Increase Your Business with Arecont Vision Megapixel IP Technology:

Arecont Vision Update
Focus on Logistics

Customer Webinar
17 December 2014

Arecont Vision

Agenda

- **Arecont Vision Update**   Scott Schafer [Executive Vice President]

- **Product Update**   Brad Donaldson [Director of Product Management]

- **Partner Presentation**   Cortland Tompkins [VP of Engineering, ipConfigure]

- **How I Shot the Bear**   Cathy Li [Regional Sales Manager - Hong Kong, Macau, Taiwan]

- **Tech Tips and Tricks**   Richard Kennedy [Field Applications Engineer]

- **Marketing Update**   Jeff Whitney [Vice President of Marketing]

- **Q&A**

Arecont Vision Update

Scott Schafer
Executive Vice President

Arecont Vision

Leading the Way in Megapixel Video

- Record YTD results!

- Key new products and technologies shipping
  - STELLAR Low Light in MegaDome2
  - AV3236DN (dual sensor)
  - Omni-Directional Camera System
  - Panomorph Camera
  - Telephoto Camera
  - AV12366DN

- Key products shipping very soon
  - 4K Camera

- Excellent Progress with VMS/NVR Partner integration
  - Improved camera discovery
  - Improved feature integration and performance
  - Better overall support

- Quality and Service
  - RMAs continue to be at very, very low levels!
  - Strong Support of the Arecont Vision Advance Replacement Process (NEW HOW-TO VIDEO ON WEBSITE)
  - Excellent Technical Support call and JIRA on-line answering results!
  - Project Registration Process is a winner! (NEW HOW-TO VIDEO ON WEBSITE)

- We are now Celebrating our 11 Years of Leading the Way in Megapixel Video!

Customer Satisfaction Survey Results

November 2014

Arecont Vision®

Leading the Way in Megapixel Video™

Delighted and Satisfied Scores (does not include somewhat satisfied, somewhat dissatisfied, disappointed)

- Arecont Vision is a valued partner to your business   96%
- Product Performance   89%
- Arecont Vision stands behind their products   96%
- Satisfaction with Arecont Vision product line   90%
- Overall Satisfaction with Arecont Vision   86%
- Quality   89%

Very strong improvement in key areas: technical support, RMA process, pre-sale support, pricing, training, confident in selling Arecont Vision, ease of doing business

Recent Customer Meetings

- End Users activity is high
  - Corporate and Higher Education campuses and parking lots
  - City Surviellance
  - Excited about Omni, STELLAR
  - Megapixel cameras provide the best ROI

- Systems Integrators are working more closely with Arecont Vision
  - Positioning Arecont Vision as a leading product line
  - Training
  - Demonstrations
  - Project Registrations

- Distributors are leading with Arecont Vision
  - Distributors driving more intensity
  - Distributors and their SI/dealers make more money with Arecont Vision
  - SI/Dealers requesting Arecont Vision products more than ever before!

Arecont Vision 10MP cameras provide high quality images for SpaceX

Arecont Vision® is uniquely capable of speaking with You about Open Spaces!

And Distribution Centers are Wide Open Spaces!

How Security Operators Should Be Working

Situational Awareness and
Up-Close Shots from the
Same Camera System Using
"Regions of Interest"

- Banking
- Industrial/Commercial
- Wholesale Distribution
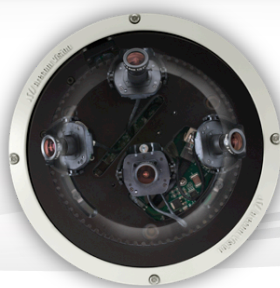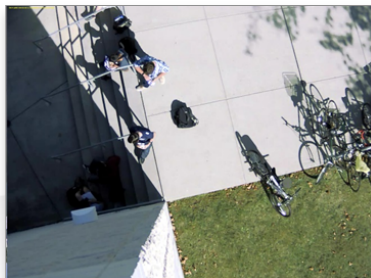- Education
- Municipalities

12MP WDR 180° Panoramic Images
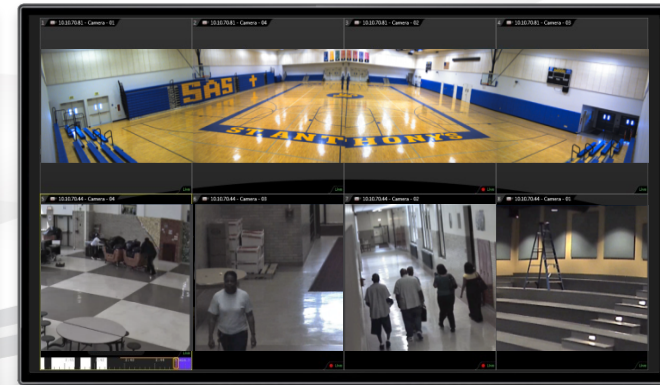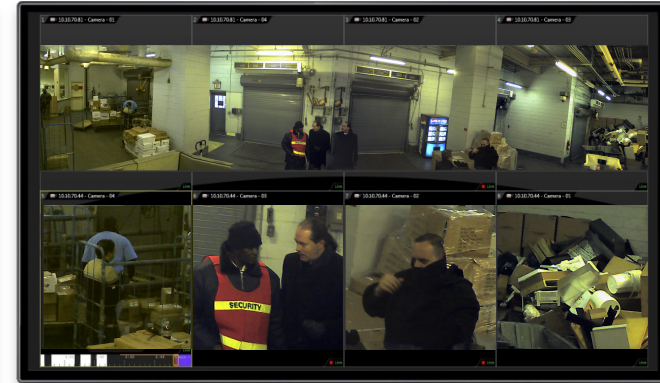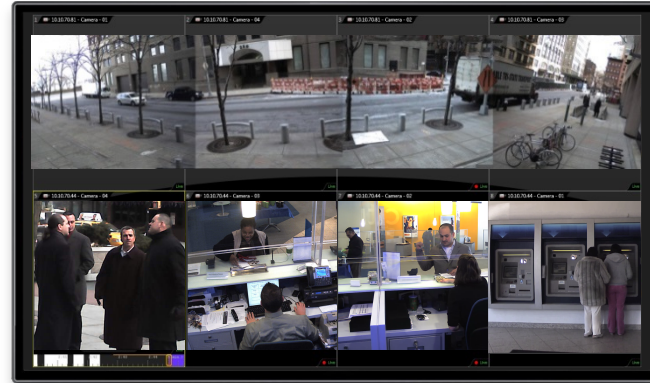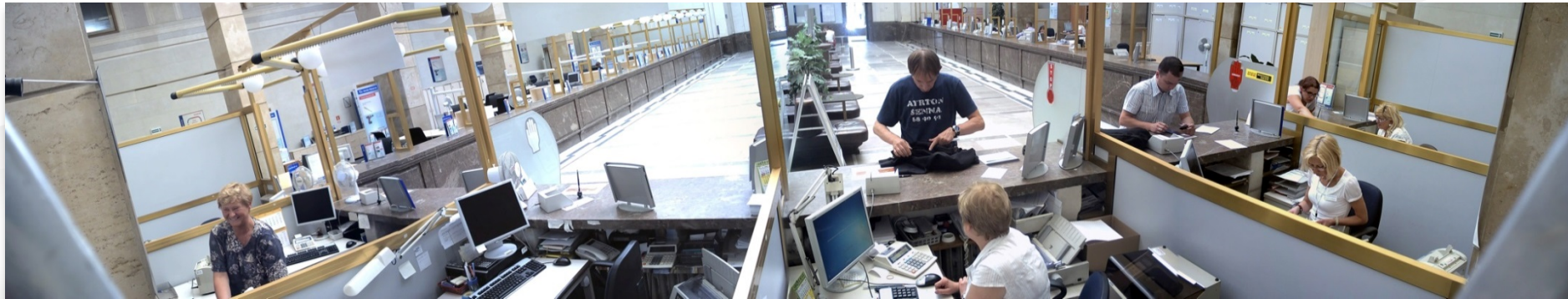
Before:

Panasonic PTZ

40° covered.

- Requires operations personnel on joystick
- In the wrong place 85% of the time
- In the right place 15% of the time and then it moves if on a programmed sequence
- Misses all other action that might happen

After:

Arecont Vision® AV12176DN

4-90 degree sensors delivers 270° coverage around the corner of the building and a sensor covering under the camera.

After:

Arecont Vision® AV12176DN **in daytime.**

270° covered plus a shot straight down!

After:

Arecont Vision® AV12176DN

at night with lights on.

270° covered plus a shot straight down!

After:

Arecont Vision® AV12176DN

at night with lights off.

270° covered plus a shot straight down!

**Arecont Vision®
Surround**Video® Omni
AV12176DN

replaces

PTZ dome

- 6x the coverage for about 50% of the price!
- Omni doesn't require an operator to be on the joystick.
- PTZ have mechanical moving devices that are prone to failure.

Arecont Vision

Arecont Vision 10MP cameras provide high quality images for SpaceX

Arecont Vision® is uniquely capable of working with You in Open Spaces!

Key Points

- Our company continues to deliver excellent new products and results!

- Customer Satisfaction is strong!

- Strongest product line…EVER!

- Improvements in Quality and Support continue

- Excellent operations performance—on-time delivery allows you to sell, less administration!

- Pricing with a Project Registration is key to your success—it is a real difference maker for you!

- Customers make more money (profit)

  - Distributors

  - SI/Dealers

- Customer Visits to WHQ

- Strong Opportunities in every vertical market: Financial, Retail, Data Centers, Commercial, Manufacturing, Education, Stadiums, City Surveillance, Distribution Centers…

Product Update

Brad Donaldson
Director of Product Management
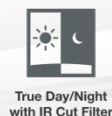
Arecont Vision

Leading the Way in Megapixel Video

MegaView® 2

1.2–10MP H.264 All-in-One Motorized P-Iris Lens
Day/Night IR Indoor/Outdoor Bullet-Style IP Cameras with
Wide Dynamic Range (WDR) and STELLAR™ Models

Highlighted Features Include:

- Wide Angle or Telephoto Motorized Remote Focus/Zoom P-Iris Lens

- P-Iris Control to Get Best Depth of Field and Image Clarity

- STELLAR™ Low Light Technology Reduces Motion Blur, Noise and Storage Requirements, While Enhancing Contrast and Allowing Color Imaging in Near Complete Darkness on 1.2MP Models

- Optional True WDR up to 100dB at Full Resolution Available on Some 1080p and 3MP Models: See Clearly in Shaded and Bright Light Conditions Simultaneously

Junction Box Included

Telephoto Lens

Wide Angle Lens

Integrated Motorized Lens with Remote Focus and Zoom

P-Iris Control for Best Depth of Field and Image Clarity

WDR Wide Dynamic Range Available on AV2226 AV3226 Models

10MP Dual Mode: 1080p/10MP on 10MP Models

STELLAR™ Low Light Technology on 1.2MP Models

Wide Angle or Telephoto Lens Option

IR LEDs

Weather Resistant IP66 Rated

True Day/Night with IR Cut Filter

All-in-One Bullet-Style Solution

Pixel Binning Mode on 3, 5, and 10MP Models

CorridorView™ with 90° Image Flip (-S Models)

SDHC Card Slot (-S Models)

Dual Encoder H.264/MJPEG

Casino Mode™ Maintains at Least 30fps on AV2225 Models

Audio Input/Output (-A Models)

MegaDome® 2

1.2–10MP H.264 All-in-One Motorized P-Iris Lens
Day/Night IR Indoor/Outdoor Dome IP Cameras with
Wide Dynamic Range (WDR) and STELLAR™ Models

Highlighted Features Include:

- Wide Angle or Telephoto Motorized Remote Focus/Zoom Auto-Iris or P-Iris Lens

- P-Iris Control to Get Best Depth of Field and Image Clarity (PM Models)

- STELLAR™ Low Light Technology Reduces Motion Blur, Noise and Storage Requirements, While Enhancing Contrast and Allowing Color Imaging in Near Complete Darkness on 1.2MP Models

- Optional True WDR up to 100dB at Full Resolution Available on Some 1080p and 3MP Models: See Clearly in Shaded and Bright Light Conditions Simultaneously

Motorized Lens

Motorized Lens with
IR Illuminator

Integrated Motorized Lens
with Remote Focus and Zoom
(AM/PM Version)

P-Iris Control for
Best Depth of Field and
Image Clarity (PM Models)

WDR
Wide Dynamic Range
Available on Some
1080p and 3MP Models

10MP
80
Dual Mode: 1080p/10MP
on 10MP Models

STELLAR™
Low Light Technology
on 1.2MP Models

Wide Angle or Telephoto
Lens Option

IR LEDs
(IR Models)

Impact / Weather Resistant
IK-10 and IP66 Rated

True Day/Night
with IR Cut Filter

All-in-One Dome
Solution

Pixel Binning Mode
on 3, 5, and 10MP Models

CorridorView™
with 90° Image Flip
(-S Models)

SD HC
SDHC Card Slot
(-S Models)

H.264
MJPEG
Dual Encoder
H.264/MJPEG

Casino Mode™
Maintains at Least 30fps
on AV2255 Models

Audio Input/Output
(-A Models)

Heater
(-H Models)

Arecont Vision®

SurroundVideo® Omni

12MP WDR or 20MP H.264 All-in-One Omni-Directional User-Configurable Multi-Sensor Day/Night Indoor/Outdoor Dome IP Cameras

Highlighted Features Include:

