INTER MAR

PSK mail
HAM Radio live

# Short Information

Version 1.0 | Octobre 2008

## Imprint

**INTERMAR Amateur-Seefunk e.V.**
**Germany's Maritim Mobile Net Service**

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**Note**
All rights of the PSC mail program are retained by Rein Couperus PAØR

INTERMAR PSK mail Win V 1.0
is a translation from Linux into Windows
by INTERMAR e.V.

Copies are only permitted with our written consent.

Pictures and screenshots in this manual only correspond with the 72 DPI quality in the internet.

## PSKmail Info PDF

**Purpose:** is to provide information on the PSKmail program and its application for the target below.

**Target:** Sailers and watersportfriends with or without ham radio license (including SWL's)

Hornbach, 25.09.2008

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## 1. What is PSKmail?

PSKmail is a ham radio working mode, which uses data traffic (PSK) : The clients and servers work in PSK-250 mode with and among each other. Everyone can connect to anyone.

An important element of PSKmail is the interconnection of several working modes and transmission media.

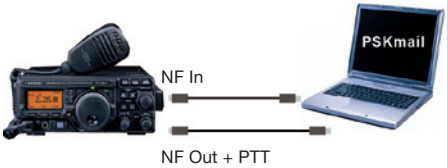
> APRS Automatic Positions Reporting System
> Server network
> Internet
> local mailbox
> more planned

Many things are possible. You can read and send email (fetch weather reports, send direct messages) and update the ships position through the APRS system (= Automatic Position Reporting System). PSKmail can provide access to internet services specifically worked out for sailers. You can use all functions with the Afu-license, but the servers can even be used without internet connection. Without Afu-licence, many functions can only be used by logging in. Therefore PSKmail in general is a SWL (listeners)-application !

## 2. What do you need for PSK-mail?

In the simplest case (SWL, listeners), one only needs a SSB shortwave receiver, a notebook, a connecting cable with cable interface*, and the PSKmail software V1.01 Linux or the INTERMAR PSKsoftware Win 1.0 for Windows XP.

Of course licensed amateurs use a shortwave transreceiver (SSB) for sending.



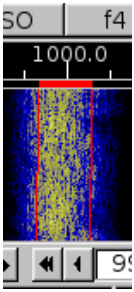

Connection:
Transceiver over microphone jack
> Mik
> PTT
> GND
and speaker jacks
> NF out
> GND
or over DATA jack (at the back)
> Data IN (NF-IN)
> Data OUT (NF-OUT)
> PTT
> GND

* see www.pskmail.de > Interface

**PSKmail system = PSK250**
**(250 Hz bandwidth)**

System TRX = SSB, USB

PSKmail is a narrow band mail delivery system used by amateur radio hams via short wave (HF) communication.
To optimize the reception quality, you can switch on a narrow 500 Hz filter into the receiver. Most of the transceiver can be retrofit with a narrow filter into the USBmode control. See manual. The advantage of a narrow filter is, that the area of only 500 Hz is bugged and you can't be disturbed simultaneously from serveral different signals. Additionally or alternatively, you can use a DSP as long as the recipient provides you.




The frequency to set is (dail-frequency) – 1 kHz from the center frequency, e.g. PSK-APRS-Random 10.148,0 kHz, dailfrequency 10.147,0 kHz

Dail-frequency, 2,4 kHz USB, 1000 Hz Waterfall
Center Frequency 10.148 kHz USB

## 3. PSKmail, what does it cost ?

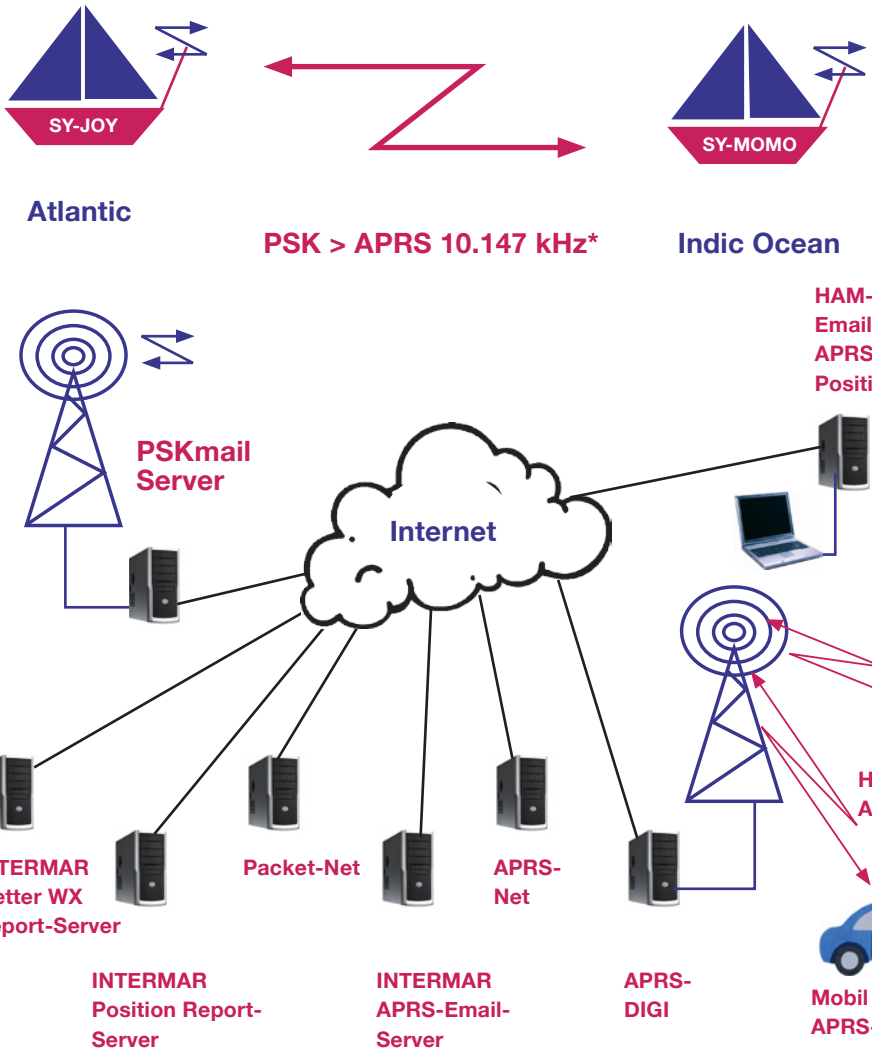
The PSLmail software, Linux and Windows are available free of charge. The user only needs the equipment discribed above. For amateurs usually always available. To connect transceiver and notebook, you need a small sound card interface. The cost amounted to 10,00 € to 100,00 €, depending on the equipment.

Small interfaces only transmit the NF and turn the transceiver on.

Complex interfaces control, among other things, the transceiver for a possible server-triggered frequency change.

