

# Chatham County Aviation



E. Scott Yackel  
Chief Pilot  
Chatham County Mosquito Control

# “The Big W?”

- Why is your Operation in existence?
- Why does your County support Mosquito Control?
- What are their expectations?

# Citizen Expectations

- Effective
- Responsive
- Efficient
- Good Steward their tax dollar
- Good Steward of the Environment



# Aviation Division circa 1998



- Airtractor 401
- Piper Aztec
- 2 Operational Hughes 300's

# Replacement Helicopter Program

- 1999- Authorized to Purchase used Turbine Helicopter
- Develop an Aerial Inspection route that could be completed quickly
- Ability to double Adulticide missions with the Helicopter addition.
- Double Larvicide capability using Airtractor and Helicopter.
- Have a back up for the Airtractor.

# New Tasking

- Inspection Flights
- Large scale Larvicide with Helicopters
- Adulticide with Helicopters and Airplane
- Airborne Law Enforcement
- Aerial Firefighting
- Search and Rescue



# Airplane/ Helicopter Assets



# “QRF” Goals ?

- Inspection Flights:

Should normally take < 2 flight hours and be timed to be completed at 1<sup>st</sup> or 2<sup>nd</sup> instar.

- Larvicide Missions:

Weather permitting should be started on 2<sup>nd</sup> instar and finish on early 4<sup>th</sup>'s

- Adulticide Missions:

- Normal acreage in increments of 6400, 9600, or 10,600
- 1-3 Helicopters
- Hot load capability to double acreage and still complete missions in < 2 flight hours.



# The Perfect Adulticide Application

- Timing- Adulticide missions should be timed for peak targeted mosquito activity periods.
  - Chatham County uses sunset vs sunrise to mitigate the exposure to Bees.
  - Most of our target species are most active at sunset vs sunrise
  - Pilots would prefer “O dark 30”
- Droplet Size: Droplet size should only be large enough to kill a mosquito when it empennages on them.
  - Smaller droplets exponentially increase the number of droplets w/o increasing application rate
  - Limit and minimize deposition.
  - Reduce impact on non-targets
- Application area: Treatment blocks should be large enough to prevent migration and prevent retreatments.
- Application rate:
  - Applications should be made at minimum label rate when possible to be a good steward of tax dollars and the environment.

# Aviation Division Long Range Plan

- Slowly convert to an all Helicopter operation w/o increasing fleet.
- Increase to 3 Pilots to increase capability, availability, reduce overtime, and create sustainability.
- Increase to 3 helicopter specific Mechanics to support various operations and program sustainability.
- Develop a 3 Helicopter Adulticide and Larvicide capability.
- Support Airborne Law Enforcement
- Aerial Firefighting
- Search and Rescue