- 12MP WDR and 20MP Configurations

- Multiple Lens Options in a Single Camera Housing from 2.8mm up to 16mm

- Up to 4 Individual Camera Gimbals can be Independently Placed in any Orientation Around a 360° Track with Extra Positions for Looking Straight Down

- True WDR up to 100db at Full Resolution: See Clearly in Shaded and Bright Light Conditions Simultaneously

Multi-Sensor Omni

- Ultra Discrete, Low-Profile Housing

- True Day/Night Functionality with Mechanical IR Cut Filter

- Complete Mounting Options

- Binning Mode for Strong Low Light Performance

| Omni-Directional Track with 4 Customizable Sensors | 270° FOV Capable | Wide Dynamic Range on 12MP Models | True Day/Night with IR Cut Filter | Pixel Binning Mode | Dual Encoder H.264/MJPEG | Ultra Low Profile Design | Impact / Weather Resistant IK-10 and IP66 Rated |

Arecont Vision®

Leading the Way in Megapixel Video™

MicroDome®

1.3–5MP H.264 All-in-One Ultra Low Profile Day/Night Indoor or Indoor/Outdoor IP Cameras with Optional Wide Dynamic Range (WDR)

Highlighted Features Include:

- All-in-One H.264 Total Power over Ethernet (PoE) Solution with Integrated 4mm Lens
- Very Easy Installation / Factory Focused
- Ultra Low Profile Design / Small Size
- Optional True WDR up to 100dB at Full Resolution Available on Some 1080p and 3MP Models: See Clearly in Shaded and Bright Light Conditions Simultaneously
- Multiple Lens Options Available (Sold Separately)
- Integrated Microphone (-F Models)
- Casino Mode™ Guarantees Continuous 30fps Frame Rate Required by Gaming Industry Regulations (AV2455 Models)

Flush Mount (-F Model)

Surface Mount (-S Model)

Ultra Low Profile Design

PoE — **All-in-One PoE and Integrated Lens**

True Day/Night with Mechanical IR Cut Filter

Integrated Microphone (-F Models)

Impact / Weather Resistant IK-10 and IP66 Rated (-S Models)

Pixel Binning Mode on 3 and 5MP Models

WDR — **Wide Dynamic Range Available on AV2456 and AV3456 Models**

Casino Mode™ Maintains at Least 30fps on AV2455 Models

H.264 MJPEG — **Dual Encoder H.264/MJPEG**

Arecont Vision®

Leading the Way in Megapixel Video™

MegaBall® / **Mega**Ball® 2

1.3*–5MP H.264 All-in-One Motorized P-Iris Lens or Manual Lens Day/Night Indoor IP Cameras with Optional Wide Dynamic Range (WDR) or 5MP H.264 All-in-One Manual Panomorph Lens Day/Night Indoor IP Camera

Flush Mount

Surface Mount

Wall Mount

Highlighted Features Include:

- 1.3–5MP H.264 All-in-One Manual or Motorized Lens Day/Night Indoor IP Cameras

- Remote Focus/Zoom P-Iris Lens (PM Models)

- P-Iris Control to Get Best Depth of Field and Image Clarity (PM Models)

- Integrated ImmerVision Enables® Panomorph Solution for 180° and 360° Field of View (DN-01 Models)

- Optional True WDR up to 100dB at Full Resolution Available on Some 1080p and 3MP Models: See Clearly in Shaded and Bright Light Conditions Simultaneously

- Light Gray and Black Dome Options

- Casino Mode™ Guarantees Continuous 30fps Frame Rate Required by Gaming Industry Regulations (AV2145 and AV2245 Models)

* 1.3MP models only available for first generation MegaBall®

| Integrated Motorized Lens with Remote Focus/Zoom (PM Models) | P-Iris Control for Best Depth of Field and Image Clarity (PM Models) | Panomorph Lens (DN-01 Models) | All-in-One Ball Solution | Integrated Microphone (-A Models) | True Day/Night with IR Cut Filter | Pixel Binning Mode on 3 and 5MP Models | Wide Dynamic Range Available on Some 1080p and 3MP Models | Casino Mode™ Maintains at Least 30fps on AV2145 and AV2245 Models | Dual Encoder H.264/MJPEG |

Arecont Vision®

Leading the Way in Megapixel Video™

SurroundVideo®

8–40MP H.264 All-in-One 180° and 360° Panoramic Day/Night Indoor/Outdoor Dome IP Cameras with Optional Wide Dynamic Range (WDR)

Highlighted Features Include:

- Industry's First 8MP, 12MP, 20MP and 40MP Panoramic Megapixel Cameras
- Optional True WDR up to 100dB at Full Resolution Available on 12MP Models: See Clearly in Shaded and Bright Light Conditions Simultaneously
- Forensic Zooming – Zoom Live or After the Event While Recording Full Field-of-View in HD – Replace PTZ Devices
- Binning Mode for Strong Low Light Performance in 12MP, 20MP and 40MP Resolutions
- Bit Rate Control and Multi-Streaming
- True Day/Night Functionality with Mechanical IR Cut Filter (DN Models)

180º View WDR

360º View WDR

360º View

180º View

180° Panoramic

360° Panoramic (8–20MP Models)

True Day/Night with IR Cut Filter

All-in-One Dome Solution with Integrated Lenses

Impact / Weather Resistant IK-10 and IP66 Rated

Pixel Binning Mode (12–40MP Models)

WDR Wide Dynamic Range (12MP Models)

Heater/Blower (8, 20, and 40MP Models)

H.264 MJPEG Dual Encoder H.264/MJPEG

Arecont Vision®
Leading the Way in Megapixel Video™

MegaVideo® Compact Dual Sensor

Highlights:

- 3MP WDR Color + 1.2MP Monochrome H.264 IP Camera
- Wide Dynamic Range of up to 100dB at Full Resolution
- Compact Housing
- Simultaneous Streaming of Both Sensors
- Excellent Low-Light Performance
- Monochrome Sensor Up-Scales to 3MP

2005

2007

WDR BW

Dual Sensor
(AV3236)

Small Size and Large Range of Optic Packages Allows this Camera "Module" to be Placed in the HSG2 Housing for Outdoor Scenarios

1.2MP Monochrome Sensor

3MP WDR Color Sensor

IPConfigure

Cortland Tompkins

Vice President of Engineering

877.207.1112 I cort.tompkins@ipconfigure.com

IPConfigure Overview

Founded in 2003 and headquartered in Norfolk, Virginia, IPConfigure, Inc. is a privately owned research and development software company. A leading developer of enterprise IP video surveillance solutions, IPConfigure offers a variety of products – all of which leverage a browser-based interface and are capable of seamlessly supporting unlimited cameras, locations, and users in a centralized or distributed architecture.

IPConfigure & Arecont Vision Partnership

IPConfigure fully supports Arecont Vision cameras, as seen here within our Enterprise Surveillance Manager (ESM).

ESM represents support for Arecont Vision cameras on an enterprise scale.

Orchid represents support for Arecont Vision cameras through ONVIF Profile S on a small and medium business scale.

- Orchid
  - Video Management System (VMS).
  - Browser-based.
- GStreamer pipelines capture IP video via RTSP, HTTP.
  - ONVIF Profile S
- GStreamer RTSP server delivers recorded video, live proxy video.
- GStreamer browser plugin on supported platforms.
- Windows, Linux; Intel, ARM, MIPS; server, embedded.
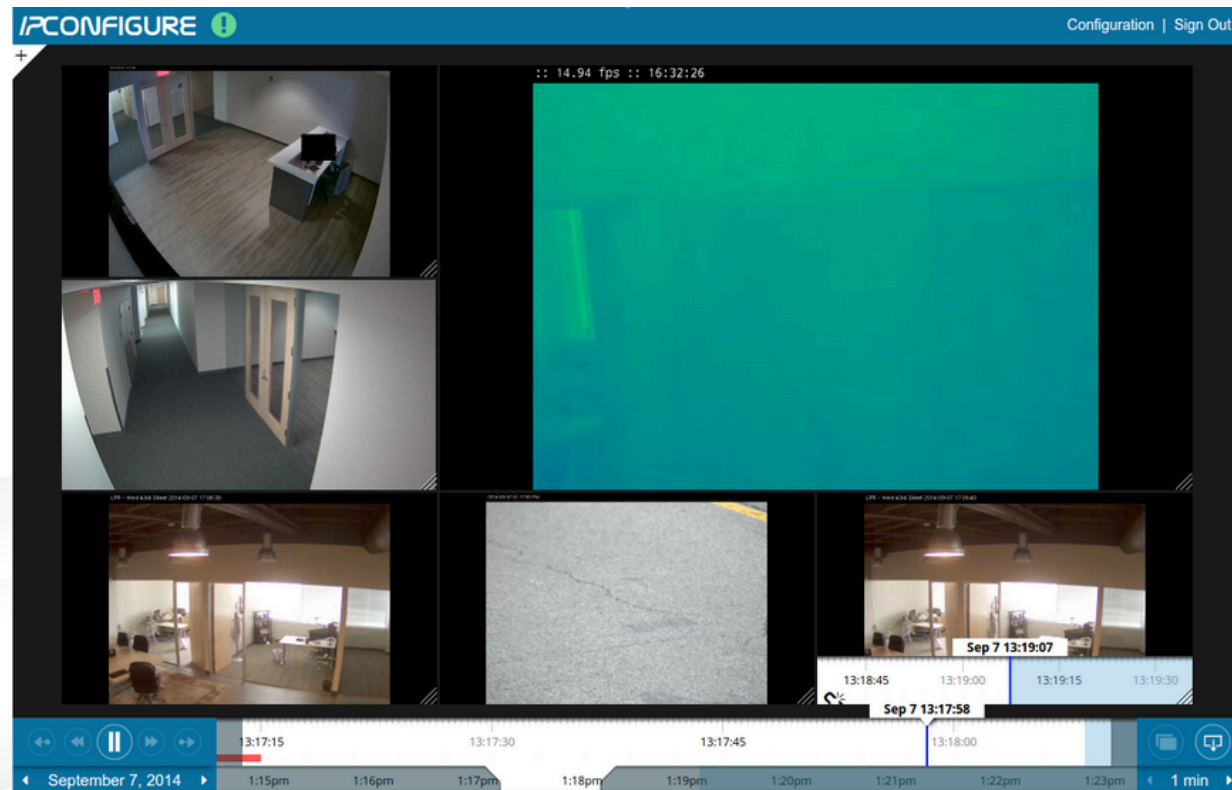
The Surveillance Design for Logistical Solutions

Richard Kennedy

Field Applications Engineer - Central

815-999-5830 rkennedy@arecontvision.com

Arecont Vision®

Leading the Way in Megapixel Video™

Sales Opportunities

Once an opportunity is brought to my attention!

