



Coastal Engineering Technical Note



COASTNET: A COMPUTER-CONFERENCING NETWORK

Using a personal computer (PC) and modem, coastal specialists within the Corps of Engineers can communicate with each other through a computer-conferencing network called COASTNET.

PURPOSE: The purpose of COASTNET is to provide the participants with a forum for posing questions and exploring approaches that will answer those questions. COASTNET will contribute to better understanding of all coastal issues, whether they are technical OR organizational in nature, or concern policy. Although COASTNET will not be used to circumvent the existing chain of command, it is useful in alerting members of the net about ongoing official actions and informally discussing drafts, agendas, storm events, project performance, etc.

GENERAL: COASTNET, formally a subnet under the U.S. Army Forum, is being operated by the U.S. Army Engineer District, Galveston, which has volunteered the resources and man-hours to continue providing this service. It is open only to Corps of Engineer employees. All participants are required to have a user ID and a password. The Corps of Engineers COASTNET should not be confused with the public COASTNET, which is operated by the University of Rhode Island on Internet and is open to the world at large.

COASTNET provides a means by which group discussion and decision making, and exchange of messages and information, are accomplished without having all members physically co-located or working on identical time schedules. The computer system acts as the central clearinghouse for information processing.

Benefits of COASTNET are as follows:

- a. There is no need to coordinate the schedules of members who want to talk with one another (avoids telephone tag).
- b. Members can stay on the job rather than spend hours travelling to a meeting.
- c. COASTNET provides a written record of the group discussion or personal message.

- d. COASTNET allows participants to compose their thoughts and to contribute them at a convenient time.
- e. Members can discuss multiple topics with all participants and communicate privately with particular individuals at the same time.
- f. Members can experience rapid and multiple feedback to an idea or question, and can give and receive feedback.

ACCESSING COASTNET: Use The following procedures in registering and using COASTNET. An informal dictionary of terms and some screen shots of the COASTNET Bulletin Board System (BBS) in use are included below.

(1) It is necessary to have TELNET access over the Internet. Users with CORPSMAIL addresses are connected to the Internet. Computer support staff can provide users with TELNET access. This can usually be added as an icon on Windows to simplify access. Systems should be set to allow the user to TELNET to 155.84.164.74 using ANSI/TTY or standard vt100 mode. Due to some complications with domain name servers, users at this time cannot use a host name.

(2) Use of the System.

Step A. Log on as "new" when the computer prompt asks for an ID.

Step B. Complete the registration process. Information provided in this step is confidential and will not be shared; its only purpose is to verify user registration.

Step C. When asked for an interest in the BBS (during the registration process), the user should indicate COASTNET. When the registration procedure is finished, the computer will disconnect automatically. A system operator (sysop) will verify registration information and upgrade access, usually within 1 working day.

Step D. A day or so later, the user should TELNET back to the BBS and log in with the user ID and password selected during the registration process.

Step E. Begin using COASTNET.

MODEM ACCESS: The BBS can be accessed through a modem pool. The telephone number is 409-766-6333. Users dialing the above telephone number for the first time will not be connected with the Galveston BBS. Once the greeting message from the computer that runs the modem pool appears on the screen, the user types the following line of text (WARNING: Keystrokes most likely will NOT be seen until the user connects with 'Galves' if using the modem pool to connect):

crec swg_telnet sd='155.84.164.74'

Please remember, the advantage of an INTERNET connection (TELNET) is that users do not pay by the minute for long distance communication.

USING THE SYSTEM: Once a user logs in to the BBS, there are three things to remember: (a) Users cannot hurt the system. Even if a user wants to, he can't hurt the system. (b) If a user is unsure about what to do and wants to escape from where he is in the BBS, he has three choices. Choice 1 is to press the question mark key and hit <RETURN>. This will usually bring up a short help message giving information that helps the user figure out what to do. Choice 2 is to input a single character X at the prompt. This allows the user to 'escape' from the current action and return to a menu prompt. Choice 3 is for the user to try what he thinks is most appropriate. Once again, if the user is wrong, he won't hurt the system. (c) Users should remember that while the BBS may be new to them, the software that is maintaining and running it has been around for several years (with upgrades, of course); therefore, there shouldn't be any unpleasant surprises in how it works. In fact, several other government agencies and large companies have been using this software for similar purposes (e.g., U.S. Army, U.S. Coast Guard, U.S. Fish and Wildlife Service, Gateway 2000, United Press International, Exxon Research).

