

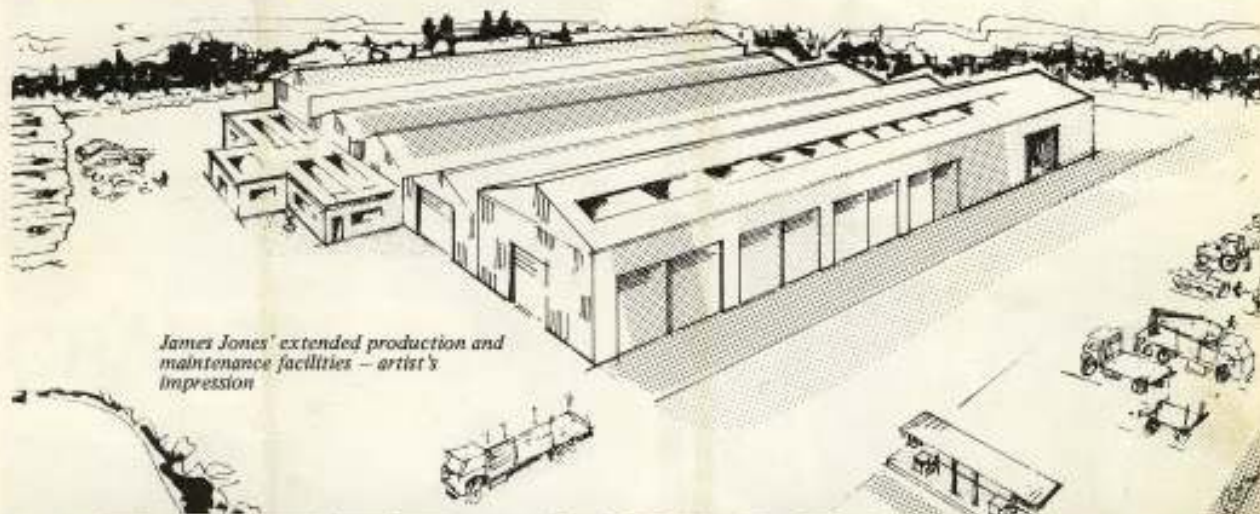


SKYLINE

Forestry engineering review from James Jones and Sons Ltd., Larbert, established for over 100 years

Number 2

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James Jones' extended production and maintenance facilities - artist's impression

UNITED KINGDOM: JONES BUILD MORE

A SUBSTANTIAL expansion is currently taking place in the manufacturing area within the engineering section of James Jones' Service Division. 20,000 sq ft of enlarged facilities will help meet the forest industry's requirement for specialised Jones-built forestry and logging equipment.

As everyone actively involved in the industry knows, the scale of operations in the UK is small by world standards but the range of timber size, terrain, and product is as varied as anywhere. As a result James Jones & Sons have to concentrate on producing the variety and flexibility demanded by the industry.

FAIR AND SQUARE

The wide range of requirements is being met fair and square by the Service Division management team who are allocating a significant share of the extra space for the development of specialised services, so essential in modern forest operations. Design and drawing office, hydraulic assembly and test area, specialised machinery, press shop and fabrication areas are all being enlarged.

Export orders which have their own special demands for space such as handling and stuffing containers, mustering and packaging of large parts orders - sometimes a customer's total requirements for 2/3 years at one time - or undercover area for packaged goods awaiting shipment, are all being given special consideration.

Better facilities and a high standard of service are essential if the competition from abroad is to be met.

HARDWOOD CRANE



KIRBYMOORSIDE based haulage company, T. Cook & Sons have been involved with timber haulage for 40 years. The increasing volume of Yorkshire timber has given Cook the opportunity to increase his fleet of specialised vehicles offering a timber haulage facility.

Already running three truck-mounted Highland Bear 5000s Eddie Cook saw a need for equipment capable of giving a service at the heavier end of the trade.

His choice of a Highland Bear 10,000 fitted to an 8 wheeler, meets the requirement for a versatile but rugged haulage unit able to handle both hardwood and softwood - last year Cook handled 25,332 tonnes.