# Multi Stage Plan

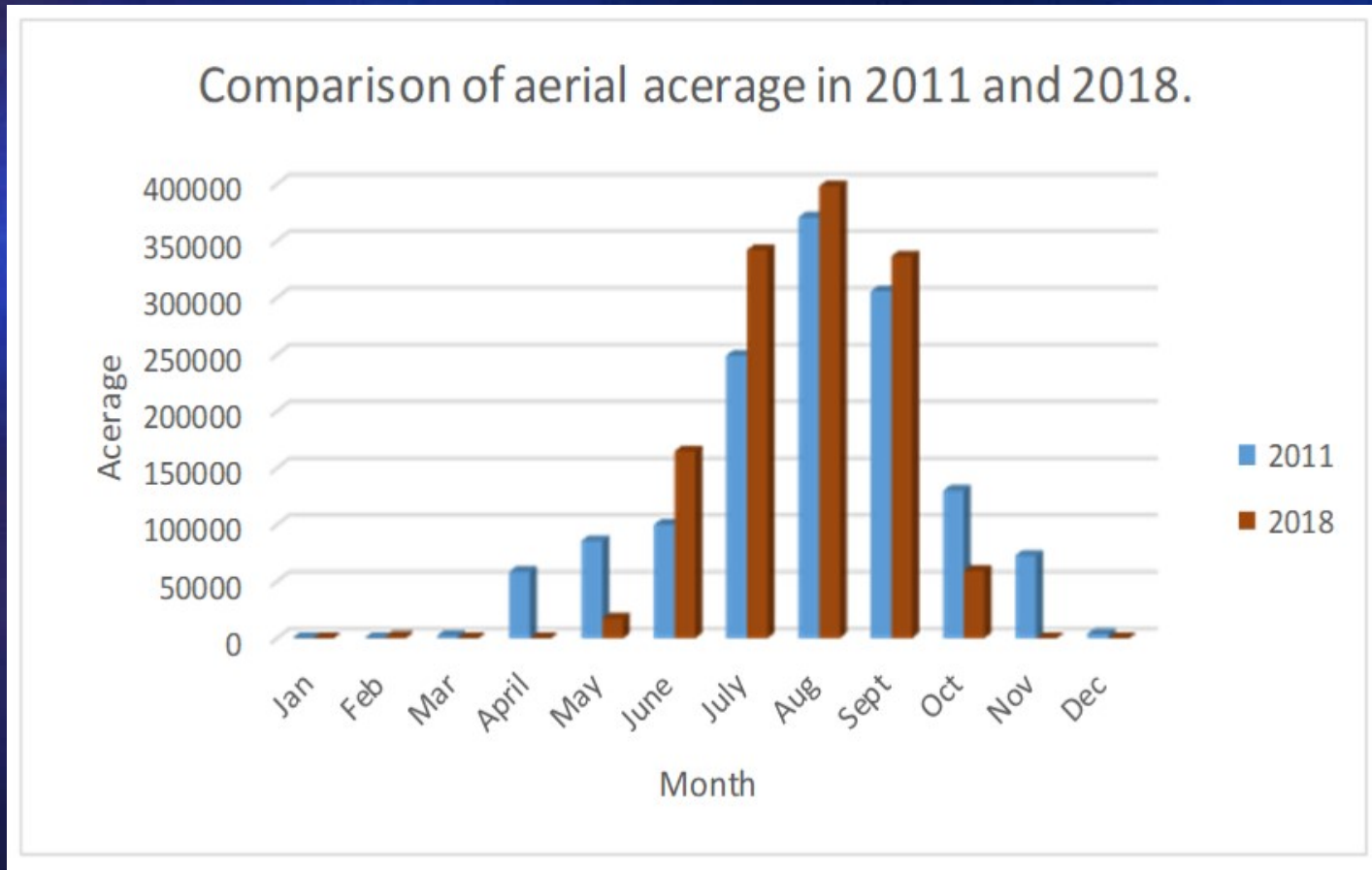
- Stage 1: (2010) Sell the Piper Chieftan, Train the Airplane Pilot Helicopters, purchase the third used MD 500 series helicopter.
- Stage 2: (2016) Hire a third Pilot, helicopter specific and train them for aerial application.
- Stage 3: (2017) Sell the last airplane, purchase the fourth used MD 500 series helicopter. Build the third (“Mil Spec”) Adulticide and Larvicide systems.
- Final Stage: Train all 3 Pilots for all missions to include:
  - Moscon
  - Airborne Law Enforcement
  - Aerial Firefighting
  - Search and Rescue



