NEW ZEALAND SUMMER EQUIPMENT NOTES

Due to the nature of the mountain environment, equipment and clothing must be suitable for its intended purpose. It must be light, remain effective when wet or iced, and dry easily. These notes will help you make informed choices.

Bring along the mandatory clothing, wet weather gear and any equipment you already own that is on the equipment checklist. This gives you an opportunity to practice with your gear and equipment so that you become efficient at using it out in the field.

These equipment notes are a comprehensive guide which cover all our Summer trips, from three-day treks to twelve-day high alpine courses. Please look over your equipment checklist to see what is required and refer only to the sections that are pertinent to your trip.

Adventure Consultants can offer clients good pricing on a range of clothing and equipment. Please feel free to contact us if you would like any advice on specific products or if you would like to special order any clothing, gear or equipment for your trip.

Body Wear

**Waterproof Shell Jacket**

Bring a non-insulated, fully waterproof shell jacket with water-resistant zip closures and a good hood capable of fitting over a helmet. The jacket should be easy to move in with your base and mid layers on underneath, and provide a good overlap with your pants, but should not be so long that it restricts access to your harness. Chest pockets are useful to things like snacks and sunscreen during the day. Pit zips allow for increased ventilation and cooling.

There are numerous fabrics which are both water-resistant and breathable such as Gore-Tex, eVent, MemBrain, PreCip and Entrant, etc. These fabrics can be expensive but can last for years, when well looked after. Shell clothing should be seam sealed during the manufacturing process or the garment will leak through the stitching. Shell clothing made of PVC or similar is totally waterproof but does not breath, which means you become damp from the inside out as moisture cannot escape while you are moving. This style of waterproof shell is not suitable for mountaineering. Therefore, fabric breathability is very important when you are active in the mountains.

A technical mountaineering jacket is ideal, but many general-purpose jackets are sufficient as well.

*We recommend The North Face Summit L5 Fuseform GTX C-Knit Jacket, Montane Alpine Pro Jacket or the Rab Muztag or Latok DV Jackets.*

**Waterproof Shell Pants**

Your waterproof shell pants should have good freedom of movement to enable you to lift your legs easily, when worn with your hiking pants and base layer leggings during inclement weather. They should also have ¾ to full length zips down each leg to enable you to put them on and take them off, while wearing your boots and/or crampons.

*We recommend The North Face Summit L5 GTX Pro Pants, and the Rab Mustag or Latok DV Pants.*
Softshell Jacket
Softshell fabric is incredibly versatile in the high alpine environment. It has wind and water-resistant qualities while also being highly breathable and comes in a variety of fabric weights. For the NZ climbing season a lightly insulated softshell jacket with a full front zip for ventilation is most functional. Zip pockets help avoid losing items stored inside and a hood is also a bonus. Make sure you can fit a base layer underneath, and your waterproof shell jacket over the top.

*We recommend the Rab Vapour Rise Alpine or Flex Jackets, and the Marmot DriClime Ether Jacket or Hoodie.*

Down/Primaloft Jacket
A warm layer is always a necessity in the mountains. For the summer months, a lightweight (e.g. 700-800 fill) down or Primaloft jacket with a hood is recommended. Put this on during rest breaks, in the hut at night or as a mid-layer under your shell if it gets cold.

*We recommend The North Face Nuptse or the Rab Electron or Continuum Warm Down Jackets, or The North Face Thermoball Hoody, Montane Prism Jacket and the Rab Nebula, Photon or Xenon X Primaloft Jackets.*

Lightweight Fleece Top
A lightweight fleece made from Polartec Power Stretch, Polartec Power Grid, Polartec Alpha, Pontetorto Tecnopile micro fleece or an expedition weight base layer is a good additional layer to keep your thermoregulation perfect.

Wear it as your top layer when warm or put your softshell, down or shell jacket over it, when it gets colder. It can be a light fleece pullover or have a short or full zip. A zip chest pocket is useful for keeping sunscreen and snacks accessible.

