

## Japanese Naval-Marked Martini-Henry Line-Throwing Gun (BSA pattern)

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In early 2016 I acquired a Japanese naval-marked line-throwing gun (舳銃=*moyai-jū* in Japanese). The main purpose of such a gun is to throw a line to a ship that is too far for a manual throw, usually, but not always, to effect an emergency rescue. Such guns were also used by fire departments needing to launch a rescue line further than their ladders would reach, for other rescues requiring the spanning of broad gaps, and for linking up planes for in-flight refuelling (yes, it sounds scary, but it's been documented!).

The smoothbore barrel is 18-1/2 inches (470 mm) long, giving the gun an overall length of 33-15/16 inches (864mm). The most surprising characteristic is its extremely heavy weight: 14 lbs, 10oz, or 6.62kg. This is primarily due to the buttstock being made out of solid cast iron (with a hard rubber recoil pad). Why? I think there could be three reasons for having such a heavy weight concentrated at the rear:

- (1) It would help to provide better balance and allow the muzzle to be elevated as required when a heavy spool of rope was fitted over the barrel and a heavy rod and sleeve projectile fitted into the barrel;
- (2) It would help absorb recoil when the heavy projectile was fired; and
- (3) It would aid in retaining the gun in the user's hands when the line reached the end of its travel, which would probably cause a forward jerking motion.

The rear "sight" actually consists of a pendulum suspended from a ladder. When the ladder is raised to its full upright position, it forms an angle of about 45 degrees with the barrel. The pendulum swings to hang evenly with the ladder when the gun is properly elevated for firing (see photo). There is no front sight, as it would have been obscured by the 7-1/2" diameter spool of rope intended to fit over the barrel. The gun disassembles easily: removing one screw from the underside of the forestock allows the forestock to swing down and it can then be slid forward and off the gun. The barrel unscrews easily by hand with no tools being needed.

As shown in the photos the principal markings are on the top of the receiver, just behind the barrel. They are arranged in two rows. The upper row has the inspection mark ⊕ on the left and a naval anchor on the right. The lower row consists of the Roman letters "KFC", well known to stand for "Kawaguchiya Firearms Company", a major pre-war importer, exporter and distributor of firearms and related goods, a successor to which still exists today with rather different lines of business. KFC markings also appear on Type 97 flare guns made for the IJN and a few other flare guns. The serial number 5318 is stamped on the left side of the barrel at the rear, and the last two digits (18) are stamped inside the forestock and inside the recess in the front of the receiver into which a projection on the rear of the forestock fits. The caliber is .577/450. A standard ball load will chamber, but kanji markings on the right side indicate that only blanks should be loaded (空装=*kūsō*). There are no other markings.

When I got the gun I knew that there was supposed to be a British naval line thrower that was basically the same, but had no information on it or the Japanese version (though the latter's existence was mentioned in the Ken Elks book on Japanese ammo). The first breakthrough in research came when I learned from Frank Allan that Thomas Keep had begun to research these line-throwers back in 2001. Frank still had a copy of Thomas's email enquiry about it, with pictures and a few details of another specimen (#503). Unfortunately, I have lost touch with Thomas and no one seems to know how to contact him or to have a copy of his findings. The second breakthrough came when Merv Jones, a noted Canadian cartridge collector, told me the British gun was made by BSA (Birmingham Small Arms). Once I googled "BSA line-throwing gun" I discovered a wealth of information on-line (full list of references available on request). Merv later kindly helped me to acquire a 10-round box for Kynoch blanks for the BSA line-

throwing gun, code dated 14 November 1951, along with three variations of the special blanks loaded for this purpose (see photo of the box, the large, heavily crimped blank and a much smaller regular blank for comparison. The headstamp is KYNOCH 577/450.) It is not known whether the Japanese produced their own ammo, or just bought it from the British, and if the latter, whether the boxes bore any Japanese marks. Correspondence with world-renowned ammunition research center Woodin Labs yielded no additional information.

Also included in the photos is an image of a 1930 Player's cigarette card showing a "Merryweather" line-throwing gun with the rope spool attached. Merryweather is an old British family company that specializes in fire-fighting equipment. I speculate that they looked after distribution to the firefighting sector; it seems unlikely they would have geared up to make the guns themselves. There seem to be three possible sources of variations of this gun so far: rope spool attachment mechanism (below or above the barrel); position of markings (barrel or receiver); and buttstock composition (wood versus cast iron). It is not known whether these three variables all changed at the same time. If not, there could be as many as  $2 \times 2 \times 2 = 8$  variations just based on these variables. The photos attached to Thomas Keep's 2001 email show serial number 503, which appears to have a rope spool retention spring below the barrel rather than the latch on top of the barrel that mine has. It also had the markings including the serial number in a different spot (on #503 all markings except the KFC are on the top rear of the barrel rather than the top front of the receiver). I also found photos of one other Japanese specimen on line, serial number 6XX, formerly owned by Eric Doody. Its rope spool attachment mechanism appears to be similar to mine, although it is missing the forestock. BSA period literature refers to the buttstock as being made of wood, with a weight including rope spool/canister approximating what mine weighs without the spool, and the caption to one on-line photo of a BSA specimen in an Australian museum indicates it has a wooden stock. It seems likely that wooden stocks are associated with early models, since a November, 1925 British magazine review reported a weight of 22-1/4 pounds with canister, some eight pounds more than the weight reported in early BSA literature.

