

FBB 5.15

SERVER AND BBS SOFTWARE FOR THE
PACKET RADIO

MULTIPOINTS, MULTICONNECTION,
MULTILINGUAL

F6FBB, Jean Paul ROUBELAT

TABLE OF CONTENTS

	Page
1 ACKNOWLEDGMENTS	4
2 COPYRIGHT	5
3 FEATURES	6
4 CONTENT OF THE DISTRIBUTION DISK	8
5 FIRST-TIME INSTALLATION AND SETUP	12
5.1 First-time setup of different files	15
5.2 APPEL.BAT	16
5.3 INIT.SRV	17
5.4 EPURMESS.INI	25
5.5 PORT.SYS	27
5.6 SWAPP.SYS	29
5.7 INITTNCx.SYS	30
5.8 MAINTx.SYS	31
5.9 BALISEx.SYS	32
5.10 BBS.SYS	33
5.11 FORWARD.SYS	34
5.12 Start the BBS for the first time	37
5.13 TNC.	38
5.14 PK-232 in host-mode.	39
5.15 Kantronics KAM in host-mode.	40
5.16 DRSI-card.	41
5.17 G8BPQ-node (uses TNCs in KISS-mode).	43
6 BBS COMMANDS	45
7 SERVER COMMANDS	51
7.1 Main menu	51
7.2 Connections-Stats	52
7.3 Documentations	53
7.4 Directory/Callbook	54
7.5 QTH-Locator	55
7.6 Satellite Orbital Computation	56
8 SYSOP COMMANDS	57
8.1 BBS menu commands	57
8.2 Other commands	61
9 FBBDOS COMMANDS	62
10 CONSOLE COMMANDS	65
11 TEXT VARIABLES	67
11.1 Variables definitions	67
11.2 Variables list	68
12 FULL SCREEN TINY EDIT	70
13 EMS and XMS	72
13.1 EMS	72
13.2 XMS	73
13.3 FBB and additional memory	74
13.4 Choice of add-on memory	74

14	ASYNC PORT DRIVERS AND TELEPHONE MODEM	75
14.1	ESS.COM	75
14.2	FBBIOS.COM	76
14.3	TELEPHONE MODEM	77
15	MISCELLANEOUS TOOLS	81
15.1	INSTAFBB.COM	82
15.2	EPURMESS.COM	83
15.3	EPURWP.COM	85
15.4	LOGSTAT.EXE	86
15.5	SATUPDAT.EXE	87
15.6	SLEEP.COM	92
15.7	TLABEL.COM	93
15.8	MAKEPG.COM	94
15.9	SETUSER.COM	95
15.10	CLEANUP.COM	96
15.11	MAINTINF.COM	97
15.12	MAINTREJ.COM	98
15.13	CUT.COM	99
16	WHITE PAGES DATABASE AND SERVER	100
16.1	DESCRIPTION	100
16.2	UPDATE REQUESTS	101
16.3	DATABASE DESCRIPTION	101
16.4	DATABASE MANAGER	102
16.5	EPURWP AND UPDATE MESSAGES	102
16.6	WP SERVER REQUESTS	103
17	SERVERS	104
17.1	REQDIR	105
17.2	REQFIL	106
17.3	NEWDOC	107
17.4	REQCFG	108
18	OTHER FILE-formats (continued from section 5).....	110
18.1	PORT.SYS	111
18.2	CRON.SYS	112
18.3	REJET.SYS	115
18.4	PASSWD.SYS	116
18.5	PROTECT.SYS	117
18.6	LANGUE.SYS	118
18.7	FORWARD.SYS	120
18.8	x.TXT, x.HLP, x.ENT, x.INF	128
18.9	FBBLOG.nn	129
18.10	DIRMES.SYS	131
18.11	STATIS.DAT	132
18.12	WFBID.SYS	133
18.13	INF.SYS	134
18.14	HROUTE.SYS	135
18.15	YAPLBL.SYS	136
18.16	MEMO.SYS	137
18.17	SATEL.DAT	138
18.18	nnnnn.SAT (characteristics)	139
18.19	WP.SYS	140
18.20	MESS.WP	141

