

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

After consideration of the evidence gathered during the investigation of the accident involving the R44, N514CD, in Rowlett, Texas (CEN22FA151), the NTSB Investigator in Charge proposed changes to the RHC Flight Training Guide that could help prevent a reoccurrence of this type of accident.

One suggestion was to emphasize the importance of early recognition of Vortex Ring State (VRS) and to initiate the recovery maneuver at the first indication of VRS without allowing an excessive descent rate to develop. Another suggestion was to warn against large, abrupt control movements when performing the VRS recovery maneuver.

A third suggestion was to move the introduction and training for VRS to a later lesson in the training guide to ensure the student was capable of controlling the helicopter while performing the recovery maneuver.

The first two have been addressed by revising the description of the maneuver to enter VRS to include the following instructions (in bold type) **“Do not allow the condition to develop beyond the initial indications and avoid large control inputs”** (copies of revised pages attached). Also, RHC Safety Notice SN-22, which pertains to VRS, has been revised. The Safety Notice now states “A recovery should be initiated as soon as VRS is suspected. Early recognition and immediate recovery by moving the rotor out of its own downwash is essential. Large control inputs are not necessary and should be avoided.” Copies of the original version and the revised version of the Safety Notice are attached.

Concerning the third suggestion, Robinson Helicopter Company (RHC) believes that it is important for a student to have a good understanding of VRS prior to

first solo. With proper ground instruction, followed by inflight training under the guidance of the instructor, RHC believes VRS training is safe, regardless of the recovery method used, provided the latest guidance is adhered to: early recognition, immediate recovery, and no large control inputs.

Thank you and Best regards,

[REDACTED]

Robinson Helicopter Company

[REDACTED]