*We recommend The North Face Summit L2 Proprius Grid Fleece, Rab Superflux and the Montane Power Up Hoodies.*

| The North Face Summit L2 Proprius Grid Fleece Hoodie | Rab Sawtooth Softshell Pant | Adventure Consultants Branded Long Sleeve Cool Horizon Shirt |

Softshell Climbing Pants
Lightweight softshell pants, which have wind and water-resistant qualities are ideal. If you tend to get cold easily, then it’s good to have looser fitting pants that you can fit thermals underneath. In inclement weather your waterproof shell pants will go over the top of your softshell pants to create an extra barrier to the elements.

*We recommend the Marmot Scree Pant, Rab Sawtooth and Spire Pants or The North Face Summit L4.*

Base Layer Tops & Leggings
Base layers must be made from materials such as merino wool or polyester. No cotton please! We recommend that you bring at least two tops (one for climbing in and one for wearing in the evenings, or to double up if you are really cold).

Tops should have long sleeves and a high neck with a zip to allow some ventilation. Base layer leggings should fit snugly without constriction.

*We recommend The North Face Warm, Rab Merino, Earth Sea Sky and Smartwool Base Layer Ranges.*

Cotton Glacier Shirt
A long-sleeved cotton shirt in a light colour helps to keep the sun off during those hot days on the glacier.

*We recommend the Adventure Consultants Glacier Shirt, available from our office.*

Underwear
We recommend treated polyester or merino underwear and singlets instead of standard cotton as they wick away sweat from your skin to keep you dry. They also dry extremely quickly when washed. Bring enough changes of underwear for the trip.

*We recommend Smartwool, Earth Sea Sky Merino, Montane Primino and the Rab Merino Underwear Ranges.*
Head Wear

Sun Hat
A wide-brimmed soft hat or baseball cap in conjunction with a bandana or buff to protect you from the sun.

*We recommend the Adventure Consultants Sun Hat and Buff, available from our office.*

Warm Hat
Wool, Windstopper or fleece extending over the ears with a secure fit to prevent flying off in a strong wind.

*We recommend The North Face Bones, the Rab Logo or Smartwool Beanies.*

Sunglasses
Preferably a “glacier” style with side protection, although some wraparound glasses rated with a category 3 lens will provide enough protection from reflected light.

The lens should be dark enough to withstand the intense reflection from the snow and MUST filter 100% of UVA, B and C radiation. Snow reflects up to 85% of solar radiation and the UV index increases 10% with every 1,000m gain in altitude, so it is of utmost importance you protect your eyes. A Category 3 or 4 polarised lens with an anti-fog coating are ideal.

If you wear prescription glasses, we recommend you get grey or amber prescription lenses. If you wear contact lenses, it is advisable to bring a pair of prescription glacier glasses as a back-up.

Eyewear retainers are essential.

*We recommend Oakley, Smith, Julbo, Bollé and Adidas Sunglasses.*

| Adventure Consultants Branded Buff | Julbo Explorer Sunglasses | Rab Alliance Gloves |

Ski Goggles
Bring good-quality goggles for protection from high winds and heavy snow. The lens should offer visible light transmission (VLT) of no more than 30%. Those with light-sensitive eyes may wish to use a darker lens and photochromatic models are ideal for use in changing conditions.

If you wear prescription glasses, please ensure they fit under your goggles.

*We recommend Oakley, Smith, Julbo, Bollé and Adidas Goggles.*

Bandana or Buff
A bandana or Buff is also a good idea for added warmth and sun protection.

*We recommend the Adventure Consultants Buff, available from our office.*

Hand Wear

Liner Gloves x 2 Pair
These thin, lightweight finger gloves should fit snugly to allow for handling ropes and carabiners easily. These should fit inside your mountaineering gloves. We recommend bringing two pairs so that you always have warm and dry hands.

*We recommend Basic Polypropylene Gloves, Black Diamond Lightweight Fleece Gloves or the Rab Stretch Knit Liner Gloves.*

Fleece Gloves
Fleece mid-weight finger gloves can be used as an additional layer to protect against the cold.

*We recommend The North Face Power Stretch Gloves, Black Diamond Midweight Gloves or the Rab Power Stretch Pro Gloves.*
Mountaineering Gloves
Mountaineering gloves should be warm and provide dexterity for working with ropes and equipment. A good model will have abrasion-resistant palms, shaped fingers, a waterproof outer and an insulating removable liner. A removable liner allows for faster drying and provides greater versatility as you can use different weights of liners inside for better temperature regulation. Please ensure that you can fit your various liner gloves inside your mountaineering gloves.

