

LIGHTSPEED

Electronics, Inc.

In the event you are operating at 1200 and do not wish to purchase a 2400 baud modem, your updates will have to be sent by mail. Sorry, but there will be no exceptions to these rules. Please print the docs to Telix and set up your program accordingly. I know several of you are hard-core IBM users and would never have chosen Telix, but we chose it because it is easy to use, has never failed us in terms of bugs, and because it is shareware. Please resist the urge to use something else and at least keep Telix on-line to appease me if for no other reason.

The second reason you will want Telix is that STS V1.7 will allow you to set up a Host mode using Telix so you can take down your board and make miscellaneous adjustments to your computer from remote locations. While STS does not require that you use Telix for this (you can program any decent term program to do it) the batch files that we have programmed and tested only work with Telix. If we all use the same software, it will surely make life easier for all of us.

Thanks for your patience regarding the update and I hope you enjoy it. If you have any questions about anything, please feel free to call me at (201) 761-1793 between the hours of 12 noon to 12 midnight EST any day of the week. Please do NOT call Florida to get help as the programmers are working on version 1.8 already and get VERY annoyed when you call down there asking questions. They don't yell at you, but they yell at me and several of you complaining about delays have only increased the delays by doing so.

For your information, V1.7 is the official release version of STS. This means that the \$100 discount for operating a beta site of STS is void for all future orders received after May 15th, 1992. Press releases to a number of major magazines will be sent out in the next few weeks regarding STS and we hope to add a few more stations to our network.

Thanks again for your patience.

Sincerely,



Frederick J. Maywald
STS Program Manager

962 IBM L5963

LIGHTSPEED

Electronics, Inc.

962 Michele

September 5, 1989

Greetings Diversi-Dial Owner,

Sorry for the delay! I am finally sending your link/guest PW for FANTASIA in Florida. FANTASIA used to be D-Dial #21 until the beginning of this year. As you may know, Lightspeed Electronics has been developing a new chat system called The Synergy Teleconferencing System or STS for short. The programming for STS is still not fully completed; however, it has been developed enough to function as a replacement for our D-Dial system since January.

You were not sent a link/guest password sooner because we are not a PCP destination city and receive few incoming links, therefore programming STS to accept incoming links was rather low on the totem pole of commands to get operational. We have recently passed that point and FANTASIA can now accept incoming links. Feel free to link to FANTASIA at any time using any method you choose. Our only request is that you not link your station to us if there are already two links present on our system. Most of our members like links and we would love to see you connected.

To link to FANTASIA, call in using your guest/link account 962 LDEUS843 just as you would a D-Dial account. This account password will not change unless you change it and should be active for at least a year. STS operates a bit differently from D-Dial in that there are no separate linking accounts. Any account can be flagged to allow linking using either the STS linking protocol or D-Dial simulation protocol. Your guest account has been flagged to allow D-Dial linking whenever you like. When you logon with your guest/link account you will be treated as a normal paid account holder. When you are ready to link, enter the command slash-asterisk "/" and STS will link your station. When you see the "REMOTE" flag, enter the appropriate D-Dial linking commands to link on your D-Dial station and you will be linked. The link will be started on our Channel 6. Feel free to move the link as you see fit to any of our Channels (2-8). Please do not move links to Channel 1. You may call/link on the main rotary [8-300/1200 baud lines] at (407) 777-7580 or on the link rotary [2-300/1200/2400 baud lines] which can be reached at (407) 777-1600.

FANTASIA does not have rules prohibiting swearing or adult topics. We normally allow as much freedom of speech as possible. With the exception of not allowing warring with linked stations there are few rules. If you restrict language or subjects on your system please indicate your rules in your link handle such as "D-Dial Name - NoCuss" or something similar. STS allows 20 characters in handles so you should have enough room. While we have few rules, one rule is that requests from Sysops on other stations are to be followed. If you have problems with our users, please leave Email to me at account #000 with as much information on the incident as possible.

