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U. S. Department of Commerce — Civil Aeronautics Administration

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Supplement No. 1 — October 27, 1949

SUBJECT: 61.63 (Previously 61.343)
Cockpit Check List

SPECIAL NOTICE

Commencing with the issuance of this supplement, a new procedure is being established for informing the public of CAA rules, policies, and interpretations. Pending such time as it will be possible for the CAA to issue a complete Civil Aeronautics Manual 61 including the appropriate Civil Air Regulation, there will be issued from time to time supplements such as this containing rules, policies, and interpretations in the form of pages to a manual. These pages should be retained by the recipient and combined with others that will be released periodically, thus permitting the compilation of all material on this particular regulation in one file. These supplements will be distributed by the CAA free of charge until such time as it is possible to release a complete Manual 61. Upon publication of the Manual which will include all supplements to date, it will be placed on sale at the Government Printing Office.

This procedure eliminates the use of the Aviation Safety Release for the publication of CAA material explaining or implementing Civil Air Regulations and as time permits, all prior Aviation Safety Releases of this type will be replaced either by a complete manual or a supplement such as this.

Instructions in this supplement regarding the insertion of new pages and the deletion of out-of-date material should be carefully followed. All supplements to Civil Aeronautics Manual 61 following this one will have this format.

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The numbering system for this material follows exactly that of like material published in the Federal Register dated July 16, 1949. The Civil Air Regulation is quoted using the new numbering system established by the Civil Aeronautics Board and the Federal Register. CAA material is identified by appending a dash to the regulation number and then numbering as outlined in the attached pages. For the convenience of those who do not have the Federal Register dated July 16, 1949, the old section numbers appearing in Civil Air Regulation, Part 61, dated June 15, 1948, are quoted after the new numbers.

61.63-1 AIR CARRIER COCKPIT CHECK LIST

Previously information relating to the approval of a cockpit check list by the Administrator has been contained in Aviation Safety Release No. 289. An amendment to the section "Power Plants and Propellers" contained in that publication has been deemed advisable. Therefore, the attached supplement will supersede Aviation Safety Release No. 289 dated June 14, 1948.

The attached new page headed "CAR 61.63 Cockpit check list" dated should be retained as the first in a series that will be issued explaining and implementing Civil Air Regulation 61.

for John Warbick
E. S. Hensley
Director, Office of
Aviation Safety

Attachment

DISTRIBUTION: Air 4, 4A, 14,
40 All tabs, 40-F-1

"CAR 61.63 Cockpit check list. (a) The air carrier shall provide for each type aircraft a cockpit check list, approved by the Administrator, adapted to each operation in which the aircraft is to be utilized. An approved check list shall be installed in a readily accessible location in the cockpit of each aircraft and shall be appropriately used by the flight crew for each flight.

(b) The cockpit check list shall include procedures prior to starting engines, prior to take-off, prior to landing, and for power-plant emergencies."

61.63-1 AIR CARRIER COCKPIT CHECK LIST. (CAA policies which apply to section 61.63 (previously 61.343)).

(a) GENERAL. The policies hereinafter set forth are issued pursuant to section 61.63(a) so as to provide a guide in the approval of an air carrier cockpit check list by the Administrator and to assist an air carrier in providing a cockpit check list which will meet with such approval and will comply with the provisions of section 61.63(b).

The check list which follows has been prepared in general terms and is considered a normal check list for compliance with section 61.63 except that those items not applicable to a particular aircraft may be deleted and the order of arrangement for the individual items may be changed at the discretion of the air carrier. The check list provided by an air carrier shall include all applicable items but will not necessarily be limited thereto.

PRIOR TO STARTING ENGINE

FUEL SYSTEM

Quantity - checked
Proper tank selection - checked
Mixtures - as required
Fuel booster pumps - as required
Cross feeds - as required

*HYDRAULIC SYSTEM

Brakes - set

ELECTRICAL SYSTEM

Battery switch - proper position

*Items thus marked will be double-checked, such as by challenge and response, or positively checked, such as by a mechanical method.

