



icmif

Virtual Meeting of  
Reinsurance Officials

**MORO 2021**

# ICMIF Virtual Meeting of Reinsurance Officials 2021



Tuesday (2-4pm BST)

**Current state of the reinsurance market**



Wednesday (2-4pm BST)

**Emerging risks**



Thursday (2-4pm BST)

**Digitisation and collaboration in reinsurance**

**MORO 2021**

# MORO: Digitisation and collaboration in reinsurance



MODERATOR

**Greg  
Lockard**

Managing Director

Shelter Re  
(USA)



**Chad  
Veach**

Innovation Manager,  
Risk Improvement

EMC Insurance  
(USA)



**Paul  
Mahon**

Insurance Director

Cornish Mutual  
(UK)



**Kevin  
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Chief Reinsurance  
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**James  
Wenham**

Executive Director

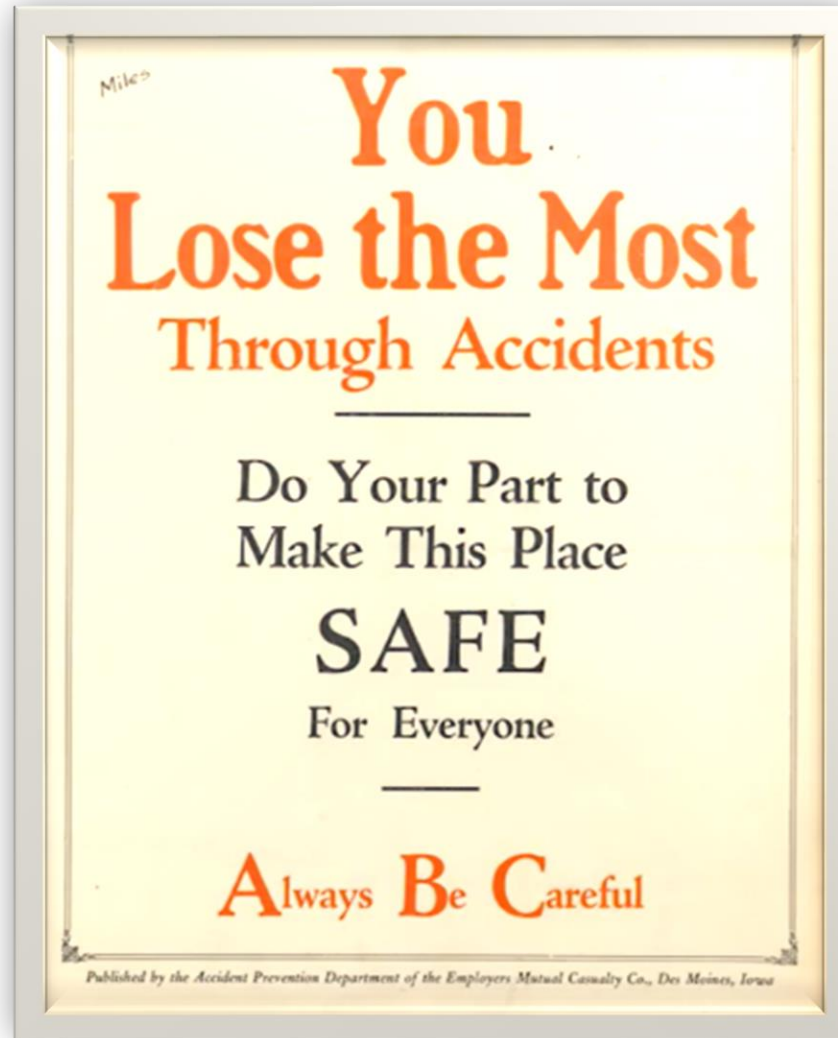
Willis Re  
(UK)

**MORO 2021**

# Innovation to Improve Risk and Improve Lives

Chad Veach, CSP, ARM, CPCU  
Innovation Manager

# Since 1926



PEOPLE & PARTNERSHIPS



# Risk Improvement Innovation – Technology & Data



Aerial Intelligence



Wearable IoT



Building/Equip IoT



Machine Vision



# Betterview Property Profile

- Aerial imagery from aircraft
- Machine vision detection of roof issues and calculated roof score
- Began 2020 with standard pilot, then...

The screenshot displays the Betterview Property Profile interface for a property at 3410 Blvd, Hampton, VA 23666. The main view is an aerial image of a building with a white roof, overlaid with machine vision detection results. A green line highlights the roof edge, and yellow and green areas indicate detected issues. The interface includes a search bar, a 'Properties' dropdown, and a 'COMPLETE' button. A 'Priority' section shows a 'Low' priority status with a green indicator. A 'Summary of Roof Scores' section displays a score of 66 out of 100, accompanied by a color-coded progress bar. A 'Summary of Roof Condition' section provides details on roof condition, severity, impacted area, and building size. A 'Building Roof Scores' section shows a score of 66 for Building 1. The interface also features a 'Hide Timeline' button and a 'GOOGLE MAPS' button.

**Betterview** Search by address

3410 Blvd, Hampton, VA 23666

ID: 6R Secondary ID: Rnr Cl ba Rnr Assigned To: Nathan Smith EDIT

Chad Veach Employee: Minel Canally (SBC) COMPLETE

**Priority** Low - January 30, 2020

BLDG COUNT	SQFT/FT AVE	LOW SCORE	MEDIA SCORE	HIGH SCORE
1	14905 ft <sup>2</sup>	-	-	-

**Priority** As of 1/30/20 **LOW**

Our evaluation of the property yields a set of problems that are considered low priority (61-100).

