#### LASER ILLUMINATIONS OF AIRCRAFT - A GROWING THREAT

## Prosecution of Laser Offenders

Karen Escobar

Assistant U.S. Attorney

U.S. Department of Justice

October 27, 2011



#### LASER ILLUMINATIONS OF AIRCRAFT - A GROWING THREAT

## Prosecution of Laser Offenders

IT STARTS WITH YOU







#### LASER Beam Exposure Questionnaire

#### Fax to Washington Operations Control Center (W0CC) (202) 267-5289 ATTN: DEN

#### Email LaserReports@faa.gov

Pilot Name:		Phone Number:		
Coı	mpany:	Flight Number:		
1.	Date and time (UTC)?			
2.	Position of event (lat/long and/or FRD)?			
3.	Altitude?			
4.	What was the visibility?			
5.	What were the atmospheric conditions? (Circle the	ose which apply) - Clear Overcast Rainy Foggy Hazy Sunny		
6.	What was the color(s) of the light?			
7.	Did the color(s) change during the exposure?			
8.	Did you attempt an evasive maneuver?  If yes, did the beam follow you as you tried to move away?			
9.	Can you estimate how far away the light source was from your location?			
10.	What was the position of the light relative to the air	ircraft?		
11.	Was the source moving?			
12.	Was the light coming directly from its source or did it appear to be reflected off other surfaces?			
13.	Were there multiple sources of light?			
14.	How long was the exposure?			
15.	Did the light seem to track your path or was there	incidental contact?		
16.	What tasks were you performing when the exposu	re occurred?		
17.	Did the light prevent or hamper you from doing those tasks, or was the light more of an annoyance?			
18.	What were the visual effects you experienced (after	er-image, blind spot, flash-blindness, glare*)?		
19.	Did you report the incident by radio to ATC?			
Any —	y other pertinent information:			
85				

This questionnaire may be filled out by the competent authority during interviews with aircrews exposed to unauthorized laser illumination. This information will be used to aid in subsequent investigation by ATC, law enforcement and other governmental agencies to safeguard the safety and efficiency of civil aviation operation in the NAS.



## The Initiation of Charges

- State vs. Federal?
  - Stiffer penalties at federal level
  - Easier proof at state level
- California Penal Code
  - § 247.5: Willful & Malicious Discharge of Laser at Aircraft
    - ▶ No proof of interference w/ aircraft
    - ► Penalty: 1 y/\$1,000 fine or 16 mos, 2 yrs, or 3 yrs/\$2,000 fine

## The Initiation of Charges

- United States Code
  - 18 USC § 32(a)(5): Willful Interference with Safe Operation of Aircraft
  - 18 USC §§ 32(a)(5) & (a)(8): Conspiracy or Attempt to Willfully Interfere with Safe Operation of Aircraft
    - Penalty: 20 yrs/\$250,000 fine



## The Initiation of Charges

- Code of Federal Regulations
  - 14 CFR Part 91.11: Prohibits
     Interference with Crewmembers
  - New Legal Interpretation (6/1/11)
    - More than 1,100 lasering incidents in 2011
  - Civil Penalty: \$11,000 for each laser incident
  - Enforced by FAA



## Legislative History of 18 U.S.C. §§ 32(a)(5) and 32(a)(8)

- "Uniting And Strengthening America By Providing Appropriate Tools Required To Intercept and Obstruct Terrorism" (USA PATRIOT Act) (P.L. 107-56), enacted 10/26/01
  - Added § 32(a)(5): Willful Interference with Safe Operation of Aircraft
  - Former Attempt/Conspiracy § 32(a)(7) is now § 32 (a)(8)



## Specific Federal Laser Strike Legislation

- Pending: "Securing Aircraft Cockpits Against Lasers Act of 2011"
  - H.R. 386, Rep. Daniel Lungren [R-CA] (intro'd 1/20/2011, passed House 2/28/2011)
- Pending: "FAA Air Transportation Modernization and Safety Improvement Act"
  - S. 223, Sen. John D. Rockefeller [D-WV](intro'd 1/27/2011)
  - H.R. 658, Rep. John Mica [R-FL](intro'd 2/11/2011)



