

# CAMRIS Update

May 14, 2023



**Perelman**  
SCHOOL OF MEDICINE  
UNIVERSITY of PENNSYLVANIA

Center for Advanced  
Magnetic Resonance  
Imaging and Spectroscopy

# Agenda

UPenn MRI Slack

Statuspage

Equipment improvements and future plans

Phones at Stellar Chance

CAMRIS policy refresh

Preview of scheduling and billing for next fiscal year

Tutorial on PBR Fund #s and post-invoice corrections

Q&A

UPenn MRI Slack



# What is Slack?

A "message board" system, that can be accessed via web, computer, or mobile apps.

# Why is CAMRIS using Slack?

- UPennMRI Slack has been active unofficially since 2017.
- Now has over 500 users; increasing "informal" CAMRIS communications.
- Slack offers an alternative to "group emails", ensuring conversations on persistent topics have a persistent home.
- It integrates with many other software tools (e.g., Statuspage updates automatically create messages in Slack)



<http://upennmri.slack.com>

# How is CAMRIS using Slack?

- **#general**  
Announcements/discussion of general interest to CAMRIS community.
- **#technical-issues**  
Reporting/discussion of technical issues. Please post technical problems here.
- **#camris-scheduling**  
Discussions of scheduling-related issues. Please post issues with the scheduling software or questions about scheduling policies here.  
**Scheduling requests should still be emailed to Margaret.**

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Statuspage

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Statuspage

<http://camris.statuspage.io>

# Updates and Plans for Statuspage

- Should now have all CAMRIS-supported equipment listed (if something is missing, tell us in [#technical-issues](#)).
- Recently improved auto-posting of updates in [#technical-issues](#) to make it less "chatty".
- 45 direct subscribers today; we want to understand barriers to use. Are the messages unclear? Are there too many irrelevant messages? Would you like to subscribe only to messages in certain bays?

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Statuspage

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Equipment improvements and future plans

# Stimulus Response Hardware

- Inventory of stimulus response equipment across all CAMRIS bays.
- Established service contract; now cycling equipment back to vendor for repair.
- Trialing new-generation interface module at Stellar Chance 7T. Will become standard interface at SC3T within next two weeks. Check it out, ask questions, and give feedback.
- Once repairs/replacement of hardware complete (Summer 2023), will have spares on hand for all response hardware, minimizing downtime.
- If you find something broken, let the local technologist know so they swap it with the spare or escalate the issue. If no technologist is on hand, please post to [#technical-issues](#).

# Bore-End Display Screens

- We've had multiple failures/issues in the last 6 months.
- Repaired screen at SC7T (leaking RF noise)
- Identified that SC3T screen is "happier" when stored outside fringe field. Sign posted on screen directing operators to move it away from scanner when not in use.
- "Borrowed" screen from MRD1 to replace broken screen at HUP6.
- Urgently working to service or replace HUP6 screen.
- Evaluating plans for long-term service/replacements.

# Stellar Chance Cooling

- Scanner cooling water system has been broken at Stellar Chance for several months.
- A few users, particularly at 7T, have experienced cooling errors.
- In consultation with PSOM and FRES, contracting for repairs to cooling system.
- Will take at minimum 12 weeks to complete repairs.
- May involve some minimal scanner downtime, which will be communicated once we have additional info.
- Groups experiencing cooling errors on any scanner should immediately report them to [#technical-issues](#).



# Scanner Software Updates

Scanner	Current	Upgrade	Upgrade Date
MRD1	NXVA30A SP02	NXVA60	likely 2025
PAV10	N4VE11C SP03	NXVA30A SP02	Summer 2023
SC3T	N4VE11C SP01	NXVA30A SP02	2024
HUP6	N4VE11C SP01	NXVA30A SP02	2024

- Major "research" sequences (e.g., UMinn BOLD/diffusion) are now available for XA software.
- MRD1 is already upgraded, but has extremely limited time for protocol testing.
- PAV10 will be the testbed for protocol upgrades and be more available to XA techdev time.