**Summary of Roof Scores** Based on 1/30/20 imagery

**66** out of 100

**Summary of Roof Condition** Based on 1/30/20 imagery

ROOF CONDITION	SEVERITY	IMPACTED SQ FT	BLDG	SQDG ID'S
Shading	Minor	8% 1200 ft <sup>2</sup>		
Overhang	Medium	4% 619 ft <sup>2</sup>		

**Building Roof Scores** Based on 1/30/20 imagery Sort by: Building Numbers

66 Building 1

**Property Features** Based on 1/30/20 imagery

SCORING TIMELINE

SCORED IMAGERY

2020

06 January 30 Aerial - Collier

INTERACTIVE GALLERY

OVERVIEW

DETAILS (14)

STATIC IMAGES

ALL HISTORIC IMAGERY

2019

October 23 Aerial

February 2 Aerial - Collier

2018

August 27 Aerial

January 21 Aerial - Collier

2017

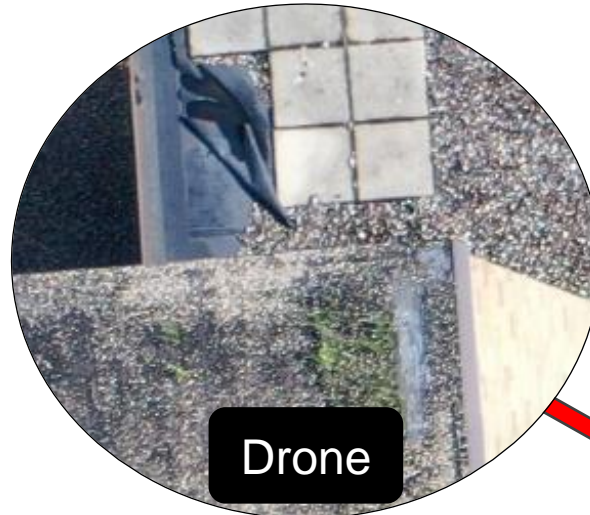
November 16 Aerial

GOOGLE MAPS

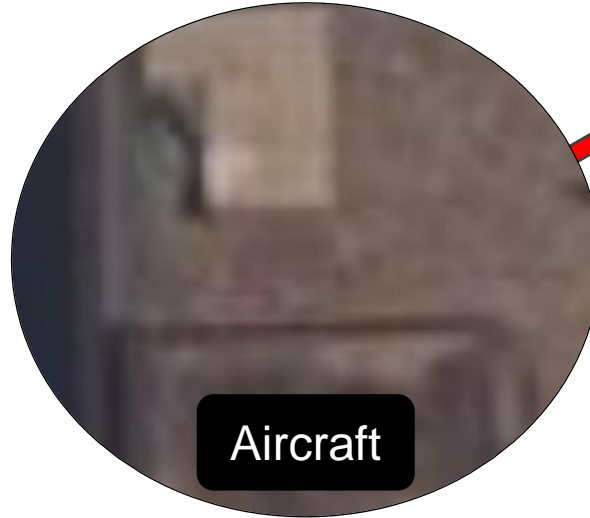
JAN 30, 2020

# kespry Drone Roof Assessments

- Roof Assessment Service Reports for policyholders
- Next... “Roof Score” based on HD imagery