APPENDIX	142
APPENDIX 1 : EDIT Commands	142
APPENDIX 2 : PK232 Host-Mode	144
APPENDIX 3 : PROCESS NUMBERS AND HELP	145
APPENDIX 4 : RECORDING A MESSAGE	146
APPENDIX 5 : TRICKS AND TIPS	147
APPENDIX 6 : FBB FORWARD PROTOCOLE	148
APPENDIX 7 : COMPRESSED FORWARDING	151
APPENDIX 8 : FORMAT OF ACK MESSAGES	153
APPENDIX 9 : REPLACEMENT CHARACTERS OR WILDCARDS	154
APPENDIX 10: PROGRAMMING TECHNIQS FOR SERVERS ...	155
APPENDIX 11: CONTENTS OF THE DIRECTORIES	159
APPENDIX 12: CONNECTION FILTERING	161
APPENDIX 13: MESSAGE FILTERING	163
APPENDIX 14: PG PROGRAMS DEVELOPMENT	165
APPENDIX 15: UNPROTO MESSAGE LISTS	167
APPENDIX 16: EXTENSIONS TO THE YAPP PROTOCOLE ...	169

1 ACKNOWLEDGMENTS:

I would like to particularly thank Patrick FC1GHV and Per LA6CU, who have helped me to achieve and set up this software, debugging and documentation, as well as Claude FC1CDC, the "dumb individual", who, with his advices and criticism (often vitriolic!), has given his support over more than four years in the achievement of this task.

I would like to thank, as well, all the programmers for the development of applications and complementary tools for this software. Such a support made me free of these tasks, very often ingrate.

I thank again all the SYSOPS and users who are confident in the product, and cooperate, thanks to their comments and suggestions, in improving this BBS software package.

I would like, at the end, to thank WA8DED for the excellent piece of software, the Host-Mode for the TNC, and also NORD<>LINK for the additions made to it.

2 COPYRIGHT:

This software is delivered at no cost and is free of all charges. It can be freely copied or installed for any HAM-RADIO application. Any other usage for commercial, professional, or industrial purposes is forbidden.

Despite the free sharing nature of this product, a participation to the investment and to the mailing cost at the level of 100 FF or 20 US Dollars (or more) would be most welcome.

The author can be contacted by mail at the following address:

Jean-Paul ROUBELAT
6, rue George SAND
31120 ROQUETTES
FRANCE

3 FEATURES :

The usage of this software is very close to the one made by WA7MBL, whose commands have been kept. It has also a set of specific and original supplementary commands.

- Works on any 100 % compatible XT or AT PC fitted with a hard disk and 640 k RAM, monochrome CGA or EGA VDU, 1 up to 8 serial ports. This software allows user-customized colours but works also without any modification monochrome adapter.

- Multiconnections: up to 50 simultaneous channels on 8 TNC (4 or 8 channels per TNC depending on the software used).

- Multiplexing: this software supports usage of an external MUX and supports also extension boards in the case of a hardware configuration having more than 2 ports. The MUX connects 4 TNC on 1 serial port, either com1 or com2. Printed board is available from the ATEPRA association, (ATEPRA, 23 rue de Provins, 77520 MONS EN MONTAIS - FRANCE).

Operates:

- with any TNC2 or clone fitted with the special 27256 eprom containing the WA8DED firmware, or TF4/TF8, with a Z80 clock of 2.5 or, better, 4.9 MHz. -
- with a PK232 in Host-Mode (but TFPK software, WA8DED hostmode for PK232 works greater !).
- with a G8BPQ node.
- With a KAM hostmode (I seem to have still some problems).

- Standard BBS: it is a BBS identical to the WA7MBL or W0RLI. It has also server functions (computation of satellite orbits, callbook, and operator customizable chapters, gateway to an other channel, the users being able to chat together in real time on the same or different channels, etc...).

