

# ***EM RESEARCH, INC.***

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August 31, 2000

Federal Aviation Administration  
Spectrum Engineering Division AES-500  
800 Independence Avenue SW  
Washington, DC 20591

Notice of Permissive Change for Transmitter ID NYKEMPA101:

An update to an approved transmitter has been made via the FCC permissive change process through a designated TCB. The application is being reviewed at CKC Certification Services, 5473A Clouds Rest, Mariposa, CA 95338, Phone: 209 966 5240 ext.233 Fax: 209 742 6133. The update transmitter is part of the Transponder Landing System's (TLS), being developed by Advanced Navigation & Positioning Corporation (ANPC). This notice is to satisfy the provisions of part 87.147 requiring applicants to notify the FAA of such activity.

The transmitter update is the addition of an output spectrum control filter, which was added to meet output pulse rise and fall times. This modification was initiated as a result of FAA system tests, and spectrum management inputs. A copy of the update is attached for your information.

The transmitter is a EM Research Model EMPA-1030-400-04 Interrogation Transmitter (ANPC Specification 870-00004-010), designed and produced by EM Research Inc especially for the TLS product. This transmitter generates 1030 MHz interrogation pulses per TLS system control. While the signals are synthesized in a different manner, they are indistinguishable from normal SSR Mode A interrogation signals. The signals have been favorably evaluated by FAA flight inspection crews in conjunction with FAA design approval tests. The basic signal properties (modulation depth, frequencies, etc.) are exactly in accordance with Part 87 & ICAO standards. This key system element is part of the system undergoing the design approval process coordinated by Deborah Lawrence (AND-740) as part of contract DTFA01-99-C-00054, who can be reached at 202- 493-4761.

If you have any questions regarding this transmitter, the TLS, or the design approval process, please call Matt Eiting, EM Research president at (775)-345-2411.

Sincerely,

Matt Eiting  
President, EM Research

Ref: FCC ID # NYKEMPA101

Confirmation # EA89558