

United States of America  
Department of Transportation -- Federal Aviation Administration  
**Supplemental Type Certificate**

*Number* ST01148CH-D

*This certificate issued to* ElectroSonics  
4391 International Gateway  
Columbus, OH 43219

*certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 25 of the Federal Aviation Regulations.* See Type Certificate Data Sheet A20WE for complete certification basis.

*Original Product - Type Certificate Number :* A20WE  
*Make :* The Boeing Company  
*Model :* 747-100 Series

*Description of Type Design Change:*

Installation of a Litton Aero Products LTN-2001 GPS sensor. Installed per ElectroSonics Drawing ES747-109651-01, Rev. I.R., dated October 11, 1999 or later FAA approved revision.

*Limitations and Conditions :*

1. Compatibility of this design change with previously approved modifications must be determined by the installer.
2. FAA Approved Flight Manual Supplement, ElectroSonics Document ES747-109651-100, Rev IR, dated April 28, 2000, or later FAA Approved revision is a required part of this STC.
3. The aircraft must be maintained in accordance with ElectroSonics Document ES747-109651-200, Rev IR, dated April 28, 2000, or later FAA Approved revision in addition to the basic airplane maintenance manuals.
4. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

*This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.*

*Date of application :* November 16, 1999

*Date reissued :* December 05, 2001

*Date of issuance :* April 28, 2000

*Date amended :*



*By direction of the Administrator*

*Tim Winesdorffer*  
(Signature)

Tim Winesdorffer  
DAS Administrator, DAS 3 CH  
ElectroSonics, Columbus, OH

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.