## Specific Federal Laser Strike Legislation

- Sen. Sheldon Whitehouse [D-RI] offered amendment to S. 223, adopting language of Lungren bill: "Current federal law does not give prosecutors ready tools to prosecute and thus deter [lasering aircrafts]"
- S. 223 passed Senate 2/17/2011
- Joint House-Senate committee to agree on common format before sending the legislation to President Obama



## Specific Federal Laser Strike Legislation

- Pending: "Securing Aircraft Cockpits Against Lasers Act of 2011"
  - S. 1608 Sen. Whitehouse (intro'd 9/22/2011)
- ► All bills would add 18 USC § 39A, prohibiting knowingly aiming the beam of a laser pointer at an aircraft, but would not increase penalty (5 yrs / \$250,000)



## 18 U.S.C. § 32(a)(5)

Interference with Safe Operation of Aircraft

"Whoever willfully ... interferes with or disables, with intent to endanger the safety of any person or with a reckless disregard for the safety of human life, anyone engaged in the authorized operation of such aircraft or any air navigation facility aiding in the navigation of any such aircraft ... shall be [guilty of a felony]."



## 18 U.S.C. §§ 32(a)(5) and (a)(8)

Conspiracy or Attempt to Interfere with Safe Operation of Aircraft

"Whoever willfully ... attempts or conspires to do anything prohibited under [§ 32(a)(5)] ... shall be [guilty of a felony]."



### What is "Such Aircraft" Under 32(a)(5)?

References 18 U.S.C. § 32(a)(1):

"any aircraft in the special aircraft jurisdiction of the United States or any civil aircraft used, operated, or employed in interstate, overseas, or foreign air commerce"



## What is "Special Aircraft Jurisdiction of the United States?"

- Defined at 49 U.S.C. § 46501(2), includes the following aircraft in flight:
  - a civil aircraft of the United States
  - an aircraft of the U.S. armed forces
  - another aircraft in and outside the U.S destined for the U.S.
- Basically, any aircraft



# Case Study United States v. Dooley and Snow: The Victims

- Kern County Sheriff's MD 500E helicopter
- A crew of two, pilot and tactical observer
- Flying at 500 ft AGL over a residential area on routine patrol
- Tracked by green laser from within 1 mile
- Pilot received slight eye injury lasting a couple of hours



## **Locating Suspects**

- Bakersfield PD responds
- No one has come or gone from location
- ► No answer, Bakersfield PD leaves
- ► FBI/JTTF receives notification of incident the next morning and conducts investigation



## The Suspects

- Jared James Dooley
  - WMA 24 yrs old
  - Resident of Bakersfield, CA
  - Extensive Record
  - Meth Addict
- Kendra Christine Snow
  - WFA 24 yrs old
  - Cohabitant of Dooley
  - Extensive Record
  - Meth Addict









### The Laser Used

- Radio Shack
- **\$50.00**
- Class IIIa
  - Medium power (1-5 mW)
  - Potential vision hazard
  - FDA regulates lasers
- Green beam
- Visible beam distance of two miles
- Originally designed for star gazing







## Initiation of Federal Criminal Charges

- 1. Arrest-Initiated Proceedings
  - PC determination within 48 hours
- 2. Complaint-Initiated Proceedings
  - Indictment within 10 court days of initial appearance, if detained, or 30 days, if not detained
- 3. Indictment-Initiated Proceedings



Complaint-Initiated

DEC-16-2007 22:04

AO 91 (Rev. 5/85) Criminal Complaint

651 323 5345

UNITED STATES DISTRICT COURT EASTERN DISTRICT OF CALIFORNIA

UNITED STATES OF AMERICA

CRIMINAL COMPLAINT

٧.

CASE NO. 5:07-mj-00045 TAG

JARED JAMES DOOLEY, and KENDRA CHRISTINE SNOW

(if search warrant is issued regarding this complaint, indicate above the case number assigned.)

I, Marty Willia, being duly sworn, state the following is true and correct to the best of my knowledge and belief. Since November 8, 2007 in Kern County(ies), in the Eastern District of California, and elsewhere.

> The defendant(s) did willfully interfere, or attempt to or conspire to interfere, with or disable, with reckless disregard for the safety of human life, anyone engaged in the authorized operation of any aircraft, as defined under Title 49, United States Code, Section 46501(2), or any civil aircraft used, operated, or employed in interstate commerce,

in violation of Title 18, United States Code, Section(s) 32(a)(5) and (a)(8), with a maximum penalty s\_imprisonment, and/or a fine of up to \$250,000 dollars, and \$100 penalty assessment.

urther state that I am a(n) <u>Special Deputy U.S. Marshal</u> and that this complaint is n the following facts:

See Attached Affidavit.

