



# HSAC

Helicopter Safety Advisory Conference

Safety Through Cooperation  
Since 1978

# Aerial Observation Committee May 18, 2022 In Person and via Zoom

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## Agenda

<b>1230</b>	<b>Anti-Trust Statement, Introductions, and Overview</b>	<b>Winston Seiler</b>
<b>1245</b>	<b>Recap on Previous Meeting and Action Items</b>	<b>Winston Seiler</b>
<b>1300</b>	<b>American Clean Power Association – Wind Turbines</b>	<b>Tom Vinson</b>
<b>1345</b>	<b>Accidents and Incidents</b>	<b>Tom Buchner</b>
	<b>Cessna 206 Pipeline Fatality – Review and Discussion</b>	<b>All</b>
	<b>Tower Impact Fatalities</b>	<b>All</b>
	<b>Birdstrike Prevention and Mitigation</b>	<b>All</b>
<b>1445</b>	<b>Leading Indicators and Hazard Reporting/Hazard Shares</b>	<b>Winston Seiler</b>
<b>1500</b>	<b>RP Updates</b>	
<b>1515</b>	<b>Other Topics of Interest and Future Topics of Interest</b>	<b>All</b>

“HSAC participants only share Safety information. We never discuss commercially advantaged info, competitive cost, production, market analysis, or other competitive trade sensitive data of any kind”

## Antitrust Checklist



We should always....

- **Not** discuss competitive cost, production, market analysis or other competitive trade sensitive data
- **Have** an agenda
- **Report** to our own counsel any concerns that we have of variation from the agenda
- **Keep** minutes for a record of our discussions



# HSAC ANTI TRUST STATEMENT

The Sherman Act and the Clayton Act are federal statutes which make certain agreements in restraint of trade illegal. Violators can be subject to criminal penalties and large monetary damages.

The purpose of antitrust policies is to **restrict communications concerning cost, production or other trade sensitive information which could be the foundation for such illegal agreements.**

# HSAC ANTI TRUST STATEMENT



## ❖ Trade Associations / Industry Groups

Trade associations are generally recognized as a legitimate forum for competitors to share ideas which promote the efficiency of the industry.

### Example:

- How to do things safer, better, more efficiently.
- However, any discussion which involves the use of cost information (even historical) or other competitive information should not take place without specific authorization of antitrust counsel.



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## Recap from Past Meeting

**Spidertracks Discussion**

**SMS Software: FltPlan.com**

**Accidents and Incidents**

**Tower Fatalities – Preventive Measures**

**Leading Indicators and Hazard Reporting**

**Hazard Shares**

**IOGP 590 → 690**

**Other Topics of Interest and Future Topics of Interest**

**Randy Langefeld**

**Marshall Cox**

**Tom Buchner**

**All**

**Winston Seiler**

**All**

**All**

**All**



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## Tom Vinson

VP, Policy and Regulatory Affairs  
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- Hazardous Liquid (Oil) and Gas Pipelines extend over 2.7 million linear miles in the United States and are considered critical energy infrastructure.
- Pipeline and Hazardous Materials Safety Administration (PHMSA) and United States Department of Transportation (“DOT”) require regular patrol and inspection of these pipelines and associated right-of-ways (e.g., 49 CFR § 195.412 requires inspection of hazardous liquids pipeline right-of-ways).
- The bulk of these patrols are accomplished by manned aircraft inspecting the pipeline right-of-ways at low flight altitude.
- Over the past several years pipeline patrol operators have noted a significant increase in the abundance, height, and size of wind turbines -- in some cases causing a flight hazard or patrols to be flown higher than specified by pipeline operators for an effective patrol.
- The combination of low ceilings with the presence of wind turbines has already prevented the aerial patrol of a right-of-way within the DOT required inspection interval.



