

### MEMORANDUM FOR RECORD

Stephen Stein Air Safety Investigator National Transportation Safety Board Office of Aviation Safety - Eastern Region

Weather Report – New Smyrna Beach Municipal Airport (EVB), New Smyrna Beach,

Florida

Date & Time: October 29, 2014 1420 EDT NTSB Accident Number: ERA15LA039

EVB is a nearby weather observation facility located at the accident site.

	m KEVB, New Smyrna Beach, New Smyrna Beach Municipal Airport (United States).
SA 30/10/2014 01:50-	METAR KEVB 300150Z 00000KT 10SM SKC 19/18 A3002 RMK LAST=
SA 30/10/2014 00:50-	METAR KEVB 300050Z 00000KT 10SM SKC 21/17 A3003=
SA 29/10/2014 23:50-	METAR KEVB 292350Z 00000KT 10SM SKC 22/17 A3002=
SA 29/10/2014 22:50-	METAR KEVB 292250Z 11005KT 10SM SKC 24/17 A3002=
SA 29/10/2014 21:50-	METAR KEVB 292150Z 08006KT 10SM SCT055 27/17 A3002=
SA > 29/10/2014 20:50-	METAR KEVB 292050Z 07007KT 10SM SCT055 28/17 A3002=
SP 29/10/2014 20:23->	SPECI KEVB 292023Z 07007KT 10SM SCT055 28/17 A3002 RMK AIRCRAFT INCIDENT=
SA > 29/10/2014 19:50-	METAR KEVB 291950Z 06009KT 10SM SCT055 28/16 A3003=
SA 29/10/2014 18:50-	METAR KEVB 291850Z 07009KT 10SM SCT055 29/18 A3005=
SA 29/10/2014 17:47-	METAR KEVB 291747Z 05006KT 10SM SCT030 29/18 A3008=
SA 29/10/2014 16:47-	METAR KEVB 291647Z 04004KT 10SM SCT030 29/15 A3010=
SA 29/10/2014 15:47-	METAR KEVB 291547Z 24004KT 10SM SKC 28/17 A3012=

> SA 29/10/2014 14:47- METAR KEVB 291447Z 26005KT 10SM SKC 26/19 A3013= SA 29/10/2014 13:47- METAR KEVB 291347Z 00000KT 10SM SKC 24/20 A3013=

# Stein Stephen

From:

Suffern Paul

Sent:

Monday, March 23, 2015 9:29 AM

To: Cc: Stein Stephen Misencik Paul

**Subject:** 

RE: ERA15LA039 - P-40 Accident

Attachments:

2015utcVISimageforemail.jpg; 1830utcthrough2030utc.gif; radarfrom1955to2029utc.gif;

SeaBreeze.png; 1700edtupperairsounding.jpg

Hi Stephen,

We may not need a weather computer model in this case. This accident clearly took off right after a "sea breeze" moved from east to west across the airport. This east wind would have picked up to between 10 to 20 knots right off the ground. In addition, the air would have been much more turbulent. The first image shows the location of the sea breeze "front" at around 1615 EDT just west of the airport. I've got a loop from 1430 through 1630 EDT for you as well on satellite. In addition, the wx radar shows the sea breeze too with the loop from 1555 to 1629 EDT with the accident site in the turbulent air on the east side of the sea breeze.

http://oceanservice.noaa.gov/education/yos/resource/JetStream/ocean/seabreezes.htm

So while KEVB only had surface winds from 7 to 9 knots:

16:50-> METAR KEVB 292050Z 07007KT 10SM SCT055 28/17 A3002=

16:23-> SPECI KEVB 292023Z 07007KT 10SM SCT055 28/17 A3002 RMK AIRCRAFT INCIDENT=

15:50-> METAR KEVB 291950Z 06009KT 10SM SCT055 28/16 A3003=

It is likely the wind was more turbulent gusting to 20 knots above the surface. The upper air sounding from 1700 EDT from the accident site also showed downburst possible between 40 and 50 mph with any shower or cloud that was dissipating near the surface (like one would see in the mountain west in the spring through fall time.

Best way to imagine the weather is like a trip to the beach in the summer time and sometime between 10am and noon the wind picks up coming off the ocean and more gusty. That would be exactly the type of weather this flight would have had... along with some updrafts/downdrafts near the clouds or any changes in terrain.

Is this info helpful for ya? Let me know what else I can help you with or if you any questions about wind speed and things. The sea breeze definitely makes things more turbulent for sure!

Paul2

From: Stein Stephen

Sent: Friday, March 20, 2015 11:33 AM

To: Suffern Paul Cc: Misencik Paul

Subject: Re: ERA15LA039 - P-40 Accident

#### Thank you!

## Sent from my iPhone

On Mar 20, 2015, at 11:05 AM, Suffern Paul < paul.suffern@ntsb.gov > wrote:

Sure thing! Will get started on it!

