FDM Working Group

HSAC
Safety Through Cooperation

Agenda

* Anti Trust Statement
* Welcome
* R-IAT Update
* Event Review
  * Birdstrike Mitigation
  * GM Worksheet
  * 690-5 Parameter update
* TCAS II / RA Discussion

HSAC
Safety Through Cooperation

Participants

* Tim Guidry, Chevron
* Mitch Olshansky, FAA
* Bob Herak, FAA
* Tasha Louviere, RLC
* Jacob Schexnayder, PHI
* Mike Hanson, BSEE
* Joao Arantes, BMT
* Jason Melancon, RLC
* Jim Evans, HeliOffshore
* Mike Turner, PHI
* David Geldmacher, Bristow
* Amanda Roberts, Bristow

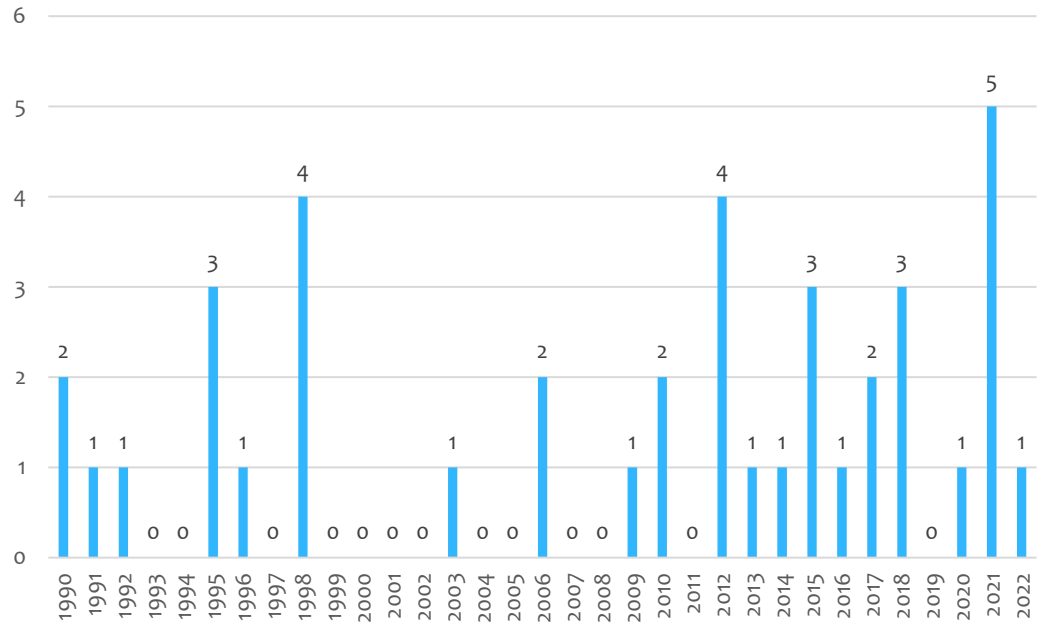
R-IAT and InfoShare

* R-IAT Next meeting scheduled for Nov 10th
* Contacts:
  * John Walberg, FAA
    john.Walberg@faa.gov
  * Ed Stockhausen, Metro Aviation
    estockhausen@metroaviation.com