### Alleged violations of Sections 32(a)(5) and (a)(8)

Sworn to before me and subscribed in my presence.

2007 <u>December</u>

Marty R. Willis

Theresa A. Goldner U.S. Magistrate Judge



Indictment within 10 Court Days of Initial Appearance

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Case 1:08-cr-00008-LJO
                          Document 20
                                        Filed 01/03/2008
                                                         Page 1 of 4
   McGREGOR W. SCOTT
    United States Attorney
    KAREN A. ESCOBAR
    Assistant U.S. Attorney
                                                      JAN 03 2008
    2500 Tulare Street
    Fresno, California 93721
                                                CLERK, U.S. DISTRICT COURT
EASTERN DISTRICT OF CALIFORNIA
    Telephone: (559) 497-4000
6
                 IN THE UNITED STATES DISTRICT COURT FOR THE
 9
                        EASTERN DISTRICT OF CALIFORNIA
10
                                           1:08CR000 08 130 _
11
    UNITED STATES OF AMERICA,
12
               Plaintiff,
                                        VIOLATION: 18 U.S.C. §§ 32(a)(5)
13
                                        and (a)(8), 18 U.S.C. § 2 -
                                        Conspiracy to Interfere with
    JARED JAMES DOOLEY and
                                        Safe Operation of Aircraft; 18
    KENDRA CHRISTINE SNOW,
                                        U.S.C. Er
                                                         (5) and (a) (8), 18
15
               Defendants.
                                        U.C
                                                           ot to Interfere
                                                             a of Aircraft,
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Alleged 18 U.S.C. §§ 32(a)(5), (a)(8) -
Conspiracy to Interfere with Safe Operation
of Aircraft (Count One);
18 U.S.C. §§ 32(a)(5), (a)(8) -
Attempt to Interfere with Safe Operation
of Aircraft (Count Two)
```

## Elements of the Conspiracy Offense

- 1) There was an agreement between two or more persons to willfully interfere with the safe operation of an aircraft;
- The defendant became a member of the conspiracy knowing of at least one of its objects and intending to help accomplish it; and
- 3) One of the members of the conspiracy performed at least one overt act for the purpose of carrying out the conspiracy.



## Element #1 "Agreement to Interfere with Safe Operation of an Aircraft"

- In Context of Lasering Cases, Interference Generally Means Interference with the Pilot/Airman Operating the Aircraft
  - Evidence of Actual Injury: Damage,
     Disorientation, Disruption of Airman/Aircraft
    - KCSO Pilot reported "gravelly" feeling in his eyes for a couple hours; TFO with night vision goggles received mild irritation
    - Expert Testimony re: Effect of Laser on Human Body
