

B O M B A R D I E R  
**CHALLENGER 300**  
BD-100 MAINTENANCE PLANNING DOCUMENT

**INSTRUCTIONS FOR USE**

**1. General**

This program is recommended by Bombardier for Time Limits/Maintenance Checks where local regulatory authorities permit.

The Flexible Maintenance Program is a Bombardier recommended scheduled maintenance program, which provides operators a window in which to perform task due at a specific interval. Use of the Flexible Maintenance Program may be subject to national/local regulatory approval.

**NOTE:** The Airworthiness Limitations section (5-10-10, 5-10-11, 5-10-13, 5-10-15, 5-10-20, 5-10-30, and 5-10-40) of the Time Limits/Maintenance Checks (TL/MC) manual must be complied with separately from the Flexible Maintenance Program.

**2. Rules**

The following paragraphs provide the rules that apply to the Flexible Maintenance Program.

A. This Flexible Maintenance Program applies only to the items in the MRB report of the TL/MC manual.

- B. Tasks with maintenance intervals lower than 400 hours or 12 months do not qualify for the flexible maintenance program.
- C. Engine maintenance tasks for hourly intervals are eligible for the flexible maintenance program only if they have been phased in with the airframe hourly checks.
- D. All APU maintenance tasks are eligible for the flexible maintenance program. Tasks in APU hours do not necessarily need to be in phase with the airframe inspection hourly tasks.
- E. Scheduled maintenance checks due at intervals of 400 hours and greater can be accomplished individually or in groups, within a period beginning 40 hours before and ending 40 hours after the due-time.
- F. Calendric controlled checks due at intervals of 12 months and greater can be accomplished individually or in groups, within a period beginning two months before and ending two months after the due-time.

EFFECTIVITY: ALL

**INSTRUCTIONS FOR USE**

B O M B A R D I E R  
**CHALLENGER 300**  
BD-100 MAINTENANCE PLANNING DOCUMENT

- G. Landing-controlled checks can be accomplished individually or in groups, with a period beginning 40 landings before and ending 40 landings after the due-time.
- H. Whenever this flexible maintenance program is applied to a task in any of the above categories, a signed off and dated record must be prepared and maintained as each task is completed. When the last task in a particular group of tasks has been completed, the whole group (e.g., 1600 hour check) is to be signed off at the date of the last task completed and in the appropriate Log Book/Maintenance Record. The next time the group of tasks is due will be calculated by adding the check interval to the midpoint of the inspection envelope (refer to Figure 1). It is then a good practice to specify in the Log Book/Maintenance Record when the aircraft is due for its next inspection.
- I. In the event of the early accomplishment of a task before the start of the flexible maintenance inspection envelope, the next due-point for that task will be calculated from the time of early accomplishment.

### 3. Examples

The following paragraphs give examples of how the inspection extensions are applied.

- A. Ten percent (10%) inspection extensions (up to a maximum of 40 hours, 40 landings, or two months) are permissible. The applicable extension will be subtracted from the next interval in order to re-establish the original schedule of the subsequent repetitive inspection.
  - (1) A 400 hours interval inspection, due at 400 hours, was done at 440 hours (10% extension). The next inspection will be at (refer to Detail A):  
  
 $840 - 40 = 800$  hours (original schedule re-established).
  - (2) A landing inspection due at an interval of 3750 landings was done at 3790 landings (1.07% extension). The next inspection will be at (refer to Detail B):  
  
 $7540 - 40 = 7500$  landings (original schedule re-established).
  - (3) A calendar inspection due at an interval of 48 months was done at 50 months (4.17% extension). The next inspection will be due at (refer to Detail C):  
  
 $98 - 2 = 96$  months (original schedule re-established).

EFFECTIVITY: ALL
------------------

## INSTRUCTIONS FOR USE

Section 4.1

Page 2

Jun 29/2007

**B O M B A R D I E R**  
**CHALLENGER 300**  
BD-100 MAINTENANCE PLANNING DOCUMENT

B. In case of inspections performed up to 10% early (up to a maximum of 40 hours, 40 landings or two months), it is recommended to add the amount equal to the advance to the next interval in order to retain the original schedule.

- (1) A 400 hours interval inspection, due at 800 hours was done at 775 hours (6.25% early). The next inspection will be at (refer to Detail D):

$1175 + 25 = 1200$  hours (original schedule re-established)

C. Inspections performed more than 10% early will require the establishment of a new inspection schedule by advancing the time at which the next inspection was due under the original schedule, by an amount equal to the advance.

