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INFORMATION SHEET NO.: Cable Yarding - 1

Previous Sheet Reference Nos.: None

WHAT? Igland-Jones Mini-Alp Yarder on Timberjack 330 Skidder

WHO? Licensee: Northwood Pulp & Timber
Box 9000
PRINCE GEORGE, B.C. V2L 4W2
(contact George McKenzie - (604) 962-9611)

Owner-Contractor: Southside Lumber Ltd.
584 Brock Drive
PRINCE GEORGE, B.C. V2N 2E4
(contact George Britch - (604) 964-2580)

Distributor: Rebuilt by Okanagan Tractor Parts & Equipment Ltd.
1077 Fairweather Place, VERNON, B.C.
Starting in 1985, new units will be assembled
in Vernon by: Skylead Manufacturing Ltd.
1046 Middleton Way, VERNON, B.C.
(contact Marcel Payeur - (604) 545-4226)

WHY? Northwood needed low-cost cable yarding to supplement ground
skidding on limited areas of steep terrain.

WHERE? Payeur reports that six mini-alps are currently operating in
Interior B.C. Britch's two units are yarding on steep
escarpments in the Bowron River drainage, east of Prince
George. Current operations are in Hagen Creek and are part
of a spruce-beetle salvage program. Slopes range from 30-100%
on the yarder settings, and the stands are mainly spruce
running about 35 cunits per acre ($245 \text{ m}^3/\text{ha}$) of recoverable
volume. Timber size averages about 25 ft^3 (0.7 m^3) per tree.

WHEN? The mini-alp was developed in Scotland in the 1960's. Early
versions were brought to Vancouver Island for commercial
thinning experiments. George Britch obtained 2 reconditioned
machines in 1983 for Northwood's contract yarding.

HOW? The two mini-alps usually work on adjacent settings and share
one skidder to swing logs to landings. When observed, only
one yarder was working on a steep downhill yarding site with
maximum yarding distance of about 900 ft (120 m). Deflection
was good, with the yarder located on flat ground at the foot
of the slope.

The crew consisted of:

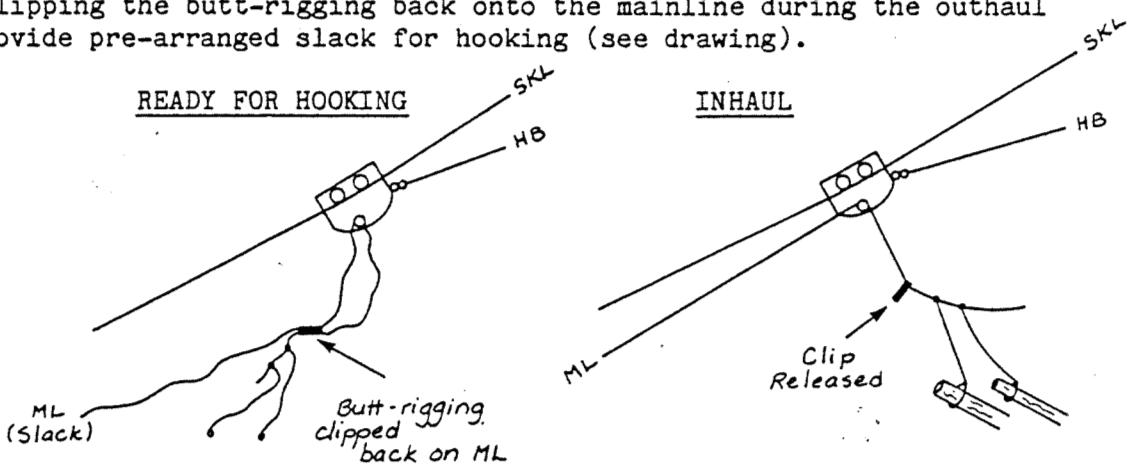
- 1 faller-rigging man (mainly falling, part-time setting chokers)
- 1 rigging-slinger (rigging and hooking)
- 1 yarder operator/chaser
- 1 skidder operator/landing bucker swinging yarded turns 200 ft to landing, bucking, decking (2 sorts for large-log and small-log mills).

Decked logs were hauled by self-load trucks at a rate of 2-4 loads per day.

The yarder was equipped with 1200 ft of 5/8" skyline, 1400 ft of 7/16" mainline and 1800 ft of 3/8" haulback, plus 2 guylines and strawline.

The mini-alp tower is 26 ft high. For added lift where needed, standing trees were rigged as backspars and also as intermediate supports.

For downhill yarding, the crew used a simple carriage with provision for clipping the butt-rigging back onto the mainline during the outhaul to provide pre-arranged slack for hooking (see drawing).



All communications are by radio (voice). Yarding/skidding production on downhill yarding averages about 30 cunits (85 m^3) per shift. For uphill yarding (not observed) the crew uses a Koller carriage in shotgun (gravity slackline) configuration and averages about 40 cunits (113 m^3) per shift.

George Britch hopes to add a bulldozer in future, for supplementary skidding and for self-sufficiency in landing construction.

There are recognized economies in working two yarders side-by-side, with sharing of the skidder swinging, bucking and decking functions. In Austria, paired small yarders are often trailer-mounted and moved by a single skidder, with even further savings in equipment cost.