See www.pskmail.de > Interface and PSKmail Shop

## INTERMAR – PSKmail Overview




Octobre 2008

## Server System

The PSK-APRS-Random-Frequency 10.147,0 kHz should be use by all servers, unless there would be multiple servers installed for different frequencies. INTERMAR operates five servers at different frequencies (see frequency-map).

The PSK-APRS-Server is exclusively used for PSK-APRS-Functions. There is no weather, email or file-retrieval allowed.

Special servers, at 20m, 30m, 40m and 80m, are available for these functions.

Other servers can be connected on the PSC-APRS frequency

Then you suggest a QSY-frequency and get a new QSY-release to the specified frequency.

The user has to change the frequency of his transceiver e.g. to retrieve his mail.

---

Attention All other functions, WX Email and files on other frequencies

> you can find it on the Frequency-Plan

PSKmail 250 MODE Software INTERMAR PSK-mail Win 1.0

*Chart reference note: All other functions, WX, email and files on other frequencies
> You can find it on the frequency plan
PSKmail 250 NODE software INTERMAR PSK-mail Win 1.0

**Server 1 10.1047,0 kHz PSK-APRS (Dial QRG)**

**Server 2 14.077,0 kHz WX-Email, File „**

**Server 3 10.146,0 kHz WX-Email, File „**

**Server 4 7.037,0 kHz WX-Email, File „**

**Server 5 3.587,0 kHz WX-Email, File „**

## Which PSKmailservers can I use?

(Center Frequencies : Display -1kHz all USB, example 10148Khz = 10147KHz!)

| Station | Country | Time (UTC) | Freq. | Beacon min. | Mode | Status | QSY |
|---|---|---|---|---|---|---|---|
| PI4TUE | NETHERLANDS | 00:00 - 00:00 | 10.148,00 | 0,4 | PSK250 | Active | 10148.50 |
| HB9XQ | SWITZERLAND | 00:00 - 00:00 | Scanning | 0,3,4 | PSK250 | Down | NO QSY |
| SM0RWO | SWEDEN | 00:00 - 00:00 | Scanning | 0,1,4 | PSK250 | Active | 10148.50 |
| W8FT | USA | 00:00 - 00:00 | 10.148.50 | 0 | PSK250 | Down | NO QSY |
| VE7SUN | CANADA | 00:00 - 00:00 | 10.148.00 | 3 | PSK250 | Active | NO QSY |
| WB5CON | USA | 00:00 - 00:00 | Scanning | 0,1,2 | PSK250 | Active | NO QSY |
| N5ALE | USA | 00:00 - 00:00 | 10.148,0 | 4 | PSK125 | Down | NO QSY |
| IS0GRB-3 | ITALY | 00:00 - 00:00 | 10.148,0 | 2,4 | PSK250 | Active | 10148.50 |
| IS0GRB-4 | ITALY | 00:00 - 00:00 | 3.591,0 | 2,4 | PSK250 | Active | NO QSY |
| VK2ETA | AUSTRALIA | 00:00 - 00:00 | Scanning | 3,4 | THOR22 | Active | NO QSY |
| KB2SDR | USA | 00:00 - 00:00 | 10.148,0 | 2 | PSK250 | Down | NO QSY |
| KD5WDQ | USA | 00:00 - 00:00 | 10.148,0 | 3 | PSK250 | Active | ? |
| KD4QCL | USA | 00:00 - 00:00 | Scanning | 3,4 | PSK250 | Down 10/4-10/11 | NO QSY |
| PA0SON-4 | NETHERLANDS | 00:00 - 00:00 | 7038.0 | 0 | PSK250 | Down | NO QSY |
| DK4XI-0 | GERMANY | 00:00 - 00:00 | 10148,0 | 5 | PSK250 | Active | NO QSY |
| DK4XI-2 | GERMANY | 00:00 - 00:00 | 14.078,0 | 0 | PSK250 | Active | NO QSY |
| DK4XI-3 | GERMANY | 00:00 - 00:00 | 10.146.0 | 0 | PSK250 | Active | NO QSY |
| DK4XI-4 | GERMANY | 00:00 - 00:00 | 7038.0 | 0 | PSK250 | Active | NO QSY |
| DK4XI-8 | GERMANY | 00:00 - 00:00 | 3588.0 | 0 | PSK250 | Active | NO QSY |
| KL7NA-1 | USA (WA) | 00:00 - 00:00 | Scanning | | PSK250 | Down | ? |

## PSKmail Weather Report

Actual large-scale weather conditions for Baltic Sea, North Sea, the Canel between France and England, Mediterranean Sea
Send start: 00:16|03:16|06:16|09:16|12:16|15:16|18:16|21:16

Weather route for 3 days : North-Baltic Sea, English Canal, Gibraltar, MM-West, MM-East

Send start:

- 06:31 North Sea – Baltic Sea
- 09:31 English Canel – Gibraltar
- 12:31 West-Meditteranean
- 15:31 East-Meditteranean

Navtex: 01:16|02:16|04:16|05:16|07:16|08:16|10:16|11:16|13:16|14:16|16:16|17:16|19:16|20:16|22:16|23:16

SYNOP: under construction

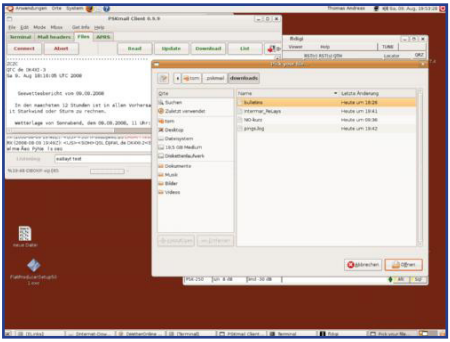
Gribfiles: under construction

Yacht position: 08:01|13:01|16:01|20:01

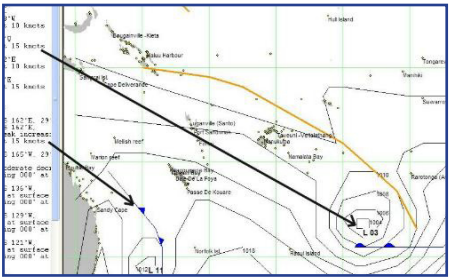
Server-Send-Program-Overview: 00:01|03:01|06:01|09:01|12:01|15:01|18:01|21:01

News: 00:03|03:03|06:03|09:03|12:03|15:03|18:03|21:

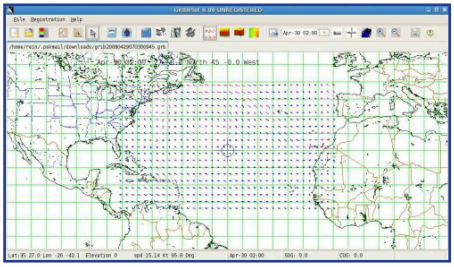
We can't take over the guarantee for the accuracy of the data.