- (1) A 800 hours interval inspection, due at 2400 hours was done at 2300 hours (12.5% early). The next inspection will be at (refer to Detail E):

$3200 - 60 = 3140$  hours (the schedule advances by 60 hours).

D. Inspections performed less than 10% early (but greater than the maximum of 40 hours, 40 landings or two months) will require the establishment of a new inspection schedule by advancing the time at which the next inspection was due under the original schedule, by an amount equal to the advance.

- (1) A 3750 landing inspection, due at 7500 landings was done at 7455 landings (45 landings or 1.2% early). The next inspection will be at (refer to Detail F):

$11250 - 5 = 11245$  landings (the schedule advances by 5 landings).

EFFECTIVITY: ALL

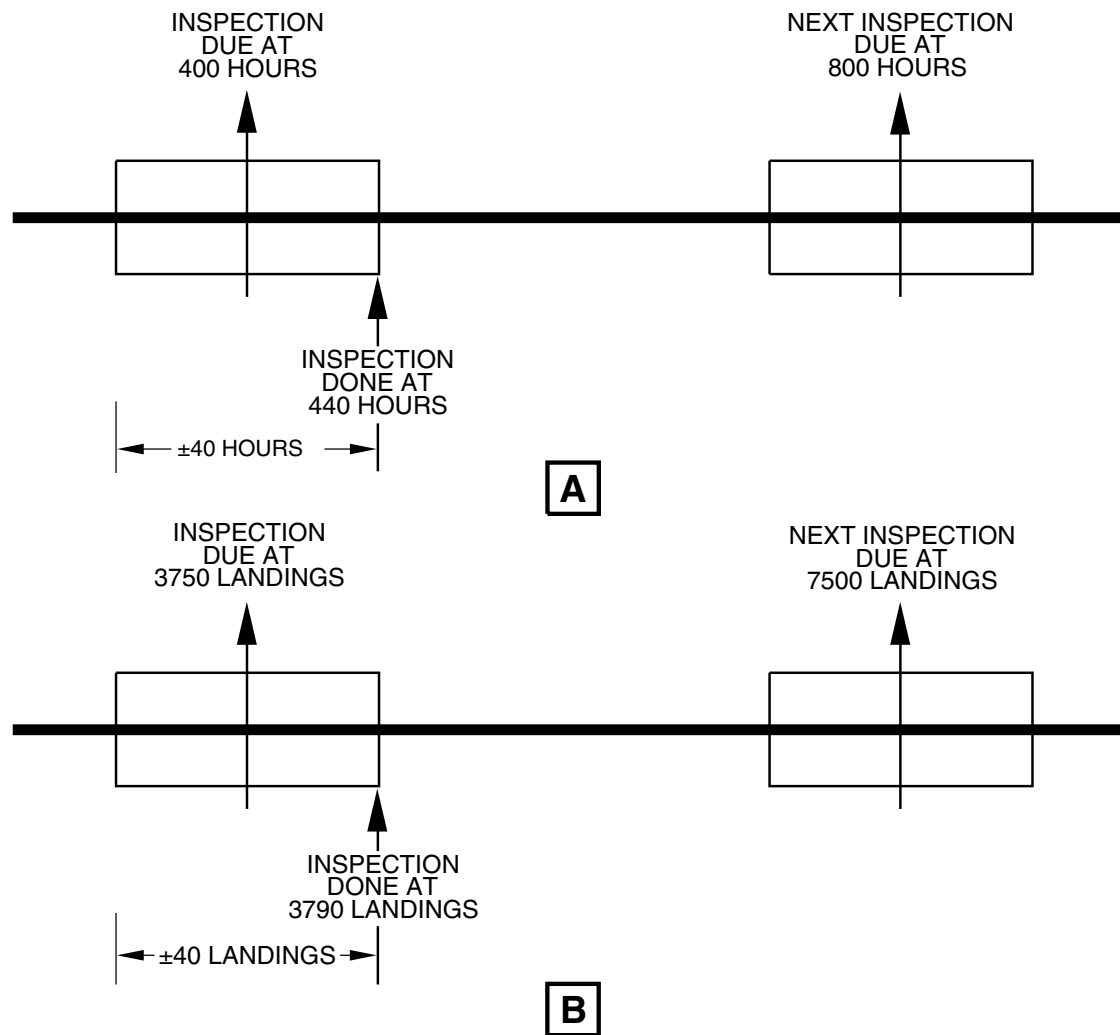
INSTRUCTIONS FOR USE

Section 4.1

Page 3

Jun 29/2007

B O M B A R D I E R  
**CHALLENGER 300**  
 BD-100 MAINTENANCE PLANNING DOCUMENT



Flexible Maintenance Program  
 Figure 1 (Sheet 1 of 3)

