

FLYABILITY

SAFE DRONES FOR INACCESSIBLE PLACES

Drones in Oil & Gas: How Chevron Uses Drones to Improve Safety, Reduce Downtimes, and Save Money

Tuesday, April 28th 2020

04:30 PM - 05:30 PM CEST

10:30 AM - 11:30 AM EST

MODERATOR



Zacc Dukowitz

Content Marketing Manager

—Flyability—

PANELISTS



Mauricio Calva

Non-Destructive Examination
Expert

—Chevron—



Larry Barnard

Downstream & Chemicals,
Manufacturing ~ Unmanned
Aerial Systems (UAS)

—Chevron—

WEBINAR ENGAGEMENT

Ask questions during the webinar.

The image shows a screenshot of the GoToWebinar Control Panel. At the top, the title bar reads "GoToWebinar Control Panel". Below it, the "Audio" section is expanded, showing three radio buttons: "Computer audio" (selected), "Phone call", and "No audio". A red microphone icon and the word "MUTED" in red are displayed. Below this, a dropdown menu shows "Built-in Microphone". A volume slider is visible, and another dropdown menu shows "Built-in Output". The "Talking: Communication Flyability" section is also expanded. The "Questions" section is active, showing two input fields: "Q: This is a test question" and "Q: Type your question here if you have one." Below these is a larger text area with the placeholder "Type question here." and a "Send" button with a paper plane icon. At the bottom, a "Test Webinar" section displays "Webinar ID# 679-368-763" and a red dot indicating "This session is being recorded." The GoToWebinar logo is at the very bottom.

AGENDA

- 1 5' Introduction
- 2 20' Mauricio Calva & Larry Barnard,
Chevron
Indoor Drones in Oil & Gas
- 3 30' Panel Discussion Q&A





Indoor Drones in Oil & Gas

Mauricio Calva
Non-Destructive Examination Expert





Indoor Drones in Oil & Gas

Larry Barnard

Downstream & Chemicals, Manufacturing
~ Unmanned Aerial Systems (UAS)





human energy®

Webinar Industry Specific: Oil & Gas

April 28, 2020.

Mauricio Calva & Larry Barnard
Chevron ETC & Chevron El Segundo Refinery



Where Robotic Inspection fits in Chevron Programs

- OBJECTIVES
 - Reduce risk and cost
 - Increased data quality and efficiency
- DRIVERS:
 - Overall Tech Refresh
 - Mechanical Integrity
 - Process Safety
 - Regulatory requirements



Information flow and responsibilities

- Who uses the information?
- How is the information processed?
- How is it analyzed, reported, and stored?
- Who is responsible for the use of data and images?



Chevron Robotic Applications



- In Service Inspection
 - Routine Inspection
 - Structures, piping, tanks and vessels
 - Call-out and special applications
- Turnaround / Shutdown Inspection
 - Internal inspection of vessels & Tanks
 - Inspection of other process equipment
 - Scheduling & contingency

Robotic Inspection Process



- Inspection Plan
- Preparation
- Tool selection
 - Optimization
- Team members
- Execution
 - Permits
 - Access
 - Surface Condition
 - Data collection
 - Analysis and reporting

