Marguerite Bay Dog Sledging 1969



The Huns, Fuchs Ice Piedmont

On arrival at Adelaide Base T in the autumn of 1969, there was a surprising lack of dog sledging know-how available to induct incoming Fids. This was mainly down to the inadequacies of the outgoing dog-man, Bugs McKeith, who had been proved to have no interest in the twenty plus dogs for which he was responsible, and Bugs was now destined to terminate his contract a year early.

Once the two-year-served, outgoing Fids boarded the Biscoe, the only people with any sledging experience were Ian Willey and Martyn Bramwell. However, Ian would find it difficult to spend time in the field because he was now Base Commander, while Martyn's experience was solely based on limited time spent with Graham Smith's team during their forced sojourn at Fossil Bluff the previous winter. This was a serious issue, for the new Adelaide GAs (Ian Curphey and Rod Pashley) for their dog teams needed to be capable of supporting the Stonington sledging programme scheduled for the 1969 field season, and this would normally have been facilitated by new GAs learning the ropes from an experienced dog driver.

With the support of other base members (but particularly lan Willey), Curph and Rod would need to spend as much time in the field as possible over the coming autumn to teach themselves, essentially by trial and error – a difficult, frustrating and inefficient process which inspired Curph to compile these technical notes. Curph makes it clear that they are necessarily a summary of what worked best for him, and make no pretensions to be "definitive" or representative of any "official" methodology, for there are almost certainly many ways of skinning this particular cat. However, the essential core of BAS dog sledging technique is firmly rooted in the systems developed by Rymill and Bingham during the British Grahamland Expedition of 1934-37, then, from 1947 onwards, refined by FID GAs under the guidance of Bingham.

Building a Nansen Dog Sledge

To any Antarctic "doggie-man", the Nansen dog sledge is the pinnacle of perfection and is the most "fit for purpose" means of transporting heavy loads over Antarctic mountain glaciers and sea ice. The prototype was designed by Fridtjof Nansen in the last decade of the 19th century, was refined by the stalwarts of the heroic Era of Antarctic exploration such as Amundsen, and has remained virtually unchanged until the end of the Antarctic dog sledging era in the mid-1970s.



The key features in the Nansen design are the use of the easily maintained materials and the simplicity of construction. As a piece of field equipment, it is flexible, strong and capable of dealing with a wide variety of Antarctic snow and ice conditions, and perhaps most important of all, can be maintained in the field with minimal resources. The Nansen was supplied to BAS bases in kit form so that the sledge had to be put together by the personnel who were to use them, thereby ensuring that their design characteristics were fully understood by the dog drivers who might have to carry out a repair in the field, possibly hundreds of miles from base facilities.

The main deck of the Nansen sledge is made of light, straight-grained Ash lathes, lashed to laminated bridges by 3oz or 5oz balloon cord. This ensures maximum flexibility to cope with irregular snow and ice surfaces, while also ensuring that the inherent strength of the wood is not compromised by screw-holes. The runners are made of steam-formed Hickory, with the running surface faced by "Tufnol" - a smooth, hard "Bakalite" material that minimises friction. Bridges are morticed into pre-formed slots in the runners, then fixed by rawhide thongs that have been soaked to make them more flexible. To reduce the chance of excessive wear, thonging should start and finish on the inside of the runner and pulled as tight as possible, before being secured at the top of the runner with a brass, round-headed woodscrew.



In anticipation of sledging on steep glacial terrain, drop-down, off-set keel plates are fitted to the runners to reduce side-slip when traversing steep slopes. To reduce the chance of the sledge rolling downhill, only the uphill keel should be lowered. The usual off-setting arrangement is to fix one keel between the 2nd and 3rd bridge, and the other between the 3rd and 4th.



The sledge deck consists of two outer longitudinals that are square-lashed to the bridges using 3oz balloon cord and to the ends of the runners using 5oz cord, with two, shorter, inner longitudinals, also square-lashed but with 3oz cord.







Getting ready for the field, Base T

All longitudinals should be positioned with care before any lashings are secured, ensuring that the spacing will allow for the snug spacing of the feet of man-food sledge boxes and so producing a more-secure pay-load. To make the lashings as strong as possible, the cord should be wound onto a strong stick or rod, making it much easier to get a tight turn. The square-lashing should be started with a clove-hitch round the bridge, followed by 7 or 8 turns. To reduce the chance of the lashings being damaged when loading the sledge, all turns should be neat and laid side-by-side with no overlaps. Lashings can be made even stronger with additional, diagonal turns, finished off by several frapping turns that tighten the whole joint. Lashings are finished by tucking the loose end under the last two turns to form a clove hitch.



The BAS Nansen has a foot-brake as an essential addition to facilitate greater control when running down hill and when there is a need to keep control of an excited dog team. The brake is a springy plank extending the length of the inner longitudinals, fitted centrally and square-lashed to the underside of the first three bridges to leave the driver's end with its metal brake plate loosely sprung. To operate the brake, the driver takes a good grip on the upright handle-bars and bears down on the loose end with either foot so that the metal plate ploughs into the snow – an operation that can still be carried out when wearing skis.



A tightly curved, bamboo cow-catcher is lashed to the front end of the runners using 5oz cord, and so that it sits on the outside of the outer longitudinals, making the runners either left or right-handed. The cow-catcher is also secured by rawhide thongs aft of the first bridge. The function of the cow-catcher is to provide a fulcrum of leverage for the towing pennant to enable the driver to steer the sledge.



The final stage of the lashing process is the application of several coats of aircraft dope. This shrinks and tightens the lashing, makes it more weather-proof and reduces wear and tear. The rawhide joints are also doped to stop the leather from drying out. Properly lashed and doped, then treated with care, lashings should stand up to a field season of several months without requiring replacement.

The handle-bar assembly consists of a left and right upright; a horizontal brace; two diagonal upright supports and two, wire, diagonal tensioning-braces. These components can be loosely assembled before being placed on the rear end of the deck assembly and held in place by partially nipped up metal tie-plates to enable the final squaring up.



The runner ends of the handle-bar uprights do not abut the rearmost bridge, and have to be tensioned towards the centre of the sledge to achieve a tight lashing using a Spanish Windlass, leaving the handle-bars in exact alignment with the rear bridge. The rawhide thong securing the wooden, diagonal upright-support is attached abaft of the second bridge and should be started and finished on the runner. Only now should the retaining-plate bolts be tightened, using self-locking aircraft nuts. The last phase of fitting the handle-bars is the attachment of the bracing cross-wires, running from the top of each handle-bar to the point where the other upright is fixed to the outer longitudinal. The cross-wires are tensioned using galvanised rigging screws but should not be over-tightened because this would increase the likelihood of a breakage under load. The correct tension is achieved when there is about half an inch "give" when the wires are squeezed together between finger and thumb. To lock the rigging screws in place, the eyes can be wired together.

Rigging Screw Rigging Screw Wired to prevent undoing when handle bars are tensioned.

The final building task to achieve the basic structure is to attach two strengthening cross-pieces to the sledge deck. One should be immediately in front of the handlebar uprights, and the other just forward of the front bridge. The last item fitted to most BAS sledges is a handlebar tray that sits on the rear end of the sledge-deck and extends just far enough forward to cover the back end of the central longitudinals to provide a secure platform for carrying fuel cans. Holes drilled into the tray can be used to attach a spare sledge bridge.



Given that the Nansen sledge utilises design features that enable it to be maintained in the field, a sledge party needs to carry such spare parts as might be necessary to accommodate this need. The minimum would usually include a spare bridge, two longitudinals, 5oz and 3oz balloon cord, iron wire and a variety of jubilee clips.

Rigging the sledge for field use

In the sledging season of 1969, GA dog drivers working out of Adelaide and Stonington in the mountains, glaciers and fjords of southern Grahamland, would have fitted out their Nansen sledge to personal taste by adopting variations of the several pieces of kit that are explained below.

Rope brake and sledge chains. The rope-brake was a length of inch-and-a half diameter Sizal (or other cheap rope) spliced onto the front bridge uprights. When not in use, it was tied up to the cow-catcher with its own tie or strap, but when descending a steep slope, the rope brake could be let down to ride under the runners to create a high-friction drag. It could also be used on level glare ice, in situations where normal braking would make the front end of a lightly-loaded sledge ride up and destabilise the sledge.



When maximum friction and braking power was required, the rope brake could be supplemented by wrapping old dog chains round the runners and securing them with a dog clip. When not in use, the chains could be kept in the sledge bag (explained below) or permanently attached to the sledge e.g. by wrapping them between the bridges. To fit chains to a loaded sledge required the use of an ice axe to tunnel under the runners, taking care not to damage the Tufnol running surface.

Towing Pennant and Grommet. This provided the connecting link between the sledge and the dog team and had to be bomb-proof if the sledge was not to be damaged. It was designed to distribute the pulling load as low as possible across the three, front bridges. It was usually made from Number 3 (11mm), nylon, cable-laid, climbing rope that was fed through a grommet on the cow-catcher and fixed on either side of the first two bridges by a single turn and to either side of the third bridge by a clove hitch. To reduce wear at the point of connection to the Main Dog Trace, a large eye-thimble was whipped into apex of the towing pennant. The Main Trace was fixed to the towing pennant using a large, steel, screw-gate karabiner.



The cow-catcher rope grommet is made from c8.5 feet of ³/₄ inch Sizal or Hemp that has been spliced together to form an unbroken loop about 9 inches in diameter. This has to be slid over the cow-catcher before it is fixed to the runners and then pulled into a figure of eight that is whipped in situ.





Detail of Nansen sledge showing arrangement of towing pennant and rope brake

Foot Plates. These are essential fittings that sit on top of the runners behind the handlebar uprights and permit the driver to ride on the sledge, allowing the brake to be applied, whether wearing either bulky mukluks or skis. They should be made from ply-wood – preferably 5-ply marine ply.





Building a new field sledge during the winter

Trail Rope. The main purpose of the Trail Rope is to provide something to grab if the driver falls or otherwise loses contact with the sledge. It is usually about 20 feet long and is attached to the bottom of the handlebar upright, with the choice of side being determined by the side of the sledge where the driver prefers to ski - so that the rope does not foul the driver's skis. Since most right-handed drivers would prefer to hold the left handle, the trail rope is most commonly attached to the bottom of the right-hand upright. The method of attachment is usually achieved by threading the rope back through a simple eye-splice at the sledge end of the trail rope.



However, the trail rope has other important uses. With the far end of the rope fitted with a dog clip, it could be used to attach to a following team. With a fixed loop a short distance from the sledge, it could be used to help picket the sledge using an ice axe, ski or even a shovel.

In camp, it is important to ensure that the trail rope is neatly coiled and draped over the handlebars, otherwise it will easily be drifted in by blowing snow and require a lot of digging out.

Lash-line. Securing the sledge load is much easier if there is a system of fixed loops in a long length of Number 2 rope, strung between the bridges and permanently attached to the sledge. The loops *on the side of the sledge where the driver does not ski* should also be fitted with dog clips that have had their gates removed. If the clips are attached on the driver's side, there is an increased risk of tearing windproofs. The point of attachment to the bridges should be a clove hitch so that it can be adjusted with ease. With the loops in place, there should be about 60 feet of loose line at the front of the driver's side that can be looped across the load and tensioned against a dog clip. As for the trail rope, when in camp, the lash-line should be coiled and secured on the sledge so that it does not get buried in drift.



Ski-joring Line. This is a length of Number 2 line stretching from the driver to the second bridge, with an eye-splice through a wooden handle at the driver's end. Its main function is to provide the driver with a secure hand grip for the hand not holding the handlebar when skiing alongside the sledge. It also assists the driver with steering control and when being pulled by a team moving at speed. The length of the ski-joring line should be such that the handle loop can be hung off the handlebar upright when not in use.



Thumper. A dog fight all too easily leads to dogs suffering serious or crippling wounds and possibly a fatal injury, so fights must be stopped. It takes courage and determination for the driver to join the melee to break up a fight, for brawling huskies slash at all movement within reach and the driver who wades in with their own limbs will be at serious risk of being bitten. To reduce the risk, the driver has to balance conflicting needs - to administer discipline with something strong enough to inflict sufficient pain to stop the fight, but not so strong as to cause the dogs a serious injury. The compromise is the piece of kit known as a Thumper. It is usually made from 1 inch or 1¼ inch hemp so that the "business end" is a 4 inch back-splice and the other end a large eye splice so that the tool can be hung around the driver's neck or on the handlebar upright.



Ice-axe. The ice-axe has many uses in the context of sledging, some of them other than for which it has been designed for mountaineering purposes. Because of its all-metal construction, the preferred model in 1969 was the McInnis, for it's most frequent function was as a temporary picket, allowing it to be hammered into the snow with a picket hammer. It was used without a leash, and because it might be needed at any time, most drivers carried the ice-axe in a holster on the driver's side of the sledge.



Pickets and Dead-men. A variety of methods are available to secure the sledge or the dog nightspans. Whatever the choice of anchor point, its purpose was to ensure that the line to which the anchor is attached cannot be pulled loose by excitable dogs, whether it was being used to secure the sledge in an emergency or to avoid problems created by loose dogs, particularly at night. However, creating secure anchors can be a real problem because of the variety of snow or ice surfaces and the nature of the terrain. The points of the rig to be secured are the back of the sledge, followed by the front end of the Main Trace. This should be as tight as possible, usually requiring some form of tensioning system between the front end of the Main Trace and the front picket.

Because they bent too easily, standard BAS-issue sledge pickets were generally unsuitable for use on sea ice and so generally discarded in favour of home-made pickets made from "T" section steel. The front picket adjustment was usually a piece of night-span chain that could be looped through the end of the Main Trace then back on itself and secured by a dog clip.



Both the front and the back pickets should be carried where they are easily accessible, most commonly in holsters of strong leather attached to the handlebar upright or its diagonal brace. The night-span picket is not regarded as being "critical" for travel safety purposes and so does not have to be kept to hand. One or two spare pickets can be carried in the sledge box.



The most important anchor is the back picket, particularly when preparing to set off – when the harnessed dogs will all be on the main trace and likely to be very excited, jumping about and stressing the anchoring system to the limit. By this time, the Main Trace picket has been replaced by a temporary ice-axe anchor or the trace is being held tight by a spare member of the sledging team. The chance of a smooth getaway without damaging the sledge or personnel is now totally dependent on the back picket remaining secure until the driver chooses to retrieve it. The point of attaching the rear picket chain to the sledge upright needs to be protected by a picket strop – a spliced loop of Number 3, with two eye-thimbles whipped and taped in place to prevent chafing of the upright. The strop is attached to the picket with a large shackle.



