
RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part B

Class Surveys

RULES

2008 AMENDMENT NO.3

Rule No.60 5th September 2008

Resolved by Technical Committee on 25th June 2008

Approved by Board of Directors on 22nd July 2008

“Rules for the survey and construction of steel ships” has been partly amended as follows:

Part B CLASS SURVEYS

Chapter 5 SPECIAL SURVEYS

5.2 Special Surveys for Hull, Equipment, Fire extinction and Fittings

5.2.4 Internal Examinations of Spaces and Tanks

Table B5.1 has been amended as follows.

Table B5.1 Internal examinations of tanks and spaces

Special Survey	Tanks and spaces subject to examination	Note
Special Survey for ships up to 5 years of age (Special Survey No.1)	<ul style="list-style-type: none"> • Cargo holds • Cofferdams • Water tanks (tanks used for fresh or sea water) <u>Ballast tanks</u> • Fuel oil tanks other than those of double bottom • Cargo tanks (other than those of tankers, ships carrying liquefied gases in bulk and ships carrying dangerous chemicals in bulk) • <u>Peak tanks</u> • Machinery spaces and other spaces 	<ul style="list-style-type: none"> • Internal examination of the deep fuel oil tanks (except both peak tanks) may be omitted provided, after an external examination, the Surveyor is satisfied with the condition of the tanks. • Ballast tanks (excluding double bottom tanks) where the protective coating is found in poor condition and it is not renewed or where a protective coating has not been applied, internal examinations are to be carried out at annual intervals. For double bottom ballast tanks in this condition, internal examinations are to be carried out at annual intervals where considered necessary by the Surveyor.
Special Survey for ships over 5 years and up to 10 years of age (Special Survey No.2)	<ul style="list-style-type: none"> • Tanks and spaces subject to examination carried out at Special Survey No.1 • <u>Fresh water tanks</u> • Fuel oil tanks in double bottom <u>cargo areas for tankers or in cargo length areas for other ships</u> 	<ul style="list-style-type: none"> • If <u>fresh water tanks and the fuel oil tanks (excluding both peak tanks)</u>, have had external examinations and the Surveyor is satisfied that they are in good condition, the scope of <u>any</u> internal examinations may be reduced to just <u>one forward and aft double bottom tank and one selected deep tank respectively. If tanks are located in the cargo area, at least one of these tanks is to be examined. Notwithstanding the above, peak tanks are to be subject to internal examinations at each Special Survey.</u>

<p>Special Survey for ships over 10 years and up to 15 years of age (Special Survey No.3)</p>	<ul style="list-style-type: none"> • Tanks and spaces subject to examination carried out at Special Survey No.2 • Fuel oil tanks 	<ul style="list-style-type: none"> • For fuel oil tanks: <ul style="list-style-type: none"> (1) If fuel oil tanks in cargo areas for tankers or in cargo length areas for other ships have had external examinations and the Surveyor is satisfied that they are in good condition, the scope of any internal examinations may be reduced to just two selected tanks. In cases where deep fuel oil tanks are provided, one or more deep tanks are to be included in this scope. (2) If fuel oil tanks other than those mentioned in (1) have had external examinations and the Surveyor is satisfied that they are in good condition, the scope of any internal examinations may be reduced to just one tank selected from those in engine rooms. Notwithstanding the above, peak tanks are to be subject to internal examinations at each Special Survey.
<p>Special Survey for ships over 10 years of age (Special Survey No.24 and subsequent Special Surveys)</p>	<ul style="list-style-type: none"> • Tanks and spaces subject to examination carried out at Special Survey No.23 • Lubricating oil tanks 	<p>→ If the fuel oil tanks (excluding both peak tanks) have had external examinations and the Surveyor is satisfied that they are in good condition, the scope of internal examinations may be reduced to just one forward, aft, and amidship double bottom tank and half of the deep tanks. If tanks are located in the cargo area, at least two of these tanks (including one deep tank) are to be examined. Also, at least one tank located in the engine room is to be examined.</p> <ul style="list-style-type: none"> • For fuel oil tanks: <ul style="list-style-type: none"> (1) If fuel oil tanks in cargo areas for tankers or in cargo length areas for other ships have had external examinations and the Surveyor is satisfied that they are in good condition, the scope of any internal examinations may be reduced to half of the selected tanks, but not less than two tanks. In cases where deep fuel oil tanks are provided, one or more deep tanks are to be included in this scope. (2) If fuel oil tanks other than those mentioned in (1) have had external examinations and the Surveyor is satisfied that they are in good condition, the scope of any internal examinations may be reduced to just one tank selected from those in engine rooms. Notwithstanding the above, peak tanks are to be subject to internal examinations at each Special Survey. • Internal examination of lubricating oil tanks may be omitted, provided, after an If lubricating oil tanks have had external examinations, and the Surveyor is satisfied with the condition of the tanks that they are in good condition, the scope of any internal examinations may be reduced to just one selected tank. Notwithstanding the above, peak tanks are to be subject to internal examinations at each Special Survey. → However, internal examinations of fuel oil tanks and lubricating oil tanks for ships over 15 years of age may not be omitted.