Driver Mike Pickard who has been operating Cook's Highland Bear 10,000 for over a year is pictured here loading a parcel of diseased elm in Claverdale, Warwickshire - the value of a properly thought out self-loader really paid off on this site as narrow roads gave bad access, and visibility was impaired by high hedges.

The crane operating position gives Mike excellent visibility and helped him to negotiate the high hedge and power lines without any damage. It was not long before he had his load up, and was away for the North.

NEW HIGHLAND BEAR OFFERS EVEN MORE

THE HIGHLAND BEAR 5000 has gained wide acceptance throughout the UK forest industry whether in use on road haulage vehicles, independent forest loaders or in processing plants.

The new Highland Bear 6010 has many of the proven features of the 5000 and in addition has some new ones which will be appreciated.

The new slimline pillar is built in Larbert and is offered with a variety of different heights to meet special load requirements.

425 degrees slewing is available when needed. The range of grapple and rotators has been expanded to include rotators offering 300 degrees. Continuous rotation and additional Highland Bear grapples are available with capacities of 4, 5 and 6 sq m.

Jones' confidence in this new crane, which is assembled in Larbert with over 60 per cent UK content, is demonstrated by all major components being warranted for 12 months.

SERVICE

Drive chains and sprockets last longer when the chain is properly adjusted and lubricated.

REMINDER

EDITORIAL 'ANOTHER LONGLEAT?' 'YES...IN FOUR YEARS.'

LONGLEAT ESTATE, courtesy of the Viscount Weymouth, was the site of the National Forestry Show organised so ably and efficiently by the staff of Longleat Estate and the Association of Professional Foresters. As an exhibitor we found the forest facilities adequate and the organisers helpful and efficient.

Having said that, we hope that any organisations who feel like staging a similar exhibition will take note that although the exhibition was well supported by APF members, the turn out of potential customers from the forest industry for our type of equipment, at least, was extremely low.

Whilst we feel it was a worthwhile exercise in general terms we cannot see the expense for the parties concerned being justified more than every third or fourth year. What the enthusiastic organiser of forestry demonstrations tends to forget is that all or most of the exhibitors also exhibit every year at national agricultural shows throughout the UK.



Sandy Brownlie of A and R Brownlie of Earlstoun, president of the Home Timber Merchants Association of Scotland, Ronnie Gordon of John Gordon and Son of Nairn, and Peter Cruickshank from Timbuyers were the only keen types from the Scottish timber trade who made the journey to Longleat.



The Trailer Alp is designed for precise control but operator Nigel Grant exceeded himself when he brought up a suitable bottle of our national beverage from the depths of the forest for presentation to Lord Bath.

Left to right: Longleat head forester John McHardy, Lord Bath, and James Jones Service Division director Airlie Bruce Jones.

At James Jones we think about our customers and their growing needs - that is one of the main reasons for building the new premises.

We acknowledge that but for their continued support - both at home and abroad - we could not continue development.

So here is a word of thanks.

Let us look forward to the continued growth of our industry now entering a period when there are more grounds for optimism.

Tree line— outer limits

THREE YEARS AGO BEAS Helicopters of Coventry had established themselves as an effective force in aerial forestry fertilisation but were bedevilled by labour problems.

The continuing need to find a supply of hardy souls to replenish one hopper - capacity 15 cwt - while the helicopter sped off to spread a second on a two minute cycle, was becoming increasingly difficult to satisfy.

The problem was put to James Jones & Sons who proposed a special design of loader with a low profile which could work below the helicopter. The Unimog 416 was selected to power the unit because it could provide not only a solid base for the loader but also a fast moving transporter to move from site to site anywhere in the UK, and at the same time give the good off-road performance essential in many forest areas.



The all-in scene: all components visible in the Minibulk/Unimog System including the cage with the used bags.

The Highland Bear 5000 crane is mounted so that no part of the crane is higher than the operator's head.