Pickets will not work in soft snow and dead-men will be required to produce a reliable anchor. These were home-made from a 12 inch square of ply-wood (5-ply) in which there were two, well-spaced holes holding a short loop of spliced Number 3 and to which a shackle or karabiner was attached for fixing the trace or span. To provide maximum hold, the dead-man must be carefully placed in an angled T-trench so that tension will drive the plate deeper into the snow. The line leading to the trace or span must be placed in its own, gently angled trench so that it does not provide any "lifting" force on the dead-man.



In some snow conditions, necessity has to be the mother of invention and anchors improvised as best suited the situation. This might require anchor back-up using an ice-axe, a snow shovel, ice-screws or buried skis. The sledge itself can be stabilised by driving skis into the snow between the sledge bed longitudinals.

Main Trace. Huskies like to engage in serious fights to establish a pack pecking order or to assert mating rights; they will chew and eat almost anything and are generally destructive. Consequently, other than when they are pups or too old to work, sledge dogs are very rarely allowed to run loose. All the dogs wear a collar.

When on base, the dogs live outside, attached by their collar to a long chain secured at both ends by a short chain on a swivel clip. Several dogs will be kept on one long chain with sufficient spacing so that they cannot get at each other. These long chains are known as the Spans, and the driver will place their individual dogs on the Span with some thought as to which dogs get along or otherwise.



Adelaide Piedmont Dog Spans (autumn 1969)

When working in the field, the dogs are attached to the Main Trace, but while in camp, with their harnesses removed, they are split up so that they cannot interact. Dogs that are not prone to chew all they can reach (e.g. the trace itself? the sledge and anything on it?) can be kept on the main trace. Dogs known to chew have to be fastened by chains to a wire trace known as the night-span.

The main trace is an arrangement of ropes and steel, 2½ inch diameter "O" rings that connects the sledge towing pennant to the dogs. A typical, Adelaide main trace consisted of four separate sections about 8 feet long that could provide a fixing point for four pairs of dogs, placed at equal distances along the trace. A single, extra-long side-trace of Number 2 rope can be clipped in with a section of main-trace for attaching a single lead-dog, while also providing the line for attaching to a front picket. The main-trace is broken down in this way so that a damaged section can easily be replaced without having to replace the whole. Each section of the main-trace has an eye-splice at both ends and is joined to the next section by the "O" ring by threading the section back through its eye-splice. Each "O" ring also accommodates two side-traces, one to each dog in the pair. The side-traces are made of Number 2 rope with an eye-splice at both ends so that the finished side-trace is about 2 feet long. One end of the trace can be looped through the "O" ring and back through itself and the other end to a swivelled dog clip that provides the attachment to a dog harness.



Dog Harnesses. Dogs work incredibly hard and deserve a comfortable harness. It is therefore essential that dog harnesses are a good fit, and should be tailor-made for individual dogs. The material of choice was a single length of one and a half inch lamp wick. Nylon tape is not a suitable material because it goes hard and causes chafing.



Measuring the exact length of lamp wick required to make a harness is relatively simple. With the dog gripped between one's knees, take a good length of lamp wick, hold it in the middle of the dog's back, pass it across his/her chest, then under the leg/armpit and bring it up to join the original length, ensuring that it is snug (but not tight) under the leg. Mark the lamp wick where it crosses the middle of the dog's chest. A piece of lamp wick twice this length is required to make the finished harness.



Use bees waxed cobbler's thread for all sewing to ensure that the finished harness is strong and fit for purpose, now follow the steps below, referring to this diagram:

- 1. Sew a steel "D-ring" into the exact middle of the length.
- 2. At the point marked mid-chest, cross the two ends at right angles and sew together.
- 3. Fit the partially made harness to the dog and pass the lamp wick ends under each leg and mark the position where they re-join the original piece, ensuring that the leg loops are snug without being excessively tight.
- 4. Lightly tack these into place at the mark, but do not cut any of the spare wick at this stage.
- 5. Try the harness on the dog to make sure it is easy to get on and off before sewing the leg loops firmly on to the main body of the harness. <u>Beware!</u> Older dogs often have arthritis, so the leg loops may have to be less snug in order to get the dog's legs through the leg loops without causing too much pain.
- 6. Trim any excess lamp wick and sew in the retaining strap across the back.
- 7. Mark the retaining strap with the dog's name.

The team's harnesses should be removed every night and clipped onto a team carabiner to be hung in pride of pace in the apex of the tent so that they dry out.



Night Span. The night-span is made of flexible, steel, ¼ inch diameter aircraft-wire with a breaking strain of around half a ton. The method of attaching the separate dog-chains has to try and eliminate tight bends and kinks that would reduce the strength of the wire – probably best achieved by crimping a short loop with a bulldog grip and attaching the chain by a shackle. One end of the night span is attached to a dedicated strop at the base of a handlebar upright. When not in use, the night span is stowed by winding it around well-spaced wooden brackets, this being the very last task in loading the sledge. On arrival at a new campsite, and once the sledge has been picketed front and rear, the setting out of the night-span is the priority task so that those dogs that are known to chew are immediately set up for the night.



Aircraft Compass. The compass used by 1969 field teams was a World War 2, oil-filled, aircraft compass, about 6 inches in diameter and mounted in a wooden box with a clear lid. The box was easily mounted on the handlebar cross-piece using slotted brackets with pegs and secured by wingnuts. Alternatively, the compass box could be secured to a sledge box on top of the load.



Magnetic variation in excess of 20 degrees and the wide ranging locations of sledge parties meant that where conditions permitted, the sledge should be lined up at the start of a journey using an ex-Army prismatic compass, sighting it away from the many metal objects on the sledge.

Sledge Wheel. This is a bike wheel with a "flat" tyre fitted with an odometer calibrated in miles and tenths of a mile. To reduce inaccuracies caused by skidding and tyre-creep, the tyre needs to be "flat" and tied to the rim of the wheel. Using standard bike forks set in a section of aluminium tubing, the wheel is attached to the non-driving side handlebar upright by a universal coupling.



Sledge Bags. Every driver should strive to become proficient with needle and thread to produce their own design for these essential pieces of equipment. Typically, a sledge bag is made from ship's-canvas and included a lid-flap. The average dimensions are: about 2 feet wide; 1.5 feet high and between 3 and 6 inches deep – it is better to have a larger bag with plenty of room rather than a thin and bulging bag. Lamp-wick, tube-webbing hanging loops are fitted so that the bag can be hooked onto the handlebar uprights. If the bag is to contain essential rescue gear, it should have a grab-handle so that it can be pulled off the sledge in an emergency. The lid can be fastened with loops sewn onto the lid that attach to wooden toggles sewn to the front of the main body of the bag. Metal buckles are best avoided because they are difficult to fasten with cold fingers. Other features include a Ventile extension tube fitted with a draw cord to make it snow-proof, and a thin metal bar sewn in with string as a place to hang spare dog clips and karabiners. Some drivers use two sledge bags, with the additional bag mounted on the front of the handlebars.



Field Equipment for a Sledge Journey

Typical Sledge load for 3-man survey team with 2 teams for a 3 week journey. 2 Nansen sledges (300 lbs); 2 sledge bags (50 lbs); 3 personal bags (150 lbs); 3-man pyramid tent (80 lbs); Emergency Pup tent (20 lbs); personal sledge box (30 lbs); "goodies" box (50 lbs); pickets (40 lbs); pots and pans box with paraffin stove and Tilley lamp (40 lbs); radio box (40 lbs); 5 gallons paraffin and cans (70 lbs); 3 boxes man-food (150 lbs); 8 boxes of Nutricon dog-food (560 lbs); shovel; spade; Telurometer (60 lbs); survey box with theodolite and Aldis lamp (30 lbs); tripod (30 lbs); generator (50 lbs); petrol (30 lbs); survey batteries (90 lbs); 3 rucksacks (20 lbs). Total payload 1900 lbs.

Clothing for autumn travel. Mukluk footwear with felt insoles; mukluk duffle inners; 2-4 pairs of socks; pyjama bottoms and/or long-johns; Ventile windproof trousers; string vest or woollen vest; wool shirt; oiled wool Nordic sweater; Ventile sledging anorak with wolverine hood trim; leather working mittens on lamp wick neck strap; duffel inners for mittens; silk gloves for handling cameras and instruments; wool head band and/or balaclava; sunglasses or goggles; waist loop; prussik loops.

Personal Bag. The total weight for any length of journey should never exceed 50 lbs. The contents include: Lilo airbed and sheepskin (reduces condensation); Lilo air-pump (do not blow up by mouth because the condensation will freeze); Lilo repair kit; torch and spare batteries; double-skin, down sleeping bag; wash kit; glacier cream; minimal spare clothing (spare socks and duffle inners); Sealskin Eskimo Kamik tent slippers; personal diary; notebook, pencils, rubber, nail-clippers; one book per man to read.

Pots and Pans (cook) box. Contents to include: matches stored in film cassettes; 4 candles, 2-pint can paraffin; Optimus paraffin pressure stove plus spares - washers; 4 nipples; prickers; spanners; nipple key; new burner; stove prickers; stove pricker assembly (sprung); funnel; matches; 2 tins of methylated spirits for priming stove and Tilley (1/2 pint lasts 3 weeks); Tilley lamp plus spares - priming cup; mantle holder; 6 mantles; vaporiser; valve assembly; pump assembly; leather washers; pricker mechanism; candles; cleaning brush; rag for cleaning up spills; 2 pot lifters; 3 mugs; 3 nesting billies with lids; cutlery; pan scrubber; dish mop; tea towel; soap powder; toilet roll; alarm clock; Thermos flask; toilet roll; stove board – a non-flexible piece of ply-wood to provide a work surface and cut so that it just fits inside the box.

Sledge box. This contained the maintenance materials that might prove vital to survival.

Tent spares to include: spare guy; guy cord; pegs; canvas tape; "housewife" sewing kit – includes scissors, piece of Ventile cloth; string for sewing; piece of beeswax; sail-maker's palm; selection of needles; reel of cotton; blanket pins; roll of lamp wick for harness repair, canvas patches for mukluk repair, tape measure, selection of buttons, Swiss file, Bostic D adhesive.

Sledge spares to include: pliers; screwdriver; gimlet; file; saw; splicing fid; adjustable spanner; selection of screws, nuts and bolts; Helvetian hide thonging; binding wire; Lasoband tape; 5oz and 3oz balloon cord; selection of Jubilee clips.

Trace and span running gear spares to include: 2 dog collars; spare ski binding; 3-4 sections of main-trace; 4-5 side-traces; 2 harnesses; 6 bulldog clips; 6 shackles; 2 swivels; reel of lamp wick harness tape; selection of "D" and "O" rings; spare section of night-span; spare picket.

Medical Kit (human) to include: 1 bottle Clove Oil; 4 ampoules Morphine; 20 Benzedrine tablets; 5 bottles penicillin; 1 course Penbrittin; 20 ml Lignocaine; dental pliers; scalpel; thermometer; forceps; 2 syringes; 2 tubes emergency sutures; 6 morphine ampoules with syringes, plus Benzadrine tablets (suicide kit).

Medical Kit (dogs) to include: a selection of treatment for fight injuries and euthanasia (WW2 Webley Service revolver) – 3 x 10cc Acetyl Promazine; 100cc Lignostab anaesthetic; 8 x 10-foot sutures; 5cc glass syringe; 3dozen disposable needles; large rolls of 2-inch and 3-inch zinc oxide plaster; 3 x 1oz tins Sulphthiazole powder; 2 x 24gm tins Penicillin ointment; 2 x 24gm tins Teramyacin ointment; 3 boxes Disguitaine; dozen paw bags; 6 x Penbrittin powder; tin Betsolan eye-treatment; .45 revolver.

Sledge Bag. The bag should contain the crevasse rescue equipment; Perspex or Tufnol runner scraper; Thermos flask and trail food for the day; Zrdski Sac survival bag; space blanket; 2 Jumars; Haltrac hoist; Salewa snow picket; 4 Salewa ice-screws; 2 pulleys; 300 feet of Number 2 climbing rope; piton hammer; 4 Cassin karabiners; 2 Stubai screw-gate karabiners; spare waist sling; crampons (bagged); ice axe and 2 dead-men.

Also in the sledge bag: ski skins; chain brakes; rope brakes; thermometer; flares for signalling aircraft; prismatic compass; binoculars and cameras.



Sledge wheel and sledge bag

Polar Pyramid Tent



Made to withstand winds of over 100 knots in temperatures of -40C, the basic design of the doubleskinned, pyramid tent has changed very little in the last century. This assumes that the tent has been pitched properly and the following safety precautions have been followed to stop the wind getting under the tent;

- 1 If the snow is loose, then dig a hole in which the tent can be pitched
- 2 Peg/anchor the snow valence securely
- 3 Weight the valence with weighty items from the sledge load and snow-blocks
- 4 Pack the valence with snow
- 5 Use bomb-proof anchor-points for all guy-lines

The tent poles should be permanently assembled and left in their tent sleeves, linked at their apex by the Pole Cap.



The separate, heavy-duty groundsheet makes it easier to keep clean and sits on top of the innertent valance.



To avoid the risk of carbon monoxide poisoning and provide adequate ventilation, there is a vent tube that passes through the inner and outer tent. This has to be checked on a daily basis to ensure that it has not become displaced or blocked by a build-up of ice. The vent tube also provides the means of passing the ariel from the Squadcall SSB radio through the tent to the dipole ariel system rigged to us skis for masts.

A system of tape loops should be left attached to the inside apex of the inner-tent as a means of attaching items that need to be dried (harnesses, wet clothing, dish cloth etc) and a dog clip for suspending the Tilley lamp



The following items were carried in the tent bag: peg bag (includes metal pegs for sea ice and glare ice); tent brush, gash can for rubbish; pee can and radio ariel.



Fully-loaded Nansen with c1000lbs load

Camping System and tent organisation.



Over many years of refinement FIDS/BAS sledge teams had developed a well-structured camping routine so that all those working in the field could anticipate what needs to be done and who would do the jobs, even in wild conditions where verbal communication might be impossible. The basis of this arrangement was based on two men sharing the workload, and where the "outside man" did all the outside jobs and the "inside man" dealt with organising the inside of the tent and preparation of food. If three men were sharing the tent, then one person would be enjoying a day off and should always occupy the same bed-space so as not to be in the way of the outside or inside man. The sleeping arrangements and arrangement of equipment was always the same.