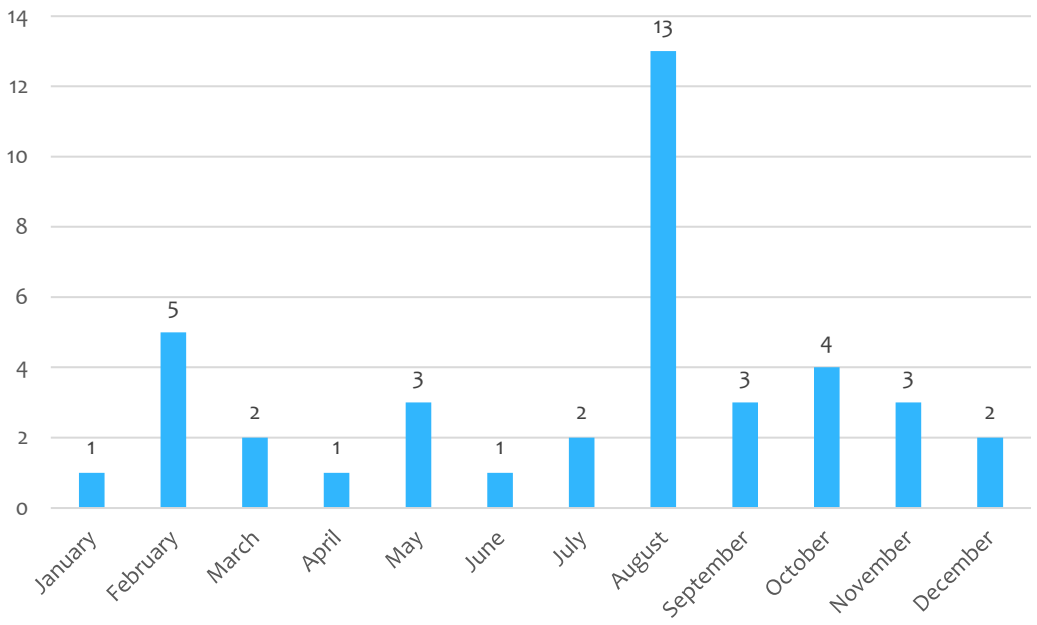
* InfoShare Next meeting scheduled for Nov 1 – 4 Bellevue, WA
* Contact:
  * Sean Mulholland
    sean.Mulholland@gmr.net