      - Dr. Van Nakagawara, FAA Research Optometrist



## Element #1 "Agreement to Interfere with Safe Operation of an Aircraft"

Importance of Reporting of Laser Illumination of Aircraft: "Laser Beam Exposure Questionnaire"

 Good questions to guide investigation and source of evidence of interference



#### APPENDIX A

#### LASER BEAM EXPOSURE QUESTIONNAIRE

FAX TO WASHINGTON OPERATIONS CONTROL CENTER(WOCC) at (202) 267-5289 ATTN: DEN				
PILOT NAME		PHONE NUMBER FLIGHT NUMBER		
1	Date and time (UTC)?		1945 A. A. Albiri shirimidakelaram.	
2.	Position of event (lat/long and/or FRD)?			
3.	Altitude?			
4.	What was the visibility?		address statistication outputton control control control ( )	
5.				
6.	What was the color(s) of the light?		Control of the Contro	
7	Did the color(s) change during the exposure?		salah sa 200 ara na Additioner	
8	10:4 con aftempt an evasive maneuver?			

- 8. Did you attempt an evasive maneuver?
  - 14. How long was the exposure?
- 17. What were the visual effects you experienced (after-image, blind spot, flash-blindness, glare)?
  - 15. Cra the tight seem to track your path or was there incidental contact?

## "Agreement to Interfere with Safe Operation of an Aircraft"

Since Conspiracy Does Not Require Proof of Interference, an Agreement to Interfere May Be Established by Evidence of Potential Injury

 Proof of Potential Injury: Scientific Examination of Laser Device





#### U.S. ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE 5158 BLACKHAWK ROAD ABERDEEN PROVING GROUND MD 21010-5403

EXECUTIVE SUMMARY
NONIONIZING RADIATION PROTECTION STUDY
NO. 25-MC-09H2-08
OPTICAL HAZARD EVALUATION OF THE GREEN LASER POINTER
INVOLVED IN ALLEGED AIRCRAFT INCIDENTS IN BAKERSFIELD
NOVEMBER 2007

- 1. PURPOSE. To evaluate the potential health hazards associated with the optical radiation
- 2. Conclusions. This laser system is Class IIIa (medium power) and exceeds the maximum permissible exposure to a distance of 24 meters for 0.25 seconds of exposure. This product has the ability to cause visual interference to pilots of aircraft located several kilometers away.

## "Agreement to Interfere with Safe Operation of an Aircraft"

Definition of Willfulness

Requires that "an act be done knowingly and intentionally, not through ignorance, mistake or accident"

 A higher state of mind intent than "knowing"



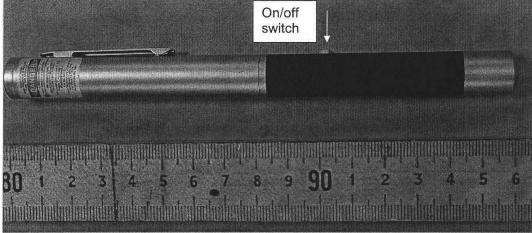
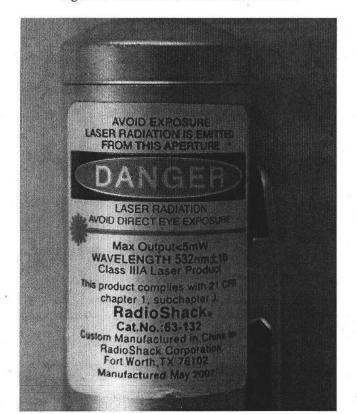
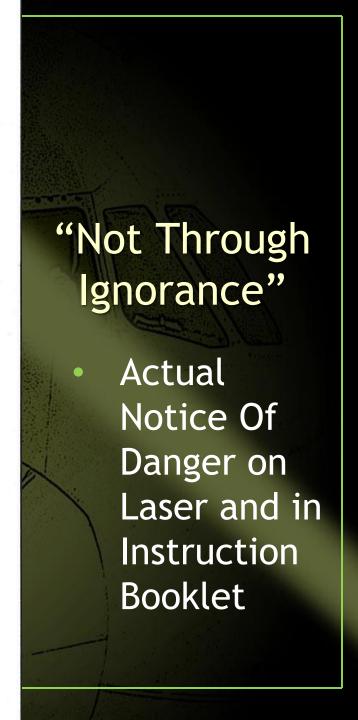


Figure 1. RadioShack Green Laser Pointer.





## "Not Through Ignorance"

- Other Evidence of Willfulness:
  - Protracted Lasering/Tracking of Aircraft
  - Possession of Other Lasers for No Legitimate Purpose
  - Acknowledgement of Improper Conduct
    - Snow: We were "taking turns shining the laser around watching the tracers in the sky"
