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TRAINING LOGGING SPECIALISTS

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A **logging specialist** is seen as a person trained to plan and manage tree harvesting and log transport. This report analyses training needs for future Logging Specialists, and draws attention to current courses available for this purpose.

INTRODUCTION

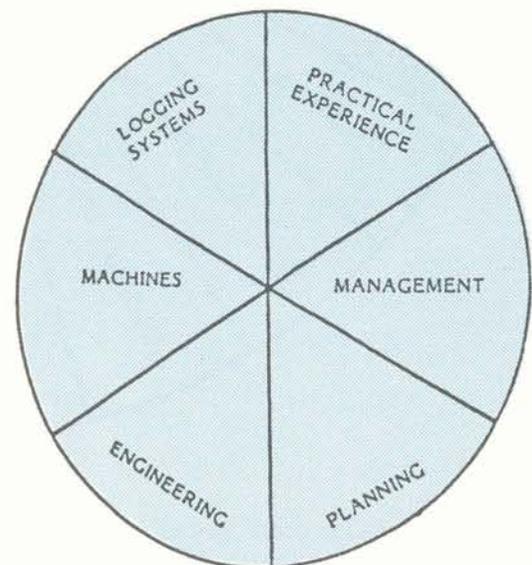
During LIRA's 1983 seminar on Research and Development in Tree Harvesting and Transportation, Dr. Ward Carson, a Senior Research Fellow with the Harvest Planning Group of the Forest Research Institute, presented a paper, "Is New Zealand Ready for Steep Country Logging?". He justified a need for logging specialist training and indicated that New Zealand would need to train ten to twelve such people per year to meet proposed expansion, primarily on steep terrain.

A discussion session at LIRA's Annual General Meeting in that year supported the concept of a training programme for logging specialists. It was felt that a modular concept with distinct courses presented separately would best meet the requirement and that LIRA and the Forestry Training Centre (FTC) jointly might be best placed to put together the programme.

LIRA examined the requirements at the 1984 seminar on "Human Resources in Logging". A proposal "Training the Logging Industry" was presented. This paper justified substantial investment in training logging specialists based on the very high proportion of total wood cost at mill door that harvesting and transport represent. There are penalties in not training in terms of high-cost operations, accidents and unnecessary environmental damage with their resultant political implications. The paper outlined a modular system aimed at making available training courses in all the technologies necessary to mould competent

logging specialists. Individual modules could be used as necessary for those for whom comprehensive training was not required. Suggestions as to what organisations should present the training in the separate modules and how it should be financed were discussed.

The following diagram illustrates areas considered to have distinct training needs in developing a competent logging specialist :



WHAT PROGRESS HAS BEEN MADE?

