



Document Number	Rev.	Rev. Date
TD-38	C	11May17
Author	Release Date	Page
Matt Cousins	14Oct13	1 of 3

Simulsat-7A Reflector Swap Planning Guide

With any major project, planning is paramount to ensure the project moves forward and all concerned are aware of aspects that pertain to the completion of the project. In this document ATCi outlines some key aspects of the Simulsat-7A reflector swap installation planning process.

During the project process ATCi will send the customer a Service Request Form (SRF), which is a writable PDF form, to gather specific information about the project.

Pictures

ATCi's Engineering Dept. requires pictures of the antenna mount, reflector, feedbox, pivot block, front rails, all associated metal parts, the surrounding area for crane, assembly access and bucket truck access.

Satellite List/Feeds

The new Simulsat-7A reflector comes with a new feedbox. This new feedbox is wider than that of the legacy Simulsat-7 antenna installed before 2006. If installed after 2006 the feed box is the same. An accounting of all feeds is needed for new mounting hardware for all feeds in the feedbox and any spares available. Please indicate C-band, Ku-band or dual-band feeds in the SRF. This will help to ensure that the reflector swap goes smoothly.

Site Survey

A site survey is recommended. An ATCi field engineer will evaluate the antenna, antenna mount, foundation, access to the site, check for rust, and consult with the customer regarding the reflector swap process. ATCi's field engineer will also check for cabling issues, crane placement, check for damaged or worn parts, check all feeds and recommend any changes to feeds or LNBS. This process could identify any unforeseen issues that disrupt the reflector swap schedule.

Please contact your sales representative for Site Survey details.

Cables and Junction Box

If purchased with the new reflector, RG-6 quad-shielded cables will be sent. These cables are cut to length for your site and come terminated on one end. The cable routing may be different for the new reflector. If these cables route differently, the existing cables might be too short. Also, this is a great opportunity to install new cables. An accounting of all cables will only help the reflector swap process. Please mark all cables with a system that is understandable for all concerned. This information will help speed up the process. If purchased with the new reflector, a junction box can be added at the base of the antenna. These junction boxes come in two types, fiberglass and stainless steel. Adding a new junction box can help with any cabling issues that have occurred over time and will help with cable management. Please contact your sales representative for details.



Document Number	Rev.	Rev. Date
TD-38	C	11May17
Author	Release Date	Page
Matt Cousins	14Oct13	2 of 3

Heating System

ATCi can provide a reflector heating system for your Simulsat-7A antenna. Speak with your ATCi Sales representative for information about reflector heating systems.

Crane/Bucket Truck

The new reflector, backup structure and feed box will be shipped on a double-drop flat bed trailer

A 25-ton hydraulic crane is required to offload the reflector panels and associated parts. This same crane can be used for disassembly and assembly as required; however, a minimum 80-ton hydraulic crane is needed to lift the reflector assembly off and back on to the mount. The reflector assembly weighs approximately 24,000 lbs.

A 50' x 80' ft (15 x 25 meters) space is needed to build the backup structure and assemble the reflector. This same size space is needed to place the old reflector and backup structure on the ground.

A bucket truck or man lift with an articulating telescopic boom lift capable of reaching 60' vertical is required to access the antenna during installation and alignment.

Crane and bucket truck arrangements and costs are the customer's responsibility.

Process:

Once all items are on site, ATCi will build the backup structure and assemble the new reflector. The space needed for this is 50' x 80' ft (15 x 25 meters). This process will require a 25-ton hydraulic crane and the bucket truck. The assembly of the new parts will take about 5 days.

Once the new reflector is assembled, ATCi will remove the old reflector and backup structure and replace it with a newly assembled unit. This process will require an 80-ton hydraulic crane. After the new reflector assembly is in place, ATCi will begin installing feeds and terminating cables. This entire process typically takes seven days to complete with the help of four local workers. With this process down time should be limited to a 24hr period.

Removing the Old Reflector, backup structure and Associated Parts

ATCi will work with the customer to have the replaced items removed from the antenna site. Please ask your sales representative about time and costs.

Conclusion

ATCi understands that a project of this magnitude in concert with already busy work schedules can be a challenge, but with careful planning and open communication between ATCi and all concerned your new Simulsat-7A reflector swap will proceed smoothly.

Please contact your ATCi sales representative with any questions. We appreciate your business.