



**Practice Instructions and Homework Assignments  
for the Beginner CW Academy Course (Second  
Edition)**

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2019 - Revision 2.1 by Bob Carter, WR7Q; Change course name from Level 1 to Beginner

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2020 - Sep - Rev. 2.3 by Bob Carter , WR7Q; Added Zoom also

Welcome to CW Academy's Beginner course. Before you take note of the homework assignments, below, you should understand how we expect you to practice during the eight-week course.

Your course is broken up into 16 sessions corresponding to a twice weekly on-line meeting with your advisors. You are expected to practice the assignment for session 1, for example, before the on-line session 1 so that the advisor can assess your progress and any problems. So, you practice the session 1 assignments for the days preceding session 1, and then practice the session 2 assignment for the days preceding session 2, and so on.

There are two key tools we use to ensure your success in this course. One is Zoom (or Skype) which enables us to meet in a virtual training room two times per week, online. We can see and hear each other, and can hear any code being sent.

But the most important tool is Morse Trainer. To set it up, read "Using Morse Trainer." Morse Trainer is pre-loaded with your homework assignment segments. You will play them, over and over, until you feel comfortable that you recognize each letter's and number's sound pattern. Note, I did not say each letter's and number's dots and dashes or dits and dahs – I said sound pattern. That's the secret to learning Morse in a way that will scale up in speed as you progress.

So, for example, your first homework assignment is to play the following segments, one at a time, until you feel you can recognize them:

Segment 1: t t t t t

Segment 2: e e e e e

Segment 3: a a a a a

Segment 4: n n n n n

Segment 5: tea

Segment 6: tee

Segment 7: eat

Segment 8: ate

Segment 9: at

Segment 10: tat

Segment 11: teen

Segment 12: neat

Segment 13: ten

Segment 14: net

Segment 15: tan

To enter a segment into Morse Trainer, simply select the session/segment from the menu, then hit "play." You can repeat a segment by hitting "play" over and over again. When you're done, select the next segment in place of the previous segment, and continue.

This constitutes your ‘copying’ practice. The key is to learn to recognize a letter or number’s pattern, and then recognize words that use those letters. You will start out by adjusting the speed of Morse Trainer so that letters and words are sent at 20 wpm.

Each homework assignment also has segments for ‘sending’ practice. For example, session 1 has the following sending segments:

Segment 1: tea

Segment 2: ten

Segment 3: net

Segment 4: tee

What you will do is select a segment, and then play it. Then you will try to imitate it, exactly, using your key or keyer. Repeat it as many times as it takes to feel like you’ve gotten the correct word pattern. For example, “tea” will sound like “dah” space “dit” space “didah.” If you don’t have enough space, say, between the “t” and “e”, it will sound like “dahdit” “didah.” That is “na” and not “tea.” Timing is everything in sending.

So, before you meet for session 1, you should be able to recognize the patterns of the letters “t”, “e”, “a” and “n.” And you should be able to recognize the patterns of the words “tea,” “ten,” “net,” and “tee.” And, you will be able to do that at 20 wpm!

During your first session, your advisor will be sending those words to you, individually, and seeing if you have learned them. Then, he/she will ask you, individually, to send words to assess how well you’ve learned good element (dit or dah) timing and spacing.

You probably realize, now, that most of your time and effort will be spent using Morse Trainer BEFORE each session, and the session is primarily used for assessment and constructive suggestions.

You will find that you should be spending at least 30 minutes per day, including session days, broken up into 15 minute periods. But take as long as you need to feel comfortable that you’ve ‘gotten’ the copying and sending segments down before each session.

Okay, now that you know what’s expected of you, here are the homework assignments organized by session and segment.