- Forwarding: with the other BBS WA7MBL type or compatible, BIDS management (up to 2000 of them, or more depending on a parameter, are saved in a separate file), a BID is automatically generated should the user doesn't provide it. Private message works with the management of MID. The messages are suppressed automatically after a delay which can be user defined. This is true for bulletins and private mail.

- The forwarding is optimized between BBS using FBB protocol type. It is more efficient on a VHF/UHF network. This kind of forwarding can be disabled by configuration.

- The compressed forwarding allows the reduction by a factor of about 40-50% the quantity of data to exchange in big messages. The messages are protected by checksums, then the transfer is made error-free.

- The forwarding is simultaneous on the various ports regardless they are incoming or outgoing. There might be several forwardings outgoing per port which number is set by parameter. The number of incoming forwarding is a function of the available channels. The time and the period of forward can be set separately on each port.

- The hierarchical routing is supported.

- The ping-pong phenomenon is automatically detected and an information is given to the sysop by a system message.

- Messages and bulletins for SYSOP are duplicated to a destination call which can be defined by configuration.

- A detailed log of the BBS activity is maintained and a statistic analysis program, written by FC1MVP, is also available.
- Binary transfer is supported with the usage of the YAPP protocol of WA7MBL. An extension to this protocol has been made, including the automatic restart and the checksum, should a stop has occurred or a disconnection took place during the transfer. This extension to the protocol works with the TPK, packet terminal program written by FC1EBN.
- Gateway between connected stations or with another port.
- Conference within the limits of the available ports and channels.
- Language: at the first connection, the connect language is attributed to the user, depending of the callsign.
- Remote SYSOP operation is supported and the housekeeping of the BBS messages, mail and old mail is done each and every night at low activity period which can be parametered, and is done automatically.
- Works under DesqView.

4 CONTENTS OF THE DISTRIBUTION DISK.

Directory of C:\515\DISK1

INSTA515	BAT	120	28.03.92	20:27
FBB515	ZIP	2454	06.03.93	14:27
514515	BAT	120	18.08.91	12:40
BIN515_2	ZIP	235835	06.03.93	14:27
READ	ME	528	13.02.93	15:46
FBBMUX		2190	05.03.93	20:17
PKUNZJR	COM	2750	28.12.92	2:04
FWD515	ZIP	626	06.03.93	14:27
STAT515	ZIP	39800	06.03.93	14:27
SY515	ZIP	5844	06.03.93	14:28
SUITE1	BAT	4491	05.03.93	22:08
SUITE2	BAT	7814	05.03.93	22:10

Directory of C:\515\DISK2

DOC515	ZIP	127982	06.03.93	14:28
BIN515_1	ZIP	197029	06.03.93	14:28
SAT515	ZIP	18420	06.03.93	14:28

Directory of C:\515\DISK3

LANG515	ZIP	199993	06.03.93	14:28
FIRMWARE	ZIP	138645	06.03.93	14:28

Directory of C:\515\DISK1\BIN515_2

SERV	BIN	562941	06.03.93	14:26
------	-----	--------	----------	-------

Directory of C:\515\DISK1\STAT515

LOGSTATF	EXE	39152	23.01.93	18:31
LOGSTATU	EXE	39136	23.01.93	18:39
LISEZMOI	DOC	8212	23.01.93	18:51
LOG	DOC	918	23.01.93	18:53
LOGCALL	EXE	11200	13.09.92	17:24
LOGFBB	CNF	358	23.01.93	18:57

Directory of C:\515\DISK1\SYS515

BALISE1	SYS	89	22.03.92	2:05
BALISE2	SYS	81	22.03.92	2:05
INITTNC	DED	47	15.08.90	11:49
INITTNC	PK	44	08.12.90	16:50
INITTNC1	SYS	45	16.12.91	23:03
INITTNC2	SYS	34	13.10.91	20:02
LANGUE	SYS	807	05.03.93	20:48
CRON	SYS	1009	22.03.92	0:33
MAINT1	SYS	61	22.03.92	0:49
MAINT2	SYS	61	22.03.92	0:49
SWAPP	SYS	473	05.03.93	20:12
PROTECT	SYS	159	26.08.90	12:49
MEMO	SYS	143	11.12.91	22:24
FORWARD	SYS	215	05.03.93	20:01
BBS	SYS	584	05.03.93	20:01
PASSWD	SYS	766	05.03.93	20:03
PORT	SYS	2604	05.03.93	20:08
REJET	SYS	515	05.03.93	20:11