A very good understanding between the team members whose jobs are largely interchangeable outside the engineering skills was apparent: obviously the men have to know what to do with a minimum of supervision if the team leader is airborne much of the time.

BEAS' operations manager Ted Spencer told 'Skyline' that in spite of more than the usual quota of low temperatures, high winds and snow, the operation north of the Border lost hardly a day all winter.

Their Lama and Bell 47G5 helicopters are principally engaged in forestry fertilisation but additionally carry out survey work, aerial lifting for the construction industry and occasional one-off jobs like transferring fish from nursery to reservoir and mountain rescue work.

The James Jones Highland Bear 5000 on the Unimog provides the muscle to keep the hoppers moving to the needs of the helicopter pilot. The biggest snag which dogged the system in the early days - getting the 15 cwt bags to flow freely - has been long overcome.

At Ardgartan the task was to spread 80 tons of phosphate on three mountain top sites where the Forestry Commission wanted to push the treeline higher. Part of the area had been recently clear-felled.

Another section had been ploughed and planted two years ago and though the 'take' had been good, deer had been responsible for some damage and the Commission were concerned to help this crop move quickly beyond deer risk.

The Commission's objective was to consolidate between the old treeline and the fence line and BEAS demonstrated the value of their mobile operation for both soil preparation and improving a standing crop.



Mini Highlander — on trial

THE MINI HIGHLANDER, first shown at Longleat in 1976, has been undergoing rigorous assessment trials with the assistance of various logging contractors and forest management companies.

During one of the trials in southern Scotland, SWOAC were able to report that on a first thinning with an average tree size of .06m³ extracted over 250m on flattish, wet and deeply rutted ground, production averaged 2.4 tons per hour with an average load of 0.7 tons.

The operator was particularly impressed with the simplicity of control and the ease with which he could travel between trees. Not only was production up to satisfactory levels but the damage to standing crop

was negligible.

The Mini Highlander is built in Scotland as a lightweight forest tractor capable of extracting thinnings but sufficiently flexible in design with hydraulic linkage and PTO to be used for general forestry duties including weeding and trailer haulage.

Trials of this machine are continuing and it is currently in southern England where a number of private estates will be assessing the machine under their own conditions.

CRANES... for all seasons



NEW WAYS of getting more out of the Jones' range of Highland Bear cranes are always being developed: — at the Spanboard Mill, Northern Ireland, a more dramatic departure from the generally accepted mounting positions has more than justified itself. (See insert).

Here the James Jones self-powered Highland Bear is shown with an independent 25 hp Lister diesel and pump providing the power.

An alternative mounting position means that when the crane is tall mounted a full load of chipboard can be

delivered to the end users. With the crane in the alternative central position a full load of 2m pulp or sawmill slabs can be hauled back to the mill.

Independence from the tractor unit ensures that this unique combination of Highland Bear

and trailer can be kept working with alternative tractor units.

The Highland Bear on the other articulated trailer is situated off centre to allow the carriage of 3 banks of 3m pulp. The crane can cover the trailer bed with pulp or sawlog sizes.

HIGHLAND SORTER/ LOADER FOR THE FORESTRY COMMISSION

The use of a sorter/loader for mechanising operations at the landing area has worked well in many areas where cross cutting, loading or transfer at the landing is involved. The addition of a grab saw for cutting logs or pulp to length without touching it by hand is a natural extension to the machine's capacity.

Here it is seen working in the Forest of Ae, Dumfriesshire.



NEWS FROM THE WOODS

A QUESTION OF DESIGN, MANAGEMENT AND PEOPLE

Between March 1976 and May 1977 the James Jones/Geordie Duncan logging team worked in Sherwood Forest harvesting windblow alongside several other organisations who were using more expensive imported machinery.

The Highlander with Highland Bear 4000, eight ton winches and trailer extracted and loaded over 25,000 tons averaging 454 tons per working week.

The output from windblow was achieved by effective site management combined with the capacity of the unit to handle long lengths up to 35ft without difficulty which could then be easily loaded on to road trailers. When conditions or weather got rough the eight ton winches were always available to help.