*We recommend the Black Diamond Guide Gloves, Rab Alliance and Guide Gloves and the Outdoor Research Alti Gloves.*

Foot Wear

Socks
Various combinations suit different people. Some people prefer to wear just one pair of socks in their boots, while others wear two; a thicker pair over a thinner pair. You need at least 2 complete sets of your personal preference. Wool or mixed fibres which have good thermal properties are a good choice.

*We recommend Smartwool, Bridgedale and Thorlos Sock Ranges.*

Gaiters
Gaiters are used to keep snow out of your boots and protect your pants from crampon snags. They need a good tie down under the instep of your boot to stop them creeping up at the heel when walking in soft snow. These should be a canvas or Gore-Tex combination, sealing around the top of your boots and extending to the top of your calf without being too tight. It is important to make sure that your gaiters fit your boots before you head into the mountains.

*We recommend the Sea to Summit Alpine, the Rab Latok Gaiters.*

Mountaineering Boots
Leather mountaineering boots are the style favoured by all of our New Zealand guides. These boots should have a full shank and come up high around the ankle for optimum support. They are often lined with Gore-Tex, making them waterproof, breathable and materials such as Duratherm provide adequate insulation. Leather boots are lighter and more comfortable than plastic boots, and it is important to get the correct fit as well as to break them in prior to your first big trip. Different brands suit different foot shapes, so try out different models prior to purchasing. Mountaineering boots need to be comfortable to walk and climb in for many hours and for several days in a row.

New-generation synthetic fabric boots with rigid sole and removable liners can be a good alternative. There are several manufacturers and the boots are hardwearing and stable. They tend to be warmer than leather boots due to the thermal liners, which can be removed and dried during the night. The fit should be snug with room to either tighten or loosen the laces to adjust for different circumstances.

Either boot must have a reasonably sized welt at the back and front to accept clip-on crampons. There are different models designed for different kinds of use, from glacier walking to steep ice climbing. As they don’t wear out that quickly, it is worth thinking about what your end use is going to be before purchasing a pair.

![](image)

*We recommend leather mountaineering boots for most New Zealand summer mountaineering trips. La Sportiva Nepal EVO Boots or the Scarpa Mont Blanc Boots are good models.*

*If you are planning on future winter or high-altitude ascents, then a new generation synthetic double boot can be a good cross-over option. However, these can be too hot during the high summer in New Zealand. We recommend the Scarpa Phantom 6000 or the La Sportiva G2 SM Boots.*

**NOTE:** A lighter, softer leather boot is preferable for mid to late season Aspiring ascents and alpine rock routes (i.e., Malte Brun). Examples are the La Sportiva Trango S EVO Boots or the Scarpa Manta Boots. Do ensure that your chosen model is compatible with your crampons.
**Technical Equipment**

**Climbing Harness**
Bring a lightweight alpine climbing harness with adjustable leg loops, plus belay and gear loops. A harness that is lightly padded around the waist and leg-loops will increase comfort as you’re belaying your climbing partner, abseiling or resting on the climb. **Please check your harness to ensure that it will fit over various clothing layers.**

*We recommend the Petzl Adjama, Luna or Aquila, and the Black Diamond Technician Climbing Harnesses.*

**Climbing Helmet**
Climbing helmets are lightweight and designed to deflect falling ice and rocks. They also protect the head in a fall. All helmets must meet industry standards for impact protection, with the standard for overhead protection being greater than the side-protection.

There are two kinds of climbing helmets available today; hard shell helmets and shelled foam helmets. Helmet makers use different terms for each type of helmet, so focus instead on tell-tale construction details like shell hardness, foam thickness and number of vents. Check the size and make sure that it will adjust for when you are wearing your hat underneath.

Plastic becomes brittle and foam degrades as it ages so if you are borrowing a used helmet, then it should not be more than 4 years old.

*We recommend the Petzl Sirocco or Meteor, and the Black Diamond Vapor or Vector Climbing Helmets.*

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**Locking and Non-Locking Carabiners**
Bring lightweight locking carabiners which have either a ‘screw gate’ or ‘twist lock’ gate. Do not get the ball lock type!

One large locking carabiner for belaying is advantageous, such as the Black Diamond Rocklock Carabiner. All additional carabiners can be smaller in size to fit more compactly on your harness. Please practice using your specific carabiners with your gloves on.

