



**Email via your Iridium Satellite Phone**

## **The Facts**

You may use your Iridium phone to successfully send email. However there are some important points to consider. Your Iridium satellite phone transmits data at a speed of 2.4 Kbs/s and therefore there are some steps that need to be taken to use the Iridium data service. Iridium provide a solution for web access this being Direct Internet Two (this can be downloaded from [www.Iridium.com](http://www.Iridium.com)). However even when web access has been achieved emails invariably are very difficult as most terrestrial email accounts will time out when accessed via Iridium. Even if a connection is achieved the delays will be such that sending email will be expensive.

## **The Solution**

G-Comm Mail is a cost effective mobile email solution for satellite telephones. As mentioned the Iridium network has a relatively slow data transfer rate of 2.4Kb/s. This makes it very important to use email software and a supporting infrastructure to work well with "slow" connections. G-Comm Mail achieves this by providing two essential features.

1. The G-Comm mail software compresses the data content of emails by up to ten times, to ensure that the customer maximises their use of airtime.
2. The supporting infrastructure ensures that secure and robust connections are made when sending or receiving email. Standard terrestrial networks, are designed for much faster connections, using land based broadband networks. As a result, connections from satellite telephones with slow data transfer rates to standard ISP's, are fraught with problems.

## **Special email address**

You will create a new G COMM email address this has the benefit of only receiving the emails from people you have given this address too, again a saving by cutting out none important emails whilst using Iridium

## **Getting email via Iridium**

G-Comm Mail's POP-Mail facility lets you use your favorite email client software, such as Microsoft Outlook or Microsoft Outlook Express. Now you can use existing address books and personal folders, even when you are in remote locations.

## **Getting email from an Internet Cafe**

Web-Mail lets you access your G-COMM Mail messages from any personal computer that has a connection to the Internet. Broadband, Dial -up, LAN or Internet cafe connections can all be used to gain access to your e-mail. No need to install any complicated software in order to send and receive messages.

## **What does it cost?**

A one off payment of \$162 USD provides 1 full year of access to G-Comm mail services. This includes on demand weather data.

## **What do I Need to Get up and running?**

Install the software on the accompanying CD, or download the latest version from <http://www.g-comm.co.uk/Gcommmail.zip> Complete the application form, specifying your desired email address and password. Once we confirm that your new email address is set-up, you are ready to go.

## **How Does G-Comm Mail Compare to Normal E-Mail Services?**

The test below was set up to compare different methods of sending email via an Iridium 9555 handset

We compared sending an unformatted e-mail (no changes to the font size, colour etc) One e-mail was sent using G-Comm Mail, One e-mail was sent using BT Yahoo's web-mail and One e-mail was sent using a regular email account using Outlook.

We chose to use BT Yahoo's mail for the simple reason that customers would expect to see the best results from BT. To try and keep results as fair as possible, we have bookmarked the login page for the web-mail service. I will also have the e-mail client (Outlook Express) closed before I dial up.

### **How were the results measured?**

We recorded both the data sent/received and the number of minutes used while completing each e-mail task.

#### **1. BT Yahoo Web-mail**

To log into web-mail I have to connect to Iridium first.

It took 11 minutes to get logged in (but no mail composition page loaded yet)

At around 12.5 minutes my dial up connection disconnected. Although my authenticated session will still be valid (it will save me 11 minutes) the recorded data for sent/received packets will no longer be 100% accurate.

After 15 minutes in total I have decided that this route for sending and receiving e-mail is completely impractical. Based on our standard call rates this cost \$22.50 and nothing was accomplished.

*15 Minutes used, 62,402 Bytes Sent, 207,322 Bytes Received.*

#### **2. No G-COMM Mail**

For this test, I am using Outlook Express again to send an e-mail through my normal e-mail account but without the aid of G COMM Mail compression.

As Outlook Express is a program local to my computer, I can compose my e-mail without connecting to Iridium. This will save me some minutes.

I am simply writing a plain text e-mail with the subject "Test" and e-mail message "Hi This is a test"

Message written now I'm going to click Send & Receive.

It took 55 seconds to send that e-mail with 5926 bytes sent and 22,503 bytes received.

I had a colleague sent me an e-mail which also needed to be received. The total time connected in this situation was *2 Minutes and 40 Seconds. 8,375 Sent, 65,232 Received.*

#### **3. G-Comm Mail Compression**

This test is almost identical to the last test. I can compose a message before dialling to Iridium and I have had my colleague send me the same e-mail to my G-Comm Mail address.

It took 24 seconds to send the e-mail with 3,602 bytes sent and 2,824 bytes received.

That is more than a 50% saving using G-Comm Mail.

Next, we need to receive the e-mail my colleague sent.

This e-mail took 26 seconds to receive.

The total time connected whilst using G-Comm Mail was *50 Seconds and total data Sent 6,174 bytes and 4,657 received!*

## Conclusion

G-Comm Mail was used in an environment that we expect most of our customers to use. We did nothing more than what we ask our customers to do in our instructions. We sent and received the same e-mails over our two accounts and found that G COMM mail was over 3 times faster!

In terms of money, G-Comm Mail would have saved me over \$4.50 on our standard airtime rate! This was test carried out on a very small e-mail if larger e-mails were used the savings would clearly be magnified.

Prices quoted in this document are correct as of June 2010.

To find out more about G-Comm Mail, please see our contact information below.

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