EFFECTIVITY: ALL

## INSTRUCTIONS FOR USE

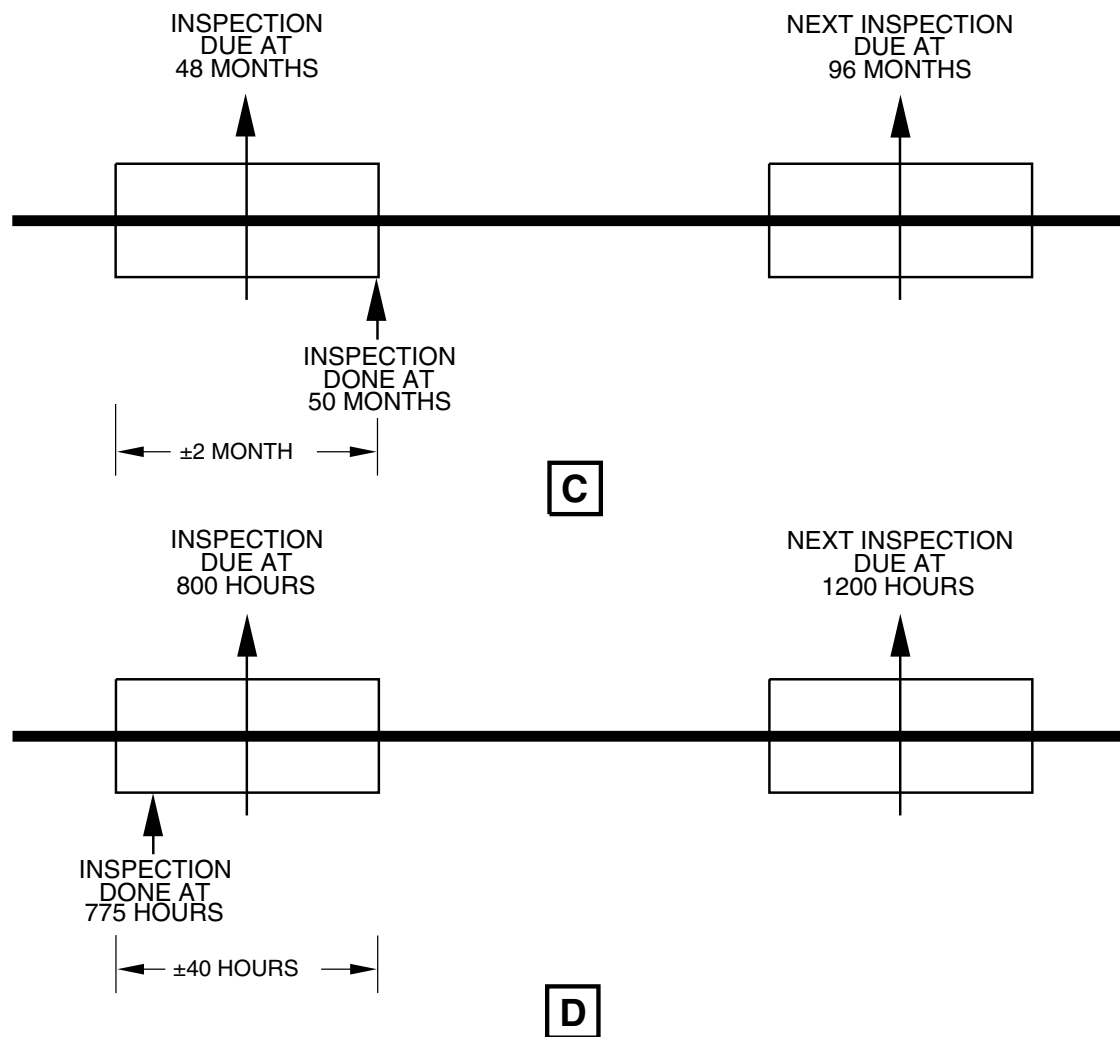
Section 4.1

Page 4

Jun 29/2007

CMP\_001

B O M B A R D I E R  
**CHALLENGER 300**  
 BD-100 MAINTENANCE PLANNING DOCUMENT



CMP\_002

Flexible Maintenance Program  
 Figure 1 (Sheet 2 of 3)