Drone

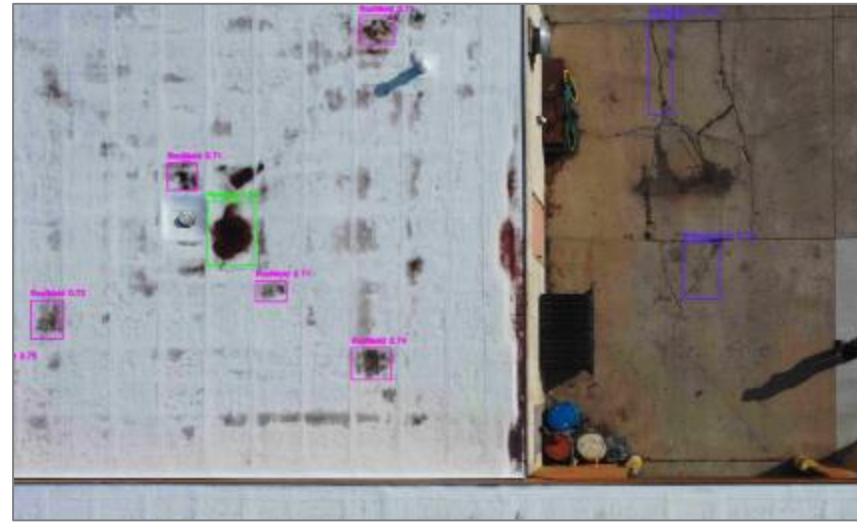


Aircraft





# INFRALYTIKS Computer Vision



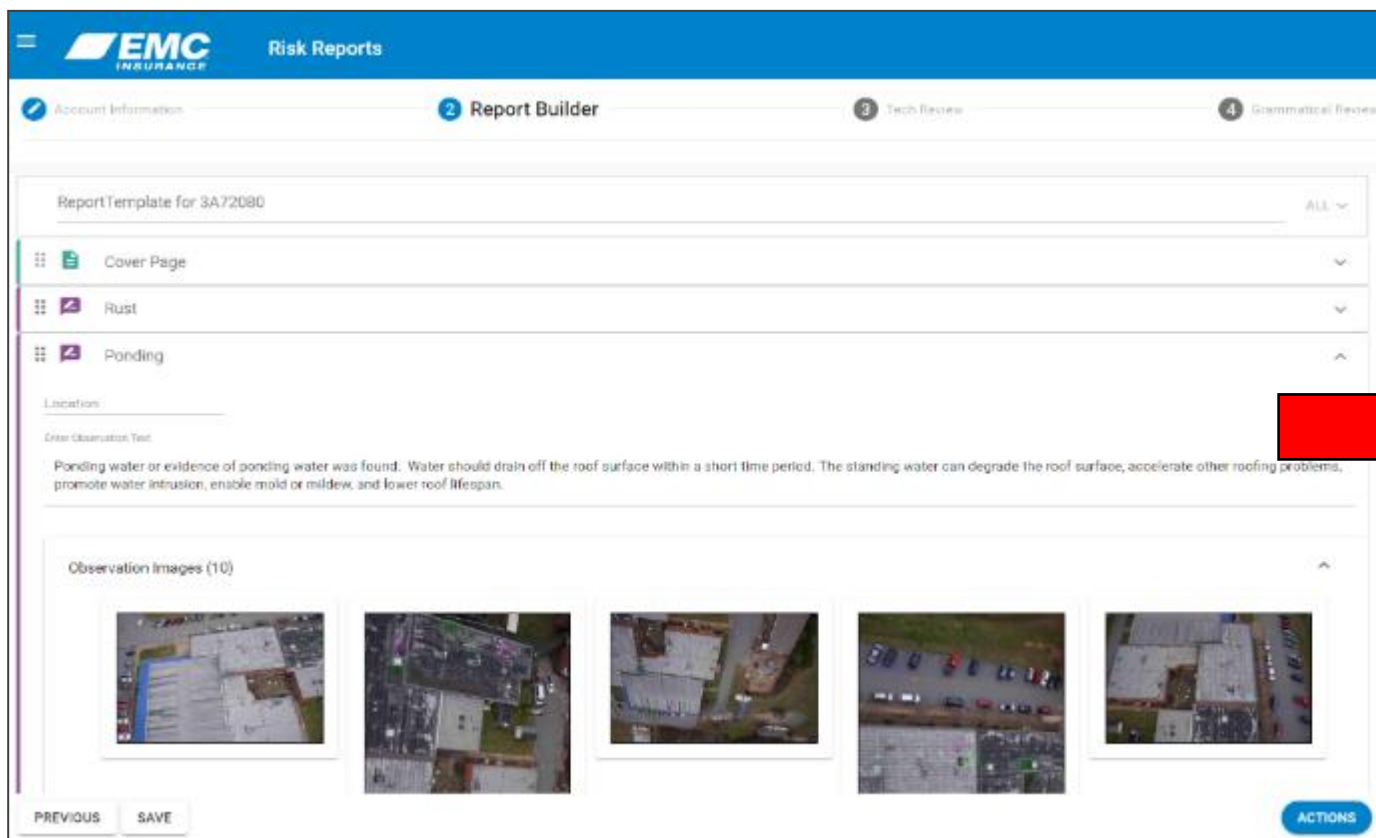
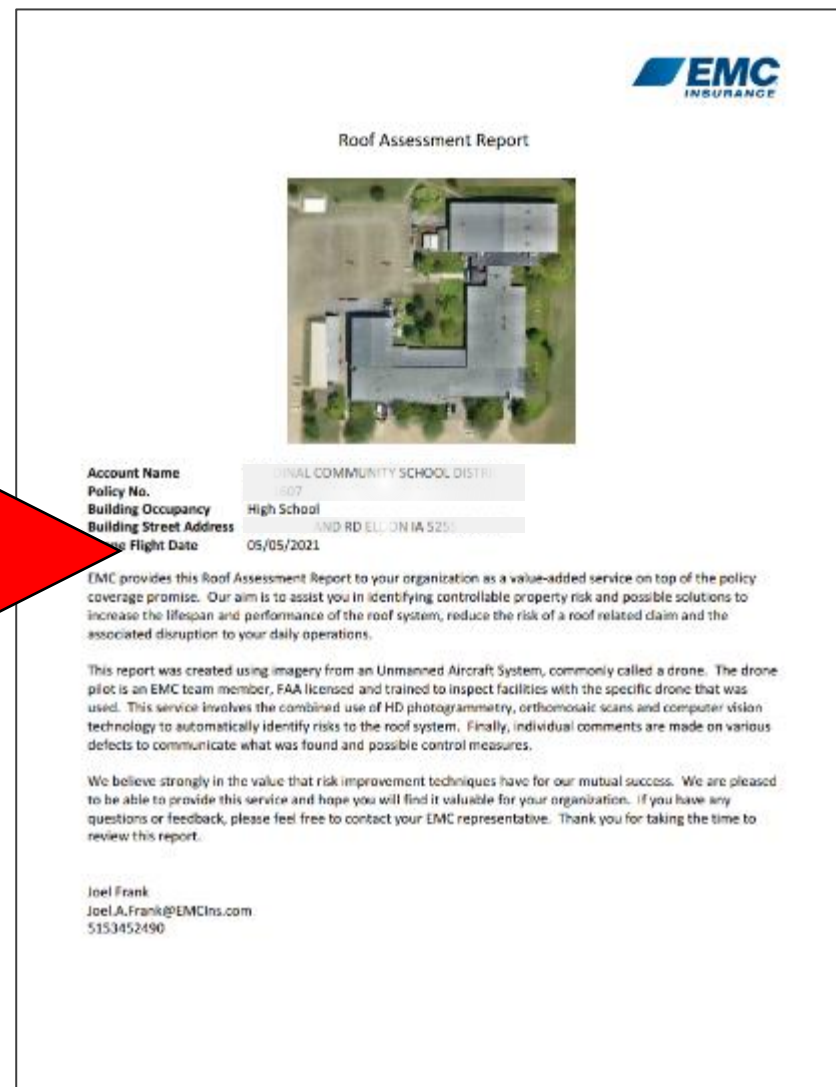
## Current Models

- Ponding
- Displaced Ballast
- Staining/Mold
- Corrosion/Rust
- Wrinkled Membrane
- Walkway Crack

## Future Models

- Patching
- Overhanging Tree
- Debris
- ???