The following is a short description of COASTNET. The BBS has a main menu with a few choices on it. The first choice is 'C,' which places the user directly in the forum/discussion group for COASTNET. Next comes the letter 'F,' for forums. This places the user in the FORUMS menu, which can access all the discussion groups on the BBS, of which there are several: /HELLO, whose purpose is to hold questions or comments about the BBS and how to do things related to the BBS; /GENERAL, for any topic of conversation that a person wishes to start; /COASTNET, which is for coastal topics. The next main menu choice is 'E' for email. This is for private email from the user, to the user, and from other members of the BBS. 'R' is for REGISTRY, which is a method to view information about other users of the BBS (to get their phone numbers or addresses, for example). When looking inside the REGISTRY, users should fill out the questionnaire. Until this is done, other users will not be able to look them up in the REGISTRY. The last choice is 'X,' for logging off or quitting the system. Pressing 'X' at the prompts enough times will eventually return the user to the main menu. By pressing 'X' once more, the user will be asked if he really wants to disconnect from the system or not.

OTHER INFORMATION: Unrelated to coastal issues, for the most part, is another network called CHANLNET. The purpose of CHANLNET is to foster discussion on issues relating to channel design projects. Users interested in accessing this forum should send an email message to the sysop while they are online.

For the technically curious, the BBS has several more abilities that are currently turned off to prevent confusing those who aren't familiar with using a BBS. These abilities include file libraries, teleconferencing, QWKmail, 'echoing' the COASTNET list server, and questionnaires, to name a few. There are plans to activate these features as time goes on and money permits

making the BBS more useful.

Users having comments or suggestions on how to improve the BBS should email the sysop, or post a message in the /HELLO forum. Please be patient in the first days and weeks of COASTNET. Until more users log on and start leaving messages, it is not going to be showing its true potential for improving communications. Users with questions are requested to log on to the system and then email the sysop.

ADDITIONAL INFORMATION: For problems connecting to the BBS, contact Wayne Crull, CESWG-ED-HC, 409-766-6352, directly.

DICTIONARY OF TERMS USED IN THIS CETN:

ANSI/TTY. A basic protocol or standard which computers use to communicate. What is useful is that different computer types can (usually) all speak these different standards (which is why they were created) A VAX machine can communicate with a Macintosh, an IBM-compatible PC, or a UNIX platform like a Silicon Graphics machine.

Discussion Groups/Forums. The words forum and discussion group can, for the most part, be used interchangeably. They are very similar to newsgroups on the Internet. A discussion group is an area of a BBS where users can leave messages to be read by others, and read messages written by others. The Galveston BBS has several discussion groups (/HELLO, /GENERAL, /COASTNET, and /CHANLNET, etc.). If there is significant interest, more discussion groups can easily be added for other topics.

Domain Name Servers. A computer that helps to direct Internet network traffic and can associate host names with IP addresses so that users can type 'TELNET galves.swg.usace.army.mil' instead of 'TELNET 155.84.164.74'. Most users find it easier to recognize and remember a string of words than a string of numbers.

BBS. Electronic Bulletin Board Service. A modern method for a group of widely separate users to easily share ideas and discuss them. Before the advent of computers, the only comparisons to BBS's were mass mailings, chained letters, and group telephone calls. With a BBS, users reading or writing messages decide when to do so, based on their schedules.

File Libraries. A portion of the BBS which can hold electronic files for downloading by others for transferral purposes. For example, data files for projects can be placed in a file library, draft copies of reports can be distributed for review (quicker than mailing and cheaper), or analysis programs like Dynlet can be placed in such an area for others to download (for example only).

FTP. An Internet program, similar to TELNET in that it is used to communicate between two computers that are physically separated. The difference is that FTP is only capable of file transfer; it could not be used to access COASTNET. FTP could be used to download

and upload files from the BBS.

