

# Rice Herbicide Update

## 2023 LACA Meeting

### Connor Webster



# New for 2023

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- Prepackaged mixture of Facet and Regiment
- AMVAC: to be available in 2023
- 22-36 oz/A
- Timing: 3 leaf to green ring
- Apply with an adjuvant plus a nitrogen source
  - Ex. Dyne-A-Pak or Phasell
  - If chosen adjuvant does not have a nitrogen source then add a urea-ammonium nitrate for optimal control
  - See approved adjuvant bulletin



# New for 2023



Rinde	Equivalent to a Tankmix of:	
Formulated Rate (FI Oz/Ac)	Facet L (FI Oz/AC)	Regiment 80 (Oz/AC)
22	22	0.413
24	24	0.450
26	26	0.488
<b>28</b>	<b>28</b>	<b>0.525</b>
30	30	0.563
<b>32</b>	<b>32</b>	<b>0.600</b>
34	34	0.638
36	36	0.675

# New for 2023



BULLETIN

## ARROZ 80<sup>®</sup> HERBICIDE APPROVED SURFACTANTS

Arroz 80<sup>®</sup> Herbicide provides effective and flexible barnyardgrass, aquatic and broadleaf weed control.

Product	Minimum Use Rate	
	fl oz/100 gal	fl oz/A
AirForce <sup>®</sup> + UAN	32 + 128	3.2 + 12.8
Cadence <sup>®</sup>	16	1.6
Dyne-Amic <sup>®</sup>	50	5.0
Dyne-A-Pak <sup>®</sup>	128–192	12.8–19.2
Freeway <sup>®</sup>	16	1.6
Inergy <sup>®</sup>	96	9.6
Invade Xtra™	128	12.8
Kinetic <sup>®</sup> HV	32	3.2
Persist <sup>®</sup> Advanced + UAN	48 + 128	4.8 + 12.8
Phase <sup>®</sup>	32	3.2
Phase <sup>®</sup> II	128	12.8
Renegade <sup>®</sup>	128	12.8
Rivet™	96	9.6
Silkin <sup>®</sup>	24	2.4
Syl-Tac <sup>®</sup>	32	3.2
Triple Play™	128	12.8
Volare™ + UAN	64 + 128	6.4 + 12.8

The addition of 2% volume/volume (v/v) 32% or 28% UAN (urea-ammonium nitrate) to one of the above listed surfactants (except Dyne-A-Pak, Phase II and Triple Play which already contain UAN) is recommended and may enhance the activity of Arroz 80 when applied under some conditions. The addition of 32% or 28% UAN at 1% v/v to AirForce, Persist and Volare adjuvants is required when used with Arroz 80. UAN is not a substitute for an approved adjuvant. Instead, it should be used in combination with one of the approved adjuvants.

Arroz 80 is exclusively sold by Helena Agri-Enterprises<sup>®</sup>. See AMVAC's entire line of products at [AMVAC.com](http://AMVAC.com)

Arroz 80 Herbicide  
HRAC Group 2



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# Reviton



- **New PPO labelled for burndowns**
  - Tiafenacil
  - 1-3 oz/A
  
- **Helm Crop Solutions**
  
- **Corn: 0 days**
- **Wheat: 0 days**
- **Soybean: 7 days**
- **Cotton: 7-14 days**
- **Sugarbeet: 30-60 days**
- **Other crops: 120-180 days**

