

Demand and transmission of e-mail reception report in digital modes

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Summary

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1. Introduction

The author of this paper (Patrick Lindecker F6CTE) has introduced, in the Multipsk 4.18 version (issued on the 17 of June 2010), the ability to request a reception report and to supply it by e-mail. This can be sent either by the other Ham with who you are in QSO or by a SWL monitoring your QSO.

Here an example of a reception report that could be received in your e-mail box :

Objet : Reception report following a RPRT@ command, from F6CTE Patrick

Reception report following a RPRT@ command, from F6CTE Patrick

Information about the reception station:

From : F6CTE Patrick

QTH : Paris 13

Locator: JN18ET

Rig : TS440S, 30 watts output

Antenna: Magnetic loop

Soft : Multipsk

Information about the mode and the signal:

Mode : BPSK31

Freq. : 18.068 MHz

S/N : 3 dB

Quality: 5/5

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For all intents and purposes, a new Macro has been created called **<RPRT@>** (« RPRT » for « reception RePoRT » and « @ » for « e-mail »). This one allows, a Ham, to submit a request for report (through the following command "RPRT@LENemail addressCRC") to the other Ham who in return will automatically send (through the software) the demanded report to the Ham specified e-mail address.

This report can be asked in all digital modes (except JT65), CW included.

Examples of use :

- 1) The main objective is to ask the other Ham with who you are in QSO to send you a reception report by e-mail.
- 2) But it can be also done by a SWL monitoring your QSO.
- 3) This macro can be used in conjunction with a (Multipsk) beacon which mode can be controlled by a RS ID. For example, you can switch the beacon in BPSK31 and asks the beacon for a reception report. Afterwards, the beacon can be switched in Olivia by a new RS ID and a new reception report can be asked...

This paper provides technical information about this new feature and the way to use it with Multipsk.

At the date of this paper, only Multipsk has implemented this possibility.

2. Command to ask for an e-mail reception report

The Ham requesting a report must first supply his e-mail address to the software (Multipsk for example). It is the only required data.

Now, suppose that you are a Ham, called « A », in QSO with another Ham, called « B », in some digital mode (let's say BPSK31). You « A » requests that « B » send you a report. For this, you send the <RPRT@> macro. Once this macro detected by the « A » software, this one will transmit, in digital mode, the following command "RPRT@LENemail addressCRC" which is the demand of report.

Description of the "RPRT@LENemail addressCRC" command

- "RPRT@" is the code for the reception report demand to transmit, as an e-mail, through the Internet net,
- "L" and "E" are figures (0 to 9) to specify the length of the email address (so a maximum length of 99 characters),
- "N" is a partial check sum to be (almost) sure that the length "LE" has been correctly received. So the email address is supposed to be composed by the "LE" next characters,
- the **email address** is limited to 99 characters ("f9xyz@fred.fr" for example),
- "CRC" is a check sum to control that the whole command has been correctly received. So if the CRC is correct, then the command is sure. There is no error.

The source code (in Pascal/Delphi and in English) to code/decode this command is available for the coding/decoding software developers, by making therequest to F6CTE by e-mail.

3. Reception of the command and e-mail transmission

Principle

The "RPRT@LENemail addressCRC" command has been transmitted by the Ham « A ». If decoded by the Ham « B » software without error, a reception report will be transmitted to the specified e-mail address. As a « zero error » is required for the decoding, this means that this command will be

advantageously used with reliable modes such as MFSK16 or Olivia. However BPSK31 is also able to decode a short string of characters without error.
In MultiPSK, reports are automatically sent on request.

Previous preparation

To send reports, the Ham « B » must supply the provider data (address and port of the SMTP server of his/her provider) to permit the « B » software to automatically send e-mails through this SMTP server. So, Ham « B » must:

- specify his/her SMTP server address (for example, "smtp.free.fr"),
- specify the SMTP port (25 being the standard).

The Ham « B » e-mail address is also required to send e-mails.

Note : it is also possible to send e-mails without the previous data by calling the e-mail box (through the Shellexecute API command and « mailto: », « ?subject= » and « &body= » parameters), and sending the e-mail with a virtual « Enter » but this method is not universal.

E-mail transmission

The « email address » is extracted from the "RPRT@LENemail addressCRC" command by the « B » software which also builds the reception report (see §1. for an example of report).

Afterwards, the « B » software will address the SMTP provider (for information, MultiPSK displays the exchange with the SMTP provider) and will send the e-mail report.

4. How to manage e-mail reception report with MultiPSK (4.18 or Greater)

Introduction

It is explained, through snapshots of MultiPSK screen with indications to the « how to operate » :

- how to use the « RPRT@ » macro to ask to the other Ham or to the SWL monitoring your QSO, to send you a reception report by e-mail,
- how to send reception reports to the ones who ask for reception report.

The e-mail address must be specified in the "WEB ADDRESS" of your personal data ("Personal" button or « Configuration » menu). It will be transmitted via the following command "RPRT@LENemail addressCRC" which is the report request.

How to ask for a reception report using the <RPRT@> macro

