

Accident 5

29/3, 37/5, 44/2, 8

The CPs outline the accidents one at a time:
lets review them quickly:

April 80 2 variezes - 1 engine failure - off field
gear off - pilots ok
I sucked water on take-off - no drain
fuel sys integrity non-standard fuel system - off field
no gear down even water Ripped off mains - nose gear up! - Pilots OK

July 80 Couple of Vario clones crashed - non-standard
cavards - 1 death 1 injured - no all flying control
Don't modify.

Oct 80

Pattern procedure

Illinois builder 2nd crash short of the
runway - seatbelt ~~was~~ open - throws forward
and out - Low/slow downwind, sharp base - crosswind

Rear stick/health

Pilot heart attack - no rear seat stick - 2 deaths

sideslipping pattern

Pilot sideslipped on final - went inverted
Rudder/winglet contours a problem in Vario only
Death

land ASAP
fuel weight

Guy ran low on gas, overflowed airport - landed
2 miles short - gear off - pilot ok

vents in pants

Guy blew 2 ply tire, braked hard and ²⁰ minutes
later melted gear near brakes

Nov 80

pre-trim syst.

Guy's elevator control disconnected - used power
later foot on balance weight - dropped 20' to ground

Low pass to Pilot's house - hit tree
2 deaths

April 81

Tether fuel caps
(caps are outboard
long & prop?)

Guy threw a cap through prop
Later had vacuum on tank - no
change to other tank - forced landing
gear off - nose up - stop in 300' off airport
Tethers fuel caps.

July 81

~~1977-1980~~ 1977-1980 varieze 2.58 accidents/
(average homebuilt 3.93/100) ¹⁰⁰/_{1/c}

no structural failure ^{1.55 fatal vs}
^(1.07 average)
100,000 hrs. no fires

Oct 81

Take off through puddles - slowed
to right - tried to take off - low Airspeed
aborted - lost nose gear - Fuel lines
bent out ~~at~~ under gear - ripped off.
Fuel everywhere

Gas Cap - slight power loss - sucked all
fuel out of tank - forced landing on LSTF
- Red tape
2nd time - fuel vent blocked

Jan 82

Take off 4" up to 4" in ice & snow
first Canopy frosted over in ^{frost} dark dawn
flew into tops of trees inverted dead

Shut off fuel
to fire!

Caught fire at run-up - taxied home
unknowing - failed to shut off fuel when
saw smoke - tried to put out fire
with ~~con~~ extinguisher - total destruction

Apr 82

Boat spinner - other ext. incompat
Threw prop - no problem

July 82

Wet to dry weather - lost prop

~~105.~~

nose wheel slippin - lost nose gear

Oct 82

Box canyon East of Salt Lake

270° roll barrel roll - into lake

aerobatics ~~to~~ engine quit in loop
a/c slid 2 feet - torque bar - back injury

Downwind take-off uphill - abort

Test:

Full aft stick, full rudder idle = 950-1250fpm
Can't survive that!

Old exhaust broke, broke prop
engine ripped off fell into cowl -
forced landing on road ok

Jan 83

Bruce Tiftt - wind shear at Santa Paula
hit roof etc - Crash pulled seat belts
out of fuselage Tiftt thrown clear

July 83

1. Guy failed to clear ridge - hit trees
2. another hit wires on river
3. Low over Florida ocean - possible brain
4. Turner

July 83

Possible canopy separation on cross-wind.

Oct 83

Possible flat spin - aft C.G.

Sugar sand in tank

Turned to shore

Raised gear for best glide

Switched tanks

Gave up on restart

Obtained best glide from tests

Picked out field and kept it in sight.

Jan 84

A/c with aft CG may have spun into beach.

Australian hit power line - into lake
2 deaths

Cowtire pilot ^{ion-current} climbed steeply on take-off - rolled 90° then inverted

14 hour V-FZ ~~to~~ Roll near ground - hit ground & killed

Pilot took off away from storm - 45 k tailwind

500' overcast - sleet - rain filled

Total disorientation - outclimb storm?

Apr 84

Canopy Open - System disabled. Pulled canopy closed
- flew A/C

July 84

Canopy opened - no safety catch.
Both hands - Dead. $\checkmark E2$

Long E2 on takeoff - engine quit 180° turn to runway
landed last $\frac{1}{3}$ - ran off and
possibly nose bores hit mag switches in
head rest.