# Reviton Drift Trial

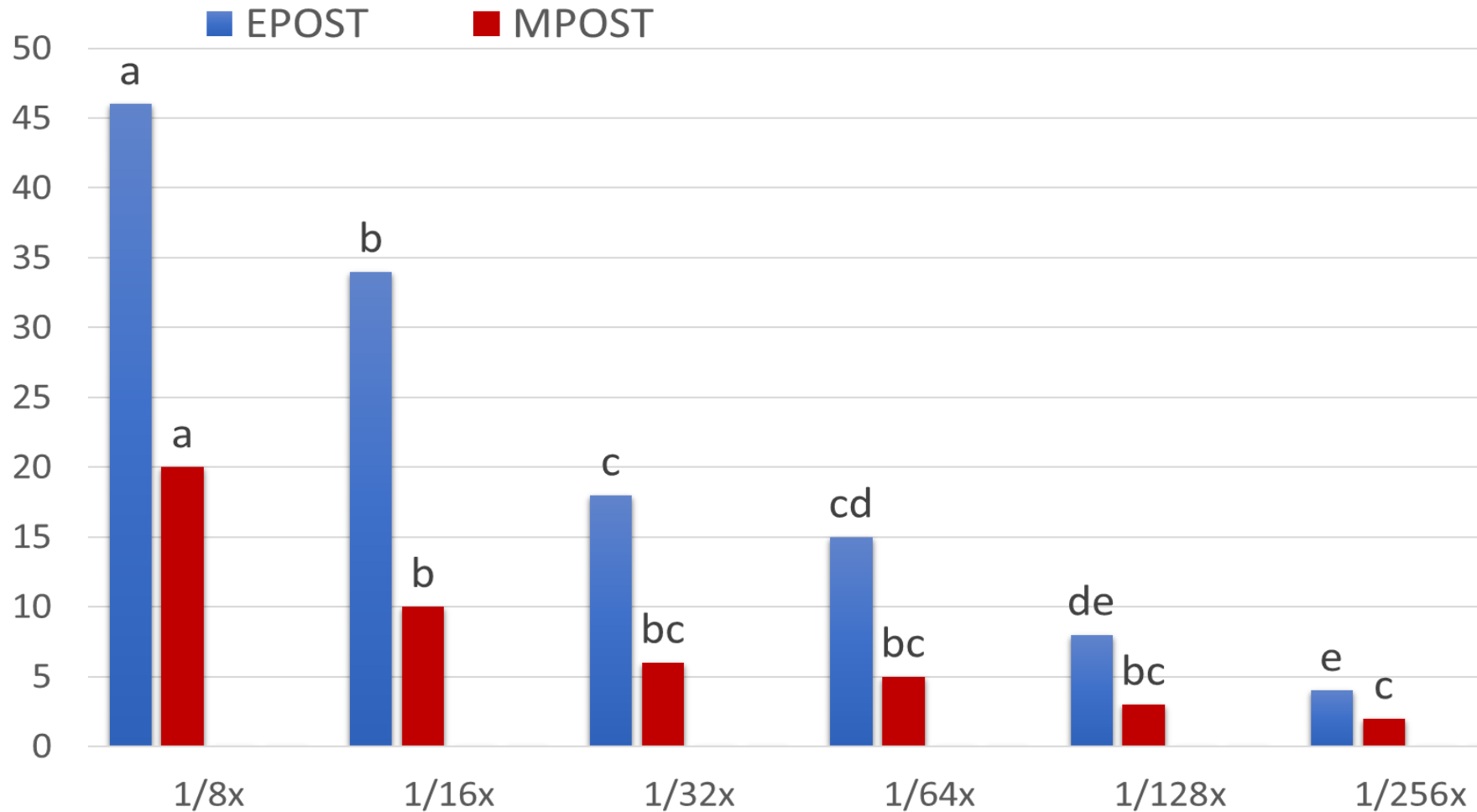
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- **Rice drift trials conducted**
  - LSU, St. Joseph, LA
  - Mississippi State, Stoneville, MS
  - Arkansas, Lonoke, AR
- **Injury observed was PPO speckling and tip burn**
- **No reductions in overall plant heights**
- **No yield reductions observed**

