MORSETEXT3

Welcome to the morse training facility provided by transmissions from VK2WI on behalf of Amateur Radio - New South Wales. In late 2008 some additional text was added into the existing file to expand the capacity of the stored text. This service is an almost continuous transmission, interrupted only when the VK2WI station is required for news bulletins or other periods of operation. Reception on the same band is a problem that has a transmitter operating at the same time. A new purpose built transmitter was commissioned in the middle of 2008 and replaced a transceiver which had been used for couple of years. The facility has been provided since the 1970's. The morse transmission is a block of plain language text stored in a solid state memory which is used to key a transmitter. The control program commences sending at a slow rate, which, at 5 minute intervals is increased to a higher speed. Upon reaching the highest speed the sending reverts back to the slowest speed and the cycle is repeated. At the end of the stored text it reverts to the beginning and repeats the cycle. the blocks of 5, 8, 10 and 12 words per minute are sent at a 12 w p m rate. The highest speed, 15 w p m is sent at 15 w p m. the identification is at 10 w p m. As the total duration of the various transmitted speeds and the length of the stored text is not the same, the pickup point at which the text is repeated will differ. This enables the listener to copy portions of text at a speed commensurate with their current ability. Using this method it is some time until similar blocks of text will occur. This is economic in the amount of text required to be stored. The solid state keyer being used to generate this text was installed in August 2005 and replaced a computer with a 3.5 inch floppy disc which had seen many years of service. The new system is easier to load new text into and the text will be replaced or added to at intervals to prevent it becoming stale and to prevent the listener from journalized. The transmission is usually made on two frequencies, one is on 80 metres on 3.699 megahertz providing extensive coverage in south east Australia and the other is on 2 metres on 145.650 megahertz and provides coverage in the Sydney region. Currently only the 80 metre transmission is being made. This 80 metre frequency provides two main roles - the first is for the teaching of morse code and the second as a band condition or propagation indicator. This is also known as the grey line where a distant station to Sydney can observe the conditions between their location and Sydney such as when the band opens and closes, like the change from light to dark at sunrise or sunset. In effect it is a beacon. The transmission on 80 metres uses the CW mode in a solid state transmitter providing about 25 watts to a half wave length dipole antenna mounted about 13 metres above the ground. Reports on this service can be made by e-mail to arnews@tpg.com.au - indicate 'beacon report' in the address header or by postal mail to p. o. box 6044 dural delivery centre nsw 2158. endorsing the envelope, 'beacon report'. The site where this transmission is located is in the Sydney suburb of Dural approximately 30 kilometres to the north west of the Sydney CBD. It is the transmission site for Amateur Radio - New South Wales where news bulletins are conducted twice on Sundays, the first in the morning at 1000 hours local time and again at 1930 hours in the evening. It is also the location for an extensive beacon and repeater network. VK2WI has been at this location since 1955 when the site was chosen as a “Home for VK2WI”. Building of the facilities was by donations and other support from members of the nsw division and was carried out in 1956 and the formal dedication of the building was in 1957. Amateur Radio - New South Wales is the trading arm of the company Wireless Institute of Australia, New South Wales Division, which was first formed in March 1910 following a meeting held in Sydney at that time and is the worlds oldest amateur radio society. Over time it developed into divisions in each state of Australia with amateur radio operators being members of the divisions and the divisions being members of a national or federal body. In 2004 the structure changed when a single national body was created out of the former Federal body with the Amateur operators being members. Also in 2004 licensing requirements changed where knowledge of morse code was no longer required to gain operating access to the high frequency bands. While morse knowledge is no longer required for examination it will remain one of the many transmission modes used by amateur radio operators and in fact has increased in use since the requirement was removed. There will continue to be people who wish to learn the art of morse code and this facility is being maintained to assist those wishing to learn and to polish their skills. One thing for sure is that you will not be able to communicate in this mode if you can not send or receive morse code. There are of course other methods of learning code. In classes conducted by clubs and groups, from tape, a one on one basis with another morse skilled operator or via a computer to name a just a few methods. Morse code is used to identify the many beacon and repeater transmissions. From the site where this transmission originates, VK2RSY identifies the beacons and VK2RWI the repeaters. While voice identification is used on some other repeaters, it is a licensing requirement that all unattended transmitters must provide a means of identifying the transmitter in use - both for knowing what system you are working