The following journal extract illustrates the way the system can work in practice ...

"On coming to a prospective camp site the routine comes into its own...The driver stops the dogs, pickets the sledge, then the main trace, and finally runs out and pickets a night-span of wire hawser at right angles from the rear of the sledge - on which the dogs that are likely to chew their traces are put for the night. Meanwhile, the sledging partner has taken a shovel from the load and is digging a large, square hole, several inches deep, and in which the pyramid tent will be erected. Both men now put up the tent, almost always with the door facing south, because almost all the big blows come from the north. The member of the team designated as Inside Man then gets inside the tent and while he is spreading the ground sheet, the Outside Man gets all the boxes and both personal bags to the door, ready to pass them inside when they are called for. Inside Man now puts out both bed rolls, lights the primus and begins preparing the meal, then hangs all his outside clothing in the apex of the tent to start drying it out.





While this is going on, Outside Man pegs out the tent, places boxes not going inside the tent onto the snow valence, along with some of the snow blocks dug from the hole. All these precautions are to stop the wind from getting under the tent. Outside Man then proceeds to cut snow bocks for making water and places them between the inner and outer tent walls, where Inside Man can reach them to progress the cooking. Paraffin is placed between inner and outer on the opposite side so that water blocks are not tainted. Outside Man now tidies and secures all outside gear, removes the dog harnesses and feeds the dogs – 1 Nutrican bar on one day and 2 bars the next. He then runs the radio aerial through the tent ventilator to Inside Man and attaches the outside end of the aerial to a ski, stuck vertically in the snow. Outside Man is now ready to enter the tent, brushing the snow from his foot-wear and clothing between the tent walls and bringing in the dog harnesses. Inside Man should have a brew to pass his companion at this time and Outside Man, his jobs done, should be able to undress and get into his sleeping bag before hanging up his clothes to dry, along with the harnesses.



Inside the tent

At this stage, everything should be at hand to spend as long a period inside the tent as is necessary, apart from going out to feed the dogs or for a man-poo. All wet clothing and harnesses will be drying in the apex of the tent over the heat from the primus and the Tilley. The most likely threat to the integrity of the system is a dog chewing itself off the span and starting a fight. Inside Man completes the meal, washes up and finally makes a brew of cocoa. He also prepares all the breakfast materials so that they are close at hand for the next day.

On waking in the morning, it may be -25C inside the tent, with frost crystals hanging from the roof. Inside Man will try to get the primus going with one hand from inside his sleeping bag, hoping that the frost will sublime away rather than come cascading down to melt and wet everything. While the pre-prepared breakfast porridge is cooking, he can retreat into the warm cocoon of his sleeping bag, knowing there is no need to emerge until the tent has warmed up

To break camp, as soon as he has finished his breakfast, Outside Man goes out to start digging out the tent, while Inside Man washes up the breakfast things and packs all boxes and bags. This done, both can now complete the dig-out and load the sledge. The roles of Inside and Outside Man are swapped on a daily basis."



The cooking arrangements should ensure easy access to both the "pots and pans" cook box and the man-food box with a stove board for the Optimus stove resting between the two.



Dog Sledging Heritage

Working dogs were first used in Antarctica in 1899, when the Norwegian-born Australian explorer Carsten Borchgrevink landed at Cape Adare on the New Zealand side of the continent with 75 dogs to support inland exploration. They actually did little beyond proving that dogs could survive, but in 1902, Otto Nordenskiold began an exploration of the east cost of the Antarctic Peninsula, which involved a 380 mile journey using dog sledges. Scott's "Discovery" Expedition of 1902 took dogs, but no one who knew how to drive them properly, leading Scott to reach some disastrously and eventually fatal conclusions about the suitability of dog transport in Antarctica. Shackleton had served his polar apprenticeship with Scott on the "Discovery", and so fell into the same trap when he used Manchurian ponies to almost get to the South Pole in his "Nimrod" Expedition of 1907. It was Roald Amundsen who showed the world what huskies driven by trained and experienced drivers could achieve. He had learned the mystical art of dog driving when he took the "Goa" through the North West Passage in 1904 and applied that knowledge to the planning that won him the race to the South Pole in 1911. Amundsen's "Fram" had taken over 100 dogs south and 55 of these were used to drive forward the logistical pyramid that got Amundsen to the Pole a month before Scott. More importantly, while Scott and all his ponies perished, Amundsen's dog teams got him and all his men back to their base in both safety and good health.

Sir Douglas Mawson, the Australian who had served an apprenticeship with Shackleton in 1907, took his own expedition south in 1912 and took 21 dogs bred from Amundsen's huskies. They worked very well, but did not prevent Mawson enduring one of the great stories of polar survival after one of his teams, the sledge with most of the food and the driver, disappeared in a huge crevasse. Shackleton was well aware of his own and Scott's previous mistakes, so when he set off in *"Endurance"* in 1914 on his Imperial Antarctic Expedition, his plan to make the first crossing of Antarctica was based solely on using dog transport. After the Endurance was crushed in the ice, while all Shackleton's men survived, once the decision to abandon their camp on the ice floes and take to the boats had been made, the dogs had to be shot. This sad ending underlines one of the basic lessons from Amundsen's polar journey; namely that the food pyramid to support an extended dog sledge journey will ultimately depend on the harsh reality that dogs can be expendable; therefore they can be used to the limit by slowly feeding the weakest to the strongest. Sad but true.



Dogs of the "Endurance" 1915

The British Graham Land Expedition 1934-37

This was a "shoe-string budget" expedition led by John Rymill and included Ted Bingham and other members of Gino Watkins British Arctic Air Route expedition to Greenland. Consequently they were experienced in polar travel and had expertise in driving sled dogs. Run on a minimalist budget of £20k, the team sailed to the Antarctic in the 3-masted schooner *"Penola"*, supported by *"Discovery II"*. The planning assumed that the flying surveys of Wilkins and Ellsworth were correct and that Graham Land was an island with no land connection to the Antarctic mainland.



Penola in the Argentine Islands

Bingham and Rymill

"Penola" proved to be under-powered, so the first winter base was further north than they had hoped and was established in the Argentine Islands at 65S. The following summer, a new base was set up at 68S in the Debenham Islands, using building materials salvaged from the disused whaling station at Deception.

The expedition's achievements were out of all proportion to the budget and set the tone for the move from the heroic to the modern era of Antarctic exploration that followed World War 2. A singleengined light aircraft – the De Havilland Fox Moth – could land on skis or floats and was used for recces, depot laying and aerial survey work. The dog teams carried out impressive journeys of up to 10 weeks and included a journey down the west coast and into King George VI Sound that separates Alexander Island from the mainland. A second sledging party crossed the mountainous spine of the plateau from west to east to reach the Larsen Ice Shelf that sits on the Weddell Sea. Large sections of the coast were accurately mapped. There were no health problems arising from the diet. Scientific results in terms of gelogy and magnetic survey were significant.



The De Havilland Fox Moth

BGLE Dog Team

Because of an overlap in personnel between BGLE, Operation Tabarin and FIDS through Ted Bingham, the lessons learned about dog travel in Antarctica by the British Grahamland Expedition of 1934-37 became the standard practice for British dog sledging operations for the next 40years and BAS sledging protocols reflected this pedigree.

Appointed to the Operation Tabarin team, one of Bingham's first jobs was to find and purchase suitable dog teams. He went to Labrador, where he purchased 25 dogs as part of a secret mission that shipped the dogs to England and into quarantine before shipping them to the Falklands. Put aboard the SS "*Eagle*", the dogs and their masters were destined for Stonington, but the weather and the pack ice had other ideas, and they ended up having to be landed at Hope Bay, on the northern tip of the Peninsula. So it was at Hope Bay that the line of dogs that BAS used in the 1960s-70s first had a taste of working in Antarctica. After Tabarin had passed the torch to FIDS, Bingham, in his capacity as the FIDS Field Commander, despatched two of his officers to Labrador in the newly purchased ship "*Trepassey*" to pick up more dogs, which they took south to establish a base at Stonington. Six of the Stonington dogs were born as pups on the "*Trepassey*" during shipment from Newfoundland, and so could claim to be the uncontested founders of the line, but there is no doubt that the British Grahamland Husky owes its origins to the breeding that emerged from the two groups of dogs – the one at Hope Bay and the other at Stonington.

A Personal Perspective of Dog Sledging

From my Antarctic journal, based on diaries and letters to my parents ...

"Huskies are by no means the ferocious brutes they are made out to be (or look)...Once one enters the dog spans where they are tethered, the dogs go mad with excitement, howling, barking and straining at their chains until they have been fussed over. Most of them only mean harm to the extent that they might lick you to death...but they smell a bit high because they are "blubbered up" from eating rotting pieces of seal meat."



One letter explains the routine of preparing a dog team for a run-out.

"BAS sledging systems are designed for working principally on glacial terrain, where there is always a risk that the leading dogs may fall through the snow bridge over a crevasse. The system uses what is known as a centre trace system, where the dogs run in pairs, one pair behind another, with a solo lead dog out in front. The idea is that should the leader and front pairs fall through a hole, the sledge can be swiftly halted (turning it over if necessary) and the suspended dogs (hanging in space in their harnesses) can then be hauled out.



Curph and the mighty Huns

The main alternative to the centre trace system is the fan trace - favoured by Eskimos (who are usually on sea ice) and where each dog has a trace that is attached directly to the sledge.

Having completed the lashing down of the load to be transported, the sledge is picketed with an angle-iron stake or ice axe. Then the main, centre trace that is permanently fixed to the front of the sledge is run out to its full length and also picketed with an ice axe. Now to attach the dogs. All the dogs to be used are put into their own, named harness while still on the spans, and then brought one-by-one from the spans to their appointed places on the main trace. The number of dogs to be

used will depend on the size of the pay-load on the sledge. On a proper journey, there is usually a team of 9. For small loads around the base, it is usually 7 or 5.

Once all the dogs are attached, the driver and any helpers have to be on their toes, because this is the moment when fights usually break out. These can be absolutely ferocious and are often very bloody. Rather than have to stitch lots of wounds, the remedy is for the driver to wade in with his "thumper" – a yard-long length of hemp warp that has been spliced into a loop that can sit over one's head and the other end back-spliced for about a foot to give it weight. It hurts but is unlikely to damage the dogs. If the driver is going to get bitten, it will be when breaking up a fight. The intention of the dog is not likely to be to bite a driver; it is just that they bite anything and everything moving in front of their eyes in the turmoil and chaos of a writhing heap of snapping dog flesh. Let us assume that fights have been sorted and we are ready to go.

The driver takes up position behind the sledge, holding the handle-bars and with one foot pressing down on the sprung brake. The sledging partner/helper now removes the ice axe/front picket from the snow and moves back to the sledge, also taking a hold on a handle-bar. The driver now removes the back picket and says "Up dogs" followed by "Huit!" Provided the snow surface isn't too sticky, the sledge now flies off like a bullet, with driver and partner hanging on for grim life and trying to jump on the sledge to slow things down. If the sledge runners have frozen in, then the "weet" is accompanied by the driver shaking the sledge from side to side to assist the breaking out.

After a few hundred yards of mad-cap racing across the snow, the dogs usually settle down to a slow trot or brisk walk, so that the driver and helper can comfortably jog or possibly ski alongside, still with one hand on the handlebars and with the driver's waist loop hooked over the bars so that they are less likely to break through a hole or be separated from the sledge.



Stalwarts of Curph's Huns - Count (Lead dog) and Nasr

From another letter:

The dogs are more responsive to the commands, the further one gets from the distractions of being around base – the preferred destination of the dogs being the seal pile. The commands are all taken from those used by Eskimos, but adapted to a British pronunciation. To wheel to the right, the command is "Auk, Auk", which is like a short, barking sound. To wheel to the left, the command is "Irra", which is a trill, produced by an extended rolling of the letter "r". To stop, the command is "Ahh, now" with the "ah" sound extended. To keep the dogs pulling well, the driver can callout encouragement to named dogs – such as "Haul away Count" or sing or whistle. The reality is that

the dogs are very responsive to the temperament and mood of those driving them. They also expect the driver and sledge partner to help out with a push if the going gets particularly arduous.



Approaching McCallum pass with view of Arrowsmith peninsula

But the reader must interpret all I have recounted from my letter with a sense of realism. To quote an experienced Fid dog driver:

"Seldom elsewhere have I heard such foul language as is used by a dog driver. Whatever stories a driver may tell you, he never has 100% control over his team – only degrees of lack of control."

One of my own letters again:

On short runs, the dogs soon pick up on the fact that they are not going far and their enthusiasm will slacken after a couple of miles, but once the driver turns them for home (and the possibility of a feed) they perk up immediately. Up go the tails and ears and they haul their hearts out, often breaking into a fast trot at around 6mph. Given that the ice piedmont at Adelaide is a graded slope over several miles but steepens in the last half mile to base, this means that the run for home can finish as hair-raising gallop with minimum control."

As far as the general care of the dogs was concerned, they always lived outside and were fed only once every other day, when they get a chunk of frozen but slimy seal meat weighing between 5lbs and 7lbs, and keeping the seal pile stocked was an on-going task. Regardless of the field programme and research issues, one of the base functions was to "fly the flag" in support of Britain's territorial claims to the Grahamland peninsula. Consequently, the Base Commander was officially appointed as a magistrate, and one of the minor functions was to issue permits for seal hunting, most often achieved by an official Permit-holder using a .303 Lee Enfield rifle (1917 vintage). The dogs provided transportation of seal carcases when there was sea-ice; otherwise it was a question of hunting seals on ice floes using the base dinghy. Whenever possible, the "John Biscoe" would divert from base relief work to hunt seals to supplement the seals taken by base Fids, and the impact of the bloodthirsty scenes associated with a major seal hunt should not be underestimated.

Most of the seals taken were Crab-eaters, with a few Weddells and the occasional Leopard seal.

From a letter to my parents: "in blazing sunshine, the "Biscoe" battered out a harbour in the the fast ice of Stonehouse Bay. It was time to go sealing, so having secured the ship in the fast ice, we dropped over the side and went off in search of seals and in twos or threes we set off towards various groups of Crab-eater seals basking in the sun, each seal showing as an elongated speck and up to a mile or so away. The idea was to drive the seals as near as possibleto the ship before shooting them, at the same time, preventing them from gaining the safety of the sea at the ice edge.