Host Name. A string of words that completely represent an IP address. IP addresses existed on the Internet before host names. Most users consider host names easier to use. For example, galves.swg.usace.army.mil or 155.84.164.74 point to the same location. If a domain name server doesn't work, a user can still get through using an IP address.

List Server. An Internet creation very similar to a discussion group. The main difference is that anyone generally has access to list servers, and the user does not have to log into a separate machine to use it. The drawback is that more sophisticated software than TELNET is required.

Logging On. The process of supplying a user ID and password allowing access to a computer without having to ask someone else. The obvious purpose of logging on is/was to screen out unwanted users. Logging on also helps to identify which user said what.

Logging Off. The process of choosing the menu option that disconnects a user from a computer system. On this BBS, the user presses "X" <Return> until the computer asks if he is sure he wants to log off. The user then presses "Y" for yes.

Mail Gateway. An Internet computer that is essential to shuffling mail between different points on the Internet. Without access to a mail gateway, the user's email range only extends as far as the local network.

Main Menu. The first list of choices a user is greeted with when logging on to the BBS. If a user is unsure of what the various choices will do, he is encouraged to try them one at a time. The system cannot be hurt, and each of the options was designed to be of use.

Password. A secret string of letters, numbers, and symbols that is used to confirm that a person attempting to use a particular ID really is that person. It is recommended that a password have (for maximum security) a mixture of upper and lower case letters, and some numerical digits, random letters, and one or more words. A good example is "JFK1999dog," while examples like "Ruth," "A," or "Bob234" are not as good. For reasons of security, users are encouraged to change passwords once a month and to use complex passwords. Users should try to keep passwords confidential.

Posting. The process of writing a message in a discussion forum (for example, COASTNET). Posting a message can mean that a user is replying to a message previously written or is generating an original question or comment.

Sysop. A system operator. The person or persons responsible for overall system design and management, and for maintaining the hardware and software associated with a BBS.

Teleconferencing. Teleconferencing is a form of simultaneous written communication. Whatever is typed shows up on the screen of the other participants. When multiple users are logged into the BBS, any one of them can teleconference with each other.

TELNET. A program (or set of programs) that allows a user to electronically communicate with other computers at high speeds (relatively) that are distant over the Internet.

User ID. A unique string of letters, numbers, and sometimes symbols that identify a person on a particular computer system. The user ID is most often chosen by the user and is only checked to ensure that it is long enough to be useful, not already in use by someone else, and not profane. Examples include Wayne, GFD, FredKraus, MarshDOG.

VT100, VT102, or VT52. More sophisticated protocols than ANSI/TTY which allow use of the arrow keys and full screen editing (like a word processor). This is useful when creating messages for email or a discussion group. A minor problem is that these standards have been 'enhanced' by some vendors, so that some configuration options must be set correctly on the computer in order to use these protocols with other computer systems.

QWKmail. A system of programs that interact with the BBS. The purpose of such programs is to automatically download all email and new messages in the forums, and upload any email and messages to the forums, whether the user is present or not. For example, the user could schedule such an event to take place every morning at 6:00 a.m., before he gets to work. This function is disabled at this time on the BBS.

SCREENSHOTS OF THE BBS:

Following are some examples of screen snapshots so that the first-time user has a visual to go by. This is not an exhaustive set of screen snapshots that shows every single screen in the BBS, but it is sufficient to give a 'feel' for the BBS. Screen shots below are set off by the lines of equal signs. The format of the BBS screens is consistent; the prompt is always at the bottom of the screen, and will require that the user press a single key followed by **<Return>**. If more than one screen of information is shown, an intermediate prompt will appear asking if the user wants to continue viewing the present screen or not. The purpose of this prompt is to let the user read all of the information on the screen at his own pace. The text in brackets above each screen shot shows the input which leads to the next screen shot.

Screen Shot 1. Opening screen when the user first connects to the BBS. At this screen, the user enters his user ID, or the word NEW to create a user ID. The user ID 'DolphinCat' is a test account; users should not try to log in using this ID; it will not work.

Screen Shot 2
{C <return> }

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Enter your password: \$\$\$\$\$\$

Greetings, Dolphincat, glad to see you back again.

