feared the same fate probably awaited the Australian garrison at Port Moresby.

Kokoda Track Campaign Timeline

The campaign took place in two phases. Firstly, the Japanese landed on the north coast and advanced south as the Australians made a fighting withdrawal over a three-month period from July to September 1942. Then the Australians advanced and the Japanese withdrew to their original beachhead. This phase took four months with all resistance ceasing on 21 January 1943, exactly six months after the initial landings.

Japanese Advance/Australian Withdrawal

1942	21 July	Japanese land at Buna-Gona-Sanananda beach-head area
	23 July	Australians confront the Japanese for the first time at Awala
	28-29 July	First Battle of Kokoda
	8-10 Aug	Second Battle of Kokoda
	12-14 Aug	Battle of Deniki
	26-30 Aug	Battle of Isurava
	2 Sept	Australians withdraw to Eora Creek
	3 Sept	Australians withdraw to Templeton’s Crossing
	4 Sept	Australians withdraw to Myola
	7-8 Sept.	Battle of Brigade Hill
	10 Sept	Australians withdraw to Nauro
	11-16 Sept	Battle of Ioribaiwa
	17 Sept	Australians withdraw to Imita Ridge

Australian Advance/Japanese Withdrawal

	24 Sept	Japanese pull back from Ioribaiwa
	12-16 Oct	Battle of Templeton's Crossing
	22-29 Oct	Battle of Eora Creek
	3 Nov	Australians reoccupy Kokoda unopposed
	5-12 Nov	Battle of Oivi-Gorari
	15 Nov	Battle of The Sananada Track commences
	18 Nov	Battle of Gona commences
1943	9 Dec	Honner sends his famous message, 'Gona's Gone'
	2 Jan	Battle of Buna commences
	21 Jan	Major Japanese resistance at Buna and Sananada ceases

Geography

The Kokoda Track crosses the Owen Stanley Mountain Range, running south from the small village of Kokoda to Owers' Corner near Port Moresby some 96 km away as the crow flies, however if the crow hiked it would be 128kms.

Battle localities are still spread throughout the jungle, marked by the weapon pits of the combatants, as if the soldiers who sheltered there have shouldered their packs and walked away only a day or two ago. Relics of these terrible times can still be found, testament to the ferocity of the fighting.

The Track is very hard walking, but with good preparation anyone of reasonable health and a strong will can complete it.

Climate

PNG is situated near the equator and is mostly tropical, with our treks running predominantly during the dry periods. Temperatures are not extreme, and in the higher country you can expect cooler nights and warm days. An average daily temperature of between 28 and 32 degrees can be expected on the Track.

Currency

The currency of PNG is the Kina, and the present exchange rate is approximately 2:1.

Time Zone

All of PNG is in the same time zone as the East Coast of Australia, except for when Australia enters Day Light Saving. During Day Light Saving, PNG maintains the same time zone as Queensland.

Flora and Fauna

The jungle along the Track varies from minute to minute. The beauty of the flora and fauna has to be seen to be believed. Very big colourful butterflies are in abundance all year round, and locals often refer to them as the “souls of the dead”. Insects, despite the terrible stories of the tropics, are not as bad as their reputation implies, especially with insecticides, repellents and protective clothing.

The Villagers

Along the Track you will meet many local villagers. They will belong predominantly to the Biage Koiari people and will be of the Seventh Day Adventist faith. They are warm, friendly and generous people and are very happy to interact with you, so simply be friendly and respect their home. There are important rules of etiquette governing behaviour, conduct and bargaining – these will be described in a pre-trek training session.

FREQUENTLY ASKED QUESTIONS

What equipment do we require?

We will provide you with the latest in lightweight, tents, and cooking gear. A detailed packing list is included in this guide.

What sort of food can we expect?

We will pre-pack specially designed daily meal packages, which are lightweight, rich in energy, nutritious and tasty. There will be ample food provided, however you may choose to supplement your diet with fresh fruits and vegetables along the Track.

What is the pre-trek preparation program?

Our Spirit's exclusive pre-trek preparation program is the result of months of planning and years of experience and has been designed to ensure you're as ready as you can be to take on the challenge.

How safe is New Guinea and the Track?

Our use of native guides and porters gives us an added degree safety on the Track. Local authorities are kept apprised of our trek program and an Epirb and satellite telephone system is carried to ensure reliable communications for the duration of the trek. We will also walk in teams, employing the buddy system to look after one another.

What happens if I can't finish?

Along the Track there are a number of airfields, so if necessary, space on the regular shuttles can be negotiated. Similarly, in the unlikely event you are injured, and the rest of the team can't get you to the next village, an evacuation helicopter can be requested via satellite telephone.

How Big are OS groups?

Our groups are a maximum of 15 trekkers, we offer close personal attention with full support. There are many trek companies who will have as many as 40 trekkers!!

What safety record does OS have?

At OS we pride ourselves on our safety record over 26 plus years operating on the Kokoda track. In that time, we have had 1 person flown off with a broken ankle. Our unique record comes from preparation and correct information and qualified support.

EXAMPLE TREK ITINERARY (i.e. Kokoda to Owers Corner)

SAMPLE ITINERARY

The following itinerary is recommended as a guide only. Track and weather conditions will inevitably determine the final journey of each individual trek.

To maintain our unblemished safety record, all trekking with Kokoda Legends is done during daylight hours only. Trekking at night on cliff faces and across raging rivers increases the risk of injury and should only be attempted by experienced Kokoda trekkers when absolutely necessary. As many of our Aussie diggers will attest, the Kokoda Legend's journey is one of respect to those who did endure the Kokoda Track in these unthinkable conditions during the war in 1942.

Day	Details
1	**Transfer:** Flight to Port Moresby . Airport transfer to hotel. **Accommodation:** Twin share hotel accommodation. **Activity:** Group briefing session at hotel on arrival.
	Twin Share hotel Accomodation
	Transfer: Hotel transfer to airport. Dash flight from Port Moresby to Popendetta Village – to Kokoda Village, home of the "Kokoda Legends
4	Trek from Kokoda Village to Deniki. **Trek Overview:** Our trek commences from Kokoda village through the rubber plantation to the village of Kovello and Hoi Village before a climb of approx. 400m into the village of Deniki **Points of Interest:** Kokoda Legends are greeted with a ceremonial village welcome before a privileged visit to the Kokoda plateau and war museum. **Accommodation:** Bush camp.
5	**Transfer:** Trek from Deniki to Alola via Isurava. **Trek Overview:** Our trek commences from Deniki and climbs approx 500m into the village of Isurava and then on to the village of Alola. **Highlights:** Our trek leads us to the village of Isurava, where we pay tribute to the Australian soldiers who fought to save our country in what is without doubt, one of the most important battle sites in Australian history. We visit the magnificent Isuarva War Memorial and take time to raise

	the Australian flag in tribute. We provide you with a description and full outline, as well as many unique insights into this famous battle site. Explore the battle site of the famous Bruce Kingsbury and the rock monument in recognition of his brave efforts for which he received the first Victorian Cross awarded on Australian soil. On arrival, a relaxing swim in the clear fresh waters of the Eora Creek. **Accommodation:** Village Guest House.
6	**Transfer:** Trek from Alola to Templeton's Crossing **Trek Overview:** Today's trek is an arduous one, with a steep descent then a 245m climb crossing the Eora Creek. This is followed by a 500m climb and a 125m descent to our campsite at Templeton's Crossing. **Highlights:** Visit the magnificent Isuarava War Memorial. Explore the battle site of the famous Bruce Kingsbury. On arrival, a relaxing swim in the clear fresh waters of the Eora Creek. **Accommodation:** Bush camp.
7	**Transfer:** Trek from Templeton's Crossing to Effogi. **Trek Overview:** An early morning start to another arduous day. First we climb up 250m then down 150m crossing the river before climbing 350m through the Kokoda Gap to the top of Mount Bellamy (the highest point on the track, 2200m). Our trek continues with a 295m descent then a 100m ascent before another descent of 400m. We climb another 350m before our final descent of 150m into Effogi. **Highlights:** Various war relics and sites along the way including fascinating weapons pits. A must for photographers, the Kokoda Gap has some of the most stunning views you will encounter along the track. **Accommodation:** Village huts/tents.
8	**Transfer:** Trek from Effogi to Menari. **Trek Overview:** A relatively easy day, the journey continues with a 250m climb up Mission Ridge and onto Brigade Hill followed by a descent of 700m then climbing up 200m into the village of Menari. **Highlights:** A tribute to the diggers who lost their lives in Australia's famous stand against the Japanese in 1942. **Accommodation:** Village huts/tents.

9	**Transfer:** Trek from Menari to Nauro. **Trek Overview:** We start the day with a 270m climb, before descending 380m into the swamp lands, traversing the Brown River several times. After lunch we climb 300m up the Maguli Range to the village of Nauro. **Highlights:** Today is a relatively easy day. It's a great opportunity to diarise your memorable moments of the trek so far. **Accommodation:** Village huts/tents.
10	**Transfer:** Trek from Nauro to Ua-ule Creek. **Trek Overview:** After an early start to the day, we climb 550m of the Maguli Range then down 700m to Ofi Creek for lunch. In the afternoon, we climb 250m of Ioribaiwa Ridge, descend 540m to Ua-Ule Creek, crossing the river 9 times. **Highlights:** Climb the furthest point the Japanese reached before being driven back to the sea by the Australian diggers. **Accommodation:** Village huts/tents.
11	**Transfer:** Trek from Ua-ule Creek to Vesulogo. **Trek Overview:** Commencing with 11 river crossings, we then climb 550m up Imita Ridge before descending the "Golden Staircase" to the Goldie River. After crossing the river we ascend the last hill 300m to the finishing archway at Ower's Corner. **Highlights:** The obligatory photos at the finishing archway signifying the completion of your personal challenge. **Transfer:** to Hotel, Port Moresby. On route to Port Moresby, we tour the Bomana Memorial Cemetery and pay our last respects to all those who fought for the privileges we have as Australians today. We celebrate with a presentation to our new Kokoda Legends upon our return to the hotel. **Accommodation:** Twin share hotel accommodation.

NB: The itinerary provided is only a guide and specific overnight locations may vary depending on circumstances as well as days on track may also vary depending on the specific offering of your trek. Trek itinerary is different if travelling in the opposite direction from Owers Corner to Kokoda.

PART 2 PHYSICAL PREPARATION

Our Spirit Pty Ltd conducts two forms of physical preparation. The first is the remote preparation program, the second is our fully supervised preparation program. It is compulsory that all clients, irrespective of current fitness levels, complete either the remote or the supervised preparation program or alternative.

Every client who has attended the full preparation or remote program has successfully completed the Kokoda Track.

REMOTE PREPARATION PROGRAM

Introduction

This section contains the Physical Training Program for our remote clients. The program has been designed specifically for the Kokoda Track. The Physical Training Program is a proven program utilising tried and tested training techniques along with innovative concepts which we have developed to suit the Kokoda Track. As part of our quality control process the program has been continuously validated and refined over the years.

The importance of your individual preparation cannot be emphasised enough. Adherence to a specifically designed and structured training program can mean the difference between an exciting and adventurous activity and an enduring and arduous slog.

Our Spirit Pty Ltd understands that you are a busy person and often your schedule will get in the way of your training program. We empathise with you and have made a conscious effort to simplify your preparation.

Preliminaries

Prior to commencing any type of Physical Training, it is essential that you consult with your local doctor to have a medical check- up.

Specifically, please explain that you are about to commence a Pre-Trek Physical Training Program in preparation to walk the Kokoda Track. Explain what is involved in walking the track from the information we have provided to you along with the Kokoda Preparation Guide.

We will also require you to log on to our website and under membership, fitness assessment, enter the required fitness background data requested as well as medical questionnaire.