The blue users guide which accompanied this letter is the users guide for STS version 2.0. We are currently at the 1.4 level so some of the commands listed in the guide are not yet active. Most of the user commands are functioning as it is primarily Sysop level commands that are being worked on. Basically, the commands that effect users that are not operational at the time of this mailing are: all of the BBS commands, most /M commands, Sysop monitoring, /SS, Network linking channels R and N, /EAAA, /EV###, /UT##, and /UD.

Also accompanying this letter is a question and answer sheet, a small questionnaire, and a prepaid/addressed envelope. We would appreciate your filling out the questionnaire and returning it to us as soon as possible. Release date for STS is expected to be in early October and any comments/suggestions you have would be most beneficial to us if received soon enough to effect the release version. If you indicate on the questionnaire that you would like further information, as a current D-Dial owner you will be sent a copy of STS's Owners Manual when the software is released. The manual is quite comprehensive and we feel it will be the best way to answer your questions about upgrading to STS.

Finally, if you would like to get in touch regarding FANTASIA or STS, please contact me at (407) 777-5703. This number is my private office line and is forwarded to my home if I am not at the office. The best time to contact me is between mid afternoon and midnight EST but you may try at any time. If you are unlucky enough to get my answering machine, do talk to it; leave your message and I will get back to you. If you would like a response by phone, understand that I will be calling collect. Until STS is officially released I am not authorized to incur long distance charges. Otherwise, responses will be left via Email in your guest account on FANTASIA or by U.S. mail if you prefer. Note: I will be on leave in the New Jersey area throughout most of September and so there will likely be a delay in returning calls made during this time. Also, please note that the number listed below is inaccurate as the phone company recently changed our area code to 407. Hope to hear from you soon!

Sincerely,

Frederick J. Maywald
Marketing Manager

FJM:jar

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1-800-877-4000

NOTICE: In order to answer some of your questions about STS prior to release the following article was reprinted with permission from the Spring 1989 edition of BREVARD BYTES, the quarterly floppy newspaper of the Brevard User Society (BUS). Approximately half a page of information has been edited from the original text. These edited portions were related to local issues and not relevant to STS. They were edited from this reprinting primarily due to size constraints of this document. Brevard User Society © 1989

THE NEW FANTASIA BBS By Sean Williams

I cornered Fred Maywald, alias Falkor, on his BBS system FANTASIA to get some details on the changes that have been going on to the system. Those of you with modems have probably at least heard of FANTASIA. Lightspeed Electronics, Fred's employer, owns FANTASIA though it is operated from Fred's home in Satellite Beach.

FANTASIA was first installed in November of 1985 and was Brevard County's first CB system. A CB system is a BBS that operates similarly to Citizen's Band or CB radio. People contact the system with their computers just like a regular BBS but instead of leaving messages in the form of bulletins that are read back later, they talk to other people who are connected to the system at the same time they are!

The original FANTASIA program was called a Diversi-Dial and allowed up to seven people to connect to it at once. It could be connected to other Diversi-Dial's throughout the country so that locals could CB with people throughout the U.S. and Canada. FANTASIA's program has since been changed to a new type of CB system under development by Lightspeed that, when completed, will allow for bulletin as well as real-time conversations. The new FANTASIA allows 10 people to CB at once, is compatible with existing Diversi-Dial systems, and has been under development by Lightspeed since March of last year.

INTERVIEW

BUS: What is the Synergy Teleconferencing System?

FALKOR: The Synergy Teleconferencing System, or STS, is a multi-user CB type teleconferencing system that will eventually be capable of handling up

to 34 incoming phone lines. It is similar to the Diversi-Dial System but has greatly enhanced capabilities.

BUS: For Instance?

FALKOR: Well, to begin with, STS can handle a much greater capacity of users and can do so at greater speeds. 2400 baud is currently the maximum speed available on our beta test system FANTASIA, but the software is theoretically capable of 9600 baud on all lines given a powerful enough computer.

BUS: What computer system does STS run on now?

FALKOR: It is designed to run on an IBM PC or compatible. The speed of the computer is what governs the maximum number of lines and the maximum speed of the lines. For instance, a ten megahertz 286 based system could handle many more and much faster modems than say a 4.77 megahertz XT system.