The school of thought which presumes that UK-built forest machines cannot shift wood should consider this.

TIME SAVED IN AUSTRALIA

RODDY DAVIES, our representative in Australia, writes that he supplied E and R Hay of Eugowra with an 8000/2H Igland Jones hydraulic winch for their logging operation in the Peak Hill area of New South Wales.

Mounted on a County, it is used for logging Cypress pine and Callitris Columnaris — an Australian indigenous species used mainly for structural purposes because of its resistance to decay and termites.

Roddy says E and R Hay were delighted. They finished their allocation six weeks ahead of schedule as a direct result of acquiring the 8000 winch.



Loads in Cyprus of up to 2 cu m were quite normal.

CYPRUS 'growing like carrots'

AS A RESULT of the recent hostilities in Cyprus large areas of the natural pine forest in the Troodos Mountains in the south of Cyprus were burnt or badly damaged.

Recovery of as much timber as possible from the inaccessible areas presented a problem and James Jones supplied the Cyprus forestry service with two tractor Alps. Hugh Thom and George Carruthers went out for three months to train operators.

Heavily tapered trees "growing like carrots" and loads up to 2 cubic metres were quite normal, and the Alps coped easily. One was equipped with the 8000A/2H winch for longer range work, up to 600 metres if necessary, and the other had a 4000/2 and a logging plate fitted so that the tractor could also be used for ground skidding when required.

It is interesting to note that the previous harvesting method in similar clearfell areas involved cross-cutting the logs into 1½ metre lengths and manually rolling them as far as 600 metres down the mountain.

The local foresters reckoned that a month's work was done in a week by the tractor Alp. Pictures - thanks to George Carruthers.



Hugh Thom with Cypriot foresters under instruction on the Alp system.

STEEP.... IT CAN N

STEEP is one way of describing the rapid increase in the cost of logging in forest areas where costs are expected to be greatest.

The price of oil reflects that as a fossil fuel its resources are finite in the environment in which foresters grow their trees. That comfort with a naturally renewable resource is not always justified when the cost is caused by a man-made combination of factors.

'ALP' a misnomer?

People tend to associate the Alp Skyline with steep ground. But foresters today are pushing the Alp further down the hill.

In the rolling wet peat forests where Sitka grows so well - the stronghold of skidders - people are becoming more concerned with root damage to the residual crop. The need for frequent moves and set-ups in thinnings is always an apparent drawback to a cableway system. However, this is where the Alp's fast rigging system really scores.

One statistically minded manager, with real life experience of both systems, pointed out that the time spent in set-up of an Alp was substantially less than the normal down-time lost on his skidders.

Fast growth in many parts of the world has led to three rotations in a short space of time and to the forest.

However attractive cableways may be, the high initial cost and with these things in mind work in the UK, Canada, Central America, Africa and elsewhere.

In many cases compaction and erosion are of its top soil, the soil in its turn polluting the water.

Selection felling in steep areas has long been a problem. The world over, the same factors have been clear.

The temptation to use earth moving power is strong. But the long term effects are becoming more apparent. The forest area to skid trails and roads, compared with the cost of fuel oil and the machines themselves.

Perhaps this is the moment, with our changing circumstances to pause and consider whether the time has come for practising 'small is beautiful' might not be.

Just consider for a moment in engineering terms (sometimes more difficult for foresters with a specialised training in silviculture) the comparison between cableways and skidders working in thinnings both loaded and unloaded on a

15 degree slope terrain.

The cableway transport time and the wire man along a slope free of bumps and a skyline.

The skidder to transport 4 ton weight over a bumpy and for man and

Both machines payload capacity 2 tons. Skidders restrained, the road with the force

The skidder down the hill it went up a slope using most of its (60 hp) as slopes, rock ches to move weight of 5½

The service complete the out that the power unit is half that of due to the conditions of

At the time of availability of unit is higher than for today -

CABLEWAY SYSTEMS WORK WORLD-WIDE

STEEP.... WHAT IT CAN MEAN

EP is one way of describing the rapid increase in the cost of oil. To foresters, steep tends to mean steep areas where costs are expected to be greatest.