5.2.7 Pressure Tests

Sub-paragraph -2 has been amended as follows.

1 At Special Surveys, a pressure test of tanks is to be carried out according to (1) through (3) below. ((1) to (3) are omitted.)

2 At Special Surveys for cargo ships, a pressure test is to be carried out according to **-1** above for tanks listed in **Table B5.22**. Any testing of double bottom tanks and other watertight compartments not designed to carry liquids may be omitted, provided that satisfactory internal and/or external examinations are carried out.

3 (Omitted)

4 (Omitted)

5 (Omitted)

Table B5.22 has been amended as follows.

Table B5.22 Requirements of Pressure Tests for Cargo Ships

Special Survey	Tanks subject to pressure tests
All Special Surveys for ships up to 5 years of age (Special Survey No.1)	<ol style="list-style-type: none"> 1. All water tanks including cargo holds used for ballast and all cargo tanks Special consideration may be given to limit testing of fresh water tanks to representative tanks provided that, after an internal and external examination of the tanks, the Surveyor is satisfied with the condition of the tanks. Tank testing of fresh water tanks may be specially considered when deemed appropriate by the Society. 2. All fuel oil tanks Special consideration may be given to limit testing to representative tanks provided that, after an internal or external examination of the tanks as specified in 5.2.4.2, the Surveyor is satisfied with the condition of the tanks. Tank testing may be specially considered when deemed appropriate by the Society. 3. All lubrication oil tanks Special consideration may be given to limit testing to representative tanks provided that, after an external examination of the tanks, the Surveyor is satisfied with the condition of the tanks. Tank testing may be specially considered when deemed appropriate by the Society.
Special Survey for ships over 5 years and up to 10 years of age (Special Survey No.2)	1. Same requirements as Special Survey No.1
Special Survey for ships over 10 years and up to 15 years of age (Special Survey No.3)	<ol style="list-style-type: none"> 1. All water tanks including cargo holds used for ballast and all cargo tanks 2. All fuel oil tanks Special consideration may be given to limit testing of double bottom tanks to representative tanks including one forward and one aft tank, and of deep tanks to representative tanks provided that, after an internal and external examination of the tanks as specified in 5.2.4.2, the Surveyor is satisfied with the condition of the tanks. 3. All lubrication oil tanks Special consideration may be given to limit testing to representative tanks provided that, after an internal and external examination of the tanks as specified in 5.2.4.2, the Surveyor is satisfied with the condition of the tanks.
Special Survey for ships over 15 years of age (Special Survey No.4 and subsequent Special Surveys)	1. All water tanks including cargo holds used for ballast, all cargo tanks, all fuel oil tanks and all lubrication oil tanks

Table B5.23-1 has been amended as follows.

Table B5.23-1 Requirements of Pressure Tests for Oil Tankers and Ships Carrying Dangerous Chemicals in Bulk