Training Principals (FITT)

There are two basic types of training principals often referred to as: overload and progression.

Overload training relates to the increased stress or load placed upon the body that is more than it is usually accustomed to. Overload training manipulates the training variables of frequency, intensity, time, and type (FITT).

Progression training relates to what, when and how the load is increased through adjusting the components of frequency, intensity, or time.

The FITT Principle describes how to safely apply the principles of overload and progression:

Frequency:

How often we are going to train throughout the week. A safe frequency is three to five times a week dependent on the phase (what week) of training.

Intensity:

How hard we are going to exercise during a session. Intensity can be measured in different ways. For example, monitoring heart rate is one way to gauge intensity during aerobic endurance activities. In our training we will also use Rate of Perceived Exertion (RPE). This is explained in more detail later in the document.

Time/Duration

How long the session is going to be. As with the other aspects of the FITT principle, time varies depending on the phase of training.

Type specificity:

This refers to the specific physical activity (Kokoda track vs marathon) chosen to improve our fitness. For example, an individual wishing to increase arm strength must exercise the triceps and biceps, while an individual wishing to walk the Kokoda Track will need to increase their aerobic endurance and subsequently needs to hike, weight load walk, swim or other aerobically challenging activities.

Most importantly, through our understanding of the training principals we acknowledge that incremental and progressive weight load walking (carrying a pack) and hill work are the keys to successful trekking. Yes HILLS, HILLS and more HILLS! When do we do them (timing – phase of training), how do we do them (technique up and down), and why are we doing them (specific training). All these are answered within the training program.

THE THREE-MONTH TRAINING PROGRAM

The training program has been designed to assist your physical preparation for the Kokoda Track.

The program runs for 12 weeks, with progressive weight load walking at the core for your preparation. The program also includes specifically designed circuits (we promise you will understand and appreciate these circuits whilst you are on the track!).

It is not necessary to start at week one if you are capable of meeting demands in week three. However, keep in mind that a progressive and gradual build-up of training intensity will prevent injuries, in particular overuse injuries like heel spurs / plantar fasciitis, Achilles and calf associated problems, so don’t over-do things when selecting a starting point.

This program is aimed at getting participants prepared for the Track, from both a physical and psychological perspective. Obviously, the better your base level of fitness and providing you train smart, listen to your body, and respond accordingly, the easier the trek will be. As the heading suggests you have three months of specific, quality training to get yourself physically and mentally prepared for your trek.

THINGS TO KEEP IN MIND WHEN TRAINING

Starting Point

It is important to put things into perspective right now. You are training for the Kokoda Track and need to be both physically and mentally prepared for the adventure. You need to ask yourself: where is my fitness level right now in relation to this specific training program? If you are a marathon runner or an elite athlete / footballer then you are fit, there is no disputing it. You are fit for your chosen sport. But you are not specifically fit for the Kokoda Track.

If you assume that you are extremely fit (based on your fitness level in other activities) and therefore decide to commence the Kokoda training program at week four or five you will increase your chances of developing overuse injuries, which unfortunately will not show until two to four weeks later. You only need to do the math to realise with the time allocated for you to recover / rehabilitate / recondition you may have missed your trek. It is strongly recommended you be conservative in your initial assessment of your fitness level.

Injury

At any point throughout your training if you sustain an injury, we want you to have it attended to promptly and to advise us (regardless if it is of a minor nature) immediately. We will then be able to provide critical information and advice to you so that you can maintain the momentum in your program in the most effective and efficient manner.

Recovery

Recovery is an integral component of any training program. Usually, we find that along with over-training, it is the least adhered to component of a training program – subsequently there is an increase in injury and failure rates.

It is a skill to find the balance between training intensity / volume and programmed recovery periods. It is important to understand that recovery does more than rest the muscles or the body. It must assist in improving our overall fitness and moving closer to the overall objective.

The Kokoda training program allows recovery periods, so treat them with the importance they deserve and use them.

Most importantly, listen to your body. If you are feeling tired or are starting to feel run down then - rest even if it is not scheduled on the program. It is better to have one or two days off than one or two weeks when you become injured or sick. Work on the principles that if you are feeling below 70%, do not train.

Over–training

As is the case with recovery, it is essential to consider the problem of over–training when scheduling a program. Over–training can have a detrimental effect on the outcome of your Kokoda training program.

Over–training is usually bought about by an inappropriate, rapid increase in the intensity, volume or frequency of training. Limited or inadequate recovery between sessions can also lead to over–training.

Flexibility of the program

Peaking

Peaking is described as working your training program so that you are at your best when the activity is on, not before or after. The Kokoda program is designed for you to peak for your trip.

Warm up

A warm up is done to prepare your body and mind for what is about to come. The physiological benefits gained from a thorough warm up are said to last from 45 to 80 minutes. The warm up is therefore an integral component of the training session. The warm up raises the body temperature and causes increased blood flow to the muscles, making the muscle fibres become more supple and less resistant to movement. The warm up should take about 10 to 15 minutes (the colder the temperature, the longer the warm up needs to be) and should involve whole body movements, e.g. running forwards, backwards, sideways, stretching, etc. This should be done for at least 5 minutes followed by range of movement exercises and light stretching. Remember to design the warm up around the exercises you are about to undertake.

Cool down

The cool down is done at the end of the main activity you have been doing. Firstly, you should get your heart rate back to rest rate by slow walking or jogging. Once you feel comfortable, begin doing your specific stretching routine which is outlined in the program. These stretches must be completed before and after each training session. Personal and additional stretches can be added but the set stretching routine must be completed first.

Heart Rate

To attain peak fitness, you must exercise within your Target Heart Rate (THR) range for at least 30 minutes per session.

To calculate your THR use the following formula.

- Subtract your age from 220, this equals your Maximum Heart Rate (MHR)
- Calculate 75% of your MHR, this is your Target Heart Rate (THR)
- Calculate 70% and 85% of your MHR, this is your Training Zone (TZ)

EXAMPLE - 30 year old male:

220 – 30 = 190 MHR

$\frac{190 \times 75}{100}$ = 143 THR

$\frac{190 \times 70}{100}$ = 133 **TZ**

$\frac{190 \times 85}{100}$ = 162

This person would need to exercise between **133 and 162** beats per minute for at least 30 minutes to achieve the best result on designated ‘hard days’.

It is possible for your heart rate to go over the maximum heart rate, because the figure of 220 is an average worked out through group testing. An important thing to remember is that if you train over your target heart range, you will probably find you will burn out quicker and will not be able to maintain the set rate required.

On your easy days your pulse need only reach about 60% of your maximum heart rate.

HOW TO TAKE YOUR HEART RATE

Determining Pulse Rate

Heart rate monitors are the most accurate, reliable and simplistic way to determine training heart rate. If your budget allows it, the purchase of a heart rate monitor is recommended. When using traditional methods, the most convenient place to measure the pulse is at the carotid artery, which is located at the side of your neck just under the jawbone. You can also measure your pulse at your radial artery, which is located on the inside of your wrist. Place the tips of two fingers below the base or your thumb and count the number of beats for fifteen seconds, starting with zero. Multiply the number by four to establish your pulse in beats per minute. Do not take this measurement with your thumb. e.g. A pulse rate of 30 beats in 15 seconds = 120 beats per minute.

The Rating of Perceived Exertion (RPE)

The Rating of Perceived Exertion (RPE) scale is a scale from 1 – 10 that is used to determine an individual's rating of physical exertion/exercise intensity at a particular time. The scale rates from 1 – nothing at all, to 10 – maximum effort. The RPE is a reliable and valid indicator to measure exercise tolerance. The RPE also correlates strongly with exercise heart rates.

Firstly, the RPE provides people of all fitness levels with easy guidelines regarding exercise intensity. Secondly, it provides a means of monitoring exercise intensity when heart rate is not a good indicator of exercise intensity (eg. person on β-blockers, which decreases heart rate at all intensities). Thirdly, it helps us to understand how intense you may "mentally" feel the exercise is versus how you "physically" (heart rate response) react to the exercise level.

Rating of Perceived Exertion Scale

1. **Nothing at all**
2. **Very, very easy**
3. **Very easy**
4. **Easy**
5. **Moderate (comfortable)**
6. **Somewhat Hard**
7. **Hard**
8. **Very Hard**
9. **Very, very hard**
10. **Maximum**

These RPE scales in conjunction with Heart Rate readings are used regularly to monitor individuals throughout the training program. You will be asked for information in relation to the scales during our conversations.

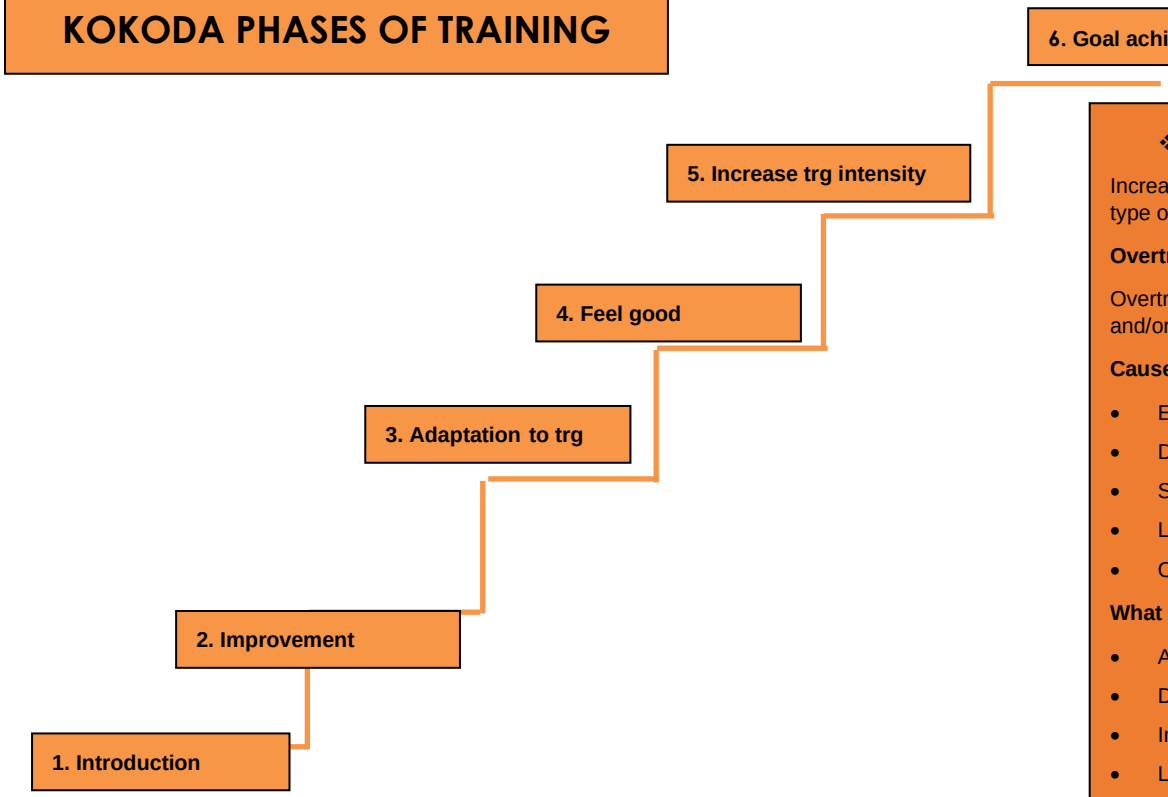
PHASES OF TRAINING

Throughout the training program there are six notable phases of training:

1. **Introduction**
2. **Improvement** (initial improvement in physical performance)
3. **Adaptation** to training (body adjusting to training requirements from a physical perspective)
4. **Feel good** (mental adjustment to workload, movement in confidence, esteem, outlook etc.)
5. **Increase** in training intensity.
6. **Goal achieved** (successful completion of the Kokoda-Track)

During these phases of training where critical mistakes can be made. The following diagram highlights the phases and critical timelines within your training program. The diagram is a useful tool to have around you as a constant reminder of the consequences of incorrect training.