The price of oil reflects that as a fossil fuel its resources are finite. Equally finite, but priceless, is the environment in which foresters grow their trees. That comfortable feeling that we foresters are involved in a naturally renewable resource is not always justified when we look at the destruction of sites caused by a man-made combination of natural factors and logging methods.

'ALP' misnomer?

People tend to associate the Skyline with steep ground. But foresters today are pushing the Alp further up the hill.

In the rolling wet peat lands where Sitka grows well — the strong-hold skidders — people are becoming more concerned about root damage to the residual crop. The need for frequent moves and set-ups in thinnings is always an apparent drawback to a cableway system. However, it is where the Alp's fast rigging system really scores. For a statistically minded forester, with real life experience of both systems, it is out that the time set in set-up of an Alp is substantially less than normal down-time lost by skidders.

Fast growth in many parts of the world has enabled foresters to experience one, two and three rotations in a short space of time and to assess the effects of mass production applied to the forest.

However attractive cableways may be, they must ultimately produce wood at an acceptable cost and with these things in mind work is continuing on both flat and steep ground in UK, Canada, Central America, Africa and Australia and we are proud to be associated with it.

In many cases compaction and erosion are serious problems, the latter denuding the forest of its top soil, the soil in its turn polluting water courses and destroying marine life.

Selection felling in steep areas has long been practised in Europe and whilst the justifications might not be similar the world over, the resultant requirements for machine manufacturers have been clear.

The temptation to use earth moving power to master the forests in difficult terrain is strong. But the long term effects are becoming clearer — erosion in clearfell areas, loss of forest area to skid trails and roads, compaction from heavy machines, not to mention the cost of fuel oil and the machines themselves.

Perhaps this is the moment, with our difficult international energy and employment situations to pause and consider whether the discipline of utilising human skills efficiently and practising 'small is beautiful' might not have a place in the forest.

Just consider for a moment in engineering terms (sometimes more difficult for foresters with a specialised training in silviculture) the comparison between cableways and skidders working in thinnings both loaded and unloaded on a

15 degree slope of typical rough terrain.

The cableway uses 5-10 hp to transport the empty carriage and the wire rope at 900 ft per min along a smooth steel surface free of bumps and obstacles — ie a skyline.

The skidder uses up to 60 hp to transport its unladen 3½-4 ton weight at around 300 ft/min over what is normally bumpy and unpleasant terrain for man and machine.

Both machines have a similar payload capacity of about 1½ or 2 tons. Skyline loads, if unrestrained, will run down to the road without power, using the force of gravity.

The skidder will also roar down the hill much faster than it went up aided by gravity but using most of its available power (60 hp) as it negotiates steep slopes, rocks, stumps and ditches to move its now 'all-up' weight of 5½ tons.

The service engineer will easily complete the picture by pointing out that the useful life of a power unit skidding is less than half that of one working skyline due to the extreme working conditions of the former.

At the same time machine availability on the skyline power unit is higher. This leads management back to a simple question for today — can we by good

education, training and methods raise the efficiency of our winch operating teams to a level at which the obvious engineering advantages and economies of cableways can be utilised effectively?



Igland Jones 4000/2 Skyline cross cutting into pit prop log

CABLEWAY Africa's

THE AFRICAN forest area of the foresters trying to manage

Usutu Pulp gave 'Skyline' a mention on the rich and fertile of the second crop showed trails. As a result many of cable systems.

After a training visit to Scotland, Nick Mostert, SAPPI has been working for nearly two years on the development of highlead operations in typical African plantation thinning, and crews working in the Eastern Transvaal were producing some useful statistics. Outputs from first thinning over the year were averaging 1 to 25 cubic metres per di with maximum up to 35 cubic



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SAPPI operators winching two metre pulp from a first thinning of pine.



Igland Jones 4000/2 Skyline winching tree length eucalypt downhill and turning logs onto the road for cross cutting into pit prop length.

