

**Pager Enhancement / Mission Call Out thoughts \*Rough Draft\***  
**Dated May 18, 2007**

Just doing some brainstorming and research into the question "what do we do if the pager system becomes obsolete?" I have had informal conversations with Search Dogs, 4x4 and ESAR. Given the most recent outage with USAMobility, I believe this is a valid subject.

Let's first take a look at the current state: USAMobility company is a result of a merger between Arch-Paging and Metrocall. Due to system upgrades and company changes including workforce restructuring, the communication coordinators for each of the groups in KCSARA have had to put in hours of extra work coordinating fixes, repairs and ordering new pagers. To assist with all the changes, a pager guide has been created and is being distributed to the different KCSARA groups.

For most groups, the individual pays a one-time fee of \$40 to purchase a pager.

USAMobility in their paging-computer upgrade provided us a new feature - when a page is sent out, an email is also sent. ESAR and SearchDogs have taken advantage of this by taking this email and forwarding it to cell phones as a Text-Message. However, this has 3 points of failure (USA Mobility, the email host, and the cell phone carrier). If any one of these fails, the page is not received. This method is also similar to 4x4's pager-to-email via specialized RF pager-receiver setup.

Other technology readily available today includes cell phones. Most digital cell phones have the ability to receive short text messages. Short Message Service (SMS), more commonly known as text messaging, is getting more use than pagers. One driver for SMS is its availability on pretty much every cell phone sold. According to CITA at Year-End 2006 there were 233 million U.S. Subscribers. Some cell phone companies provide free incoming text-messages, others like Verizon charge \$0.15 a message.

While the current method works faster, delivering the bulletin to all pagers 100 or 100,000 simultaneously, the SMS method via email will take several additional minutes. In addition, each message can contain no more than 160 characters, although this may be starting to increase for some providers.

I think we need to discuss an alternative solution and a backup to the existing pager setup that takes advantage of current technology. Until we have a new system which provides a DTMF gateway (automated phone tree), the pager needs to remain the main solution.

A 3 phase process approach would be best:

**Step1 - Backup**

Since pages from KCSO-Comm Center come via email, let's provide an alternative email-address that sends that page to specific individuals in each group (email and/or cell phone) who would then handle the call out and response to the page.

**Step2 - Enhancement**

Take advantage of the current technology and use email and text-messaging to transmit information to members. Let's enhance the call-out system.

Encourage or provide a database so that members can register w/home number, cell phone, email address and text-messaging address. With that information, create group email address which forwards to the appropriate email and/or text-message address. We need to establish a protocol for content and have a secure website with ability to send page via that "group" email address.

Ideally I would envision a 5 tier setup that allows the sender and recipient (member) to select the types of pages that they would receive via email AND text-message.

1. receive all pages (informational, meeting, mission, emergency)
2. receive meeting, mission and emergency
3. receive mission and emergency
4. receive emergency only
5. The 5th category would be receive pages for their group

### Step3 - Replacement

Next, work together on a Request for Quote for an automated phone-tree with DTMF gateway (such as Dialogic or Voicent gateway) and ask a few vendors to provide costs and demonstrate.

### Questions:

How do we handle the Text-Messaging Cost?

What if I do not have a cell-phone?

Do we rely on cell phones (3 points of failure), or keep pagers as primary w/cells as secondary?