**Text Weather**



**SYNOP Weather**



**Grib Weather**

## 4. Description of performance

**80 % of all information will be run in APRS-system without a PSKmail-server-connection.**

That means, that the most important information proceeds without long waiting time or any connection issue - or occupied lines. Simply enter info, send, ready or keep the receiver into operation.

**Following functions are working without being connected to a server**

> send APRS Position report automatically / manually, with or without GPS.

> send APRS beacon (small info) with your position; can be changed any time, manually or automatically by using the boardpanel display on the yacht-position-map.

> Send APRS weather report with your position; can be changed any time, manually or automatically by using the boardpanel display on the yacht-position-map.

> Send APRS speed and itinerary information, manually or automatically by using the boardpanel display on the yacht-position-map.

> Send APRS messages (up to 67 characters) to other amateurs worldwide

> Get APRS messages from other amateurs worldwide.

> Get APRS-information from APRS-info : e.g. tides, camping / motorhomes places, APRS neighbouring stations, APRS-MSG-Group and others.

> Send APRS-MSG-Group information by closed APRS Message Group to the PSKmail-receivers.

> Send APRS-email (small text with 67 characters) to all email-adresses you've got worldwide.

> Get APRS-email (small text with 67 characters) from PSKmail-email. Call@pskmail.de Adresses and other amateur-emails e.g. ...@DARC.de

> Get weather reports automatically (at fixed broadcast times).

> Get automatically providing reception of Europe SYNOP-weather-report.

> Arranged for automatic reception of Grip-weather reports for Europe and the North-Atlantic.

> Also arranged for automatic reception of other yacht-positions, reported on a map in connection with Grib data.

> Automatic reception of bulletins

> Automatic SOS-function with extra icon and extra text

Also if there are many users, operating will not be disturbed with these solutions. The user can always send data without waiting.

**20 % of all information will run to a server with Connect**

**Following functions are running to a server with Connect**

Retrieving and working out amateur-email (only for legitimate amateurs)

> Retrieving local mail from the server (mails are in local serverbox)

> Retrieving Grib Files (weather reports)

> Retrieving amateur' websites as a file (text e.g. DARC)

> Retrieving special files (from filelist) e.g. Weather reports, help information, lists, surveillance stations, etc.

If you limit yourself to the most basic information, the servers won't be occupied.

You don't need elaborate expensive hardware, INTERMAR makes the software available on a USBstick, free of charge and a cheap small soundcard interface, which can be reproduced.

1. Worldwide PSK >APRS frequency 10.147 kHz Dial Qrg, 2,4 kHZ USB 1000 Hz Waterfall Centerfrequency 10.148 kHz.
For all other frequencies : see www.PSK-mail.de>Home PSKmail Server.

## Application Ham Shack-Operator

> Send an APRSmail directly on board from a home-PC

**To:** aprs@pskmail.de
**Subject:**
DJ4WL: Hi Tom 73 from Board, Rolf: DK4XI

(email text as above, capitalized Call, colons are very important, max. 67 characters).

> Send an APRS message directly on board from a home-PC
Open message-window in UI-View program, enter call, I for I-Gate and enter text. Max. 67 characters

> Send an internet email
Write email in email program, address e.g. call.@pskmail.de an send it

# PSK > APRS QRG

## 10.147 kHz USB *

Qsy-Qrg**

- Only for PSK-APRS
- Only for APRS functions

- No Weather (WX)
- No Email
- No files
- No WEB

DK4XI-0
DL9YCS
PI4TUE
SM0RWO
IS0RGB-3
EA8AYT
VE7SUN
N5ALE
KD5WDQ
WB5CON
KL7NA
and others

DK4XI-3**

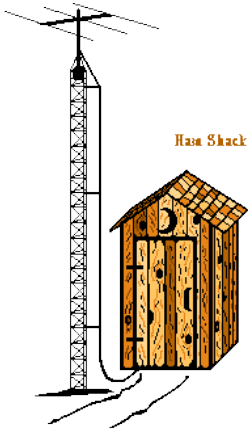
Our Target is a world wide PSK/APRS server network on 10.147 kHz

All the other PKSmail-Functions are running on other frequencies

* Dial-Frequenz, 2,4 kHz USB, 1.000 Hz Waterfall Center Frequenz 10.148 kHz USB

** For Email, WX and files

## 5. Ham Shack Operator




Every ham-shack-operator as well as SWL's have the opportunity to participate to the PSKmail communication via internet from their home PC.

Possibilities via internet from your home PC :

**PSKmail Monitor**
All servers have an online-site, on which you can watch the live radio communication.
See : www.pskmail.de > Home

**PSKmail chat**
A PSKmail chat room has been installed. There, you have the possibility to chat live.
See www.pskmail.de or www.pskmail.eu

**PSKmail Forum**
There are two forums with the topic PSKmail.
See in German www.pskmail.de
See in English www.pskmail.eu
See discussion

**PSKmail Freelist**
With PSKmail Freelist, you have the possibility to enter and retrieve informations via email.
See in German www.pskmail.de
See in English www.pskmail.eu

**PSKmail Wiki**
All english spoken news and additions are presented here.
See in English www.pskmail.eu > enter keyword "wiki" in search window

**PSKmail Position Report**
All positions sent via PSKmails are visible on a map
See www.pskmail.de

**PSKmail Serverlist**
All active PSKmails, calls, frequencies and options are listed in the serverlist
See www.pskmail.de > Home

**PSKmail APRS-Message Online Window**
You can directly send an APRSmessage via PSKmail in an internet-online-window

on a homepage.
See www.intermar-ev.de > Home

**PSKmail APRS-Message UI-View**
With the UI-View-Program (APRS) one can directly send a message on board of a friendly yacht.
See www.ui-view.org

**Reading PSKmail APRS-Messages**
You can read your received messages on the APRSserver FINDU
See http://www.findu.com/cgi-bin/msg.cgi?call=DK4XI (own call)

**PSKmail APRS-Email-Server**
Every OM can send an “APRSmail” from his home PC directly to a sailer e.g. in the Atlantic. If the sailer has a radio relay reception at that moment, the APRSmail will directly be displayed on the incoming email window.