Special Survey	Tanks subject to pressure tests
<p>Special Survey for ships up to 5 years of age (Special Survey No.1)</p>	<ol style="list-style-type: none"> 1. Cargo tank boundaries facing ballast tanks, void spaces, pipe tunnels, fuel oil tanks, pump rooms or cofferdams 2. Within the cargo area of oil tankers, representative tanks for fresh water, fuel oil and lubrication oil 3. All other water tanks Special consideration may be given to limit testing of fresh water tanks to representative tanks provided that, after an internal and external examination of the tanks, the Surveyor is satisfied with the condition of the tanks. Tank testing of fresh water tanks may be specially considered when deemed appropriate by the Society. 4. All other fuel oil tanks Special consideration may be given to limit testing to representative tanks provided that, after an internal or external examination of the tanks as specified in 5.2.4.2, the Surveyor is satisfied with the condition of the tanks. Tank testing may be specially considered when deemed appropriate by the Society. 5. All other lubrication oil tanks Special consideration may be given to limit testing to representative tanks provided that, after an external examination of tanks, the Surveyor is satisfied with the condition of the tanks. Tank testing may be specially considered when deemed appropriate by the Society.
<p>Special Survey for ships over 5 years and up to 10 years of age (Special Survey No.2)</p>	<ol style="list-style-type: none"> 1. All cargo tank bulkheads 2. Within the cargo area of oil tankers, representative tanks For fresh water tanks, fuel oil tanks and lubrication oil tanks, as Special Survey No.1 3. All other water tanks Special consideration may be given to limit testing to representative tanks provided that, after an internal and external examination of the tanks, the Surveyor is satisfied with the condition of the tanks. 4. All other fuel oil tanks Special consideration may be given to limit testing to representative tanks provided that, after an internal or external examination of the tanks as specified in 5.2.4.2, the Surveyor is satisfied with the condition of the tanks. 5. All other lubrication oil tanks Special consideration may be given to limit testing to representative tanks provided that, after an external examination of the tanks, the Surveyor is satisfied with the condition of the tanks.
<p>Special Survey for ships over 10 years and up to 15 years of age (Special Survey No.3)</p>	<ol style="list-style-type: none"> 1. All cargo tank bulkheads 2. All water tanks 3. All fuel oil tanks Special consideration may be given to limit testing of double bottom tanks to representative tanks including one forward and one aft tank and of deep tanks to representative tanks provided that, after an internal and external examination of the tanks as specified in 5.2.4.2, the Surveyor is satisfied with the condition of the tanks. 4. All lubrication oil tanks Special consideration may be given to limit testing to representative tanks provided that, after an internal and external examination of the tanks as specified in 5.2.4.2, the Surveyor is satisfied with the condition of the tanks.

	5. For ships carrying dangerous chemicals in bulk, selected steel cargo pipes outside cargo tanks and ballast pipes passing through cargo tanks
Special Survey for ships over 45 10 years of age (Special Survey No.43 and subsequent Special Surveys)	<ol style="list-style-type: none"> 1. All cargo tank bulkheads 2. All For water tanks, all fuel oil tanks and all lubrication oil tanks, <u>as Special Survey No.1</u> 3. For ships carrying dangerous chemicals in bulk, selected steel cargo pipes outside cargo tanks and ballast pipes passing through cargo tanks

Table B5.23-2 has been amended as follows.

Table B5.23-2 Requirements of Pressure Tests for Ships Carrying Liquefied Gases in Bulk

Special Survey	Tanks subject to pressure tests
All Special Surveys for ships up to 5 years of age (Special Survey No.1)	<ol style="list-style-type: none"> 1. All boundaries of ballast tanks and deep tanks within the cargo area 2. Representative tanks for fresh water, fuel oil tanks and lubrication oil within the cargo area. <u>When deemed appropriate by the Society, tank testing may be specially considered.</u> 3. All water tanks For fresh water tanks outside the cargo area, special consideration may be given to limit testing to representative tanks provided that, after an internal and external examination of the tanks, the Surveyor is satisfied with the condition of the tanks. Tank testing of fresh water tanks may be specially considered when deemed appropriate by the Society. 4. All fuel oil tanks <u>outside the cargo area</u> For fuel oil tanks outside the cargo area, special consideration may be given to limit testing to representative tanks provided that, after an internal or external examination of the tanks as specified in 5.2.4.2, the Surveyor is satisfied with the condition of the tanks. Tank testing may be specially considered when deemed appropriate by the Society. 5. All lubrication oil tanks For lubrication oil tanks outside the cargo area, special consideration may be given to limit testing to representative tanks provided that, after an external examination of tanks, the Surveyor is satisfied with the condition of the tanks. Tank testing may be specially considered when deemed appropriate by the Society.
Special Survey for ships over 5 years and up to 10 years of age (Special Survey No.2)	1. As Special Survey No.1
Special Survey for ships over 10 years and up to 15 years of age (Special Survey No.3)	<ol style="list-style-type: none"> 1. All water tanks 2. All fuel oil tanks Special consideration may be given to limit testing of double bottom tanks to representative tanks including one forward and one aft tank and of deep tanks to representative tanks provided that, after an internal and external examination of the tanks as specified in 5.2.4.2, the Surveyor is satisfied with the condition of the tanks. 3. All lubrication oil tanks Special consideration may be given to limit testing to representative tanks provided that, after an internal and external examination of the tanks as specified in 5.2.4.2, the Surveyor is satisfied with the condition of the tanks.
Special Survey for ships over 15 years of age (Special Survey No.4 and subsequent Special Surveys)	1. All water tanks, all fuel oil tanks and all lubrication oil tanks