Directory of C:\515\DISK1\FBB515

INIT	SRV	3502	05.03.93	19:52
NEWDOC	SYS	14	10.02.91	12:54
EPURMESS	INI	1406	05.03.93	19:53

Directory of C:\515\DISK1\FWD515

AMSAT		86	27.05.91	19:02
F6ABJ		491	13.10.91	20:00
LA6CU		244	13.10.91	9:26

Directory of C:\515\DISK2\BIN515_1

APPEL	BAT	1231	22.03.92	1:44
EPURMESS	BIN	27269	05.03.93	19:25
MAINTINF	BIN	14401	05.03.93	19:25
BIPPER	COM	12142	10.02.91	17:48
MAKEPG	COM	9034	06.03.93	8:29
ICOM	COM	6998	27.02.93	17:51
INSTAFBB	COM	44758	05.03.93	19:52
REQDIR	COM	13810	03.06.92	18:42
REQFIL	COM	11940	03.06.92	18:50
TLABEL	COM	780	31.08.91	11:35
ESS	COM	3128	20.01.93	15:55
CUT	COM	7984	08.03.92	14:40
NEWDOC	COM	13060	10.02.91	13:09
CLEANUP	COM	58064	18.01.93	18:50
CTRLBK	COM	174	22.02.92	9:51
FBBIOS	COM	5775	10.02.93	1:30
HR2WP	COM	17152	27.12.92	17:20
SLEEP	COM	8778	10.02.91	16:39
SETUSER	COM	8114	04.10.90	18:08
FV	COM	8396	10.01.93	1:42
MULTI	EXE	15568	10.10.92	7:27
SATUPDAT	EXE	47458	22.11.91	6:52
MAINTREJ	COM	11500	04.06.92	20:36
EPURWP	BIN	19140	05.03.93	19:25

Directory of C:\515\DISK2\DOC515

MULTI	DOC	5813	22.11.92	19:22
CHANGES	DOC	25841	02.02.93	15:56
515-GB	DOC	279165	07.02.93	15:42
WA8DED21	DOC	33778	29.10.87	0:24
WA8V21B	DOC	21331	20.01.88	22:39
WA8V21C	DOC	12483	15.03.88	21:15
FV	DOC	7388	10.01.93	1:42
TFPK	DOC	9700	02.05.92	15:51

Directory of C:\515\DISK2\SAT515

SATEL	DAT	4968	05.03.93	2:39
14129	SAT	964	03.05.92	2:33
14781	SAT	653	09.02.91	11:13
18129	SAT	2981	03.05.92	2:33
19216	SAT	1691	03.05.92	2:33
20480	SAT	1205	04.05.92	2:33
20437	SAT	860	03.05.92	2:33
20440	SAT	356	09.02.91	12:37
20441	SAT	495	04.05.92	2:33
20442	SAT	1293	04.05.92	2:33
20439	SAT	1479	03.05.92	2:33
21087	SAT	5956	03.05.92	2:33
20826	SAT	300	03.05.92	2:33
19336	SAT	306	03.05.92	2:33
20305	SAT	306	03.05.92	2:33
21232	SAT	325	03.05.92	2:33
16969	SAT	298	03.05.92	2:33
20788	SAT	331	04.05.92	2:33
20580	SAT	276	04.05.92	2:33
18820	SAT	305	20.05.91	21:03
19851	SAT	316	03.05.92	2:33
20670	SAT	313	04.05.92	2:33
16609	SAT	1112	03.05.92	2:33
19531	SAT	284	03.05.92	2:33
21089	SAT	538	03.05.92	2:33
21578	SAT	716	05.09.91	17:02
21575	SAT	1400	03.05.92	2:33
21577	SAT	848	03.05.92	2:33