as well as being able to locate the transmission source should interference occur. All the dural systems identify in morse code. Now to expand the range of this text and this will be done by listing the operations frequencies of the various Dural transmissions. First the news channels. VK2WI may operate on one or more of the following frequencies. 160 metres, 1845 kilohertz. 80 metres, 3595 kilohertz. 40 metres, 7146 kilohertz. 30 metres 10.125 megahertz. 20 metres 14.170 megahertz. 17 metres, 18.120 megahertz. 12 metres 24.950 megahertz. 10 metres 28.320 megahertz. 6 metres 52.525 megahertz. 2 metres on 145.600 and 147.000 megahertz. 70 centimetres on 438.525 megahertz and 23 centimetres on 1273.500 megahertz. In 2007 a new frequency was added to the morning coverage. A non amateur allocation was obtained to provide some of the relay stations the ability to source from a frequency more consistent to their region. It is to be found on 5425 kilohertz using the upper sideband mode. it is in the region known as 60 metres. It is about half way between 80 and 40 metres and fills in the gap between where the ground wave of 80 fades out and before the skip of 40 comes to earth. It is meant to cover from about 100 kilometres out to 500 kilometres from the vk2wi site. It does at times a bit better than that and is reported from south and north of the new south wales borders. It is running about 100 watts in the upper side band mode into a dipole antenna positioned as an inverted vee. The VK2RWI repeaters assigned to the site are 29.640 megahertz on 10 metres. - not currently operating - 53.850 megahertz on 6 metres. 147 megahertz on 2 metres. 438.525, 438.600 and (439.900 – yet to be developed) megahertz on 70 centimetres and 1273.500 megahertz on 23 centimetres. Repeaters identify when first keyed up and then at intervals while in use. The VK2RSY beacons also at the site, identify in morse code giving call sign and maidenhead grid square location – qf56mh -. On 28.2615 megahertz, 10 metres uses vertical polarization. Other beacons use horizontal polarization and are 50.289 megahertz on 6 metres. 144.420 on 2 metres and 432.420 megahertz on 70 centimetres. These two units are currently off air pending development of new equipment. On 23 centimetres on 1296.420 megahertz, upgraded in 2008 with a new transmitter and a power increase from 2 to 20 watts. Beacons transmit a continuous carrier and identification occurs about twice a minute in cw by interrupting the carrier. Reports may be made to the technical committee of the dural installation by an e-mail to arnews@tpg.com.au [use the correct ‘at’ sign on the computer] or by mail to p.o. box 6044 dural delivery centre nsw 2158. Address it to dural technical committee in the title space. This is where the original text finished. Changes have also been made to address details in the older text. Some more material has now been added. First some information to users of this service. On the 80 metre band there is a live operator provided morse training service. It is on two nights a week, conditions and operator availability permitting. These being Tuesday and Thursday at the present time. You will find it at 2000 hours local VK2 time on a frequency of 3550 kilohertz plus or minus the QRM, under the call sign VK2BWI. Here, blocks of text are sent. At the end of each block a voice read back is given. There are also hints given on morse procedure. It has been found by those who have just learnt the morse code and venture into their first on air contact that what they learnt during the study of the code bears little resemblance to what the on air operators are sending. It appears like a series of mis spelt words. What it is, is short hand to cut down on the number of characters that need to be sent. It derived from the early days of communication over distance on land and sea where the operators developed these short cuts to save time and effort. You may have already come across the q code where a block of 3 letters is a sentence either as a question, if it is followed by a question mark, or an answer if it is just the 3 letters. There are also other combinations of 1 or more letters which may phonetically give the sound of the word. For example if you wanted to say thank you - you can send t u . You are sending a report to the other station in short hand. If fact, we use many of these short cuts in voice transmissions and one example is the r s t block of numbers. r, the first is readability, then s is for signal strength and finally when using morse code t is sent to indicate the tone quality of the transmission. If you are