CABLEWAY — answer to Africa's logging problems?

THE AFRICAN forest areas are in a very delicate balance and recently Skyline met some of the foresters trying to maintain it.

Usutu Pulp gave 'Skyline' a shatteringly clear picture of the effect of heavy logging equipment on the rich and fertile tree growing areas of Swaziland. Aerial infra-red photographs of the second crop showed a clear pattern of reduced production on the numerous skid trails. As a result many of the future logging areas were being planned to operate under cable systems.

After a training visit to Scotland, Nick Mostert of SAPPI has been working for nearly two years on the development of highlead operations for typical African plantation thinning, and crews working in the Eastern Transvaal were producing some useful statistics. Outputs from first thinnings over the year were averaging 20 to 25 cubic metres per day with maximum up to 35 cubic

metres on occasions when conditions are favourable.

This included all set-up times. It is interesting that set-up times have been reduced to a normal average of 12/15 minutes with an observed record of only 7 minutes.

This was an example of what well thought out drill, good training, and proper site planning can produce.

Elsewhere Twello was pro-

ducing similar statistics working clearfells on small eucalyptus.

Bernard de Souza initiated the work as a result of a visit to Scotland in 1973 and under direction of the area forester Hennes de Villiers the operations were working well.

The next development was to train a team on skyline, which would extend the distance of operations up to 400 m.

Experiments with different choker arrangements were going on to increase the load size for these longer distances, resulting in increased production on both short and long distances.

A year of working by SAFI using the Alp system on thinnings had produced some consistent results in their extensive Graskop forest.

Working early thinnings in two metre lengths up hill over a convex slope is never one of the most productive activities. Nevertheless, a consistent 20/25 cubic metres per day is being achieved.

Minor changes to the felling patterns and chocking arrangements were planned, which should nearly double the load size and this should put the daily output over the 30 cubic metre mark. Work with the Alp winch on clearfells was also starting and areas where suitable landings had been planned were to be worked during the next few months.

In general the skill and training of the operators was impressive, and as experience is gained the levels of output are expected to increase.

Double Drums boost profits

LOGGERS in North Yorkshire are finding that the Forestry Commission's line-thinnings policy in Dalby and Copthorn forests dictates double drum skidding for reasonable profits.

The three Holtby brothers, plus Bob Dukes and Jim Coulson, between them run four logging operations in the area, each based on old Fordson tractors with new Igland Jones double drum winches.

Dukes led the way a year ago and the rest have followed suit this winter.

Bob and Holtby brother Stan join forces when conditions are too rough for skidding and set up Stan's highlead gear. James Coulson also has a highlead kit with his double drum Igland and is finding that on his current patch he can keep 3 fallers hard at it.

David and Derek Holtby run the fourth unit. All work the pulp and stake wood to the rideside for the local sawmills to collect.

Bob Dukes grafted away for several months until others realised he had an answer to productivity problems which single drum winch equipment could not meet. Over the past year he has shifted the best part of 2000 tons of prop and pulp wood - single handed.

Derek Holtby says that the double drum winch is the only thing that could make this part of the forest pay. The Jones tagline and choker system used on the Igland saved so much time that one of the team was freed from extraction work for felling.

The compartment where David and Derek were working when visited by Skyline was one of the poorer ones which, they



Jim Coulson with new double drum Igland Jones winch and highlead facility can keep a three man team of fallers fully occupied.

said had frightened off other gangs: "We thought we might grind to a halt", said Derek. "That's why we bought the winch and chains. But production has actually gone up."

"Where the road runs up the valley we were doing 80 to 100 tons a week in very bad conditions made worse by the way

the Forestry Commission marked the trees several years ago when double drum winches weren't around."

The problems were aggravated by last year's long dry summer which killed many trees, some of which of course were marked for felling, further reducing the count per acre.

In the long term all the gangs were fairly happy about the line thinning system which apart from providing the forest owner with large savings in brashing costs, seems to provide the only sensible way of giving access to unbrushed plantations.

