U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of the Chief Counsel

800 Independence Ave., S.W.
Washington, D.C. 20591

MAR 25 2010

Sergeant Dale Owens
Director of Operations
Broward County Sheriff's Office
2601 West Broward Boulevard
Fort Lauderdale, Florida 33312

Dear Sergeant Owens:

This is in response to your letter of September 29, requesting a legal opinion clarifying whether the Broward County Sheriff's Office must obtain a part 133 certificate to conduct police and medevac operations with certain structures that are externally mounted on its helicopters.

In your letter, you state that the Broward County Sheriff's Office operates helicopters under a part 135 air carrier certificate. To support your police role, you have a nightsun spotlight, microwave downlink antenna and a FLIR gimbal mounted on your helicopter. For medevac operations, two of the three aircraft have a mounted night scanner spotlight.[1] None of the equipment can be removed by your pilots or crew members, and all equipment must be removed by a mechanic or technician. All items were installed by the manufacturer or aftermarket with a supplemental type certificate (STC).

An "external load" means a load that is carried, or extends outside of the aircraft fuselage. 14 C.F.R. §1.1. You represent that the nightsun spotlight, microwave downlink antenna, FLIR gimbal and night scanner cannot be jettisoned and do not move freely. Also, the photographs of the helicopters you submitted with your letter indicate that the installed equipment extends outside of the aircraft fuselage but does not extend below the landing gear. All items were installed by the manufacturer or aftermarket with a supplemental type certificate (STC). Advisory Circular 27-1B, Chg 2 (AC-27-1B) indicates that the FAA would characterize equipment, such as the nightsun spotlight, microwave downlink antenna, FLIR gimbal and night scanner permanently mounted on your helicopter as an "external fixture" instead of an "external load."

The AC defines an external fixture as "[a] structure external to and in addition to the basic airframe that does not have true jettison capability and has no significant payload capability in addition to its own weight." The attachment, when installed under a STC, becomes a part

[1] Your letter also questions whether wire strike kits, popout floats, ENG cameras or additional navigational antennas require a part 133 External Load Operating Certificate. We have limited this response to the specific equipment used in your operation; however, to the extent that such equipment meets the definition of a fixture as discussed herein, the same reasoning would apply.

of the aircraft fuselage. An example is an external float. Like the external float, the nightsun spotlight, microwave downlink antenna, FLIR gimbal and night scanner do not have any "payload capability" in addition to their own weight. Also, those external structures are not designed or approved to transport any object that can be added or removed from the external load attaching means as the specific operation may require (e.g. a hoist attached by a hook to the aircraft).

For the above reasons, we conclude that the equipment attached to your helicopters - a nightsun spotlight, microwave downlink antenna, FLIR gimbal and night scanner - do not require part 133 certification because these items are external fixtures

This response was prepared by Lorna John, Senior Attorney in the Regulations Division of the Office of the Chief Counsel, and was coordinated with the Rotorcraft Directorate and the General Aviation and Commercial Division. Please contact us at (202) 267-3921 if we can be of further assistance.

Sincerely,

Rebecca B. MacPherson
Assistant Chief Counsel for Regulations, AGC-200