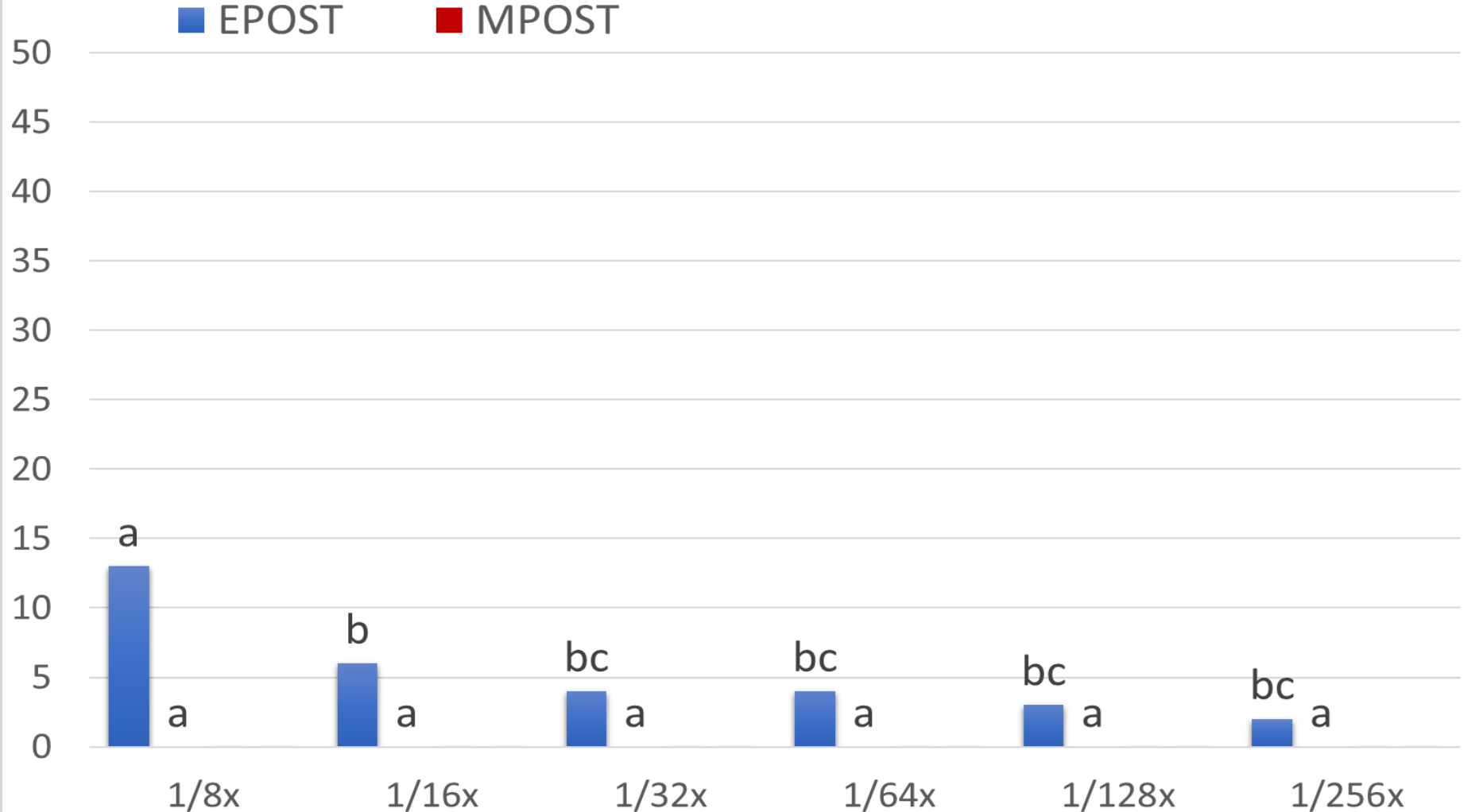




# Injury 7 DAT

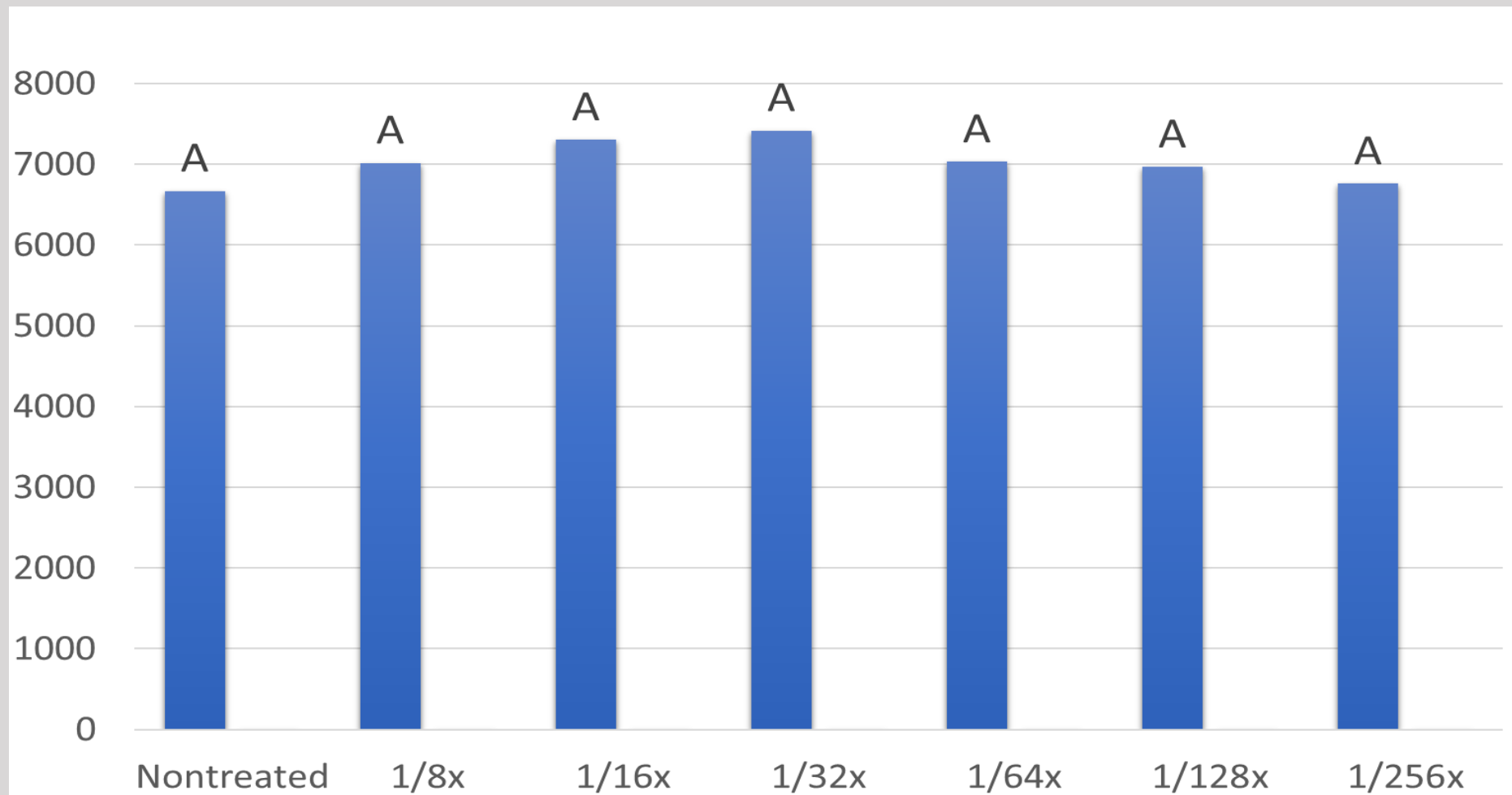


# Injury 21 DAT





# Rough Rice Yields (kg ha)



# MaxAce Tolerance to Quizalofop

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# Highcard 2-3 lf rice





# Provisia 2-3 lf rice





# Provisia 13.9 fl oz/A on Maxace rice

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# Highcard vs Provisia at 2-3 leaf and 5 leaf – 1 tiller

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# 2-3 lf Grasses





# 5 lf – 1 tiller Grasses





# Highcard

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- Only use Highcard in the MaxAce system
- Safener plays more of a role at lower rates
- Growth stage comparison study
  - Applications were 14 days apart
  - Timing is key in MaxAce rice
  - More flexibility in Provisia
- Struggles with fall panicum

# Provisia Stewardship

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# Provisia Stewardship Update

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- **Roughly 15 confirmed Provisia outcross weedy rice populations**
  - All possess the Clearfield gene
  - Confirmed by the Breeding Project
  - Tissue samples from 100 different plants
- **No one reason to blame**
  - Biggest influence is the lack of residual control
- **Antagonism is an issue**

# Antagonism

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- **More times than not, it's there**
  - Would need a nontreated to see it in most cases
- **Have at least one application of Provisia alone**
- **Which application should we mix?**
  - Shouldn't be based on first or second application
  - Mixing decision should be based off of grass and weedy rice size and population, < 3-4 leaf