  - Past Evidence of Recklessness/Disregard for Human Safety (Rule 404(b) Evidence)
    - Snow: Illegal Possession of Tear Gas, Prior Restraining Order
    - Dooley: Possession of Destructive Device



## Elements of the Offense Attempt to Interfere with Safe Operation of Aircraft

- The defendant intended to willfully interfere with a person engaged in the authorized operation of an aircraft as defined; and
- The defendant did something that was a substantial step toward committing the crime



## Element #2 "Substantial Step"

- Beyond "mere preparation" but may be less than the "last act necessary" before commission of the substantive crime
  - Examples:
    - Evidence of acquisition/purchase of powerful laser
    - Evidence surrounding the lasering
      - e.g., Hunting/tracking the aircraft

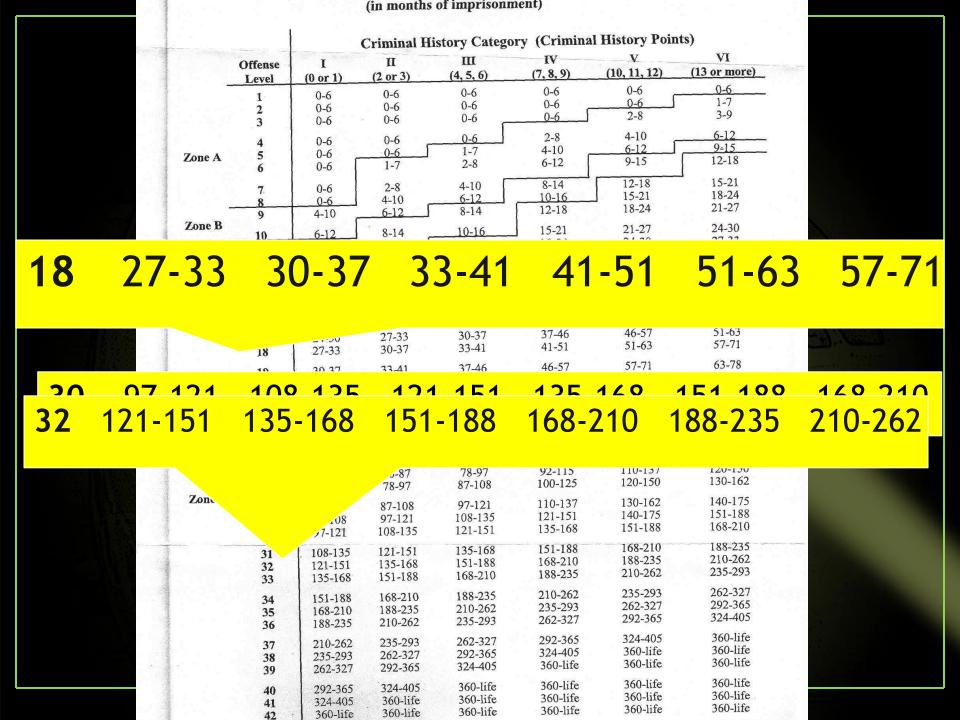


- The Detention Hearing (18 U.S.C. § 3142): Make an Impact/Educate Court
  - Argue that Section 32 gives rise to a statutory rebuttable presumption of flight risk and danger to the community, since it is a crime of violence
    - Dooley detained as <u>danger and flight risk</u>, after Magistrate Judge finding that the crime is a "very serious" offense
    - Snow initially detained as danger and flight risk, later ordered released on a property bond posted by Dooley's mom and residential drug treatment

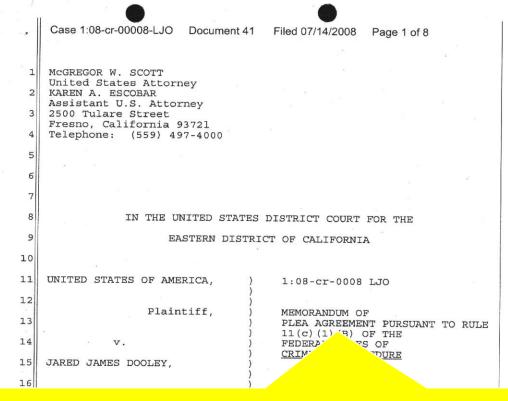


- Driven by U.S. Sentencing Guidelines
- ► U.S.S.G. § 2A5.2
  - BOL 18, if the offense involved recklessly endangering aircraft safety
  - BOL 30, if the offense involved intentionally endangering the safety of: (A) an airport or an aircraft; or (B) a mass transportation facility or a mass transportation vehicle
  - Dangerous weapon enhancements for various uses of laser
  - Terrorism Enhancement U.S.S.G. § 3A1.4 Add 12 or BOL 32, whichever is greater/CHC VI, if the offense is a felony that involved, or was intended to promote, a federal crime of terrorism, as defined in 18 U.S.C. § 2332b(g)(5)





Guilty Plea to Count 2 (Attempt)



Defendants agree: "When the light hit the cockpit, it disoriented the Kern County Sheriff's pilot, causing pain and discomfort in his eyes for a couple of hours."

Case 1:08-cr-00008-LJO Document 50 Filed 10/03/2008 I McGREGOR W. SCOTT United States Attorney KAREN A. ESCOBAR Assistant U.S. Attorney 2500 Tulare Street Fresno, California 93721 Telephone: (559) 497-4000 IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF CALIFORNIA 10 11 UNITED STATES OF AMERICA. 1:08-CR-0008 LJO 12 Plaintiff, GOVERNMENT'S RESPONSE TO DEFENDANT D'LEY'S OBJECTIONS TO 13 PRESENTE PORT AND OPPOSITION OWNWARD DEPARTURE 14 JARED JAMES DOOLEY,

Sentencin

Court/ "Just

A 24-month sentence is justified given, Impac potentially, "the catastrophic effects" and "the danger to individuals in the air and on the ground when flights are Testin disrupted."

AO 245B-CAED (RGASE4)1 SABEGY-GOODER L. Qrimin Decyment 55