Note the Camera Location's

This was an actual markup sent to me

Discovered Opportunities

Arecont Vision®

Leading the Way in Megapixel Video™
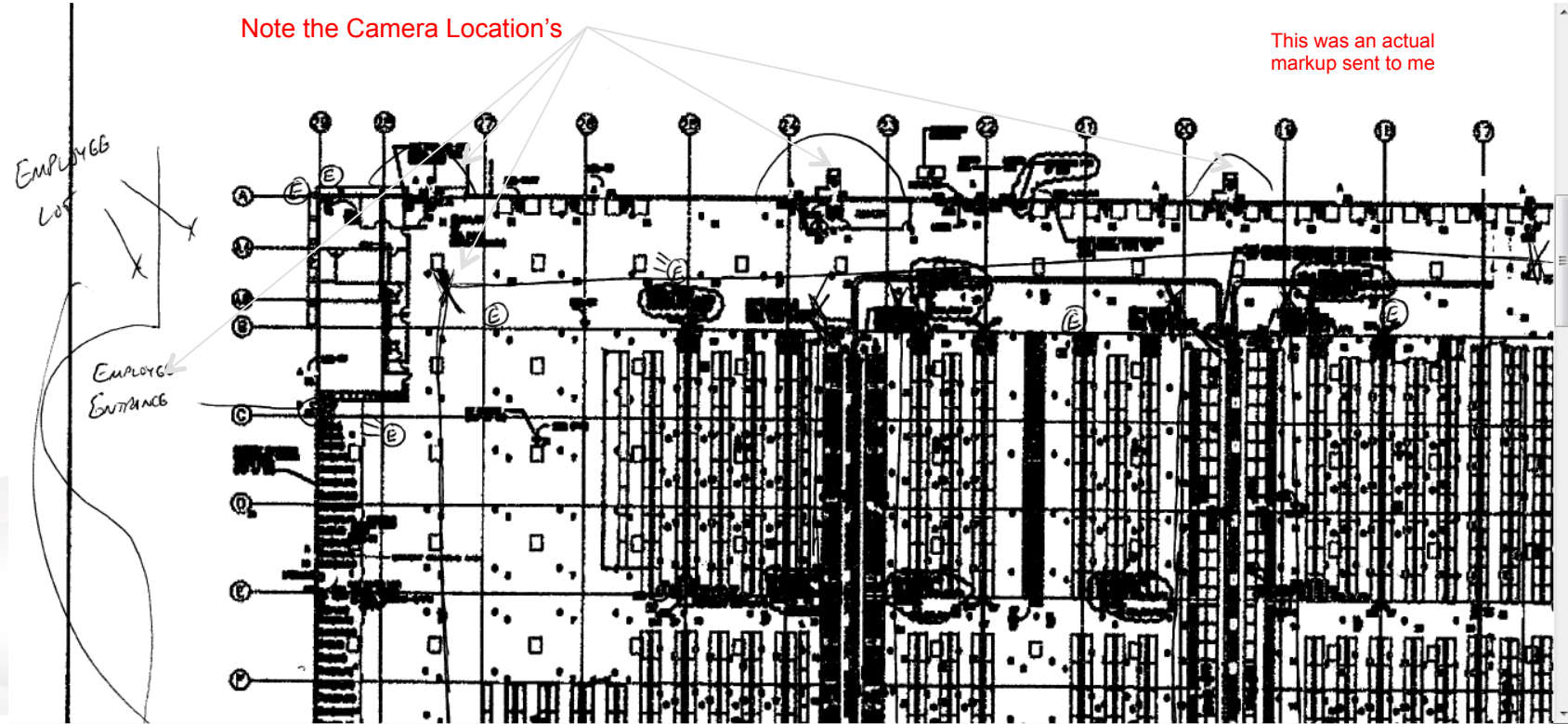
Through a Series of questions and a detailed understanding of the customers needs!
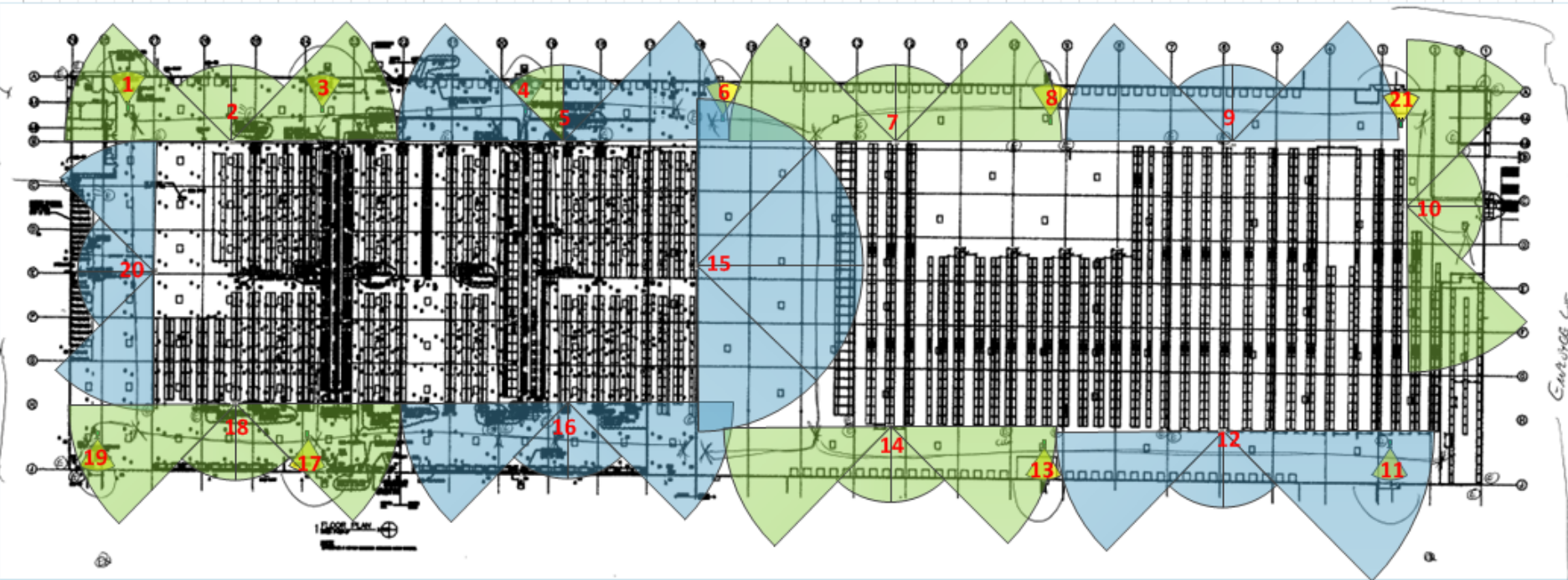
Easily turns this into a Sales Tool for our Integrator and Distribution Partners to portray the solution and close the Sale!

Choppers finally returning to the central area of Chicago

Their drawings are easily copied into my Visio program!

Arecont Vision®

This allows me to calculate and Illustrate what cameras are best suited to fulfill their request.
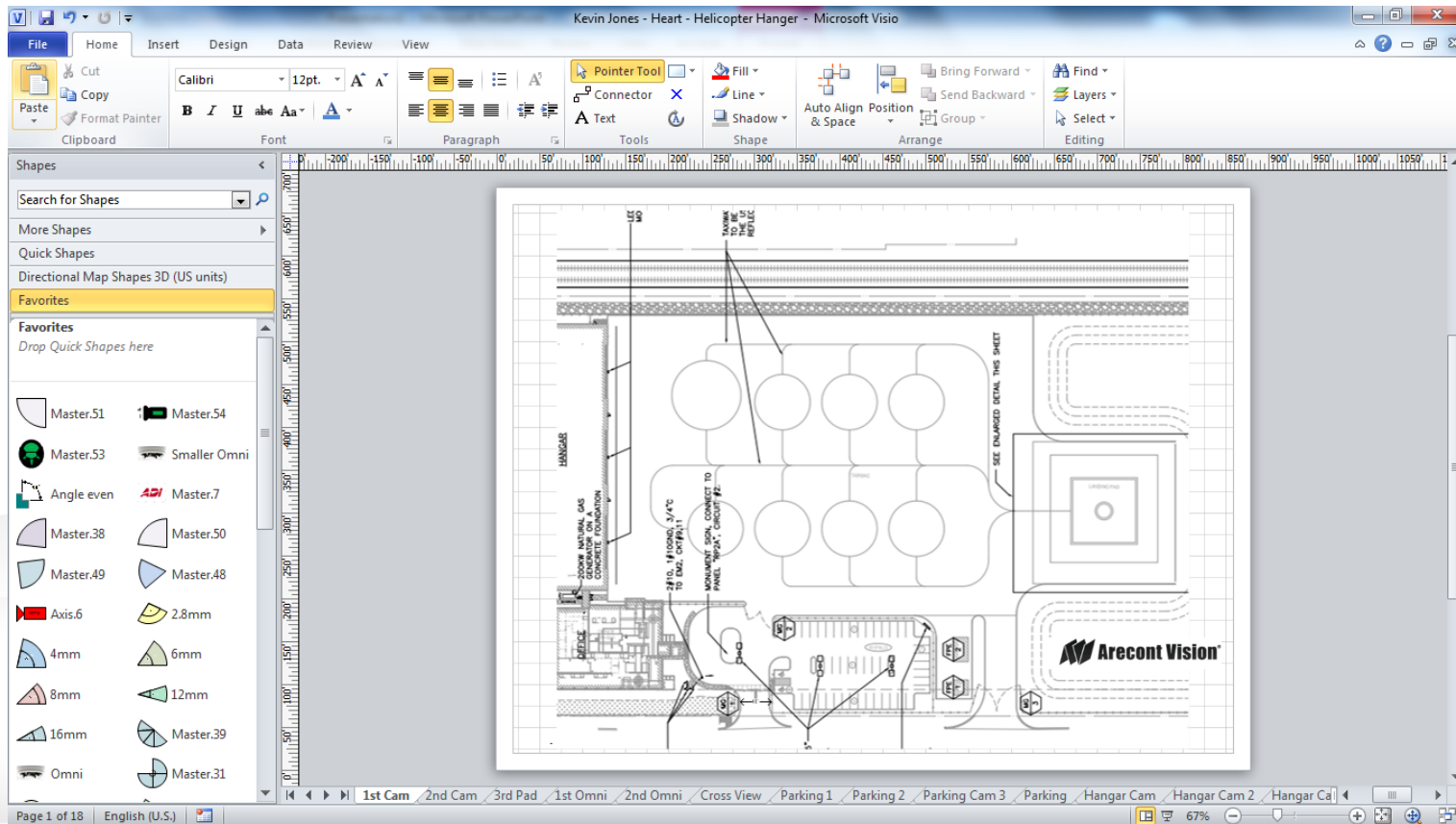
What were their requirements?

They
Required
High Definition
Imagery, most
importantly
Tail Rotor
Identification
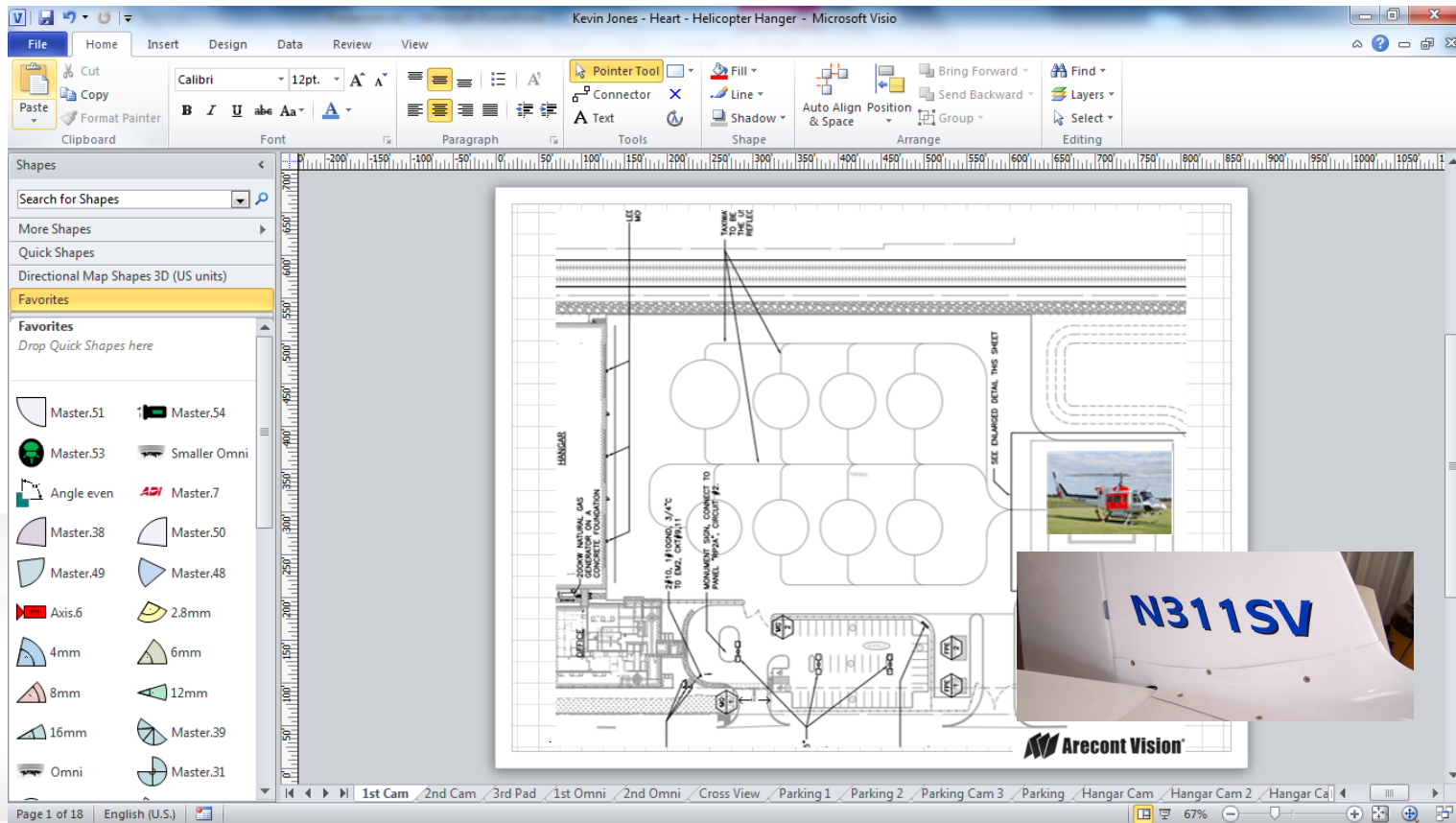
Visual and Actual Calculations can be Documented