# Roof Assessment Reports



# HSB Building/Equipment Monitoring

- *Sensor Systems by HSB* program for K-12 schools
- Water, Spoilage, Freeze - HVAC Failure



## Beta Phase

24 months

54 locations

33 spoilage events prevented  
2 HVAC & chiller issues detected  
3 water damage events prevented

~\$165,000 +  
~\$25,000 +  
~\$50,000

Remote  
Monitoring &  
Reporting

Predictive  
Maintenance

Disruption  
Prevention

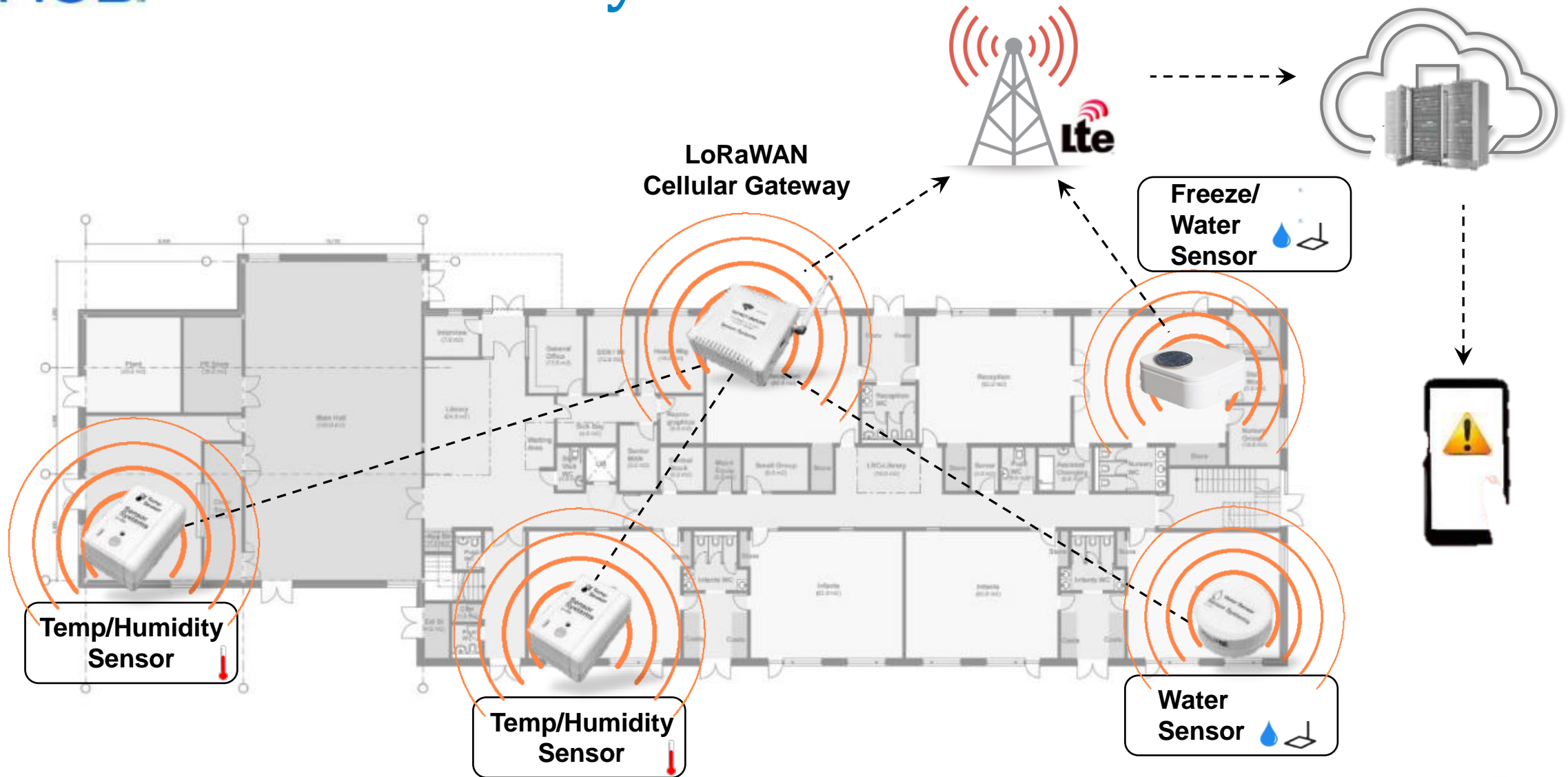


# Building/Equipment Monitoring

## *Sensor Systems by HSB* **Freeze Prevention Kit**