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1. That the National Pipeline Mapping System ([www.npms.gov](http://www.npms.gov)) be consulted prior to all wind turbine and other tall structures approvals (structures above 200 ft. AGL);
2. That a minimum of 3000 ft lateral offset to the pipeline be provided from the nearest point of the turbine blade or tall structure;
3. That whenever possible, turbines or other tall structures be placed on only one side of a pipeline right-of-way if required to be within 3000 ft. laterally.



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## Cessna 206 Fatality



Cessna TU206F Turbo Stationair, N858JA  
Posted on Kathryn's Report

<http://www.kathrynsreport.com/2022/04/cessna-tu206f-turbo-stationair-n858ja.html>



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<b>Location:</b>	Marlin, TX	<b>Accident Number:</b>	CEN22FA168
<b>Date &amp; Time:</b>	April 5, 2022, 12:31 Local	<b>Registration:</b>	N858JA
<b>Aircraft:</b>	Cessna TU206F	<b>Injuries:</b>	2 Fatal
<b>Flight Conducted Under:</b>	Part 91: General aviation - Aerial observation		

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On April 5, 2022, about 1231 central daylight time, a Cessna TU206F airplane, N858JA, was substantially damaged when it was involved in an accident near Marlin, Texas. The 2 pilots were fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 aerial observation flight.

The airplane departed the Houston Executive Airport (TME), Houston, Texas, on a pipeline inspection flight with a destination of Waco, Texas. Preliminary radar and Automatic Dependent Surveillance-Broadcast (ADS-B) data indicated the airplane first appeared at 1038 near TME. The airplane tracked north-northwest toward Waco, Texas, and climbed to 4,000 ft msl. About an hour and a half into the flight, the airplane turned southwest and began a series of maneuvering turns over the area where the pipeline was located. The airplane continued to maneuver southwest and worked its way to a location 20 miles south of Waco. It then turned to the east toward the Marlin Airport (T15), Marlin, Texas. The pilot contacted Waco Approach Control and informed them that he was landing at T15.



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The airplane overflowed the airport and entered a left downwind traffic pattern for runway 17. The airplane continued to a left base leg and then final. An Armory security camera located on the airport recorded the airplane on final approach. The airplane touched down just past the approach end of the runway and bounced back into the air. It touched down a second time in the grass just right of the runway, struck a runway light, veered back on the runway, crossed the runway, and departed the left side of the runway. The airplane then disappeared behind a building. Mode C position reporting data showed three more airplane positions in close proximity just east of the airport. All track data was lost at 1231. The airplane was about 1,800 ft. southeast of the approach end of runway 17 at T15 when track data was lost.

The accident site was in a treed pasture located on the east side of a gravel road that ran along the east side of T15, and 1 mile northeast of Marlin, Texas. The elevation of the accident site was 410 ft and the terrain was predominately flat.

The airplane impacted in a near vertical attitude and rested upright on its main landing gear and nose on a heading of 281°.

The airplane main wreckage was located about 340 ft east of the runway and consisted of the fuselage, both wings, main landing gear, engine, and empennage. The propeller and nose landing gear were located west of the airplane. A debris field that contained broken pieces of the windscreen, cowling, glareshield, and instrument panel was located between the airplane and the propeller. An additional area of debris that consisted of the left wing tip was located beneath a tree about 90 ft west-northwest of the airplane. A broken tree branch was located among the debris.



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The airplane's propeller was located 33 ft. west of the airplane main wreckage and was embedded about 1 ft into the ground. The propeller was broken torsionally at the flange. All three blades showed S-bending and chordwise scratches. A 4 ft by 4 ft impact crater was located beneath the propeller. Pieces of the windscreen were found in the crater. Two 6 in wide and 15 ft long impressions in the ground extended east and west from the impact crater. At the end of the east impression were pieces of the right wing tip and position light.

A second tree located 15 ft south of the impact crater showed several broken branches, which were found on the ground between the propeller and the tree.

An on-scene examination of the airplane revealed no preaccident malfunctions or failures that would have precluded normal operation.