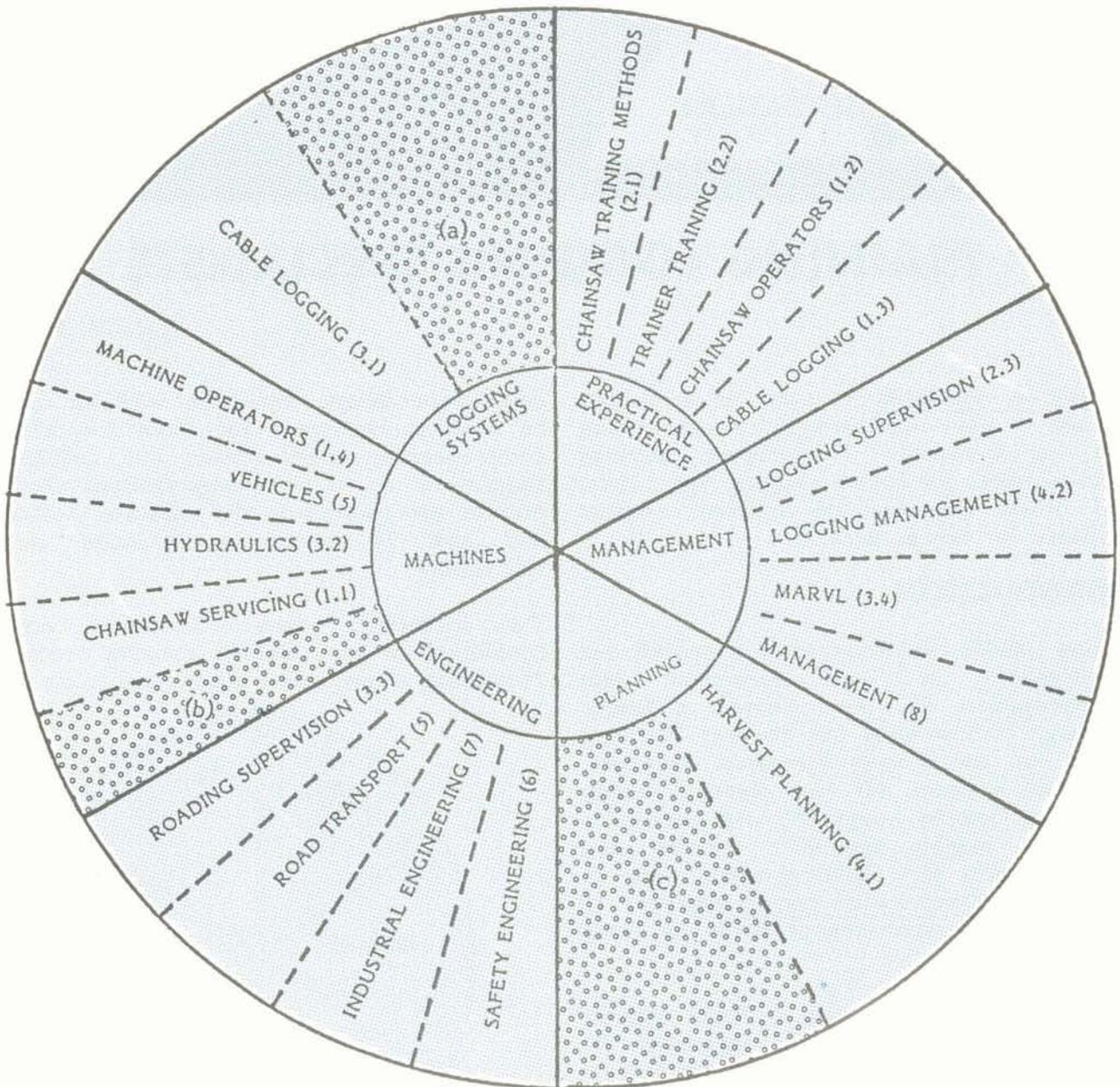
What courses are now available?

The LIRA initiatives in 1983 and 1984 stimulated both industry and the training institutions to initiate and revise courses of instruction. In particular, the N.Z. Forest Service as part of its revision of career paths in forestry, made changes in courses having a bearing on logging and made such courses more freely available to industry.

If we look, in relation to the above diagram, at what is now available to industry, we have:

LOGGING COURSES NOW AVAILABLE

(Numbers refer to Sub-headings on Pages 3-5)



There are still some notable gaps :

(a) Systems

There are not yet specialised courses dealing with either ground-based systems or transportation. It is expected that one covering the former may be initiated after the LIRA 1986 seminar featuring this subject.

(b) Machinery

There is need for a simple short course on logging machinery covering; machine theory, componentry, power and drive systems, functions and capability.

(c) Planning

More comprehensive treatment of planning, particularly the application of computing systems, cable mechanics and cost analysis are desirable. At present, such courses are only available overseas. The Forest Research Institute's Harvest Planning Group has developed computer planning packages which are available for incorporation into training programmes.

Information on those courses indicated above and now available are summarised as follows. Apart from these specialised short courses are the harvesting options presented as integral parts of the N.Z. Certificate of Forestry and the University of Canterbury School of Forestry undergraduate course.

COURSES NOW AVAILABLE TO THE INDUSTRY ARE:

(1) **Basic Level Training** - on working techniques, machine operation or maintenance

1.1 Chainsaw Servicing

at : Forestry Training Centre, Rotorua.

for : Those involved in servicing and maintenance of chainsaws.

contents : Describes functions, components, basic servicing procedures, fault findings and correction.

time : 4 days (dates in Forestry Training Centre calendar)

enquiries : Officer in Charge, Forestry Training Centre (FTC), P.O. Box 943, Rotorua

1.2 Chainsaw Operators

at : Tasman Forestry Limited, Murupara.

for : Chainsaw operators, both learner and experienced.

contents : Understanding, use and maintenance of chainsaw, basic felling, cutting techniques and procedures to meet Logging & Forestry Industry Training Board (L. & F.I.T.B.) certification.

time : 5 days but may be reduced for specific requirements.

enquiries : Training Manager, Tasman Forestry Limited, Private Bag, Murupara.