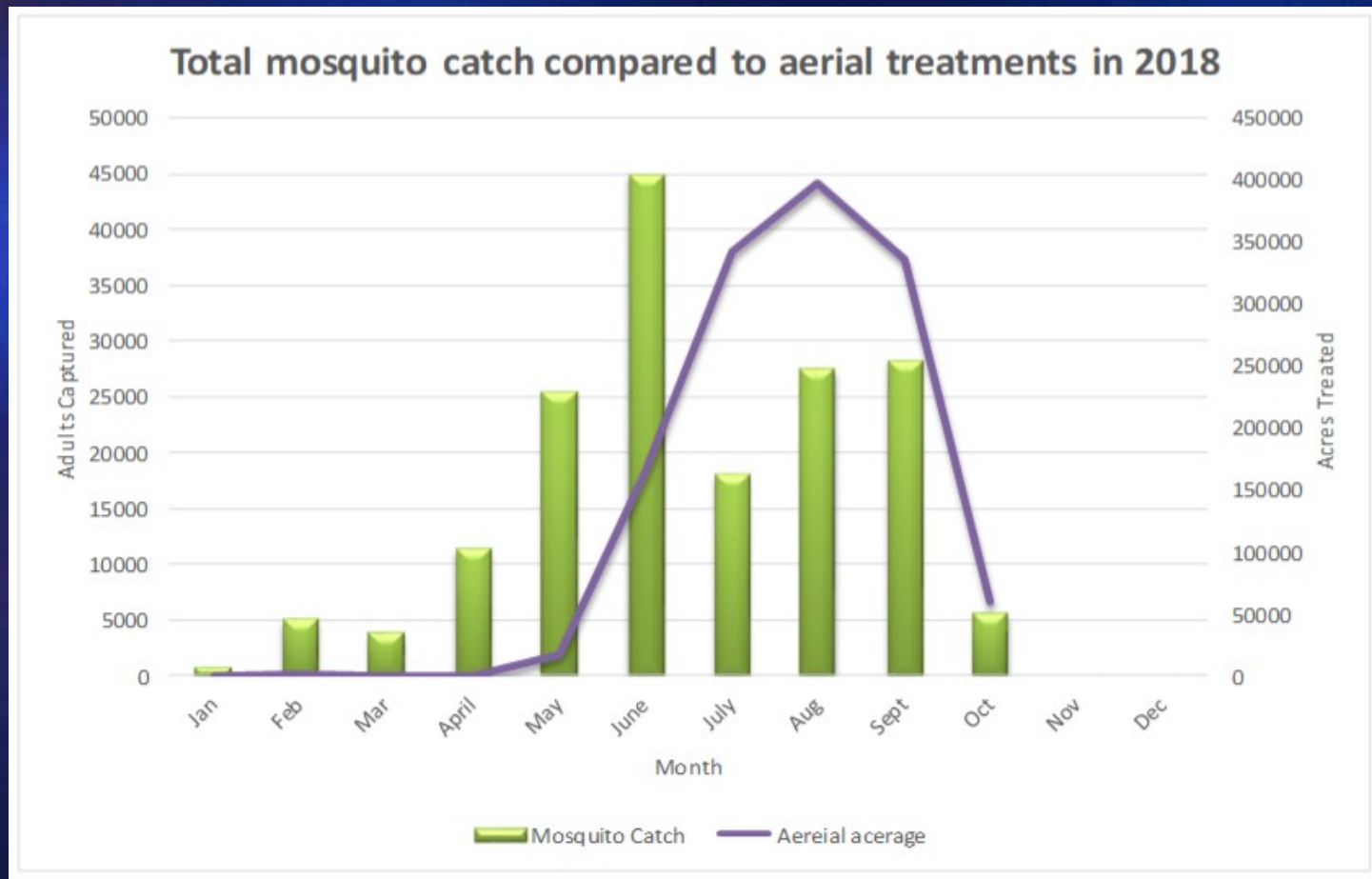
# WNV Action Plan

- Pre 2018: Treat WNV affected areas twice a week
  - Two 6400 acre Aerial Blocks treated per night, working “9 days a week”.
- Present treatments: Complete aerial treatment areas once a week.
  - Missions can be 6 Aerial Blocks with the ability to treat 12.
  - Blocks will be staggered to allow product to move into adjacent blocks.
  - Crews normally working 5 day weeks