Bring lightweight non-locking or snap link carabiners.

*We recommend the Petzl and Black Diamond Carabiners.*

**Belay Device**
Bring an ATC style device for belaying and rappelling. We use the tubular style devices which have two holes for the rope to pass through. They are lightweight, easy to use and are compatible with single or double ropes.

*We recommend the Black Diamond ATC-XP or Guide, and the Petzl Verso or Reverso Belay Devices.*

**Personal Anchor System**
This device is attached to the belay loop on your harness and with the use of a small carabiner, the excess chain links are tucked away on one of your front gear loops. This device is used as your safety when reaching an anchor point on a rock, snow or ice climb. We use a chain link style system because it’s safer, more convenient and more adjustable than other methods, plus can be used to equalise anchors.

*We recommend the Metolius PAS 22 Device.*

**Jumar/Ascension Device (For Alpine Expedition Course & Seven Summits Course participants only)**
For use when ascending fixed lines. Bring one if you have one, but otherwise, we will provide one.

*We recommend the Petzl Ascension and the Black Diamond Index Jumars.*
**1 x Long and 2 x Short Prusiks**

You should bring one long (3.2m untied length) and two short prusik loops (1.6m untied length). Prusiks should be made from 5–6mm cord and are used for glacier travel, crevasse rescue and abseiled safety backup. A double fisherman's knot is generally used to create the loop. Your guide can help tie these during the course.

*Adventure Consultants has prusik cord available for purchase.*

**1 x Sling**

One 3 metre untied sling is required. Slings are either made from tubular webbing or Dyneema/Spectra. The former is more economical, whereas Dyneema slings are much lighter, but also more expensive and need to be replaced more frequently. If you have your own sewn double or triple slings, then please bring them with you.

*Adventure Consultants has unsewn sling available for purchase.*

**Ice Tools**

A wide range of ice tools are available, so it is good to have a firm idea of your future climbing goals prior to purchasing a pair. Some tools are brilliant for vertical ice and useless for classic mountaineering and vice versa. Some tools are acceptable for both.

**Ice Axe**

For general alpine climbing, you will need a straight shafted axe between 55cm to 65cm long, depending on your height. A longer tool is more practical on moderate ground and even the most difficult climbs have approaches and descents for which this is useful. The pick should be a normal curve for easier self-arrest, and the adze must be a good angle to chop steps in ice and snow. Many tools come with replaceable picks so check that the bolts are tight before each climb.

Short axes with reverse-curved shafts and moulded hand grips are fine on hard technical ice climbs, but not as well suited to most alpine climbing.

Shafts are either metal or glass composites and some have rubber hand grips. A rubber grip at the base of the shaft makes it easier to hold when self-arresting or climbing steeper ground, as well as keeping your hand warmer. The shaft must be smooth enough to be forced into the snow and should not have protrusions, which can get caught up on crusty surface snow.

Many modern tools are not sold with leashes; however, these are available to purchase if you would like the added support when climbing on steeper ground.

*We recommend the Grivel Air Tech EVO, Black Diamond Venom or the Petzl Summit, Summit Evo and Sum’Tec Ice Axes.*

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**Ice Hammer**

This can be shorter than the axe (50+cm) as it is often only used on the steeper sections of a climb, and for hammering in stakes and ice screws. Some people find it easier to have axe and hammer of the same length when climbing on steeper ice, but for most alpine climbing, a walking axe with a shorter hammer is the best combination. The head of the hammer receives quite a lot of abuse on a climb and must be very secure with a good striking surface. The pick can be a normal or reverse curve. Most climbers opt for a short technical tool with a bent shaft to protect the knuckles on steeper climbs.

*We recommend the Grivel Air Tech EVO, Petzl Sum’Tec and the Black Diamond Venom Ice Hammers.*
Crampons
We recommend the New-Matic clip-on type as they are the quickest to put on and take off. The front points of your crampons should stick out from the front of the boot about 2.5cm. Be sure to check the heel piece of the clip on crampon is compatible with your mountaineering boots and stays in place when in the up position. If possible, practice putting on your crampons before you head into the mountains.

We recommend the Grivel G12 New-Matic, Black Diamond Sabertooth Clip and the Petzl Vasak Leverlock Universel Crampons.