## Homework Assignments

### **Session 1:**

#### **Copying segments:**

Segment: t t t t t

Segment: e e e e e

Segment: a a a a a

Segment: n n n n n

Segment: tea

Segment: tee

Segment: eat

Segment: ate

Segment: at

Segment: tat

Segment: teen

Segment: neat

Segment: ten

Segment: net

Segment: tan

Segment: eat at ten

Segment: ate at ten

Segment: at tee

#### **Sending segments:**

Segment: tea

Segment: ten

Segment: net

Segment: tee

Segment: eat at ten

Segment: at tee

### **Session 2**

#### **Copying segments:**

Segment: t t t t t

Segment: e e e e e

Segment: a a a a a

Segment: n n n n n

Segment: o o o o o

Segment: i i i i i

Segment: s s s s s

Segment: 1 1 1 1 1  
Segment: 4 4 4 4 4  
Segment: ten  
Segment: ton  
Segment: tin  
Segment: tie  
Segment: toe  
Segment: no  
Segment: not  
Segment: note  
Segment: it  
Segment: at  
Segment: one  
Segment: neat  
Segment: net  
Segment: nit  
Segment: toes  
Segment: stone  
Segment: tease  
Segment: noise  
Segment: one neat note  
Segment: no noise  
Segment: tie it  
Segment: 1 ton stone

Segment: N1AS  
Segment: N4ON  
Segment: S41T  
Segment: NO1S  
Segment: AI1E  
Segment: IT4O  
Segment: EA1ON  
Segment: ES4IT

**Sending Segments:**

Segment: stone  
Segment: tin  
Segment: tie  
Segment: no  
Segment: not  
Segment: it

Segment: at  
Segment: N1AS  
Segment: N4ON  
Segment: S41T  
Segment: NO1S  
Segment: AI1E  
Segment: IT4O  
Segment: EA1ON  
Segment: ES4IT  
Segment: 1 ton stone  
Segment: 14 notes  
Segment: ten toes

### **Session 3**

#### **Copying Segments:**

Segment: o o o o o  
Segment: i i i i i  
Segment: s s s s s  
Segment: r r r r r  
Segment: h h h h h  
Segment: d d d d d  
Segment: l l l l l (the letter "l")  
Segment: 2 2 2 2 2  
Segment: 5 5 5 5 5  
Segment: all  
Segment: tell  
Segment: tall  
Segment: deal  
Segment: the  
Segment: their  
Segment: doll  
Segment: dell  
Segment: hall  
Segment: hill  
Segment: hole  
Segment: load  
Segment: lead  
Segment: late  
Segment: later  
Segment: seal  
Segment: sell

Segment: sole  
Segment: she  
Segment: shed  
Segment: her  
Segment: hear  
Segment: DL1AT  
Segment: HH5H  
Segment: HS1TD  
Segment: ND2T  
Segment: NA4T  
Segment: 142  
Segment: 451  
Segment: 1425  
Segment: a tall hill  
Segment: she is here  
Segment: he is late  
Segment: 4 sheds  
Segment: 12 hills

**Sending Segments:**

Segment: all  
Segment: tell  
Segment: the  
Segment: lead  
Segment: late  
Segment: she  
Segment: her  
Segment: DL1AT  
Segment: HH5H  
Segment: HS1TD  
Segment: ND2T  
Segment: NA4T  
Segment: 142  
Segment: 451  
Segment: 1425  
Segment: she is here  
Segment: he is late

**Session 4**

**Copying Segments:**

Segment: r r r r r



Segment: h h h h h  
Segment: d d d d d  
Segment: l l l l l (the letter “l”)  
Segment: 1 1 1 1 1 (the number “1”)  
Segment: 4 4 4 4 4  
Segment: u u u u u  
Segment: c c c c c  
Segment: chat  
Segment: chair  
Segment: chin  
Segment: chart  
Segment: ouch  
Segment: couch  
Segment: touch  
Segment: such  
Segment: teach  
Segment: reach  
Segment: sun  
Segment: son  
Segment: hold  
Segment: told  
Segment: sail  
Segment: rail  
Segment: tail  
Segment: nail  
Segment: oil  
Segment: soil  
Segment: toil  
Segment: coil  
Segment: rain  
Segment: cause  
Segment: sauce  
Segment: toss  
Segment: toll  
Segment: tall  
Segment: tell  
Segment: cell  
Segment: call  
Segment: NC5A  
Segment: NA2T  
Segment: CU1LL

