HOT CLIMATE COOL DOWN PROCEDURE

RHC recommends inserting this sheet at the end of Section 4 of the R22, R44, R44 Cadet, and R44 II Pilot's Operating Handbooks.

Also distribute to all pilots flying these aircraft.

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Engine valves with excessive deposits, wear, and leaks have been reported by operators in hot climates. Engine oil can coke on valves (form solid deposits) if engine is shut down with valves too hot (valves are cooled by fuel and airflow while engine is running).

Normal cool down procedure specifies operating at 60-70% RPM for R44-series or 70-75% RPM for R22-series until a drop is seen on CHT gage then reduce to idle, disengage clutch, wait 30 seconds, and shut down using mixture control.

If ambient temperature is above 100 °F (38 °C), an extended cool down is recommended. Operate at cool down RPM for at least 1 minute before reducing to idle. Operators with mixed fleets may choose to implement a 2-minute cool down for commonality with typical turbine engine cool down times.

Unapproved fuel is another suspected contributor to valve problems. Ensure lab report accompanying bulk fuel deliveries indicates correct fuel specification. Cut or fold along this line