



US Forest Service Aviation TECH BULLETIN



No. FSTB 2011-01

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Subject: Skid Tube Rope Abrasion Guards

Distribution: All Helicopter Rappel Operators

ISSUE: Some helicopters on contract to the U.S. Forest Service (USFS) for the rappel mission do not have skid tube rope abrasion guards installed. Skid tube rope abrasion guards must be installed for rappel flight operations.

DISCUSSION:

In 2010 the U.S. Forest Service sent Heli-Tech the following document. Heli-Tech then sent it out to all operators that have STC# SH261WE installed on aircraft. The text is listed below.

BELL 205A/205A-1/210/212/412/214B/214B-1

Design Owner: USDA – FS

Kit Designer: Avspec

Items Required For Rappelling:

Rappelling Kit¹: ELAM – External Load Attachment Means
Load Rating: 300 pounds per side (3.5 limit load factor, 5.25 ultimate load factor)

Installation basis²: STC SH261WE
USFS approval status: Final (MTDC/NIFC)

Accessory:

- 1) Two NAS1211B or equivalent rings (2500# minimum ultimate strength & .625" stud length) – contractor responsible (Heli-Tech, Eugene, OR is possible source for rings)
- 2) Web strap for spotter to connect between rings. – Supplied by the government.
- 3) Skid tube rope abrasion guards – contractor responsible

Notes:

- 1) Kit includes the anchor, placards, ICA, FMS, & Installation Instructions. The STC calls out specific rings and ring locations for the Spotter tether attachment point. The Rappel Working Group has standardized on a strap between some of the points listed in the STC. MTDC maintains the design specification for the web strap between these points.
- 2) There was an earlier version of this kit that only had an allowable working load of 250 pounds. These kits have been superceded by the 300 pound kit and are no longer approved for Forest Service rappel contracts.

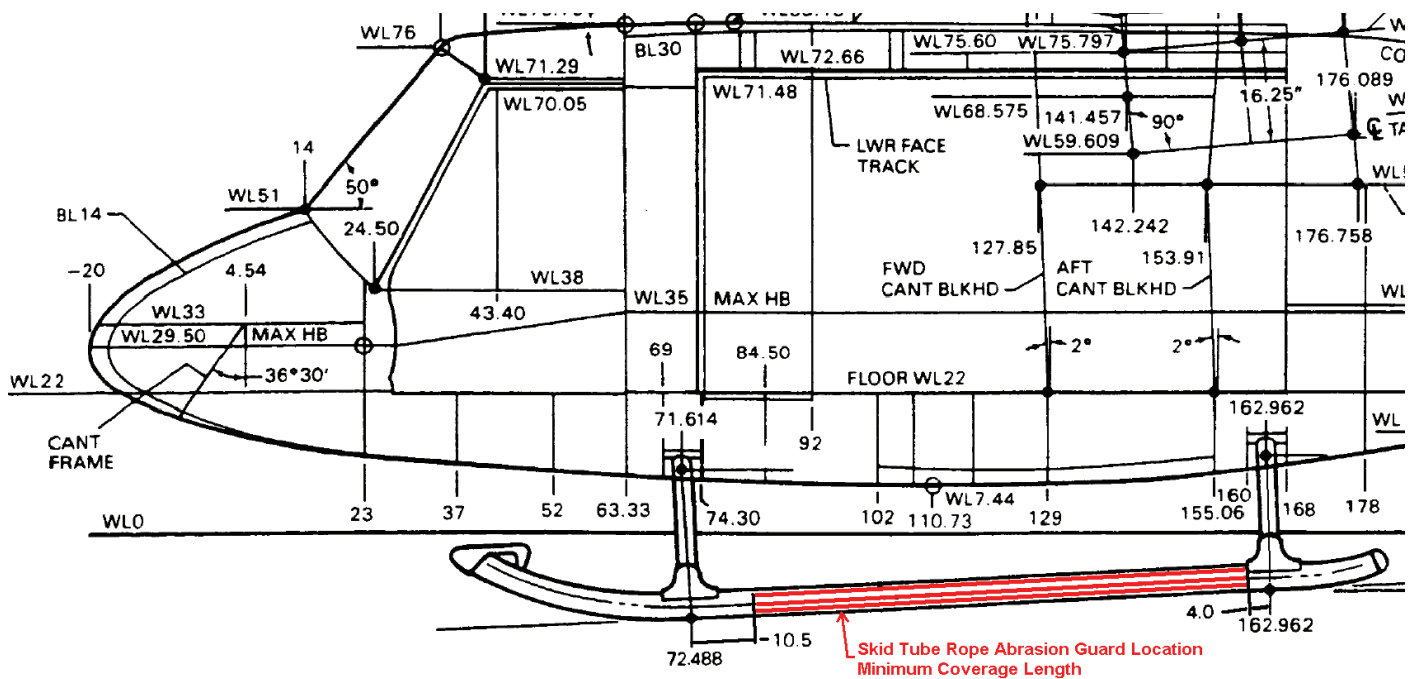
INSPECTION: USDA200MMS latest Revision

Skid Tube Rope Abrasion Guards

The envelope that the tube rope abrasion guards shall fit in are as follows. Note Fuselage Station (FS) is annotated for undeflected landing gear, as would be the case in flight.

- The forward edge of the skid tube rope abrasion guards shall not be greater than 10.5 inches aft of the centerline of the forward landing gear cross tube saddle (FS 83). It is permissible for the guards to extend forward.
- The aft edge of the skid tube rope abrasion guards shall not be greater than 4.0 inches forward of the centerline of the aft landing gear cross tube saddle (FS 159). It is permissible for the guards to extend aft.
- The skid tube rope abrasion guards shall be designed to keep the rope from contacting the skid tube.
- The skid tube rope abrasion guards surface shall be free from nicks, burrs, and sharp edges that would cause the rope to snag or be cut.

Figure 1 Skid Tube Rope Abrasion Guard Dimensions from Saddle Centerlines



Contact:

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