Segment: CO5NO

Segment: NU4R

Segment: CT1AC

Segment: CE1NI

Segment: 4241

Segment: 1452

Segment: in the cell

Segment: that hurts

Segment: at the hall

Segment: hole in 1

### **Sending Segments:**

Segment: chat

Segment: chin

Segment: teach

Segment: sail

Segment: rain

Segment: tall

Segment: tell

Segment: NC5A

Segment: NA2T

Segment: CU1LL

Segment: CO5NO

Segment: NU4R

Segment: CT1AC

Segment: CE1NI

Segment: 4241

Segment: 1452

Segment: sail on sailor

Segment: tell all

Segment: hold on

## **Session 5**

### **Copying Segments:**

Segment: u u u u u

Segment: c c c c c

Segment: 2 2 2 2 2

Segment: 5 5 5 5 5

Segment: m m m m m

Segment: w w w w w

Segment: 3 3 3 3 3

Segment: 6 6 6 6 6  
Segment: ? ? ? ? ?  
Segment: wait  
Segment: wall  
Segment: well  
Segment: will  
Segment: mall  
Segment: mill  
Segment: chum  
Segment: mow  
Segment: much  
Segment: such  
Segment: water  
Segment: wet  
Segment: what  
Segment: dew  
Segment: date  
Segment: atom  
Segment: tow  
Segment: tower  
Segment: were  
Segment: where  
Segment: was  
Segment: wish  
Segment: wash  
Segment: mat  
Segment: matt  
Segment: mel  
Segment: him  
Segment: her  
Segment: his  
Segment: hw?  
Segment: W3AA  
Segment: N3AM  
Segment: DM5RA  
Segment: W6AM  
Segment: N2AT  
Segment: RW5L  
Segment: ON4UN  
Segment: 335  
Segment: 1432

Segment: 6122  
Segment: well water  
Segment: how is it?  
Segment: is this it?  
Segment: this is it

### **Sending Segments:**

Segment: wait  
Segment: well  
Segment: mall  
Segment: mill  
Segment: wet  
Segment: date  
Segment: W3AA  
Segment: N3AM  
Segment: DM5RA  
Segment: W6AM  
Segment: N2AT  
Segment: RW5L  
Segment: ON4UN  
Segment: 335  
Segment: 1432  
Segment: 6122  
Segment: this is it  
Segment: 1432 hill street  
Segment: 1 and 4 is 5

## **Session 6**

### **Copying Segments:**

Segment: m m m m m  
Segment: w w w w w  
Segment: 3 3 3 3 3  
Segment: 6 6 6 6 6  
Segment: f f f f f  
Segment: y y y y y  
Segment: you  
Segment: toy  
Segment: foot  
Segment: tooth  
Segment: root  
Segment: cute

Segment: noise  
Segment: larry  
Segment: roy  
Segment: ton  
Segment: teeth  
Segment: feet  
Segment: yet  
Segment: they  
Segment: say  
Segment: ray  
Segment: hay  
Segment: your  
Segment: fair  
Segment: fare  
Segment: far  
Segment: fur  
Segment: furry  
Segment: hw?  
Segment: F5IN  
Segment: YO1AR  
Segment: HH5H  
Segment: NO3M  
Segment: AA3U  
Segment: S52R  
Segment: 1512  
Segment: 3316  
Segment: is this fair?  
Segment: yes it is  
Segment: the fur flies  
Segment: she is shy  
Segment: I say no  
Segment: she says yes

### **Sending Seqments**

Segment: cute  
Segment: said  
Segment: raid  
Segment: stir  
Segment: him  
Segment: feet  
Segment: hw?