Every step in calculating Angles, Distances and Resolution can be added to the drawings.
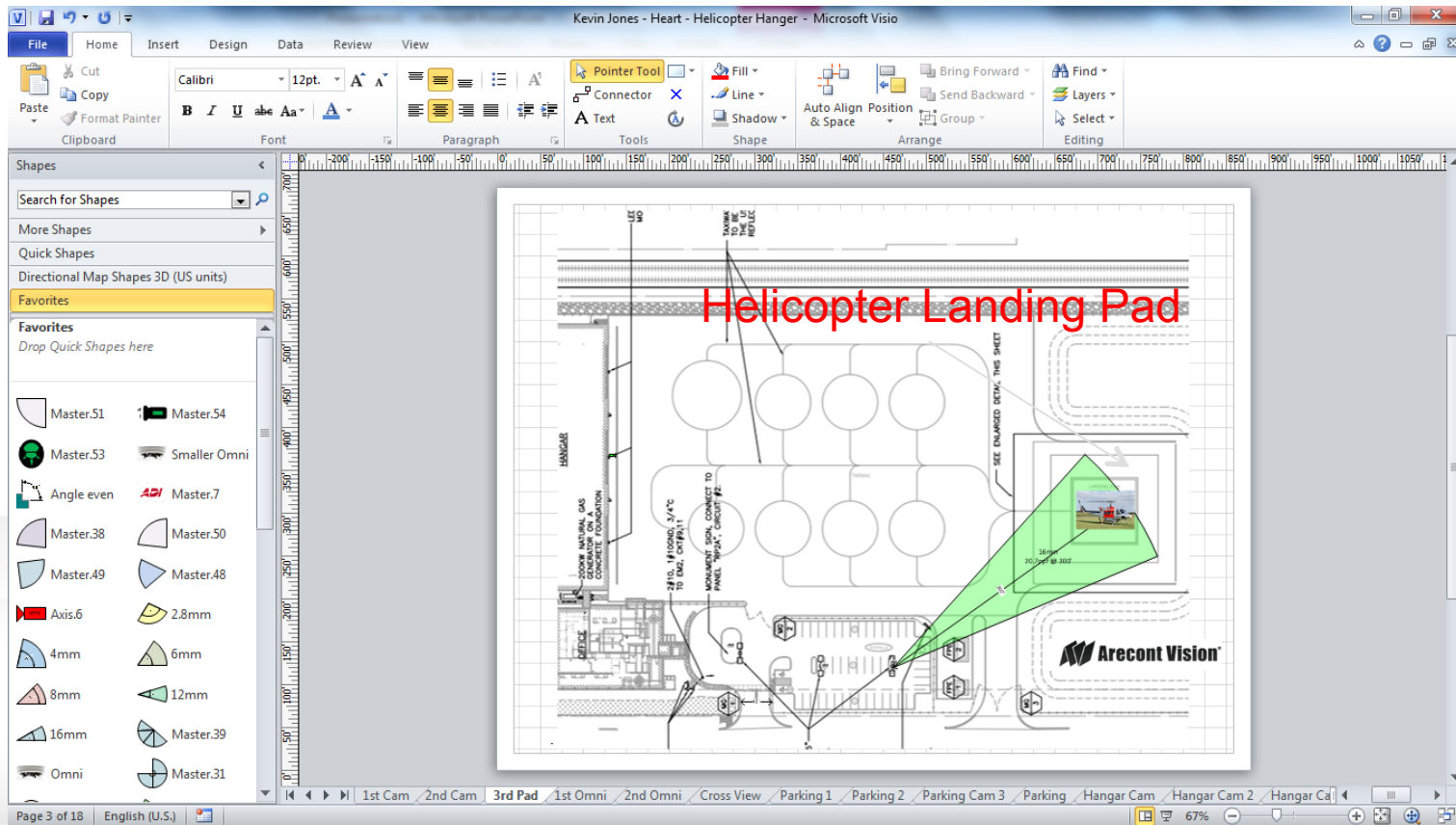
What do we Know?

Cameras can be installed on light poles. Distance to Landing Pad is 300' away. Horizontal FOV needed to be 125'

How do we Calculate?

Arecont Vision®

Leading the Way in Megapixel Video™
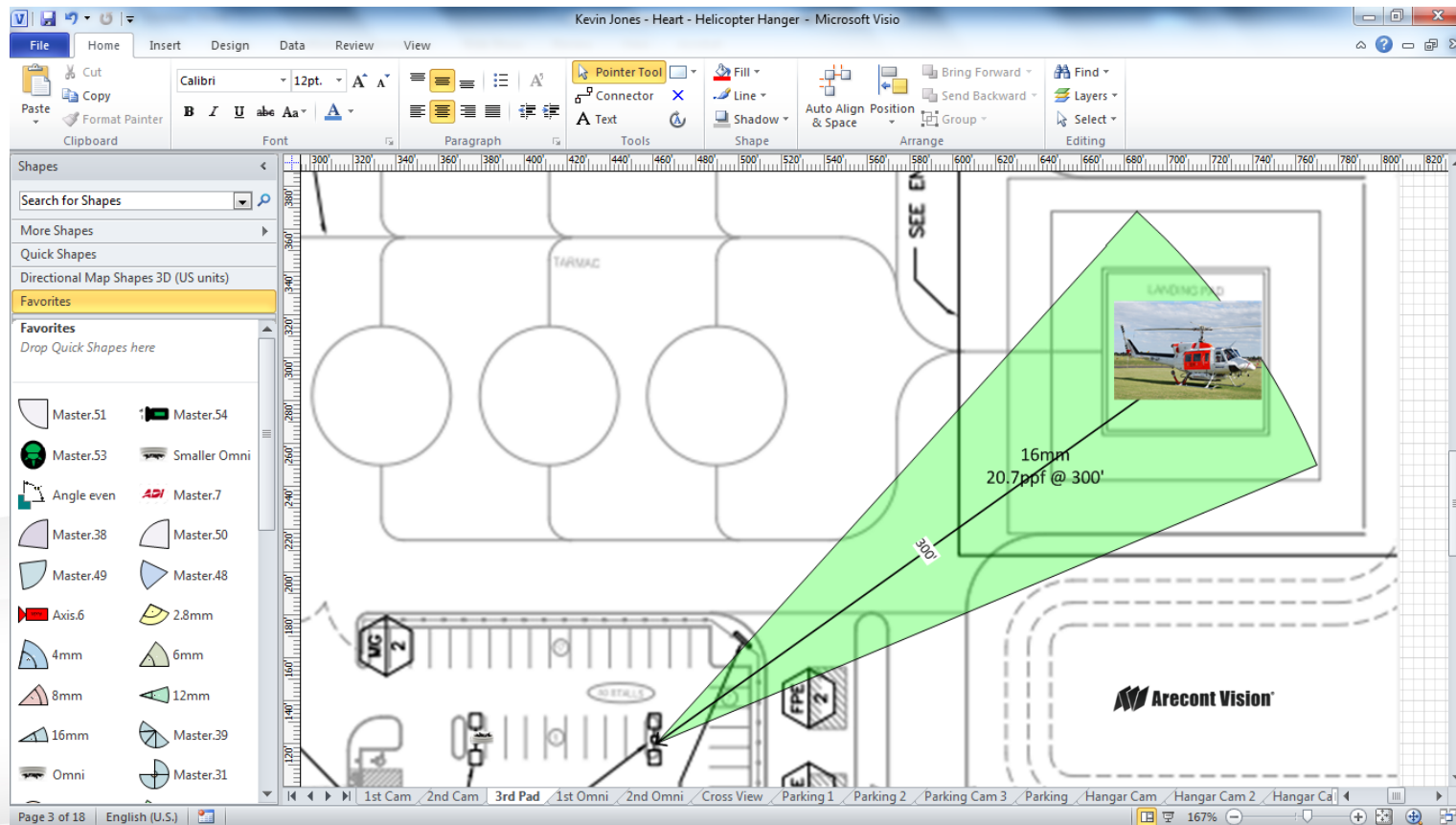
Measuring the distance of the object, and utilizing a CCTV lens calculator, I am able to determine the proper lens strength.

.
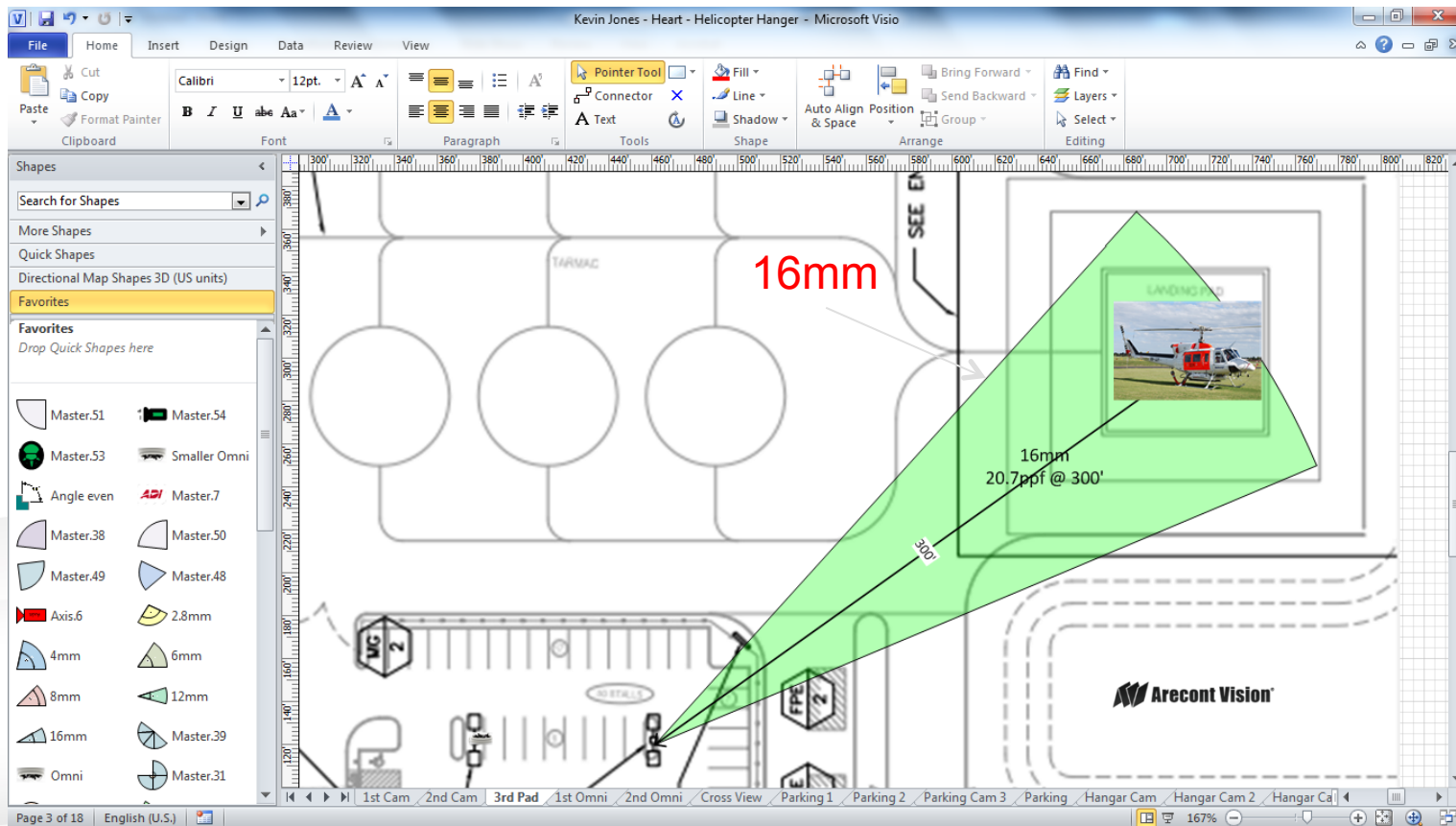
But is that enough?

Now I have to calculate which resolution will achieve clear identification of Tail Rotor Identification Markers.

Arecont Vision®

Leading the Way in Megapixel Video™
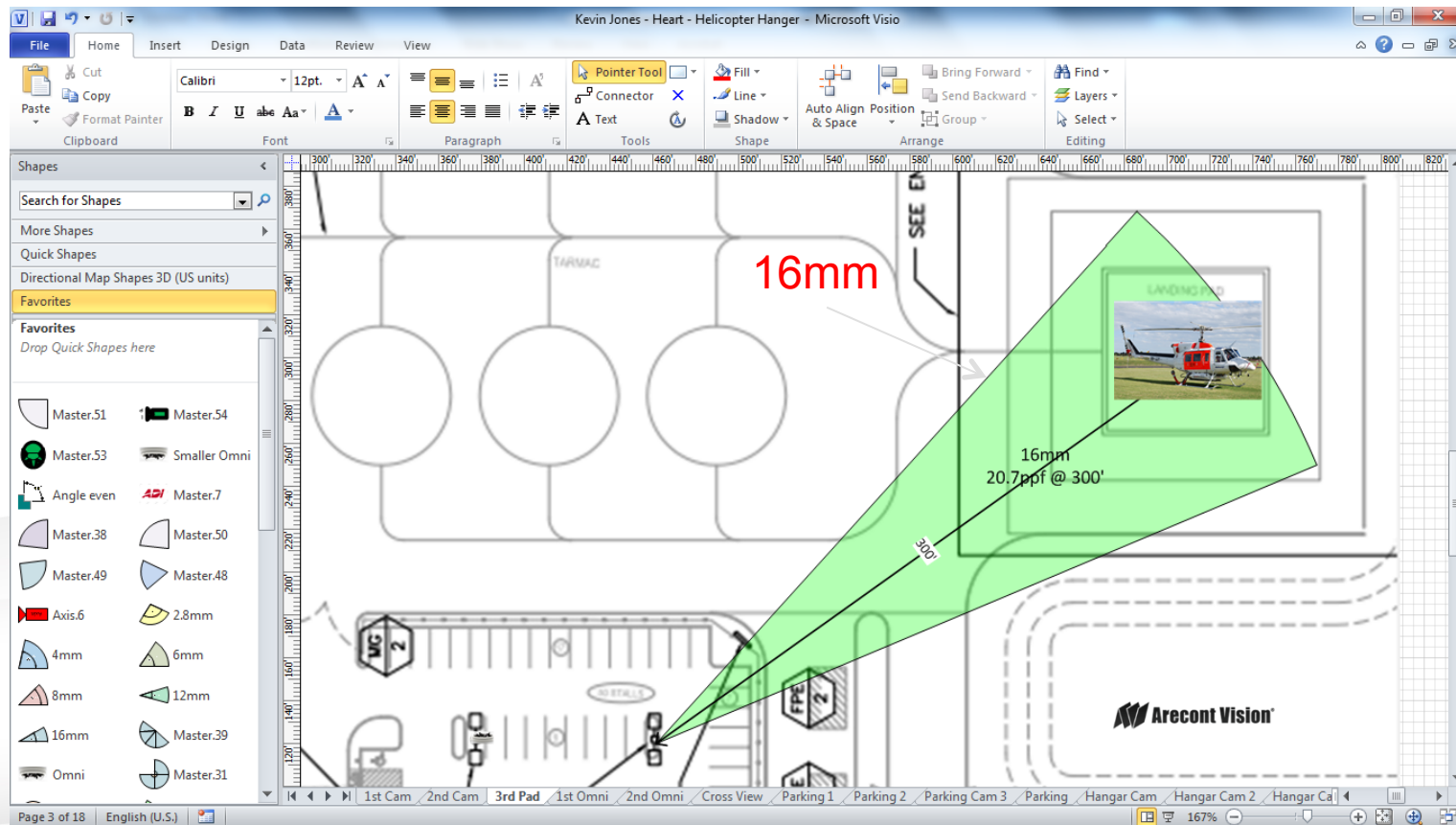
We know through testing, a pixel density of 45ppf can easily identify a vehicles license plate identification.