Table B5.24 has been amended as follows.

Table B5.24 Requirements of Pressure Tests of Bulk Carriers and Dry Cargo Ships of not less than 500 gross tonnage

Special Survey	Tanks subject to pressure tests
<p>All Special Surveys for ships up to 5 years of age (Special Survey No.1)</p>	<ol style="list-style-type: none"> 1. All boundaries of ballast tanks, deep tanks and cargo holds used for ballast within the cargo length area 2. Representative tanks for fresh water, fuel oil tanks and lubrication oil within the cargo length area. <u>When deemed appropriate by the Society, tank testing may be specially considered.</u> 3. All water tanks outside the cargo length area Special consideration may be given to limit testing to representative tanks provided that, after an internal and external examination of the tanks, the Surveyor is satisfied with the condition of the tanks. <u>Tank testing of fresh water tanks may be specially considered when deemed appropriate by the Society.</u> 4. All fuel oil tanks outside the cargo length area Special consideration may be given to limit testing to representative tanks provided that, after an internal or external examination of the tanks as specified in 5.2.4.2, the Surveyor is satisfied with the condition of the tanks. <u>Tank testing may be specially considered when deemed appropriate by the Society.</u> 5. All lubrication oil tanks outside the cargo length area Special consideration may be given to limit testing to representative tanks provided that, after an external examination of tanks, the Surveyor is satisfied with the condition of the tanks. <u>Tank testing may be specially considered when deemed appropriate by the Society.</u>
<p>Special Survey for ships over 5 years and up to 10 years of age (Special Survey No.2)</p>	<ol style="list-style-type: none"> 1. As Special Survey No.1
<p>Special Survey for ships over 10 years and up to 15 years of age (Special Survey No.3)</p>	<ol style="list-style-type: none"> 1. All water tanks including cargo holds used for ballast 2. All fuel oil tanks Special consideration may be given to limit testing of double bottom tanks to representative tanks including one forward and one aft tank and of deep tanks to representative tanks provided that, after an internal and external examination of the tanks as specified in 5.2.4.2, the Surveyor is satisfied with the condition of the tanks. 3. All lubrication oil tanks Special consideration may be given to limit testing to representative tanks provided that, after an internal and external examination of the tanks as specified in 5.2.4.2, the Surveyor is satisfied with the condition of the tanks.
<p>Special Survey for ships over 15 years of age (Special Survey No.4 and subsequent Special Surveys)</p>	<ol style="list-style-type: none"> 1. All water tanks including cargo holds used for ballast, all fuel oil tanks and all lubrication oil tanks

Chapter 8 PROPELLER SHAFT AND STERN TUBE SHAFT SURVEYS

8.1 Propeller Shaft and Stern Tube Shaft Surveys

Paragraph 8.1.3 has been amended as follows:

8.1.3 Preventive Maintenance System

Notwithstanding the requirements in **8.1.1** above, where the ship is equipped with oil lubricated stern tube bearings and appropriate stern tube oil sealing devices as approved by the Society, and at least the following **(1)** through **(4)** are properly monitored and recorded for diagnosing the lubricating conditions of the shafting system and maintaining the system preventively based on the results of the diagnoses subject to approval of the Society; the survey items of -2, -3 and -5 in **Table B8.1** need not be complied with provided that all condition monitoring data taken according to the approved preventive maintenance system is found to be within permissible limits and a general examination of the shafting system is carried out. For a ship of which the preventive maintenance system has been approved by the Society, the notation “*Propeller Shaft Condition Monitoring System*” (abbreviated to *PSCM*) is affixed to the ship’s classification character and the propeller shaft may be examined as a propeller shaft Kind 1C for the remaining requirements except -2, -3 and -5 in **Table B8.1**. The examination of the propeller boss bore in way of the propeller shaft taper section required by survey item -6 in **Table B8.1** may be partly dispensed with where deemed appropriate by the Society.