# Stand Alone System



# Advanced Driver Assist



Pedestrian & Cyclist Collision Warning



Speed Limit Indicator

Lane Departure Warning



Forward Collision Warning

Headway Monitoring & Warning

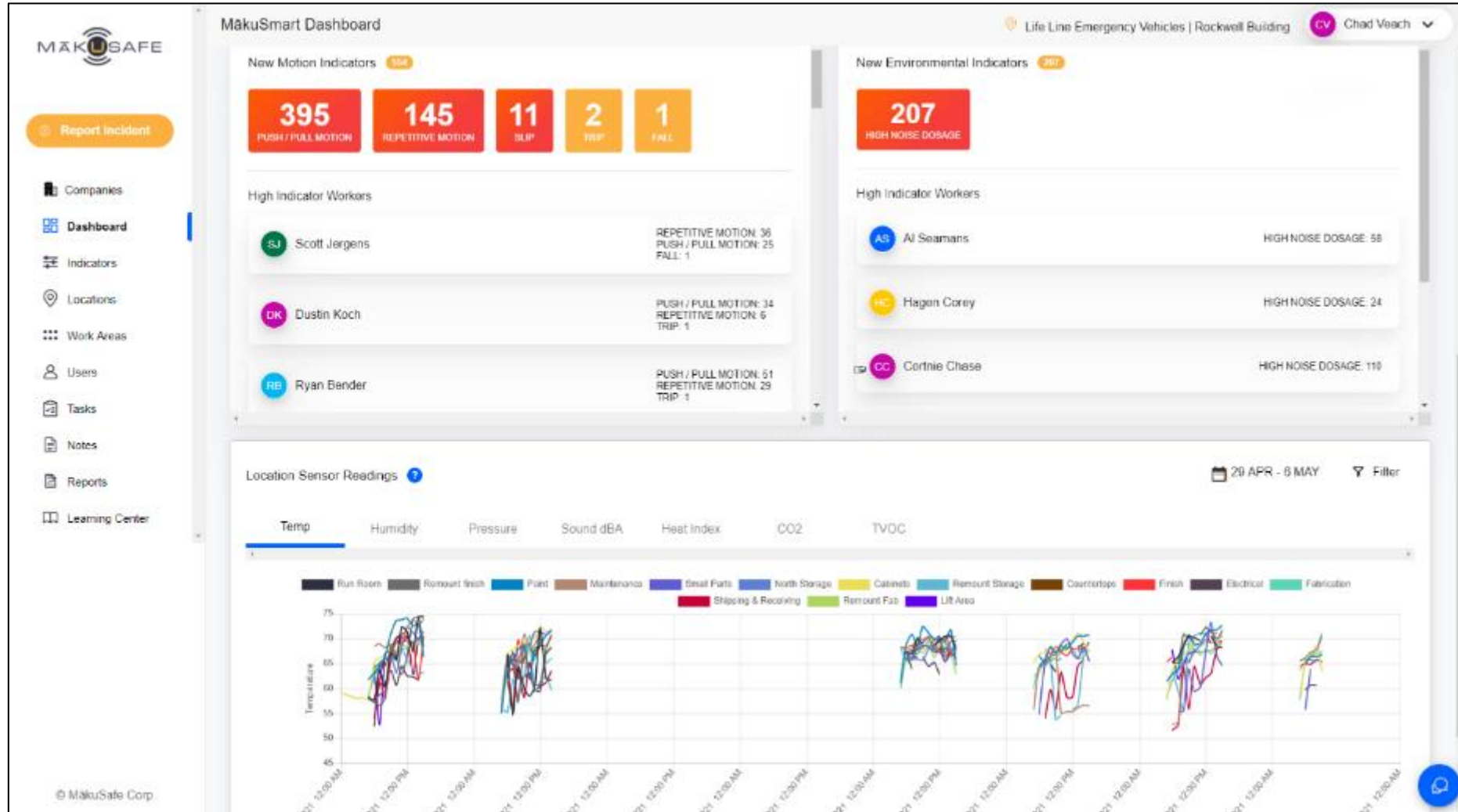


# MAKUSAFE Wearable Safety Tech

- Captures motion & environmental data
- Two Pilots completed in 2019
  - >3 months & 40 devices
- Beta phase began late 2020 with 1,200 devices and 12-month no-cost trial for WC policyholders



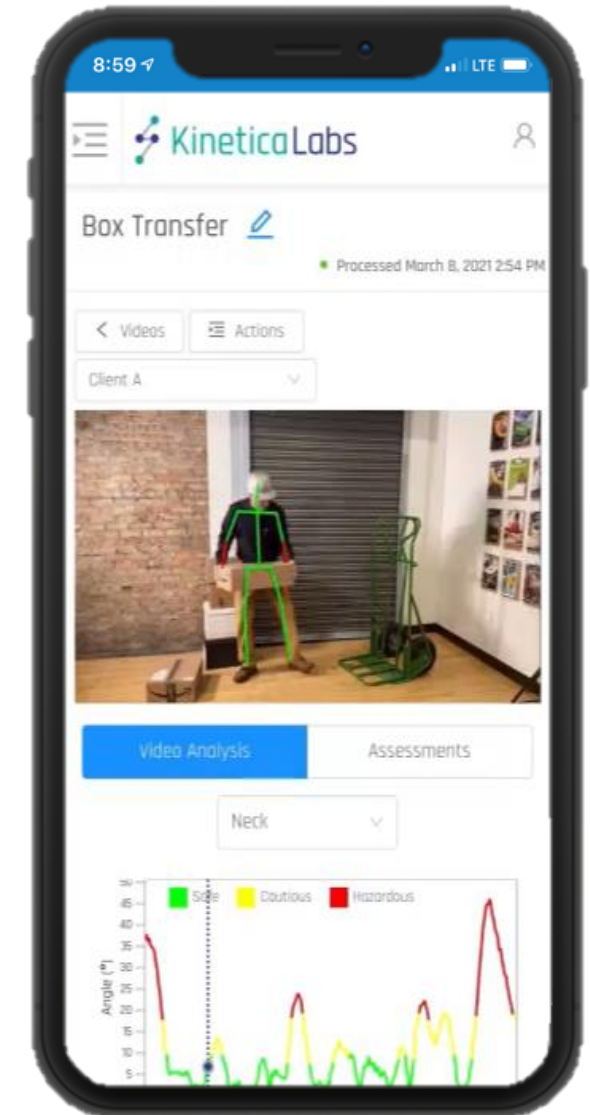
# MĀKUSAFE MākuSmart Risk Intelligence Platform