Filed 10/24/2008

Page 1 of 6

#### **United States District Court**

Eastern District of California

UNITED STATES OF AMERICA

JARED JAMES DOOLEY

JUDGMENT IN A CRIMINAL CASE

(For Offenses Committed On or After November 1, 1987)
Case Number: 1:08CR00008-001

David A. Torres

Defendant's Attorney

#### THE DEFENDANT:

[V] pleaded guilty to count(s): TWO of the I

pleaded nolo contendere to counts(s) \_\_\_ was found guilty on count(s) \_\_\_ after a p

ACCORDINGLY, the court has adjudicated tha

scepted by the court.

following offense(s):

ate Offense

Number(s)

Count

Judgm

### Dooley: 24 months in custody

 Derived from low end of USSG range based on TOL 15/CHC III

4	I- distance to be dismissed	by District Court on motion of the United State	es.
	indictment is to be distributed	by District Court on motion of the	

Appeal rights given. [✔]

Appeal rights waived.

IT IS FURTHER ORDERED that the defendant shall notify the United States Attorney for this district within 30 days of any change of name, residence, or mailing address until all fines, restitution, costs, and special assessments imposed by this judgment are fully paid. If ordered to pay restitution, the defendant must notify the court and United States attorney of material changes in economic circumstances.

October 10, 2008

Date of Imposition of Judgment

/s/ Lawrence J. O'Neill

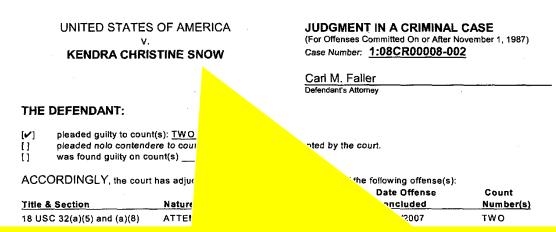
Signature of Judicial Officer

LAWRENCE J. O'NEILL, United States District Judge

Name & Title of Judicial Officer

#### **United States District Court**

Eastern District of California



### Snow: 18 months in custody

Over government's objection, Court imposed a "Booker" sentence derived from 50% reduction from low end of USSG range based on TOL15/CHC V

Signature of Judicial Unicer

LAWRENCE J. O'NEILL. United States District Judge Name & Title of Judicial Officer

November 12, 2008 Date

#### LASER ILLUMINATIONS OF AIRCRAFT - A GROWING THREAT

## Prosecution of Laser Offenders

Points of Contact





### POC

Re: Laser Reporting

Cornelius Moore

Operations and International Support

System Operations Security

Federal Aviation Administration

Phone: 202/267-8445

Fax: 202/267-5775

Email: Cornelius.Moore@faa.gov



### POC

Re: Effect of Lasers on Human Beings Dr. Van Nakagawara, O.D.

Research Optometrist

Vision Research Team Coordinator

Aerospace Medical Research Division

FAA - Civil Aerospace Medical Institute

Phone: 405/954-6235

Fax: 405/954-1362

E-mail: Van.Nakagawara@faa.gov



### POC

Re: Laser Aircraft Investigations Contact Your Local FBI Office or FBI/JTTF TFO Marty Willis

Phone: 661/852-2445

Fax: 661/323-5345

Email: MartyWillis@kernsheriff.com



#### LASER ILLUMINATIONS OF AIRCRAFT - A GROWING THREAT

### Questions



#### Karen Escobar

Assistant U.S. Attorney
Eastern District of California
559/497-4094

Karen. Escobar@usdoj.gov