KOKODA PHASES OF TRAINING



❖ **Overuse injury:**

Increase in training volume, Increase in intensity, incorrect start point, not use to the specific type of training

Overtraining:

Overtraining is usually bought about by an inappropriate rapid increase in the intensity, volume and/or frequency of training. Limited / inadequate recovery

Causes

- Excessive increase in volume, intensity and frequency and or physical labour
- Dietary deficiencies
- Sleep deprivation
- Lack of recovery periods
- Over exertion in non training activities

What to look for - Signs and Symptoms

- An unexpected drop in performance
- Development of overuse injuries, persistent joint or muscular soreness and or pain
- Increase risk of injury fatigue and
- Lack of concentration
- Loss of appetite
- Loss of muscle mass
- Insomnia

Usually the initial signs of overtraining are ignored and more commonly people tend to train harder. The appropriate action is to be aware of the signs and symptoms and temporarily reduce the training load.

Quality training + smart, efficient & effective training + recovery periods
= success in training

AJDAN GRJMES PHJLOSOPHY

90 Day Training Program									
					Duration			Maximum Heart Rate[1]	
Day	**Activity**	**Course**	**Back Pack**	**Date**	**Goal**	**Achieved**	**Intensity**	**Goal**	**Achieved**
1	Walk	Flat/medium	Empty Pack		40 mins		60%		
2	walk	Flat/medium	Empty pack		40 mins		50-70%		
3	Rest Day								
4	Walk	Flat/medium	Empty Pack		45 mins		75%		
5	Rest Day								
6	Rest Day								
7	Walk	Flat/medium	Empty Pack		45mins		70%		
8	Rest Day								
9	Walk	Flat	Empty Pack		60 mins		65%		
10	Walk	Flat/medium	Half Pack (approx 8kg)		60 mins		70- 85%		
11	Walk	Hilly	Half Pack (approx 8kg)		60 mins		70%		
12	Walk	Hilly/Flat	Half Pack (approx 8kg)		60 mins		70%		
13	Rest Day								

[1] Refer to the Participant Guide for instructions on calculating your Maximum Heart Rate

14	Walk	Hilly/flat	Half Pack (approx 8kg)		45 mins		75%		
15	Walk	Hilly/flat	Half Pack (approx 8kg)		45 mins		75%		
16	Rest Day								
17	Walk	Hilly	Half Pack (approx 8kg)		1 hour		75%		
18	Walk	Hilly	Half Pack (approx 8kg)		1 hour		75%		
19	Walk	Hilly	Half Pack (approx 8kg)		60 min		75%		
20	Rest Day								
21	Walk	Hilly	Full Pack (approx 15kg)		40 min		70%		
22	Walk	Hilly	Full Pack (approx 15kg)		50 mins		70%		
23	Rest Day								
24	Walk	Hilly/ medium	Full Pack (approx 15kg)		2hours		75%		
25	Walk	Hilly /medium	Full Pack (approx 15kg)		2 hours		75%		
26	Rest Day								
27	Walk	Hilly/flat	Full Pack (approx 15kg)		60 min		75%		
28	walk	Hilly/flat	Full Pack (approx 15kg)		60 min		60%		
29	Walk	Hilly	Full Pack (approx 15kg)		60 mins		75%		
30	Rest Day								

31	Walk	Hilly	Empty Pack		120 mins		70%		
32	Rest Day								
33	Walk	Hilly/Flat	Full Pack (approx 15kg)		60 mins		70%		
34	Rest Day								
35	Walk	Flat	Full Pack (approx 15kg)		60 min		85%		
36	Walk	Hilly	Full Pack (approx 15kg)		60 mins		70- 85%		
37	Walk	Hilly	Full Pack (approx 15kg)		60 mins		70%		
38	Walk	Hilly/Flat	Full Pack (approx 15kg)		2 Hours		80%		
39	Rest Day								
40	Walk	Hilly	Half Pack (approx 8kg)		60 mins		85%		
41	Walk	Hilly	Half Pack (approx 8kg)		60 mins		85%		
42	Rest Day								
43	Walk	Hilly	Full Pack (approx 15kg)		60 mins		85%		
44	Walk	Hilly	Full Pack (approx 15kg)		60 mins		85%		
45	Walk	Hilly	Full Pack (approx 15kg)		60 min		Fast		
46	Rest Day								
47	Walk	Hilly	Full Pack (approx 15kg)		1 hours		85%		

48	Walk	Hilly	Full Pack (approx 15kg)		1 hours		85%		
49	Rest Day								
50	Rest Day								
51	Rest Day								
52	Walk	Hilly/ medium	Full Pack (approx 15kg)		3hours		85%		
53	Walk	Hilly /medium	Full Pack (approx 15kg)		2 hours		85%		
54	Walk	Hilly	Full Pack (approx 15kg)		40 min		Fast 90%		
55	Walk	Hilly	Full Pack (approx 15kg)		40 min		Fast		
56	Walk	Hilly	Full Pack (approx 15kg)		40 min		Fast		
57	Walk	Hilly	Full Pack (approx 15kg)		60 min		Fast		
58	Rest Day								
59	Walk	Hilly	Full Pack (approx 15kg)		3hours		Fast		
60	Walk	Hilly	Empty Pack		4 Hours		Fast		
61	Walk	Medium	Empty Pack		60 min		Fast		
62	Walk	Medium	Full Pack (approx 15kg)		60 min		Fast		
63	Rest Day								
64	Rest Day								

65	Rest Day								
66	Walk	Hilly	Full Pack (approx 15kg)		4.5 hours		Fast		
67	Walk	Hilly	Full Pack (approx 15kg)		4 hours		Fast		
68	Rest Day								
69	Walk	Hilly	Full Pack (approx 15kg)		60 min		Fast		
70	Walk	Hilly	Full Pack (approx 15kg)		70 min		Fast/ med		
71	Walk	Hilly	Full Pack (approx 15kg)		70 min		Fast		
72	Walk	Hilly	Full Pack (approx 15kg)		70 min		Fast		
73	Walk	Hilly	Full Pack (approx 15kg)		75mins		Fast		
74	Rest Day								
75	Walk	Hilly	Full Pack (approx 15kg)		60 min		Fast		
76	Walk	Hilly	Full Pack (approx 15kg)		60 min		Fast		
77	Rest Day								
78	Walk	Hilly	Full Pack (approx 15kg)		60 min		Fast		
79	Rest Day								
80	Walk	Hilly	Full Pack (approx 15kg)		60 min		Fast		
81	Walk	Hilly	Full Pack (approx 15kg)		60 min		Fast		

82	Walk	Hilly	Full Pack (approx 15kg)		60 min		Fast		
83	Walk	Hilly	Full Pack (approx 15kg)		60 min		Fast		
84	Walk	Hilly	Full Pack (approx 15kg)		60 min		Fast		
85	Rest								
86	Rest								
87	Rest								
88	Rest								
89	Rest								
90	**Depart**								

NOTES:

Fluids/dehydration

Water is the key component of our body; it makes up for approximately 83% of our blood, 76% of our muscles, 75% of our brain and even 25% of your bones. Put simply if we were to avoid drinking for a few days we would not survive. Therefore, fluid intake is essential within our training program and our trek.

Water makes up approximately 50–60% of body weight. Subsequently, any loss of water via the body's cooling mechanism, sweat, is going to impact on the body's ability to perform. If the body is not properly hydrated, we expose it to a variety of health risks. If you have inadequate fluid intake, cells within your body pull water from your blood stream which impacts on your heart, making it work harder. Ensure that you drink plenty of fluids before, during and after training. Your kidneys cannot purify your blood effectively when you are dehydrated, which places stress on them, your liver and other vital organs.

You must ensure that you drink plenty of fluids before, during and after training. Plain water is usually the best form of fluid intake; some energy drinks have high concentrations of sugar in them to give you an instant, but short, energy high. Drink 400mls (two glasses) of water in the 15 minutes before training. This will ensure your body is well stocked with fluid at the beginning of the activity.

Schedule drinks regularly throughout the activity. So, ensure you have a water bottle or camel-pak easily accessible. You should drink to thirst ... in your newsletters' we will discuss further hydration / heat exhaustion, heat stroke and hyponatremia.

Keep drinking water after training as your body will still require further fluid replacement. Keep drinking until you pass clear urine.

Diet While Training

Endeavour to maintain a well-balanced diet throughout the preparation period. If you are over-weight to begin with, do not make the mistake of cutting carbohydrates from your diet **(see Nutrition Guide)**, as it will leave you feeling drained, with an accompanying loss of strength and stamina. The intensity of the program will ensure you shed weight in a safe and natural manner.

Stretching

Stretching is a vital part of the Kokoda Training Program and should be looked on as being as important as any other part of the program. Stretching can help to prevent an injury by promoting recovery and decreasing soreness. By ensuring muscles are loose and flexible, you'll reduce your chance of an injury dramatically.

Stretching ensures that your muscles and tendons are in good working order. The more conditioned your muscles and tendons are, the better they can handle the rigors of the program and exercise intensity / volume levels, subsequently the less likely that they'll become injured.

The program has a set stretching routine, which has been designed specifically for the training regime and when you are walking the track. If you are predisposed or have prior injuries and have preferred stretches ie. tight illio tibial band (ITB) then you should also undertake these stretches on completion of the training stretches.

STRETCH ROUTINE– REMOTE PREPARATION PROGRAM

ORDER OF STRETCHES

(These stretches are always to be completed at the conclusion of the session)

1. Lower back
2. Figure four
3. Glute
4. Hamstring
5. Quad
6. Calf
7. Soleous / Achilles
8. Chest

These stretches are explained below,

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1. LOWER BACK

58

Spinal Rotation

Stretches:
Gluteals, Lateral hip, Lumbar Spine, Oblique Abdominals

Action:
- Bend knee toward chest
- Grasp with opposite hand
- Pull across toward floor
- Keep shoulders flat on floor

▶ Hold the stretch

2. FIGURE FOUR

76

Buttock

Stretches:
Gluteals,
Upper Hamstrings,
Deep Hip Rotators,
Posterior Hip Joint

Action:
- Clasp knee
- Draw legs toward chest

▶ Hold the stretch

Action - Details:
- Lie on your back with knees bent
- Place bolster acrossways under buttocks (optional)
- Place one ankle on the other knee
- Draw the legs toward the chest so you can grasp the supporting knee with both hands - thread inner arm through the gap under the shin
- Slide the ankle up the thigh toward the hip a little
- Gently pull the legs closer toward the chest until you feel a stretch in the buttock & back of the upper leg (upper hamstring)
- You can push against the outer knee with the elbow for extra stretch

▶ Hold the stretch for a few seconds

Variations:

1.
- Vary the position of the ankle on the thigh

2.
- Lift the head as well

3.
- Clasp the supporting knee from behind rather than over the front to avoid hyperflexion of the knee

3. Hold-Relax
- Pull gently into the stretch, hold
- Inhale, push ankle against the resistance of the knee
- Hold the contraction for 5 seconds
- Exhale, relax, and gently ease further into the stretch

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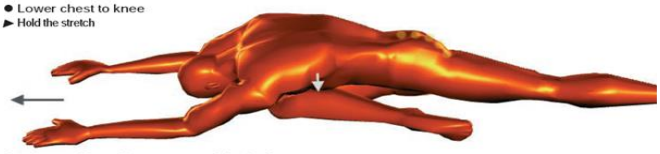
3. GLUTE