# Kinetica Labs Ergo Assessment Tool

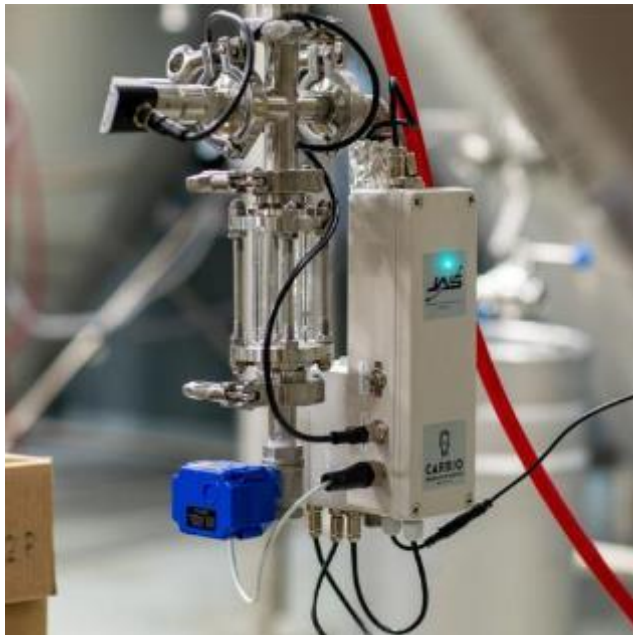
- Video motion capture
- Captured on-device or upload





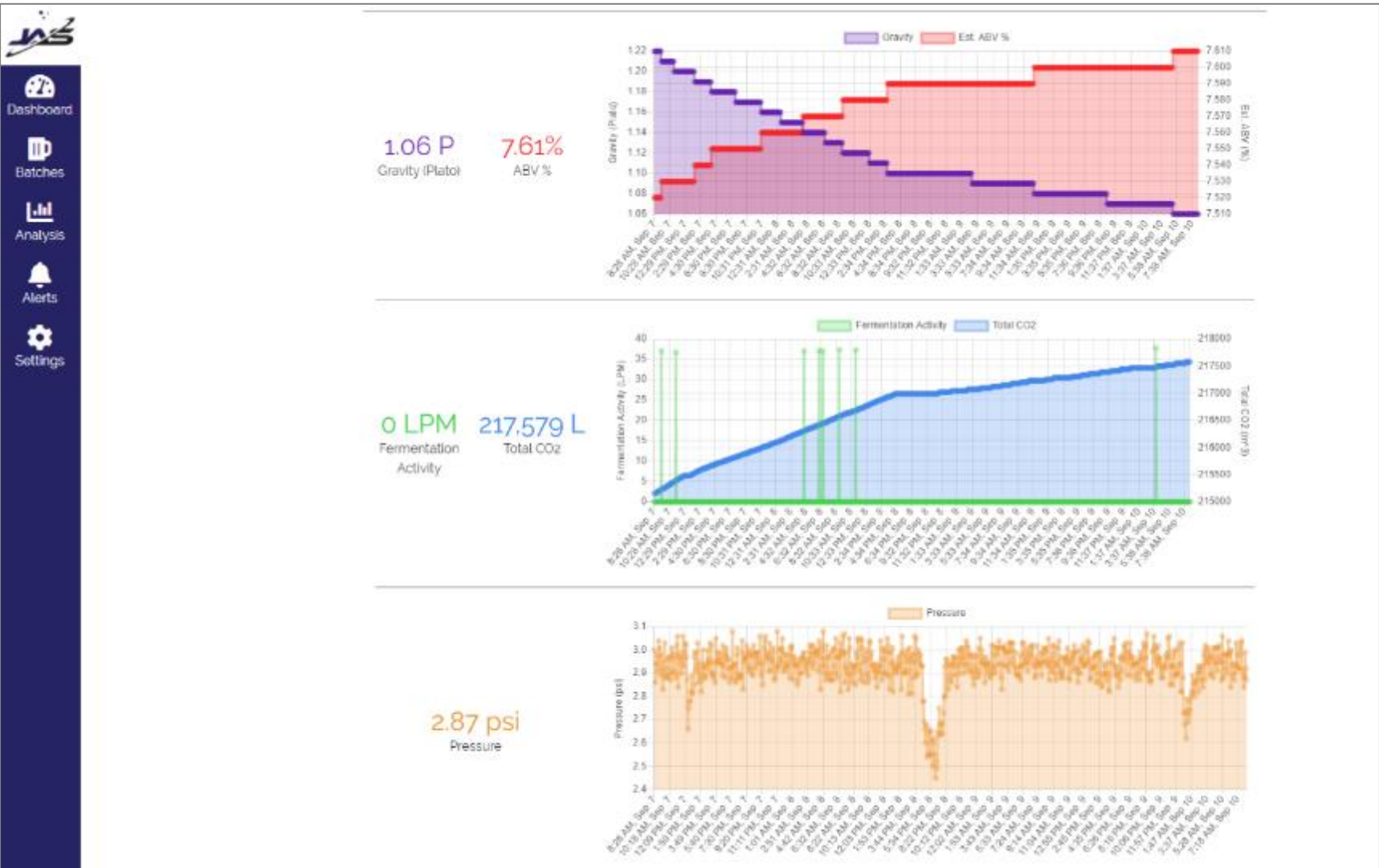
# Brewery Sensor Solutions

- CO<sub>2</sub> sensor for fermentation
- pH sensor for sour beer
- Pressure & temperature carbonation
- Temp/humidity refrigeration/freezer
- Ambient CO<sub>2</sub> for worker safety
- Water leak or intrusion





