

Orlando Flight Standards District Office



Federal Aviation
Administration

Autorotation Accident / Incident Review

Presented to: 2015 HAI Heli-Expo

By: Robert Jex, FPM

Date: March 4, 2015



Acknowledgements:

- **Nick Mayhew, GM, Bristow Academy**
- **Phillip Wynands, Dir. of Std's, Bristow Acad.**

- **Rotor Safety Challenge project**
 - WINGS credit available!



NTSB Accident Database

Autorotation Accidents 2013 – Present Nationwide reported data



NTSB database at a glance

- **1890** ttl “autorotation” acc. reports from 1965
- **94** “autorotation” accident reports from 2013
- Vast majority were **non-fatal**
- **2 fatal** autorot’n acc’s since start of 2013
 - 3/15/13 – S-76, Grand Lakes, LA (3 fatal)
 - 12/29/14 – R-22 Beta – Lake Worth, FL



A-R Acc's in Florida, 2013-14

- 2/6/13 – Hiller UH-12B, Merritt Island
- 3/19/13 – Schw 269C, Titusville
- 2/3/14 – Hu 369, Naples
- 7/21/14 – Schw 269C, Titusville
- 12/29/14 – R-22 Beta, Lake Worth (**Fatal**)



A-R Acc's by Model from 2013

- R-22 – 14
- Bell 206 – 13
- AS-350 – 10
- Sch / Hu 269 – 8
- Hu / MD 369 – 8
- R-44 – 7
- Bell 47 – 5
- Rotorway Exec – 5
- All others – 4 or less



ORLANDO FSDO

Flight Training Accident & Incident Analysis



ACCIDENT & INCIDENT ANALYSIS

The Orlando FSDO has carefully analyzed **437** flight training accidents & incidents of all aircraft types occurring within the district since the beginning of FY 1999 to determine:

Causal Factors

Trends

Training Deficiencies

Airworthiness Issues



ORLANDO FSDO ACCIDENT & INCIDENT SUMMARY

FLIGHT TRAINING ACC'S & INC'S (All Types)

<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
60	38	24	28	22	18	12
<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
18	25	30	44	24	32	33
<u>2012</u>	<u>2013</u>	<u>2014</u>				
17	17	25				



ORLANDO FSDO ACCIDENT & INCIDENT SUMMARY

MECHANICALLY CAUSED FLIGHT TRAINING ACC' & INC'S (All Acft Types)

<u>2012</u>	<u>2013</u>	<u>2014</u>
13	8	9



Helicopters in Orl FSDO

Flight Training Accidents & Incidents

Helo Hard Landing, Hover, and A-R Events (Pilot error)

<u>FY</u>	<u>Total Events</u>	<u>Helo Events</u>	<u>Ratio</u>
2007	30	5	17 %
2008	44	3	7 %
2009	24	2	8 %
2010	32	3	9 %
2011	33	2	6 %
2012	17	3	18 %
2013	17	0	0 %
<u>2014</u>	<u>25</u>	<u>2</u>	<u>8 %</u>
	222	20	9 %



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Mechanically Caused Accident / Incident Review

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AIRWORTHINESS INITIATIVE

The Orlando FSDO continues to place special emphasis on the airworthiness compliance of flight training aircraft.

Increased Inspections

Analysis of mechanically caused flight training accidents and incidents



MECHANICALLY CAUSED ACCIDENT & INCIDENT DETAILED SUMMARY

OCCURRENCE

CAUSE

FY-13 HU-269C: Emerg. autorotation

Engine failure

FY-14 HU-269C Engine failure

Pwr loss; Unk cause



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