



# Aviation Investigation Final Report

|                                |                            |                         |             |
|--------------------------------|----------------------------|-------------------------|-------------|
| <b>Location:</b>               | ORCUTT, California         | <b>Accident Number:</b> | LAX84FA395  |
| <b>Date &amp; Time:</b>        | July 15, 1984, 15:30 Local | <b>Registration:</b>    | N4030A      |
| <b>Aircraft:</b>               | HILLER UH-12E              | <b>Aircraft Damage:</b> | Substantial |
| <b>Defining Event:</b>         |                            | <b>Injuries:</b>        | 2 None      |
| <b>Flight Conducted Under:</b> | Part 91: General aviation  |                         |             |

## Analysis

MAINTENANCE HAD JUST BEEN PERFORMED & THE CREW WERE BEGINNING A TEST FLT TO CHECK THE TRACKING OF THE MAIN ROTOR BLADES. WHILE THE PLT WAS HOVER TAXIING, HE LOST COLLECTIVE CONTROL & ROTOR RPM DECREASED. HOWEVER, HE WAS ABLE TO MAKE A ROLL-ON LANDING, BUT THE HELICOPTER ROLLED OVER & WAS DAMAGED. AN EXAM OF THE LOWER COLLECTIVE CENTER CONTROL HOUSING DISCLOSED THAT THE TERMINAL PIN WAS PLACED THRU THE OUTER HOUSING, BUT WAS INSTALLED BENEATH THE TERMINAL TEE RATHER THAN THRU THE TEE. THE MANUAL EMPHASIZES THAT THE PIN MUST PASS THRU THE TERMINAL TEE. THE MANUAL HAD NO PROVISIONS TO ASCERTAIN THAT THE PIN HAD BEEN INSTALLED THRU THE TERMINAL TEE.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

### Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: HOVER

#### Findings

1. (C) ROTORCRAFT FLIGHT CONTROL, COLLECTIVE CONTROL ROD - DISCONNECTED
2. (C) MAINTENANCE, REPLACEMENT - IMPROPER - COMPANY MAINTENANCE PERSONNEL

3. (C) CONDITION(S)/STEP(S) INSUFFICIENTLY DEFINED - MANUFACTURER

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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

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Occurrence #4: ROLL OVER

Phase of Operation: LANDING

## Factual Information

### Pilot Information

|                                  |   |  |                  |
|----------------------------------|---|--|------------------|
| <b>Certificate:</b>              | Commercial  | <b>Age:</b>                              | 44, Male         |
| <b>Airplane Rating(s):</b>       | Single-engine land; Single-engine sea; Multi-engine land  | <b>Seat Occupied:</b>                    | Right            |
| <b>Other Aircraft Rating(s):</b> | Helicopter  | <b>Restraint Used:</b>                   |                  |
| <b>Instrument Rating(s):</b>     | Airplane  | <b>Second Pilot Present:</b>             | Yes              |
| <b>Instructor Rating(s):</b>     | Airplane single-engine  | <b>Toxicology Performed:</b>             | No               |
| <b>Medical Certification:</b>    | Class 2 Valid Medical--no waivers/lim.  | <b>Last FAA Medical Exam:</b>            | January 27, 1984 |
| <b>Occupational Pilot:</b>       | Yes   | <b>Last Flight Review or Equivalent:</b> |                  |
| <b>Flight Time:</b>              | 9000 hours (Total, all aircraft), 2000 hours (Total, this make and model), 7900 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 50 hours (Last 30 days, all aircraft) |  |                  |