# “Mission Control” – Data & Alerts





# IntelliSee

Smarter surveillance for a safer world

# Machine Vision on Video



PEOPLE & PARTNERSHIPS



*count on*



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PEOPLE & PARTNERSHIPS



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Cornish Mutual  
Farming Insurance Experts





# Introduction

- Established in 1903 – Working to protect the farming community
- Operate with strong values driven by our Mutuality
- Geographical niche – UK South West (Cornwall, Devon, Somerset, Dorset)
- Range of products with farm insurance at our core
- Targeting sustainable, profitable growth







## Our Reinsurance Dilemma

- Utilised different approaches over the last 20 years – all served a purpose but felt sub optimal
- Seeking a long term, bespoke programme based on our mutual ethos and unique requirements
- We met Farm Mutual Re at ICMIF MORO conferences



## The Solution

- Farm Mutual Re recognised the issues, understood our Members and offered a solution
- Invaluable guidance and input from Willis Re
- We see the relationships now as beyond traditional Reinsured, Broker and Reinsurer arrangements.
- Our advice to other Mutuals:
  - Do not to accept “off the peg” reinsurance solutions
  - Engage with other Mutuals



# Farm Mutual Re











## MORO Presentation

ICMIF collaboration in action. Reinsurance case study.

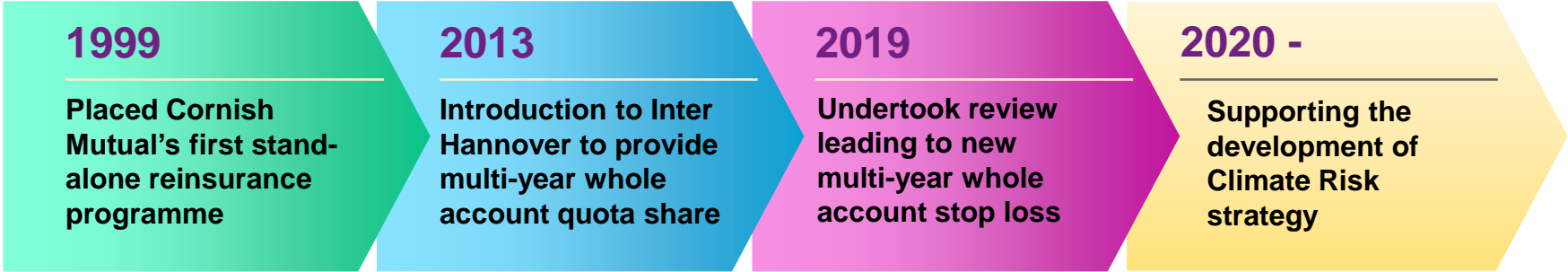
June 2021



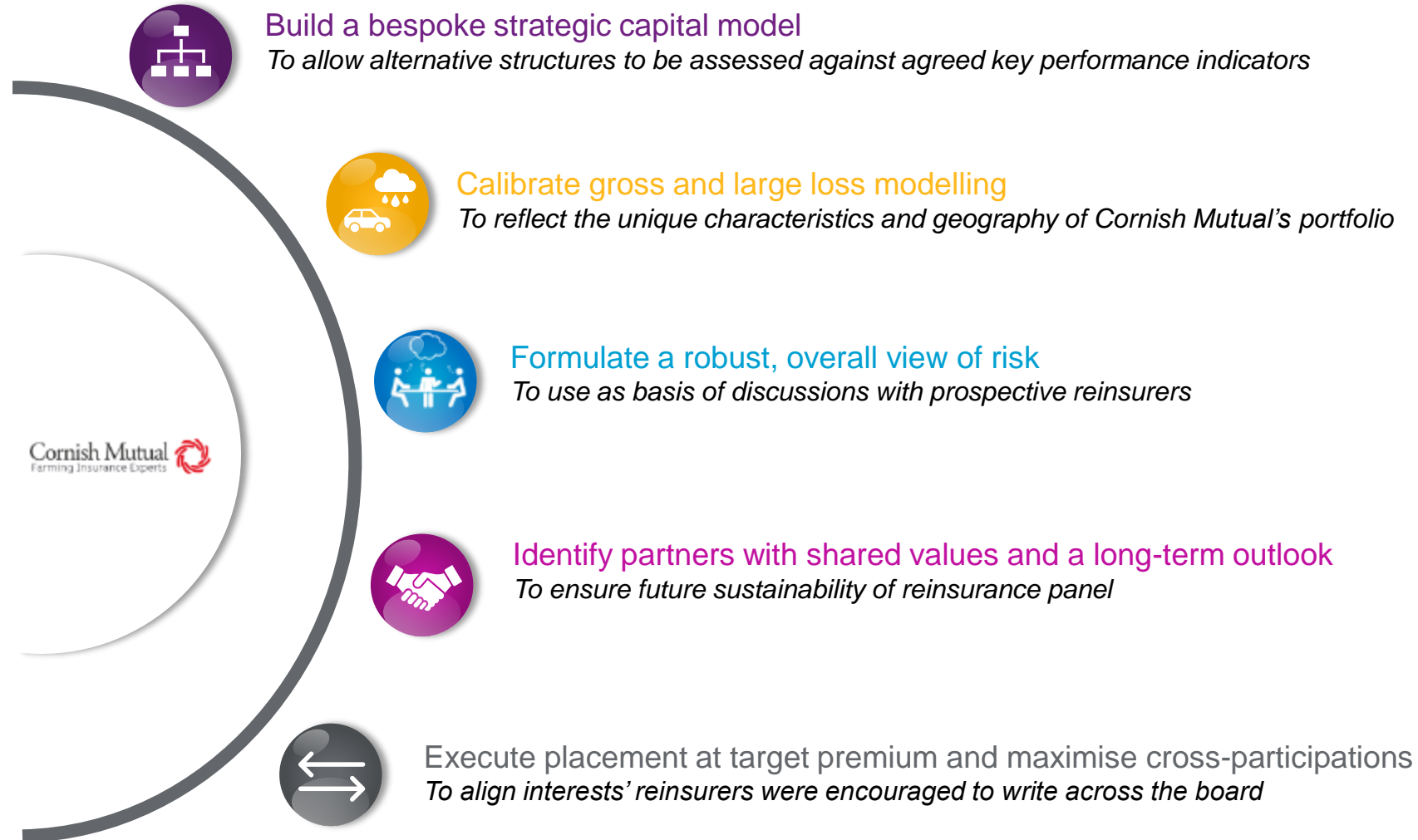