Font Size = 2 ¾" High

Font Size = 12" High

(h) After March 7, 1988, each operator of an aircraft penetrating an ADIZ or DEWIZ shall display on that aircraft temporary or permanent nationality and registration marks at least 12 inches high.

[Doc. No. 2047, 29 FR 3223, Mar. 11, 1964, as amended by Amdt. 45-2, 31 FR 9863, July 21, 1966; Amdt. 45-9, 42 FR 41102, Aug. 15, 1977; Amdt. 45-13, 46 FR 48604, Oct. 1, 1981; Amdt. 45-15, 48 FR 11392, Mar. 17, 1983; Amdt. 45-17, 52 FR 34102, Sept. 9, 1987; 52 FR 36566, Sept. 30, 1987]

Will a 5 Megapixel Camera Deliver?

A 5 Megapixel camera has a horizontal pixel density of 2,592 pixels / divided by our Horizontal FOV of 125'

2592 / 125 = 20.76
20.76 PPF
will clearly capture Registration Markings!
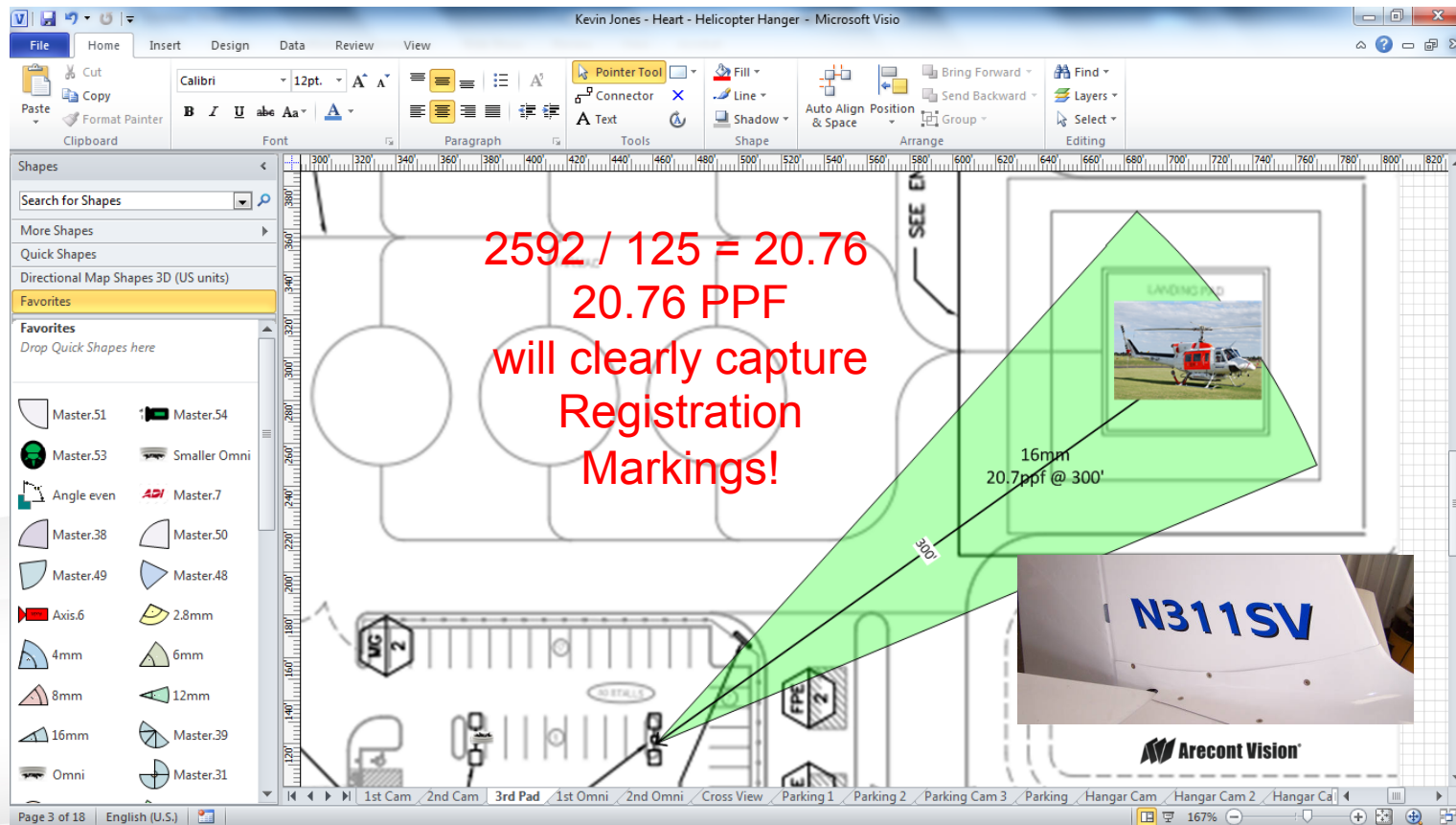
So lets continue with our Design / Camera #2

Once the Helicopter lands, it will taxi to it's own pad!
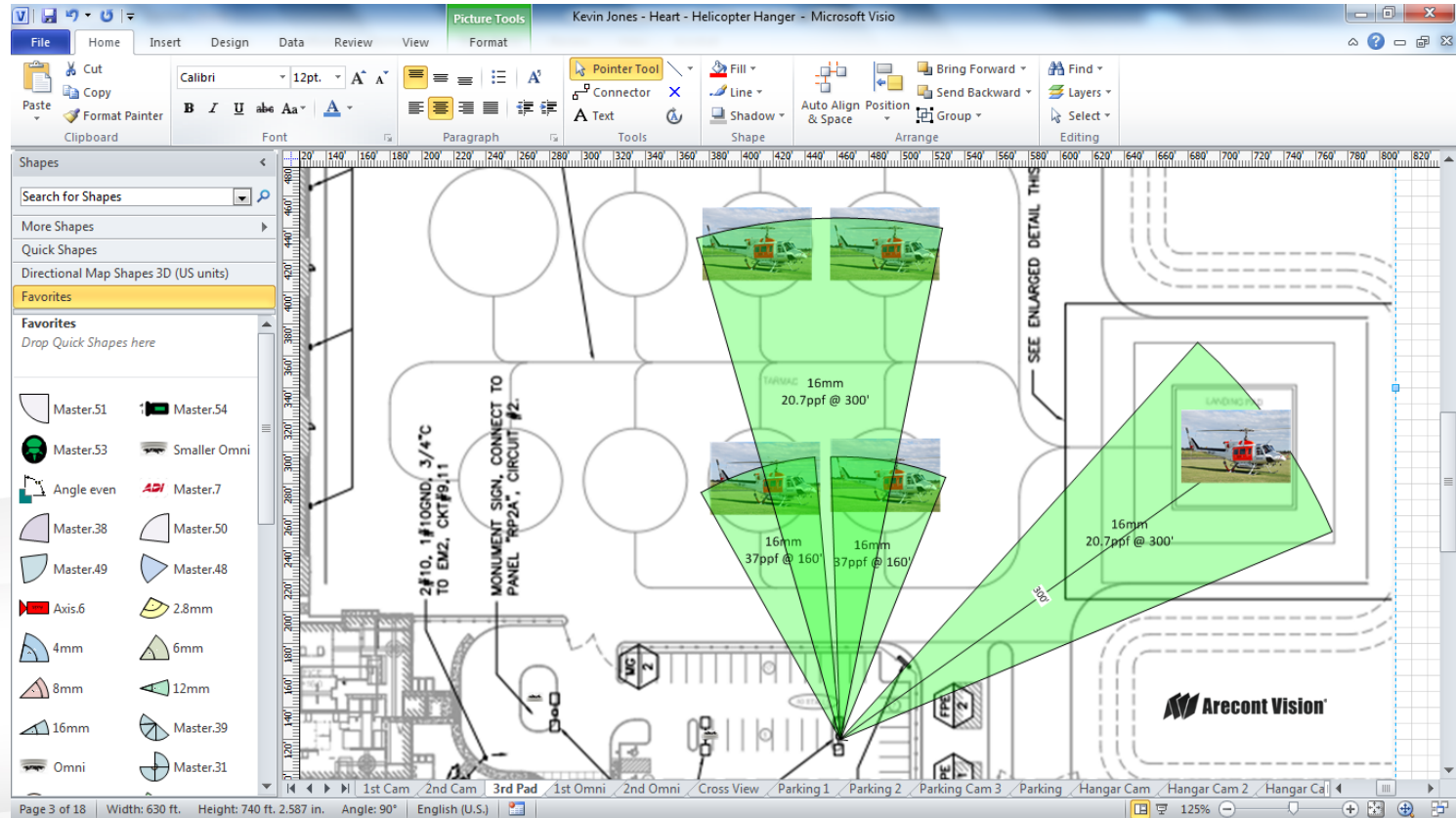Another 5 Megapixel camera with a 16mm lens.
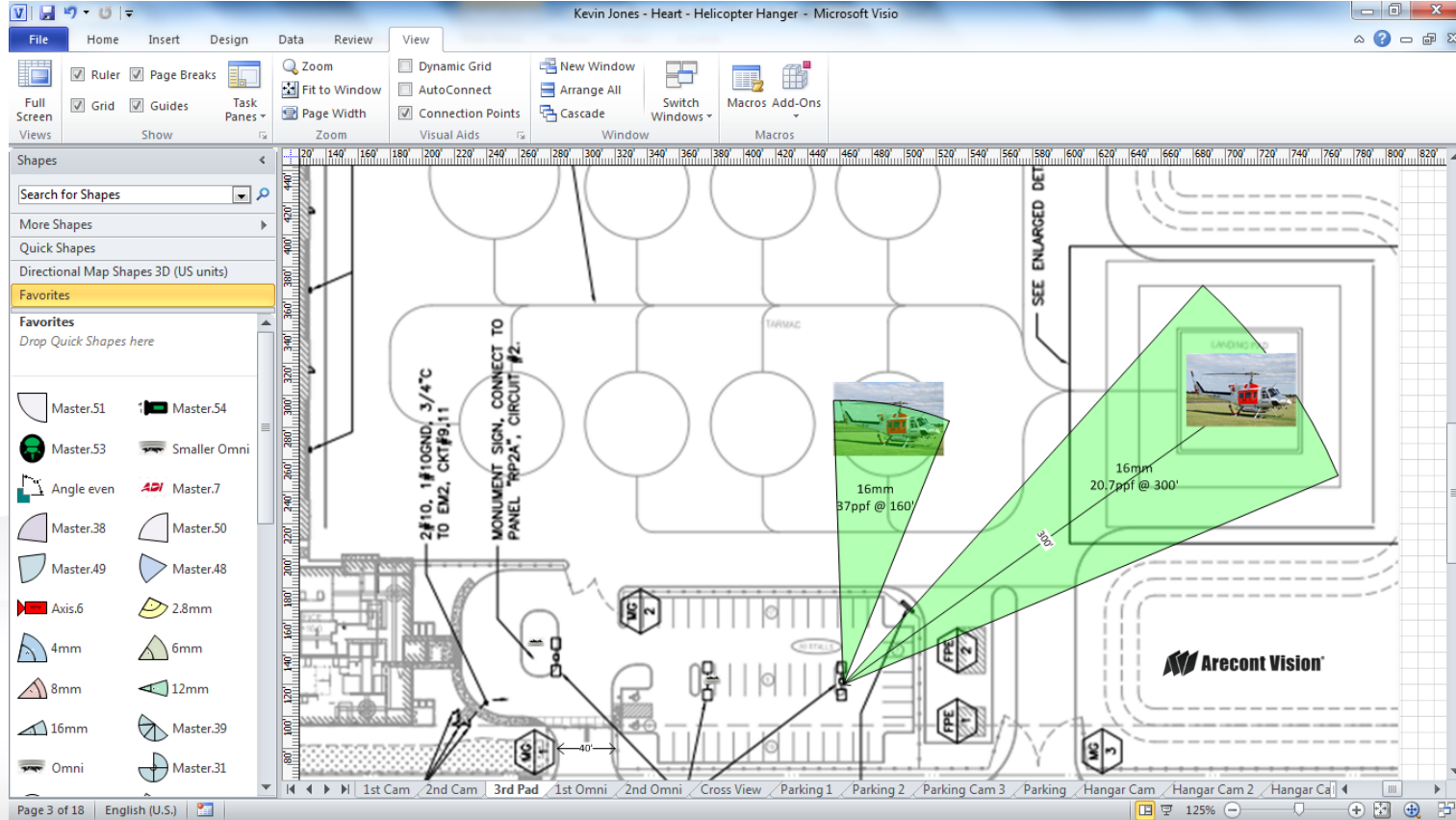
Camera #3