72
DeepHip

Stretches:
Gluteals, Deep Hip Rotators, Lateral Hip

Action:
- Back leg in line with front knee
- Slide hands forward
- Lower chest to knee
- ► Hold the stretch



Action - Details:
- Sit on floor with front leg bent & back leg straight with knee-cap on floor
- Ensure that the back leg is in line with the front knee
- Slide hands forward
- Lower chest to knee
- ► Hold the stretch

Variations:
1.
- Start in all-4's
- Slide right foot across towards the middle
- Lift left leg, straighten it, place it across the other leg, & slide it away to lengthen the hip & let the rest of the body follow
- Lower hips to floor
- Let chest lower to knee, with arms outstretched & forehead on floor

2.
- From the stretch position described, slide hands back to place them under shoulders
- Slowly push up with hands to lift head & chest
- Lift as high as comfortable
- Relax into the stretch, letting the hips 'sag' down

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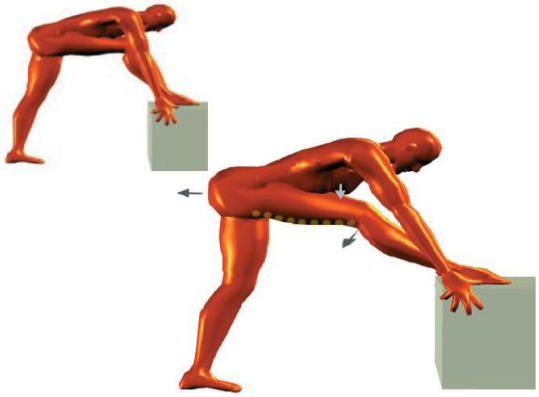
4. HAMSTRINGS

85 Hamstrings -stand

Stretches:
Hamstrings

Action:
- Hips face forward
- Chest on thigh
- Move hips back
- Knee straightens
- ► Hold the stretch



Action - Details:
- Stand with one leg placed on a chair/ low table in front of you, the other leg facing forward in line with front leg
- The front leg should be bent rather than straight
- Lean forward from the hips, keeping the back as straight as possible
- Place chest on thigh
- Hold onto the chair/table
- You may have to hop back a little if your back foot is in too close
- Move hips back, letting the knee become straighter - think of pushing the ischial tuberosity ('sitting bone' in the pelvis) back & up. This adds more emphasis to the upper hamstrings
- ► Hold the stretch for a few seconds

Variations:
1.
- Do the same stretch in all-4's

2.
- Pull the foot & toes back toward you to stretch the sciatic nerve - gently!
- ► Hold the stretch for a few seconds, release & repeat several times to mobilise the neural structures

- Note: avoid stretching neural (nerve) structures firmly or holding them on stretch for more than about 3 seconds - they respond better to being gently mobilised

2. Hold-Relax
- Do the stretch as described
- Inhale

- Note: The hamstrings span the hip & the knee. When the knee is bent during the stretch there is more emphasis put on the muscle bellies in the middle to upper thigh rather than the tendons at the knee (which is the case with straight leg stretching).

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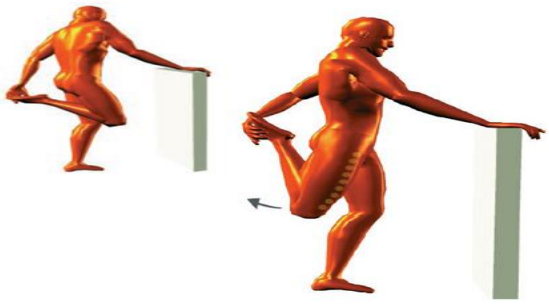
5. QUADS

84
Quads-stand

Stretches:
Quadriceps,
Rectus Femoris

Action:
- Clasp foot with opposite hand
- Draw knee backward
- Hold the stretch



Action - Details:
- In standing, place hand on chair or wall for support
- Clasp foot with opposite hand, then straighten trunk
- Draw thigh backward
- Prevent pelvis from tilting backward by tightening low abdominals
- Hold the stretch for a few seconds

Variations:
1.
- Clasp foot with hand on the same side and do the stretch
- Keep knee in line with hip - make sure it does not 'scissor' out to the side

2.
- If the knee is too uncomfortable with the degree of flexion (bend), then place a towel/strap around the ankle & hold onto it when drawing the thigh backward

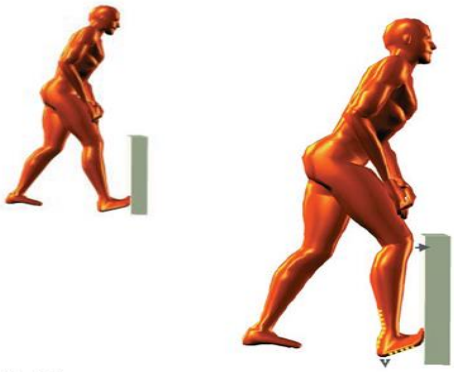
3. Hold-Relax
- Press foot against the pull of the hand, hold for 5 seconds
- Relax, draw thigh further backward

6. CALF

98
Instep/Calf

Stretches:
Toe Flexors,
Soleus,
Achilles,
Plantar Arch

Action:
- Place toes against wall
- Heel on ground
- Push knee toward wall
- Hold the stretch



Action - Details:
- Stand with the toes bent back against a wall or step
- Keep the heel on the floor & bend the ankle back
- Push knee towards wall, letting it bend
- You may need to lean towards the wall slightly too
- Hold the stretch for a few seconds
- Stretch the feet & toes the other way afterwards

Variations:
1.
- If front knee is kept straight, the gastrocnemius muscle is included in the stretch
- Keep the back straight & lean forward

2.
- Create a stretch on the outer border of the sole and lower leg by placing outer toes against wall and turning foot in
- Keep knee straight & lean towards wall

3.
- Vary the stretch by turning the foot in then out
- Vary the emphasis on the toes or the instep (plantar arch) by moving the toes closer to or further from the wall

4.
- Stand with one leg slightly in front of the other
- Place your weight onto the ball of the foot
- Press downward to create a stretch in the toes & instep

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7. SOLEUS/ACHILLES

96
Deep Calf

Stretches:
Soleus,
Achilles Tendon

Action:
- Feet point forward
- Lower hips, bend knee
- Keep heel down
- ➤ Hold the stretch

Action - Details:
- Stand upright with supporting leg forward & leg to be stretched behind
- Place the feet so that they point forward
- Keep the knee and foot in a straight line
- Lower hips, bend the back knee downward over the toes
- Maintain arch of foot
- May use a wall for support
- Vary stretch by turning foot slightly in or out, or aiming knee over the inner or outer toes

Variations:
1.
- Try placing a book under the toes to include stretching the toe flexors and plantar arch
- Or place toes against a step to bend them backward

2.
- If a tightly folded towel is placed along the lateral border of the back foot, then the stretch will better include Tibialis Posterior
- Make sure the knee is aimed over the middle toes

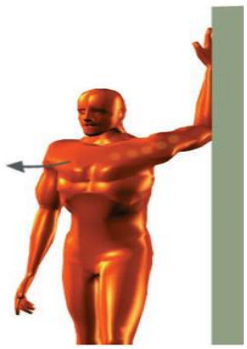
3.
- If a tightly folded towel is placed along the medial border of the back foot, then the stretch will better include Peroneus Longus & Brevis

8. SOLEUS/ACHILLES

23
Pecs+Wall

Stretches:
Pectorals, Anterior Deltoid,
Coracobrachialis,
Anterior Shoulder

Cautions:
Anterior shoulder dislocation



Action:
- Place forearm on wall or doorway
- Turn chest away from arm
- ➤ Hold the stretch

Action - Details:
- Stand tall with good spinal alignment
- Place forearm on wall or doorway
- Keep chin tucked in
- Keep shoulder down
- Turn chest away from arm
- Be careful not to overstretch
- ➤ Hold the stretch for a few seconds

Variations:
1.
- Vary the height of the forearm - higher or lower - to stretch different parts of the chest & anterior shoulder

2.
- Place both forearms on either side of doorway or on the walls in the corner of a room
- Stretch both shoulders at once by gently leaning chest forward
- Remember to keep the shoulders down

Assessments

As with any form of training program we need to measure the effectiveness of the program, in this case your overall performance. Throughout the program we have designated assessment periods to monitor your progress, enabling us to amend, modify and provide specific feedback to you.

The assessment periods are as follows:

Week three:	step up	refer step up assessment – enclosure 1
Week four:	8km	1hr 30 min – 1 hr 45 min review and modification of individual program
Week eight:	12km	timed event yellow zone (safe)/orange zone (decision)/red zone (out)
Week twelve	6-hour	duration event - refer program

Throughout the twelve-week program the assessment sessions provide us with the necessary information to make an informed decision on whether you meet the criteria to complete this trek. In the event that for some reason you have not met this criterion, we will discuss with you in detail the reasons why and the opportunities that arise. It may be that you will be ready for the next Kokoda Trek, or you may wish to participate in another Our Spirit Pty Ltd Adventure activity.

Conclusion

If you have any questions regarding your preparation for the trek do not hesitate to contact us on 0414521531 or aidan@ourspirit.com.au

Remember; a realistic and thorough physical preparation training program will pay off, leaving you equipped to handle the challenges of the trek and making your experience more enjoyable and memorable.

STEP UP ASSESSMENT (REMOTE TREKKERS ONLY)

INTRODUCTION

Assessing and measuring are the means of collecting information upon which subsequent performance evaluations and decisions are made.

Objective

The objective of this assessment is to monitor the development of your cardiovascular system.

Required Resources

To undertake this assessment, you will require:

- Gym bench (45cm high)
- Stopwatch
- Assistant (where possible)

How to conduct the assessment

The Harvard Step Test is conducted as follows:

- Step up on to a standard gym bench once every two seconds for five minutes – 30 steps per minute or a total of 150 steps. If possible, have someone to help you keep to the required pace.
- On completion of the assessment record your pulse rate + time
- One minute after finishing the test - take and record you pulse rate (bpm) – Pulse 1
- Two minutes after finishing the test - take and record you pulse rate (bpm) – Pulse 2
- Three minutes after finishing the test - take and record you pulse rate (bpm) – Pulse 3

NB: Please be aware; if your form or technique starts to waiver or you start to feel uncomfortable you are to cease the assessment and then record your heart rates as prescribed.

In this case, when you forward your results you need to inform us of the duration of the assessment, along with your pulse rate at the completion of assessment and at the three intervals.

Example:

1.	Record time for the assessment	3 min 35sec
2.	On completion of assessment heart rate	158 bpm
3.	First minute heart rate	140 bpm
4.	Second minute heart rate	130 bpm
5.	Third minute heart rate	110 bpm

Forward your results to Our Spirit Pty Ltd (cut and paste) to info@ourspirit.com.au

REMEMBER:

- If your form or technique starts to waiver - 'STOP'
- You start to feel uncomfortable 'STOP'.
- You cannot maintain the cadence 'STOP'.

If any of the above occurs you are to cease the assessment and then record your time and heart rates as prescribed.

NUTRITION GUIDE

Regular exercise places great demands on the body. In order to achieve maximum performance, optimal energy and rapid recovery, the ideal training diet must be employed. The following points must be considered when planning your training diet:

- Food is Fuel.
- Physical fitness does NOT presuppose nutritional health.
- Nutrition starts to bridge the gap between performance and ability.