# Scanner Software Updates

Scanner	Current	Upgrade	Upgrade Date
MRD1	NXVA30A SP02	NXVA60	late 2024 or 2025
PAV10	N4VE11C SP03	NXVA30A SP02	Summer 2023
SC3T	N4VE11C SP01	NXVA30A SP02	2024
HUP6	N4VE11C SP01	NXVA30A SP02	2024
SC7T	N4VE12U SP01	NXVA?	late 2024 or 2025
HUP5	N4VD13A SP06	NXVA?	considering 2024

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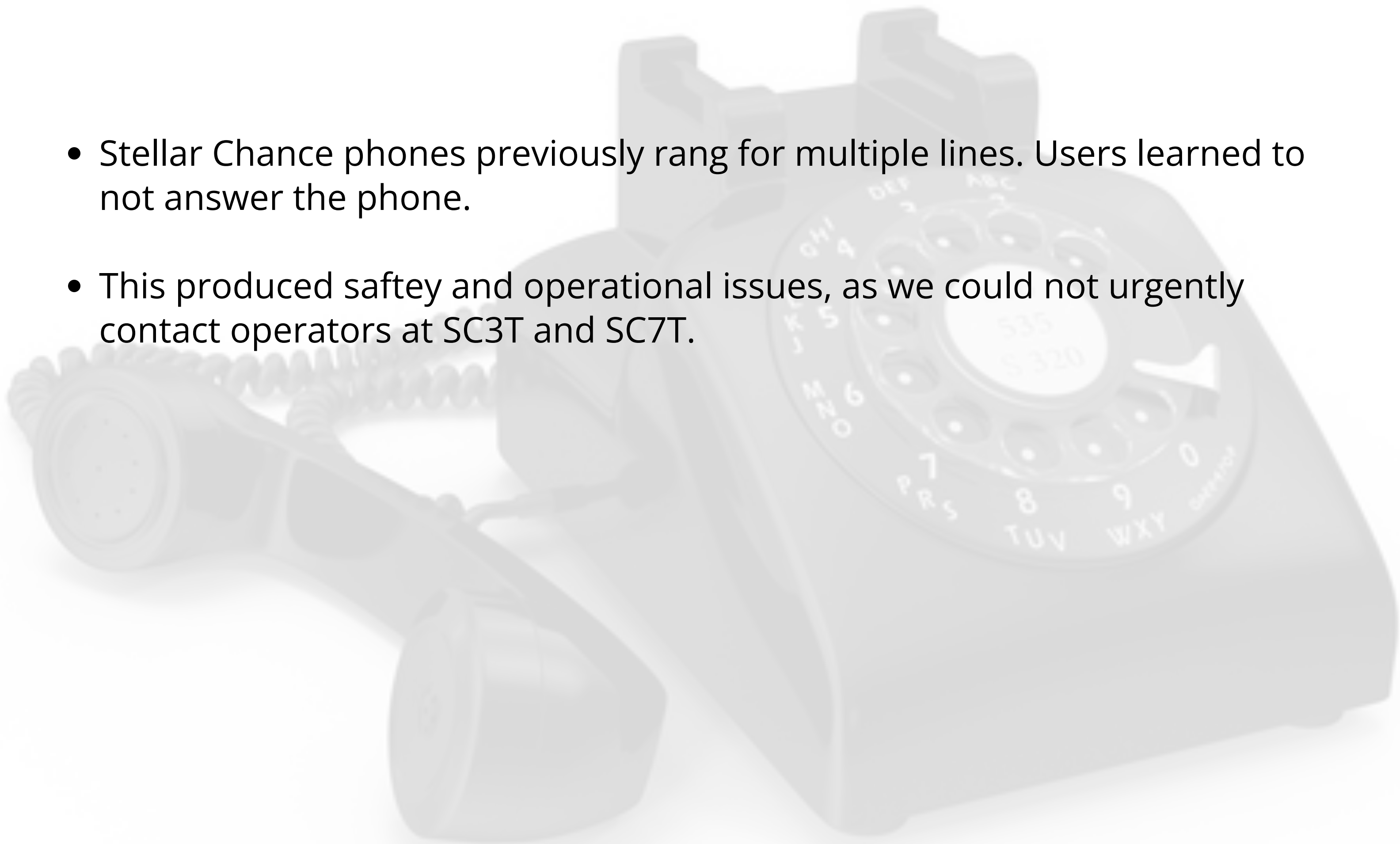
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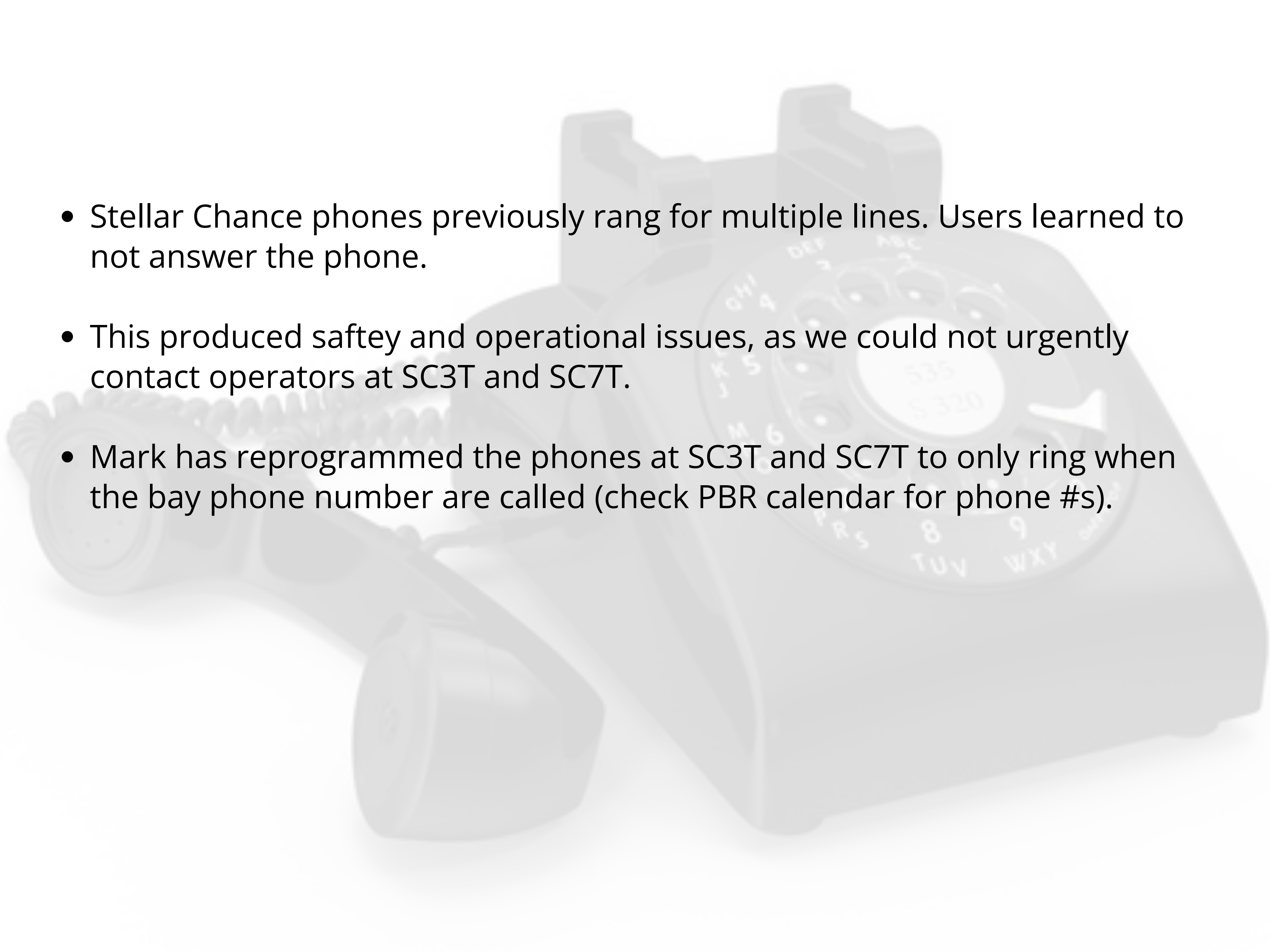