Multiple locations for pads require multiple cameras to Maintain the High Resolution requirements.
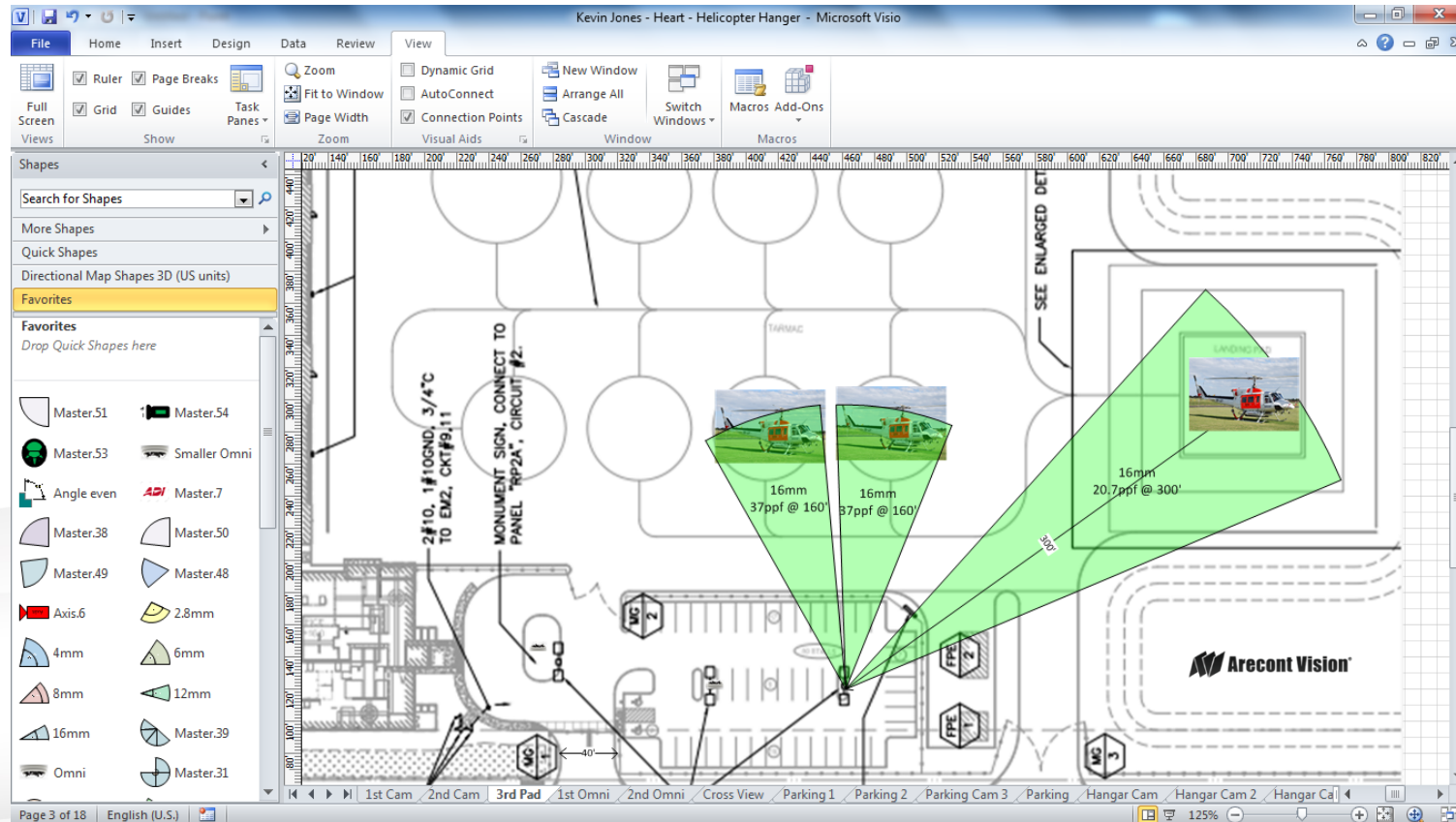
Multiple locations for pads require multiple cameras to keep the High Resolution Standards Maintained.

Can this be done more efficiently?

Is it possible that a single dome camera can capture all four images? The SurroundVideo Omni Series cameras were specifically designed for this application.
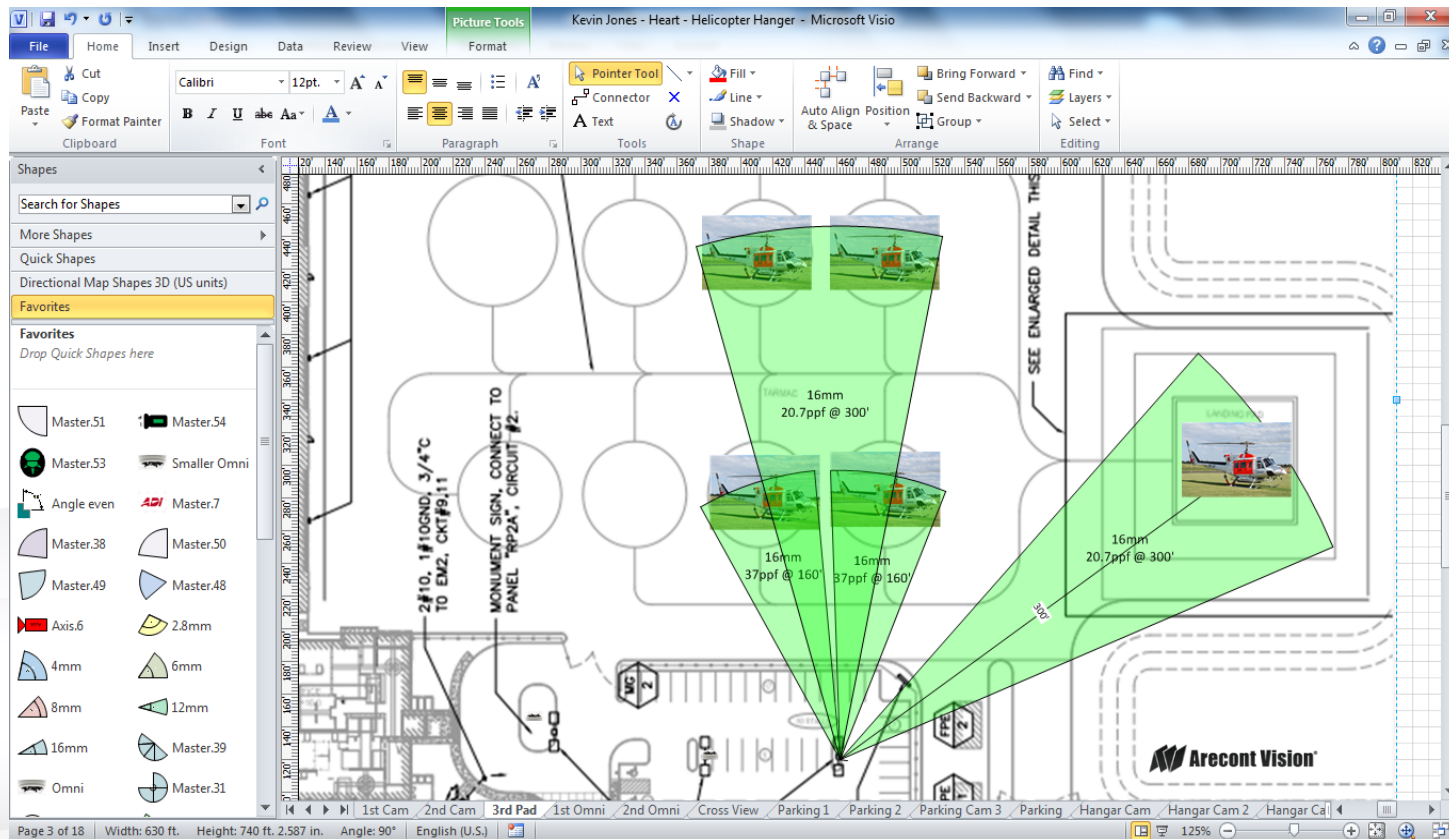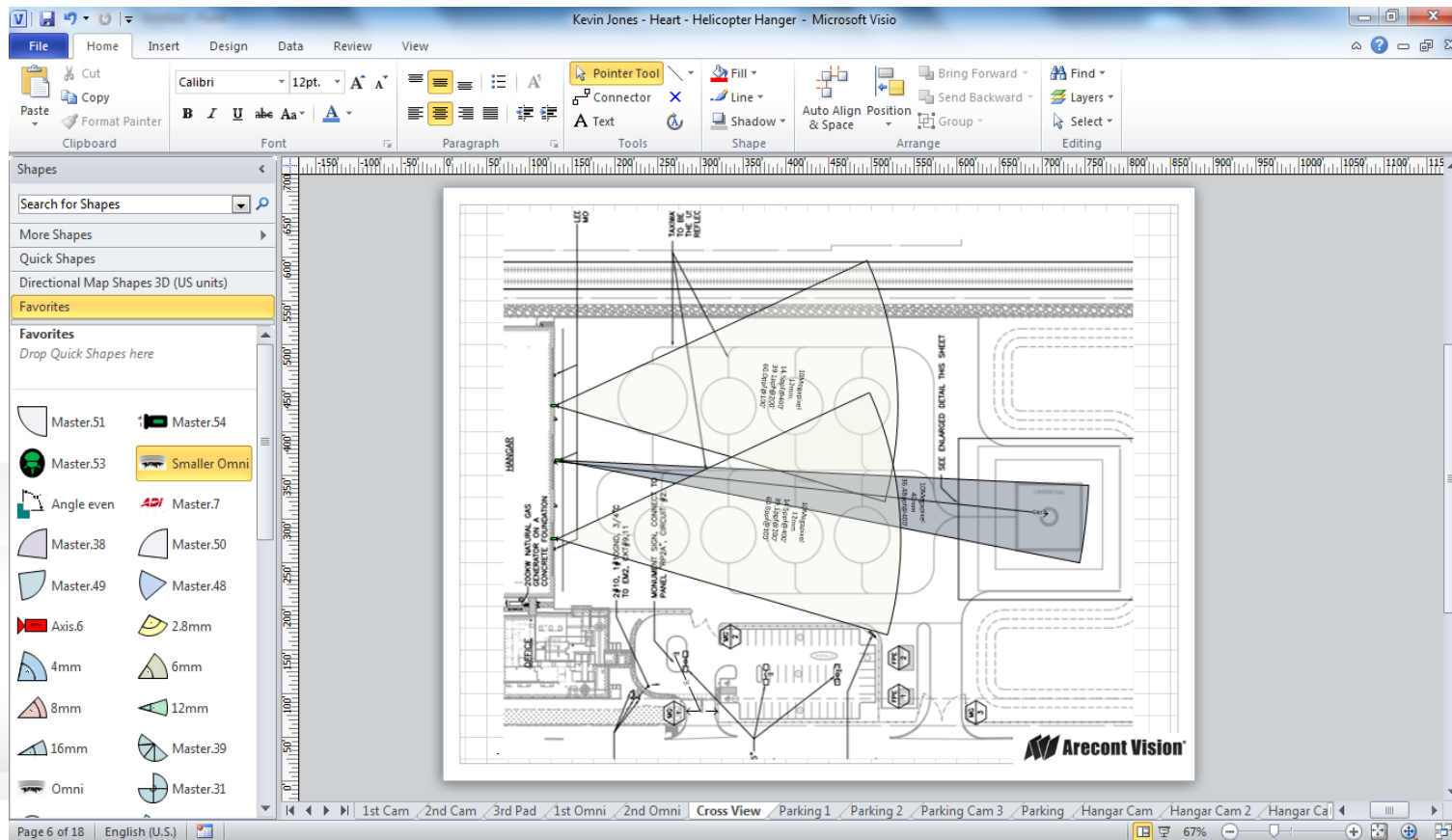
More coverage required more cameras

It only made sense to add another Omni on this pole.