SERVICE IN AFRICA



SERVICE in Southern Africa is being extended by Robert Hudson's branch office under Jim Jones, who has been with the company for two years.

Here Bill Baillie (right) demonstrates a service point to Jim (centre) and his assistant in the forestry workshop at Nelspruit.

Another familiar face to many people is Angus McPhee from Robert Hudson.

With a lifetime's experience in mechanical handling timber and sugar, he has been working with James Jones and Sons' equipment for six years. Recently he spent six weeks in Scotland with us training on cableway systems which he has since introduced successfully to a number of African logging operations.

Dressed for the heat he is seen behind his fine ash bar - a souvenir from his training visit to Scotland.



NEW HIGHLANDER FOR HARRIS



... a highly manoeuvrable machine equally at home in second thinnings or clearfell of small hardwood.

Forestry Commission visits Larbert/Leven



MEMBERS of the Forestry Commission from the North and East of Scotland Conservancies came together recently for a two day visit to the company's sawmill and engineering works at Larbert and pole depot at Leven.

Seen here at the Leven depot the group was shown the standards 'of quality control and specification required in the industry' and particular attention was given to British pine poles to meet GPO requirements.

On the left is James Jones area manager Sandy Hogg with a group including Robert MacArthur (pointing) and Robert Innes, Conservator North Scotland (centre).

L. G. HARRIS founded the Bromsgrove - based brush company that bears his name 35 years ago and, with an eye to guaranteeing eventual self-sufficiency in raw material, immediately bought his first parcel of woodland.

Now L. G. Harris have 2000 acres, with a chief forester - Edgar Jones - who told Skyline that the planting programme is beginning to pay real dividends. The first thinnings stage is some time past, second thinnings are coming into production and the 50 acres of clearfell which is replanted each year adds up to a sizeable harvesting operation.

Clearfell ash and sycamore go to the Harris sawmill for processing into handles. Smaller produce is peeled and stacked for use as broomheads. Wood waste is pulverised and used as fuel in the factory.

When Skyline visited the Harris operation, we found the latest addition to the Jones range of small front wheel drive skidders working in the 22 acre Kingswood hauling sycamore up steep slopes to a landing.

Manoeuvrable

This County based unit of 97 hp with full Jones' logging specification including approved operator frame, front logging blade and 5 ton double drum winches, meets the requirements for a highly manoeuvrable machine equally at home in second thinnings or clearfell of small hardwood.

Working to two teams of fellers, the unit has performed up to Harris's expectations, producing a regular 30 tons per day, working over the full range of ground conditions and tree size.

REPORT FROM OUR MAN IN VANCOUVER

JAMES JONES and Sons' man in British Columbia, Peter Bingham, writes that the interest in skyline logging systems today is growing caused by a variety of the increasingly tough environmental constraints and operational requirements.

The advantages of Skyline logging is that it comes to terms with the industry's current need on the West Coast - the reduction of road density, access to terrain inaccessible to conventional systems, the ability to work economically smaller irregular shaped cutting units and scattered settings, to cope efficiently with thinnings and clearfell on steep sites.

R. B. Hatch, woods manager of Triangle Pacific Forest Products, reported on the Island Jones Alp, which they had used on loan from the BC For-

est Service. This Alp was powered by a 60 hp British Leyland tractor and the winch itself was trailer mounted with a 25 ft tower and 5 powered winch drums for skyline, one each for haul-in and return lines and lighter ones for landing winch and strawline.

The result of the trials showed that the machine was simple and easy to operate with the cables light enough to be able to be handled easily, haul-in lines speeds of about 600 ft per minute were a little slow for distances over 500 ft, but

were not a major factor in determining productivity. More important were delays caused by long logs of 32 ft to 48 ft with diameters larger than 12 ins. These presented difficulties in thinning when side hauling to the rack. As a result, logs are cut to a shorter length to make it easier to extract without damage to the standing crop.