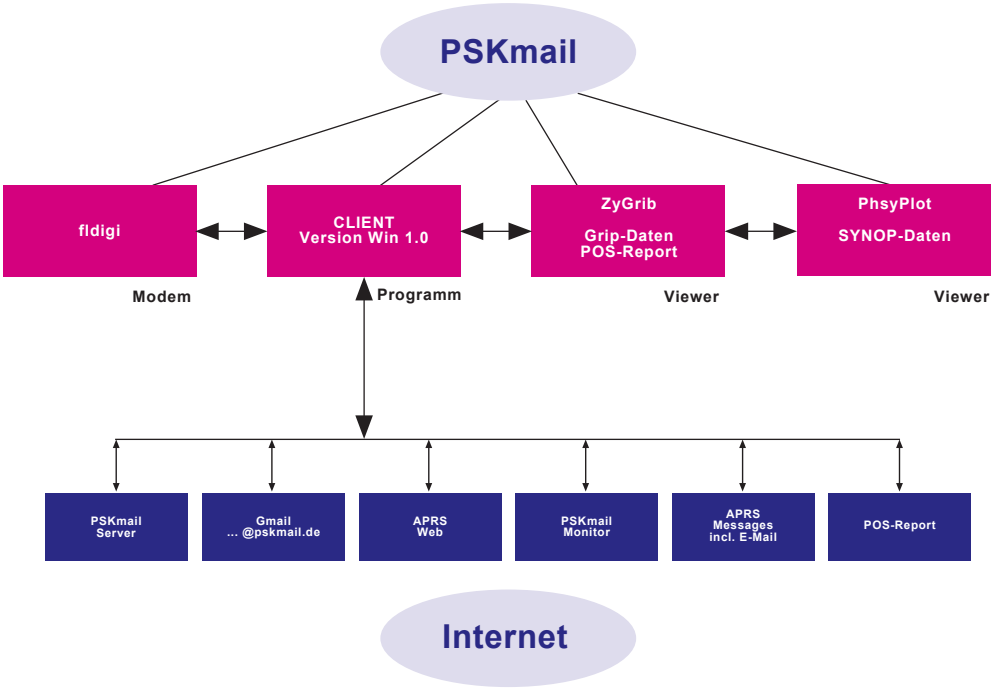
Important : It’s not an email sent to the email address of the transceiver, who retrieves the message afterwards. This email will be sent to an APRS-email-server, which will convert the APRSmessage into a message on the APRS-network.
This message may be retrieved at any time, also later on by the command “Get Message” in the PSKmail-program.
See www.pskmail.de >PSKmail – email

**PSKmail Standard-Email**
Obviously any OM can send emails from their home PC to PSKmail-users. The PSKmail-user has the opportunity to use an own email address only for the PSK-mail-communication.
INTERMAR has set up a separate email account in collaboration with Google. The INTERMAR email-server is call@pskmail.de

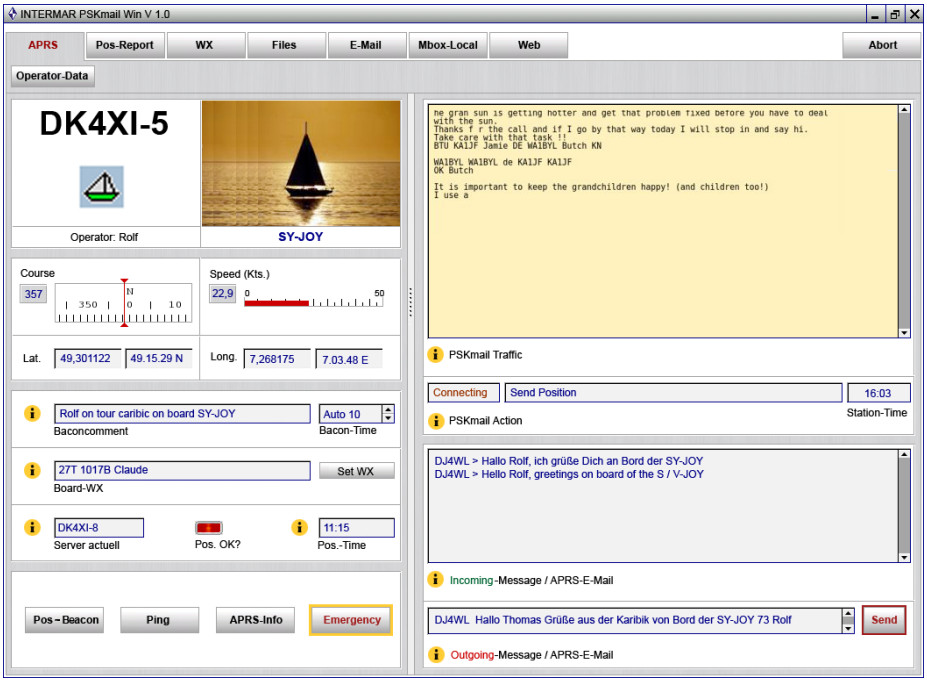
Every OM can get his own Address : call@pskmail.de
See www.pskmail.de > PSKmail – Email

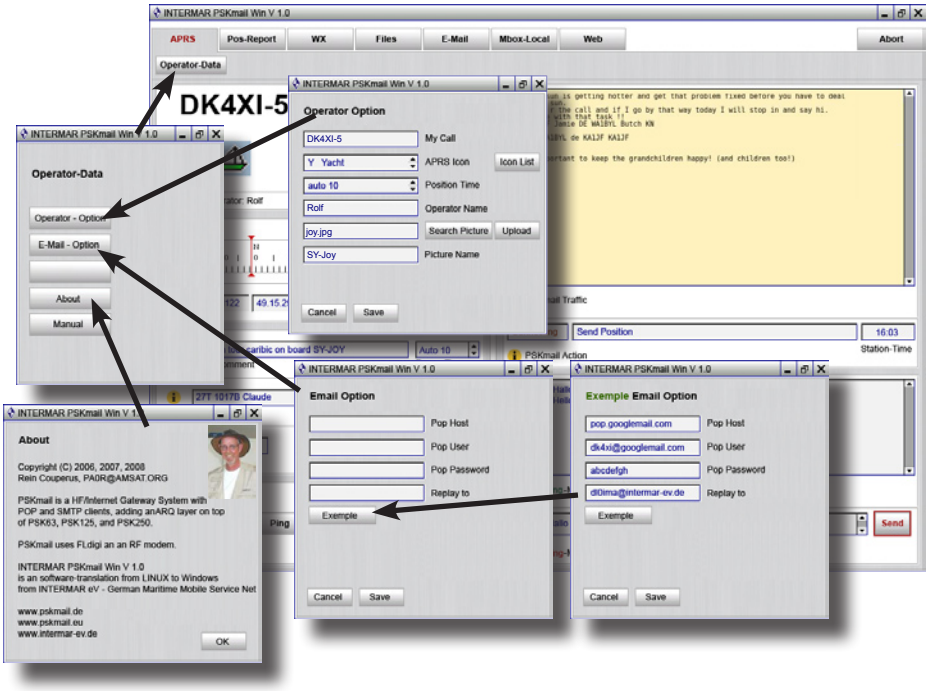
**PSKmail TelNet**
New applications as :
> Retrieving local emails from serverbox (worldwide)
> Retrieving files from selected servers
> Other new applications.