# Willis Re and ICMIF



# Willis Re and Cornish Mutual

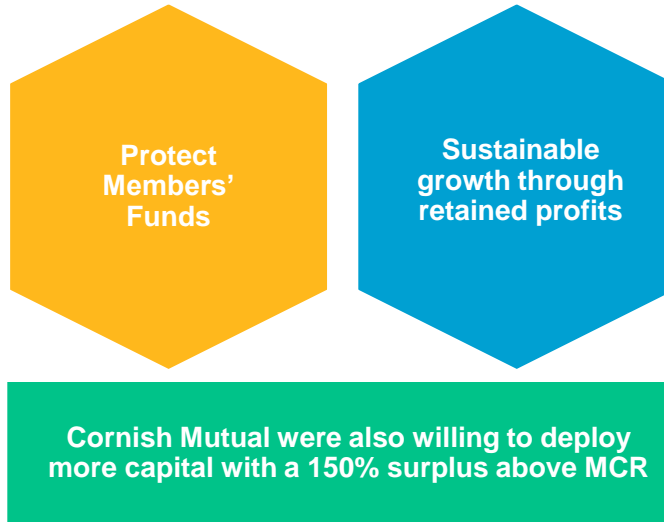


# Willis Re's role in collaboration with Cornish Mutual

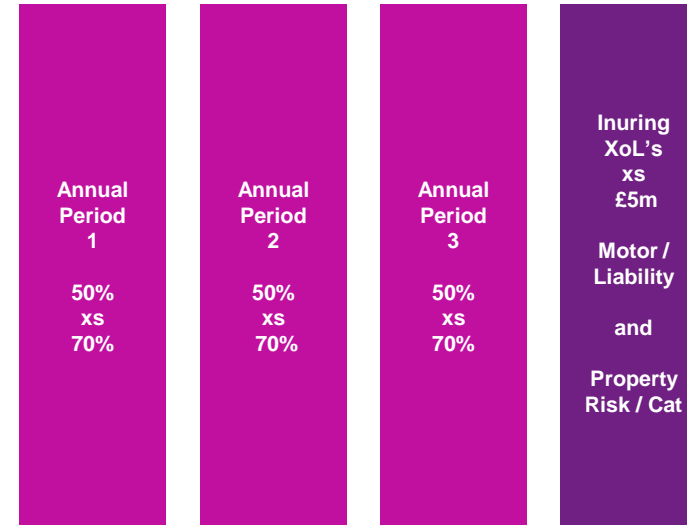


# Impact of New Arrangements

## Cornish Mutual's Primary Goals



## Programme Structure



Whole Account Stop Loss and inuring XoL protections improved all key metrics whilst maintaining Solvency Capital Requirement within tolerance level



Opportunity to widen engagement with the reinsurance market and communicate key differentiators to existing and prospective partners

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# Reinsurance-related content on ICMIF Knowledge Hub

Hub themes

None

Topics

Reinsurance x

Content type

None

Search the hub

Type to search



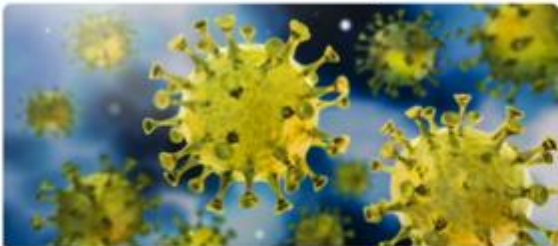
WEBINAR

The emerging risks from COVID-19 in 2021 and beyond



CONFERENCE SESSION

Global reinsurance roundtable (September 2020)



WEBINAR

The insurance implications of the coronavirus 'catastrophe'



NEWS ARTICLE

Latest sigma: Insurers hit by USD 89 billion of losses from disasters in 2020



THOUGHT LEADERSHIP ARTICLE

Rejoining Paris Agreement spurs US (re)insurers' ESG adoption



WEBINAR

Insurance and reinsurance wordings in a post-pandemic world



WEBINAR

Reinsurer's approach to pricing of property risk



CONFERENCE SESSION

Reinsurance the mutual way

# MORO 2021

# Meeting of Reinsurance Officials (MORO) 2022

**Wiesbaden,  
Germany**

2022, Dates TBC

HOSTED BY



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