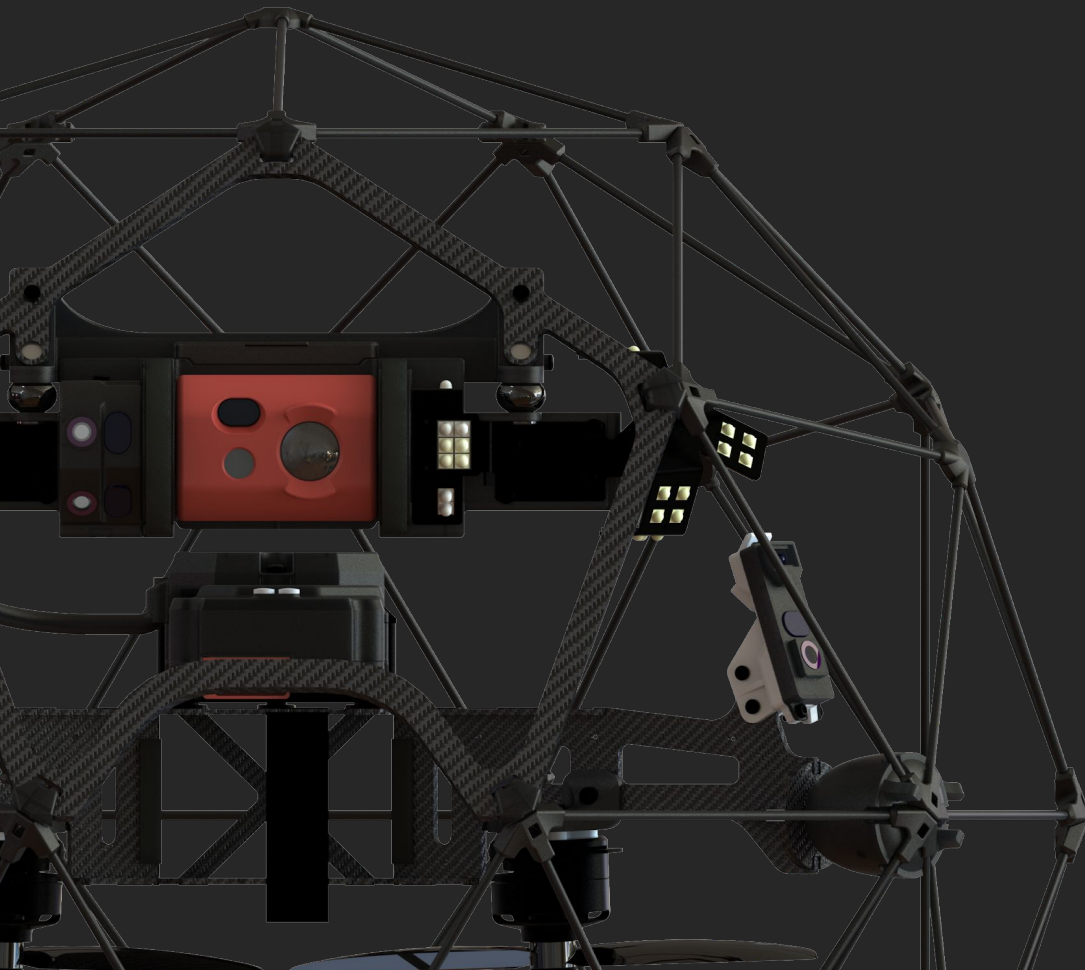
Examples of Applications

- Stack Inspection
- Process Piping Inspection



Conclusions and Comments





The recording of this webinar
will be sent to you afterward.

PAST WEBINARS

Thursday, April 9

10:30 AM EST / 04:30 PM CEST

Learn How API and ASME Experts Are Working to Expand Drone Inspection Applications

- Suzanne Lemieux, Manager, Operations Security & Emergency Response Policy at API
- Luis Pulgarin, Project Engineering Advisor at ASME

Tuesday April 14

11:30 AM EST / 05:30 PM CEST

How Country-of-Origin Drone Bans Impact U.S. Companies & Agencies Including Public Safety Agencies Fighting COVID-19

- Jordan Gross, Senior Government Relations Lead at DJI
- Romeo Durscher, Senior Director of Public Safety Integration at DJI

Tuesday, April 21

10:30 A.M. EST / 04:30 PM CEST

3D Modeling with Indoor Drones: Applications and Implications

- Andrew McIntyre, Technical Trainer and mapping expert at Pix4D
- Marc Gandillon, Head of Marketing at Flyability

Wednesday April 22

10:30 AM EST / 04:30 PM CEST

How to Build and Scale a Drone Program at Your Company

- Calvin Rieb, Head of Global Unmanned Systems at Cargill
- James Manni, UAS Program Manager at TVA

<https://www.flyability.com/news/user-conference-webinars>

UPCOMING WEBINARS

Tuesday April 28

10:30 AM EST / 04:30 PM CEST

Drones in Oil & Gas: How Chevron Uses Drones to Improve Safety, Reduce Downtimes, and Save Money

- Mauricio Calva, Non-Destructive Examination Expert at Chevron
- Larry Barnard, Downstream & Chemicals, Manufacturing ~ UAS Governance at Chevron

Thursday, April 30

11:30 AM EST / 05:30 PM CEST

Indoor 3D Modeling Use Cases: Photogrammetry in Action

- Laurie McBean, Geospatial Data Specialist at UAS Inc.
- Gregory Spirlet, Professional Services Engineer at Flyability