- (1) Lubricating oil sampling and analysis is to be carried out regularly at intervals not exceeding 6 *months* and each analysis is to include the following **(a)** through **(d)** at least:
 - (a) Water contents
 - (b) Chlorides contents
 - (c) Contents of shaft metal and bearing metal particles
 - (d) Oxidation of oil
- (2) Lubricating oil consumption rate
- (3) Bearing temperature
- (4) The value specified in -4 of **Table B8.1**

Table B8.1 Ordinary Surveys of Propeller Shaft and Stern Tube Shaft

Items	Examinations
1 Propeller connection (1) Shafts having keyed propeller attachments	The aft shaft taper is to be examined from the end of the cylindrical part of the shaft (or from the aft edge of the liner, if any) for one-third of the length of the shaft taper by an efficient crack detection method.
(2) Shafts having keyless propeller attachments	The forward portion of the aft shaft taper is to be examined by an efficient crack detection method. When the propeller is force fitted to the shaft, it is to be ascertained that the pull-up length is within the upper and lower limits given in 7.3.1-1, Part D .
(3) Shafts having coupling flange at the after end	The flange fillet and coupling bolts are to be examined by an efficient crack detection method. However, the crack detection examination may be dispensed with, provided that the Surveyor is satisfied with the condition after an external examination.
2 Propeller shaft, stern tube shaft, and coupling bolts	The sleeves, the fillet of the coupling flange to the intermediate shaft or to the stern tube shaft and the coupling bolts are to be examined with the shaft drawn from the stern tube bearings (anti-corrosion covers are to be removed for shafts of Kind 2).
3 Stern tube bearing	The stern tube bearings are to be examined.
4 After end of stern bush	The clearance between the propeller shaft or the stern tube shaft and the after bearing of the stern tube or the shaft bracket bearing or wear down of the bearing is to be measured.
5 Sealing device	Major parts of the stern tube sealing devices (including shaft bracket sealing devices, if any, hereinafter referred to as the same in this Chapter.) are to be opened and examined.
6 Propeller boss	The propeller boss bore in way of the propeller shaft taper section is to be examined.
7 Controllable pitch propeller	The pitch control gear and working parts are to be examined and the propeller blade fixing bolts are to be examined by an efficient crack detection method.
8 Water lubrication line	Where water-lubricated stern tube bearings are adopted, the sea water piping for lubrication is to be examined.
9 Oil lubrication line	Where oil-lubricated stern tube bearings are adopted, the low oil level alarms of the lubricating oil tanks, oil temperature measuring devices and oil circulation pumps are to be examined.
10 Lubrication oil	Where oil-lubricated stern tube bearings are adopted, the lubricating oil record book is to be examined.

EFFECTIVE DATE AND APPLICATION

1. The effective date of the amendments is 5 September 2008.

GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part B

Class Surveys

GUIDANCE

2008 AMENDMENT NO.4

Notice No.64 5th September 2008

Resolved by Technical Committee on 25th June 2008

AMENDMENT TO THE GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

“Guidance for the survey and construction of steel ships” has been partly amended as follows:

Part B CLASS SURVEYS

Amendment 4-1

B5 SPECIAL SURVEYS

B5.2 Special Surveys for Hull, Equipment, Fire extinction and Fittings

B5.2.4 Internal Examinations of Spaces and Tanks

Sub-paragraph -4 has been added as follows.

- 1 At Special Surveys for oil tankers, bulk carriers and ships carrying dangerous chemicals in bulk, reference is to be made to the plans and documents specified in **B1.4.2-6**.
- 2 When internal examinations are carried out, the means of access provided for the examinations are also to be examined.
- 3 “Coating condition” referred to in **5.2.4-3, Part B of the Rules** is in accordance with **B4.2.4-2**.
- 4 With respect to **Table B5.1, Part B of the Rules**, if a selection of tanks is accepted to be examined, then different tanks are to be selected so as to examine all tanks on a rotational basis.