KHUM Birdstrikes

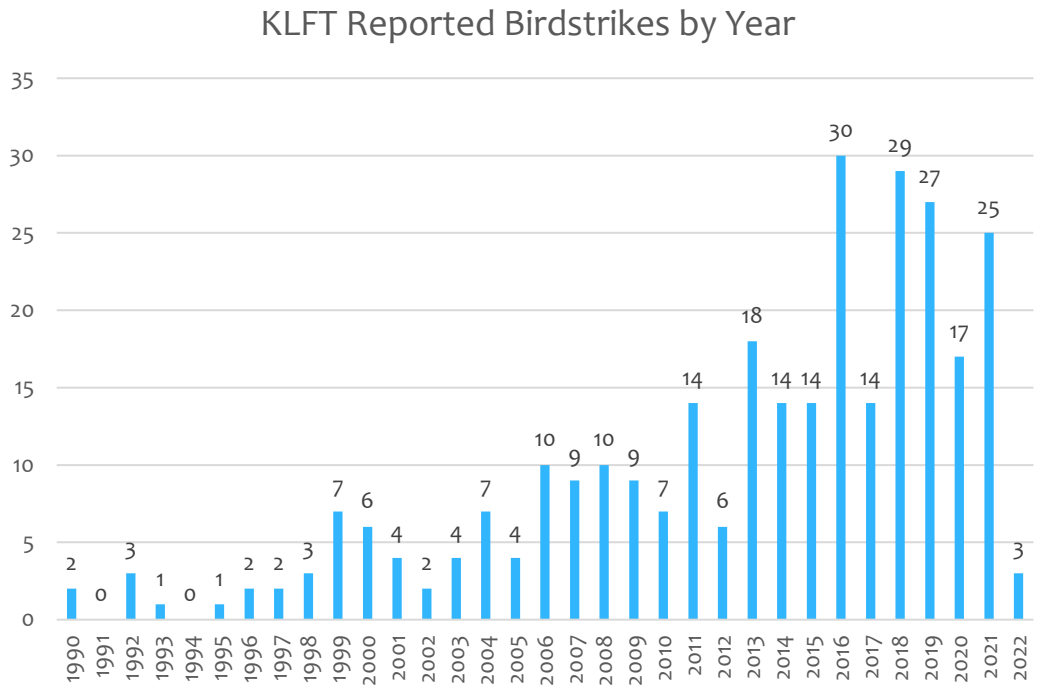
KHUM Reported Birdstrikes by Year

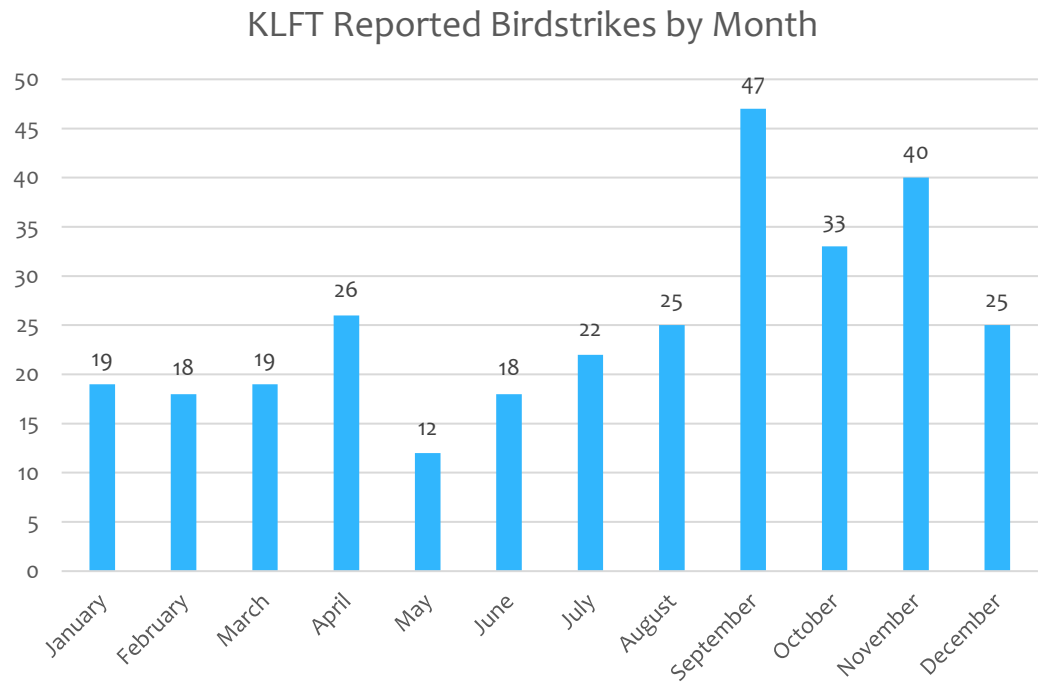


KHUM Reported Birdstrikes by Month

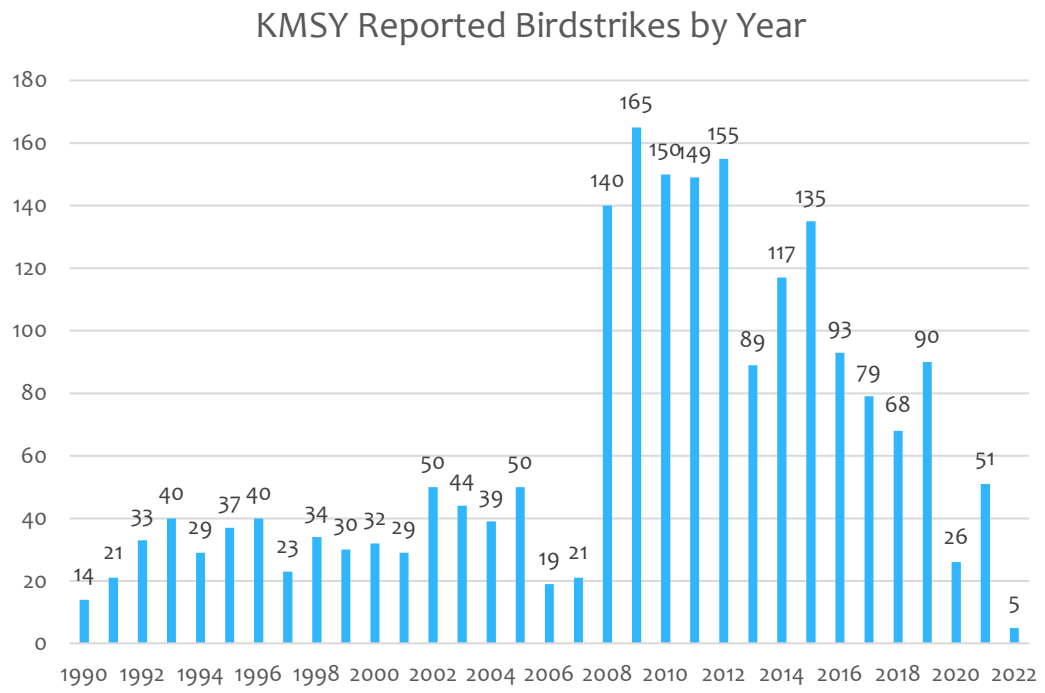


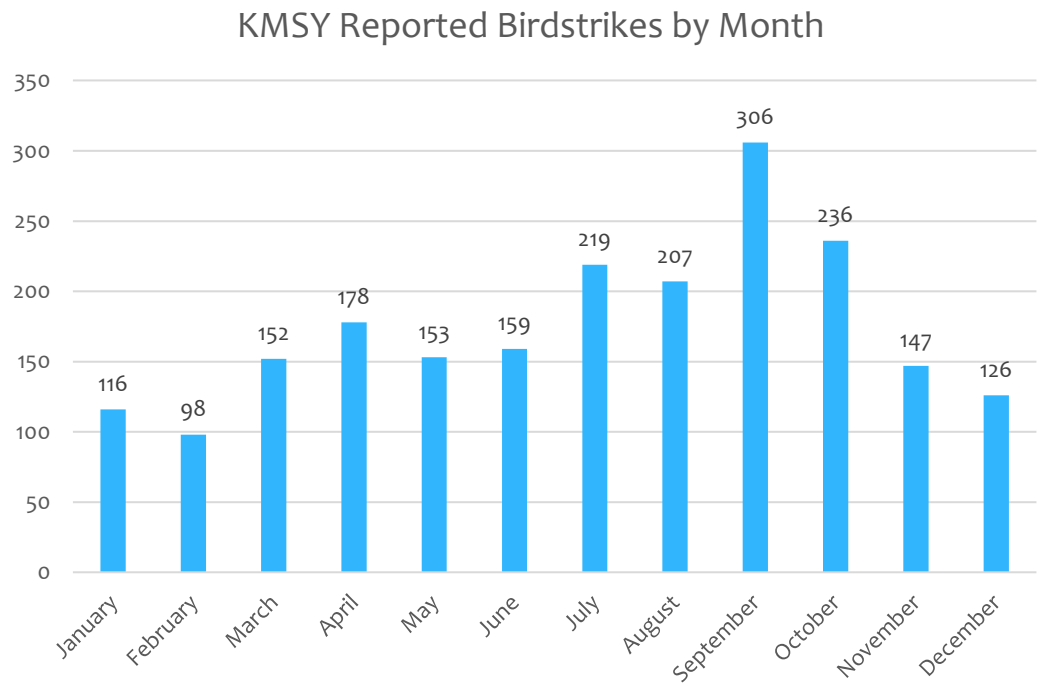
KLFT Birdstrikes



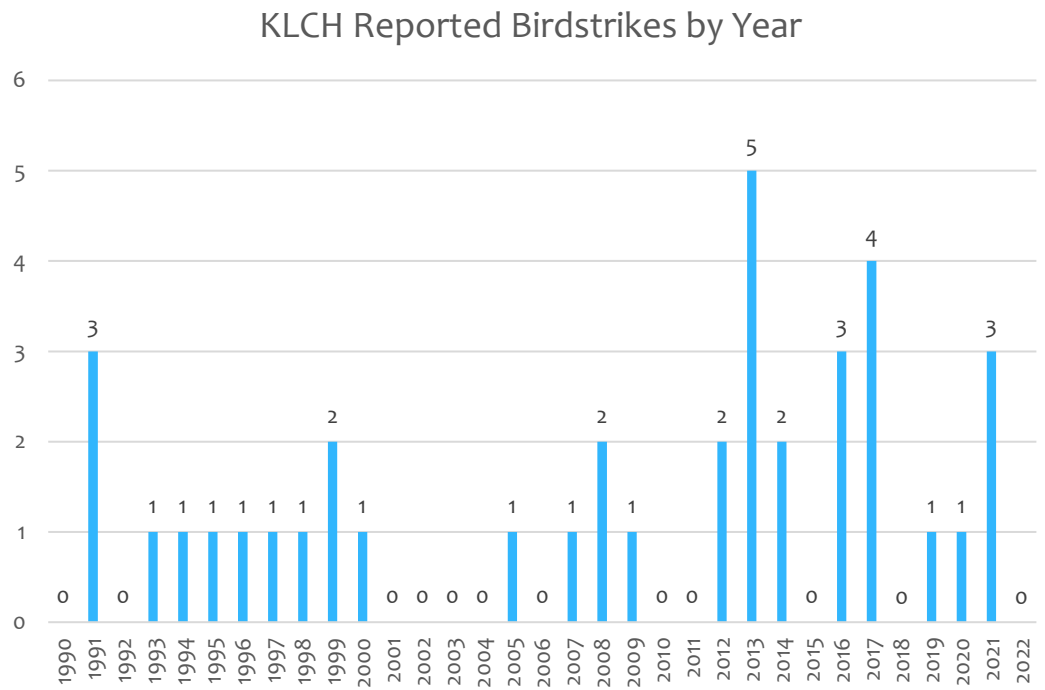


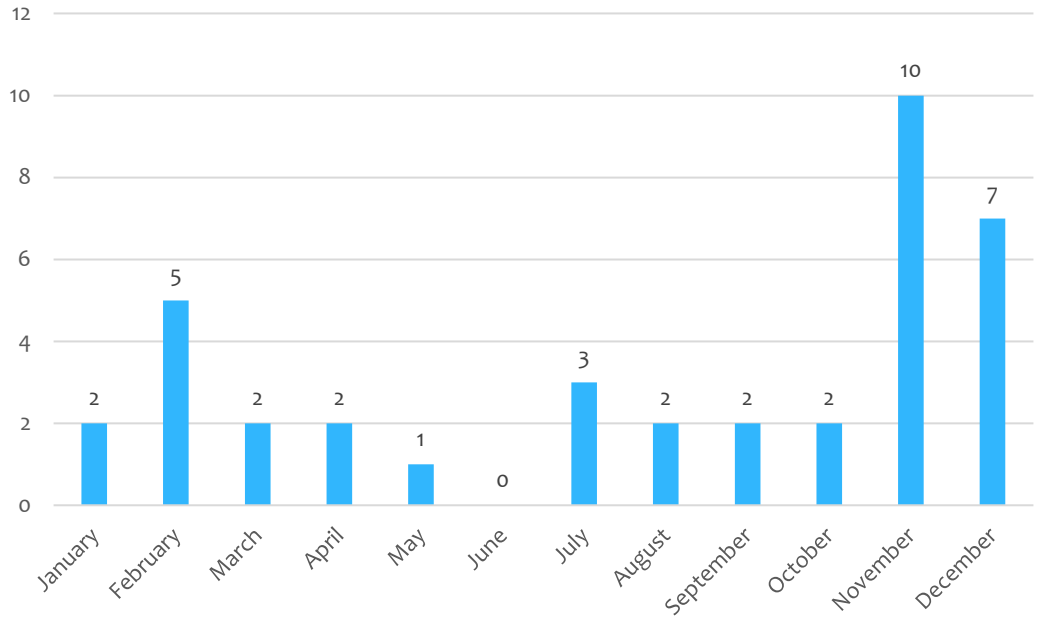
KMSY Birdstrikes



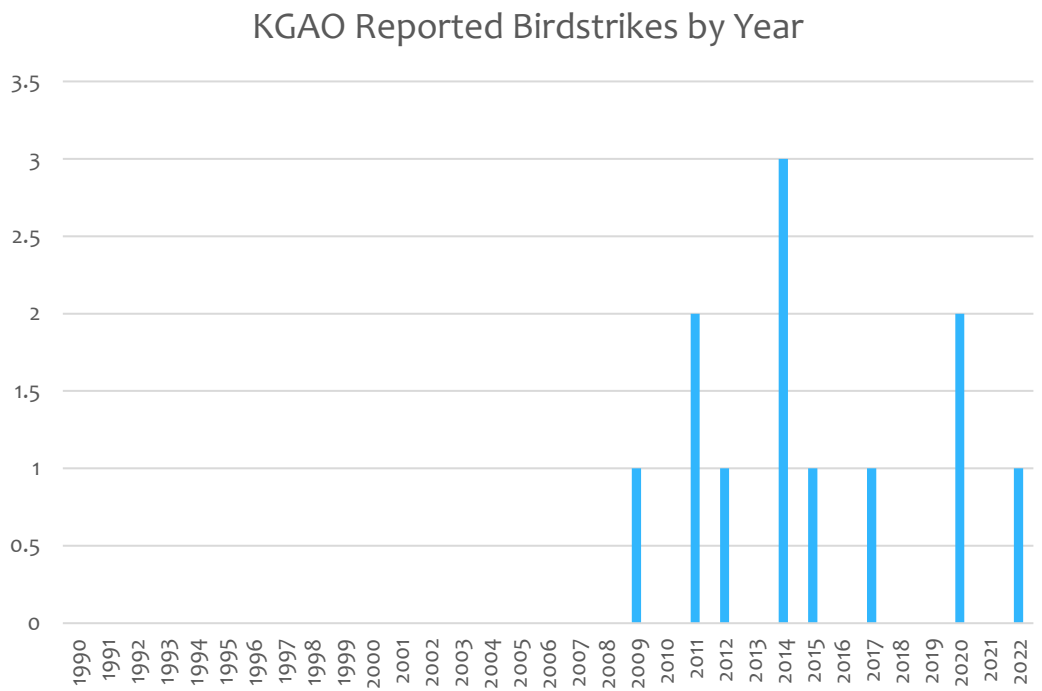


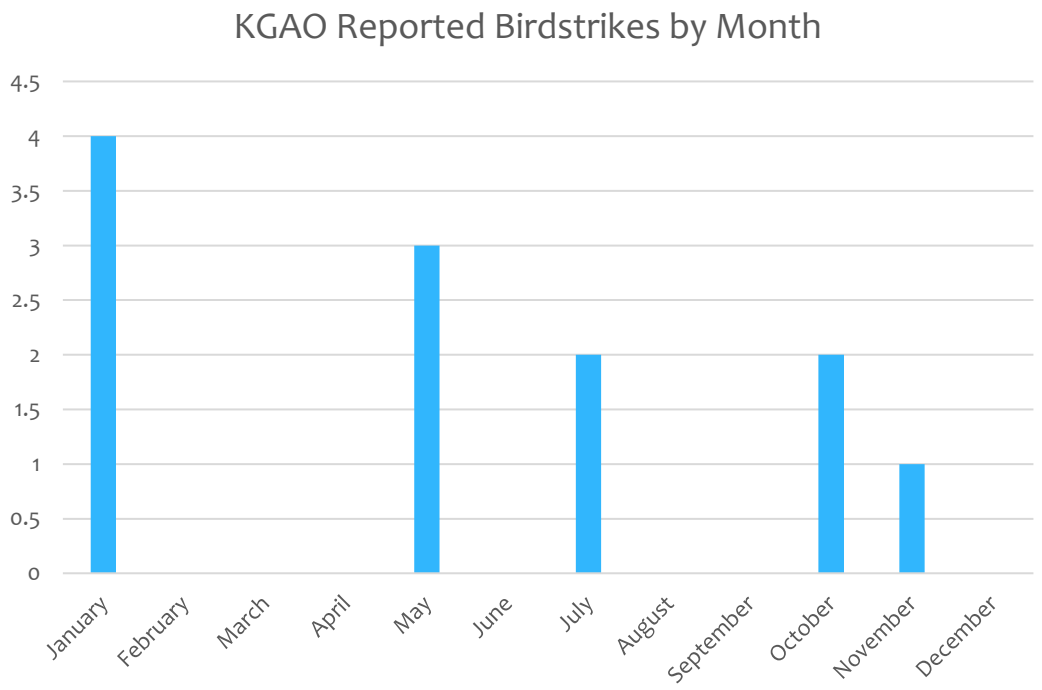
KLCH Birdstrikes





KGAO Birdstrikes





Birdstrike Monitoring

* In addition to HSAC RP 2010-3 Bird Strike Avoidance