BUS: So what is the recommended computer type?

FALKOR: Basically, it adjusts depending on what you want to do. A base system would be running up to ten, 2400 baud modems on an eight or ten megahertz clone with 640K of memory. Hard disk speed is very important so this is assuming a relatively fast hard disk, say 30 to 40 millisecond track to track time.

BUS: Why do you need a hard disk? The Diversi-Dial system didn't, did it?

FALKOR: Well we weren't out to make another Diversi-Dial. That's been done already. STS is compatible with D-Dials sure, but the idea was to design a system that would not only be far more powerful but also would allow for further expansion in the future.

D-Dial's limitations are caused by a combination of operating on a rather primitive computer and operating the software entirely from memory. We didn't want to follow down the same path.

I remember when I first installed our D-Dial system years ago. The programmers at the office all gathered around and marvelled at how efficient the programming was. The author, Bill Bashum, did an incredible job of programming to get such a limited system to do so much. The problem was that he stretched the Apple to the limits from the beginning. He didn't allow room for easy expansion.

BUS: And you have?

FALKOR: Definitely. Using an IBM system resulted in more power than we needed to do the job. That meant we could not only program in all kinds of user features that the D-Dial didn't do, but that we could also get carried away in the design and program in a lot of unnecessary niceties. The SysOp functions on STS are really incredible. Of course, using an IBM system was not without its bad points. Other than the obvious problem of it costing more to purchase, we wanted more lines in a single machine to help offset the additional cost of installing an STS system and for convenience.

BUS: So what's the problem with that? Surely an IBM can easily handle more lines than the Apple.

FALKOR: Oh, it can from a processor point of view. But from where? You see we already used up a number of available bus slots for hard disks, monitors, etc. We couldn't afford to waste a bus slot per modem as they did for Diversi-Dial. So the obvious solution was a multi-port serial card or multi-modem card.

The multi-modem cards were quickly dismissed, mostly for logistical reasons, leaving the serial cards. The only problem was that the serial cards on the market were either too cheaply made and undependable or priced at ridiculous rates. So, we decided to make our own serial card which dramatically reduced the cost of an STS station. Unfor-

unately, it also threw the project off schedule; we were supposed to release STS last December.

BUS: Logistical reasons?

FALKOR: Well, no matter what we decided, Lightspeed would be a sole-source vendor supporting the package. Multi-modem cards aren't known for being highly reliable or inexpensive and from a logistics point of view, if we used an outside vendor's modem card it would force us and our customers to rely on a third party for hardware support.

A telecommunications system can't afford to be off-line for any length of time. With a third party vendor, we couldn't have controlled repair times. By using a serial card of our manufacture we could design the card to be exactly what we wanted which was a simple, reliable method to handle a large number of lines. It also has the added benefit of being a very effective means of deterring software piracy.

BUS: Makes sense! Tell me some more about STS from a non-technical viewpoint.

FALKOR: Well it has all the standard CB type features. I used ideas from Compuserve, GENie, American Peoplelink, and of course Diversi-Dial in its design. Then I added a BBS section that could be used without leaving chat. Every convenience I could think of was designed into the layout from the beginning and then the programmers programmed to specs. That avoided the design problems that the piece-meal construction of D-Dial caused.

Many of the user conveniences are small things like remembering terminal settings, being able to assign your own password, blocking people from sending you Email, being able to view and delete unread Email that you mailed to other users...things like that. And of course I added chat and conference functions. The conferencing will even work across links once there are some more STS stations to link to.

BUS: How about from the SysOp's perspective?

FALKOR: That's where I got really carried away. I hated the way my Diversi-Dial handled system options, really primitive. I'm sure it was programmed the way it was to save memory space but I

still hated it. I am a Macintosh person by nature, so I wanted a user-friendly system and put in fill-in-the-blank option menus that let you adjust just about everything. I had designed it rather simply with numbered fields so the SysOp would enter the number of the field he wanted to change.