# 2011 vs 2018 Aerial Acreage

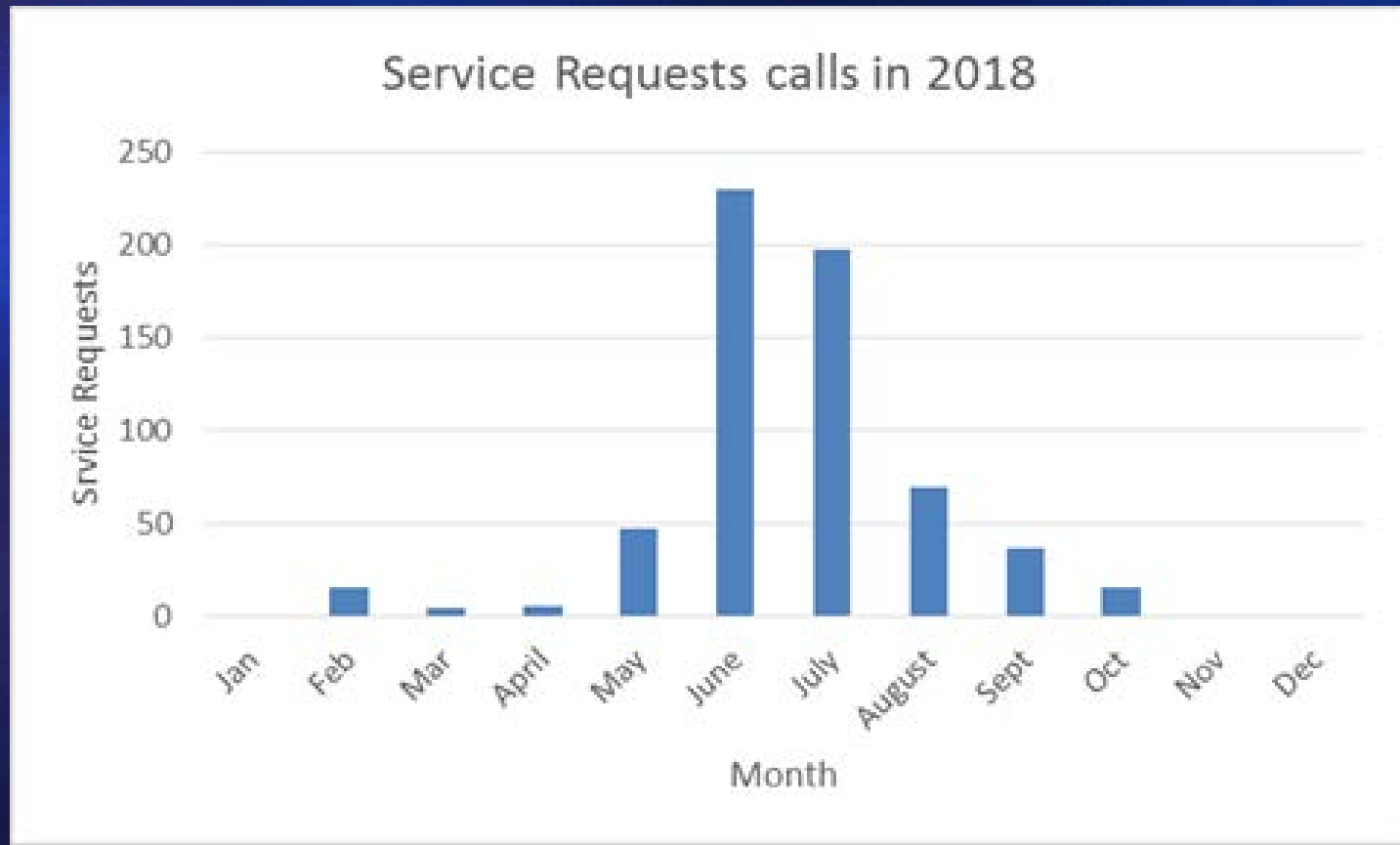


# Mosquito Traps vs Aerial Treatments





# 2018 Service Requests

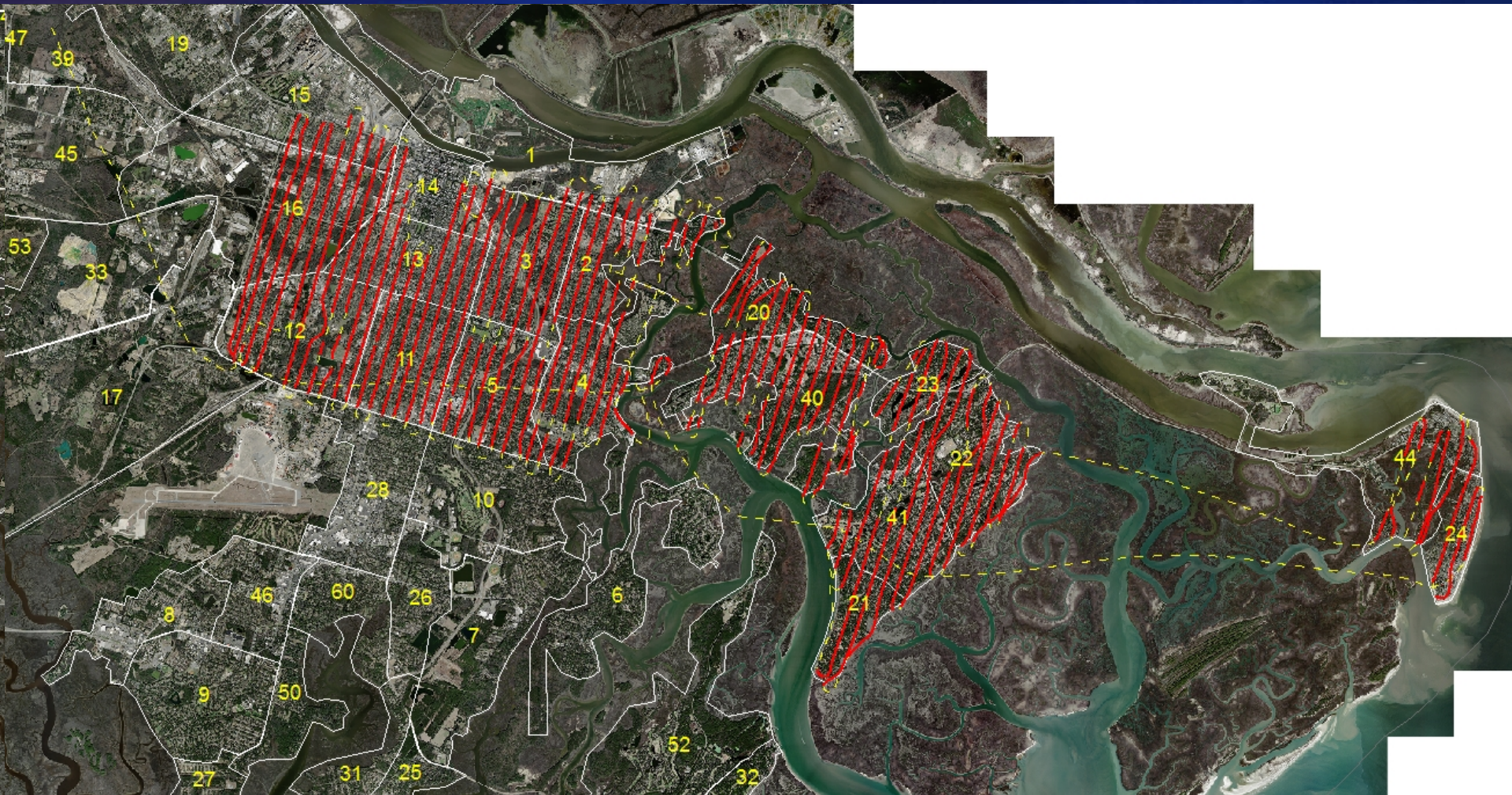


# 2011 vs 2018

| August                    | 2011    | 2018    |
|---------------------------|---------|---------|
| # missions                | 51      | 49      |
| Flight Hours              | 61      | 51      |
| Total Acres               | 370,822 | 398,264 |
| Acres per mission         | 7271    | 8127    |
| Acres per Flight Hour     | 6079    | 7809    |
| Max Acres per Mission     | 9640    | 19,798  |
| Max Acres per flight Hour | 7415    | 9,899   |