Seals are not happy travelling on land or ice, and so they frequently had to be prodded with longhandled blubber-hooks, and at other times had to be given a breather. Only the occasional seal seal gets upset enough to try and bite the person driving it.

Once near the ship, or if the seal will not go any further, two of the crewmen (reputed to be the best shots) would shoot the seals through the head at point blank range with soft-nosed .303 bullets, often dum-dummed to make the kill more efficient ... The crew men were good shots, and although shooting from ranges varying from 3 inches to 75 yards, nearly always got a head shot, just behind the eye and towards the neck. The trouble sometimes begins at this point, because some seals just will not die easily. Sometimes with as many as three bullets clean through the head, the seal would start thrashing around, trying to bite anyone near it and also make for the water. Our job would then be to finish them off by cutting the throat. This unenviable task was left to us Fids, along with the gutting.



The seal would sometimes spurt blood about 6 feet or so as it was ripped up, so we were soon literally covered in blood –and the amount seemed to be exaggerated by the whiteness of the snow and beauty of the surroundings. And it was not just a visual thing, because blood has a strong smell, to say nothing of the gutting. The first couple of hours were all very shocking, and by this stage only 5 of us Fids would have anything to do with the killing or dressing. The other 15 Fids took a lower key role by helping to load the carcasses onto the ship.

I had one particularly traumatic experience. It happened after we had pulled out of the fast ice and were steaming slowly along the ice edge and between the floes, waiting for seals to haul out. Three appeared on some rotten ice that would probably have broken up if the ship pushed into it, so the seals were shot from the foc'sal head at perhaps 70 yards range to prevent them from dropping into the water. All three seals had been seen to quiver then lie still (all head shots) so I was dropped off the moving ship on a strop suspended from the derrick to cut the throats and gut them. I would then drag the seals to the edge of the floe with my blubber hook, put strops around them and hook them onto the derrick strop when the ship made a second pass. At least, that was the plan. As I put my knife to the throat of the first seal, it seemed to put new life into it and it started to try and bite me, with blood flying in all directions. Standard practice for this eventuality was to stun the seal by bashing it over the nose. In my several blows to effect a stunning with my wrought iron blubberhook, the latter was bent to a right angle before the seal was still enough for me to stab it to death. On a separate occasion I witnessed a half-gutted seal resurrect itself and make for the water with the gutter sitting astride it. The seal was half in the water before the gutter got his knife up into its heart.

The sad part is that there is no way of taking seals in a more humane way than we do, and we have to take seals to feed the dogs. By the time we got back to Adelaide, we had taken about 140 seals in this way. Perhaps the nearest consolation is that we had some biologists on board who collected as many measurements as possible, along with brains, jaw-bones and sexual organs.

But the messiest and worst job was yet to come. The carcasses were simply piled on the deck and lay in the direct sun, also generating their own heat through putrification. The blubber was soon turning green and stinking to high heaven, and once back at Adelaide the 400lbs carcasses had to be man-handled several times to get them from the ship's deck, to the scow, onto the jetty, onto a sledge and so to the seal pile. Can you imagine the state of my sealing clothes? And the smell!"

Preparing and distributing the seal feed was quite a chore and involved cutting up old carcasses that may have been on the seal pile for over a year. First the carcass was flensed to remove most of the blubber – because this would have fouled the dog's coat and ruin its insulation qualities. Then it was chopped into the right size chunks with a felling axe. This was the messiest and most unpleasant part of the job, because small pieces flew off in all directions and got stuck to your clothes. The smell was pungent in the extreme, so those Fids that regularly did the dog feeds kept a dedicated set of wind-proofs for this purpose. They were easy to spot because they soon become black and shiny with rancid seal fat.



Seal for supper: Otter eating his dinner

This following letter extract provides an insight to sealing from base.

"On one relatively warm and sunny day in mid-January, Steve and I could see what looked to be an exceptionally large seal on one of the floes a few hundred meters off-shore. I collected the rifle. Then we both launched the dinghy and Steve rowed us out to the floe.

It was not just a large seal; it was a very large Leopard seal. I was not prepared to take any chances and shot it twice through the head before cutting its throat and gutting it. We took pictures and struggled to tow it back to the jetty. It was a magnificent specimen, and once ashore, I extracted its canine teeth so that later I might turn them into pendants".



Leopard seal shot off Adelaide, January 1970

Anyone that wants to know more about the British Grahamland Husky and how we ran them should refer to the definitive text. This is "*Of Dogs and Men*", written by Kevin Walton and Rick Atkinson. Kevin had been a Fid in the 1940s and Rick was working for BAS when the last remaining dogs were banished from Antarctica by treaty in 1994. The book traces the lineage of BAS huskies, from the collection of the first teams in Labrador and Greenland; through developing aspects of training, nutrition, breeding and sledging; to the advent of motorised vehicles and phasing out of dog transport. The book celebrates the end of an era, but hopefully will help ensure that the myth and romance of travel by dog team will not be forgotten.





Tuva

So, what do I think you should know about huskies, given that my recommendation to read the above text is unlikely to be followed up? Here is my summary.

Ziggy

The partnership between man and dog in order to pull sledges in Arctic Canada and Greenland stretches back into pre-historic times and there is evidence that it was happening more than 2000 years ago. According to the kennel clubs, there are various classified breeds; some are large, powerful animals, ideal for pulling freight; others are made up of small and fast dogs. What all the Eskimo breeds have in common is that they are extremely hardy, usually stocky and they have a dense inner fur overlaid by a coarse outer thatch. Being descended from wolves, they often have a

wolf-like appearance; but they are larger boned, with a broader head, a shorter snout and a tightly curled tail. What mattered most to the sledge drivers of FIDS and BAS was the spirit and will to work, for they might be expected to cover 30 miles in a day while hauling two or even three times their own body weight. Some quotes from experienced Antarctic hands tease out the special qualities of the dogs produced by the controlled breeding programme that was enforced by BAS.

"Huskies possess a unique drive to both travel and to pull. As working dogs they are ideal. Their notorious flaw is their tendency to fight whenever the opportunity arises – not because they are naturally vicious but because, like their ancestor the wolf, they have a need to exert their authority to maintain their position in the pack."

"Although the dogs could be savage in their behaviour to each other, with only few exceptions they crave affection and attention from their drivers."



"Singing was a very necessary part of the dogs' social order, and tended to occur just before they settled down for the night. One dog would begin a low wooing sound, followed by another and then another, each with a slightly different pitch."

"Dogs are naturally both gregarious and competitive animals and quickly establish among the packs they form. The driver soon learns to observe the hierarchy and to exploit the dogs' different personalities in arranging a team...the general principle being brains at the front, brawn at the rear...the best leaders tend to be female: more sensitive, more alert and less inclined to fight. Harnessed behind, the stronger dogs are content to chase after them all day ... Almost always a king Dog would emerge, who would boss the other dogs and keep them in order."

Dog Training and "Recreational" Sledging at Base T, 1969-70

The dogs were an important part of base life that went far beyond their main role of providing transport to support the field programme. Depending on a Fids disposition, they could be a source of companionship; they could facilitate minor journeys; they provided transport for seal hunting and at the same time, these short runs would be helping train new dogs and new Fids!

The gently-convex slope of Adelaide's Fuchs Ice Piedmont rose from near sea-level at Base T to around 750m at the base of the mountain spine that stretched from Cape Alexandra on Mount Ditte (1320m) in the south, to Mount Liotard (2225m); Mount Gaudry (2565m); Mount Barrie (2140m); Mount Mangin (1955m); Mount Bouvier (2280m) and Mount Reeves (2210m) - over 50 miles up the island. However, It was far from ideal in terms of providing a dog-training venue, for shortly after the sledge ascended the relatively steep ice ramp leading from base to the Adelaide airstrip, the sledge
driver could see the mountains across most of their horizon, but from 3 feet down - a doggy perspective – the mountains would not be visible, thereby denying the dogs any major feature to aim at. This was both boring and distracting for established teams, but more like a nightmare for training a new team from scratch and who would therefore require a lot of ski-running in front of the team from the trainers.



Dog's-eye view of the Piedmont

Dog's-eye view of the sea ice

In 1969, the 5 dogs that were not assigned to the Huns or the Picts became a new, scratch team, aptly christened "The Rabble". Notwithstanding the above issues, the Rabble were able to leave base in the depth of winter (5th July) making best use of the track put in by the 18 dogs of the Huns and Picts, as these proper field teams set off for Stonington to support the 1969 field programme. A 6-day lie up near Pinnacle Depot (c 15 miles from base) was the only geographical reward for a great deal of pushing to assist the Rabble, but the run back to base went better because the dogs soon picked up on the idea that they were heading for home on a route that was a gentle down-hill run for the last 6 miles. In the early autumn, the Rabble made a second run to Pinnacle without tracks to follow and in the summer they did a run to support a climbing trip to Window Buttress.



Summit of Window Buttress

In the New Year, supported by an injection of three experienced dogs borrowed from Stonington, The Rabble travelled with the Huns and had a superb run to the depot at Bond Nunatak at the north of the island. The improvement in the performance of The Rabble was not solely due to the addition of experienced dogs. Through the winter and into early autumn the training had taken place on the sea ice, where the beset ice-bergs provided plenty of visual stimulation to keep the dogs interested and on-track.



Training on new ice, early October 1969







The Rabble were used to put in a semi-permanent camp on Avian Island and performed superbly on an adventurous day-trip via Avian Island to visit the Emperor penguin colony on the Dion Islands, a round trip of around 20 miles.



The Avian island Research Camp

From my journal ...

"Thursday 25th turned out to be a very special day – among the very best in my term of Antarctic service. It dawned bright, clear, calm and around -23C. Steve and I were to take Dick to the camp and bring Ian back, with a detour to the Henkes Islands, about 5 miles off-shore to the SW. This being a more serious undertaking than most of our training runs, apart from Dick and his personal bag, we loaded the sledge with an extra personal bag, a rope, skis and survival kit, and we knew that Ian would have his personal bag to be brought back with him. So much for the plan; but that is not how it turned out. The official BAS Journey Report that I subsequently wrote takes up what happened:

With Dick Bird, Steve and Bill left base about 1100, running to the Chileno Refugio on Avian Island, then across the island to the holiday rest-centre camp, just S of the Argentinian Refugio...After about ten minutes of shouting, Ian was seduced from his pit, Dick was dropped off and since the weather was exceptionally fine ...we set off towards the Dions... to put in a good trail as far as possible, according to the amount of day-light available and the state of the weather... the sea ice conditions looked to be very good... since there had been fast ice off the base after mid-April.

We set off from Avian at 1220, running about half a mile east to skirt a large balloon of salty ice, and after reaching a grounded berg which would make an easily recognisable trail marker, set off southwards in a bee-line for the Dions. The dogs were working extremely well, and by running hard, we covered a good 5 miles in the first hour, in spite of a 1.5 mile section of very young (and therefore very sticky) ice. But now the surfaces were quite fast; the ice being sound, deep in snow and without leads, cracks, holes or pressure ridges...We abandoned the plan of trail laying in favour of completing a trip to the Dions... at this range very distinct (5 miles), particularly Emperor Islet, which is the highest of the group."



Here I have to explain that Dion Islets possessed the only Emperor Colony in Western Antarctica. It was only the third such colony to be found – by Stonington sledges in the mid-1940s. But because it is an isolated group, laying 10 miles off-shore, it is a serious undertaking to sledge there and had been rarely visited because it is exposed to strong winds from any given direction, and therefore caries the risk of ice breaking up and being swept out to sea.

The Report continues:

"The rookery lies on a low neck of land at the SE extremity of the islet (i.e. Emperor Islet), joining the highest section to a small, rocky knoll on which the depot is situated.

The sun having topped the Fuchs Ice Piedmont the previous day, we ran on in sunshine, keeping good time and reaching the Emperor penguin rookery in 1hr and 40 minutes after leaving Avian. A few small cracks and leads were crossed about 1.5 miles N of the islets



Emperor Islet, Dions, 25th July 1969



...We allotted only half an hour to our stay, and this was spent in photographing and counting the penguins, as well as inspecting the depot. About 200 birds were present, almost all with eggs.



"... Within 25 minutes we were returning to base ...we had been very lucky because we estimated that the sun would only have fallen on the rookery for the previous couple of days – to be borne in mind if future photographic visits are anticipated. With tracks all the way back to base, good time was made, and to conserve energy, we were taking it in turns to ride the sledge...just before reaching Avian, Shrimpie collapsed with cramp and so was taken onto the sledge until she recovered. The return to base took 2hrs 20 minutes. The total distance covered was about 20 miles".

Participation in Main Journeys 1969

First journey as related in my journal ...

"The highlight of April was my first full-scale field trip. Two of the lads on base are General Assistants whose only job is to run dog teams to support the field scientists – but the latter are wintering at Fossil Bluff. Therefore the GAs' function is to get in as much sledging experience as possible before they set off to Horseshoe and Stonington in July. Thus, before mid-winter, we all had the opportunity to take turns in going out on field trips.

On March 30th, after two attempts to get away had been foiled by the weather, our field party of 4 men with two dog teams finally got away. I was travelling with lan Curphey ("Curph") and the Huns, while Martyn Bramwell travelled with Rod Pashley and the Picts. It was a magnificent clear day with temperatures around -9C when we left base, the dogs pulling hard up the slope of the Piedmont, heading for the mountains towards the North. A fast surface of glittering frost crusted the snow, requiring us to make minimal effort on our skis to stay with the sledge, and travelling at about 4mph. We were treated to several mirages and dancing horizons. After about an hour and a half, we were able to hug the foot of the mountains. These run N - S along the backbone of Adelaide and rise in sheer rock faces and glaciers to a general height of around 7000 feet.



Looking back at the Picts

Resting the Huns near Trig 6

With such scenery about a mile to the east, and Marguerite Bay and Alexander Island (100 miles away) visible to the south, it was as great an introduction to sledging as could be hoped for. By the end of the day we had reached Pinnacle Depot, having covered 15.6 miles and climbed over 2000 feet, most of the time running in shirt sleeves quite comfortably, even though the temperature was down to -15C when we eventually stopped."

The teams:







The letter explains the sledging and camping routine:

"It is essential that nothing is left to chance, and this is most easily accomplished by adopting a fixed routine. This principle extends from the choice of equipment to the way we travel and the actual procedure for setting up and breaking camp. The need for precautions will become apparent later in this letter.