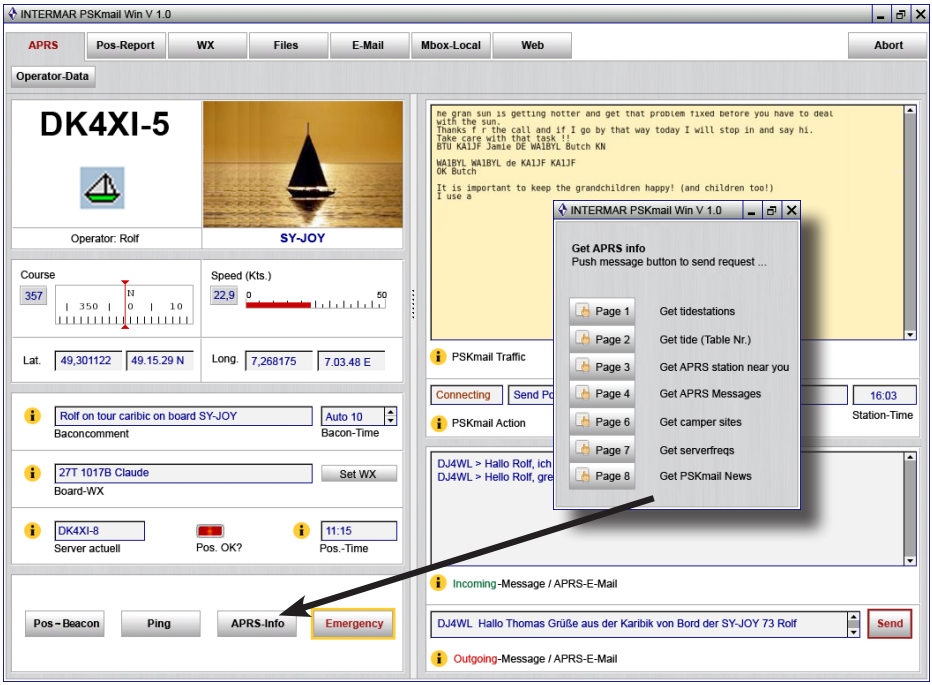
## 6. Software INTERMAR PSKmail Win V 1.0




Version 10.2008


INTERMAR PSKmail Win V 1.0
APRS
Pos-Report
WX
Files
E-Mail
Mbox-Local
Web
Abort
Operator-Data
DK4XI-5
Operator: Rolf
SY-JOY
Course
357
Speed (Kts.)
22,9
Lat.
49,301122
49.15.29 N
Long.
7,268175
7.03.48 E
Rolf on tour caribic on board SY-JOY
Baconcomment
Auto 10
Bacon-Time
27T 1017B Claude
Board-WX
Set WX
DK4XI-8
Server actuell
Pos. OK?
11:15
Pos.-Time
Pos-Beacon
Ping
APRS-Info
Emergency
he gran sun is getting hotter and get that problem fixed before you have to deal
with the sun.
Thanks f r the call and if I go by that way today I will stop in and say hi.
Take care with that task !!
BTU KA1JF Jamie DE WA1BYL Butch KN
WA1BYL WA1BYL de KA1JF KA1JF
OK Butch
It is important to keep the grandchildren happy! (and children too!)
I use a
PSKmail Traffic
Connecting
Send Position
16:03
Station-Time
PSKmail Action
DJ4WL > Hallo Rolf, ich grüße Dich an Bord der SY-JOY
DJ4WL > Hello Rolf, greetings on board of the S / V-JOY
Incoming-Message / APRS-E-Mail
DJ4WL Hallo Thomas Grüße aus der Karibik von Bord der SY-JOY 73 Rolf
Send
Outgoing-Message / APRS-E-Mail


INTERMAR PSKmail Win V 1.0
APRS
Pos-Report
WX
Files
E-Mail
Mbox-Local
Web
Abort
Operator-Data
DK4XI-5
Operator Option
DK4XI-5
My Call
Y Yacht
APRS Icon
Icon List
auto 10
Position Time
Rolf
Operator Name
joy.jpg
Search Picture
Upload
SY-Joy
Picture Name
Cancel
Save
Operator-Data
Operator - Option
E-Mail - Option
About
Manual
Send Position
16:03
Station-Time
Email Option
Pop Host
Pop User
Pop Password
Replay to
Exemple
Exemple Email Option
pop.googlemail.com
dk4xi@googlemail.com
abcdefgh
dl0ima@intermar-ev.de
Send
About
Copyright (C) 2006, 2007, 2008
Rein Couperus, PA0R@AMSAT.ORG
PSKmail is a HF/Internet Gateway System with
POP and SMTP clients, adding anARQ layer on top
of PSK63, PSK125, and PSK250.
PSKmail uses FLdigi an an RF modem.
INTERMAR PSKmail Win V 1.0
is an software-translation from LINUX to Windows
from INTERMAR eV - German Maritime Mobile Service Net
www.pskmail.de
www.pskmail.eu
www.intermar-ev.de
OK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APRS
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Files
E-Mail
Mbox-Local
Web
Abort
Operator-Data
DK4XI-5
Operator: Rolf
SY-JOY
Course
357
Speed (Kts.)
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Lat.
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49.15.29 N
Long.
7,268175
7.03.48 E
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Bacon-Time
27T 1017B Claude
Board-WX
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DK4XI-8
Server actuell
Pos. OK?
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Pos.-Time
Pos-Beacon
Ping
APRS-Info
Emergency
PSKmail Traffic
PSKmail Action
Connecting
16:03
Station-Time
Incoming-Message / APRS-E-Mail
DJ4WL Hallo Thomas Grüße aus der Karibik von Bord der SY-JOY 73 Rolf
Send
Outgoing-Message / APRS-E-Mail
INTERMAR PSKmail Win V 1.0
Get APRS info
Push message button to send request ...
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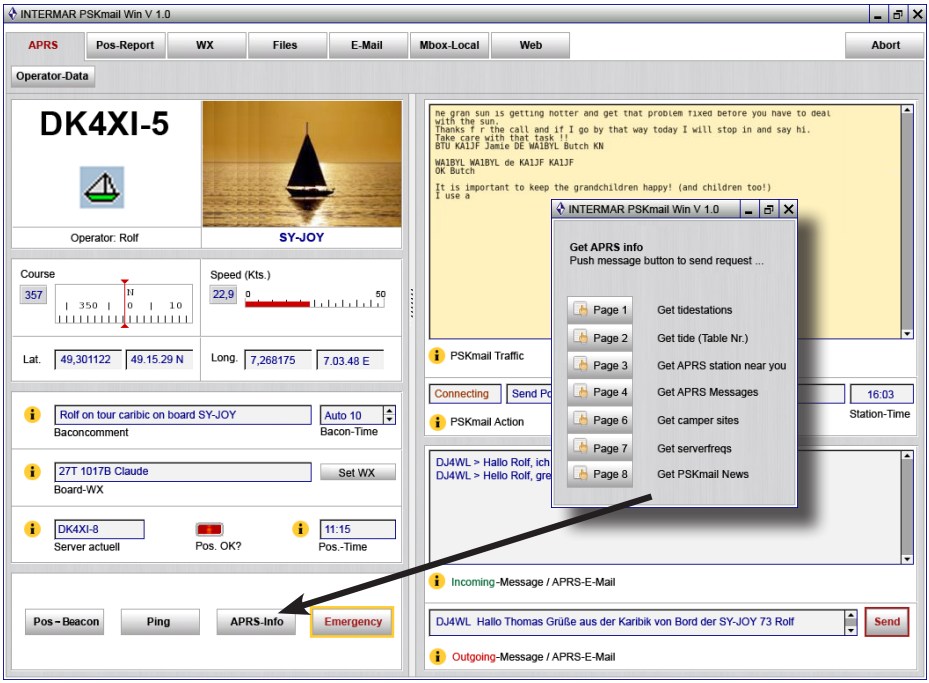
Page 2
Get tide (Table Nr.)
Page 3
Get APRS station near you
Page 4
Get APRS Messages
Page 6
Get camper sites
Page 7
Get serverfreqs
Page 8
Get PSKmail News