- **Know what to mix and what not to mix**
  - Stay away from Stam, Grasp, Regiment, 2,4-D

# BMP's Going Forward

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- **Let the size and population of weedy rice dictate follow up applications**
- **Use residuals – Grass and broadleaf**
- **Only mix when weedy rice and grasses are small**
- **Use proper carrier volumes**
  - 10 – 15 GPA
- **Clean equipment/combines**
  - Harvest fields with weedy rice last

# Mixing Order

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# Mixing Order

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- **Agitate throughout the entire mixing process**
- 1. Dry formulations – Dilute first**
    - **Water dispersible granules (WDG)**
    - **Wettable powders (WP)**
    - **Soluble granules (SG)**
  - 2. Ammonium Sulfate (AMS)**
  - 3. Compatibility agents/anti-foamers**

# Mixing Order

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## 4. Dispersed liquid formulations

- Suspension concentrates (SC)
- Flowables (F or FL)
- Micro-capsules (CS or ME)

## 5. Remaining liquid formulations

- Emulsifiable concentrates (EC)
- Oil dispersions (OD)
- Solutions or soluble liquids (S or SL)

## 6. Adjuvants

# Acknowledgments

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- Rice Research Board
- Adama
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- Corteva
- FMC
- Gowan
- HorizonAg
- Nichino
- UPL
- Valent

## Staff

- Graduate Students:
  - John Williams
  - Maranda Arcement
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- Jeremy Hebert
- Kalem Johnson

# Questions?

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