

# G-30-1-1

## SOME RANDOM NOTES ON SUNRISE SKIP

by Robert Kramer

Since we are approaching the peak of the sunrise skip (SRS) season, it is a good time to remind you of the great potential this DX mode has. In fact, unless you live on the extreme East Coast, it could prove to be your most successful DX period. Although SRS can be good at any time of the year, the peak period is from late September to mid January, with the November-January portion usually the best (although some years September has been outstanding). There also is a small secondary peak the first week of April. Since I have already written an extensive series of articles on this subject (available from IRCA & NRC reprints), I won't discuss PSA's & other types in depth. Instead, I plan to provide a few tips that have helped me DX SRS successfully.

Many people think of SRS as DXing for sign-ons and looking for daytimers that have signed-on. These, of course, are a major part of SRS DX. But one area people often overlook is the area of fulltime stations, particularly to the west of you. As the sunrise approaches your location, the stations to the east begin to fade out. However, there still is a darkness path to the west. This means that under the right conditions some really fantastic DX loggings can be made. My best is CFCP-1050 Grand Prairie, Alberta. I also have heard KBAD-740, K7AR-620 & KGHL-790 (the last 2 had already been logged via other DX modes) at sunrise. Other good CADX targets to the west include: CFQC-600, CFDB-800 & KCJB-910. One pattern I have noticed is that often stations to the west will peak as Chicago's sunrise approaches. Thus signals such as KSL & KFI will be the strongest they have been the entire night. This also means that some stations that were not in earlier could be at SRS.

Another facet of SRS DX that is overlooked is DXing on regional channels at the time when stations change antenna patterns or power. While it is a good idea to look for sign-ons on clear channels at these times, after doing so, check some of the regionals for stations operating with their daytime facilities. Often a station that is too weak on its PSA, or throws all of its power at night away from you, can be logged via this mode. Sometimes a station will be in for as long as 15 minutes after the change.

### GUIDELINES FOR SRS DXING

1. The best times of the month for this mode are: the first 15 days of the month January-June & the last 15 days of the month July-December.
2. Obtain and use a set of the sunrise/sunset maps to determine what to look for & at what time.
3. Have a tape recorder running just before the sign-on periods begin because many stations sign-on without warning.
4. Check for PSA S/Os beginning at 0600.
5. Be particularly of SRS during aurora conditions.
6. Watch out for weak signals on a channel that usually has a strong dominant, especially at S/On times.
7. On very rare occasions the graveyard channels can be good, be sure to check them periodically.
8. As your local sunrise approaches look for stations to the west of you.
9. After clear channel S/Os, check the regional channels for stations that are operating with daytime facilities.
10. Make a list of target stations that you are possible to log via SRS in your area.
11. Since it is sometimes difficult to get out of bed, you may want to use more than one alarm clock.
12. Make use of an appliance timer on your receiver & tape recorder for the mornings that you can't get up to DX.

Through the use of these guidelines you should be able to have great success during SRS. Remember, SRS is often good even during the summer, when DX is generally lousy, even though it won't be as good as a peak season opening. This means that even if band conditions aren't very good, SRS can be.



## Sunrise DX During Aurora by Robert Kramer

One of the most interesting times to DX SRS is during a geomagnetic disturbance, i.e. aurora. During conditions on this variety, all normal reception will be affected, if not altogether altered. Stations that normally are considered pests will be weakened or obliterated (unless they are within groundwave distance, when they could be stronger). In their places may be low powered PSAs from the deep south. In the course of this article we will take a look at aurora sunrise skip.

There is no best time of year for aurora (contrary to popular belief, summer is not all auroral). The reason for poor reception is static from thunderstorms & reduced night time hours, it can happen almost at any time of year. The best auroras have occurred in the middle of September & late December for this DXer. These periods are characterized by good sunrise conditions to the south, which an aurora will enhance. It must be remembered that there must be good skywave reception to the south present in order for the aurora to be a success. For this reason many auroras are not very productive. This is especially true of those taking place in late spring & early summer. These unproductive auroras will deaden the band and dramatically improve groundwave signals. Unfortunately, the period around sunrise is often poor for aurora DX even when the night hours have been quite good. A pattern I have noticed is that on the day that the aurora hits, Sunrise is usually very good. During many auroras, any day after the first is characterized by groundwave reception and little else. Of course this isn't always the case. Some multi-day auroras have been good every morning at SRS. There is just no way to tell. To sum it up, SRS DX is impossible to predict based on the conditions of only a few hours ago. There have even been times when the aurora didn't affect normal reception but produced spectacular DX at SRS.