INTERMAR PSKmail Win V 1.0
APRS
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WX
Files
E-Mail
Mbox-Local
Web
Abort
Operator-Data
DK4XI-5
Operator: Rolf
SY-JOY
Course
357
Speed (Kts.)
22,9
Lat.
49,301122
49.15.29 N
Long.
7,268175
7.03.48 E
Rolf on tour caribic on board SY-JOY
Baconcomment
Auto 10
Bacon-Time
27T 1017B Claude
Board-WX
Set WX
DK4XI-8
Server actuell
Pos. OK?
11:15
Pos.-Time
Pos-Beacon
Ping
APRS-Info
Emergency
PSKmail Traffic
PSKmail Action
Connecting
16:03
Station-Time
Incoming-Message / APRS-E-Mail
DJ4WL Hallo Thomas Grüße aus der Karibik von Bord der SY-JOY 73 Rolf
Send
Outgoing-Message / APRS-E-Mail
INTERMAR PSKmail Win V 1.0
Get APRS info
Push message button to send request ...
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Get tide (Table Nr.)
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Get APRS station near you
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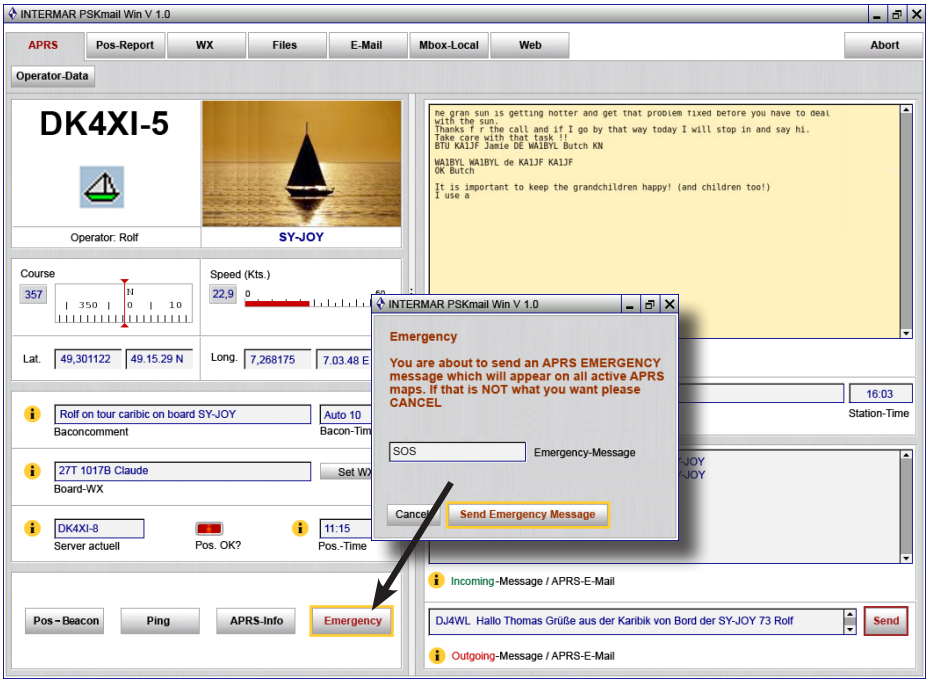
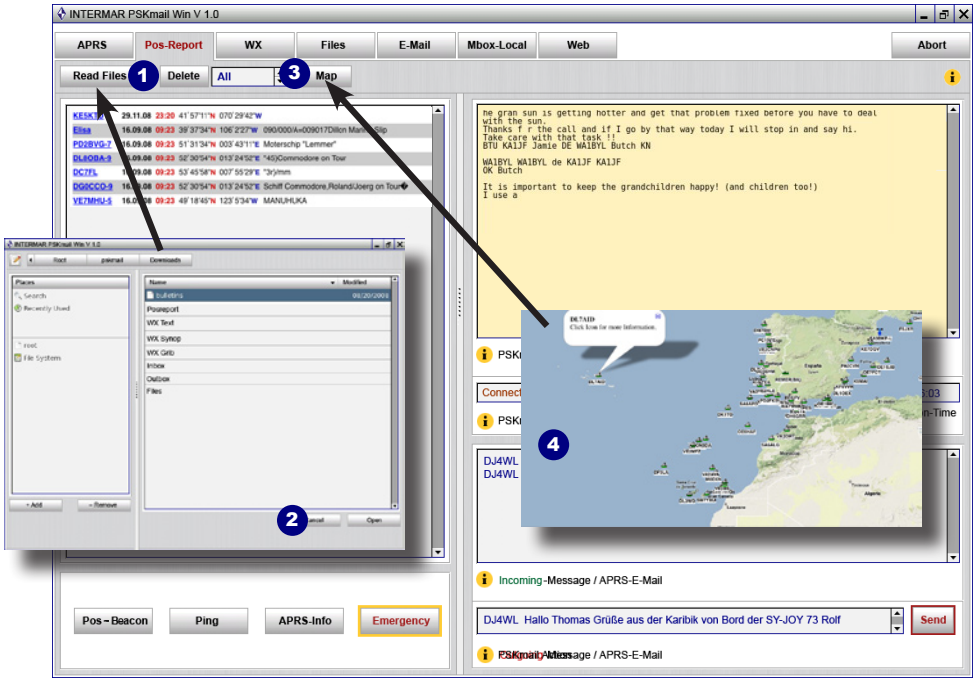
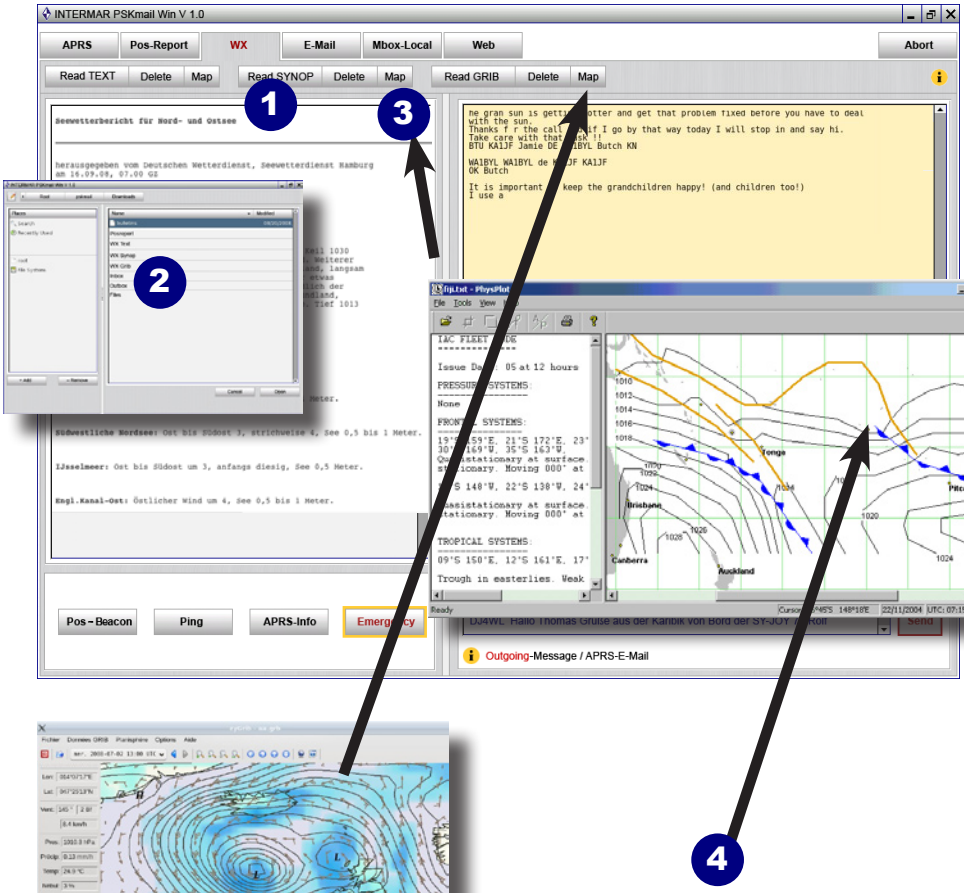
Page 8
Get PSKmail News