PRIOR TO TAKE-OFF

WEIGHT AND BALANCE

Pilot is aware of weights and take-off limitations

*FUEL SYSTEM

Quantity - rechecked
Proper tank selection - rechecked
Mixtures - take-off position
Fuel booster pumps - as required
Cross feeds - as required

*HYDRAULIC SYSTEM

Hydraulic pressures and quantity - checked
Brakes - checked
Hydraulic selector valves - checked

*ANTI-ICING AND DE-ICING EQUIPMENT - Checked and set

ELECTRICAL SYSTEM

Battery switch - proper position
Invertors - as required
Ignition - checked
Generators - checked
Radio - checked

*POWER PLANTS AND PROPELLERS

Propellers - checked and set in take-off position
All engines - checked for proper functioning and required power
Super chargers - checked and set in proper take-off position

HEATERS - Checked and set

INSTRUMENTS

Engine

Oil - quantity, temperature and pressure - normal for take-off
Fuel pressure - normal for take-off
Carburetor - temperature - normal for take-off
Cylinder head - temperature - checked

*Items thus marked will be double-checked, such as by challenge and response, or positively checked, such as by a mechanical method.

INSTRUMENTS

Flight

Static and vacuum selectors - checked
Directional gyro - set
Altimeter - set
Horizon - uncaged
Turn and bank - checked
Clock - set

*PRESSURIZATION - checked

*FLAPS

Wing flaps - take-off position
Cowl flaps - take-off position

*CONTROLS

Auto pilot - off
Trim tabs - set for take-off
Gust locks - off
Free and tested for through full limit of travel

PRIOR TO LANDING

*FUEL SYSTEM

Proper tank selection - checked
Mixtures - landing position
Fuel booster pumps - as required
Cross feeds - as required

WEIGHT AND BALANCE

Maximum landing gross weight - checked

*HYDRAULIC SYSTEM

Hydraulic pressure - checked
Brakes - checked and off
Hydraulic selector valves - checked

*ANTI-ICING AND DE-ICING EQUIPMENT - Checked

*Items thus marked will be double-checked, such as by challenge and response, or positively checked, such as by a mechanical method.

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POWER PLANTS AND PROPELLERS

Propellers - as required
Super chargers - as required
*Manual reverse pitch actuator or indicator - checked

*HEATERS - checked

INSTRUMENTS

Static and vacuum selectors - checked
Altitude - set
Directional gyro - set

*PRESSURIZATION - Checked

CONTROLS

Auto pilot - off
Trim tabs - as desired

*LANDING GEAR

Down and locked - checked

*FLAPS

Wing flaps - as desired
Cowl flaps - as desired

POWER-PLANT EMERGENCIES

FUEL SYSTEM

Mixtures - Idle cut-off on dead engine - required position on all others
Fuel selector valve - dead engine - off
Fuel booster pumps - dead engine - off
Cross feeds - as required
Throttle - dead engine - closed

HYDRAULIC SYSTEM

Hydraulic selector valve - set on proper engine
Hydraulic pressures - checked
Brakes - checked
Ignition - off - dead engine
Generators - off - dead engine

*Items thus marked will be double-checked, such as by challenge and response, or positively checked, such as by a mechanical method.

POWER PLANTS AND PROPELLERS

Propellers - Low RPM and feathered on dead engine - set as required on all live engines
Engines - All live engines set for proper functioning and required power
Super chargers - checked and set in proper position

HEATERS - Checked and set in safe operation position

INSTRUMENTS

Engine - oil temperature and pressure checked
Engine - fuel supply and pressure checked
Carburetor - temperature checked
Cylinder head - temperature - checked

FLIGHT INSTRUMENTS - Checked and reset if necessary

PRESSURIZATION - Checked