Well, as it turned out, the programmers were really into the project by the time they started work on the SysOp screens and got totally carried away. STS now uses ANSI compatible graphics so that full screen editing of SysOp level information is available for the main SysOp terminal and for remote SysOps with ANSI or VT100 terminals. Knocked my socks off when they showed me what they had done. [Laughter] The only bad part was that I had to rewrite quite a bit of the owner's manual. The programmers enjoyed that immensely.

BUS: It does sound nice. No wonder you missed your December objective.

FALKOR: December wasn't an imperative thing really and we wanted it done right from the beginning.

BUS: What do the SysOp screens do?

FALKOR: STS lets you adjust almost everything. It is very flexible. Users are assigned a security level and commands are also assigned security levels. If a user has the same or higher security level than the command and has not been selectively restricted from using it, he can use the command. This allows almost total flexibility for the SysOp and allows for up to 50 different SysOp and Co-SysOp levels. No more Co-SysOp passwords to lose like the D-Dial used.

BUS: What about connecting to other systems?

FALKOR: STS is able to convert it's format into D-Dial compatible information so an STS system can link to D-Dials. The D-Dial linking protocol [language] is very limited though, so linked STS systems will use our own linking protocol which allows for error checking and more advanced capabilities.

Lightspeed has also arranged for a national linking system we call Network Linking. An STS system will be able to make one outgoing call and connect to all the other STS stations in the country for under \$30.00 a month, unlimited non-prime time use.

BUS: What's the benefit of doing that over calling direct?

FALKOR: STS stations get to connect legally to long distance stations, which is hard to do now that Telenet's PC Pursuit service has changed their rate structure. But beyond that, the national network system will allow SysOps to have access to support programs, information files, things like that, more or less product support type information. Network links are also more efficient since a station can connect to all the other stations with a single call and while connected link paths will never be more than three characters between any two Net-Linked STS stations.

BUS: I like this already! What about Diversi-Dials?

FALKOR: Unfortunately direct Net-Linking is probably beyond D-Dial capability. My programmers believe that due to the speeds of data transfer, the scrambling, multi-channel information, and error checking going on during a Net-Link, that it is beyond the Apple's capability of keeping up even if there was enough memory available on the Apple to add the massive coding required to support Net-Linking.

We will try making a conversion program that could be run on a bare-bones IBM sitting along side a D-Dial to provide a Net-Link interface for D-Dials. By connecting the Apple to the IBM via a parallel port it should be possible to have a D-Dial keep up with the network since the IBM will be doing the majority of the work. But probably the best way for a D-Dial to get onto the network would be for it to link to an STS station that is hooked to the Net-Link and let the STS station provide the conversion.

What might be possible would be for someone to use the same service we are using to provide Net-Linking for STS systems and make their own simple Net-Link protocol for D-Dials to use without all the scrambling, error-checking, and other frills. Someone would have to make the investment to establish the separate Network though.

BUS: So Lightspeed is going to pay for the STS Network fees?

FALKOR: For the most part we will be paying for the Net-Link operation fees. We will just charge a simple twenty or twenty-five dollar a year Net-Link sub-

scription fee to help offset some of the costs of operation. We have already paid for the setup fees. Individual systems will still have to pay the monthly connection rate of around \$30.00.

BUS: Sounds great. So how about the bad news? What does STS cost?

FALKOR: I knew we'd get to this point eventually. Actually, I can't quote you a solid figure. Our costs for the serial boards are just estimates at the moment. I can say, however, that the target cost for a base system including one serial card, meaning up to a ten-line system, is \$500.00 for D-Dial owners that upgrade to STS within six months or so of the release date. They're getting a discount. New owners will pay more.

BUS: Ouch. Still expensive.

FALKOR: True, not cheap. But you can't get something for nothing. By the time we release STS there will be over 18 months of work in it and more man-hours than I care to calculate. We are also including hardware for a ten-line system in that price. Diversi-Dial used to cost almost \$500.00 for just software. You didn't even get a real manual with it for that price, and that was for only seven lines. I think Diversi-Dial is down to around \$400.00 now, but he still has a much better profit margin. The reason we are offering STS so low at first is that we want to give existing operators a chance to upgrade reasonably and we recognize that an existing D-Dial owner will have to buy all new hardware.