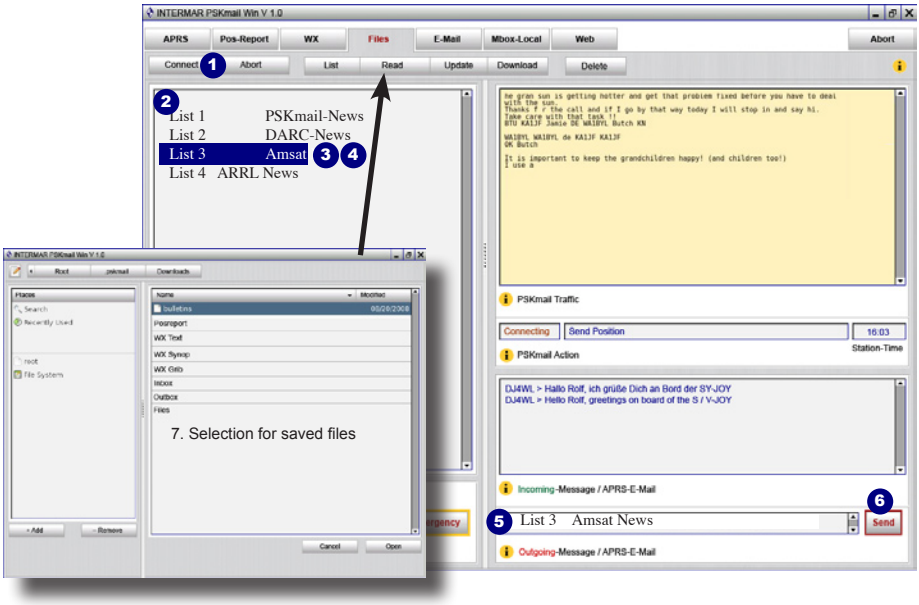

INTERMAR PSKmail Win V 1.0
APRS
Pos-Report
WX
Files
E-Mail
Mbox-Local
Web
Abort
Operator-Data
DK4XI-5
Operator: Rolf
SY-JOY
Course
357
Speed (Kts.)
22,9
Lat.
49,301122
49.15.29 N
Long.
7,268175
7.03.48 E
Rolf on tour caribic on board SY-JOY
Baconcomment
Auto 10
27T 1017B Claude
Board-WX
Set WX
DK4XI-8
Server actuell
Pos. OK?
11:15
Pos.-Time
Pos-Beacon
Ping
APRS-Info
Emergency
he gran sun is getting hotter and get that problem fixed before you have to deal
with the sun.
Thanks f r the call and if I go by that way today I will stop in and say hi.
Take care with that task !!
BTU KA1JF Jamie DE WA1BYL Butch KN
WA1BYL WA1BYL de KA1JF KA1JF
OK Butch
It is important to keep the grandchildren happy! (and children too!)
I use a
16:03
Station-Time
Incoming-Message / APRS-E-Mail
DJ4WL Hallo Thomas Grüße aus der Karibik von Bord der SY-JOY 73 Rolf
Send
Outgoing-Message / APRS-E-Mail
INTERMAR PSKmail Win V 1.0
Emergency
You are about to send an APRS EMERGENCY message which will appear on all active APRS maps. If that is NOT what you want please CANCEL
SOS
Emergency-Message
Cancel
Send Emergency Message