B5.2.7 Pressure Tests

Sub-paragraphs -1 and -4 have been amended as follows.

- 1 With respect to **5.2.7, Part B of the Rules**, Bilge, sludge and other similar tanks are to comply with the requirements for fresh water tanks
- 2 Pressure tests of air pipes, sounding pipes, and other pipes may be required where deemed necessary by the Surveyor as a result of examinations.
- 3 In oil tankers, all bulkheads which form the boundaries of each cargo tank are to be tested with pressure from either side without fail at Special Survey No. 3 and subsequent Special Surveys.
- 4 ~~Special consideration may be given to pressure tests of fuel oil, lube oil and fresh water tanks based on confirmation from the Master stating that pressure tests have been carried out on these tanks according to the requirements in **5.2.7, Part B of the Rules** with satisfactory results.~~ “In cases where deemed appropriate by the Society stipulated in **Table B5.22 to B5.24, Part B of the Rules**” means that satisfactory external examinations of tank boundaries and confirmations from Masters stating that all pressure testing has been carried out according to the requirements with satisfactory results.

B8 PROPELLER SHAFT AND STERN TUBE SHAFT SURVEYS

B8.1 Propeller Shaft and Stern Tube Shaft Surveys

B8.1.3 Preventive Maintenance System

Sub-paragraph -3 has been newly added as follows:

1 Appropriate stern tube sealing devices approved by the Society and devices for properly monitoring the bearing temperature specified in **8.1.3, Part B of the Rules**, are specified respectively as follows.

- (1) Stern tube sealing devices capable of being repaired and replaced without drawing the shaft
- (2) Either of the following devices to measure the temperature at the aft end bottom of the stern tube metal and a device to record the temperature:
 - (a) Two or more temperature sensors embedded in the metal
 - (b) An embedded temperature sensor replaceable from inboard the ship and a spare temperature sensor.

In this case, replacement with the spare sensor is to be demonstrated according to the procedures submitted beforehand.

2 The preventive maintenance system specified in **8.1.3, Part B of the Rules**, is to be approved in accordance with the procedures specified in **Table B8.1.3-1**.

3 The wording “where deemed appropriate by the Society” in **8.1.3, Part B of the Rules** means those cases where it is difficult to sufficiently draw out the propeller from the propeller shaft for those ships in which the distance between the propeller and the rudder plate is short and where no sign of slippage between the shaft and propeller has been confirmed. However, even in such cases, the propeller is to be drawn out from its shaft as far as possible and the condition of the propeller boss bore is to be checked by the surveyor.

EFFECTIVE DATE AND APPLICATION (Amendment 4-1)

- 1.** The effective date of the amendments is 5 September 2008.

B1 GENERAL

B1.1 Surveys

Paragraph B1.1.4 has been amended as follows.

B1.1.4 Periodical Surveys carried out in advance

1 Where an Annual Survey or Intermediate Survey was carried out in advance in accordance with **1.1.4-2, Part B of the Rules**, the anniversary date is to be amended to a new date 3 *months* after the date on which the Annual Survey or Intermediate Survey was completed. Subsequent Annual Surveys and Intermediate Surveys specified in **1.1.3-1(1)** and **1.1.3-1(2), Part B of the Rules** are to be carried out at the intervals using the new anniversary date. However, where the third Periodical Survey (determined using the intervals corresponding to the new anniversary date) after the previous Intermediate Survey is due before the expiry date of the Classification Certificate of the ship, the Intermediate Survey is to be carried out in lieu of the Annual Survey.

2 In cases where Special Surveys are carried out in advance of the due dates of Intermediate Surveys and such Intermediate Surveys are dispensed with in accordance with **1.1.4-3, Part B of the Rules**, then such Special Surveys are to be completed up to and including the due date of the third Annual Surveys.

EFFECTIVE DATE AND APPLICATION (Amendment 4-2)

1. The effective date of the amendments is 1 January 2009.
2. Notwithstanding the amendments to the Guidance, the current requirements may apply to the surveys for which the application is submitted to the Society before the effective date.