Dave Handley, supervisor of research for the Forestry Division of MacMillan Bloedel, reports on logging with the Alp during the past three years. Because thinnings have always been low in value and relatively more costly to produce than final harvest it follows that the design criteria for thinning

equipment should provide low capital costs, low operating costs and simplicity of maintenance and repair as well as reliability and versatility.

These considerations have led Europeans to consider the tractor as the prime mover and power source.

In conclusion Dave Handley reports that the machine had proven it can meet the criteria.

Productivity should average 15/20 cunits per day for a four man crew with piece sizes of 7/13 cubic ft.

The Alp has the capacity to yard up to 1800 ft - some linear programming is needed to optimise yarding distance and road costs. (2.9m³ = one cunit).

FASTEST CRANE IN THE WEST

A JAMES JONES Highland Bear mounted on an ERF180 eight wheel timber truck owned by B. & J. Davies of Bucknell, Salop has shifted 1008 m³ of 50 years old Douglas fir in 5½ days. Director Peter Davies told 'Skyline' he thought this might be a UK/European record.

Operator/driver John Venables recently moved a parcel of Forestry Commission timber out of nearby Mortimer Forest to the Charles Ransford sawmill at Bishop's Castle, four miles away. He averaged nine loads a day.

The Forestry Commission confirmed the story, saying, "That's the way to shift timber — we were surprised and delighted."

The unit gets worked harder, claims Peter Davies, than any other crane in the Welsh borders.

"It's working to absolute maximum capacity — so quick and efficient."

In operation since 1975, the unit consistently averages several loads a day — up to eight on short haul work, one or two on longer distances.

The 1976 windblow and Dutch elm disease provide most of the larger diameter logs with routine hardwood and softwood produce completing the picture.

Some twenty sawmills are served in the area with their various needs including poles, pitprops and general sawlog



timber.

The Davies trucks often work in pairs served by the one Highland Bear 10,000. Additionally the Bear is used to load and unload articulated trailers both in the forest and in the yard.

Time lost to date is negligible — limited to routine changes of worn hoses.

A Border Highlander



JOCK LAW from Lilliesleaf purchased his first Highland Bear eight years ago. It is still working.

Bought as a mobile and versatile yard loader capable of unloading trucks as they came into the mill, sorting and moving back-stock, feeding the skids and occasionally, where distances permitted, hauling into the mill, it's been a busy Bear.

Law's new Highland Forwarder is expected to do even more than its stablemate. Increasing distances and a growing requirement for roundwood in the mill meant that a more powerful unit was needed.

The final choice is a highly manoeuvrable small front wheel drive Highlander of 48 hp equipped with Highland Bear 2510, double drum winches and 8 ton trailer.

This machine, equally at home in selection fellings or clearfells extracts from stump to landing mainly working as a forwarder. When ground conditions become too severe for forwarding the winches enable it to perform as a skidder.

Having extracted from the stump to the landing, the Highlander is used to transfer its load onto highway vehicles or when shorter distances are involved, hauls an 8 ton load direct to the mill.

Jock's son Bert, who operates the new equipment, is highly delighted with it but he told 'Skyline' that "the old crane and tractor will be around for a long time yet".



Alp Skyline with control cabin working on 600 metre experimental thinning operations with the Forestry Commission forest in Ardgartan, Argyllshire. Three metre pulp length limits the load size which could be gathered for each turn governing the total potential output. Lessons learned and experience gained from systems developed by private contractors working longer lengths both in the UK and abroad should prove useful for these conditions.

Alps overseas — see our centre pages.

SERVICE NEWS

ENGLAND

Pape Advanced Projects have reached agreement with James Jones and Sons to provide a South of England service base for the full range of Highland forestry equipment. John Pape, managing director of the company, is in no way new to the industry. The company he has built up has been supplying loaders to the industry in the south east and his company also assembles timber treatment plants for use in the UK and overseas. Telephone: Egham 3177

CANADA

Our interests in the West Coast of Canada are being looked after by **Peter Bingham** of P.E. Bingham Associates, Vancouver. A stock of machines and spare parts are maintained under Peter's care.

See Vancouver report — page 7