The golden rule is safety first. Everything is double checked before we set out. The 20-day manrations are in factory-made units of a single box weighing 56lbs.but this can be doctored to suit individual tastes...e.g. remove 2 tins of butter to replace with 1 tin of jam...The Optimus paraffin pressure stove MUST be in A1 condition for obvious reasons, for apart from its general use as a cooker/heater, we are dependent on it for the production of all our water and dehydration is severe when sledging. No chance can be taken of a tent tearing due to a small area of weakness, therefore the tents may appear to be excessively patched – but it is an essential precaution...Setting out on a journey with 2 men running one team of 9 dogs, the sledge would carry the following load for a 10day trip.

- (a) 2 personal bags, each containing double a sleeping bag, Lilo air mattress, Lilo pump, sheepskin (to insulate sleeping bag from Lilo), Eskimo Kamik tent slippers, torch, change of socks and duffle inners, personal repair kit, reading materials for lie-ups.
- (b) 1 sledge box for radio with batteries
- (c) 1 man-food sledge box containing 20 days rations
- (d) 2 boxes of Nutrican dog food in 1lb blocks
- (e) 1 pots and pans sledge box holding a Tilley lamp, primus, cutlery, dish mop, tea-towel, methylated spirits and Optimus stove and Tilley spares
- (f) 1 sledge box containing medical kit for men and dogs, sledge repair kit, spare dog harnesses and traces, maps, sledge compass, prismatic compass
- (g) 1 sledge bag slung from handle-bars containing crevasse rescue gear, emergency bivouac equipment and a flask containing a hot drink
- (h) Other items in the load include 2 ice axes, 2 pairs of crampons, 1 shovel, 1 spade, 3 gallons of paraffin, a pyramid tent and a mountain pup tent for use in emergencies.

...Encumbered by such a load, the party uses such travelling precautions as the terrain demands. On a good, fast surface, it is easiest to ski-jore with one hand holding the handle bar and the other a rope attached well-forward of the sledge. On a good surface, the dogs will manage up to 6mph and a change from ski-joring to running helps avoid fatigue. It is good practice to be linked to the sledge handle-bars by a cow's tail waist-loop at all times, as is trailing a rope with a knotted end that can be grabbed if the driver parts company with the sledge.

On coming to a prospective camp site the routine comes into its own...The driver stops the dogs, pickets the sledge, then the main trace, and finally runs out and pickets a night-span of wire hawser at right angles from the rear of the sledge - on which the dogs that are likely to chew their traces are put for the night. Meanwhile, the sledging partner has taken a shovel from the load and is digging a large, square hole, several inches deep, and in which the pyramid tent will be erected. Both men now put up the tent, almost always with the door facing south, because almost all the big blows come from the north. The member of the team designated as Inside Man then gets inside the tent and while he is spreading the ground sheet, the Outside Man gets all the boxes and both personal bags to the door, ready to pass them inside when they are called for. Inside Man now puts out both bed rolls, lights the primus and begins preparing the meal, then hangs all his outside clothing in the apex of the tent to start drying it out.



Tent lay-out

While this is going on, Outside Man pegs out the tent, places boxes not going inside the tent onto the snow valence, along with some of the snow blocks dug from the hole. All these precautions are to stop the wind from getting under the tent. Outside Man then proceeds to cut snow bocks for making water and places them between the inner and outer tent walls, where Inside Man can reach them to progress the cooking. Paraffin is placed between inner and outer on the opposite side so that water blocks are not tainted. Outside Man now tidies and secures all outside gear, removes the dog harnesses and feeds the dogs – 1 Nutrican bar on one day and 2 bars the next. He then runs the radio aerial through the tent ventilator to Inside Man and attaches the outside end of the aerial to a ski, stuck vertically in the snow. Outside Man is now ready to enter the tent, brushing the snow from his foot-wear and clothing between the tent walls and bringing in the dog harnesses. Inside Man should have a brew to pass his companion at this time and Outside Man, his jobs done, should be able to undress and get into his sleeping bag before hanging up his clothes to dry, along with the harnesses.

At this stage, everything should be at hand to spend as long a period inside the tent as is necessary, apart from going out to feed the dogs or for a man-poo. All wet clothing and harnesses will be drying in the apex of the tent over the heat from the primus and the Tilley. The most likely threat to the integrity of the system is a dog chewing itself off the span and starting a fight. Inside Man completes the meal, washes up and finally makes a brew of cocoa. He also prepares all the breakfast materials so that they are close at hand for the next day.



On waking in the morning, it may be -25C inside the tent, with frost crystals hanging from the roof. Inside Man will try to get the primus going with one hand from inside his sleeping bag, hoping that the frost will sublime away rather than come cascading down to melt and wet everything. While the pre-prepared breakfast porridge is cooking, he can retreat into the warm cocoon of his sleeping bag, knowing there is no need to emerge until the tent has warmed up

To break camp, as soon as he has finished his breakfast, Outside Man goes out to start digging out the tent, while Inside Man washes up the breakfast things and packs all boxes and bags. This done, both can now complete the dig-out and load the sledge. The roles of Inside and Outside Man are swapped on a daily basis.



Pinnacle Depot and Mt Liotard

Back to my journey:

"The next day, after a late start, we set off at break-neck speed over hard sastrugi (parallel, fluted snow ridges carved by the wind) that gave us a tough time for about 4 miles. After a couple of minutes with the brake full on, we were still not in full control and ended up flipping the sledge. Rod tipped his sledge a little later. The Picts, running only 8 dogs, found it difficult to keep up, forcing the Huns to sake several stops. We eventually made about 9 miles before camping at a depot site known as Lincoln Nunatak, where we hoped to locate and inspect the depot. This run took us below Mont Gaudry and Mount Barre, two of Adelaide's most spectacular peaks. In the evening, Curph and I skied over to the supposed depot site, but failed to find anything more than an empty Nutrican tin. However, we did find a beautiful ice grotto in the bergschrund.



Huns and Mount Barre

Lincoln Nunatak and Mount Gaudry

That night, a blow set in and we were soon enveloped in cloud, snow and drift, forcing us to lie up the following day in a full whiteout. I read Hemmingway's Fiesta while Curph was sewing himself a sledging pennant. The weather abated that same night, so we were able to travel again the next day in beautiful conditions, continuing north to the one E- W break in the Adelaide Mountains, where the Shambles Glacier cuts through the chain, pouring the Piedmont ice into the Lauboeuf Fjord, on the Peninsula side of Adelaide. This took us to the McCallum Pass below Mount Mangin, a point about 33 miles north of base, where, having set out from base with man-rations for 10 days and dog food for 12, we decided it was wiser to return to base with food in hand rather than take any chances with the weather...At the McCallum we had a great view of the mainland mountains of the Arrowsmith Peninsula and a view of Stonehouse Bay, where we had been sealing on the Biscoe. We could also see the northern section of the Adelaide Mountains, which stretch another 50 miles or so to distant Mount Vallane.





Approaching the Shambles

McCallum Pass and the Arrowsmith Peninsula

Our return trip was begun immediately and we reached a point just south of our previous night's camp. We then decided to take our time in getting back to enable a better appreciation of the magnificent surroundings.



Camped opposite the Barrie-Gaudry saddle

Liotard from the north

My letter makes little of our return trip, but my journal completes the story and provides sufficient detail to inform my long-term memory to round off this section of my narrative. We were very casual and leisurely in our approach to getting back to base. We were enjoying ourselves, the dogs were improving with every day away, we were getting better at handling them and the weather remained settled. Two days of short runs got us back to Pinnacle Depot, but included a recce of the climbing potential of the saddle between Barre and Gaudry. On 5th April we inspected the depot (excellently sited in a wind-scoop to stop it drifting in) and added one of our Nutrican containers to bring the number depoted to 5 in total.

But that night, as lan and I crunched our way across the heavily frosted snow to return to our tent own tent after spending the evening with Rod and Martyn, there was a 22 degree halo round the moon. A short while later, as we settled into our sleeping bags, the tent began to shudder in a blustery breeze and a little later we were into a full-on, northerly blow.

The weather had taken a major turn for the worse and the next day (Easter Sunday, 5th April) it was blowing a full gale and gusting maybe 50 or 60 knots – enough to make communication difficult in the tent and impossible with the Picts. We were in a howling blizzard of driving drift and freezing rain that was icing up the tent. Fortunately for me, it was lan that got the short straw as Outside Man. We later learned that sometime in the night, Tirpin of the Picts had got off his trace without Rod knowing. He had then eaten his way into one of the Nutrican containers before Rod was onto him and got him back to his place on the night span.

In the morning of Easter Monday, we found ourselves in a whiteout of heavy drift and the tent outer encased in boiler plates of ice, but during the afternoon the wind eased. Deciding to brave the weather, we broke camp and made an uncomfortable move south on a compass bearing, but only managed about 5 miles, before we called it a day and camped over ice – not ideal if the wind got up again. And it did, but this time from the east. That night and into the next day, the volume and ferocity of the drift was now reinforced by snow blowing straight off the neighbouring peaks and ice falls. When going out to feed the dogs, our sledge was only just visible, even though it was a mere 12 feet from the tent door. Every now and again, above my head, I got a glimpse of a blue sky. It was clearly a fine day a few feet above the Piedmont, but that was little consolation, for there was no way we could move unless the wind abated. It was our 10th day away and we had already gone on to half rations, providing just 1 meat bar and a half packet of soup between 2 of us for the main evening meal. There was nothing to spread on our hard tack biscuits and we had just a single brew

of coffee left. But we were "living the myth" of Antarctic sledging and knew we had to make the best of it.



However, while we were in no danger and hardship was minimal, there was a more serious issue that bothered us. There was a broken control knob on our Squad-call radio and this had given us trouble the whole time we had been away, so we had not been in contact with base since leaving. While we hoped that our buddies back at Base T were not getting worried, we felt under pressure to get back before there was real alarm. Consequently, while it was still blowing enough to make breaking camp cold and uncomfortable, on the morning of Wednesday 9th we decided to make a try to cover the 9 or so miles required to get us home.

That morning, there was broken altocumulus cloud overhead, and when the sun broke through the gaps, it produced a dramatic yellow light that glinted off the nearby ice falls and back-lit the snow devils swirling around us as we broke camp. Setting off at 1015, we found the sledging surface firm and fast. The dogs sensed that this might be the run for home and a welcome meal of seal meat. Up went their tails and their pace increased to a trot as we intercepted the drum-line that marked the dog-leg in the route from the Piedmont below The Window Buttress and so to the base. The angle of slope also increased in our favour, allowing the last couple of miles completed at a run, even if we both rode on the sledge. The odometer on the sledge wheel registered a 9.2 mile run and we completed it in just an hour and 25 minutes.

As we came off the ramp into the High Street, we ran into a search party that was about to set out in a Muskeg tractor! John Newman (Tractor Mech) and Barry had been up for the previous two nights, servicing the Muskeg to ensure that it was in condition to undertake an unsupported field trip. All their field gear was ready to go and loaded on a Maudheim cargo sledge. A decision was made that their preparations should not go to waste and instead of supporting a search, would now be to restock the depleted depots at Pinnacle and Lincoln. The dogs could be given a good feed, the dog sled outfits replenished and the depot run begun the next day. We all set to the task of ensuring this could happen and with the jobs done, ate an evening meal of real food before retiring to the bar.



The second journey ...

Curph had picked up a serious skin allergy that was still causing him problems as we approached the middle of May, but there was still another depot journey to be completed, this time to re-site Lincoln depot. I was both thrilled and proud to be told that Curf was happy for me to take over the Huns for the next run, scheduled to take place as soon as the opportunity arose. Running a 9-dog team on a full field trip was not just a dream come true; it was the fulfilment of a long-held ambition. And it started on 12th May...

My Journal, 12th May:

"...-20C, with a nasty 15-20 knot wind, but a beautiful, clear morning...and it was decided we would travel...Rod to run the Picts with Bob Davidson and me to run the Huns with Steve. We were just about ready to get away for 1145, but then there was a brief pause in the action which resulted in a major dog-fight within the Huns, started between the brothers Nasr and Hamad. Kelly then took the opportunity to duff Tuva, and when Steve waded into prize them apart, he took a slash-bite in his leg requiring Terry to put in 6 stitches, thus putting Steve out of action. Henry then threw his gear together to replace Steve. We were finally away for 1245, by which time the wind had dropped to nothing."

Count was by far the most experienced leader, so the Huns broke trail. Count was determined to test me and tended to wander about over the first couple of miles, but then settled down. All the other dogs hauled their hearts out, enabling us to make about 8 miles and camp opposite Trig 6 at around 1550. Cirrus cloud that had been hovering on the western horizon, now began to invade the

sky, heralding a northerly blow. Our suspicions were confirmed as Henry and I returned to the Huns tent after spending an evening with Rod and Bob.

No sooner had we turned into our bags than the wind got up and it did not drop until around 1430 the following afternoon, but this was too late for us to consider a move. A littler later, as we wandered around outside to stretch our legs and feed the dogs, it was completely calm, with the cloud sitting on the mountains at around 5500 feet.

We spent the evening in Rod's tent for the second time, but in spite of Bob's radio expertise, we had problems with the aerial and failed to make contact with base. For the second night in a row, a breeze was rising as we went to bed, forcing yet another lie-up the next day, when, like the day before, the wind grew less in the early afternoon. By evening, however, the wind was both falling off and becoming more sporadic, promising us better luck for the morrow. Meanwhile, the afternoon "entertainment" (provided by the Picts to keep us Huns on our toes) was when I heard the crunching of snow under doggy feet outside the tent. I poked my head through the tunnel to see what was going on, and immediately underwent a severe face-licking from Yuri, who had chewed himself off the trace and was now on the prowl for an extra feed.

The next day was near a perfect travelling day as we could hope for this late in the year. As Outside Man, I was out by 0845 to begin the big dig-out that is usually the consequence of a prolonged lieup. The Picts were ready to move ahead of Henry and me, but we were moving north by 1115, on a surface that was soft on top but firm below.



Huns on the trail

My Journal notes that:

"... About -15C today. Dogs generally worked well, although once again Count began the day by wandering around. Low drift was whipped up by katabatic winds funnelling down the Sloman Glacier. Kelly (he was a Stonington dog and establishing his place in the team hierarchy) started two fights. Tuva took advantage of the distraction and had a bite at Count's foreleg. He may have

been making a point because earlier I had split him away from Ziggy, his usual partner. But bothy dogs pulled much better with their new trace pairings, Rita and Otter respectively."