I've given the customer 8 camera views for the price of 2.
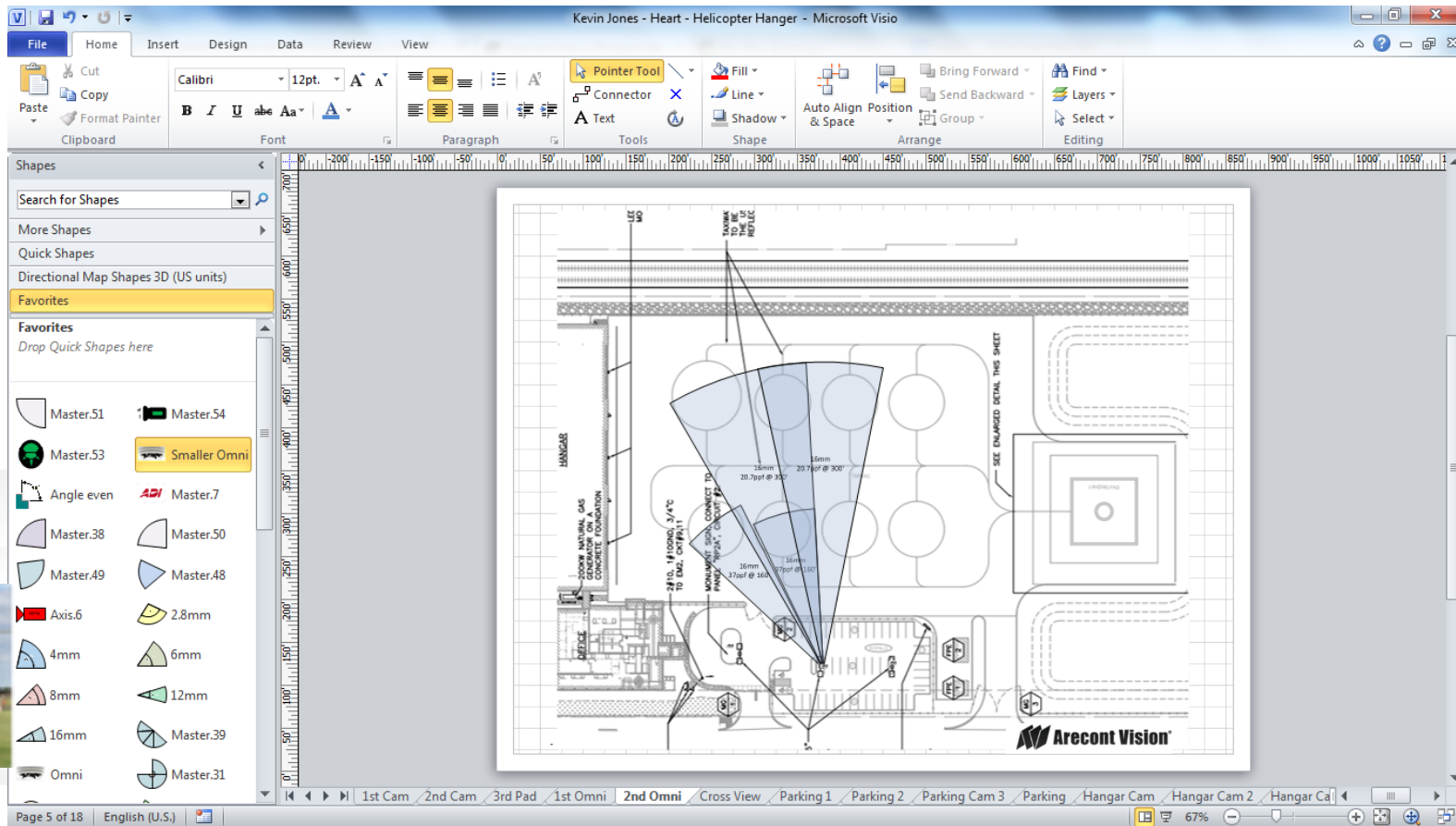
They requested a second angle of the field

Arecont Vision®
Leading the Way in Megapixel Video™

As you can see from this view, Omni-Directional cameras were not chosen.
It required our 10 Megapixel cameras to do the job!

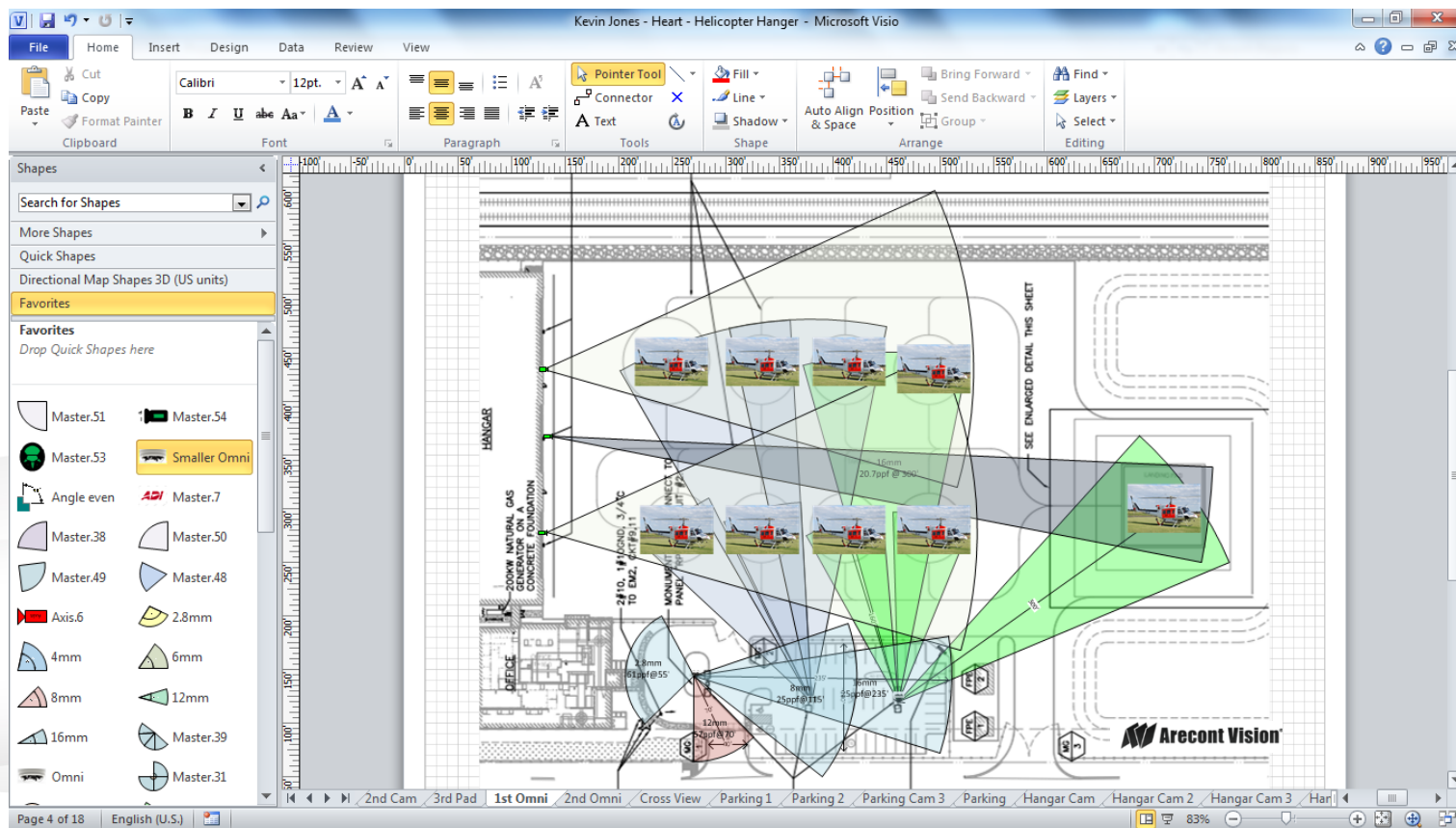# Lets not forget about the Parking Facilities

As you can see from this view, Omni-Directional cameras were again recommended. **AV20175DN-NL**

Total Coverage!

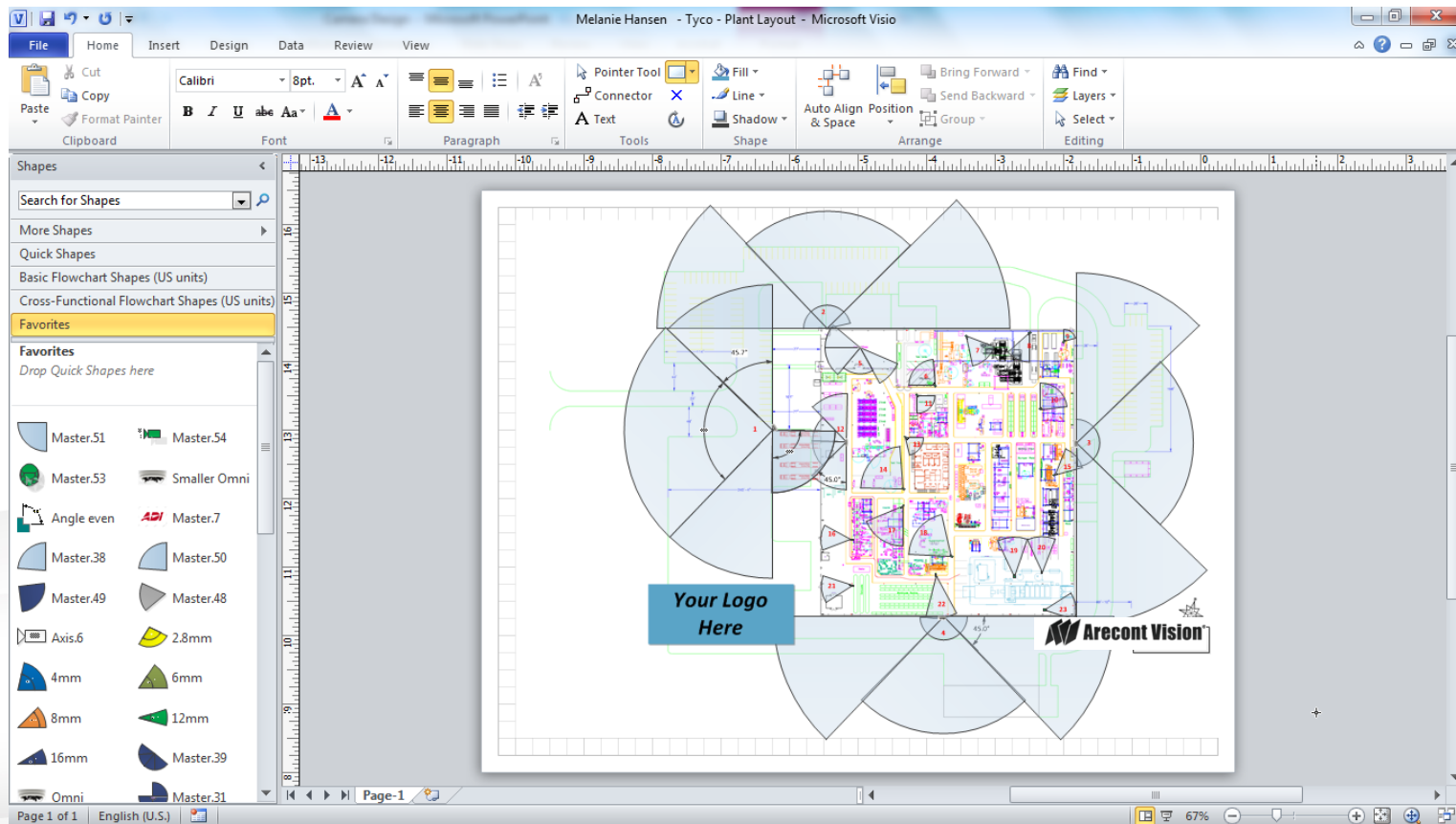**Arecont Vision**®

Leading the Way in Megapixel Video™
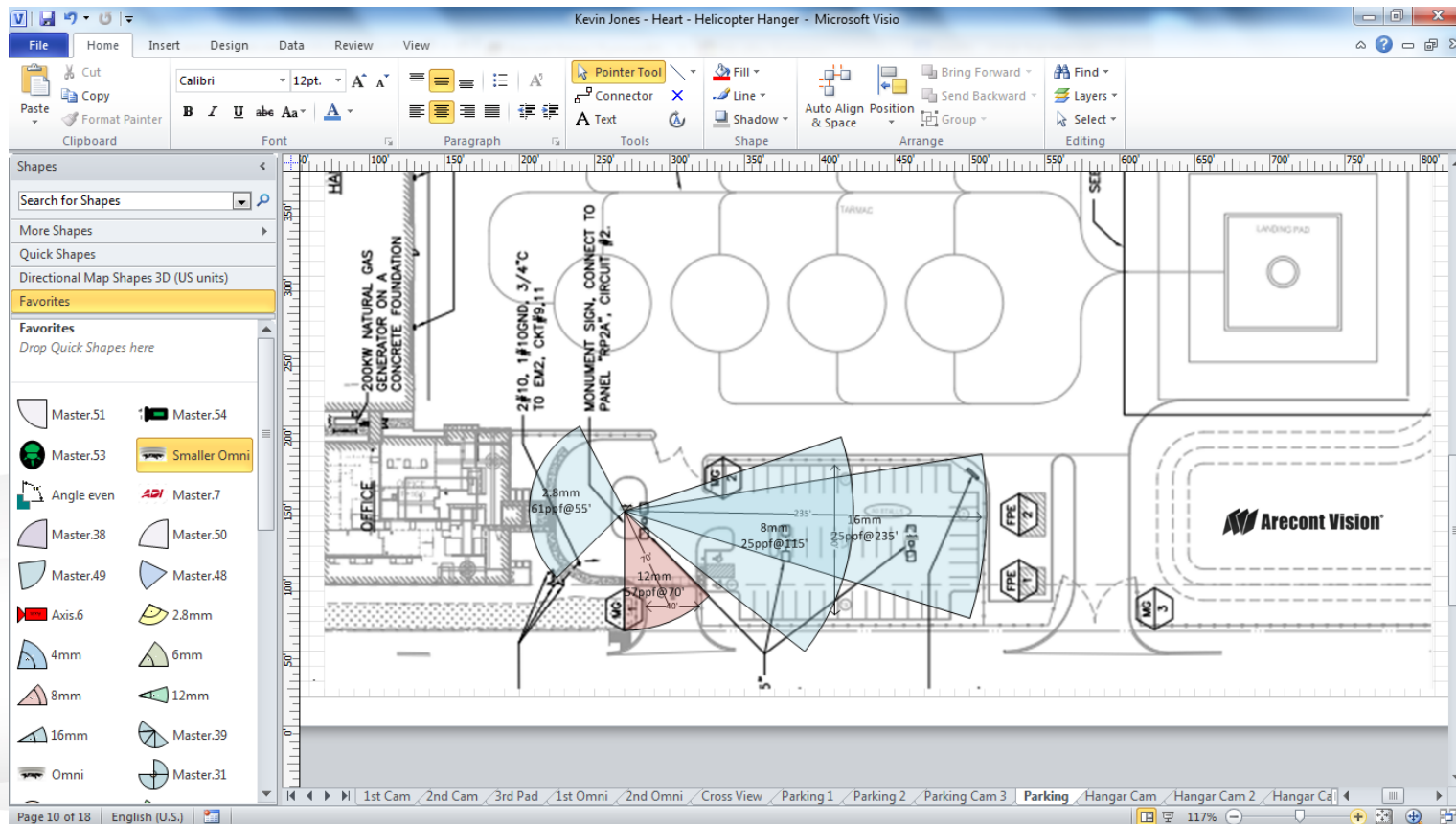
Complete Design and BOM provided at no additional cost by your local Arecont-Vision Field Application Engineer.

