## I will format this and fix typos later

outside of runtime, why worse reordering everythinh

You have scheduled activities that are already kinda on-board the satellite, and you donn't have a contact for that satellite for maybe 2.5-3. hours, if you reschedule things that are happening at that time window, you can't send that. now you have a disconnect between what your system thinks and what the satellite actually knows to do. You have to be weary of those lockout periods

don't let perfect be enemy of good. it is more costly to change stuff already sent, and you don't want to do all that work and it leads to a slightly better schedule, at the cost of other things.

manual vs automated - none is better or worse, just different. Manual is better sometimes, automated is better sometimes. manual is not overly constrained like our problem is. they are a bit more open(but it doen'st mean that our system won't be of use to them). but they take more time to do and maintain.

automatic schedulers have problem that making perturbations to the system often leads to many problems. like sorry, we already had that scheduled, can't change it. or sorry, it will take us 4 hours to move that one single thing you are trying to schedule

How long does it take for the system csa use to respond to the orders that they make?

- If we get changes to teh one system, it cakes the rest of the scheduled stuff sometimes. if everything is online, they can do it in half-an hour or an hour. even daily processes of the system, not making any changes to the system takes hours. from 9am in morning to 6 in afternoon, it is taking time planning for the single 24 hour period. planning for a single 24 hour period is essentially like a full-time job
- even if you make a single change, the time from when you make that change to when the change takes effect is like 30 minutes.
- It is basically a full time job, takes a couple hours a day.

## scheduling window

- rescheduling window
- the idea is that if there is an available asset, or if there is an available time slot, and contact period, it is able to do it right away. so it doens't have to go through so much procedure just for a simple change that can be done easily

How long to train an operator on the current system which you have employed?

- for more complex systems, it can take weeks if not months
- for simpler ones, you can learn it pretty fast if you're willing and able a couple weeks maybe. but it takes time.
- You may be able to handle the routine way of doing things, but if things go haywire, you ahve to talk to someone who has see this happen before to tell you you have to do this

- tHEY HAVE GIVEN US INFO ON payload and stuff. another aspect is the bus. it is a very large systemn to learn, there are may quirks to it.
- These points apply to both systems both manual and automated
- The manual isn't faster to learn, it is just more hands-on. You still need to know all the processes that are going on for the automated
- It is less a function of manual vs automated, more about constalation size or mission complexity basically.
- in the ideal world, The system is not so complex one person is able to understand it and handle it start to finish. However a lot of the systems are very complex, where one person handles, for example, image orders, another handle downlinks, e.t.c.

In terms of order generation, can we build an algorithm or methodology that makes specific image or maintenance

- \* that is how the orders they give us are generated they generate them with a certain amount of bounded randomness
- \* soon will give us a day in the life example, with more orders and specific cases for us to handle

right now, we have sample image orders, we are processing them.