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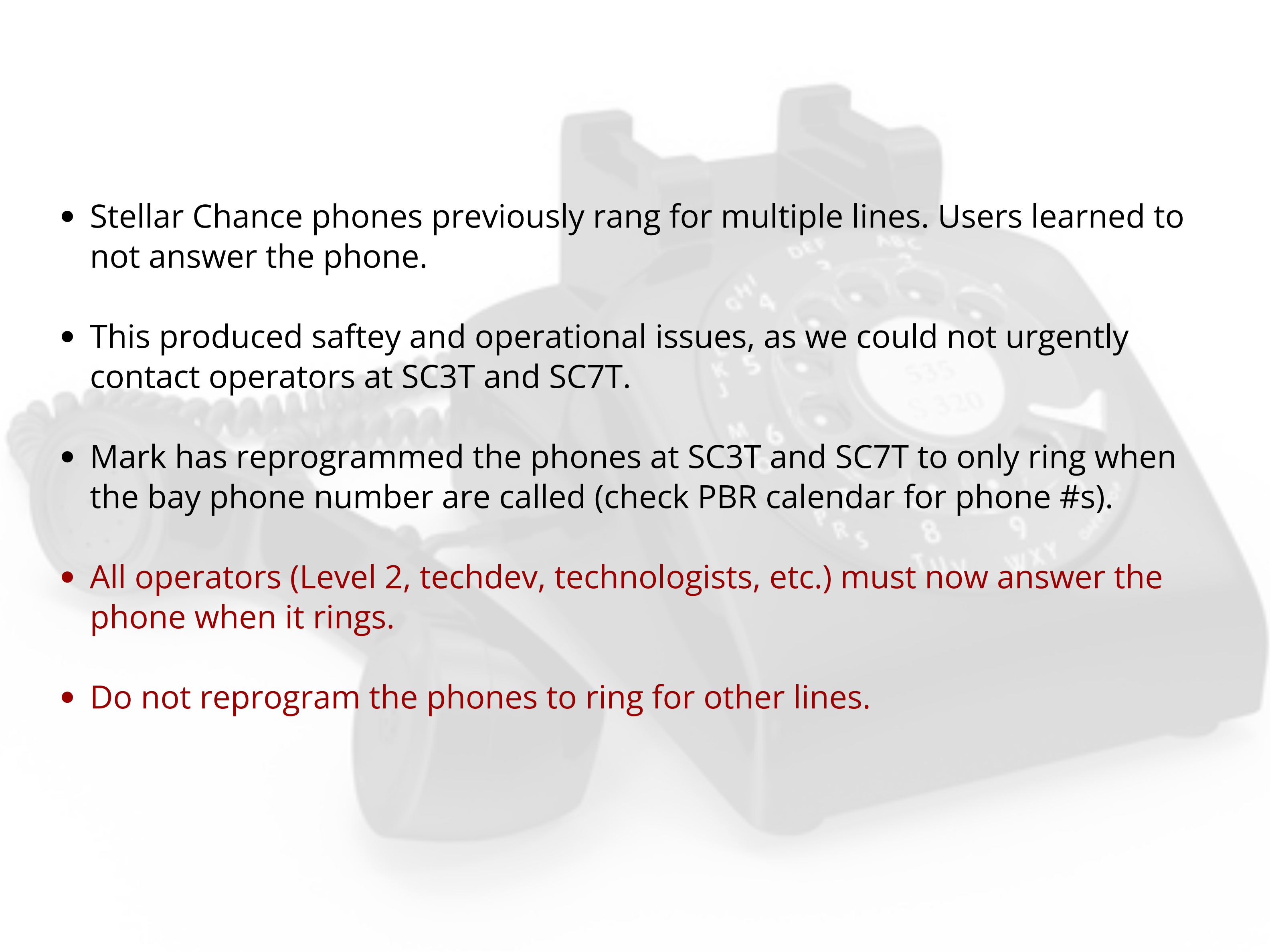
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  - This produced safety and operational issues, as we could not urgently contact operators at SC3T and SC7T.
  - Mark has reprogrammed the phones at SC3T and SC7T to only ring when the bay phone number are called (check PBR calendar for phone #s).
  - All operators (Level 2, techdev, technologists, etc.) must now answer the phone when it rings.
  - Do not reprogram the phones to ring for other lines.