Ice-Screws
Ice-screws are available in a range of different sizes from 12cm to 22cm in length. Make sure you have one to two long screws 22cm in length, as these will be used for anchors. Most modern ice screws have winders for faster placement.

We recommend the Black Diamond Turbo Express, Petzl Laser Speed and Grivel 360 Ice Screws.

Snowstake/Picket
The most commonly used stakes are the T-shaped stakes and the V-shaped aluminium stakes with a tape sling at the top. They are commercially available with a wire anchor point at mid-length, which provides more versatility.

We recommend MSR Coyote Snow Pickets.

Avalanche Rescue Equipment
Spring and early summer conditions require the following avalanche safety items. If you own avalanche safety equipment, please bring it along so you can practice and become efficient with your particular models.

If you would like to purchase avalanche equipment prior to your trip or course, please get in touch. We have avalanche safety kits for sale in our office retail store, and we can also order in individual items of transceiver, shovel or probe.

Avalanche Transceiver
Transceivers are used to locate a buried victim in the least amount of time possible. If purchasing a transceiver, look for a digital 3 antenna model that is easy to use. All avalanche transceivers transmit on the same 457kHz frequency and are compatible with all other analogue or digital models.

We recommend the Pieps DSP Sport, BCA Tracker Series, Ortovox Zoom or 3+ Transceivers.

Avalanche Probe
Avalanche probes are made up of multiple aluminium or carbon sections, tensioned by a cable. These sections extend to form a 2-3 metre pole for probing avalanche debris deep into the snow.

We recommend Black Diamond Quick Draw Tour 240 or 360, Backcountry Access Stealth or the Ortovox 240 or 320 Light PFA Probes.

Snow Shovel
Shovels should be a lightweight avalanche specific model. A telescopic handle and a large metal blade will allow you to move more snow at a faster rate.

We recommend Voile, Black Diamond Deploy 7, Backcountry Access B-2 EXT and RS EXT or the Ortovox Beast and Badger Shovels.
Camping Gear & Accessories

Alpine Climbing Backpack
Your pack should have at least a 50-litre capacity but no more than 65 litres in volume. Required features include a good expansion/compression system, attachment points for ice axe, hammer and crampons plus a top pocket.

*We recommend The North Face Phantom 50, Cobra 60 or the Black Diamond Speed 50 Backpacks.*

Bivvy Bag
The best types are made from Gore-Tex or a similar waterproof breathable fabric, which help to prevent condensation on the inside. Some designs have mosquito netting built in and can also have a hoop to prop up the head space. These extra options are still suitable, just slightly heavier and bulkier.

*We recommend the Rab Alpine or The North Face Simple Bivvy Bags.*

| Black Diamond Speed 50 Pack | Rab Neutrino Pro 400 Sleeping Bag | Therm-a-Rest NeoAir XTherm and XTherm MAX Mattresses |

Sleeping Bag
The ideal NZ trip sleeping bag is a 3 season down sleeping bag that is rated to around -5C/23F. A down bag with 700g or more of down fill is preferred as this provides greater warmth for weight, while also keeping the sleeping bags volume to a minimum.

It is a good idea to pack your sleeping bag in a plastic bag or dry compression sack. This is to avoid it getting wet, as down loses its insulating qualities when wet.

Please note that the ratings quoted above are the sleeping bags Limit or comfort temperature. If you are a cold sleeper, consider a warmer bag. If you are using the EN temperature ratings when choosing a sleeping bag, a general rule is most women or cold sleepers should tend towards the Extreme rating and most men should tend towards the Comfort Limit rating. Sleeping bags that do not have the EN rating tend to be rated at their Comfort Limit temperature.

*We recommend The North Face Blue Kazoo, the Rab Alpine Pro 400 or Neutrino Pro 400 Sleeping Bags. If you sleep cold, then we recommend the Rab Alpine Pro 600 or Neutrino Pro 600 Sleeping Bags.*

Sleeping Bag Liner
A sleeping bag liner must be used if you are hiring a sleeping bag. Although we highly recommend sleeping bag liners in general as they prolong the life of your bag by keeping it clean and dry. Liners can be made from silk, cotton or wool, and thermal liners are also available which can increase the warmth of your bag.