Segment: F5IN  
Segment: YO1AR  
Segment: HH5H  
Segment: NO3M  
Segment: AA3 U  
Segment: S52R  
Segment: 1512  
Segment: 3316  
Segment: she says yes  
Segment: he says no  
Segment: who is he?  
Segment: he is will  
Segment: no he is walt

## **Session 7**

### **Copying Segments:**

Segment: f f f f f  
Segment: y y y y y  
Segment: 3 3 3 3 3  
Segment: 6 6 6 6 6  
Segment: p p p p p  
Segment: g g g g g  
Segment: 7 7 7 7 7  
Segment: 9 9 9 9 9  
Segment: / / / / /  
Segment: page  
Segment: paper  
Segment:pepper  
Segment: glad  
Segment: glare  
Segment: large  
Segment: ledge  
Segment: george  
Segment: geo  
Segment: chas  
Segment: chase  
Segment: change  
Segment: peg  
Segment: pug  
Segment: pig  
Segment: pen

Segment: pencil  
Segment: pipe  
Segment: pit  
Segment: gain  
Segment: garage  
Segment: guard  
Segment: gas  
Segment: gus  
Segment: chug  
Segment: yes  
Segment: yet  
Segment: yonder  
Segment: coy  
Segment: G4AN/3  
Segment: N1AR/5  
Segment: W9UCA/9  
Segment: W3/PY2AA  
Segment: F6/N6AM  
Segment: 2N2222  
Segment: 7423  
Segment: 14253679  
Segment: he is a pro  
Segment: she is near  
Segment: do not gape  
Segment: he is at 19 glen street

**Sending Segments:**

Segment: page  
Segment: glare  
Segment: ledge  
Segment: george  
Segment: pen  
Segment: pit  
Segment: G4AN/3  
Segment: N1AR/5  
Segment: W9UCA/9  
Segment: W3/PY2AA  
Segment: F6/N6AM  
Segment: 2N2222  
Segment: 7423  
Segment: 14253679

Segment: go to her  
Segment: read the page  
Segment: wat page?  
Segment: page 15

## **Session 8**

### **Copying Segments:**

Segment: b b b b b  
Segment: v v v v v  
Segment: 7 7 7 7 7  
Segment: 9 9 9 9 9  
Segment: / / / / /  
Segment: vote  
Segment: vat  
Segment: view  
Segment: wave  
Segment: pave  
Segment: save  
Segment: vow  
Segment: valve  
Segment: solve  
Segment: volt  
Segment: vault  
Segment: bad  
Segment: body  
Segment: bore  
Segment: born  
Segment: barn  
Segment: barney  
Segment: brad  
Segment: bread  
Segment: bed  
Segment: better  
Segment: best  
Segment: bill  
Segment: build  
Segment: built  
Segment: bolt  
Segment: bulb  
Segment: blame  
Segment: blend



Segment: bland  
Segment: blow  
Segment: BV2AA  
Segment: BA1RO  
Segment: WB2AE  
Segment: N6RB/4  
Segment: W2/VE1AR  
Segment: VE2/W2LE  
Segment: 6146  
Segment: 5514  
Segment: name is bob  
Segment: name is bill  
Segment: name is ted  
Segment: name is Vinnie  
Segment: ur rst is 559  
Segment: ur rst is 459

### **Sending Segments:**

Segment: vote  
Segment: valve  
Segment: bed  
Segment: best  
Segment: BV2AA  
Segment: BA1RO  
Segment: WB2AE  
Segment: N6RB/4  
Segment: W2/VE1AR  
Segment: VE2/W2LE  
Segment: 6146  
Segment: 5514  
Segment: name is bill  
Segment: name is art  
Segment: ur rst is 579  
Segment: ur rst is 449