We only stopped twice; once for lunch; and once to get pictures opposite Pinnacle depot and Mount Liotard. By late afternoon we had covered over 16 miles and camped just above the Lincoln wind-scoop.



Mount Liotard

The next morning began a day of frustrations. I was Inside Man and prepared breakfast for 0730. On peeping out of the tunnel, I could see a clear cold morning with enough breeze to set up a low drift. The master plan was that Rod and I would run the Huns into the depot site, while Henry and Bob began packing the gear, but Rod over-slept and this delay meant that the wind and drift were kicking up by the time we got going. With Rod sitting on the depot supplies and me riding the foot-plate, we reached the depot in conditions that were already uncomfortable to work in, but soon reached the conclusion that the proposed re-siting was not the best option, therefore the stores were best left where they were. By the time we got back to the tents, it was too blowy to move, but in the hope of an improvement, we sat around in Rod's tent, leaving the Huns in harness and gear partly packed, ready to go at short notice. But the improvement failed to materialise, forcing us to unpack, re-established camp in the usual manner, and put all the dogs on their proper spans for another night in the same camp.



Camp near Lincoln

The wind that kept us from moving was a cold southerly. Given that it was about -20C, the windchill had to be taken seriously. But the bigger issue was that the drift was made up of very tiny ice spicules that found their way into every nook and cranny – a problem compounded by the Huns tent having a rip in the fabric of our inner tent. This had to be repaired in the field, and we eventually got this done during the evening, only to find we had another problem on our hands. The Tilley was not burning properly; it was giving off fumes and providing poor light. Resorting to candle-light and torches, this was resolved by fitting a new mantle, after which we settled down to a comfortable evening, while outside the tent, the wind had picked up yet again.

By next morning of (17th) the conditions were marginally better than the previous day. It was still about -20C, but the sky was clear and the drifting snow not quite so bad. We decided to go for it and packed to be away before midday. At first the going was soft, but as we began to descend from the plateau between Lincoln and Depot 5, the surface improved and our speed began to pick up. Soon, Henry and I were running to keep up and the dogs seemed to sense that we were potentially on a run for home, where a feed of seal would be the reward for their efforts.



The Picts resting on the run for home, with Henry and Rod

The snow surface got better as we got closer to base and the dogs kept up their great work rate. Just 4.25 hours after setting off from Lincoln, having covered 24 miles and descended over 2000 feet, we swept down the Ramp and brought the teams to a halt in the High Street. A letter records:

"I shall be lucky if I ever get in a better day's sledging."

We put the dogs on their base spans and fed them the seal they brightly deserved. Jobs done, we could take stock. Yes we were tired, but we were also very satisfied with how the day had gone. And all this had been achieved without any dog fights!

I wrote the official Journey Report for this trip. It concludes:

"Lincoln Depot cannot be improved upon without making an approach to a rock site very difficult. The dogs worked steadily, and the last day's journey is a suitable testimony to the way in which they are improving by constant use."

The third journey...

After mid-winter, there followed a very active period of preparations for the two GAs to sledge over to Horseshoe and Stonington in early July, their aim being to help out with the Stonington field season. They over-hauled every item of kit and rebuilt the sledges. Meanwhile, Steve and I continued to improve the Rabble, for we hoped that Ian would allow us to accompany the GAs up the island. The Rabble's performance was enhanced by swapping Hen for Rita, the latter being an experienced dog and excellent worker, but she had been served by Kelly on mid-winters day so was to stay on base to have the pups we felt sure she was carrying.

After managing a circumnavigation of Avian Island, the Rabble got the go-ahead to leave with the other two teams, with a departure date set for 4th July. Steve and I now had to create a third camping unit, working against the clock. Fortunately, the weather had never agreed to let us away for 4th, and departure was put off until Saturday 5th.

The whole base was up early and breakfasted to help get us away with minimum fuss. As we loaded the 3 sledges in mid-winter darkness, Adelaide had not seen such levels of dog sledding activity for many years. The Picts and Huns, with their 9-dog teams, were carrying full loads. With only 5 dogs and a limited itinerary, the Rabble had a load of around 450lbs, but that was still going to require a work-rate that was beyond the experience of most of the team. Once the sledges were loaded, the Muskeg towed each of the sledges up the Ramp and the drivers picketed them close to the dog spans. The dogs had picked up on the air of excitement and the last thing we needed was a dog fight, so to reduce that possibility, all of us harnessed the same team at the same time, thus getting each sledge away with minimum fuss. The Rabble was the last to leave, but we then had a good track to follow.

Even the Picts found the pull up to the airstrip on the "sticky" surface a hard pull, so Steve and I had to do a bit of pushing and shoving, but in general terms the Rabble hauled well. As we progressed towards the mountains along the marked route of the Drum-line, the Huns and Picts were getting away from us. Apart from when they stopped for a breather at the Drum-line Fork, we lost sight of them. To have any chance of getting back to them, we limited our own stop to a quick drink of hot lemon from our flask. Even so, with the dim twilight fading and the cloud thickening and lowering to obscure the upper parts of the mountains, we accepted that perhaps we had seen the last of Rod and Curf for the day. By 1500, having covered about 8 miles, we were about 1.5 miles south of Trig 6. It was -16C but the temperature was rising, and it had begun to snow. Accepting the fact that we would soon find ourselves in total darkness and probably into a blow, we saw our best option as

camping where we were. Although we did not know it at the time, we were about experience the epic lie-up of the season.

Sure enough, during the night, the wind struck with a vengeance. As expected, it was a Norther, causing the temperature to creep up to around freezing point and filling the air with driving wet snow that begun to bury the tent, the sledge and the dogs. The wind increased steadily over the next couple of days. By Tuesday afternoon, base was reporting a mean 70 knots and a gust of 97 knots. It would be safe to assume that the winds we were getting up on our Piedmont camp were significantly stronger than those on base. The noise was like being about to be hit by an express train. The fabric of the tent was shuddering and clapping. To communicate, we had to shout.

A letter home has this to say:

"Although the tent was well dug-in, you can imagine our concern at the height of the blow. At one stage we put on all our clothes in anticipation of the tent getting blown away... It was 4 days before we were able to move on."

Feeding the dogs was a grim job. Visibility was 5yards at best and nil for most of the time. It was impossible to stand up, although Steve had tried and was nearly blown away. Feeding therefore involved crawling on hands and knees and groping around to feel for the dogs, which had by this time curled into a ball with their tails over their noses, allowing themselves be buried. Experienced dogs would stand up from time to time to ensure that their trace did not freeze to a depth where they could not get up for air, but inexperienced dogs would try to stay snug in their snow cocoon, unaware that they were risking suffocation. Feeding therefore included digging such dogs out, regardless of the conditions, and the official, Base T Journey Report for Tuesday 8th July reminds me that at the height of the hurricane, both Mary and Polly had to be dug out from the limits of their traces on the night span.

One aspect of camp routine requires elaboration – how we coped with human bodily waste. What follows may offend sensitive natures, but for the benefit of the inquisitive, here goes. Pee was easy to deal with. The Scots Porridge Oats in the man-food boxes were supplied in a rectangular tin that had plenty of cubic capacity to accommodate a big wee. Going outside for just a pee was an unjustifiable hassle for both tent partners. The protocol was simple. Up on your knees; face the tunnel entrance; pee into the porridge can; hold the can in the middle of the doorway (between inner and outer tent) and finish by slowly tipping the contents into the snow, where the hot liquid creates a hole. After a few pees, the hole excavates itself into a bottle-shape, with the neck at the top. It soon freezes. The cold ensured there were no smells.

So far, so good, but what did we do about a poo? Conditions permitting, poos would be performed sufficiently far away from the tent so as not to be an issue when cutting snow blocks for drinking water. They would quickly freeze and also be eaten by any dog that got the chance to get at them, hot or cold! But in the conditions most commonly associated with a lie-up, squatting with one's pants down, in a blizzard, is totally out of the question. The first approach to a solution was to suppress the urge, but after a while, necessity usually determined that a pragmatic approach must prevail. The protocol went something like this. Warn your partner of the problem; off with your pants; get some loo paper; facing backwards; squeeze through the inner door and wriggle around between the inner and the outer tent to a position on the down-wind side-panel where one could squat, braced by leaning against the outer tent. Go for it! A word of warning may be appropriate. Be sure you really must go and be quick. The saving grace was that most Antarctic sledging poos were small – because of the nature of the rations, and also because we were often a bit dehydrated. But it was not the only way of doing it ...

During this particular lie up, in conditions that were extreme, not just severe, I awoke from one of my several dozings between reading sessions, to find that Steve was just finishing off the special part he played in the "mother of all poo stories". The shaking and rattling of the iced-up and boiler-plated outer tent against the inner had steered him towards a totally different solution for relieving his agitated bowels. His solution was based on pure Yorkshire pragmatism. At the last meal, we had emptied the contents of one of our four, 1lb tins of butter. With me asleep, Steve had simply squatted over the empty tin and by calculated bum-rotations, deposited a carefully-curled "log" in the can. Needless to say, he was quite proud of his achievement.

During the next day, the wind slowly abated and backed to the NW as a cold front went through, freezing the damp tent fabric and turning the several feet of snow that had buried everything into icy concrete. Therefore, when we eventually emerged on Thursday, we were faced with a 3-hour dig out, but it was beautiful winter twilight with a temperature of -26C. Steve was Outside Man and began digging at 0900 – when there was barely enough light to do the job. The hard work kept us warm and we packed as quickly as we could.



Digging out could be a major task - these pictures were taken on other journeys, when there was light

Fortunately, there was no wind, so when we moved off about 1200, it was relatively comfortable. Keeping warm was never going to be an issue, because the depth of snow and gradient of the Trig 6 slope required both of us to push the sledge. We finally came up to where Rod and Curf were camped about 2.5 miles south of Pinnacle Depot at 1400. They had not started their dig-out until 1130 and were still shovelling when we arrived, leaving us feeling very smug at now being poised to over-take the main teams. We stopped briefly for a council-of-war, but did not hang around because as soon as we stopped, the Rabble started to squabble and the Huns (wanting to join the fun) pulled out their pickets. Hard pushing was punctuated by frequent halts, as Mary (with no trail to follow) stopped for nervous pees that we could not fathom or prevent. But we got to within half a mile of Pinnacle, where we camped. It was now a beautiful, clear evening, with just enough breeze from the SE to set up a low, whispering and snaking drift. For just 2 minutes, the sun peeped over the northern horizon to the west of Depot 5. It was the first time we had seen it since 23rd May.

That night, Steve and I had to make a hard decision about our next move. Our original plan had been to get to Lincoln, but the tough going was slowing our progress and therefore we were eating into both the man and dog rations at a rate that would require us to take supplies from one of the depots. We would undoubtedly do better if we were following a track put in by the main teams, but they had not come up to us and we did not know why. After long discussion, we felt that depleting the depots could not be justified. Tomorrow we would begin our journey back to base.

The following morning, Friday 11th July, we were away before 1100 and moving south on the track we had put in on Thursday. We could see that the Huns and Picts had not got away, but after the ruckus we had precipitated among the Huns the previous day, we pushed the pace, swung to the west, and gave them a wide berth. Maybe the Rabble sensed that with a reduced load (down to 350lbs) and the gradient now in our favour, we could get back to base and a feed of seal. The dogs

pulled really well and 4.5 hours after setting off we were home. Everyone was surprised to see us back, but even more surprised at the performance of the Rabble. With the main teams away for several months, our few dogs could now be put on a new base span in the gulley to the north of the Tractor Shed, closer to the hut and easier to approach from the Seal Pile.

In spite of the disappointment of not reaching Lincoln, Steve and I were pleased with what had been achieved; in terms of the dog's work ethic; the testing of our equipment and our field savvy in the severest of conditions; we felt it had gone well. Hopefully, we had turned a corner in the development of the Rabble, as well as getting Adelaide's dog heritage back on track. We had also turned another corner, for that afternoon, the sun was again visible, this time for a little longer than the day before. Now that I was back on base, I was also aware that while we had been preoccupied with the preparations of the field journey, another personal milestone had passed without my noticing. I had passed my second anniversary of employment with BAS.

The fourth Journey...

In November, dog-supported camping journeys were reinstated. Priority had to go to Henry and Steve, who would depart for Stonington as GA Dog-drivers sometime soon after the aircraft could take them across. Running with Bob as his partner, Henry had good weather and got to the McCullum Pass, as did Steve on the next trip, when he travelled with Fanny Hill. This all fitted Ian's request that Steve and I, in deference to previously stated perceptions and sensitivities, made the decision that we would not travel together. It was to be my turn next, when Ian and I would take the team off. But this plan fell apart when Ian strained a ligament in his leg. It was so bad that Terry put it in plaster.

Now was the chance for one of the mal-contents to step into lan's shoes. But, true to form, at first none of them wanted to go. Mischievously I tried to set up the worst of them. In the bar, I pressurised Skedder to "put his money where his mouth was", feeling confident that he would make a fool of himself by turning down his sledging opportunity in front of everyone. You can probably imagine the amusement it caused when the cornered Mr Snell accepted my offer to take him out and I had been hoist by my own petard! What had I let myself in for? It was common knowledge that I despised him and he had an equally big aversion to me. My closest friends later told me that they felt sure that I was only taking him in order to get rid of him by dropping him into a crevasse somewhere up the Piedmont. I can say in all honesty that the possibility did cross my mind.

In a letter home:

"...Thus it was that I found myself with Skedder as a sledging partner. The trip itself involved a oneday run up the Piedmont, followed by a 4-day lie-up in a big blow. There was no-one else on earth that I least wanted to share a tent with for 96 hours without a break, but I had brought this upon myself and had to live with it. I was utterly pissed off; but the worst was yet to come. The return to base was in the nature of an epic, for the blow had put down about 2 feet of soft snow, the drifts around the tent had buried the sledge to the handle bars, and after a 4-hour dig-out (mostly by me) the campsite and dog span looked more like a redoubt on the Somme.