Directory of C:\515\DISK3\LANG515

FRANC8	HLP	52571	01.08.92	21:33
FRANCAIS	HLP	52578	07.04.92	19:52
FRANCAIS	TXT	11280	31.10.92	12:06
ITALIANO	HLP	35632	04.08.92	20:42
FRANC8	TXT	14799	15.02.93	22:14
SVENSK	TXT	11312	09.08.92	17:05
PORTUGUE	TXT	11375	09.08.92	17:05
NORSK	TXT	18897	09.08.92	17:05
NEDERLAN	TXT	12058	09.08.92	17:05
ITALIANO	TXT	13343	09.08.92	17:05
CATALA	HLP	18310	12.04.92	10:27
DANSK	HLP	31267	13.01.91	5:55
DEUTSCH	HLP	52368	20.03.92	2:31
ENGLISH	HLP	55909	22.08.92	7:06
ESPAGNOL	HLP	18509	12.04.92	10:28
HRVATSKI	TXT	10831	09.08.92	17:05
NEDERLAN	HLP	16113	18.05.90	16:49
NORSK	HLP	62807	14.06.92	12:42
PORTUGUE	HLP	19685	01.11.90	19:57
SVENSK	HLP	14271	07.03.91	23:29
ESPAGNOL	TXT	12430	07.02.93	15:54
HRVATSKI	HLP	39541	01.01.80	3:28
ENGLISH	TXT	14221	03.02.93	15:20
DEUTSCH	TXT	14122	07.02.93	15:53
DANSK	TXT	13977	09.08.92	17:05
CATALA	TXT	11423	09.08.92	17:05
MODEM	ENT	479	17.09.92	2:33

Directory of C:\515\DISK3\FIRMWARE

TF4	ROM	32768	17.03.88	20:23
TF18	ROM	32768	14.11.88	10:34
TF24	ROM	32768	14.09.90	9:14
TF8	ROM	32768	23.03.88	12:26
PK88U16K	ROM	25508	18.06.90	16:59
PK88U32K	ROM	25511	18.06.90	16:59
PK87U16K	ROM	25417	06.03.90	21:08
PK87U32K	ROM	25420	06.03.90	21:06
TFPK	ROM	32768	02.05.92	15:48
TFPKM	ROM	32768	02.05.92	15:48

5 FIRST-TIME INSTALLATION AND SETUP.

This part of the manual is intended for the sysop that has never used FBB software before. I hope this part of the manual will help you to get "on the air" with FBB without too many problems.

Normally you will install FBB from diskettes. Normally your diskette-drive will be called A, and normally you will install the FBB-program on hard-disk called C. But this is no absolute need, you can use other drives as well. More about this a little later.

Your hard-disk is organised in several directories. If you are not familiar with this, you should read in your DOS-manual about how the hard-disk is organised.

FBB will normally be installed on your hard-disk in a directory named FBB. This directory should be placed directly under root (C:\FBB). This directory will be automatically created for you. The BBS will also need a lot of other directories, and they can be made directly from root, or they can be made under the FBB-directory. In the procedure I will describe here, only the FBB-directory will be at the root (C:\FBB) of the hard-disk, while all the other directories will be placed under FBB (like C:\FBB\USERS etc). But you can choose this yourself. More about this a little later.

You should now be ready to start the installation procedure. Put the first of the diskettes (if you use such a format that more than one diskette is needed) in your disk-drive, and type A: if that drive is named A, or B: if that drive is named B. Press ENTER to execute the command (you must always press ENTER after a command to the PC). Your PC will now answer with something like A:\> or B:\>

If you now are ready to install FBB 5.14 for the first time on your PC, you type INSTA514 (For version 5.15 you type INSTA515 and so on..)

