

WINDTHROW SAFETY CONTROL

Kaingaroa Forest

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ACCIDENT PREVENTION AND SAFETY PROGRAMMES relating to windthrow salvage operations as experienced in the area worst hit in Kaingaroa Forest by the Easter gale of 1982. The period covered is from 13 April to 31 October and general information, comments and observations made in this report relate only to private contract crews, Forest Service gangs and Waipa gangs as administered from Kaingaroa Headquarters, and does not include any material or statistics involving KLC, Pan Pac, or Waimihia operations other than the three fatalities mentioned later in the report.

SAFETY AND FIRST AID

As soon as early assessments of the extent of "the blow" were available it was obvious that a large labour force would be concentrated in a comparatively small area towards the southern end of the forest comprising approximately 10 Compartments of Old crop radiata. Because of the potentially hazardous work situations created by windthrow conditions it was anticipated that accident rates would increase proportionately. Initially it was proposed and approved to set up a fully equipped and professionally manned mobile First Aid Unit and locate it in a strategic position relating to the work force. However, after further consideration in conjunction with the local doctor and St. Johns people, it was decided to shelve this idea in favour of putting an extra runabout in the area equipped with basic first aid gear, plus oxygen and entonox cylinders. Since its eventual acquisition and commissioning on 17.5.82 this vehicle has been staffed by one or other of the logging safety officers on alternate weeks, accompanied by a qualified St. Johns lady recruited specially for the duration of the main salvage operation. This arrangement allowed one officer to concentrate his efforts on the main blow area while his offsider was free to circulate and maintain an ongoing accident prevention and safety and training programme amongst those gangs employed elsewhere in the forest. Liaison was established with KLC and forest subdivisions advising them of safety and first aid facilities available, while arrangements were made with Rotorua St. Johns people to provide L.S.S.T. per helicopter if necessary.

Being only 15 minutes from the windthrow zone the Waimihia people and first aid personnel attended the majority of accidents requiring ambulance transport, being backed up by Taupo St. Johns.

At a subsequent meeting of salvage workers the Kaingaroa Industrial Nurse spoke to them on various aspects of first aid available to them in the field. She stressed the need of extra care, vigilance and attention at all times and to be wary of complacency. Handouts on first aid for common accidents plus one covering those of a more serious nature were distributed.

ACCIDENT PREVENTION

In the early stages of the salvage operation a meeting of loggers was arranged to discuss accident prevention in logging generally with special emphasis on the problems likely to be encountered

under windthrow conditions. The basic theme of the meeting stressed the need for everyone concerned to observe and practice the basic safety rules that apply to the normal logging situation. The meeting was reminded that the Unsafe Act, and to a lesser degree the Unsafe Condition, were the two main factors leading up to accidents. If we fail to recognise and take the appropriate action to control them we are asking for trouble sooner or later the meeting was told - too many of us adopt the attitude that it's always later or "will never happen to me". All of the hazards - plus, encountered in normal harvesting operations are multiplied many times over in the windthrow situation and all its complexities.

It is worthy of mention here that initial research for information and documented material on windthrow salvage work proved fruitless in the local archives. Considering the amount of previous windthrow on the local scene (small compared to this one), plus Eyrewell 1964 and Ashley and Balmoral 1975, there should be volumes of information on the subject.

A "thank you" to Forest Products people as we xeroxed off sufficient copies of their handout on "Recommended practices and procedures for windthrow situations" for circulation amongst our contractors.

The meeting of salvage loggers was also addressed by the local Labour Department Bush Inspector who highlighted some of the basic safety regulations relating particularly to roadside tree-felling, minimal safe distances between fallers and fellow workers and the incidence of scarfed trees and spars left standing. LIRA executive also spoke on how advisable and essential it is to acquire and wear protective gear and safety aids and urged contractors to give their support to the LIRA accident and near-miss recording scheme, pointing out how the only good that comes out of accidents is the use that the information yielded from these reports can be put to in preventing a possible repetition.

#### COMMUNICATIONS

A procedure was established early on in the piece to try and avoid delays, general confusion and unnecessary duplication of information and instructions when an emergency situation arose. A printed handout of this procedure was made available to every contractor and in general the system worked okay, but on a few occasions delays were caused by people at the accident scene not following the correct procedures per the handout or as instructed. A basic hurdle in the procedure was the undesirable need for inefficient relaying of accident information through individual contractor's CB radio bases in town then out to Kaingaroa HQ switchboard. On some occasions the switchboard people were bypassed and the information concerning the accident was given to an officer in the establishment not directly responsible for actioning emergency services. This occurred even after CB radio people staffing contractors' bases in town had been advised of the proper procedures.