### **Session 9**

#### **Copying Segments:**

Segment: b b b b b  
Segment: v v v v v  
Segment: k k k k k  
Segment: j j j j j

Segment: 8 8 8 8 8

Segment: 0 0 0 0 0

Segment: <BT><BT><BT><BT><BT> (make sure you've selected "pro signs" on Morse Translator)

Segment: jack

Segment: jay

Segment: john

Segment: jim

Segment: jerry

Segment: back

Segment: rack

Segment: tack

Segment: tech

Segment: tach

Segment: reach

Segment: each

Segment: teach

Segment: help

Segment: high

Segment: hill

Segment: fact

Segment: face

Segment: far

Segment: fear

Segment: then

Segment: their

Segment: him

Segment: her

Segment: his

Segment: hers

Segment: them

Segment: they

Segment: their

Segment: switch

Segment: line

Segment: ant

Segment: dipole

Segment: vertical

Segment: ohms

Segment: home

Segment: away

Segment: test  
Segment: Asia  
Segment: Africa  
Segment: K1JD  
Segment: N1AR  
Segment: W2TT  
Segment: K2UMU  
Segment: N2NW  
Segment: VE3NE  
Segment: VA3KP  
Segment: K4BAI  
Segment: N5KO  
Segment: 807  
Segment: 3500Z  
Segment: 4250A  
Segment: hw is he?  
Segment: name is joe  
Segment: name is john  
Segment: name is jim  
Segment: ur rst is 579  
Segment: ur rst is 339  
Segment: sri no cpy

**Sending Segments:**

Segment: jack  
Segment: tach  
Segment: reach  
Segment: each  
Segment: fear  
Segment: his  
Segment: ant  
Segment: K1JD  
Segment: N1AR  
Segment: W2TT  
Segment: K2UMU  
Segment: N2NW  
Segment: VE3NE  
Segment: VA3KP  
Segment: K4BAI  
Segment: N5KO  
Segment: 807

Segment: 3500Z  
Segment: 4250A  
Segment: name is fred  
Segment: name is tom  
Segment: name is john  
Segment: name is bob  
Segment: ur rst is 549

## Session 10

### Copying Segments:

Segment: k k k k k  
Segment: j j j j j  
Segment: 8 8 8 8 8  
Segment: 0 0 0 0 0  
Segment: x x x x x  
Segment: q q q q q  
Segment: z z z z z  
Segment: <BK><BK><BK><BK><BK>  
Segment: wl  
Segment: ur  
Segment: ok  
Segment: hw?  
Segment: qrx  
Segment: rig  
Segment: wx  
Segment: ant  
Segment: pwr  
Segment: kw  
Segment: name  
Segment: Memphis  
Segment: nyc  
Segment: sf  
Segment: dallas  
Segment: Houston  
Segment: nm  
Segment: nj  
Segment: ca  
Segment: ut  
Segment: al  
Segment: ar  
Segment: il

Segment: in  
Segment: me  
Segment: ma  
Segment: ct  
Segment: co  
Segment: qrm  
Segment: ne  
Segment: sd  
Segment: nd  
Segment: pa  
Segment: ky  
Segment: fl  
Segment: nc  
Segment: sc  
Segment: sdgo  
Segment: lax  
Segment: la  
Segment: on  
Segment: sk  
Segment: mb  
Segment: nt  
Segment: ab  
Segment: qc  
Segment: nb  
Segment: ns  
Segment: nr  
Segment: rst  
Segment: uk  
Segment: usa  
Segment: Tokyo  
Segment: paris  
Segment: London  
Segment: hamburg  
Segment: Sydney  
Segment: ZL2TT  
Segment: VK4OM  
Segment: JE1TRV  
Segment: BA1CW  
Segment: KH6LC  
Segment: AL2A  
Segment: AA3B