There is mail in your mailbox!

(Hi! Please read the following, this helps other users communicate with you on this BBS)

By the way, you haven't filled out your Registry entry yet... Just select R from the TOP menu to enter the Registry!

Please select one of the following:

- C ... Quicklink to CoastNet
- F ... Forums and Discussion Groups
- E ... Electronic Mail
- R ... Registry of Users
- A ... Alter Display Preferences
- I ... Information Center

(N)onstop, (Q)uit, or (C)ontinue?__

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Screen Shot 3. The main menu that will be displayed when initially logging on. At the bottom of the screen is the prompt requesting a single letter. To use COASTNET, press 'C' followed by <Return>. To read email on this system, press 'E' followed by <Return>. If unsure of an option, press '?' <Return> for a brief help screen. If those choices are not satisfactory, press 'X' <Return> to exit this set of menu options.

Screen Shot 3
{ C <return> }

=====
Greetings, Dolphincat, glad to see you back again.

There is mail in your mailbox!

(Hi! Please read the following, this helps other users communicate with you on this BBS)

By the way, you haven't filled out your Registry entry yet... Just select R from the TOP menu to enter the Registry!

Please select one of the following:

- C ... Quicklink to CoastNet
- F ... Forums and Discussion Groups
- E ... Electronic Mail
- R ... Registry of Users
- A ... Alter Display Preferences
- I ... Information Center
- X ... Exit System (Logoff) nue?

Main Menu Page (TOP)

Make your selection (C,F,E,R,A,I,? for help, or X to exit):

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Screen Shot 4. The menu screen that controls actions inside the COASTNET discussion forum. If the first line is not showing the word COASTNET, use the option 'S' <Return> to switch to the COASTNET forum. Otherwise use 'R' <Return> to read messages and 'W' <Return> to write new messages. While reading messages, an option to post a reply to a message will be given.

Screen Shot 4
{ R <return> }

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Your current Forum is /CoastNet: COASTNET

- R ... Read messages
- W ... Write a message
- Q ... Quickscan menu
- F ... Filescan
- T ... Teleconference
- S ... Select a new Forum
- X ... Exit from Forums

Select a letter from this list, or ? for more info:

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Screen Shot 5. A partial view of the next screen after selecting to read messages. The default option is scanning, 'S' <Return> but as the user gains familiarity with the system, other options can be used.

Screen Shot 5
{S <return> }

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You can select the messages you wish to read in the following ways:

- S ... scan through messages one at a time
- L ... list messages non-stop
- K ... keyword-search for specific messages

Enter your choice, ? for help, or RETURN to "scan":

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Screen Shot 6. This is an example of a message the user would see while scanning the discussion forum group. Using the options listed on the last line, the user could read this message or move forward in the message queue and view the header for the next message.

Screen Shot 6
{ R <return> }

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Enter message number to start scanning at, or ? for help.

(Also, just hit RETURN for new messages, F for first, or L for last):

Date: Monday, January 9, 1995 7:23am
/CoastNet
From: Jay Lockhart
Msg#: 78
To: ** ALL **

Re: New CoastNet BBD

(N)ext, (P)revious, follow (T)hread, or (R)ead this message?

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Screen Shot 7. This sample screen is what the user would see if he chose the option 'R' <Return> at the choice listed above. The user can now move on to the next message or can post (write) a reply to this message, if he has additional information or a question.

Screen Shot 7

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Date: Monday, January 9, 1995 7:23am
/CoastNet
From: Jay Lockhart
Msg#: 78
To: ** ALL **

Re: New CoastNet BBD

(N)ext, (P)revious, follow (T)hread, or (R)ead this message? r

Welcome to the new Coastnet BBd! Galveston District has graciously volunteered to hoast the Coastnet BBD. It can provide a home for all our coastal discussions involving topics near and dear to all of us. I am glad to see you have found your way from Wayne State to the heart of the Texas Coast. I trust we will have a long, productive, and enjoyable stay on these friendly shores. ESSAYONS! Jay Lockhart

(R)eply, (E)mail reply, follow (T)hread, (P)revious or (N)ext message?

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