Federal Aviation Agency



AC NO: AC 170-1		
AIR NAVIGATION FACILITIES		
EFFECTIVE :		
1/14/63		

SUBJECT: OPERATION AND USE OF APPROACH LIGHTS (ALS) AND SEQUENCED FLASHING LIGHTS (SFL) SYSTEMS

- 1. PURPOSE. This circular is issued to advise airspace users of the Operation and Use of Approach Lights (ALS) and Sequenced Flashing Lights (SFL) Systems.
- 2. REFERENCE. Technical Standard Order, (TSO)-N24a, dated September 11, 1959, together with its attachment, AGA-NSla of April 24, 1958, contain the "National Standards on Approach Lighting at Land Aerodromes."
- 3. BACKGROUND. Recent statements have indicated that the purpose and use of these lights is not clearly understood by the users. Accordingly, this circular has been prepared to provide explanatory information on the operation and use of ALS and SFL.
- 4. INFORMATION. The approach lights are normally lighted between sunrise and sunset when the ceiling is less than 1,000 feet and/or the prevailing visibility is less than three miles, and between sunset and sunrise when the ceiling is less than 2,000 feet and/or the prevailing visibility is less than five miles, and:
 - a. When instrument approaches are being conducted to the runway served by the lights and this is the landing runway, or;
 - b. When instrument approaches are being conducted to the runway served by the lights but aircraft are circling to land on another runway, or;
 - c. When instrument approaches are being conducted to the airport but aircraft will circle to land on the runway served by the lights.

5. OPERATING CRITERIA

- a. Approach lights shall be operated at any time or on any brightness setting, as requested by a pilot for his operation, or may be operated at any time or on any setting deemed advisable by a controller except when contrary to a pilot's request.
- b. The intensity of Standard Approach Light Systems and Short Approach Light Systems should be set in accordance with the following:

INTENSITY SETTING TABLE

Visibility (Meteorological - applicable to runway served by the lights)

STEP	DAY	NIGHT
5	*less than one mile	when requested
4	one to three miles	when requested
3	three to five miles	*less than one mile
2	when requested	one to three miles
1	greater than five miles	greater than three miles

*And/or 6,000 feet or less of RVR on the runway served by the ALS and RVR.

Local conditions may determine the feasibility of prescribing settings other than those above and this is authorized on an individual location basis.

- c. Sequenced Flashing Lights (SFL) where installed, are a component of the ALS and cannot be operated when the ALS is off. The SFL may be operated at any time the ALS is operated and shall be lighted day or night when the ceiling is below 1,000 feet and/or the visibility is less than three miles. The SFL shall be turned off at the request of a pilot and may be operated with the ALS at any time requested by a pilot or deemed advisable by a controller. (The SFL between the end of the runway and the 1,000 foot crossbar will only operate on ALS step 4 and step 5; the remaining lights will operate on any step setting.)
- d. For Runway Visual Range (RVR) landing minima to be applicable, the ALS and SFL must be on and in operating condition. An approach

light system shall be considered to be inoperative when four or more adjacent light bars of the ALS are inoperative and/or when four or more consecutive lights of the SFL are inoperative. (An ALS bar is considered to be inoperative when three or more light units are out.)

6. HOW TO GET PUBLICATIONS. To get this publication and publications referenced herein, identify them by title and number, and order copies from:

Federal Aviation Agency Washington, D.C. Attn: MS-163

George C. Prill Director

Flight Standards Service