I was determined to end my ordeal and get back, thereby pushing the limits of what was achievable. A 5-dog team and deep, soft snow was a far from ideal situation, requiring me to ski-lead on a compass bearing and Skedder to push the sledge– and it was a whiteout. Dave smoked and drank heavily and spent most of his life on his bum in the Radio Shack. He also avoided communal jobs. He was on the bottom end of the scale of being unfit. Hardly a surprise, but after about 3 miles, he was totally and utterly tuckered and therefore incapable of keeping the sledge moving forward. I had no choice but to push the sledge myself until the surface improved, a distance of about 6 miles. It was exhausting. To make matters worse, Pig, my biggest dog, refused to throw his weight into the trace unless I continuously waded into him with the thumper. I am not sure if beating Pig took more out of me than the pushing. I began to lose my cool with the dog, knew that would not help and then got angry at myself. Had I been carrying the .45 revolver, I would probably have shot him. Thankfully, with about 7 miles to base, the surface improved.

By now, Dave was all-in and throwing up. With around 6 miles to run, where our trail made a dogleg away from the mountains, I became aware that through my concentration on keeping the sledge moving, I had lost my focus on the compass course. We had crept about half a mile closer to the mountains than we should have been and now, as we made the turn, we had to cross a belt of large crevasses that barred our path. They were wide but bridged, showing as elongated dips in the snow surface. The dogs sensed their presence and became agitated. Just what I needed!

In turning away from a very obvious crevasse, in the flat light I failed to spot that I had now put the sledge on a course that ran along the edge of another that was perhaps 15 yards across. No sooner had I begun to turn than Pig got windy and jumped the wrong way, pulling the sledge further towards the centre of the dip. Within seconds, Dave's legs had broken through into a hole. He scrambled out but broke through into a second hole; but not before the sledge had dropped sideways and sunk back. It was now balanced along its centre, and hanging over what might have been a bottomless hole. All our efforts to extricate the sledge only succeeded in toppling it further in. We were in trouble. All the rescue kit was in the bag at the "wrong" end of the sledge. The dogs were milling about and of no use. Luckily, I could still reach my sealing knife and used it to cut off the trail rope and looped it round the handle bars. Sinking an ice axe in the snow, I took a turn around the shaft with the loose end of the trail rope and heaved for all I was worth. The sledge inched towards me. After a lot of brute force and ignorance, we were once again on safe ground.

Almost immediately, a Muskeg tractor came over the southern horizon and I probed towards it until we were clear of the crevasses. United with the tractor, the lads told us that they had guessed we would be trying to get back in difficult circumstance and so had come out to lend a hand. Most of our sledge load was now shifted to the tractor and we had a comparatively easy run for the final 5 miles back to base."



The surface at last improved ...

The master plan discussed on base before the trip with Skedder had been that on our return, there would be a quick turnaround, then those of us that saw ourselves as climbers would take the dogs and the tractor back up the island to the plateau below the col between Mount Barre and Mount Gaudry. From a plateau camp, we would then climb Gaudry, at 8500+ feet, the highest peak on Adelaide. But it now looked as if the crevasses on the Piedmont were opening up earlier in the summer than we had anticipated. Taking a Muskeg up the Piedmont would no longer be a viable option and the plan was abandoned.

I was really disappointed, not just at not being able to carry out a long-cherished climbing trip, but because at that time, it seemed that I had finished with dog journeys on Adelaide.

The fifth Journey – a grand finale ...

As New Year 1970 approached, Ian Willey sanctioned a dog journey to cover as much of the Piedmont as possible and inspect a depot at Bond Nunatak that had not been visited since 1966. Curph's BAS Journey Report. States the purpose of the run as follows:

"1. As the relief driver for the Huns arrived on base early this year (i.e. Richie Hesbrook on the Twin-Otter from Anvers on 7th December) it was felt that a short field trip would be a good way to start the team handover. The depot put in at Lincoln Nunatak last April had not been seen in the last two visits, so a checking was in order.

2. According to the Depot Book, a depot still exists at Bond Nunatak and it was hoped that this could be checked as well."



The teams to undertake the trip were to be The Huns (driven by Curph but accompanied by Richie Hesbrook as part of his induction as their driver for next season) and The Rabble (driven by me and reinforced by the Stonington dogs Dai, Polly and Castro). Much of the journey I describe in a letter written during a lie-up on 10th January.

"We set off about 11pm on New Year's Eve – singing Auld Lang Syn to encourage the dogs up the Piedmont...travelling at night to get the best running surfaces and by the light of the midnight sun... The three of us were sharing one camping unit under the call-sign Sledge Victor... It was a superb night and we covered the 25 miles to Lincoln in exactly 8 hours. Incidentally I am now driving a new, super-charged, twin-carb' Rabble, reinforced by three new dogs."

To avoid the crevasses we knew to be opening up towards the mountains, we took a slightly different route to the one used on previous journeys up the island. By heading towards Window Nunatak for just 3.5 miles before running on a bearing of 340M, we found there were no major depressions and only a single, well-bridged crevasse to cross.

My letter:

When we got up at 1800 the next evening, we ran the Huns over to the crag, but even though we probed, we failed to find either the depot we had put in before mid-winter, or the rocks that we had placed it on, and it is now written off. It probably lies under the winter's snow accumulation and what looks to have been an avalanche.



Camp at Lincoln

We set off from Lincoln at 2200, running on a bearing of 015M towards Bond, but the weather rapidly deteriorated. The wind rose to an estimated 25 knots and the cloud descended to Piedmont level, forcing us to camp after only 4 miles and beginning a lie-up that was to last for 36 hours.

About 3 o'clock in the afternoon of 4th January, the sun was blazing through a thin mist. We were dozing on top of our sheepskins in a sweltering tent, waiting for the sun to sink towards the horizon (night) when the surfaces would freeze up. We were woken from our stupor by the dogs howling and barking, and then heard the engine of the Turbo-Beaver. Scrambling out of the tent, we saw the plane buzz the camp and throw down a cigarette tin containing a message to call them up on the radio frequency the message provided. We tuned in and Bert (the pilot) requested that we mark out a landing strip threshold. He needed to land to pick up one of my dogs, which was now needed by the Picts, presently on the Grahamland Plateau. We responded by stomping out an arrow in the

snow and liberally scattering cocoa in the arrow-head to produce a clear runway marker. Bert made a safe landing, his two passengers took photographs, and after a swift cuppa, they took off with Shrimpie on board to recce the crevassing on the Shambles before returning to base.

All this I filmed on my cine camera.



Midnight Sun, early January 1970

Later that evening, at 1830 and with reduced teams, we set off in mediocre weather, crossed the 10-mile wide head of the Shambles Glacier, and sledged on northwards at a fast pace on good surfaces for a total of 22 miles, covered in just over 6 hours. We didn't see a single crevasse. This brought us to Bond Nunatak, and we camped about half a mile out from the crag where we hoped to find the depot. No sooner had we stopped than it started to blow (we estimated 20 knots) and snow, and that was just over 6 days ago, so we are now in our 7th day of lie-up. We did have a lull for a couple of hours around 1300 yesterday (8th January), and being a bit too near the end of our food for comfort, ran the dogs to the foot of the Nunatak to look for the depot, finding it without a problem. We took 1 box of man-food, 2 Nutrican dog-food and 5 gallons of paraffin. We then dug out the camp in the hope that we would be able to move on, but no luck, for soon it was snowing and blowing again – to the extent that the 6000+ foot mountain less than half a mile to our east could not be seen.

And so the lie-up goes on, and on ..."



Do not be misled by scale in this picture, Richie was about 6 feet 8 inches!

I completed the story of this field trip in a letter written on 22nd January. When the weather cleared up on 12th, we decided that we could not afford the food to travel to the north coast of Adelaide.

Curph's Journey Report:

"At last, a real break in the weather. Up at 1800 and dug ourselves out to the surface in bright sunshine. We left Bond at 2030 and sledged south. Surfaces were not too good at first, but improved as we got out of the influence of the Nunatak. The setting of the sun towards the horizon also crisped up the surface. We took a line a bit further west than on the northward run, heading for a point about 3 miles out from Lincoln and camped at 0500, having covered 22.6 miles in about 8 hours. Temperature was -10C."

My last run with the Rabble was across midnight and into the early hours of 13th January. Having broken camp, we set off at 2300 on 12th.

Curph's Report:

"From Pinnacle, we ran closer in towards the mountains than on the trip up the island, and as a result, saw the crevassed areas previously reported. We had no problem finding a route through, but in bad light it would be far better to stay well out from the crags. We arrived back at base at 0500, having covered 26.1 miles in 6 hours. It had been a very enjoyable day. The temperature was -10C."

I knew I would never get another run like it. So it was that my Antarctic dog-sledding career came to a memorable finale. It was a performance that has fed me with positive memories for a lifetime.

When Curph wrote up the Journey Report quoted above, he began with a quotation from Herman Melville's "Moby Dick". It captures both one of the lasting memories of the journey and Curph's special brand of humour.

"We had lain thus in bed, chatting and napping at short intervals, when, at last, by reason of our confabulations, what little nappishness remained in us altogether departed, and we felt like getting up again, though day break was some way down the future. Yes, we became very wakeful, so much so that our recumbent position began to grow wearisome..."



Travelling by the midnight sun

Dog Profiles



Count (born 6.1.62; base weight 89lbs; end of season field weight 75lbs)

At heart, Count is a big softy and likes to be patted as much as he hates being beaten. When happy, Count is an outstanding lead dog, but he can be a real bastard when he chooses. Count was always at the pointed end until Myrna started to lead, and due to his high intelligence, he may act as if he feels superior and then try to force his will on the driver. As is usual with a new driver, when I took over, Count refused to respond to commands. Beating was not the answer because he works best when happy - and if he gets really boot, his tail will drop and he will try every trick in the book to get his own way. On the other hand, bad conditions or challenging terrain bring out the best in Count and he will even lead through deep soft snow where other leaders have to be ski-led. Traveling in Sastrugi he can be relied upon to take a good line and it will be best to keep directional commands to a minimum.

Because of his advancing years, Count is slow, but doesn't like it when the dogs behind crowd him. In this situation he might start a fight, particularly if the main offender doing the crowding is Tuva, so that the latter was eventually moved from his place in the front pair to keep him from winding Count up. If Count does get into a fight and gets chewed up, he is likely to show his shrewd nature, for he knows how to play the aggrieved "Old Soldier". He may well refuse to get up and will yelp as if being murdered. Count's other weakness is his tendency to wander – but a quick command should easily bring him back onto line.

When Count is not leading he pulls well; but when leading he often runs with a slack trace. There may be a short-lived improvement if the driver shouts "Get up Count", but you should expect that it will probably not last.

For normal direction commands I used "Auk a bit" for right, provoking a slight change in the required direction. To get a sharp right I used "Auk! Auk! Auk!", but much louder, and possibly using a bit of brake to make the point. For left turns I used "Irrrra a bit" for a slight change or several loud "Irrras!" for a sharp change, again with the possible use of the brake. "Ahhh now" is the call to stop. Most drivers have a problem with their "Ahhh nows", especially when following another sledge on a good

surface, when a lot of brake may be required. The commands "Are you ready dogs?" followed by "Up dogs!" followed by "Huit!!" has been replaced in the Huns by the simple "Er, hem" (the polite coughing sound that gentlemen make when someone has farted) followed by a "click" click" made with the tongue against the roof of the mouth. The team still respond to "Are you ready dogs etc?" but the new command gives a good response.

Encouragement for Count to obey a command is best provided by shouting "Count!" If there is no response, repeat, "Count!" followed by the command. If there is no response, Count is trying it on, but before beating him, try stopping the sledge and repeating the command. Beating Count should only be an option if all else fails and it might be better to pat his head and rub his belly, because he doesn't like to think he is being ignored.

When considering commands, encouragement for any dog slacking or skiving should be "Get Up! followed by the dog's name e.g. "Get up Tuva!" or "Get up Nasr!" or use a general encouragement such as, "Haul away! Or "Haul away dogs!" When you feel that you really need that bit of extra from the team, shout the names of some of the dogs e.g. "Get up, Hamad, Nasr, Kelly, Tuva etc. If these four throw their weight into the trace, they can move anything.





Myrna (born 7.4.68; base weight 59lbs)

Myrna started life as a Stonington bitch out of Princess, leader of The Terrors, and although very young and playful, she was brought into Adelaide as a potential lead-dog for The Huns. At the time of writing her training is on-going.

I felt it best to teach her to work properly in harness before lead training, so I initially ran her in the back pair with Kelly, where she soon became a really good worker and learned a few tricks like unballing her feet and peeing on the run. She was kept at the back for 3 months, and then switched to being a front-pair dog. When the opportunity presented itself to lead on existing tracks, she was moved to the lead for a series of short runs. Initially she was reluctant to stay in front, but some judicial beatings and the shouted command "Myrna, get up!" seem to have done the trick and she now stays out front.

By running behind Count, she learnt the commands for herself, but even with Count leading, I addressed commands to Myrna and encouraged her when she followed Count. This training system seems to have worked because the first time I ran her as leader without tracks, she led for 9 miles without putting a foot wrong!

On subsequent training runs, if she did not respond, I stopped the sledge and gave the command. This usually worked, but if she is too playful, or won't keep in front, I recommend a good hiding and this usually results in good behaviour for the rest of the run, because when she is doing wrong, she knows it. Another strategy I used was to chase her round to the required direction while shouting the relevant command, with tons of encouragement when she does well. "Good girl Myrna!"; "Yes! Yes!"; or "That's it!" seemed to improve her response i.e. if she tentatively makes a move in the right direction, a "Yes! Yes!" from the driver usually made her complete the move.

In summary, she is now a good worker and usually well-behaved. When on heat, her big quim flashes may cause havoc in the team. Last heat was 28th July 1969 and the intention is to mate her with Otter at her next heat.

She can be spanned on the main trace but has spasms of chewing that are worse when she is on heat. She has also been known as an escape artist so the collar clips have been retained on her harness.



Castro (born 1.8.68; base weight 80lbs; field weight at end of season 68lbs)

Castro was a young Stonington dog that joined The Huns at the end of August. Although carrying the reputation of being "sick in the mind", he's a good lad and has worked well from the outset. As a young dog, he gets bullied, especially by Nasr, who has ago at Castro every opportunity he can contrive. He is still playful but will probably grow out of this. When confronted by holes or cracks, he becomes scared and will use all has strength to drag the other dogs away, assisted by Myrna. Once the latter has become a better leader, it may prove advantageous to bring him and Count further back – but keep Count away from Tuva.

Castro is the worst chewer in the team and if he gets the chance will eat every bit of nylon on the sledge. On his first "big chew" he got through two side traces and a ski-jore line! Before starting on the night span! While he may grow out of this, if he is put on the main trace at night, be prepared for devastation before dawn.