The procedure was based on Kaingaroa Headquarters switchboard operators acting on information received relating to an accident and they only being responsible for alerting or dispatching ambulance back-up services to the accident location if and as required, or advised by a qualified first aider at the scene.

Gang location sign-posting got a badly needed facelift to bring

the situation back to some semblance of order and uniformity, but requiring constant day to day revision and checking by the responsible field supervisors to ensure that such sign-posting relates accurately to the current situation.

In addition to maintaining a continuing programme of education, persuasion, adoption and implementation of safe practices on a daily basis, the accident prevention and safety message is put across to loggers throughout the forest in the form of sign-posting sited in prominent places at entry points to the forest and in and around the windthrow area. The wording of the signs was purposely kept simple and to the point, e.g. LOG SAFELY and THINK FIRST/ACT SECOND. The reverse sides were in the way of supportive suggestions such as REMEMBER SAFETY FIRST and SEE YOU TOMORROW. It is suggested here that perhaps there is insufficient sustained use made of this media in attempting to get the message across. After all the more of the senses involved in receiving the message, the better chance there is of a desirable reaction.

#### ACCIDENTS AND NEAR MISSES

Altogether we recorded 26 accidents, eight of which resulted in lost time, i.e. off for more than two days. Half a dozen near misses were reported involving kick-back, slabbing under tension and almost being squashed under a root plate. It is almost certain that for every near miss reported there were ten never mentioned - a lower figure could be applied to the minor injury category. As mentioned previously, there are three fatalities to date. Two of those resulted from the falling tree or spar situation and leaving the degree of blame aside could be attributed to windthrow conditions. Of the 26 accidents on our patch, only four were directly caused by windthrow conditions. One of these features on a separate attached report while another involved an admiring breaker-out perched three metres up on a group of windthrown trees applauding his mate crosscutting a vital log in his jig saw perch. He fell off and got badly bruised ribs for his stupidity - hospitalised and on compo for a few weeks.

The most common type of injury was bruising of legs, ankles and feet through logs rolling mostly in skid situations and breaking out. Chainsaw cuts came next, involving lower legs and feet with one kick-back incident cutting a skiddy on the cheek. Another involved a crosscutter under-estimating the amount of tension in a blown log and if the truth were known, using the wrong cross-cutting technique to boot, having the tree "explode" on him, throwing him and saw out of control "A" over "K" backwards and receiving a puncture type wound in his left underside arm just above the elbow. The injury was caused by the tines of the felling dog. Another one which could easily have been number four on the fatal list involved a faller cutting a spar and leaving it standing - no scarf, no wedge, no sense - Yes! he had been warned of the special dangers concerning spars and worthy of another airing in this text.

#### SPARS

Treat spars with respect. Because of their relative rigidity, spars are inclined to behave in an unpredictable manner when felled especially across stumps and other log material. The tendency for them to bounce and slide is greatly increased in comparison

to the full length tree, where the overall friction and weight factors inhibit much of the trees' movement after initial ground impact. Spars with no obvious lean should not be felled without wedge or machine assistance. Remember, a partially cut tree is top of the list for killing potential. Provided a spar is green and sound, and on considered evaluation does not constitute a danger, consider leaving it untouched till breaking-out operations allow machine access to assist in its safe felling. All in all very few situation if any were encountered, reported or observed that had not been covered by the aforementioned N.Z.F.P. handout.

#### CONCLUSION

Generally speaking, the accident rate has not been as high as anticipated. The reasons for this are open to some conjecture but the fact that 90% plus of the salvage workers involved were resident skilled men, with most gangs having at least one logger with previous windthrow experience, must be a strong influence on this final result. It is fairly widely recognised that a constant interchange of information amongst the various logging companies relating to all types of accidents is a vital element in the campaign to reduce this industry's toll. There are still some quarters where there is some reluctance to divulge this information with a definite NO! from Labour Department people. They are very keen to get our nitty-gritty detail but back off smartly when asked to reciprocate - anyone with similar experience?