Training Diet

Enjoy a wide variety of nutritional foods. You should eat food from the following food groups every day:

- Breads and cereals
- Fruit and Vegetables
- Meat and protein
- Milk and dairy foods

Carbohydrates

Aim for high levels of carbohydrates: Carbohydrates:

- Are the primary energy source for exercise
- Are easily digestible
- Rapidly replenish muscle and liver glycogen stores
- Improve endurance, recovery and concentration
- Are important for good nutrition and long-term health (low in fat, cholesterol free, vitamin rich)

All carbohydrates break down into simple sugars. A little of this sugar is rapidly available as blood sugar; the rest is sent to the liver and converted to glycogen. We store glycogen in our liver and muscles and then use it during training. We must, therefore, eat enough carbohydrates each day to replace those used during training. 60% - 70% of the meal in front of you should consist of carbohydrate foods. If we do not eat enough carbohydrate each day we eventually use up our entire store (similar to petrol in a car). Consequently, we are not able to train as well as usual and we feel constantly tired.

The body's stores of muscle glycogen are generally only adequate for 90 minutes of hard exercise. After this time your levels of glycogen will fall rapidly, and your performance will be affected. Therefore, you can either slow down (not possible on the Trek) or you need to top up your blood glucose levels as you exercise, with glucose polymer sports drinks and easily

digestible carbohydrate snacks. Sports drinks provide instant energy as blood sugar. They can improve endurance when taken during exercise/treks.

Traditional Classification of Carbohydrates:

1. Simple (sugars and fruits etc)

2. Complex (breads and cereals)

Classification System - Glycaemic Index (G.I.)

The Glycaemic Index is the method of assessing and classifying the blood glucose response of foods containing carbohydrates. High G.I. foods cause blood sugar levels to rise quickly after eating, so are ideal for recovery and during exercise. Low G.I. foods are better for endurance and sustained energy. Low G.I. foods should be taken before long periods of exertion, and High G.I. foods during long workouts and for recovery.

Low G.I.	**High G.I.**
Pasta	Glucose
Multigrain bread	White and whole meal bread
Milk	Rice
Apples, peaches, plums	Processed plain cereals eg. Weet Bix
Dates, figs	Watermelon
Yoghurt	Honey
Legumes	Lucozade/Sports Drinks
Jellybeans	

50g servings of carbohydrate

Bread	4 slices
Pasta (cooked)	1 1/4 cups
Weet-bix	4 biscuits
Scones	3 average
Banana	2 medium
Orange/Apple/Pear	3 average
Fruit Roll-up bars	2 1/2
Muesli Bars	2 1/2
Mars Bars	2 1/2
Power Bars	2 1/2
Orange Juice	600 mls
Gatorade	850mls

Protein

Protein should be eaten several times a day. Protein is required for tissue growth, repair and maintenance. However, if not used for energy any extra protein in your diet will be converted to fat. As a guide, people undertaking the full trek preparation program should consume approximately 1.5g protein per kg of body weight, eg. a 90kg man should consume about 135g protein per day.

Good sources of lower fat protein include:

- Lean red meat
- Poultry
- Fish and all seafood
- Low fat dairy foods
- Beans
- Rice, bread and cereals (to a lesser extent)

Fat

Avoid Fat. Excess fats, including oils, butter, margarine, mayonnaise, fatty meat, chicken skin, take away, deep fried potatoes, etc. are not a primary energy source, and are therefore stored as excess body fat!

You should also avoid salt (which leads to dehydration), too much fibre, and drink alcohol in moderation. In training peaks, alcohol leads to dehydration, storage of excess fat and exacerbates injury - definitely do not drink to excess after a big training day.

Sports Drinks

These are designed to replace lost fluids and carbohydrates. They can increase your time to exhaustion while exercising, however they are expensive. The best way to use them is as a fluid replacement after exercise. If you intend to use glucose polymer sports drinks such as Exceed, Endura, Gatorade, Isosports etc. do not take them as the manufacturer recommends - dilute with water instead. Sports drinks which are too concentrated, can cause gastrointestinal upsets and retard gastric emptying rate and carbohydrate absorption. As a rule, drinks should contain moderate sodium levels - 230-460mg, 120-195mg of potassium and 6-8% carbohydrate per litre.

Before Training

The night before big training sessions is the crucial time for refilling your energy stores. A meal consisting mostly of carbohydrate is recommended, eg. a large serve of pasta, with smaller serves of meat. Complement your meals with bread, juices and water, and if desired finish with a fruit-based dessert. Other good foods include rice, vegetables, chicken (no skin), lean red meat, broccoli, cauliflower and mushrooms.

Carbohydrate super snacks to remember are strawberry Quick in skim milk, crumpets with honey and jam (no butter) and dry fruit (eg. banana chips).

After Training

Recovery = Replenishment of Glycogen Stores + Rehydration of Fluids. The first 30-60 minutes after a training session are the most important for recovery. It is believed that between 50g and 100g of carbohydrate consumed during this time will promote a more rapid uptake of glucose by the muscle. This leads to a more rapid recovery, as the muscle is able to restore glycogen at a faster rate. Delaying carbohydrate intake for more than 2 hours can delay full recovery for several days.

Choose foods that are high on the Glycaemic Index for recovery. A High G.I. snack straight after exercise will give you the kick start you need to refuel your muscle energy demands. A commercial sports recovery drink containing added electrolytes may be beneficial if you cannot eat immediately after exercise. Remember: keep your energy levels up and you will train better!

Water also helps your body to replenish energy stores, so make sure you drink plenty.

MEDICAL CONCERNS

General

Experience has shown that in some cases this type of activity may cause or aggravate certain injuries. In almost all cases, however, these injuries have arisen due to inadequate preparation by participants.

The most common injuries are:

- Blistering feet
- Back abrasions from inadequate pack walking preparation
- Inflammation around ankles and knees (also generally due to poor preparation)
- Lower back complaints (once again usually caused through poor preparation)

Medical Guide

In line with the thorough nature of this guide, as many contingencies possible have been taken into account, endeavouring to ensure your safety and your enjoyment of the trek. The following advice is offered for your information:

1. Body Weight- participants should commence the trek with a small quantity of body fat. You can assess the amount of body fat you are carrying by pinching a fold of your skin. Too much body fat will compound the risk of heat illness and injuries. Too little fat results in inadequate energy reserves.

2. Heat Illness - the best preparation against heat illness is to be physically fit and as acclimatised to the heat as possible. Full acclimatisation is achieved by working/exercising under warm conditions and drinking lots of fluids while doing so.

3. Blisters - blisters are caused by friction on the skin and occur at points where footwear puts pressure on points of the feet and where toes rub together. The best prevention is adequate training in the footwear to be worn on the trek. Rubbing or soaking the feet in methylated spirits every second day will help ‘toughen them up’. Blistering between the toes can be prevented by applying Bepanthen Nappy rash cream between them. A ‘hot spot’ can be taped with plain Elastoplast to permit continuing activity while preventing blister formation. We recommend Our Spirit Socks to help prevent blisters.

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Health

Looking after your own, and your trek mates, health is essential. Remember that one person becoming sick, or lame will slow down or stop the entire group. To provide appropriate medical care all members of Our Spirit Pty Ltd staff are qualified in Wilderness and Remote Area First Aid.

However, the following points in regard to health must be noted:

1. Doctor's Examination – we recommend all participants must have a thorough check-up before commencing their training, ensuring there are no serious problems with their heart and lungs (respiratory system)..

2. Inoculations - advice should be sought from your doctor as to what precautionary 'shots' you should have. (be educated here as often Doctors are ill advised, if unsure please call us on 0414521531).

3. Malaria - Malaria is prevalent in the trek area. It is imperative that you seek the most up to date advice regarding antimalarial treatment from your doctor. The use of preventative tablets is essential. However, these tablets should be used in conjunction with insect repellents. If the precautions suggested by your guides are followed carefully malaria should not be an issue.

Health Services Australia suggests the use of 100 milligrams (1 x tablet) of Doxycycline daily, 2 days before departure, daily during the trek, and 4 weeks after return. Doxycycline is a broad spectrum anti-biotic which has been found to be effective against malaria. Safe practice information on hygiene and water will be given prior to commencement of the trek.

Finally

Your Our Spirit Pty Ltd team is experienced in field health requirements; however, if you have any specific medical condition that your doctor considers should be brought to our attention you must ensure it is made available to us at Our Spirit.

If you have any allergies, are asthmatic, diabetic or are currently taking any medication, please note that information on the space provided on the information sheet. It is your responsibility to provide your own medications for any special conditions.

Hiking Backpacks

How to choose which backpack suits you

The most important thing when selecting a backpack is to make sure it fits your posture and that it is not going to cause you any postural defects.

Your goal is to find a backpack that fits you:

Trip length—are you going out for an overnighter or for a week or more? For most of our treks, we recommend at least a 65 litre backpack.

Personal style of hiking—are you more into comfort or weight savings? Is your gear old and bulky or weight- and space-efficient?

Body type—your torso length, not your height, matters most.

Backpacks by Trip Length and Capacity

The following is a general guide for which pack sizes (measured in litres) typically work well for trekking during warm-weather hikes of varying lengths. Colder-weather trips usually require a larger pack, while ultralight hikers may choose to go smaller than the recommendations here.

Length of trip	Pack capacity (litres)
Weekend (1–3 nights)	35–50
Multiday (3–5 nights)	50–80
Extended (5+ nights)	65+

Backpack Fit

One of the keys to a comfortable backpack is to get a pack that is the right size (e.g., small, medium, large) for you. **Your torso length—not your height—is the key measurement**; hip size can also be helpful.

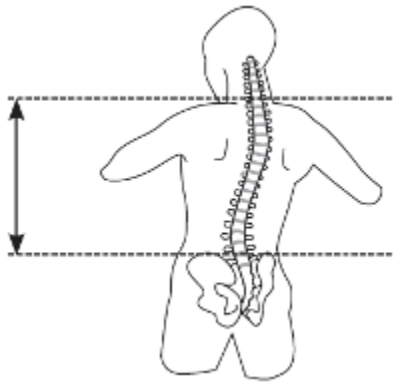
The right fit is one that offers:

A size appropriate for your **torso length** (not your overall height).

A comfortably snug grip on your hips.

If you're unable to work with a fit specialist in a store, you can enlist a friend and follow the directions provided below:

Find Your Torso Length



To do so, you'll need a friend and a flexible tape measure.

- Have your friend locate the bony bump at the base of your neck, where the slope of your shoulder meets your neck. This is your 7th cervical (or C7) vertebra. Tilt your head forward to locate it more easily. This is the top of your torso length.
- Place your hands on top of your hip bones (also known as your *iliac crest)*, with fingers pointing forward, thumbs in back. This is the "shelf" on which your pack will rest. The middle of an imaginary line drawn between your thumbs is the bottom of your torso length.
- Using the tape measure, your friend should measure the distance between the C7 and the imaginary line between your thumbs. Be sure you stand up straight when being measured. You now should have your torso length.

Use your torso length measurement to find your best pack size. Generally, manufacturers size their pack frames something like this:

Extra Small: Fits torsos up to 15 ½"

Small: Fits torsos 16" to 17½"

Medium/Regular: Fits torsos 18" to 19½"

Large/Tall: Fits torsos 20" and up

Determine Your Hip Size

While less important than torso length, your hip measurement is useful to know. It's especially helpful if you are considering a pack that offers interchangeable hipbelts.

Take your tape measure and wrap it around the top of your hips. The correct measurement is along the "latitude line" that radiates out from your belly button to your sides and the high points of your hip bones. This is slightly higher than your waist, so your hipbelt measurement may differ from your pants waist size.

A properly positioned hipbelt will straddle your hips about an inch above and below that latitude line, wrapping around the 2 pointy pelvic bones on the front of your body.

Torso Length

Some packs are available in **multiple sizes**, from extra small to large, which fit a range of torso lengths. These ranges vary by manufacturer and by gender. Check the product specs tab for size details of a specific pack.

Other packs may feature an **adjustable suspension**, which can be modified to fit your torso, especially if you're in between sizes. The drawback: An adjustable harness adds a little weight to a pack.

Waist Size

The majority of a backpack's weight, **80% or more, should be supported by your hips**.

Backpack hipbelts usually accommodate a wide range of hip sizes, from the mid-20 inches to the mid-40 inches.

People with narrow waists sometimes find they cannot make a standard hipbelt tight enough and need a smaller size. Some packs offer interchangeable hipbelts, making it possible to swap out one size for another.

Women-Specific Backpacks

These are engineered specifically to conform to the female frame. Torso dimensions are generally shorter and narrower than men's packs. And hipbelts and shoulder straps are contoured with the female form in mind.

Youth-Specific Backpacks

These typically offer smaller capacities and include an adjustable suspension to accommodate a child's growth. Women's backpacks, with their smaller frame sizes, often work well for young backpackers of either gender. So do small versions of some men's packs.

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Additional Backpack Fit Adjustments

Load lifter straps are stitched into the top of the shoulder straps, and they connect to the top of the pack frame. Ideally, they will form a 45° angle between your shoulder straps and the pack. Kept snug (but not too tight), they prevent the upper portion of a pack from pulling away from your body, which would cause the pack to sag on your lumbar region.

Sternum strap: This mid-chest strap allows you to connect your shoulder straps, which can boost your stability. It can be useful to do so when traveling on uneven cross-country terrain where an awkward move could cause your pack to shift abruptly and throw you off-balance.

Backpack Frame Type

Internal-frame backpacks: The majority of packs sold today are body-hugging internal frame packs that are designed to keep a hiker stable on uneven, off-trail terrain. They may incorporate a variety of load-support technologies that all function to transfer the load to the hips.

External-frame backpacks: An external-frame pack may be an appropriate choice if you're carrying a heavy, irregular load. Toting an inflatable kayak to the lake or heading out to the backcountry with surveying tools? An external frame pack will serve you best. External frame packs also offer good ventilation and lots of gear organization options.

Frameless backpacks: Ultralight devotees who like to hike fast and light might choose a frameless pack or a climbing pack where the frame is removable for weight savings.

Backpack Features

Main compartment access:

- **Top-loading openings** are pretty standard. Items not needed until the end of the day go deep inside.
- Some packs also offer a **zippered front panel** that folds open exposing the full interior of the pack, or a **side zipper**, which also makes it easier to reach items deeper in your pack.

Sleeping bag compartment: This is a zippered stash spot near the bottom of a pack. It's a useful feature if you don't want to use a stuff sack for your sleeping bag. Alternately, this space can hold other gear that you'd like to reach easily.

Top lid: Many packs offer a zippered top lid where most backpackers store quick-access items: sunscreen, insect repellent, camera, snacks, map. Some lids detach from the main pack and convert into a hipbelt pack for day trips.

Typical Pockets:

- Elasticized side pockets: They lie flat when empty, but stretch out to hold a water bottle, tent poles or other loose objects.
- Hipbelt pockets: These accommodate small items you want to reach quickly—a smartphone, snacks, packets of energy gel, etc.
- Shovel pockets: These are basically flaps stitched onto the front of a backbag with a buckle closure at the top. Originally intended to hold a snow shovel, they now pop up on many 3-season packs, serving as stash spots for a map, jacket or other loose, lightweight items.
- Front pocket(s): Sometimes added to the exterior of a shovel pocket, these can hold smaller, less bulky items.

Ventilation: This can be a drawback of internal-frame designs. Much of the pack rides on your back, cutting airflow and accelerating sweaty-back syndrome. Designers have addressed this in a variety of ways—**ventilation "chimneys"** built into back panels, for example.

A few packs have engineered a **suspended mesh back panel**, sometimes called "tension-mesh suspension." This is a trampoline-like design where the frame-supported backbag rides along a few inches away from your back, which instead rests against the highly breathable mesh.

Padding: If you're using a lightweight pack with a fairly minimalistic hipbelt and lumbar pad, you can encounter sore spots on your hips and lower back. If this is the case for you, consider using a cushier hipbelt.

Attachment points: If you frequently travel with an ice axe or trekking poles, look for tool loops that allow you to attach them to the exterior of the pack. Rare is the pack that does not offer at least a pair of tool loops.

Backpack Accessories

Raincover: Pack fabric interiors are usually treated with a waterproof coating. Yet packs have seams and zippers where water can seep through, and the fabric's exterior absorbs some water weight during a downpour.

The solution is a *raincover*, which could be a plastic garbage bag (cheap but clumsy) to a more customized packcover. If you expect rain on your trip, this is a good item to carry. An alternative: bundling gear internally in waterproof "dry" stuff sacks. Lightweight dry sacks can be a better option in windy conditions; strong gusts have the potential to abruptly peel a cover right off a pack.

Hydration reservoir: Nearly all packs offer an internal sleeve into which you can slip a *hydration reservoir* (almost always sold separately) plus 1 or 2 "hose portals" through which you can slip the sip tube.

How to Pack a Backpack

Packing a backpack is pretty simple, but there are some tips to make the process easier and to get you better results.

Ideally, a well-loaded pack will feel balanced when resting on your hips and nothing should be shifting or swaying inside. As you walk, the pack should feel stable and predictable, one with your upper body.

If possible, first pack your backpack at home. You can spread out your gear on a clean floor, visually confirm you've got everything, and feel less rushed as you load up.

Use the equipment checklist to ensure you've got everything you need.

Backpack Access

Most backpacks feature a **top-loading** opening to reach the main compartment. Some packs also offer a **zippered front panel** that folds open, exposing the full interior of the pack, or a side zipper, which also makes it easier to reach items deeper in your pack.

Your pack might also feature a **sleeping bag compartment**, a zippered stash spot near the bottom of the bag. It’s a useful feature if you don’t want to use a stuff sack for your sleeping bag. Alternately, this space can hold other gear that you’d like to reach easily.

Packing the Bottom of Your Backpack

The bottom of the pack is where you should stash items you won't need until you make camp at night. Most hikers shove their sleeping bag into the bottom of the pack. This is also where you might keep long underwear being used as sleepwear, and a sleeping pad (if it rolls up into a tiny shape).

Any other needed-only-at-night items can go down low except a headlamp or flashlight. Always have your light source in a readily accessible space.

Packing the Core of Your Backpack

Heavier items should be centered in your pack—not too high, not too low. The goal is to create a predictable, comfortable center of gravity. Heavy items too low cause a pack to feel saggy. Too high and the load might feel tippy.

Your heaviest items should be placed on top of your sleeping bag and close to your spine. Usually these items will be your **food , water, first aid.** Wrap softer, lower-weight items around the weightier items to prevent heavier pieces from shifting. Your rain jacket can help stabilize the core and fill empty spaces.

Hydration reservoir: Most newer packs include a hydration reservoir sleeve. This is a slot that holds a reservoir close to your back and parallel to your spine. It's easier to insert the reservoir while the pack is still mostly empty.

Packing the Top and Periphery of your Backpack

Top lid: Many packs offer a zippered top lid. You can stash frequently used items and keep them within easy reach. This might include, *compass*, *GPS*, *sunscreen*, *sunglasses*, *headlamp*, *bug spray*, *first-aid kit*, snacks, rain gear, *packcover*, toilet paper and sanitation trowel. You can also place these in external pockets, if you have them. Some packs even offer small pockets on the hipbelt.

Sleeping pad: You may need an extra set of straps to attach it to a lash point on the top of the pack or near your waistline on the outside of the pack. Another option: put it beneath your top pocket (lid) and the top opening of the pack, then tighten the lid to the pack. The pad may be vulnerable to slipping out either side, so secure the pad to the pack with an extra strap or two. (Note: It's fine to carry tent poles and a sleeping pad inside a pack if you have the space.)

Trekking poles: Same deal; just put the grips in the pocket and the tips pointing upward.

Other tools: Some packs offer a series of external stitched loops called a daisy chain. Use it to clip or tie small items on your pack.

Note: Minimize the amount of gear you attach to your pack's exterior. External items can potentially get snagged on brush in areas of dense vegetation. Too much external gear could also jeopardize your stability.

Additional Packing Tips

Fill up all empty spaces. For example, put utensils, a cup or a small item of clothing inside your eating bowl.

Stuff sacks: Some may prefer the low-chaos/easy-organization of stuff sacks, while others simply prefer to pack soft items loosely in the pack to use up all available room. Experiment with your own gear and decide which method most appeals to you.

Compression straps: Tighten all compression straps to limit load-shifting.

Rain cover: Carry a *pack rain cover* and keep it easily accessible. Though some backpacks are made with waterproof fabric, they have seams and zippers that are vulnerable to seepage during a downpour. A pack cover is worth its weight when rain becomes persistent.

Fitting your Backpack

First, loosen all of the pack's straps and hipbelt. Start by putting about 10 to 15 lbs. of weight into the pack to simulate a loaded pack. If making these pack adjustments at home, follow the steps below in front of a mirror. Get a friend to help if possible.

Step 1: Hipbelt

- Put the pack on your back so that the hipbelt is resting over your hip bones.
- Close the hipbelt buckle and tighten it.
- Check the padded sections of the hipbelt to make sure they wrap around your hips comfortably. Keep at least 1" of clearance on either side of the centre buckle.
- If the hipbelt is too loose or tight, try repositioning the hipbelt buckle. If this doesn't solve the problem, you may need a different pack (or hipbelt).

Step 2: Shoulder Straps

- Pull down and back on the ends of the shoulder straps to tighten them.
- Shoulder straps should fit closely to hold the pack body against your back and thus keeping the load forward. They should NOT be carrying the weight.
- Have your helper check to see that the shoulder strap anchor points are 1" to 2" inches below the top of your shoulders.

Step 3: Load Lifters

- Load-lifter straps are located just below the tops of your shoulders (near your collarbones) and should angle back toward the pack body at a 45° angle.
- Gently snug the load-lifter straps to pull weight off your shoulders. (Overtightening the load lifters will cause a gap to form between your shoulders and the shoulder straps.)

Step 4: Sternum Strap

- Adjust the sternum strap as needed to a comfortable height across your chest.
- Buckle the sternum strap and tighten until the shoulder straps are pulled inwards comfortably from your shoulders, allowing your arms to move freely.
- Pull the stabilizer straps located on either side of the hipbelt to snug the pack body toward the hipbelt and stabilize the load.

Final Tweaks

- Pull the stabilizer straps, if equipped, located on either side of the hipbelt to snug the pack body toward the hipbelt and stabilize the load.
- Go back to the shoulder straps and carefully take a bit of tension off of them. This ensures the majority of the weight is carried by your hips.

Hiking Boot Selection

- There are many brands of hiking boots available on the market today, we have put together this guide to help you select Boots that actually fit and work for you … not the shop assistant. In selecting a pair do not be guided by price, as many cheaper boots can be more specific to your foot structure.

Hiking Boot Uppers

- Materials impact a boot's weight, breathability, durability and water resistance.
- **Full-grain leather:** Full-grain leather offers excellent durability and abrasion resistance and very good water resistance. It's most commonly used in backpacking boots built for extended trips, heavy loads and rugged terrain. It is not as light or breathable as nylon/split-grain leather combinations. Ample break-in time is needed before starting an extended trip.
- **Split-grain leather:** Split-grain leather is usually paired with nylon or nylon mesh to offer lightweight, breathable comfort. Split-grain leather "splits away" the rougher inner part of the cowhide from the smooth exterior. The benefit is lower cost, however, the downside is less resistance to water and abrasion (though many feature waterproof liners).
- **Nubuck leather:** Nubuck leather is full-grain leather that has been buffed to resemble suede. It is very durable and resists water and abrasion. It's also fairly flexible, yet it too requires ample time to break in before an extended hike.
- **Synthetics:** Polyester, nylon and so-called "synthetic leather" are all commonly found in modern boots. They are lighter than leather, break in more quickly, dry faster and usually cost less. Downside: They may show wear sooner due to more stitching on the outside of the boot.
- **Waterproof:** Boots and shoes billed as "waterproof" feature uppers constructed with waterproof/breathable membranes (such as Gore-Tex® or eVent®) to keep feet dry in wet conditions. Downside: The reduced breathability created by a membrane (compared to the ventilating mesh used on some non-waterproof shoes) may encourage feet to sweat on summer days.

Hiking Boot Midsoles

- The midsole, which provides cushioning, buffers feet from shock and largely determines a boot's stiffness. Stiff boots might not sound like a good thing, but for long hikes on rocky, uneven terrain they can mean greater comfort and stability. A stiff boot won't allow your foot to wear out by wrapping around every rock or tree root you step on.
- The most common midsole materials are EVA (ethylene vinyl acetate) and polyurethane.

- **EVA** is a bit cushier, lighter and less expensive. Midsoles use varying densities of EVA to provide firmer support where needed (e.g., around the forefoot).
- **Polyurethane** is generally firmer and more durable, so it's usually found in extended backpacking and mountaineering boots.

Hiking Boot Support Components

- **Shanks:** These 3–5mm thick inserts are sandwiched between a boot's midsole and outsole to add load-bearing stiffness to the midsole. They vary in length; some cover the entire length of the midsole, while others only cover half.
- **Plates:** These thin, semiflexible inserts are positioned between the midsole and the outsole, and below the shank (if included). They protect feet from getting bruised by roots or uneven rocks.

Hiking Boot Outsoles

- Rubber is used on all hiking boot outsoles. Additives such as carbon are sometimes added to backpacking or mountaineering boots to boost hardness. Hard outsoles increase durability but can feel slick if you go off trail.
- Other outsole considerations:
- **Lug pattern:** Lugs are traction-giving bumps on the outsole. Deeper, thicker lugs are used on backpacking and mountaineering boots to improve grip. ***Widely spaced lugs offer good traction and shed mud more easily.***
- **Heel brake:** This refers to the clearly defined heel zone that is distinct from the forefoot and arch. It reduces your chance of sliding during steep descents.

Hiking Boot Rands

- Found on some waterproof/breathable boots, a rand is the wide rubber wrap encircling the boot (or sometimes just the toe area) where the upper meets the midsole. It offers extra defense against water penetration on wet, mucky trails. It also protects boot leather from rocks and abrasion.

Hiking Boot Fit Tips

- **Know your size.** It's best to have your foot measured on a Brannock device at the shop. You can also measure your foot length (in inches or centimeters) and use the online sizing charts found on many boot page websites to find your boot size.
- **Try on boots at the end of the day.** Your feet normally swell a bit during the day's activities and will be at their largest then. This helps you avoid buying boots that are too

small. On the Kokoda Track for example your feet tend to expand by a half size due to the heat of the tropics, this must be taken into account when buying boots.

- **If you wear orthotics, bring them along.** They impact the fit of a boot.
- **Wear appropriate socks.** Familiar socks can help you more quickly assess the fit and feel of new footwear. However, try to make sure the thickness of the socks matches what you intend to wear on the track. We recommend ***Our Spirit socks*** as they have been developed and tried and trusted on the Kokoda Track over 20 years.
- **Spend some time in the boots.** Take a stroll through the store. Walk up and down stairs. Find an inclined surface and walk on it. If you detect an odd bump or seam, or a little pinching in the forefoot, the boot's not right.
- **When shopping online, consider a brand you have worn before.** Most boot companies tend to use a consistent foot model over time, so the fit is likely to be similar.
- **Consider aftermarket insoles (a.k.a. footbeds)**. Insoles come in models that can enhance comfort, support or fit—or all three.

- ## Types of Insoles

- # Comfort Insoles

- People who experience foot pain and tired feet from standing or walking on hard surfaces for extended periods may find relief from shock-absorbing insoles designed for comfort.
- These can be flat or shaped and feature gel or foam in their construction. Insole choices include full length, ¾ length or arch or heel inserts.
- Tired, achy feet may also be the result of insufficient foot support inside a shoe. If a "comfort" insole does not provide relief, or even aggravates the problem, it is an indication that the foot wants firmer support, not more cushioning. Try a "support" style insole instead.

- # Support (or "Sport") Insoles

- These feature a harder material for structural support and stability. Comfort is derived from the increased stability rather than direct cushioning.
- Supportive insoles are best for the following conditions:
- **Structural misalignment**, which can manifest not only as foot pain, but discomfort in the ankles, knees hip, back, neck or head.

- **Plantar fasciitis:** Medical professionals routinely recommend the use of a supportive insole as part of the treatment protocol for this painful condition resulting from tears in the plantar fascia—a band of connective tissue which connects the heel to the forefoot.
- **Supination or over-pronation:** Support insoles moderate a tendency for the feet to either supinate (roll out) or over-pronate (excessive rolling in) when walking or running.
- Though not customized to an individual foot, support insoles come in different models and profiles to suit most foot shapes or footwear types.

Insole Volume

- Insoles can change footwear volume, which is the internal space of the shoe.
- **High-volume insoles** best suit high-volume shoes such as hiking boots, ski boots or running shoes.
- **Low-volume insoles** are needed for low-volume shoes such as a casual or cycling shoes, in-line skate boots or ski skate boots. (Note: The thickness of your socks will also have a big influence on footwear fit.)

Common Footwear Fit Problems

- If you have any of the following common fit problems, insoles may help. Insoles vary in heel and arch dimensions; a footwear specialist can assess your feet to see which type works best.
- **Heel slippage:** A shoe that fits well in the mid- and forefoot but allows heel slippage or lift may be improved with a supportive, mid- to high-volume insole. This reduces excess volume in the rear of the shoe and stabilizes the heel of the foot, minimizing the heel slip that can cause hot spots and blisters.
- **Foot elongation:** For those with significant foot elongation in one or both feet when measured standing as compared to sitting, a supportive insole can help. This reduces foot elongation when weight bearing, creating a better fit and lessening the need to size up when buying footwear.
- **Low or collapsed arches:** People who have low or collapsed arches often ask for "arch support" insoles. What is really needed, though, is "foot support" which helps stimulate the arch muscles to be engaged and active. A supportive insole stabilizes the heel and distributes pressure across the base of the foot, instead of concentrating pressure into the arch area. Direct arch support is actually uncomfortable for many people since it inhibits the normal flexing of the foot.

Insole Fit Tips

- Once you've narrowed the options to a few models, it is time to test them out. An REI footwear specialist can guide you through this process.
- First, stand on the insole outside the shoe. Lift up your other foot so you are balancing on the foot that is on the insole. Check how stable you feel, how much pressure you feel and whether the tissue of your heel is cupped and supported nicely in the insole.
- Then, try the insole inside your shoe (don't forget to remove the stock insole first). Now you are assessing the fit as well as the feel and support. Be sure you feel stable in the shoe and that the insole takes up the right amount of volume: not too little or too much.

Insole Care Tips

- Aftermarket insoles generally last about 12 months for daily or regular use. This may be extended to several years if you have a pair in footwear that sees only occasional or seasonal use. Care tips:
- **Air them out:** Sweaty or wet feet? Remove insoles regularly to allow moisture trapped between the insole and shoe to dry out.
- **Wash them:** If needed, wash insoles by hand with a mild detergent or sports detergent and air dry before re-inserting.
- **Inspect them:** Periodically remove and inspect insoles for signs of deterioration and replace as needed.

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EQUIPMENT LIST for Kokoda

Essential Items		
1	**Adventure Backpack & Equipment Bundle** or Rucksack 60 litre capacity or a maximum of 75 litre (limit packed weight to 10-13kg) Day Pack 20 Ltrs if you are not carrying your main pack.	
1	**Water Carriers** 1 x 2 Litre Backpack Bladder/Bottles. Your choice of water bottles or water bladder, you will need easy access to bottles. 1 x Water bottle (for mixing supplements)	
1	**Sleeping Bag 10 + , Sleeping Mat**	
2	Dry bags, waterproof bags or heavy-duty bin liners can be used to waterproof your clothes inside your backpack while trekking then one to store your boots upon return	
1	Deep bowl (big enough for cereal and dinner)	
1	Mug (Plastic Mug with a clip on lid – to retain the heat for cooking noodles)	
1ea 2	Knife / Fork / Spoon or Combo Eating Utensils	
1	Head Torch (and spare batteries)	
1	Basic First Aid Kit	
Optional Items		
1	Daypack (for personal use). You do not need a daypack if you are carrying your own pack	
1	Pillow (Inflatable travel pillow or cushion insert – do not bring full size pillow)	
1-2	Walking poles (Carved walking sticks can be purchased on the track from PNG locals)	
	Camera, spare batteries, Spare memory card **Note:** Cameras and video recorders cannot be charged on the track as there is no electricity	
1	Diary and pen	

1	Playing cards	
1	Extra garbage bag (in case 2 main bags become ripped or torn)	
2	Bandanas (optional)	
1	Sarong wrap for wearing around camp or to the shower	
Clothing		
1	Walking boots and spare boot laces	
1	Crocs, thongs or Sandals – adventure style with good grip for evening wear	
1	Long cotton pants or equivalent and long shirt / thermal (for night time)	
1	Rain jacket	
2	Shirts for trekking	
1-2	'skins' style sports clothing shorts / 2XU sports clothing (highly recommended, great to reduce chafing)	
2	Walking shorts or walking pants	
1	Costumes (for rivers and hotel)	
4	**Pairs of silver, merino woolen hiking style socks**	
4	Comfortable underwear / bras	
1	Gaiters (optional) small or long	
1	Hat / cap	
1	Microfiber Towel	
1	Plastic Poncho or rain jacket (see above rain jacket)	
Toiletries		
1	Toothbrush	
1	Toothpaste	

1	Razor	
1	Roll Toilet paper or wet wipes/baby wipes (in plastic bag)	
1	Nail brush (optional)	
1	Antibacterial Hand Gel (small bottle)	
1	Small soap (small soaps are best in case you lose one in the fast-flowing rivers)	
1	Small bottle of Shampoo & Conditioner (green friendly)	
1	Hair Brush/Comb	
1	Ladies hygiene products	
1	Hair ties	

Personal Medical Kit		
	Medications as Prescribed by your Doctor (anti-malaria, antibiotics for wounds and infections, anti-inflammatory, anti-vomiting, epi-pen etc…)	
12	**Electrolyte Sachets (must have!!)** Gastrolyte, Endure Opti with **magnesium**	
1	Headache Tablets	
1	Strong Pain Relief	
1	Diarrhoea Tablets	
1	Magnesium supplements (enough to support daily quantity recommended)	
1	Anti-Inflammatory medications (eg. Ibrufen, Voltaren, Nurofen)	
1	Antihistamines (e.g. Telfast, Phenergan 10mg)	
1pkt	Blister Pads	
1	Roll of strapping tape	
2 pkts	Large size band-aids (Elastoplast)	

1	Knee and/or ankle guards (if needed)	
1	Foot fungi powder (Tea Tree foot powder works well)	
1	Antiseptic lotion/cream	
1	Hydrocortisone cream (for bites)	
1	Insect repellent roll-on / cream (Bushmans DEET– always keep it on)	
2 pkts	Water purification tablets or UV purifier (e.g. ***Steripen***) or filter	
1	Sunscreen (always keep it on)	
1	1 X 50g tubes of 'Bepanthen' nappy rash cream- for your feet! And prevent chafing	
	Scissors, tweezers, and safety pins	

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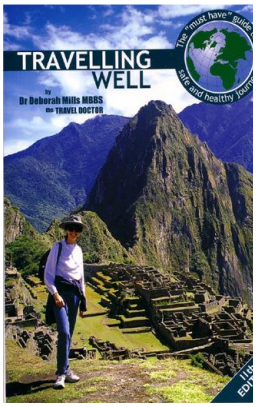
WOMEN ON KOKODA

Women genetically will experience different physical and psychological change; thereforewe provide you with the following information that we hope assists you with your preparation for an adventure experience. If you have any questions or concerns, please contact our office on +617 5641 4561 or email info@ourspirit.com.au

Some Women's' Health Considerations for Kokoda Trekking

Excerpts from 'Travelling Well' Dr Deborah Mills



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Thrush

Thrush is a most unpleasant condition to have while traveling! Doxycycline is the common anti-malarial medication used for this part of the world and about 9% of women taking doxycycline will develop thrush. Cotton underclothes may help prevent it but you need to carry medicines so you can treat thrush promptly if symptoms develop.