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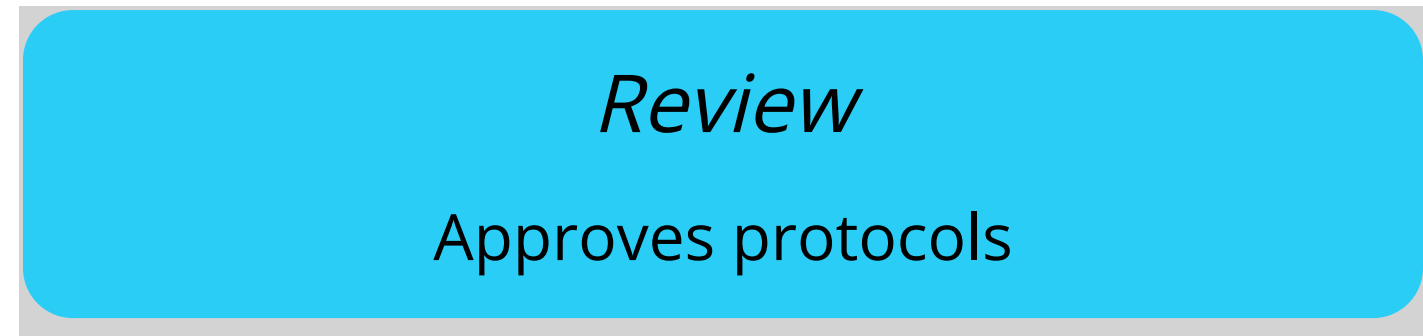
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CAMRIS policy refresh