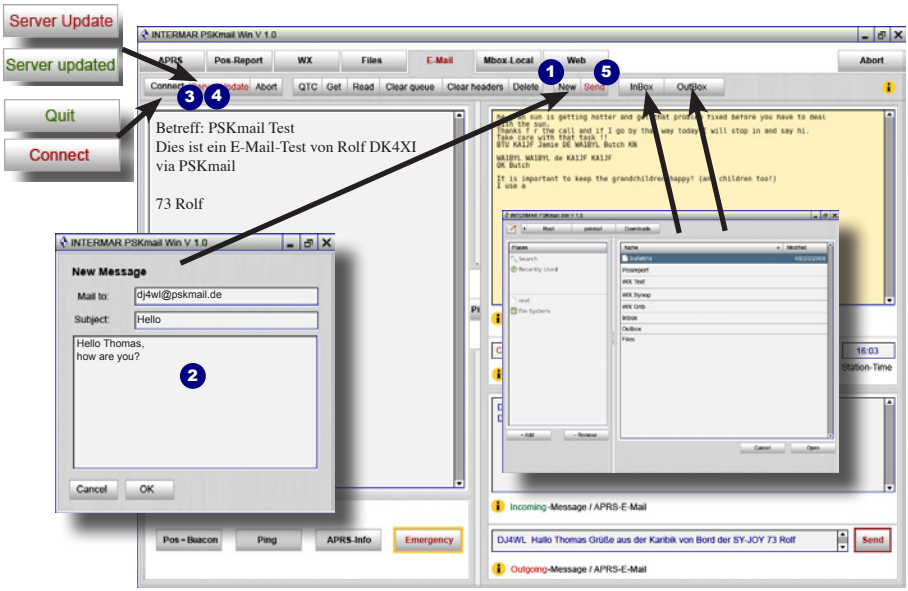

1. Read Pos (exemple)
2. Open file
3. Open map
4. Put the file into the map



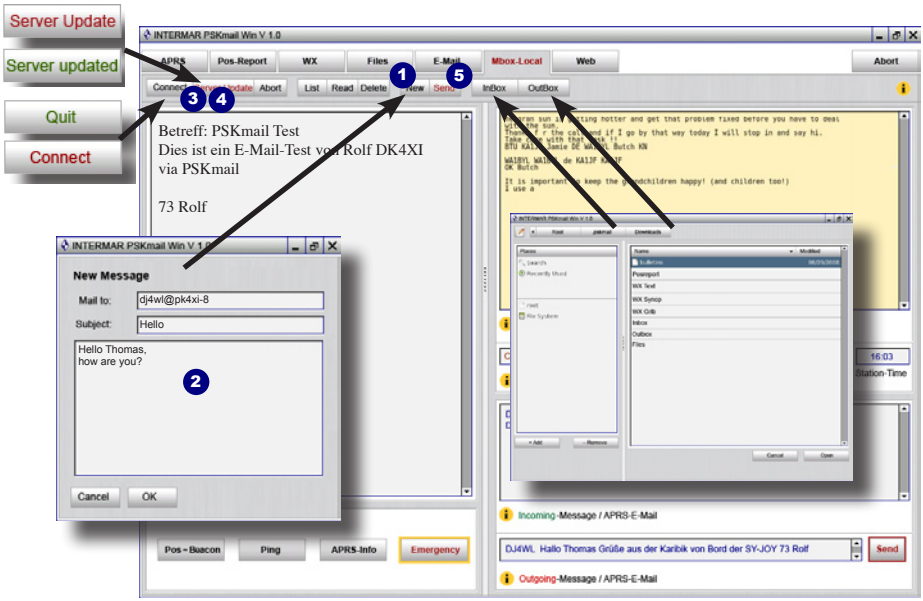

1. Read Synop (exemple)
2. Open file
3. Open map
4. Put the file into the map



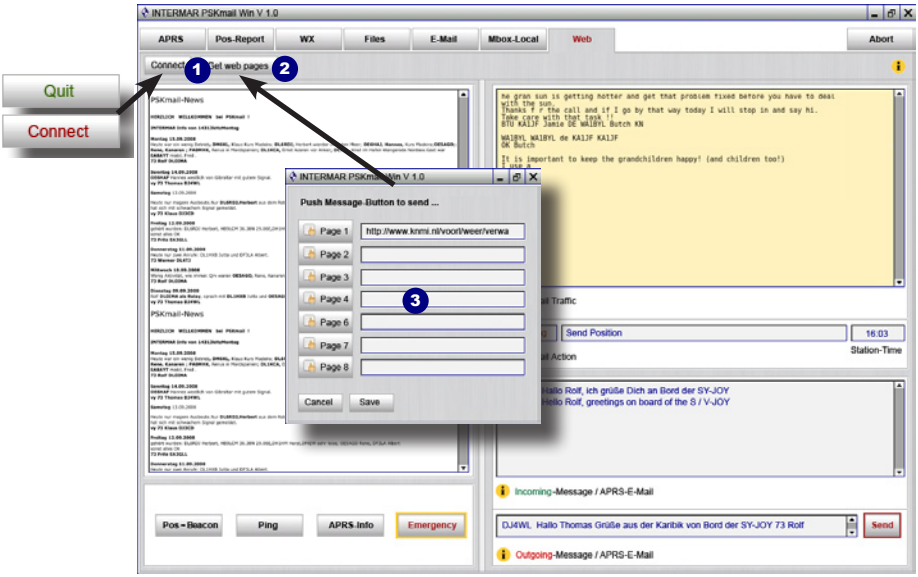

1. Connect
2. List
3. Select List
4. Copy Row
5. Put the Row into „Sending-Row“
6. Send



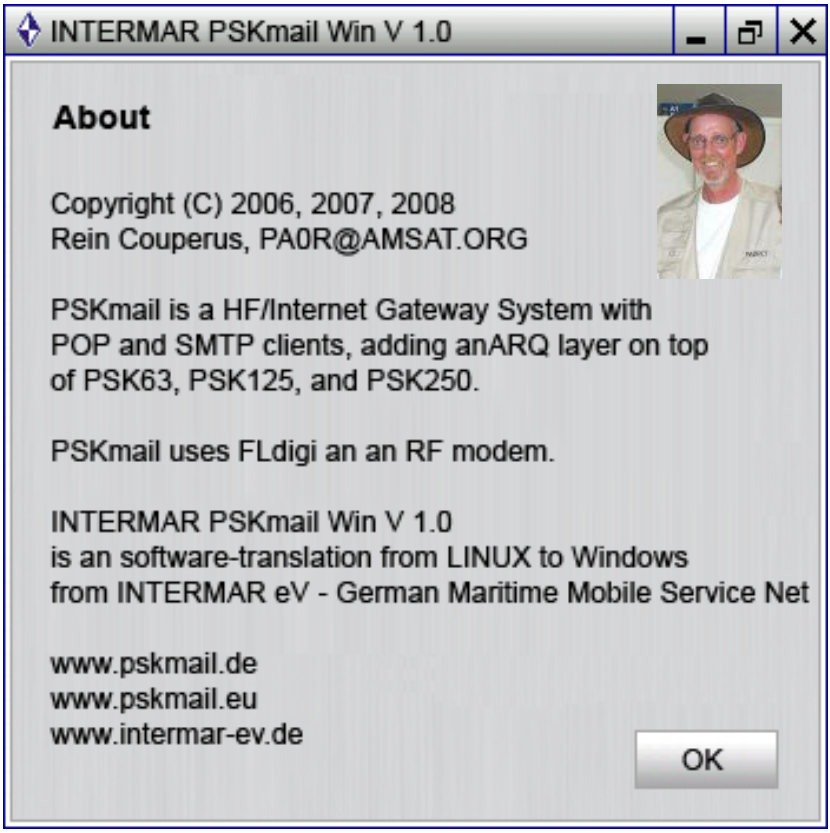

1. New
2. Write E-Mail
3. Connect
4. May be server update
5. Send




1. New
2. Write E-Mail
3. Connect
4. May be server update
5. Send




1. Connect
2. Get web pages
3. Select Website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About
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PSKmail is a HF/Internet Gateway System with
POP and SMTP clients, adding anARQ layer on top
of PSK63, PSK125, and PSK250.
PSKmail uses FLdigi an an RF modem.
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is an software-translation from LINUX to Windows
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OK