Although a veteran DXer can sometimes tell when there is aurora (but not all times, because some poor skywave nights sound like aurora), the best way to tell is to tune to WWV at 18 past the hour. They give both the current K index (1-9) & the previous day's A index (the previous day GMT). The higher the index the greater the aurora. Usually the A index for a minor aurora is 25-35. The K index for this level of aurora would be 5 or 6. Any A index over 40 or K index over 6 is a major storm. WWV also gives a geomagnetic prediction for the next 24 hours, but this can't always be depended upon, especially when an aurora is predicted. Current technology & knowledge allows for a 2% accuracy rate for aurora prediction. So don't get up for sunrise based on a WWV prediction. Instead, if an aurora is forecast, check every 3 hours for the latest K index. If the K index remains at a low level, chances are that the predicted aurora won't occur. Also, keep in mind that sometimes an A index of less than 25 produces aurora like conditions at SRS. So if the K index is 4 when you go to bed, then SRS may be worth getting up for. Unfortunately, there is no way to determine if SRS will be good. The only way to find out is to DX it.

Once that you know that there is aurora and you decide to DX SRS, the next step is to get up a bit earlier than the PSA S/Os. The reason is that you will need to know just what hasn't been knocked out and where to look for sign-ons. In doing this you may also stumble on a new station. Be sure to check the graveyard channels well. Unlike normal SRS, when GY DX is next to nonexistent due to interference, the GYers can produce good loggings during SRS aurora. This is due to many of the usual pests being wiped out, leaving room for southern stations hundreds of miles away. When 6 AM ELT hits, be looking for S/Os on regional & local channels. After the S/On period ends, tune around attempting to ID any station that didn't appear to be in before the S/On period. Follow this procedure again at 6 AM CLT, MLT & PLT (the last 3 if they occur before your local sunrise). Also, don't ignore the clear channels. You will need a copy of the sunrise/sunset maps to DX these effectively, but even if you don't have a set you could stumble on something. Pick a clear channel that has no sign of the usual dominant (and has daytime only stations to the east of you) or the dominant is unusually weak. Consult the sunrise/sunset maps to see what signs on in areas to the south (especially the very deep south). Then go to the selected channel and sit through the sign-on period. Any sign-on you hear could be weaker than the sign-ons on the regional channels you may have heard earlier, even to the same geographic area. The reason is the station is signing on much closer to local sunrise (while the regional station signed on well before it).

### AURORA SRS TIPS

1. Check WWV every 3 hours during a suspected aurora period to get the K index.
2. When getting up for sunrise, awaken early enough to make a brief scan of the band. This will enable you to see the effects of the aurora.
3. Make an effort to ID any station that didn't appear to be in before the sign-on periods.
4. Pay particular attention to frequencies that usually are covered by strong dominant pests. Many times the aurora will knock out the pests allowing a good catch to sneak through.
5. Don't ignore the GY channels. Some good loggings have occurred due to reduced interference.
6. An aurora is not likely to be productive unless there is skywave reception present to the south, southeast or southwest (not necessarily all at once).
7. DX both PSA & clear channel S/Os for as many S/On periods as are possible in your area. Even DXers on the west coast could find a weak southeastern S/On during an aurora.
8. A helpful aid to DXing sunrise (& sunset) are the frequency maps available from the GWDXA. These maps show the location of every station in the U.S. (at the time the maps were made). When combined with the Sunrise/sunset maps, all of the tools for effective SRS DX are present. For info, write the GWDXA at: Box 783 Thatcher, AZ 85552, Ed Ryan should be able to give you the correct price info.