You will now see at your screen something like this:

---- QUOTE: ----

**** PREMIERE INSTALLATION DE LA FBB 5.14 ****

**** FIRST INSTALL OF FBB 5.14 SOFTWARE ****

Installation - depuis le disque A: - from disk A:

- Programmes du serveur -	BBS programs -	C:\FBB
- Fichiers systeme -	System files -	C:\FBB\SYSTEM
- Messages -	Messages -	C:\FBB\MAIL
- Messages binaires -	Binary mail -	C:\FBB\BINMAIL
- Repertoires utilisateurs -	User's directory -	C:\FBB\USERS
- Fichiers Yapp -	Yapp files -	C:\FBB\USERS\YAPP
- Archive messages -	Message archive -	C:\FBB\OLDMAIL
- Statistiques -	Statistics -	C:\FBB\STATS

Si cette configuration ne convient pas,
modifier les chemins par defaut dans le fichier A:SUIE1.BAT

If this configuration is not ok,
please change it in the A:SUIE1.BAT file.

Tapez Ctrl-C si une version precedente existe deja
Et utilisez 513514.BAT pour une mise a niveau.

Type Ctrl-C if a precedent version already exists

and use 513514.BAT instead.
----- UNQUOTE. -----

This screen may vary a bit from version to version, but the work you have to do, will still be the same. First of all, you will see that the PC says that you will install from disk A. Is this correct ? If you are installing from disk-drive B, you must stop the installation now. The same applies if you want to use other directory-names or paths for some of the other directories that are listed on your screen now.

If you DO want to change any of these things, you MUST do it now. The changes are described in this paragraph; if you do NOT want any changes, you can go on to the next paragraph. You stop the installation-batch by pressing CTRL-C. Now you will see the standard A:\> prompt again. Now you must use a normal text-editor and edit the file SUITE1.BAT on your diskette. I presume you have such an editor... Make sure that it is able to save the file again in ASCII (DOS) format ! So if you use for example Word Perfect, you MUST remember to save the file again in DOS-format !

At the beginning of that file, you will see a line saying SET disk=A: If you want to install from B-drive, you edit this line like this:

```
SET disk=B:
```

You change only the letter after '=', nothing else ! You can also change all directory-names or directory-paths in this same way. If you do not want to use C:\FBB\SYSTEM, but want it to be C:\FICHIERS, you just change the line saying

```
SET fichiers=C:\FBB\SYSTEM  
to  
SET fichiers=C:\FICHIERS
```

and so on. You must ONLY change the name behind the '=' sign, you must NOT change anything before that in that line. You can do this with any (or all) the directory-names and paths. But remember that you will need to do some extra work with other config-files later if you do not use the default installation.

When you have finished doing the changes you want in the lines starting with SET, you must save the file again to disk. When that is done, you start over again from the beginning, by typing INSTA514 etc.

OK. That is about all. Now the BBS-program and all its files will be installed on your hard-disk. You only have to change diskettes each time you are asked to (if you install from more than one diskette). When the installation is complete, you will be asked to modify some of the files. We will have a look at this now.

If you have a printer, it is a good idea to make a hard-copy of the doc-files now. Go to the DOC-directory and type

```
COPY *.DOC PRN.
```

You will need a lot of paper....

This is the recommended organization for your directories
directories will be made like this if you made no changes :

```
FBB          INIT.SRV and EPURMESS.INI (configuration) files.  
|  
| \_BACKUP   Backup important files.
```

```

\__BIN          All the BAT, COM and EXE files.
\__BINMAIL
  |
  | \_MAIL0      Compressed mail files (number ending with 0).
  | :
  | : \_MAIL1
  | :
  | : \_MAIL8
  | :
  | \_MAIL9      Compressed mail files (number ending with 9).
\__DOCS         Files of the DOCS command.
\__MAIL
  |
  | \_MAIL0      Ascii mail files (number ending with 0).
  | :
  | : \_MAIL1
  | :
  | : \_MAIL8
  | :
  | \_MAIL9      Ascii mail files (number ending with 9).
\__OLDMAIL      Optional archive for messages.
\__PG           COM and EXE files for the PG command.
\__USERS       Root of the FbbDos directories.
  |
  | \_YAPP
\__SYSTEM      System files.
  |
  | \_FWD        Includes of FORWARD.SYS file.
  | \_LANG       Texts and help files.
  | \_LOG        FBBLOG.nn files.
  | \_SAT        Satellite files.
  | \_WP         White Pages files.