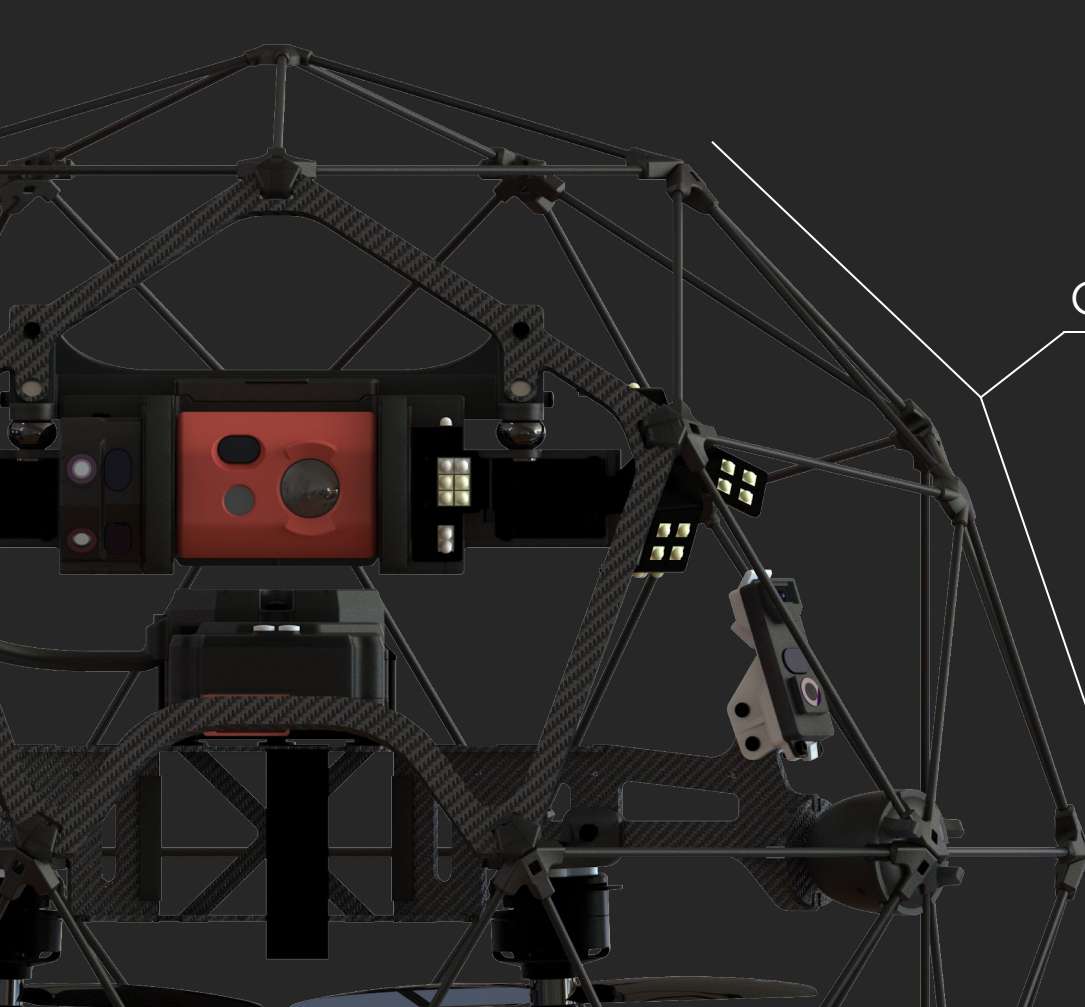
Thursday, May 14

10:30 AM EST / 04:30 PM CEST

Drones in Power Generation: How Exelon Uses Drones to Improve Safety, Reduce Downtimes, and Save Money

- Chris Place, Business Development Manager at Exelon Clearsight

<https://www.flyability.com/news/user-conference-webinars>



Q&A

You can also send your questions to:

Mauricio Calva, Chevron - MCalva@chevron.com

Larry Barnard, Chevron - LarryBarnard@chevron.com

Alexandre Meldem, Flyability - ame@flyability.com

Johan Mlouka, Flyability - jm@flyability.com