* Using roll rates as indicator of potential collision/close call with birds.
* Roll rate limits set per fleet and mission.

GM2 SPA.HOFO.145 Events

(Proposed Helicopter Specific)

Event Name		
Ground-taxi, power high	High airspeed with power	Torque split
Ground-taxi, speed high	High airspeed without power	Rotor speed outside limits – power
Ground-taxi, pedal excessive	High airspeed at low altitude *	Rotor speed high— power off
Ground-taxi, lateral acceleration high	Low airspeed at altitude*	Fuel content low
Ground-taxi, longitudinal acceleration high	Low airspeed on departure*	HTAWS / EGPWS alert triggered
Ground taxi, excessive cyclic position	Altitude high	TCAS TA or RA
Ground taxi, excessive rate of cyclic	Rate of climb high*	Airspeed Low
Ground taxi, excessive roll	Rate of descent high*	Groundspeed change high*
Ground-taxi, yaw rate high	Rate of descent high at low speed *	Groundspeed high*
Hover, yaw rate high*	Minimum altitude in autorotation	Pitch attitude excessive
Air-taxi, speed high*	Excessive pitch attitude*	Pitch rate high*
Pitch attitude limits*	Excessive pitch rate *	Roll attitude high*
Roll attitude limits*	Excessive roll attitude *	Roll rate*
Rotor brake applied early	Excessive roll rate *	Altitude excessive*
Gear extension and retraction — airspeed	Excessive yaw rate *	Rate of descent on approach high*
Gear extension – distance	Excessive cyclic input	Heading difference high*
Gear extension & retraction — height	Excessive pedal input	Glideslope deviation
Cabin heater on (take-off and landing)	Excessive vertical acceleration*	Localiser deviation
Heavy landing *	Outside air temperature high	Go-around
Offshore landing with tailwind landing	One Engine Inoperative	Stability Augmentation System (SAS) / autopilot (AP) disengaged
High groundspeed prior to touchdown*	Torque limits exceeded	SAS/AP disengaged on take-off
Rig take-off, rotation height outside TDP limits		Higher modes engaged out of limits
Rig take-off, pitch attitude outside limits		
Rig take-off, pitch rate outside limits		

Legend

- Ground (onshore and offshore)
- Flight – take-off and landing
- Flight - speed
- Flight - height
- Flight – attitude and controls
- Flight - general
- Flight - approach
- Flight - automation

Traffic Collision Avoidance System Traffic or Resolution Advisory (TA/RA)

* How many aircraft are fitted with TCAS II?
* How are you currently tracking/trending TA/RA events?
* Follow up for January meeting.

Questions

* Thank you and Safe travels!