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## Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N858JA
Model/Series:	TU206F	Aircraft Category:	Airplane
Amateur Built:			
Operator:	On file	Operating Certificate(s) Held:	None
Operator Designator Code:			

## Meteorological Information and Flight Plan

Conditions at Accident Site:	VMC	Condition of Light:	Day
Observation Facility, Elevation:	KACT, 498 ft msl	Observation Time:	11:51 Local
Distance from Accident Site:	25 Nautical Miles	Temperature/Dew Point:	30° C / 17.8° C
Lowest Cloud Condition:	Clear	Wind Speed/Gusts, Direction:	15 knots / , 240°
Lowest Ceiling:		Visibility:	10 miles
Altimeter Setting:	29.62 inches Hg	Type of Flight Plan Filed:	
Departure Point:	Houston, TX (TME)	Destination:	Waco, TX



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## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 Fatal	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 Fatal	<b>Latitude, Longitude:</b>	31.339384, -96.85044 (est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Bowling, David
<b>Additional Participating Persons:</b>	Christopher Wright; Federal Aviation Administration; Irving, TX Henry Soderlund; Textron Aviation; Wichita, KS Sean Dey; New Era Technology; Boardman, OH

**Note:**

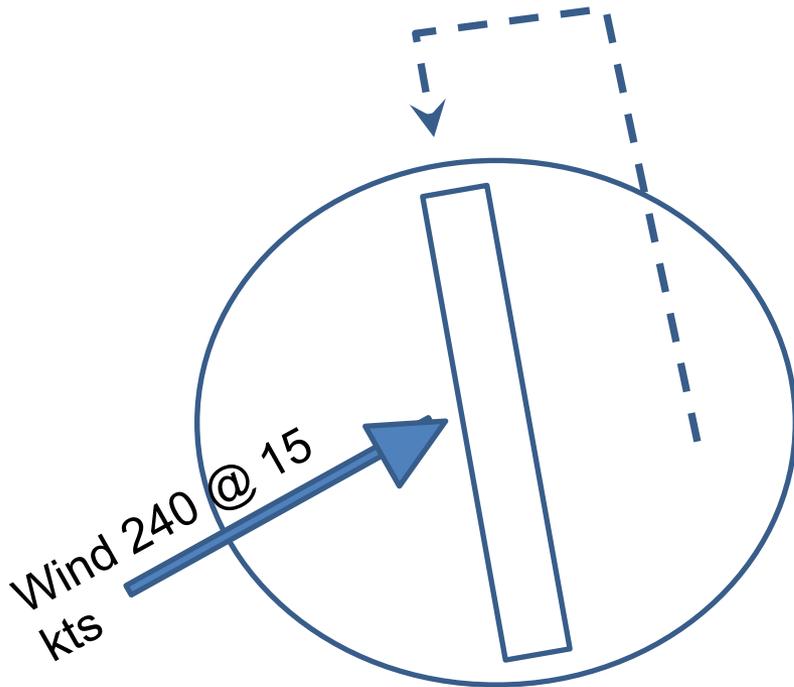


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**Wind Speed/Gusts, Direction:** 15 knots / , 240°  
**Runway:** 17, 3021 ft x 50 ft





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## **Discussion:**

Go Around Proficiency

Aircraft Familiarization

Stabilized Approach

Was airport familiar to pilots?

Personal minimums of the pilots?



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# Tower Impact Fatalities

## Discussion:

Should we draft an RP for Tower Hazard Recognition and Risk Mitigation?

### Discussion Notes from 1/2022:

Situational Awareness

Foreflight Hazard Advisor

Minimum Altitude and Distance Separation in Ops Procedures

Fly Patrols the same way every flight

Can Spidertracks be used to evaluate hazard? Manual Geofencing around Towers is available.

Hazards being briefed prior to the flight.

Brief how you are going around or above a tower as they are approaching the tower.

Drop Waypoints of new hazards along lines...these can be shared within the organization. (Non charted hazard database)

Deadhead minimum altitudes as per the ops manual

Minimum altitudes in the patrol reporting form...lack of attention during deadhead flights

Radar Altimeter (are GA versions affected by 5G?)

