

SECTION III

TOWER CABS

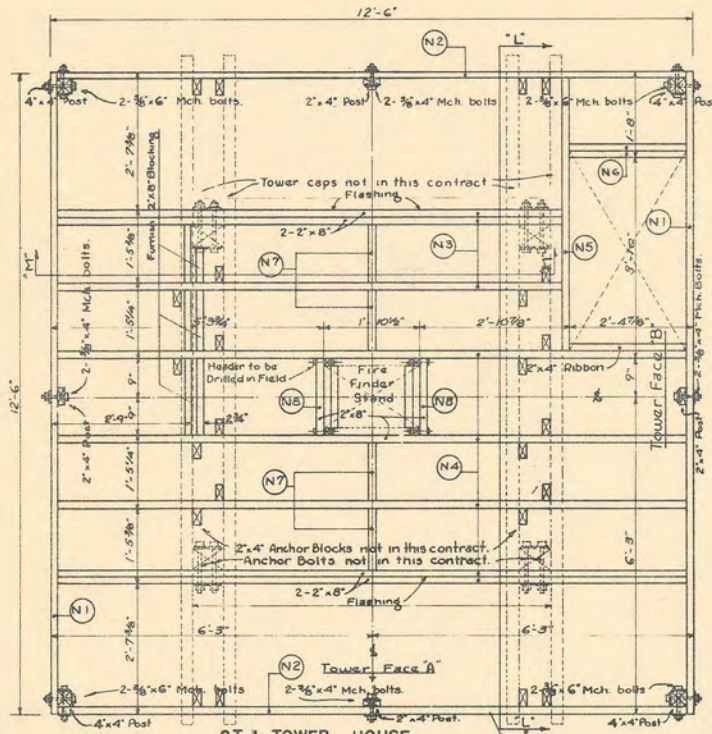
The 7' x 7' steel tower cab drawing is included with the drawings of the tower in Section I and are not repeated in this Section. The 14' x 14' steel tower uses the 14' x 14' wood cab, drawings of which are included in this Section.

In order, however, to use the 14' x 14' wood cab on the 14' x 14' steel tower, certain revisions of detail are necessary, which are as follows:

1. As detailed on drawings of 14' x 14' steel tower, bolt 4" x 6" S4S treated sills to 5" x 3½" x 5/16" angles at cab level. It is suggested that the contractor furnishing the tower material be also required to furnish and treat the 4" x 6" sill. The four sill pieces are to be cut to required length and the horizontal bolt holes in the sill are to be bored to suit the holes in the 5" x 3½" x 5/16" angles.

Horizontal holes are also to be bored in the sill to suit the four anchorage straps as shown on sheet B-4203 of the cab drawings, the details of which must be revised to fit the 6" depth of the sill in place of the 10" depth of the cab girder. Before preservative treatment is given, all of the 4" x 6" sill pieces must be completely and accurately framed so that no cutting or boring will be necessary in the final use of the pieces. The sill pieces are to be plainly marked for their correct location.