BUS: When we talked last you mentioned that a D-Dial SysOp had been curious as to whether Lightspeed would be providing a protection zone, or a kind of monopoly for STS owners.

FALKOR: Yes, we have had several requests of that kind and haven't really reached a decision. In any case, any qualified D-Dial SysOp who upgrades before the deadline will probably get approved. After that, some type of monopoly zone for areas, particularly small cities, may be offered. The problem is that you violate the rules of supply and demand when you provide people with monopolies, so we haven't decided.

BUS: Which rules do you mean?

FALKOR: In most cases, supply and demand will govern a market. Meaning

if someone opens a new system in an area where there is one already it should indicate one of two things: 1) the new businessman isn't a very good one and hasn't made the decision based on consumer demand or, 2) the existing system management has done something wrong and created or ignored a demand, such as overly restrictive rules or not having enough phone lines to meet the areas demand, stuff like that.

If we give someone a monopoly in an area and the owner is a poor manager, or has an attitude problem, then we make Lightspeed and STS look bad and do a disservice to the community since the demands of consumers may not be met. Usually the free market system can worm out problem cases on its own. But if we offer a monopoly, we then have to find a way to decide when a system needs to adjust to demand or let the people in a given area suffer. Also the legal ramifications of such a setup could practically make an STS station license into a franchise. There really is no easy answer to this situation, though we should know what we are going to do by the time STS is released.

BUS: So now you have a fancy system to replace our old neighborhood D-Dial. The question on all of our minds is, since you probably wouldn't sell an STS system to go into competition with yourselves locally, when do the rates go up?

FALKOR: [Laughter] They are already too high really. Thanks to Southern Bell's strange rules, we have the highest phone bill of any teleconferencing system in the country. We were almost paying the phone bill with the old D-Dial. With STS, membership has increased and FANTASIA is in the black. In fact, if current trends continue we may drop to \$10.00 and add a few lines.

BUS: The news gets better and better! How about games?

FALKOR: Bah. I don't really even want games. You'll be seeing them anyway though. STS version 3.0 will have several card type games and hopefully a maze game. We are also discussing a large scale adventure game.

BUS: Great! Why don't you like games?

FALKOR: Well, I want a chat system. There are already game boards up all over Brevard. With the addition of games,

people spend less time chatting and more time gaming. That's why STS's BBS section is designed to work without leaving chat. I have this strange urge to have people chatting on my chat system.

BUS: Yeah, there are game systems. But you would have the best of both worlds and ten lines to boot!

FALKOR: Well, time will tell. You may get your wish.

BUS: Thanks for answering all these questions. Any last words?

FALKOR: Humm. Yeah, Anyone want to buy an Apple IIe? I have two of them for sale. Cheap!

If you don't have a modem, now would be a good time to give in and purchase one. Modems can be very handy for exchanging program files and for accessing database library information systems, but in addition to their practical applications modems can be used to have fun and their cost has decreased dramatically in the past few years.

There are currently over 20 public BBS systems in Brevard. Most are free, but even the ones that aren't charge minimal fee's. The Guild (which I will be covering next issue) is the most expensive and charges a fee of \$.75 per hour. FANTASIA has a flat-rate fee and charges \$11.00 per month for unlimited access. Several other one or two-line systems charge yearly rates up to twenty-five dollars, but all these fees are very reasonable when you consider the time and investment the operators have to make to operate the systems.

If you would like to try FANTASIA it can be reached by setting your terminal program to 8-N-1 and dialing (407) 777-7580. FANTASIA will allow access at 300 or 1200 baud when you call this number. As a non-paying visitor your time will be limited and you will not be able to use many of FANTASIA's features. For more information on FANTASIA type the command '/I' after you have accessed the system or send a self-addressed, stamped envelope to: Lightspeed Electronics, Inc. 400 Sheridan Avenue, Satellite Beach, Florida 32937 and request a "FANTASIA Users Guide".