```

The path FBB\BIN must be included in your PATH in AUTOEXEC.BAT. Do this by adding to the PATH line in AUTOEXEC.BAT ";C:\FBB\BIN" like :

```
PATH C:\;C:\FBB\BIN
```

A list of the files of each directory is given in appendix 11.

5.1 FIRST-TIME SETUP OF DIFFERENT FILES.

So far so good... Now we must modify some files, to make the system work. I will describe all the changes you MUST do, and some changes that you CAN do, if you like. Read this section very carefully. For most of the files it is VERY important that the number of non-comment lines must NOT be changed. Later in the sysop-manual you will find more details on some of these files, and also details on other files that are not described here in this startup-section.

5.2 APPEL.BAT.

This is the very first file that FBB will use. You will find it in the main FBB-directory. You don't really need to do any changes in this file, unless you did some changes in SUITE1.BAT during installation. If you did, you must change the pathnames in APPEL.BAT exactly the same as you did in SUITE1.BAT. This is very important ! So look for the lines that I have marked with an <-- here :

```
set fbb=C:\FBB          <-- Defines the base of the FBB file system.
echo off
cd %fbb%                <---
break off
echo Program is started, use ^C to interrupt within 3 seconds
sleep 3
serv %1
if errorlevel 2 goto direct
if errorlevel 1 goto suite
goto fin
:suite
cls
echo
echo Sorting HROUTE.SYS...
copy %fbb%\system\hroute.sys temp.$$$ <---
type temp.$$$ | sort | find /v "# " > %fbb%\system\hroute.sys <---
del temp.$$$
echo
echo Backup of important files...
copy %fbb%\system\dirmes.sys %fbb%\backup\dirmes.s1 <---
copy %fbb%\system\inf.sys %fbb%\backup\inf.s1 <---
echo Cleaning up message-file...
del epurmess.res
epurmess
echo Cleaning up white pages database...
del epurwp.res
epurwp
:direct
if not exist c:%fbb%\system\sat\amsat.txt goto appel <---
cd %fbb%\system <---
tlabel
cd %fbb%\system\sat
satupdat amsat.txt /n > satupdat.res
satupdat amsat.txt >> satupdat.res
del amsat.txt
cd %fbb% <---
:appel
echo Program is started, use ^C to interrupt within 3 seconds
sleep 3
serv -t
if errorlevel 2 goto direct
if errorlevel 1 goto suite
:fin
echo Program is terminated..
break on
Echo on
```

5.3 INIT.SRV.

This file is the next file that FBB looks into during startup. This file will be found in the main FBB-directory. All basic data is collected from this file. Use your standard editor (as explained earlier) to edit the following lines: (all lines starting with # are comments)

INIT.SRV is now created or updated with a little program named INSTAFBB.COM. This program is organized as pages of menus, and you can edit or change any topic in your configuration. It is no longer necessary to edit the INIT.SRV file.

The version of the software is now indicated in the first comment line. This will allow further automatic updates.

```
# FBB5.15
#
# Callsign and H-address (Do not include SSID !)
LA1B.#BRG.NOR.EU
#
# SSID for the BBS
0
#
# Qra locator
JP20RH
#
# Qth (variable $c)
Bergen
#
```

In the above lines you MUST replace the callsign and H-address with your own BBS-call and H-address. You also must replace the SSID, that is the number after the callsign. In LA1B-6, the 6 is the SSID. If you do not want any SSID, type 0 here. You also must replace the QRA-locator with your own locator (ask some other ham for help on this, if you don't know the BBSs QRA-locator. Do NOT use the value from this example-file ! You also must replace the QTH (don't make it too long...). If the QTH-name is short, you might add the QRA-locator here too, like I have done.