given a report of 5 5 9 it means that your readability was perfect, your signal is not that strong but your tone is perfect. You will find the r s t code in handbooks and other information sources about the hobby. The short wave listener also uses a reporting code which is s i n p o which has additional information for the broadcasting service when you a trying to extract a qsl card from them. All these letter combinations, the q code and the like are universal in that you can have a contact with a station where neither operator speaks the same language. We will now give some more examples and later some samples of what form an on air contact may take. g b is goodbye, f b is fine business. good morning or good evening is g m and g e and g d is good day. again is a g n. an invitation to reply is the single letter k. acknowledging is to q s l. your becomes u r. if you are talking about people, for a male you send o m - old man - or o t for old timer. for the females you refer to a young lady as a y l and the wife or spouse as the x y l. Moving on now to

having an on air contact. Suppose you are a british station in contact with a russian. The russian with a call sign ub5ref is sending to the brit who is 2m0rzo. If it was a voice contact what might be said is … received most of that transmission all right but the signal has now become very weak so would you please send again your name. the report to you is 3 4 9 [hard to read, weak but the tone is good.] my name is boris and I live in oster. I think we had a contact last year on 7 megaherts. How is the copy now at your end ? … That was nearly 60 words, about 300 letters, which at 5 words per minute would take 12 minutes to send. In about 100 letters we could send … r most ok om but sig nw vy weak pse agn rst es name = ur rst 349 = hr name is boris qth oster - think we qso last year on 7 = hw cpy nw om? ar … at 5 w p m it would have taken about 4 minutes. In the next example the other end of the contact is in scotland …. r ok colin es mni tnk fer rprt from edinburgh = name hr es les qth brigeton = ur rst 479 wid some qrn = rig is ic735 ant dipole pwr abt 5w ar … here is an example of calling for a contact … vvv vvv cq cq cq de g0ajr g0ajr g0ajr k g0ajr g0ajr de g0wme/qrp g0wme/qrp k g0wme/qrp de g0ajr ur rst 579 w qsb g0wme/qrp de g0ajr k g0ajr de g0wme/qrp ur rst hr 599 w qsb g0ajr de g0wme/qrp k 73 g0wme/qrp de g0ajr this time an example of first cw contact … cq cq cq de m8sap m8sap m8sap k m8sap m8sap de m2oxz m2oxz k m2oxz de m8sap ga = name hr is doug doug qth is coventry coventry = ur rst hr 599 w qsb = hr vy nervous cuz my 1 st qso on cw hi hi = m2oxz de m8sap k m8sap de m2oxz rr name hr is manny manny - ur 5nn in newcastle = fb on first cw qso - gud fist = rig hr is homebrew 6v6 into an inverted l - hw? m8sap de m2cxz k m2oxz de m8sap ok manny - cpied all ok = rig hr is knight t50 into a moxon = cul tnx fer nice qso gud dx es 73 - m8sap de m2oxz - cl The internet has sites where there are these examples - some slanted toward the European style and others towards the united states where their examples similar to that used in the arrl vec 5 wpm tests. You will notice many short cuts. In the previous example the rst is given as 5nn. it means 599 but it is shorter in the number of elements making up the block. The text has been checked but it may contain typos or errors. Now that the requirements of morse code has been dropped from the examinations for an amateur licence in almost every country of the world there has been an increase in the use of code in on air contacts. many amateurs have ventured on air to try their ability. it is a self regulating exercise, for if you can not read the other station or they can not read you the contact will not proceed very long. We will now devote some space to five letter and number groups. abcde fghij klmno pqrst uvwxy z 12345 67890 aeiou afkpu bglqv chmrw dinsx ejoty 13579 24680 edcba jihgf onmlk tsrqp yxwvu the quick brown fox jumped over the lazy dog is the old typing exercise to check out all the keys on a typewriter. there is another keyboard layout which was used on the lino type setting systems earlier in the printing industry. now days type setting comes from the computer keyboard. the present keyboard layout came from a redesign of the layout on a typewriter, which separated as far as possible, keys used in sequence which may jam against each other when typing at speed. how many letters in the Greek alphabet ? answer 24. what is the year 2005 in roman letters? answer mmv. In older films the year of production / release was shown in the title or credits in roman numerals. there is now about twice the number of words to the earlier text in this transmission. some additional text was added in December 2005 and several hundred more words in October 2007. It was decided to retain the existing text and keep expanding by adding. we would like to hear from users of this service as to the type of material that they would like included. you can send a email to arnews@tpg.com.au or write to po box 6044 dural delivery centre 2158….. morse was the first means of electronic