Segment: 8044  
Segment: 7400  
Segment: 73  
Segment: u hv qsb  
Segment: u hv qrm  
Segment: name?  
Segment: qth?  
Segment: qth is ny  
Segment: qth is paris  
Segment: pse qsy to 7054

**Sending Segments:**

Segment: wl  
Segment: ur  
Segment: ok  
Segment: qrx  
Segment: rig  
Segment: wx  
Segment: ant  
Segment: pwr  
Segment: kw  
Segment: qrz  
Segment: qth  
Segment: qrs  
Segment: qro  
Segment: qrp  
Segment: ZL2TT  
Segment: VK4OM  
Segment: JE1TRV  
Segment: BA1CW  
Segment: KH6LC  
Segment: AL2A  
Segment: AA3B  
Segment: 8044  
Segment: 7400  
Segment: 73  
Segment: ur rst is 579  
Segment: qth is nr Tulsa  
Segment: name is barry  
Segment: ur rst is 559  
Segment: qth is Dayton oh

Segment: name is john

## Session 11

### Copying Segment:

Segment: [your callsign] de k6rbur rst 579 nr sf name rob hw? [your callsign] de k6rb k

Segment: [your callsign] de n3jt ur rst is 5nn <BT> qth mclean va ? mclean va <BT> op is jim de n3jt

Segment: [your callsign] de w1rm <BT>ur rst 569 569 in ct name is pete bk

### Sending Segment:

Segment: k6rb de [your callsign] – ur rst 57n in [your town/city and state abbreviation] - name is [your name] btu k6rb de [your callsign] k

Segment: n3jt de [your callsign] – ur rst 56n in [your town/city and state abbreviation] – name is [your name] – n3jt de [your callsign] k

Segment: w1rm de [your callsign] – ur rst 45n wid QRN in [your town/city and state abbreviation] – name is [your name] – w1rm de [your callsign] k

## Session 12

### Copying Segments:

Segment: [your callsign] de k6rb wx cldy temp 58 <BT>rig runs 100 w to vert <BT>age is 66 so hw?[your callsign] de k6rb k

Segment: [your callsign] de n3jt <BT>wx rain temp 42<BT>rig is k3 es ant is 4 el yagi -age is 65 ok? de n3jt

Segment: [your callsign] de w1rm wx snow temp 24rig is IC 7700 pwr is kw es ant is dipole age is 70 hw? BK

### Sending Segments:

Segment: k6rb de [your callsign] – wx sunny temp 82 –rig runs [your power] w to [your antenna] – age is [your age] hw? k6rb de [your callsign] k

Segment: n3jt de [your callsign] – wx rain temp 54 –rig runs [your power] w to [your antenna] – age is [your age] hw? n3jt de [your callsign] k

Segment: w1rm de [your callsign] – wx oc temp 70 –rig runs [your power] w to [your antenna] – age is [your age] hw?w1rm de [your callsign] k

## Session 13

### Copying Segments:

Segment: [your callsign] de k6rb tnx fer qso es hpe cu agn 73 <SK> [your callsign] de k6rb ee

Segment: [your callsign] de n3jt nice qso tnx cul 73 <SK> [your callsign] de n3jt gn

Segment: [your callsign] de w1rm – enjoyed qso <SK> [your callsign] de w1rm ee

### Sending Segments:

Segment: k6rb de [your callsign] tu fer qso cu agn 73 <SK> k6rb de [your callsign]

Segment: n3jt de [your callsign] cul es nice qso 73 <SK> k6rb de [your callsign] ee

Segment: w1rm de [your callsign] enjoyed qso also 73 <SK> w1rm de [your callsign] cu ee

## Session 14

Before online sessions, listen to HF radio on CW sub-bands. Listen for slower stations calling CQ and copy their callsigns. Listen to slower stations in QSO and see if you can copy what they are saying. Practice sending first, second and wrap exchanges.

Practice sending your callsign, ur qth, and ur name – over and over again!!!

## Session 15 and 16

No homework