## Aircraft and Owner/Operator Information

|                                      |                                |                                       |                 |
|--------------------------------------|--------------------------------|---------------------------------------|-----------------|
| <b>Aircraft Make:</b>                | HILLER                         | <b>Registration:</b>                  | N4030A          |
| <b>Model/Series:</b>                 | UH-12E UH-12E                  | <b>Aircraft Category:</b>             | Helicopter      |
| <b>Year of Manufacture:</b>          |                                | <b>Amateur Built:</b>                 |                 |
| <b>Airworthiness Certificate:</b>    | Restricted (Special)           | <b>Serial Number:</b>                 | 5147            |
| <b>Landing Gear Type:</b>            | Skid                           | <b>Seats:</b>                         | 2               |
| <b>Date/Type of Last Inspection:</b> | June 21, 1984 100 hour         | <b>Certified Max Gross Wt.:</b>       | 3100 lbs        |
| <b>Time Since Last Inspection:</b>   | 23 Hrs                         | <b>Engines:</b>                       | 1 Reciprocating |
| <b>Airframe Total Time:</b>          | 1602 Hrs                       | <b>Engine Manufacturer:</b>           | LYCOMING        |
| <b>ELT:</b>                          | Not installed                  | <b>Engine Model/Series:</b>           | VO-540-02       |
| <b>Registered Owner:</b>             | O'RIELLY'S ECONO LEASING, INC. | <b>Rated Power:</b>                   | 305 Horsepower  |
| <b>Operator:</b>                     | SAN FRANCISCO & FESNO LAND CO  | <b>Operating Certificate(s) Held:</b> |                 |
| <b>Operator Does Business As:</b>    |                                | <b>Operator Designator Code:</b>      |                 |

## Meteorological Information and Flight Plan

|   |                                  |   |          |
|---|----------------------------------|---|----------|
| <b>Conditions at Accident Site:</b>     | Visual (VMC)                     | <b>Condition of Light:</b>                  | Day      |
| <b>Observation Facility, Elevation:</b> |                                  | <b>Distance from Accident Site:</b>         |          |
| <b>Observation Time:</b>                |                                  | <b>Direction from Accident Site:</b>        |          |
| <b>Lowest Cloud Condition:</b>          | Clear                            | <b>Visibility</b>                           | 25 miles |
| <b>Lowest Ceiling:</b>                  | None                             | <b>Visibility (RVR):</b>                    |          |
| <b>Wind Speed/Gusts:</b>                | 5 knots /                        | <b>Turbulence Type Forecast/Actual:</b>     | /        |
| <b>Wind Direction:</b>                  | 335°                             | <b>Turbulence Severity Forecast/Actual:</b> | /        |
| <b>Altimeter Setting:</b>               |                                  | <b>Temperature/Dew Point:</b>               | 24°C     |
| <b>Precipitation and Obscuration:</b>   | No Obscuration; No Precipitation |   |          |
| <b>Departure Point:</b>                 |                                  | <b>Type of Flight Plan Filed:</b>           | None     |
| <b>Destination:</b>                     |                                  | <b>Type of Clearance:</b>                   | None     |
| <b>Departure Time:</b>                  | 15:29 Local                      | <b>Type of Airspace:</b>                    | Class G  |

## Airport Information

|                             |   |                                  |                |
|-----------------------------|---|----------------------------------|----------------|
| <b>Airport:</b>             |   | <b>Runway Surface Type:</b>      |                |
| <b>Airport Elevation:</b>   |   | <b>Runway Surface Condition:</b> |                |
| <b>Runway Used:</b>         | 0 | <b>IFR Approach:</b>             | None           |
| <b>Runway Length/Width:</b> |   | <b>VFR Approach/Landing:</b>     | Forced landing |

## Wreckage and Impact Information

|                            |        |                             |                            |
|----------------------------|--------|-----------------------------|----------------------------|
| <b>Crew Injuries:</b>      | 1 None | <b>Aircraft Damage:</b>     | Substantial                |
| <b>Passenger Injuries:</b> | 1 None | <b>Aircraft Fire:</b>       | None                       |
| <b>Ground Injuries:</b>    | N/A    | <b>Aircraft Explosion:</b>  | None                       |
| <b>Total Injuries:</b>     | 2 None | <b>Latitude, Longitude:</b> | 34.910221,-120.230575(est) |

## Administrative Information

**Investigator In Charge (IIC):** Llorente, A  
**Additional Participating Persons:** JOHN E KNOEBBER; VAN NUYS , CA

**Original Publish Date:**

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.ntsb.gov/Docket?ProjectID=23977>

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