1.3 Basic Cable Logging

at : Tasman Forestry Limited, Murupara.

for : Developing young loggers requiring training in cables.

contents : Cable systems, rigging procedures, splicing, tie-backs, anchors and stump selection, whistle signals, breaking out.

time : 5 days

enquiries : Training Manager, Tasman Forestry Limited, Private Bag, Murupara.

1.4 Machine Operators

at : Tasman Forestry Limited, Murupara.

for : Operators of tractors, skidders, loaders, haulers.

contents : Preparation starting and shutdown procedures, lubrication and maintenance, understanding of component systems, safety and fire precautions.

time : 3 days.

enquiries : Training Manager, Tasman Forestry Limited, Private Bag, Murupara.

1.5 Machine Operators/Heavy Truck Drivers

at : N.Z. Forest Products Limited, Kinleith.

also on site courses at locations outside Kinleith by arrangement.

for : (a) Operators of tractors, skidders, loaders, haulers, graders and compaction equipment.
(b) Drivers of heavy trucks, logging trucks, metal trucks, chipliners etc.

contents : Basic applications of all machines. Preparation, starting and shutdown procedures, lubrication, maintenance, component systems, safety and fire precautions.

time : 3 day courses at Kinleith. Off-site courses to suit requests.

enquiries : Training Officer, Garage Training Centre, N.Z. Forest Products Limited, Private Bag, Tokoroa

1.6 Practical Courses on Logging

N.Z.F.S. now offer 6 week courses on Ground-based systems at Whaka forest and a 13 week course on Cable Systems at Golden Downs. But due to heavy demands from their own personnel they are not presently available to industry.

(2) **Supervisor Training** aimed at supervision of field operations in tree harvesting

2.1 Chainsaw Training Methods

at : FTC,
Rotorua

for : Operators who will be responsible for training others.

contents : Principles for safe and effective use, care and maintenance, tree felling theory, methods of training.

time : 5 day course (9 times per year)

enquiries : Officer in Charge,
Forestry Training Centre,
P.O. Box 943,
Rotorua

2.2 Training for Logging Trainers

at : FTC,
Rotorua.

for : Experienced operators responsible for training other and certification for L. & F.I.T.B. certificates.

contents : Training techniques, organised training, standards and requirements for L. & F.I.T.B. certification.

time : 5 day course.

enquiries : Manager,
Logging & Forest Industry,
Training Board,
P.O. Box 1632,
Rotorua.

2.3 Logging Supervision

at : FTC,
Rotorua

for : Front line logging supervisors.

contents : Logging systems, performance and productivity, incentives, induction, training and dispute procedure, safety codes, accident reporting, maintenance, environment and product requirements.

time : 7 day course.

enquiries : Officer in Charge,
Forestry Training Centre,
P.O. Box 943,
Rotorua

(3) **Technical Courses** aimed at giving depth of understanding of specialised subject

3.1 Cable Logging

at : FTC, Rotorua
N.Z.F.S., Golden Downs
(combined LIRA/FTC courses*)

for : Personnel involved (or about to be) in operation and control of cable logging.

contents : Cable systems, wire rope construction, tension, deflection, spar raising, anchoring, guying, interpretation of contour maps, planning, landing layout, safety.

time : 5 day courses.

enquiries : Officer in Charge,
Forestry Training Centre,
P.O. Box 943,
Rotorua

* Courses may be held at locations to meet local requirements (e.g. Southland, 1985)

3.2 Hydraulics in Logging

at : N.Z. Logging Industry Research Association, Rotorua

for : Contractors and supervisors of logging machinery incorporating hydraulic components.

contents : Principles and components of hydraulic systems, circuits, symbols, transmissions, fluids, filtration, oil analysis, system maintenance.

time : 5 day course.

enquiries : Director,
LIRA,
P.O. Box 147,
Rotorua

3.3 Roading Supervision

at : FTC,
Rotorua

for : Those involved in supervising road maintenance and construction.

contents : Planning and location, road standards, principles of construction, capability of earthmoving machines, installation and maintenance of drainage, maintenance programme.

time : 5 day course.

enquiries : Officer in Charge,
Forestry Training Centre,
P.O. Box 943,
Rotorua.