From: Misencik Paul

Sent: Friday, March 20, 2015 11:04 AM

**To:** Stein Stephen **Cc:** Suffern Paul

Subject: RE: ERA15LA039 - P-40 Accident

Paul

Would take this on?

Paul

Sent with Good (www.good.com)

----Original Message----

From: Stein Stephen

Sent: Friday, March 20, 2015 10:39 AM Eastern Standard Time

To: Misencik Paul

Subject: ERA15LA039 - P-40 Accident

Hi Paul,

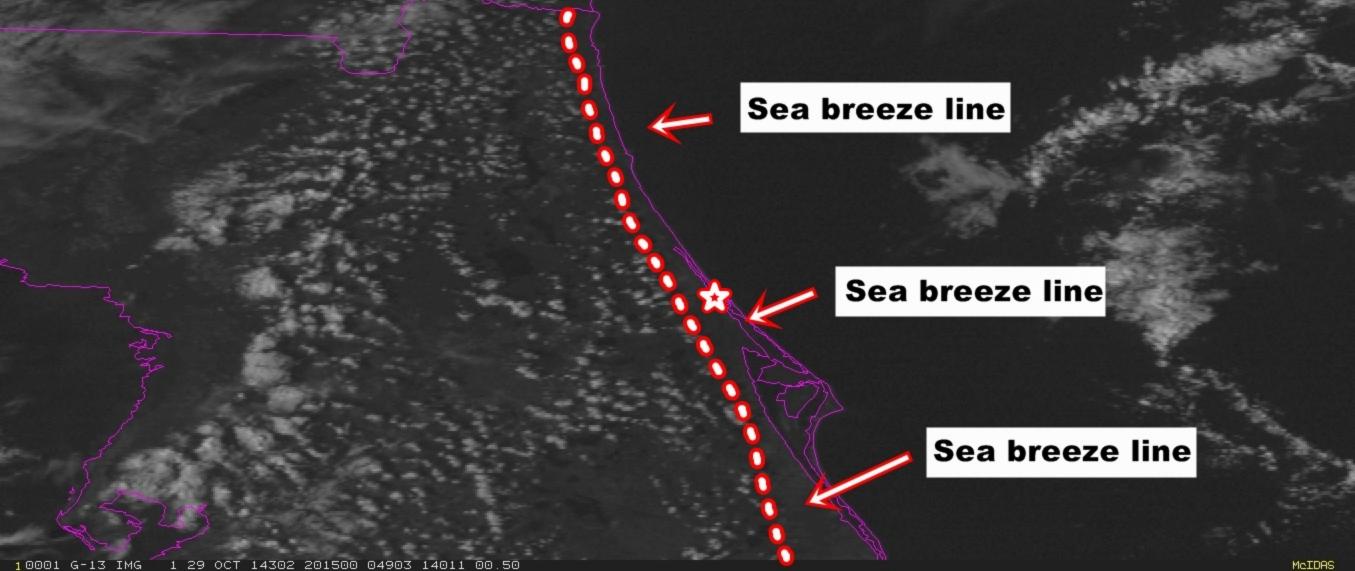
I have an accident involving a P-40 that ground looped during landing at New Smyrna Beach Airport (EVB), New Smyrna Beach, Florida on October 29, 2015. There was nothing mechanically wrong with the directional control and the wind at the surface was too slow to ground loop an 8000lb airplane. I recently spoke with Paul Suffern about doing some modeling to show what the winds were doing just above the surface and was hoping that could enlist his assistance for this.

Regards,

Stephen

#### **Stephen Stein**

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RAOB - 2100UTCNAMSOUNDING.CSV File Edit Displays Listings Analyze Refresh Compare Options Help FT (x1000) mb 400 Carb Cloud TROP Lvl: -- ft MSL FRZG Lvl: 14202 ft MSL cclEL Hgt: 6307 ft MSL lfcEL Hgt: 19117 ft MSL (Auto) LLWS Ice Ice LFC Hgt: 4599 ft MSL Parcel Data CCL Hgt: 5394 ft MSL LCL Hgt: 3724 ft MSL Pres: Hgt: (MSL) T2Gust: 54 mph WindEx: 46 mph ±Std: CWEAT: 172.7 Temp: 500 Td: 0.0 LI: T-Td: TT: 43.1 KI: 1.3 Tc: 28.2 °C RH: PT: ePT: 280/9 0-6km 9 0-3km s-rH: L.R.: 9 0-2km gust potential near any shower or Tmax: 5 0-1km dissipating cloud CAPE+ only: 29 J/kg Wind: 600 CIN total: -104 J/kg Hgt: DCAPE6.0km: 976 J/kg (MSL) VGP  $0-4 \,\mathrm{km}$ : 0.023 EHI 0-2km: . 0 8 m/s : VVM BRN: LFC Lift / LPL 1016 mb 700 800 900 -Stn Elev: 7 ft 1000 1016 QNH = 1015.9 mb 20 MSL -20 -10 30°C 0 10

DA: 1468 ft, ISA RAOB Config #1:

