



# U.S. Department of Transportation Federal Aviation Administration ADS-B Compliance Monitor

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## ADS-B Aircraft Operation Compliance Report

**ICAO:** A831E8 (52030750)    **Tail Number:** N627TA    **Flight Id:** N627TA  
**Period:** 06-26-2015 17:48:35 to 06-26-2015 19:07:13  
**Aircraft:** 2014 - COSTRUZIONI AERONAUTICHE TECNA ASTORE  
Year - Make / Model

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### Operation Analysis Overview

	Analysis	Exceptions
<b>Airborne 1090</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Surface 1090</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Surface RWY/Taxi 1090</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Airborne UAT</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Surface UAT</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Surface RWY/Taxi UAT</b>	<input type="checkbox"/>	<input type="checkbox"/>

#### Prepared For Owner of Record:

ROWE ROGER  
2264 CLEARWATER RUN

THE VILLAGES, FL 32162-2302

#### Prepared By

**Surveillance and Broadcast Services (SBS) Program  
ADS-B Compliance Monitor**

**June 29, 2015**

**Note:** Items highlighted in red within this report indicate the ADS-B Out system installed on this aircraft failed to meet the corresponding performance requirement as specified in § 91.227. The owner/operator must take action to correct the ADS-B system deficiency identified.

## Operation Summary

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**Operation Id:** 6502051      **Start Time:** 06-26-2015 17:48:35  
**ICAO Reported:** A831E8 (52030750)      **End Time:** 06-26-2015 19:07:13  
**ICAO Assigned:** A831E8 (52030750)      **Duration (s):** 01:18:38  
**Tail Number:** N627TA      **Total Reports:** 44535  
**Country:** United States - Civil

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**Detection:**       **Airborne**     **Surface**      **Service Area(s):**     **Western**     **Central**     **Eastern**  
**Service Volume Initial:** 168 - Miami  
**Service Volume Final:** 1007 - Miami

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**Link Version:** 2      **Out Capability:** 1090      **In Capability:** UAT  
**Flight Id:** N627TA       **Military**  
**Operator:**       **Anonymous**  
**Exceptions:**    **Airborne 1090 in rule airspace**       **Airborne UAT in rule airspace**   
                         **Airborne 1090**     **Surface 1090**       **Airborne UAT**     **Surface UAT**

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## Aircraft Summary

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**Type Aircraft:** Fixed-Wing Single Engine      **Type Engine:** 4 Cycle  
**Certification:** Light Sport      **Airworthiness Date:** 09/18/2014  
**Cert Date:** 11/26/2014      **Expiration** 11/30/2017      **Classification:** Light Sport  
**Make:** COSTRUZIONI AERONAUTICHE TECNA      **Year:** 2014  
**Model:** ASTORE      **Serial:** 027

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**Type Registration:** Individual  
**Owner:** ROWE ROGER  
**Street:** 2264 CLEARWATER RUN  
**Street:**  
**City:** THE VILLAGES      **State:** FL      **Zip:** 32162-2302  
[FAA Civil Aviation Registry Link...](#)

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# Airborne 1090 Analysis Summary

**Start Time:** 06-26-2015 17:48:35

**End Time:** 06-26-2015 19:07:13

**Duration (s):** 01:18:38

**Processed Reports:** 4775

**Total Reports:** 44535

**Service Volume Initial:** 168 - Miami

**Service Volume Final:** 1007 - Miami

**Link Version:** 2

**Out Capability:** 1090

**In Capability:** UAT

**Emitter Category:** 1 - Light (<15,500lbs)

**Antenna(s):** 1 - Single

**SILsupp:** 0 - Per Hour

**Flight Id:** N627TA

**Vert Velocity Baro**

**Mode 3A:** 1200

**Vert Velocity Geo**

**Exceptions:**

Rule	Miss Ele	Int \ Acc	Kin	Other	NIC	NACp	NACv	SIL	SDA
Yes	No	Yes	No	No	No	No	No	Yes	Yes

Class A	Class B	Class C	Class D	Class E	Part91AppD
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Missing Elements

Category	NACp	NACv	Vel	Baro Alt	Geo Alt	Flight Id	Mode 3A	Emit Cat
% Fail	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Max dT(s)	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00
MCF	0	0	0	0	0	0	0	0

## Integrity & Accuracy

Category	NIC	NACp	NACv	SIL	SIL Sup	SDA	NIC_SVT	NACp_SVT	Val	eVAL	eVal NIC
% Fail	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Max dT(s)	00:00:00	00:00:00	00:00:00	01:18:08	00:00:00	01:18:08	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00
MCF	0	0	0	4775	0	4775	0	0	0	0	0

Category	NIC	NACp	NACv	SIL	SDA
Avg	7.0	10.0	1.0	0.0	0.0
Min	7	10	1	0	0
Max	7	10	1	0	0

## Kinematics

	Baro Alt	Baro Alt Δ	Geo Alt	Geo Alt Δ	Velocity	Position Δ
% Fail	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MCF	0	0	0	0	0	0

## Other Checks

	Link Version	Emitter Cat	Flight ID	Mode 3A
% Fail	0.00%	0.00%	0.00%	0.00%
MCF	0	0	0	0

	ICAO Duplicate	Anonymous	UAT Only above 18K
% Fail	0.00%	0.00%	0%
Max dT (s)	00:00:00	00:00:00	00:00:00
MCF	0	0	0

### Notes:

MCF - Maximum Consecutive Failures

## Distributions

### NIC - Horizontal Containment Bound

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Unkn	< 20NM	< 8NM	< 4NM	< 2NM	< 1NM	< .6NM	< .2NM	< .1NM	< 75m	< 25m	< 7.5m	XXX	XXX	XXX	XXX
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
0	0	0	0	0	0	0	4775	0	0	0	0	0	0	0	0

### NACp - 95% Horizontal Accuracy Bound (EPU)

NA	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	$\geq 10\text{NM}$	$< 10\text{NM}$	< 4NM	< 2NM	< 1NM	< .5NM	< .3NM	< .1NM	$< .05\text{NM}$	< 30m	< 10m	< 3m	XXX	XXX	XXX	XXX
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
0	0	0	0	0	0	0	0	0	0	0	4775	0	0	0	0	0

### NACv - 95% Horizontal Velocity Error

NA	0	1	2	3	4	5	6	7
	$\geq 10\text{m/s}$	< 10m/s	< 3m/s	< 1m/s	< .3m/s	Reserved	Reserved	Reserved
0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
0	0	4775	0	0	0	0	0	0

### SIL - Source Integrity Level

0	1	2	3
$> 1 \times 10^{-3}$	$\leq 1 \times 10^{-3}$	$\leq 1 \times 10^{-5}$	$\leq 1 \times 10^{-7}$
100.0%	0.0%	0.0%	0.0%
4775	0	0	0

### SILs - SIL Supplement

0	1
/Hour	/Sample
100.0%	0.0%
4775	0

### SDA - System Design Assurance

0	1	2	3
$> 1 \times 10^{-3}$	$\leq 1 \times 10^{-3}$	$\leq 1 \times 10^{-5}$	$\leq 1 \times 10^{-7}$
100.0%	0.0%	0.0%	0.0%
4775	0	0	0

### GVA - Geometric Velocity Accuracy

0	1	2	3
> 150m	$\leq 150\text{m}$	$\leq 45\text{m}$	Reserved
100.0%	0.0%	0.0%	0.0%
4775	0	0	0

## Distributions (continued)

### Validation

0	1	2	3
Unknown	Invalid	Reserved	Valid
0.5%	0.0%	0.0%	99.5%
22	0	0	4753

### Enhanced Validation

0	1	2	3
Unknown	Invalid	Reserved	Valid
100.0%	0.0%	0.0%	0.0%
4775	0	0	0

### NIC Baro

0	1	2	3
Not XCheck	X Check	Reserved	Reserved
0.0%	100.0%	0.0%	0.0%
0	4775	0	0

### SQL - Signal Quality Level

Category	0	1	2	3	4	5	6	7
1090 ES	≤ -90dBm	≤ -87dBm	≤ -84dBm	≤ -81dBm	≤ -78dBm	≤ -72dBm	≤ -66dBm	> -66dBm
UAT	≤ -96dBm	≤ -93dBm	≤ -90dBm	≤ -87dBm	≤ -84dBm	≤ -78dBm	≤ -72dBm	> -72dBm
	0.1%	0.2%	0.3%	0.2%	0.3%	2.6%	17.1%	79.2%
	7	9	16	9	14	124	815	3781