Symptoms

Thrush is a yeast infection of the vagina. The symptoms are:

- A white 'cheesy' vaginal discharge
- Redness/irritation of the genital skin
- Itch - sometimes quite severe.

Thrush is often provoked by the contraceptive pill, a course of antibiotics, or some types of malaria pills.

Treatment of thrush

Thrush is easily treated with special creams or pessaries (e.g. econazole nitrate pessaries - one is placed into the vagina each night for 3 nights). Other popular treatments are Canesten, Gyno-Daktarin, nystatin, or miconazole. If the symptoms do not respond to treatment in a day or two, you must see a doctor urgently as it is probably not thrush. There is also an oral tablet available for severe cases; fluconazole, (Diflucan) one oral dose of 150mg is taken. As one traveller put it 'expensive but worth it'

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Cystitis/Urinary Tract Infections

Many women experience cystitis or urinary tract infections when traveling. If you are prone to this type of infection, ensure you drink plenty of fluids, and treat yourself promptly if symptoms develop.

Infection of the urinary tract usually occurs in women. If you cannot see a doctor - Take your temperature and look at the urine.

Symptoms of Cystitis / Urinary Tract Infection

- Burning or stinging when passing urine
- Feel unable to fully empty the bladder
- Need to go to the toilet very frequently e.g. every half an hour
- Urine is cloudy, discoloured and odour is increased

Treatment

- Drink more fluids to 'flush' the germs out of the 'plumbing'.
- Decrease your coffee intake. Coffee is a kidney stimulant and will make you want to urinate more often.
- A urinary alkaliniser (e.g. Citravescent or Ural) may help stop the 'burning'. Take one sachet four times a day.
- Sometimes it is necessary to take antibiotics to clear the infection. If you cannot get to a doctor the appropriate antibiotics for urinary tract infections are trimethoprim, cotrimoxazole or norfloxacin (Noroxin is handy because you usually have it in your kit for TD.

Norfloxacin (Noroxin) 400mg tablets One tablet twice a day for 3 days

If there is no improvement in 24 hours, you need to see a doctor. Bladder infections may spread upwards to the kidneys, which can be very serious.

Kidney Infections

Watch for the bladder infection spreading to the kidneys. Clues for this are:

- Do you have a fever as well?
- Is there blood in your urine?
- Do you have back pain?
- Do you feel sick and tired?

These symptoms raise the definite possibility of kidney infection or Pyelonephritis. You need antibiotics and must see a doctor at once.

Feminine Hygiene

Toilet and general washing facilities may be limited. During a menstrual period, ensure your hands are clean before tampons are used. Wash hands with soap and water, (tap water is OK), and dry your hands with a clean towel. Products such as Microshield™ hand wash can be used where soap and water is not available. The use of tampon applicators may be convenient. Stopping your periods for the duration of the walk may be a very good idea – see below.

Stopping Periods

Medical research has shown that you do not NEED to have a period every month. If you are on the pill, some contraceptive pills can be taken continuously, thus avoiding periods altogether. This is safe. It is easier with monophasic (one strength pills) like Microgynon, Levlen, or Nordette. . You simply skip the sugar pills for that month. This will delay your period 3 weeks. Most women can safely skip three periods in a row.

If you are taking 'multiple dose pills' (e.g. Triquilar, Triphasil, Trifeme), skipping the sugar pills may not work. To delay a period on these pills you need to do this: when you reach the end of your active pills for the month - instead of taking the sugar pills, use a spare packet and take the last week of active pills from the spare packet. Then take the sugar pills. This will delay your period for a week. Generally it is best to always take a 'Saturday' pill on a Saturday or confusion may occur. Discuss this with your doctor. If you want to skip periods, it may be easier to temporarily change to a 'one strength pill'.

Other Issues with the Contraceptive Pill

Vomiting ....and the Pill

If you are ill, and vomit within five hours of taking the pill, it may not have been absorbed. You should take another pill to replace the one lost. Use a spare packet; it is better to use a replacement pill for the correct day of the week, i.e. take a Thursday pill on a Thursday.

Diarrhoea ....and the Pill

It is difficult to predict the effect that diarrhoea will have on pill absorption. The safest course of action is to continue taking the pill, but use other means of contraception while you have severe diarrhoea and until 7 active pills after the diarrhoea has ceased.

Antibiotics ....and the Pill

This is important if you need to take antibiotics for diarrhoea, or with some of the ant malarial tablets. Some antibiotics interfere with the effectiveness of the contraceptive pill. This may lead to spotting in the middle of the month, or even pregnancy. For most antibiotics, use other means of contraception while taking the antibiotic and for 7 active contraceptive pills afterwards.

Malaria tablets ...and the Pill

Doxycycline, a commonly used anti malarial for this region, may interfere with the 'pill' leading to irregular bleeding or even pregnancy. Chloroquine, Maloprim, Malarone and mefloquine (Lariam) do not interfere with the oral contraceptive pill. Use other means of contraception while on doxycycline and for at least 7 active contraceptive pills after finishing the malaria pills.

Irregular Periods

If you are not on the pill, it is common to have irregular periods while traveling, especially on this sort of trip. Your periods may come early or come late – be prepared. It is harmless except for the logistics of dealing with sanitary protection, and perhaps the concern of possible pregnancy if they are very late.

Hair Loss During or Shortly After Travel

This is not a specifically female problem but tends to be more noticeable and cause more concern in women. It is quite common after prolonged or stressful travel to notice an increase in the loss of hair on brushes or on the pillow after sleeping. The hair does grow back. Have a checkup when you get home just in case it is something else.

Additional Packing Items for Women

	Thrush medicine – pessaries and cream
	Extra supplies of tampons/sanitary protection
	Noroxin & Ural – in case of urinary tract/bladder infection
	Extra supplies of the contraceptive pill if relevant

Important Travel Instructions

Domestic Travel

Participants who require domestic travel to meet the international group flight, must arrive at least 2 hours before the scheduled international flight departure time. Upon return, we recommend you book your domestic flight at least 2 ½ hours after the international group flight arrival time.

International Travel

Luggage Restrictions

Your personal baggage must not exceed the 17kg weight limit as group supplies including food, sleeping bags, mats, tents, etc make up the balance of the airline allowance. Please note that legislation in both Australia and Papua New Guinea restricts the carriage of liquids, aerosols and gels in carry-on luggage. This may also include Duty Free Purchases, depending on where the items were purchased. The allowance for hand luggage is a maximum of 7kg.

Check-In

To obtain your boarding pass and proceed through Australian customs, you will require the following documents:

- A copy of your Itinerary and E-Ticket (Trekkers will receive their E-ticket on arrival at the Brisbane International airport on the morning of departure. Trekkers departing from all other ports will receive their E-ticket via email approximately 1 week prior to departure).
- A copy of your PNG Visa
- Your Passport (valid for at least 6 months from your departure) and showing exactly the same name as the name you provided on your profile.
- Completed Australia Departure Card (available from Check-in staff at the airport)

Arrival in PNG

On arrival in Port Moresby, collect your checked luggage and proceed through ***PNG customs***. Your group will be met by an Our Spirit Representative upon your arrival in Port Moresby once you have cleared customs.

Money Exchange

We recommend that our trekkers carry about 200Kina ($100AUD) in small denominations to buy drinks, fruit (subject to availability due to the recent drought), souvenirs, etc, along the track. Additionally, you might be required to pay a 50Kina ($25AUD) surcharge for access to the

Isurava memorial, which was recently imposed by one of the landowners. Please ensure you have the correct amount available, should this surcharge be required.

The bank at the PNG airport (after you pass through immigration) is the best place to change your Australian dollars into Kina. In the past, some people have been given the old denominations by Australian banks which can no longer be used in PNG today and in most cases Australian banks do not have Kina readily available.

Hotel Transfer on Arrival

Outside the terminal, the Gateway Hotel Courtesy Bus will meet the group and transport everyone back to the Gateway Hotel. The Gateway Hotel is situated approximately 2km from the airport.

Managing Luggage with a Personal Porter

If you have hired the services of a Local Legend (Personal Porter) for your trek, you will also need to carry a day pack for personal items you need with you on the Track while walking (e.g. water, snacks, first aid kit, torch, sun protection/block-out, camera, etc.). Most people pack their day pack into their backpack as checked-in luggage. If you do not have a backpack, please advise us and we will arrange one for you. In this instance, travel with your normal luggage, including the daypack. Upon arrival at the hotel, you will be given a backpack which you can fill up to a maximum of 16kg for your personal porter to carry. Your travel luggage will be stored in a secured lock up at the hotel whilst you are trekking.

Hotel Accommodation

Travelling with Valuables

Travel clothing and general personal items (such as a shaver and hairbrush, for those who have it – hair that is!) can be left at the hotel in Port Moresby whilst you are trekking. These items are kept in a locked store room. There is also a safe facility at the hotel, available to store passports and other small items of value.

What IS Covered & What IS NOT

Accommodation is confirmed on a twin-share basis, unless the singles supplement has been purchased) on the first night and last night (s) in Port Moresby as part of our adventure package.

All other charges (e.g. meals – unless pre-paid package purchased with adventure, bar, room service, laundry, etc) are the responsibility of the individual. All accounts must be settled directly with the hotel prior to your departure from the hotel on the day of your return flight.

Bomana Cemetery (the reason why we train, it's a pilgrimage.. in their footsteps)

This war cemetery, which was commenced in 1942 by the Army lies 19 kilometres north of Port Moresby on the road to Nine Mile, and is approached from the main road by a short side road called Pilgrims Way. Simple wrought iron gates open on to a grass forecourt enclosed by a bank of colourful tropical shrubs and trees. From this forecourt a short flight of steps rises to the Stone of Remembrance, which is of pink freestone richly grained. Beyond this, on gently rising ground, lie the graves, marked by white marble headstones; and from a mound beyond the graves, and dominating them, rises the cross of Sacrifice, made of the same stone as the Stone of Remembrance. There are two grassed avenues of rain trees stretching from the front to the back of the cemetery, and between every few rows of graves are tropical shrubs and trees. The total number of burials is 3,779. The 438 unidentified soldiers of the United Kingdom forces were all from the Royal Artillery and captured by the Japanese at the fall of Singapore; they died in captivity and were buried on the island of Ballale in the Solomons. These men were later re-buried in a temporary war cemetery at Torokina on Bougainville Island before being transferred to their permanent resting place at Port Moresby. On a hill above and behind the cemetery, to the right of the centre, stands a rotunda of cylindrical pillars which is the memorial to those men of the Australian Army (including Papua and New Guinea local forces), the Australian Merchant Navy and the Royal Australian Air Force who lost their lives in the operations in Papua and who have no known graves.