## Restructuring policies and drafting processes to:

- Improve clarity and practicality for scanner users and staff.
- Produce a single, structured repository of policies.
- Iteratively improve policies via regularly scheduled reviews.
- Include user community in the generation and review of policy.

# CAMRIS Committee Structure



## Please!

- Fill in protocol submissions accurately and completely
- Have PIs review key documents before submitting
- Identify supporting personnel (physics and radiologist)
- Include your imaging protocol, indicating any non-product ("research") pulse sequences and your support/upgrade plan
- Detail clinical population and support personnel

# New CAMRIS Committee Structure

## *Executive*

Final oversight and approval

## *Review*

Approves protocols and reviews policies

## *Admin*

Scheduling,  
billing, and  
compliance

## *Operations*

Physical and  
digital  
infrastructure

## *Safety*

Roles and  
processes for  
human safety

Apply to join!

First batch of revised policies on website July 1

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All policies updated over next academic year

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Preview of scheduling and billing for next fiscal year

Rates to increase by no more than 3% for next FY.  
No major changes to fee structures.

Proposed billing changes (policy will be finalized before July):

- Slots will be billed for the full duration of the booking.
- Booking is for the bay, not just the scanner. Log in when you enter the bay and log out as you leave.
- If you run over, you will be billed additionally in 10 minute increments.
- You will not be charged for time that is not available to you because a previous group ran long.
- No-show will be billed at an hourly rate (no-show for a 3-hour slot accrues 3x no-show rate).
- To receive refund for time lost due to technical issues, you must report them immediately to [#technical-issues](#), or confirm that the issue is already posted on the Statuspage.

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Statuspage

Equipment improvements and future plans

Phones at Stellar Chance

CAMRIS policy refresh

Preview of scheduling and billing for next fiscal year

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# New Protocol Submission Process

- <http://www.med.upenn.edu/camris/> is the main website
- You can find the redcap portal here along with information on what documents and other requirements are needed.
- Incomplete or incorrect applications will not be reviewed by the committee. When in doubt please reach out to Margaret Ryan or Norman Butler for help.
- Be sure to include all necessary CAMRIS safety clauses in your ICF.

# CAMRIS's PBR Main Portal

- <http://pathbio.med.upenn.edu/pbr/portal/> is the website portal for the main pbr section
- Here PI's, BA's or lab managers can add or delete lab members for each protocol.
- This is also where funding is linked to CAMRIS approved protocols.
- It is the responsibility of each research group to manage lab member access and funding linkage by protocol.

# CAMRIS's PBR Calendar Access

- <https://pathbio.med.upenn.edu/camris/dogfish/> is the website to access the CAMRIS calendar
- Anyone can log in with their user name and pennkey for a "read only" view.
- Lab members will have specific protocols under their profile and will be able to book scan time once the funding and calendar access steps are completed in the main pbr after CAMRIS gives full approval.
- Please update your user profile so CAMRIS has accurate information (e.g. valid Penn email and a good phone number).



# CAMRIS's PBR Calendar Access

- The various scanner schedules open a new week of booking time, 3 weeks out, every Tuesday morning at 9:30 am.
- Some complicated protocols can be designated as CAT1, which lets a lab book out further on some scanners.
- However a Pennchart order number **MUST** be listed in order to hold the slot.
- If this is not done, your reservation might be removed and/or CAT1 status might be cancelled.

# CAMRIS's PBR Calendar Access

For non-CAT1 protocols, scheduling time outside of the 3 week window is possible by contacting:

- Margaret Ryan for HUP6
- Jacqui Meeks (MRI tech) for SC3T and 7T (Stellar chance)
- For Pav10, all booking is done by the HUP6 techs at this time.
- Also contact HUP6 techs if you need to schedule on Devon scanners or HUP5.

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Phones at Stellar Chance

CAMRIS policy refresh

Tutorial on PBR Fund #s and post-invoice corrections

Q&A