Customizing the Design!

Adding the customers Logo's onto my designs helps make it their own when presenting. Adding our logo to the design makes it known this is an ArecontVision Solution!

Customizing the Design!

Creating a Bill of Material directly on the design is a good rule. Numbering the cameras and cross referencing them to their physical location also ensures installer accuracy.
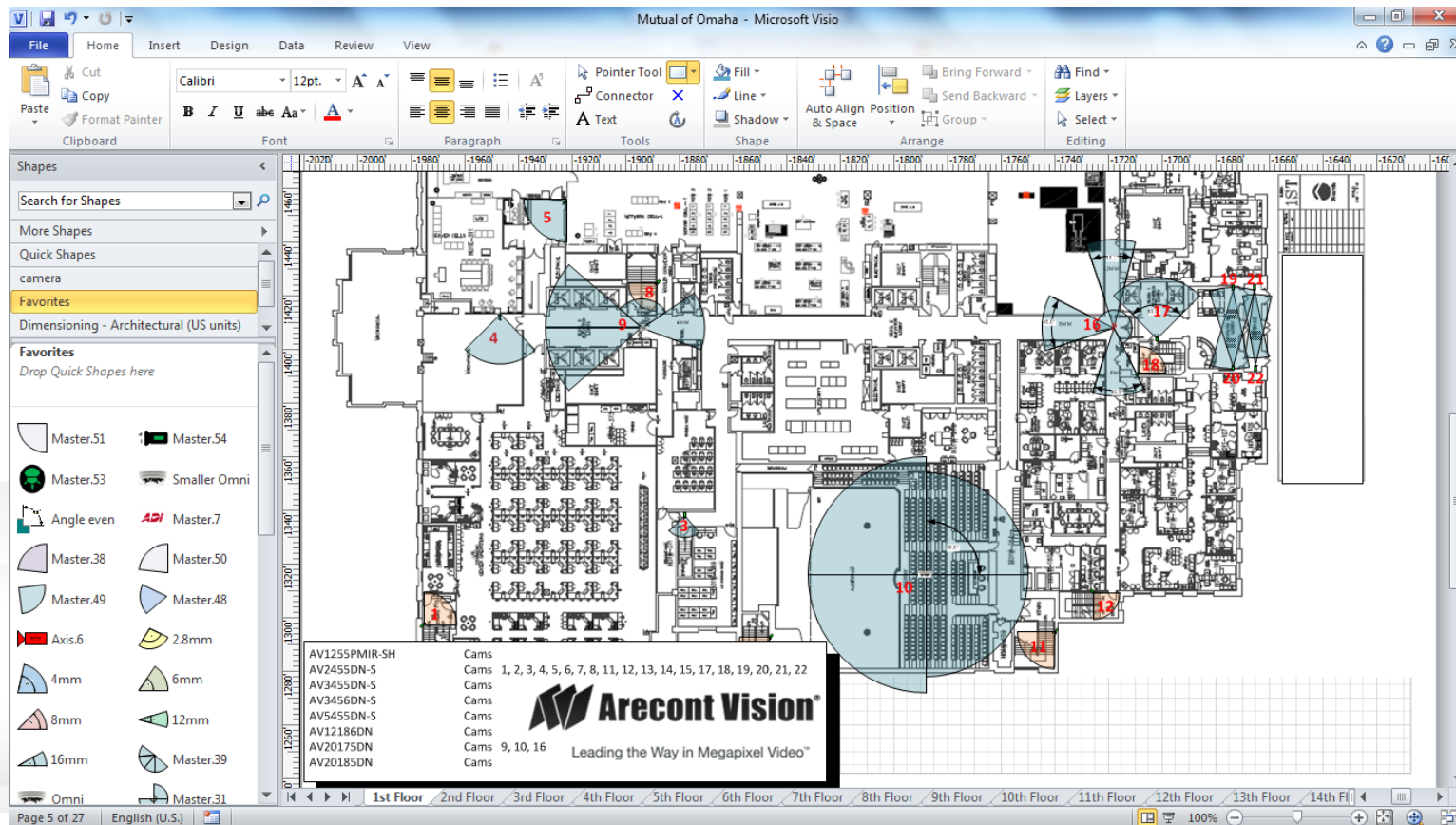
Thank You!

Richard Kennedy
Field Applications Engineer - Central
815-999-5830 rkennedy@arecontvision.com

🇺🇸 Made in the USA

Arecont Vision®

Leading the Way in Megapixel Video™

2015

Updated Marketing Sources for 2015

December 2014 Customer Webinar

Jeff Whitney

Vice President, Marketing

818.937.0477 I jwhitney@arecontvision.com

Made in the USA

Arecont Vision®

Leading the Way in Megapixel Video™

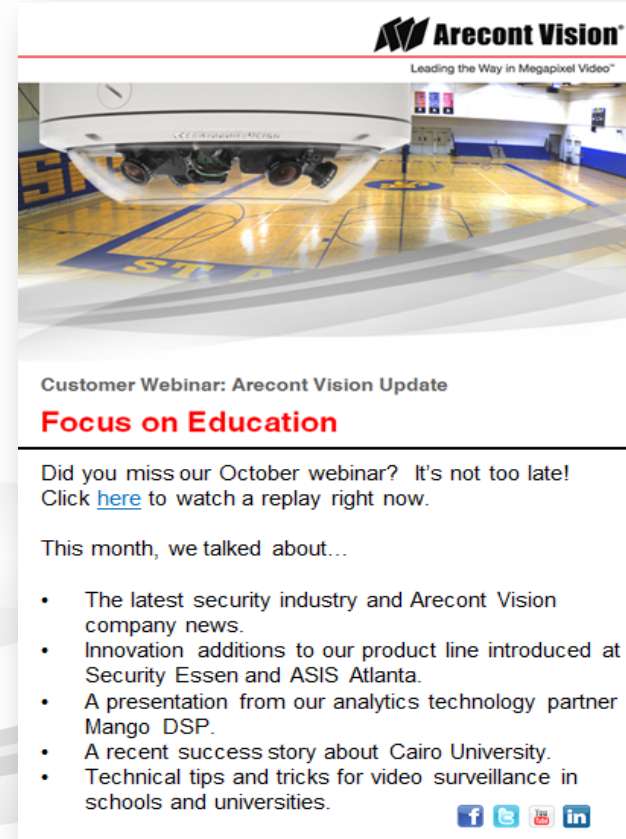# Arecont Vision® In The News

- Monthly eBlast newsletter

- Covers most interesting/important news coverage of Arecont Vision® and our customers during the past 30 days

- Translations for multiple languages

- Content from:

  - ✓ *Press coverage*

  - ✓ *Analyst coverage/reports*

  - ✓ *Industry news online, print, and blogs*

  - ✓ *Partner coverage, articles, and videos*

Arecont Vision® Customer Newsletter

- Company news for our integrator customers

- Monthly issues cover topics such as:
  - ✓ *Awards, programs, events, promos*
  - ✓ *Data sheets, brochures, advertisements, case studies, new offerings*

- Content from:
  - ✓ *Marketing*
  - ✓ *Product Management*
  - ✓ *Engineering*
  - ✓ *Tech Support*
  - ✓ *Executive Staff*
  - ✓ *Sales Ops*
  - ✓ *Sales Teams*
  - ✓ *Rep Firms, Sales Partners*
  - ✓ *Technology partners*
  - ✓ *Press releases*

Customer Update eNewsletter

From The Editor

Jeff Whitney, Vice President, Marketing

We've had a busy fall season, with important new products and enhancements being announced and displayed at major shows like Security Essen in Germany, ASIS Atlanta in the US, Paris France for Expoprotection, Sicurezza in Milano, Italy, and CANASA in Toronto, Canada.

Because there have been a number of important announcements from

Arecont Vision® Webinar and E-Blasts

- Email e-blasts focused on our monthly webinars

- Pre-event e-blast provides details on upcoming webinar topics

- Post webinar e-blast provides:
  - ✓ *Invite to next month's webinar*
  - ✓ *Reminder of what was in the webinar from earlier in the week*
  - ✓ *Link to the recorded version and downloadable slides*
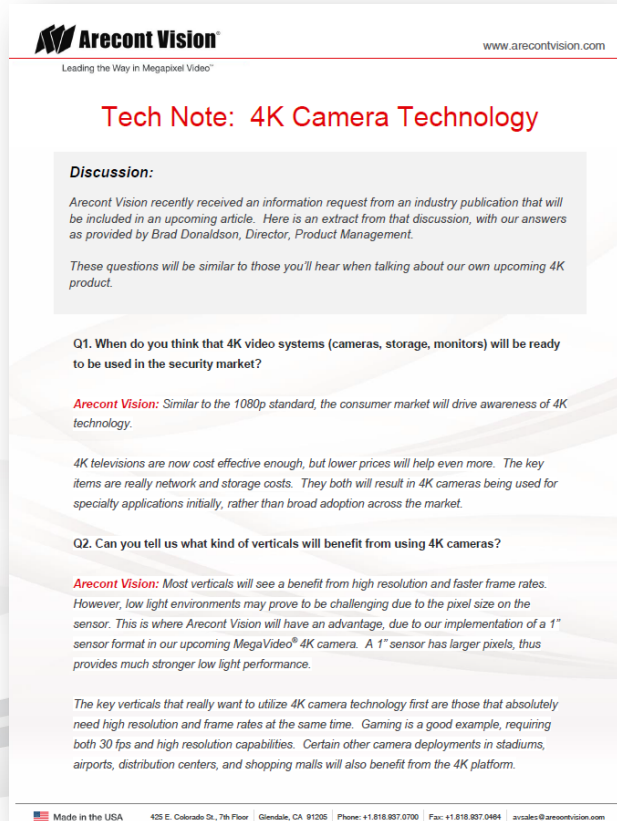
Arecont Vision® Customer Update eBulletin

- Monthly distribution to our integrators/customers

- Single-issue reference material about Arecont Vision®'s industry leading programs and products, including:

  - ✓ *The RMA Process*

  - ✓ *Technical Support*

  - ✓ *Customer Satisfaction Scores*

  - ✓ *Quality*

  - ✓ *Shipping on Time*

  - ✓ *Training and Education with AVU*

  - ✓ *Project Registration*

- Translated into multiple languages

Arecont Vision® Tech Note

- New single-topic per document bulletin for Sales, Reps, Integrators

- Covers major topics of interest that can help in understanding Arecont Vision® products and technology, or in answering typical questions from customers, prospects, and partners

- Provides messaging about technical subjects, drawn from interviews, articles, or other marketing communications sources

  - ✓ *Product Management, Support, Marketing typical department sources*
  - ✓ *Webinar presentations*

E-blast refers to mass mailings. *Email* refers to smaller volume MS Exchange mail.

Arecont Vision®
Leading the Way in Megapixel Video™

www.arecontvision.com

Tech Note: 4K Camera Technology

Discussion:

Arecont Vision recently received an information request from an industry publication that will be included in an upcoming article. Here is an extract from that discussion, with our answers as provided by Brad Donaldson, Director, Product Management.

These questions will be similar to those you'll hear when talking about our own upcoming 4K product.

Q1. When do you think that 4K video systems (cameras, storage, monitors) will be ready to be used in the security market?

Arecont Vision: Similar to the 1080p standard, the consumer market will drive awareness of 4K technology.

4K televisions are now cost effective enough, but lower prices will help even more. The key items are really network and storage costs. They both will result in 4K cameras being used for specialty applications initially, rather than broad adoption across the market.

Q2. Can you tell us what kind of verticals will benefit from using 4K cameras?

Arecont Vision: Most verticals will see a benefit from high resolution and faster frame rates. However, low light environments may prove to be challenging due to the pixel size on the sensor. This is where Arecont Vision will have an advantage, due to our implementation of a 1" sensor format in our upcoming MegaVideo® 4K camera. A 1" sensor has larger pixels, thus provides much stronger low light performance.

The key verticals that really want to utilize 4K camera technology first are those that absolutely need high resolution and frame rates at the same time. Gaming is a good example, requiring both 30 fps and high resolution capabilities. Certain other camera deployments in stadiums, airports, distribution centers, and shopping malls will also benefit from the 4K platform.

Made in the USA   425 E. Colorado St., 7th Floor   Glendale, CA 91205   Phone: +1.818.937.0700   Fax: +1.818.937.0464   avsales@arecontvision.com

Watch for them soon!