*We recommend Sea to Summit Silk and Thermal Sleeping Bag Liners.*

Therm-a-Rest & Foam Sleeping Mat
Depending on your trip and conditions in the mountains, you may need a sleeping mat. A full-length closed-cell foam mat and a lightweight air mattress are used for tenting or bivvy ing out on route. Check for requirements.

*We recommend the Therm-a-Rest NeoAir XTherm Air Mattress.*

Headlamp
We recommend a headlamp with at least 300 lumens which features a long range ultra-bright beam plus smaller LED lights with short range lighting for around camp. A long-range beam with a dimming function for around camp is also suitable. Rechargeable models are fine if standard batteries can also be used. Please bring a pair of spare batteries.

*We recommend the Petzl Actik, LED Lenser MH5 or SEO 7R, and the Black Diamond Storm or Spot Headlamps.*
Water Bottle
Two plastic bottles with heat-resistant qualities and a wide top of at least 1 litre capacity are recommended. A bladder hydration system is useful in theory but will freeze on cold mornings, even with an insulation sleeve on the tube. These are also prone to punctures from sharps such as crampon spikes when stored together in your pack.

*We recommend the Adventure Consultants Branded Nalgene 1 Litre and 500ml Wide Mouth Bottles, available from our office.*

Personal Toiletries
A small toiletries kit which can include a toothbrush, tiny toothpaste and soap plus a small flannel. Make sure everything liquid is in containers that don't leak or break.

Sun Block
A small tube of max protection sun block, plus sunscreen lip balm (with SPF 30+) for day application.

*We recommend AloeUp Sunscreen, available from our office.*

First Aid Kit
You should always carry a basic first aid kit including blister tape, second skin, gauze pads, crepe bandage and painkillers. Include any personal medication required plus extras and please remember to inform the office and your guide if you are taking any prescription medicine.

Store your first aid kit in a waterproof container.

Stuff Sacks & Plastic Bags
Lightweight nylon stuff, compression and dry sacks are perfect for keeping your clothing and gear organized and dry.

*We recommend Sea to Summit Pack Liners, Ultrasil Stuff Sacks, Dry Sacks and Compression Sacks.*

Rock Shoes
Bring these if you own them as a day’s rock climbing may be incorporated into your course or climb and can be a good wet-weather alternative. We do have a small selection of rock shoes here at the office if you need to borrow a pair.

Optional Extras

Lightweight Trekking Pants
These can be nice to wear while travelling to the mountains, during a walk out of the mountains on a hot summer’s day or to the crag rock climbing.

Trekking Poles with Snow Baskets
These are useful for taking the strain off your knees, improving balance on rough terrain or walking through deep snow. A collapsible model with snow baskets is ideal, especially in early and late summer when snowshoes may be required.

*We recommend Leki and Black Diamond Adjustable Poles*

Hut Shoes/Running Shoes
A lightweight pair of running shoes or sandals can be nice to wear around the hut, in transit to and from the heli pad and while walking down the valley.
Earplugs
A handy way to get a good night’s sleep when sharing a room with a snorer!

Notebook & Pencil
Preferably waterproof paper notebook or wrapped in plastic bags.

Map
The relevant map can be purchased from our office.

Compass
Any compass which is suitable for orienteering will do. The magnetic declination is different in the Southern Hemisphere, so compasses designed for the Northern Hemisphere will stick if you use them here.

We recommend the Silva and Suunto Compasses.

Pocket Knife/Leatherman/Tool Kit
Swiss Army Knife, Leatherman tool or equivalent. A personal repair kit is useful as is a lighter.

We recommend the Victorinox Knives and Leatherman Multi Tools.

Chemical Hand & Toe Warmers
You can bring 2-3 sets of lightweight disposable chemical hand and toe warmers.

We recommend the Grabber brand of hand and toe warmers.

Personal Entertainment
Consider taking an iPod/E-reader or a good small book. We recommend A Climbers Guide by Adventure Consultants.

Camera/Smart phone
Camera and spare batteries or Phone with power bank/portable charger.

Please check your equipment checklist as there may be other requirements not listed here.

Give us a call or send us an e-mail if you have any questions as we are always happy to help.

Adventure Consultants provide a retail order service should you wish to purchase equipment.

Please contact us, if you wish to know more about this service.