Look at obstacles hit, and determine single pilot vs. dual crew and familiarization with the area...how often had the crew flown the line or in the area? What was the weather during the incident – Clear, overcast and/or gray?



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## Birdstrike Prevention and Mitigation





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## FLOAT PLANES - NOTICED THEY QUIT HITTING BIRDS

In the early 1990's float plane operators in the Pacific Northwest, British Columbia and Alaska began reporting that along with the improved recognition and increased lamp life, bird strikes were dramatically reduced by pulsing their landing and taxi lights.

Commercial float plane operate in waterfowl habitat where there are no wildlife mitigation methods employed. Bird strikes are mitigated by having the aircraft more apparent.



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## RP Updates

### ***Revisions For Approval:***

2006-02 Preferred Equipment Fit (Added ADS-B)

2006-03 Captain Minimums (Added reference to Ab Initio Training)

2009-01 Pilot/Observer Training (Removed Links, Minor Text Editing)

### ***For Review with Revisions Recommended by Group:***

2006-01 Preferred Maintenance Guidelines

2008-01 Flight Following

2013-01 Fatigue Management

***Do Tower Hazards merit an RP? - Yes***



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## Leading Indicators/Hazard Shares



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## Other Topics for Current Discussion and Future Topics of Interest/Guest Speakers

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# Other and Future Topics

- Next Meeting in person or virtual for Aerial Patrol Group?

UPCOMING MEETING DATES	LOCATION
May 18 & 19, 2022	City Club at River Ranch, Lafayette, LA
October 12 & 13, 2022	Four Points by Sheraton, French Quarter, New Orleans, LA

- Other Discussion Topics for the Current Meeting
- Any participants to be added to distribution list?
- General Meeting Information for tomorrow

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# Aerial Observation Committee

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American Clean Power Association – Wind Turbines

Accidents and Incidents

Cessna 206 Pipeline Fatality – Review and Discussion

Tower Impact Fatalities

Birdstrike Prevention and Mitigation

RP Updates



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## American Clean Power Association – Wind Turbines

Tom Vinson and Hilary Clark, American Clean Power

- New wind turbines are increasingly over 500 ft tall
- Planning and permitting is performed on the state and local level
- There is some flexibility in where turbines can be placed, but placement is determined by numerous factors – wind, land ownership, setbacks, population density, geology, etc.
- 25 developers do 95% of the work
- Recommend information sharing briefing to be distributed to trade association members for awareness to encourage voluntary guidelines
- Summary materials will be created by HSAC Aerial Observation Committee and shared with American Clean Power Association, including availability for presentation.



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## Accidents and Incidents

### **Cessna 206 Pipeline Fatality**

Bounce on landing, failed go around and response, results in dual fatality.

Relatively low time pilots, 15kt crosswind, narrow runway'

Currently Preliminary NTSB report, much more to be learned.

- Stabilized Approach
- Go Around Proficiency
- Aircraft and Airport Familiarization
- Personal minimums

### **Tower Impact Fatalities in 2021**

Drafting RP for Obstacle Hazard Avoidance: Hazard assessment, pre-flight hazard briefing, hazard advisor, minimum separation, consistently flown route, training procedures, communication between crew



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## **Birdstrike Prevention and Mitigation**

Pulse lights are most effective

Anecdotally like bulk of birdstrikes occur during maneuvering

Consensus is not to take drastic maneuvers to avoid

## **Updates and Revisions of RPs**

2006-02 Preferred Equipment Fit (Added ADS-B)

2006-03 Captain Minimums (Added reference to Ab Initio Training)

2009-01 Pilot/Observer Training (Removed Links, Minor Text Editing)

## **For Further Review with Revisions Recommended by Group**

2006-01 Preferred Maintenance Guidelines

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## **Future Meeting Topics**

NASA ASRS Reporting Team; ATC regarding pipeline coordination, LOA, etc.