It is not known whether BSA made these guns and exported them to Japan for sale by KFC, which did distribute BSA air guns in Japan before the war, or whether KFC made them in Japan, presumably under license. There are no BSA or other British markings of any kind visible on my specimen. Measurement of screw threads or other production details may provide some insight into the location of manufacture if suitable comparison guns can be located. BSA also produced a mounted version of the gun, and it is not known whether this was also marketed in Japan. The BSA/KFC line-throwing gun should not be confused with the Greener Martini-Henry harpoon gun, which is based on an earlier model of Martini-Henry action.

With Google's help I found a mention of the firing of an (unspecified) line-throwing gun in a Japanese-language account of the 1943 Indian Ocean rendez-vous between Japanese submarine I-29 and German sub U-180 to transfer Indian independence leader Subhas Chandra Bose. Besides the IJN, other possible Japanese users may have included the Imperial Sea Disaster Rescue Society (帝國水難救済會=*Teikoku suinan kyūsai kai*), shipping lines, passenger ships, and fire departments in major cities, but none of these have yet been confirmed.

If you have any information at all on this gun, in either its BSA or KFC incarnations, its ammunition or accessories, or would like a full list of references, please contact me at [tallteri@shaw.ca](mailto:tallteri@shaw.ca). I would like to compile a follow-up piece on this strange beast. As you can see, there are more questions than answers so far!

**Photos:** right side; left side; top markings; “load blanks” marks (right side); Kynoch box with large line-throwing & small regular blanks; gun with rope canister attached; elevation indicator.



## Annotated References

### **Period details on BSA gun:**

BSA brochure: [digital.slv.vic.gov.au/dtl\\_publish/pdf/marc/50/2589979.html](http://digital.slv.vic.gov.au/dtl_publish/pdf/marc/50/2589979.html). Includes photos of gun and accessories, including firing, and a cross-sectional line drawing.

Patent on projectile: <http://www.freepatentsonline.com/1418963.pdf>. Includes cross-sectional line drawing of rod-and-sleeve projectile.

BSA Board Minutes: <http://discovery.nationalarchives.gov.uk/details/rd/60a78abc-c632-4936-9059-4e8cf4f8795a>. Courtesy of Warwick University, Modern Records Centre.

**Other Surviving Specimens:** Photo of BSA specimen, Queenscliffe Maritime Museum, Australia.

Available at <https://victoriancollections.net.au/items/536705722162ef1310275d75>. Appears to have projectile, wooden sock and below-barrel rope canister attachment mechanism.

Reportedly used until 1976.

Photo of KFC specimen #6XX formerly owned by Eric Doody at <http://www.wehrmacht-awards.com/forums/showthread.php?t=211997&page=3> (posted 30 March 2007).

Another BSA specimen reportedly held by Powerhouse Museum, Australia. No image available.

Reportedly #72. <http://www.powerhousemuseum.com/collection/database/?irn=251580>

**Period Press Reports:** *Daily Telegraph*: 20 October, 1921. "Line-throwing gun". Page unknown. Courtesy of Warwick University, Modern Records Centre. Abridged report repeated in US newspaper *Edwardsville Intelligencer*. <https://www.newspapers.com/newspage/26396217/>

"Birmingham Small Arms", Olympia Exhibition Supplement to *The Engineer*, November 20, 1925, p. xx. (Report on BSA line-throwing gun; weight reported as 22-1/4 pounds with rope canister, much more than original BSA brochure. Optimal elevation reported as 30 degrees.)

**Emails:** Frank Allan, personal email correspondence dated February 2-11, 2016.

Eric Doody, personal email correspondence dated July 6, 2016.

Thomas Keep, "Japanese line throwing gun", email dated 2 August 2001 to various recipients. Photos of #503.

Bill Woodin (Woodin Lab), personal email correspondence dated May 25-26, 2016.

**Reports re usage:** History of New Brighton Lifeboat Station. Reports BSA line-throwing gun first provided 1921. <http://rnli.org/findmynearest/station/Pages/New-Brighton-tabs/History.aspx>

"Refueling in flight", *Flight* magazine. April 25, 1940, p. 384. Available at

<https://www.flightglobal.com/FlightPDFArchive/1940/1940%20-%201220.PDF>

伊号第 2 9 潜水艦とスバス・チャンドラ・ボース("Sub I-29 and Subhas Chandra Bose")

<http://kuir.jm.kansai-u.ac.jp/dspace/bitstream/10112/2967/1/KU-0200HK-20020331-11.pdf> Reports Japanese line-throwing gun use in transfer of Bose from German to Japanese.

**Miscellaneous:** Ken Elks. *Japanese Ammunition 1880-1945, Part 1: Pistol, Rifle and Machine Gun Ammunition up to 20mm*, 2007, p. 22.

Nitroexpress.com forum had explanation of Kynoch date codes in a post dated February 14, 2006.

Kawaguchiya catalogue No. 19 (営業案内= *eigyō annai*), author's collection. BSA air rifles, accessories and .22 rifle shown pp. 47-50. Matching price list dated September, Showa 5 (1930).