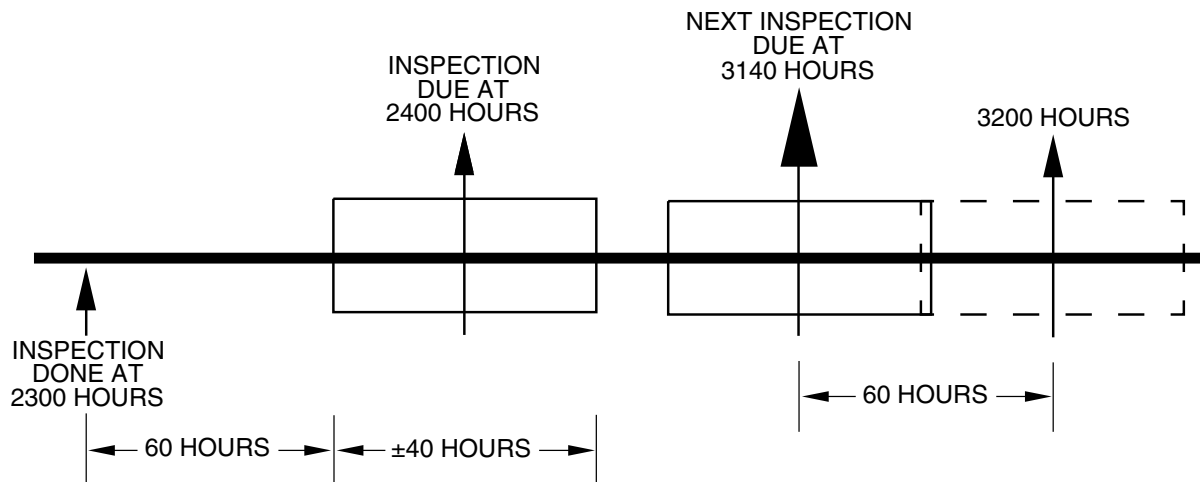
EFFECTIVITY: ALL

## INSTRUCTIONS FOR USE

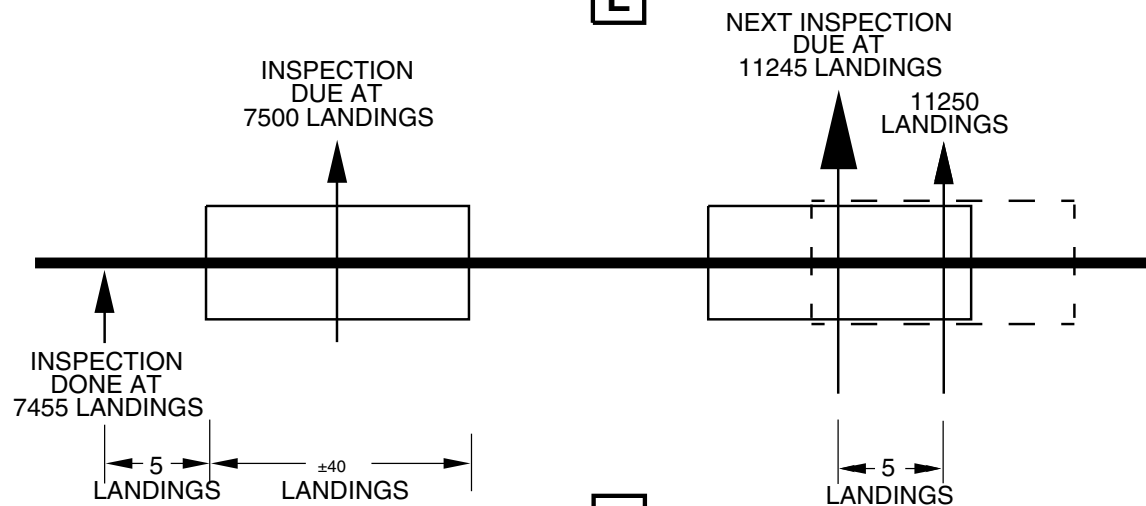
Section 4.1

Page 5  
 Jun 29/2007

B O M B A R D I E R  
**CHALLENGER 300**  
 BD-100 MAINTENANCE PLANNING DOCUMENT



**E**



**F**

CMP\_003

Flexible Maintenance Program  
 Figure 1 (Sheet 3 of 3)

EFFECTIVITY: ALL

INSTRUCTIONS FOR USE

Section 4.1

Page 6  
 Jun 29/2007