

CICA – Vic / Tas Branch Crane Safety Bulletin #261 February 2019



Do you know how to use a radio properly?

Before radios there were whistles and hand signals. Now days the radio is far more common as the jobs are bigger and the load is further and further away from the crane and often out of sight. With the use of radios there is potential for complacency as operators can simply tell the crane driver what they want him or her to do in their own words rather than remember the whistle and hand signals. Any one can push a button to talk, but what makes a good radio operator? If not used properly, could a radio can do more harm than good? With every innovation and technology comes drawbacks or down sides. With radios, these can be accentuated by the shortage of experienced riggers/dogman combined with the increased use of casual labour hire. The result is unfamiliarity of new members joining communicating in what was once a regular, familiar or 'tight' crew.

The majority of radio systems today still run in analogue mode. Crane crews generally use UHF radios and avoid digital units due to issues with signal delay, which could be catastrophic when the command 'Stop' is not heard straight away. The most popular models are the analogue Motorola GP328 and the DP2400 which is a digital radio capable of running in analogue mode.



So what will make you a good radio operator? The key points for a dogman/rigger lifting or landing the load are:

- Check your licences are valid (if you need one for the radios you are using).
- Prior to starting work, ensure all radios are functioning, fully charged and set on correct frequencies.
- Check your frequencies for any other usage around the Jobsite. – a mobile crane should always be operating on a closed/private channel which it is licenced to do so.
- Check the hand-held mike for damage as they are the most likely part to malfunction due to mis treatment.

- If you're new to a crew, get to know them and have a chat about the task at hand and how you all like to go about your work. If you're not clear on something tell them BEFORE you get on the radio and out under the hook.
- When using the radio, speak slowly and clearly with confidence.
- Trust your crane driver, don't constantly issue too many commands. Experienced drivers with their landing spot in sight can get the load very close to the mark with only a few commands needed when landing the load.
- Don't discuss ANYTHING except the load on the hook while it's in the air. This is not a time for socialising or even planning the next lift. That can be done once the load is landed.
- Release the button after talking so the crane driver or anyone else can communicate too.
- Know your whistles in case of radio failure! all dogman / riggers should never leave home without the whistle, treat it like your licence!

In hazardous environments where the presence of a potential spark, heat or flame could potentially create a safety hazard, Intrinsically Safe Radios are required. Since radios are electrical, they have the potential to generate sparks and heat, and there are many situations in which a radio may need to be used in potentially hazardous or explosive environments.

Such environments include oil rigs and refineries, gas mains, coal mines, chemical plants, factories, emergency scenes involving First Responders, and other environments where there are potentially explosive or hazardous materials. These sites fall into three basic classifications:

Class 1: flammable vapours and gases

Class 2: flammable dust

• Class 3: flammable fibres

This should be captured in your SWMS with using Intrinsically Safe Radios as one of the control measures.

In built up areas we need to be careful about the operating range of the radios used. Crane crews generally only need to communicate within a worksite and having a radio powered over 1W will potentially interfere with other crews in areas far away. For this reason and depending on what licence the operator holds, radios are often detuned to 1W.

Remember, although radios are simple to use, it pays to put some effort and awareness into doing it well as communication is the key to working safely as a team.

Stay Safe -CICA