Because he gets duffed up by the other dogs, he is slightly subdued and cowers if the driver shows they are angry. As he matures and gets better at fending for himself, he will probably show a more independent spirit for he has all the makings of being a very fine dog.



Hamad (born 5.3.68; base weight 83lbs; field weight at end of season 65lbs)

Hamad is the brother of Nasr and Hen out of Ziggy and is the steadiest dog in the team. Although he gets on well with his brother, Hamad may sometimes initiate a team fight by starting a "friendly with Nasr, and then the others join in. While it is just Hamad and Nasr, a shout will usually be enough to break them up.

Unlike Nasr, Hamad is a very reserved dog and doesn't muck about when there is work to be done. He pulls well all the time, and when the going gets tough he seems to work even harder. While not a "character", he is probably the best dog in the team.

When I first took over The Huns, Hamad chewed quite a lot and on one occasion "noshed" his harness. Since then, he has been on the night span and it is possible that he has grown out of his chewing phase. When you stop for the night, once released he will automatically take up his place on the night span –something I have encouraged and to date this has never caused any trouble, such as causing a fight or Hamad running off. He is so well-behaved he rarely needs beating.

You need to keep a check on his coat for ant hairless patches, especially around his collar and on his chest. "Temedex" will clear this up.

Because Hamad and Nasr are such a good pair, I recommend that they are not split up.



Nasr (born 5.3.68; base weight 85lbs; field weight at end of season 67lbs)

Brother of Hamad and Hen out of Ziggy, Nasr is a real Huskey character. He is very demonstrative and his appealing methods to show what an "ace" he is have left me with the opinion that he is an extrovert of the first water. He runs well with Hamad, and while he never starts fights with him, he'll have a go at any other dog in the team, creating the impression that he only fights for fun, not malice, and consequently has no enemies in the team.

Nasr works well most of the time but may try to run slack if he thinks that he can get away with it. A quick "Get up Nas!" usually sends him trotting forward.

I have always kept him on the night span so his chewing tendencies remain unknown. He has a really smart trick that he likes tom pull. He winds his chain round the night span wire until he can clip himself off. When caught doing this, it has earned him a beating, as it puts a hell of a strain on the wire and Nasr has already snapped one using this technique. When you do have to hit Nasr for the first time, ensure that you show him who's Boss and hit him hard, because he thinks everything is a big joke and he can be a bit stroppy.

He is also crafty in other ways. If you have to beat him (or Hamad) you need to hold him down with your foot on his harness, otherwise he will drag the rest around and try to get a fight going. Other than these eccentricities, Nasr is a great dog and a real Mate to his driver. Like Hamad, he can be let off the main trace at the end of the day and he will take himself to his place on the night span. I always put Hamad and Nasr on the night span before moving Castro – I anticipate that Nasr might have a go at the latter if we moved Castro first.



Tuva (born 3.12.66; base weight 90lbs; field weight at end of season 71lbs)

Tuva is a powerful hound but tends to be lazy at times, so you need to keep on top of him. Because he is predisposed to be pugilistic, I have always run him paired with a bitch. He is also inclined to stir trouble by growling and snarling at other dogs, particularly Kelly.

He originally ran as front pair with Ziggie, but they played too much so I split them up. When Tuva was a front pair dog, there was always trouble brewing if he caught up with Count, resulting in several fights. Before Rita was in-pup and withdrawn from The Huns before the journey to Stonington, she proved to be the best partner for Tuva, on whom she was a steadying influence. I recommend that this partnership is renewed as soon as possible.

Tuva has one particular bad point that he tries on from time-to-time: he tries to come the hard man when being beaten. At first, he bared his fangs to un-nerve and intimidate me, but I persisted and he now resorts to a discontented snarl. If he does try this on, you will need to really lay into him to show that he cannot muck you about.

If Tuva needs to crap on the run, you need to make sure that he does not get entangled with Kelly. They both like to fight and are the hardest protagonists to break up.

I have never known Tuva to chew. In camp he is a noisy dog in the mornings.



Hen (born 5.3.68; base weight 58lbs; field weight at end of season 55lbs)

Hen is the sister of Hamad and Nasr out of Ziggy and was only an occasional choice of dog for The Huns until she replaced Rita during the latter's confinement. She is now a fantastic worker and can be relied upon to pull her little heart out. Because she can be a bit playful when near the front, she performs best when run towards the back of the team

At first she was extremely timid, but is better now. However, she is easily frightened, and if she senses that the driver is angry, she can cause trouble by running all over the place while you go down the line to belt some other dog.

Her timidity is such that whenever the driver tries to move her about by leading her by her harness, she yelps and screams blue murder, so it is best to get hold of her collar, when she is less stressed. Similarly, she is reluctant to have her harness put on or off and lies down in the most infuriating way that might make you angry. Neither words of assurance or beating has had any effect on overcoming these issues, so I can't make any recommendations. In spite of these peculiarities, they are off-set by the way she works – she is the hardest worker in the team and will pull forever.

She is an occasional chewer, especially when on heat, and such is her lust for nylon that she was individually picketed when on heat, so avoiding the ruin of many traces.

On balance, I would bring Rita back into the team.

Last heat October3rd 1969.



Kelly (born 4.2.63; shot 13.12.70; base weight 88lbs; field weight at end of season 78lbs)

Kelly is an ex-Stonington Terror; an incorrigible rogue; a real character and an old hand at sledging. He was moved to Adelaide as a stud dog and is consequently possessive of the bitches he serves. I'm sure he considers it a personal affront when he is not allowed to mate a bitch on heat!

He is a really good dog that can always be relied upon to work steadily. He is best used for his power as a wheeler in the back pair. Because of his age, he is no longer fast but will always pull hard and considers it his duty to keep the sledge moving.

Kelly likes a punch-up, but his position in the back pair doesn't give him all the opportunities he would like. A state of mutual respect currently exists between himself and Tuva. They growl at each other but are not too bad as long as the driver avoids getting them snagged up together.

Kelly now has arthritis in his fore-legs, so great care is required when putting him into his harness. I usually folded his leg up to thread it through, but it may help if he uses a slacker harness with slightly longer leg loops. However, his arthritis has never prevented Kelly from working hard.

Some time ago, Kelly got his right fore-leg punctured by Otter and the old wound has opened up a couple of times with puss formed. I treated this by cutting away the sloughed skin (no sedative) and packing the hole with "Teramycin" ointment. If this wound gets bad, a course of penicillin should solve the problem.

Kelly is exceptionally well-behaved, never chews and can be let off to accompany you for a walk – he even sat still on a walk while photographs were being taken of a seal pup! He knows the score and has only required beating when he was the cause of a fight.

If the sledge is moving really fast, Kelly will not be able to keep up and so should be let off and he will follow the sledge.



Ziggie (born 3.12.66; base weight 62lbs; field weight at end of season 55lbs)

Ziggie is the mother of Nasr, Hamad and Hen and is an exceptionally good bitch, happiest when she's working and so pulls hard all the time. She is well-behaved, very fond of humans and likes attention. She always tries to please.

When she ran in a pair with Tuva, she played around a lot, but once split from him and ran with Otter, she never gave any trouble. She now runs back pair with Kelly. Because she works so hard, she had a hairless patch on her chest that cleared up with the use of "Temedex".

She is intelligent and I have tried using her to lead, but she treated it as a game and kept dropping back to see what the other dogs were doing. In her old harness, she was a super escape-artist, but that has been cured by giving her a tighter harness.

Being a chewer, at the end of the day, she can be let off her trace and she will go to her place on the night span, although sometimes she will wait until the driver walks over.

In a fight, Ziggie is not averse to chewing a dog or two.



Otter

Otter is an ex-Stonington dog from the Admirals who is now an Adelaide stud dog. A very powerful and hard-working dog, when moved base, he was already suffering from arthritis in his back-legs and so was not brought into the team until he had responded to a course of 100 "Arlef" pills. This led to my decision to use him on the mid-winter journey to Horseshoe and Stonington. However, in spite of his long experience in field journeys, in "deep soft" conditions he has great difficulty, flounders badly and can barely keep up, resulting in my decision to replace him with Castro once we got to Stonington.

Otter is a "grand old man" with a pleasant nature that can no longer cope with extended field journeys. But if allowed, he will still be useful and enjoy short "island jollies" and fulfil his stud services.

Otter has the reputation of being the biggest "gannet" on Grahamland and holds the Stonington Nutty Crunching record.




Rita (born 21.7.66; base weight 72lbs; field weight at end of season 60lbs)

Rita is a very reliable, hardworking and experienced bitch. Running her with Tuva will get the best out of the latter, for Rita will accept no nonsense from him. Mated with Kelly, she was left on Base for the midwinter journey to Stonington and subsequent spring programme. Rita can be a bitch-hater and proved to be a good mother to three, fine pups – Chinook, Mistral and Zonda.



L- R Mistral, Chinook and Zonda



Otter demolishing a 7lbs chunk of seal

As far as the general care of the dogs was concerned, they always lived outside and were fed only once every other day, when they get a chunk of frozen but slimy seal meat weighing between 5lbs and 7lbs, and keeping the seal pile stocked was an on-going task. Regardless of the field programme and research issues, one of the base functions was to "fly the flag" in support of Britain's territorial claims to the Grahamland peninsula. Consequently, the Base Commander was officially appointed as a magistrate, and one of the minor functions was to issue permits for seal hunting, most often achieved by an official Permit-holder using a .303 Lee Enfield rifle (1917 vintage). The dogs provided transportation of seal carcases when there was sea-ice; otherwise it was a question of hunting seals on ice floes using the base dinghy. Whenever possible, the "John Biscoe" would divert from base relief work to hunt seals to supplement the seals taken by base Fids, and the impact of the bloodthirsty scenes associated with a major seal hunt should not be underestimated.

Most of the seals taken were Crab-eaters, with a few Weddells and the occasional Leopard seal.

From a letter to my parents: "in blazing sunshine, the "Biscoe" battered out a harbour in the the fast ice of Stonehouse Bay, at the foot of Adelaide's Shambles glacier. It was time to go sealing, so having secured the ship in the fast ice, we dropped over the side and went off in search of seals and in twos or threes we set off towards various groups of Crab-eater seals basking in the sun, each seal showing as an elongated speck and up to a mile or so away. The idea was to drive the seals as near as possibleto the ship before shooting them, at the same time, preventing them from gaining the safety of the sea at the ice edge.



Seals are not happy travelling on land or ice, and so they frequently had to be prodded with longhandled blubber-hooks, and at other times had to be given a breather. Only the occasional seal seal gets upset enough to try and bite the person driving it.

Once near the ship, or if the seal will not go any further, two of the crewmen (reputed to be the best shots) would shoot the seals through the head at point blank range with soft-nosed .303 bullets, often dum-dummed to make the kill more efficient ... The crew men were good shots, and although shooting from ranges varying from 3 inches to 75 yards, nearly always got a head shot, just behind the eye and towards the neck. The trouble sometimes begins at this point, because some seals just will not die easily. Sometimes with as many as three bullets clean through the head, the seal would start thrashing around, trying to bite anyone near it and also make for the water. Our job would then be to finish them off by cutting the throat. This unenviable task was left to us Fids, along with the gutting.



The seal would sometimes spurt blood about 6 feet or so as it was ripped up, so we were soon literally covered in blood –and the amount seemed to be exaggerated by the whiteness of the snow and beauty of the surroundings. And it was not just a visual thing, because blood has a strong smell, to say nothing of the gutting. The first couple of hours were all very shocking, and by this stage only 5 of us Fids would have anything to do with the killing or dressing. The other 15 Fids took a lower key role by helping to load the carcasses onto the ship.

I had one particularly traumatic experience. It happened after we had pulled out of the fast ice and were steaming slowly along the ice edge and between the floes, waiting for seals to haul out. Three appeared on some rotten ice that would probably have broken up if the ship pushed into it, so the seals were shot from the foc'sal head at perhaps 70 yards range to prevent them from dropping into the water. All three seals had been seen to quiver then lie still (all head shots) so I was dropped off the moving ship on a strop suspended from the derrick to cut the throats and gut them. I would then drag the seals to the edge of the floe with my blubber hook, put strops around them and hook them onto the derrick strop when the ship made a second pass. At least, that was the plan. As I put my knife to the throat of the first seal, it seemed to put new life into it and it started to try and bite me,

with blood flying in all directions. Standard practice for this eventuality was to stun the seal by bashing it over the nose. In my several blows to effect a stunning with my wrought iron blubberhook, the latter was bent to a right angle before the seal was still enough for me to stab it to death. On a separate occasion I witnessed a half-gutted seal resurrect itself and make for the water with the butcher sitting astride it. The seal was half in the water before the gutter got his knife up into its heart.

The sad part is that there is no way of taking seals in a more humane way than we do, and we have to take seals to feed the dogs. By the time we got back to Adelaide, we had taken about 140 seals in this way. Perhaps the nearest consolation is that we had some biologists on board who collected as many measurements as possible, along with brains, jaw-bones and sexual organs.

But the messiest and worst job was yet to come. The carcasses were simply piled on the deck and lay in the direct sun, also generating their own heat through putrification. The blubber was soon turning green and stinking to high heaven, and once back at Adelaide the 400lbs carcasses had to be man-handled several times to get them from the ship's deck, to the scow, onto the jetty, onto a sledge and so to the seal pile. Can you imagine the state of my sealing clothes? And the smell!"

Preparing and distributing the seal feed was quite a chore and involved cutting up old carcasses that may have been on the seal pile for over a year. First the carcass was flensed to remove most of the blubber – because this would have fouled the dog's coat and ruin its insulation qualities. Then it was chopped into the right size chunks with a felling axe. This was the messiest and most unpleasant part of the job, because small pieces flew off in all directions and got stuck to your clothes. The smell was pungent in the extreme, so those Fids that regularly did the dog feeds kept a dedicated set of wind-proofs for this purpose. They were easy to spot because they soon become black and shiny with rancid seal fat.

The following letter extract provides an insight to sealing from base.

"On one relatively warm and sunny day in mid-January, Steve and I could see what looked to be an exceptionally large seal on one of the floes a few hundred meters off-shore. I collected the rifle. Then we both launched the dinghy and Steve rowed us out to the floe.

It was not just a large seal; it was a very large Leopard seal. I was not prepared to take any chances and shot it twice through the head before cutting its throat and gutting it. We took pictures and struggled to tow it back to the jetty. It was a magnificent specimen, and once ashore, I extracted its canine teeth so that later I might turn them into pendants".



Leopard seal shot off Adelaide, January 1970