Oct 84

South African L. E2 - took off with
quartering tailwind 1700' - rough
strip - slow to gather speed

~~Jan 85~~ Apr 85

Florida power lines at 140ft
Clipped off gear & left winglet
Flew to gravel & landed ^{no} gear down
& speed brakes - bruises from seat belt

Conn. Pilot forgot to switch tanks
in new A/C - flew too low pattern
and landed ^{short} Back injury

~~July 85~~ Oct 85

Norwegian noted slight vibration
in an altitude test - non-return
prop had fractured - safe landing

Jan 86

1. Low Flying Buzzing Aerobatics
75% fatal Long E2
7 of 11 total Long E2

2. Engine / Prop Failure
- not AEP.

Long E2 100' RT of centerline
flipped over - pilot - neck injury - pax none

VEZ Single vent line blocked by
mud & amber - crash coming down
off - broken leg.

Guy did Taxi test in VEZ with
only canard on - raised up -
prop hit - turned him over
bounced on gear and landed on
second turn crushed top - neck injury

Apr 86

Jan 80 Buzzing etc 75% Long E2 fatal
Oct 82 Box canyon in Utah, Barrel roll into lake, aerobatics - low alt. July 83 - Failed to clear ridge, hit wires on river, low over Florida

Jan 84 Australian into power line - 14 hour VEZ - rolled near forest killed

Caution Jan 84 500' overcast failed to get to runway fuel night

Apr 80, Oct 80 ran out Oct 83 - Sand in tank

Oct 81 - Gas cap gone - sucked fuel out

Apr 85 - forgot to change tanks before landing - Jerry too

Jan 86 - Vent line blocked - wing tear off - broken leg

Caution Long E2 suspect. to Prop Damage

Apr 81 flew cap through Prop, Oct 81 too

Oct 85 prop failed - safe landing

Canopy

July 83 - Canopy separation?

Apr 84 - Canopy open one hand for it - landed ok, no warning system working

July 84 " " two hands - killed

Caution never rotate past canard on horizon

Jan 84 Low time - no current - rolled 90° on takeoff - inverted

Jan 86 - never do ground tests with canard only - 1 1/2 flips nearly fatal

Caution - A/c can get higher than you can take

Jan 84 Total disintegration - out climb a storm

Caution - Pitch trim change

Caution avoid dropping A/C on tail

Bill Reid - just leaning on Prop leave prop

Jerry Sloan - moving A/C up slope parallel to ground

Emergency Procedures

Fire in flight

If electrical turn off elect.

If fuel turn off both

Land ASAP

Jan 82 Fire on ground - never fuel Texas crash - never shut off fuel?
Landing short Apr 81 - Powerline - kept flying w/ part wing
and gear down & only
brakes

Oct 80 VZ - seatbelt open?

Oct 84 - engine quit - fuel back in very

Engine Failure

mixture rich

mags both

switch tanks

Boost pump on
attempt restart

Turned to shore
Raised gear for best glide
switched tanks
Out restart field kept it
Picked out field kept it
in sight

Glide 70-75 knots 77 @ 1000' b/s

85 at 1200

91 at 1400' b/s

Shut off fuel

Plan for $\frac{1}{2}$ to $\frac{1}{3}$ down runway etc

15 to 1 with prop stopped

17 to 1 with wind up

Can't survive full aft stick mush! 1250'/min

Apr 80 2 ver (1 engine, 1 fuel syst water)

Apr 82 Threw prop - successful landing July 82 weather/no torque
success

Oct 82 Threw exhaust - lost prop - successful

Oct 83 Sand in tank - landing upside in field - survived

July 84 - Tried to get back to runway - overshot - injuries

Jan 86 RT of centerline
flipped

2 nonstandard canards

Heart attack

Melting gear hard breaking

1 Disconnected Canard

Oct 81
Jan 82

Takes off in snow & slush, water,

Jan 83 Wind shear - Santa Paula

Jan 84 Downwind takeoff (45k)

Apr 85 South Ave - Rough runway
quartering railroad

Oct 82 Downwind