communication, where, by sending an electric current down a wire something could operate at the receiving end. By sending long and short bursts of current arranged in sequence in a format known to both the sending and receiving end a message could be passed. a language was developed where letters could be formed using combinations of long and short pieces of current. When all operators learnt the same combination of longs and shorts they could pass a message to anybody on the line. Morse was in use for some decades before the human voice was added to the same pair of wire and the telephone was born. When it came to radio or wireless as it was known - because it was done without wires, it was morse that was first used. Voice followed and as things developed, other methods of transferring information was introduced. Now days various forms of data transfer the information and apart for amateur radio operators and those who like morse code almost no body uses the code. Longest use of morse code was in the shipping industry but that was discontinued a few years ago. Its passing closed an era. These days a lot of people send messages to each other on their mobile phones using a type of code with s m s. At intervals contests are staged – often in the media – to see whether morse or sms can transfer the message the fastest. Using the same text the contestants send in their chosen mode. Nearly always - morse wins. Morse code history is preserved in some of the technology museums. One group of these museums in australia are ‘telstra

museums' where all forms of telegraphic and telephonic equipment is preserved. There is one in sydney at bankstown and also in melbourne at hawthorne and in brisbane at albion. Check out their email at tmuseumatbigpond.net.au . another museum of radio which include morse code equipment is the kurrajong radio museum - west of sydney – on the edge of the blue mountains. Email to vk2zioatyahoo.com.au or google search 'kurrajong radio museum' well worth a visit. The HF or short wave spectrum comprise those frequencies between 3 and 30 megahertz. The conditions on the short wave spectrum – the ones which provide local and world wide communications generally work in an 11 year cycle. This is a function of the sun spots which appear on our sun. When it is a sun spot minimum the frequencies which provide communications crowd down towards the low end and often there are times when these is no communication available between certain locations. When conditions improve – four or five years after the minimum the frequencies have moved up and [almost] continuous world wide working is available on frequencies in the mid range – for the amateur this is our 20 metre band which is 14.000 to 14,350 Mhz. Higher frequencies 17, 15, 12 and up to 10 metres will be there at least part of the time and generally provides world or distant working. Below 20 metres the amateur frequencies will provided good workings on local and medium hauls. Generally 30 metres will provide interstate ranges, 40 metres has good local and medium haul in daylight hours and often dx working. 80 metres is affected by sunlight absorbion so is best at night and for an hour or so after dawn and before sunset. Also better as a winter band when the atmospherics -qrn- is less than in summer months. This will provide you with local and short to medium hauls by day and across australia and over the pond to new zealand by night. At times even further. The lowest band 160 metres – is good local ground wave by day but by night will work well interstate. VK2WI has added non amateur frequency to its coverage in the morning – it is half way between 80 and 40 metres and is on 5425 khz. Its function is to provide some of the manual relay stations a signal source is the zone between where 80 is absorbed out and before the 40 skip comes to earth. In the present cycle 24 the minimum was supposed to have occurred late 2007 but it appears delayed, something which happens from time to time, and now not expected to start climbing until some time in 2009. In a side note the 40 metre band is generally available between 7000 and 7300 but as at october 2008 only the first hundred – 7000 to 7100 – is exclusive amateur. Above that we share with broadcasters. We are to gain the second two hundred – 7100 to 7200 – for the amateur service starting at 29 march 2009 when the broadcasters in their 41 metre band move higher and out of the 7100 to 7200 portion. This will give the amateur service effectively more spectrum without having to fight for a spot with the broadcasters. This will be good for one of the most popular HF band. additional text was created 21/9/2008 and added a little later to the program. Users are requested to indicate what type of text they like, the speeds used and any other improvements which can be made. That's all for the present, send those comments by email to arnews@tpg.com.au or the mail address on p.o. Box 6044 dural delivery centre nsw 2158 .... the preceding text has taken some 7 to 8 hours to send, contains about 3783 words, thank you for using the service and now it will revert to the start. .....