3.4 MARVL Method for Assessment of Recoverable Volume by Log Types

at : FTC,
Rotorua

for : Field staff involved in collection/interpretation of pre-harvest inventory data for logging management.

contents : Method description, exotic assessment, use of instruments, raising techniques, quality codes, processing and interpretation of data.

time : 4 day course.

enquiries : Officer in Charge,
Forestry Training Centre,
P.O. Box 943,
Rotorua

3.5 Log Grading Workshop

at : Timber Industry Training Centre,
Rotorua

for : Skid and yard operators.

contents : To correctly grade logs to national N.Z.F.S. log grades - log specification, measuring defects, optimum cutting practice.

time : 2 day course.

enquiries : Principal,
Timber Industry Training Centre,
P.O. Box 1340,
Rotorua.

(4) Management Level Courses aimed at giving comprehensive knowledge of harvesting to present and future management

4.1 Harvest Planning

at : FTC, Rotorua
(N.Z.F.S./LIRA combined course)

for : Logging managers, engineers and planners. Those responsible for planning and management of harvesting programmes.

content : Logging systems, transportation, logging capability and costing, development of harvest plans, planning aids. Preparation of a harvest plan is an integral feature of this course.

time : 9 day course.

enquiries : Officer in Charge,
Forestry Training Centre,
P.O. Box 943,
Rotorua.

4.2 Logging Management

at : FTC, Rotorua

for : Forest or logging managers controlling harvesting and transport.

contents : Pre-harvest inventory, logging systems, planning principles, roading and transportation, logging capability incentives and contracts, marketing, new developments. (This course is presently under revision for presentation in 1986).

time : 9 day course.

enquiries : Officer in Charge,
Forestry Training Centre,
P.O. Box 943,
Rotorua.

(5) Road Transport

The Road Transport Industry Training Board organises numerous courses for supervisors and instructors and a range of technical short courses on engines, braking, electronics, transmissions, etc., accident prevention, safety, and aspects of management, throughout the country at various Polytechnics, Technical and Community Colleges.

Contact :

Road Transport Industry
Training Board,
P.O. Box 9755,
Wellington.

(Telephone : 859-093)

(6) Safety Engineering

The Accident Compensation Corporation offers a range of short courses on aspects of occupational safety and training for apprentices through to managers. Courses on practical accident prevention, construction safety, accident control, ergonomics, accident investigation, are available.

Contact :

Safety Division,
Accident Compensation Corporation,
Private Bag,
Wellington.

(7) Industrial Engineering

Technical Institute and University Schools of Management at a variety of locations offer courses on industrial engineering, work measurement, computer appreciation and use and management subjects generally. The Central Institute of Technology at Trentham is commonly used by major forestry organisations for this purpose. It presents a range of management courses in productivity improvement.

Contact :

Registrar,
Central Institute of Technology,
Trentham.

or

your regional Technical Institute.

(8) Management

Numerous organisations throughout New Zealand offer courses on various aspects of management. They are mostly short training courses from two to five days for all levels of personnel, covering; supervision, financial knowledge, negotiating skills, communication, leadership and motivation. Some of these have relevance to the management of logging and log transport operations.

Information on such courses can be obtained from :

Auckland Provincial Employers' Association,
Private Bag,
AUCKLAND

(Telephone : 794-302)

Carrington Technical Institute,
Private Bag
Mt Albert,
AUCKLAND

(Telephone : 968-106)

Central Institute of Technology,
Management Services and Industry
Engineering Department,
Private Bag,
TRENTHAM.

(Telephone : 288-169)

C.P.I. Management Consultants Limited,
P.O. Box 2512,
WELLINGTON.

(Telephone : 850-112)

Centre for Continuing Education,
University of Auckland,
Private Bag,
AUCKLAND.

(Telephone : 737-999)

David Forman & Associates Limited,
351 Manukau Road,
Epsom,
(P.O. Box 26-118),
AUCKLAND

(Telephone : 605-606)

N.Z. Institute of Management,
P.O. Box 26-001,
Epsom,
AUCKLAND.

(Telephone : 606-403)

School of Administrative Studies,
Wellington Polytechnic,
Private Bag
WELLINGTON.

(Telephone : 850-559)

John P. Young & Associates (N.Z.) Limited,
P.O. Box 3143,
WELLINGTON.

(Telephone : 843-792)

LIRA has brochures of many of these, copies of which can be obtained from the LIRA librarian.

For further information, contact:

N.Z. LOGGING INDUSTRY RESEARCH ASSOC. INC.
P.O. Box 147,
ROTORUA, NEW ZEALAND.

Fax: (073) 462-886

Telephone (073) 487-168