Next we have some filenames and path-names. These filenames and paths are the same as used in the installation-procedure. If you did no changes in this during installation, you will not need to change any of these now. But if you DID make changes during installation (in SUITE1.BAT) you MUST do the exact same changes here ! This is VERY important ! Note the syntax, and note that directory-names MUST end with a \

```
# Directory for files used by the BBS
C:\fbb\system\
#
# Directory for messages
C:\fbb\MAIL\
#
# Directory for binary-messages
C:\FBB\BINMAIL\
#
# Directory for users DOS
C:\fbb\users\
#
# Directory for Yapp-files
C:\fbb\users\yapp\
#
```

```
# Directory for DOCS
C:\FBB\DOCS\
#
```

That was not so difficult ?

Next you MUST replace the first-name of sysop, and the callsign of sysop.

```
# First-name of sysop
Per
#
# Sysops callsign
LA6CU
#
```

In the following line you CAN (not necessary) replace the ***** with a callsign. If you do, that callsign will receive a copy of all SYSOP-messages that arrives. You might want to put your own callsign there.

```
# Callsign (and route if needed) that shall have copy of messages
# adressed to SYSOP
# (** for no copy, FD1CDC@FD1CDC.FMLR.FRA.EU if route)
*****
#
```

No need to change this:

```
# Path and filename for import-file
\FBB\MAIL.in
#
```

Here you must first write the code for the kind of monitor you use, and then you must have a number for how many minutes you want before the screen should go blank, after no activity on the keyboard. In this example I have a CGA-monitor, and my screen will go blank after 5 minutes since I last touched the keyboard.

```
# Type video:0=CGA, 1=EGA, 2=VGA Time before screen-blank.
#
0 5
#
```

Log complet gives you a log-file for every week. If you write NO here, no log-file will be made. The log-file will appear in the directory named LOG. Direct video uses fast BIOS-calls if you answer OK. If you plan to use Desqview or Windows you must change it to NO. Indication of channels will normally be OK (that means that monitored information on screen will be more complete, with callsign of user before every frame from each user, etc).

```
# Log complet (OK or NO)
OK
#
# Direct video (OK or NO)
OK
#
# Indication of channels
OK
#
```

Next we have Mode Test (NON - OK). If you type OK, the BBS will start, but will not access the TNC(s). Use this the first times, to make sure that everything works fine. When you are sure that all is well, connect the TNC(s) and change this to NO. Restart the FBB, and now the TNCs will be used, as normal.

```
# Mode Test (NO - OK)
OK
#
```

Forward type FBB is faster and more efficient than standard MBL-type forward. Use this whenever possible (OK). If you type NO, FBB-type forward will not be allowed. The same goes for compressed forward. Compressed forward is very much faster, and should always be used. So, leave these lines unchanged, you can change them later, if you want to :

```
# Use (when possible) forward type FBB
OK
#
# Use (when possible) compressed forward
OK
#
```

Hroute update validation. If you type OK, the HROUTE look-up will be validated. This takes some tens KB of memory. A route without hierarchical extension will be changed to hierarchical route if found in the HROUTE.SYS database. This database is automaticly updated while receiving headers.

```
# HROUTE look-up and database update validation
OK
#
```

Informations query. This ensures that the user will give his informations. This will be helpfull for the update of the white pages database. If "OK", the user will prompted until he answers to the queries.

```
# User MUST give Name, HomeBBS, Qth and ZIPcode
OK
#
```

Next we have 'Masque'. This is a default value that is given to all new users when they log on the BBS for the FIRST TIME. Select the things you want for all new users, and the values for them. If you f.ex. want all new users to get Paging, and be in Guest mode, add 32 and 64, and put the result 96 in the file. If you want none of the things listed here, put in a 0. The "see-all_mail" mask will be active only if the user has the "read-all-messages" security code (see behind).

```
# First connection mask.
# 0   : disable.
# 1   : Excluded.
# 2   : Local.
# 4   : Expert.
# 8   : Sysop.
# 16  : BBS.
# 32  : Pagation.
# 64  : Guest.
# 128 : Modem.
```