

Transcript – Zone Controller Rollover

Welcome to this Alaska Land mobile radio training presentation, ALMR Zone controller rollovers.

Zone controller rollovers occur each quarter and are essential for the proper operation of the ALMR system. During this time, software updates, security patches and other technical maintenance are performed on the zone controllers. These zone controllers are essential to operate the functions within each AMR operational zone and maintain good communications and uptime for all users.

In order to apply the software updates, this procedure is carefully managed to ensure minimal disruption and downtime to all our users. This is done by utilizing one controller and one zone at a time. For this maintenance operation, The zone controllers must roll over between a primary and backup to accomplish the security updates, and this occurs over the course of two mornings each quarter between 4:00 AM and 6:00 AM.

The Almr system is divided into 3 operational zones. Zone 1 includes areas South of the Denali Highway, including South, Central and SE Alaska. Zone 2 includes the areas north of the highway and the interior region, and Zone 4 is within the Municipality of Anchorage.

Controllers can be thought of as the brains of the system and run all critical aspects of the ALMR system. Each zone has 2 controllers, a primary, and a backup controller. The rollover procedure switches between the primary and backup controller. During the first morning of the two morning process, the primary controller is taken offline and is switched to the backup controller. During this time, the primary controller is patched and updated and tested to ensure proper operation. The second day, the primary controller is switched back into operation and the secondary controller is taken offline for the same maintenance process.

Users are notified that the rollover procedure is pending via several ways, primarily through the ALMR Daily Systems status report in the upcoming scheduled maintenance section. In addition, dispatch center points of contact are notified separately via another e-mail as we get closer to the rollover date.

On the morning of the rollover, each of the three zones is performed separately instead of simultaneously. ALMRstaff starts the process by contacting each dispatch center to ensure that the rollover can occur. This clearance is essential as the ALMR staff are

looking for any type of major incident or other ongoing activity that cannot be disrupted by the maintenance process.

Dispatch centers are encouraged to share this information with all of our staff. We will reorder the zones or delay the procedure until the situation has been resolved. Once that clearance is received, technical staff performs the rollover procedure. When completed, the dispatch centers are again called to let them know that the procedure is completed and ensure that no technical issues are arising on their side.

When the zone rollover occurs, it is most likely that dispatch centers will see the effects of the switchover happening. Dispatch consoles may briefly show talk groups that are unavailable, showing the X icon or a similar audible or visual indication.

In the field, subscriber units may briefly show a site trunking message. However, this usually does not occur as the switchover is relatively brief during the switchover time. Communications in the field are disrupted. And access to the wider all on our system is not available if the transmission occurs during this time, it will likely occur only to radios that are affiliated with the same area of our site. This is the same procedure when a site goes into site trunking mode. However, the rollover itself typically takes 30 seconds or less, and that disruption time is kept to a minimum.

If you have questions about the zone rollover procedure or require any technical assistance, please contact the help desk or ALMR Operations Management Office for assistance.