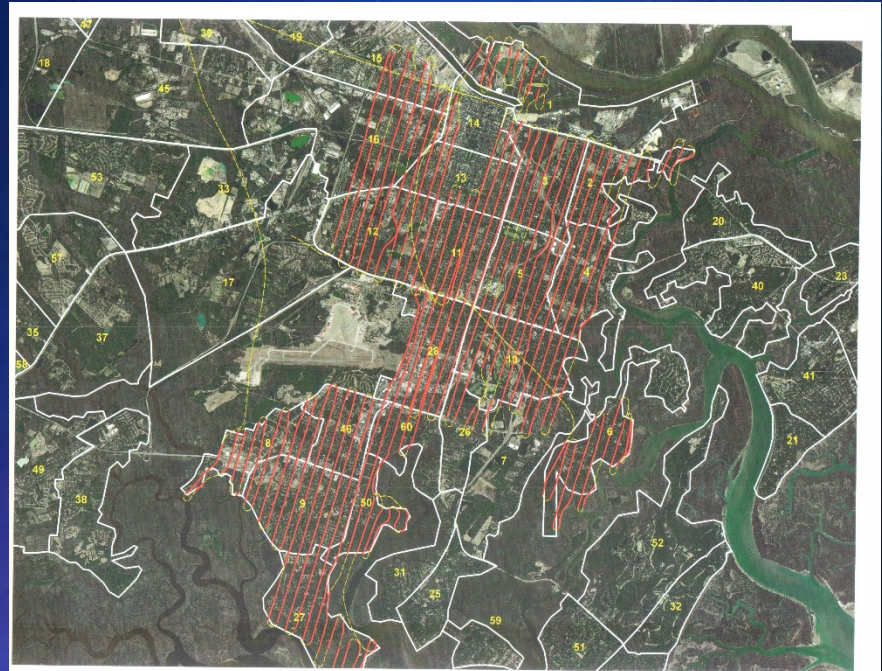


# 14 October 2018 Application





# 2018 Aerial Blocks





# Aviation Division

- Three Pilots
- Three Mechanics
- 4 Helicopters

1987 MD500E

1988 MD500E

1992 MD520N

1992 MD520N







# Paperwork !!

- EPD Visits
- DNR Visits & Investigations
- Complaint Calls
- Freedom of Information requests
- Facebook & Instagram attacks
- Anti pesticide groups

Bad boys, bad boys  
Whatcha gonna do, whatcha  
gonna do  
When they come for you

Case Details Page 1 of 1

CHATHAM COUNTY, GA  
Eastern Judicial Circuit of Georgia

Home Juvenile Court Magistrate Court Probate Court Recorder's Court State Court Superior Court Court Forms Court Fees

October 13, 2015 Location: Case Details

**CASE LOOKUP** **CASE DETAILS**

**COURT FORMS**

**COURT FEES**

**MAP & DIRECTIONS**

**JURY SERVICES**

**SITE SEARCH**

State  
vs.  
YACKEL, E. SCOTT

Case Events

Charges

Parties

Proceedings

**Case Information**

Court: Magistrate  
Case Number: N150335  
Case Type: PRE WARRANT HEARING  
Judge: JUDGE MARY KATHRYN MOSS  
Date Filed: 4/3/2015  
Status: CLOSED - WARRANT DENIED  
Disposition Date: 6/23/2015  
Disposition: WARRANT DENIED

**Defendant Information**

Name: YACKEL, E. SCOTT  
DOB: 3/15/2015  
Gender: MALE  
Race: WHITE  
Height:  
Weight:  
Eyes:  
Hair:

**Attorney Information**

N/A

**Bondsman Information**

N/A

**Case Events**

| Date      | Time   | Code                | Judge          | Action               |
|-----------|--------|---------------------|----------------|----------------------|
| 6/23/2015 | 1:45PM | PRE WARRANT HEARING | MICHAEL BARKER | WARRANT DENIED       |
| 6/3/2015  | 1:45PM | PRE WARRANT HEARING | MICHAEL BARKER | RESCHEDULE EVENT     |
| 4/25/2015 | 1:45PM | PRE WARRANT HEARING |                | CANCELLED EVENT - CL |

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**Charges**

| Charge | Description | Counts | Severity | Charge Date | Disposition |
|--------|-------------|--------|----------|-------------|-------------|
|--------|-------------|--------|----------|-------------|-------------|

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**Proceedings**

| Date      | Time   | Code                              | Judge                | Action         |
|-----------|--------|-----------------------------------|----------------------|----------------|
| 6/23/2015 | 1:45PM | CASE DISPOSED                     | WARRANT DENIED       | MICHAEL BARKER |
| 6/23/2015 | 1:45PM | PRE WARRANT HEARING               | WARRANT DENIED       | MICHAEL BARKER |
| 6/3/2015  | 1:45PM | PRE WARRANT HEARING               | RESCHEDULE EVENT     | MICHAEL BARKER |
| 5/19/2015 |        | SCANNED INITIAL CASE FILING (SCA) |                      |                |
| 4/15/2015 | 1:45PM | PRE WARRANT HEARING               | CANCELLED EVENT - CL |                |

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Home Juvenile Court Magistrate Court Probate Court Recorder's Court State Court Superior Court Court Forms Court Fees

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<http://www.chathamcourts.org/Case-Details/caseno/N150335>

10/13/2015

An aerial photograph showing the underside of a large aircraft, likely a bomber, with its wings and tail section visible. The aircraft is flying over a city with a mix of greenery and urban development. The sky is clear and blue.

*Thank You,  
Questions ??*