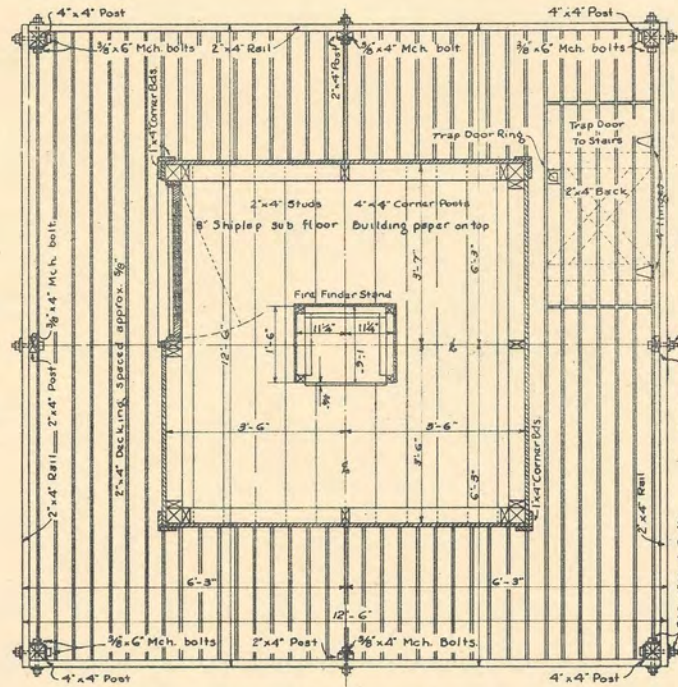
2. Because the steel tower framing itself makes provision for supporting the catwalk, the cab joists are to be framed as shown on sheet B-4201 for cab types G-TH and G-HP. 2" x 8" joists are to be used, however, in place of 2" x 6" joists called for on this drawing. The reason for this is that the 14' x 14' wood cab drawings call for a center sill which is not provided for on the steel tower.
3. Such untreated catwalk and trap door material as indicated on the steel tower drawing, L-1603, is to be purchased rather than the catwalk material as called for on 14' x 14' wood cab drawings.



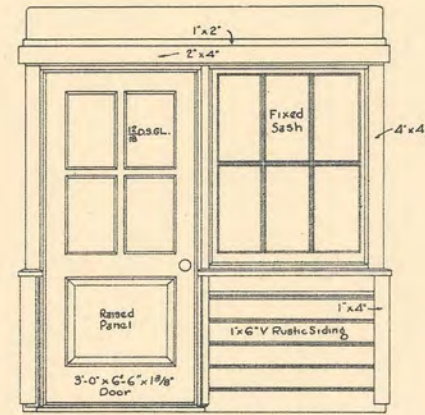
CT-1 TOWER HOUSE FLOOR & CATWALK FRAMING PLAN

Note: All 1/2"x4" Mch Bolts to have 2-1/8" cut washers each. All to be Galv.

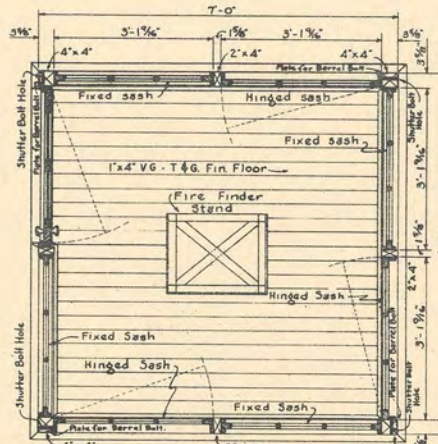
Note: All timbers marked (N) are not in contract but are indicated hereon for the information of the field.



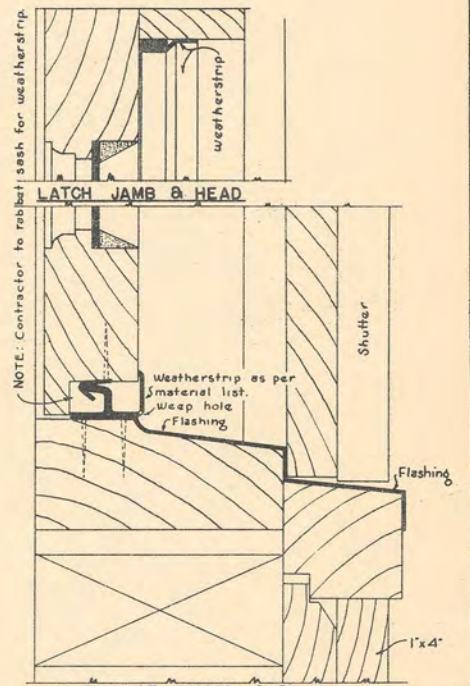
CATWALK PLAN



LEFT ELEVATION



FLOOR PLAN

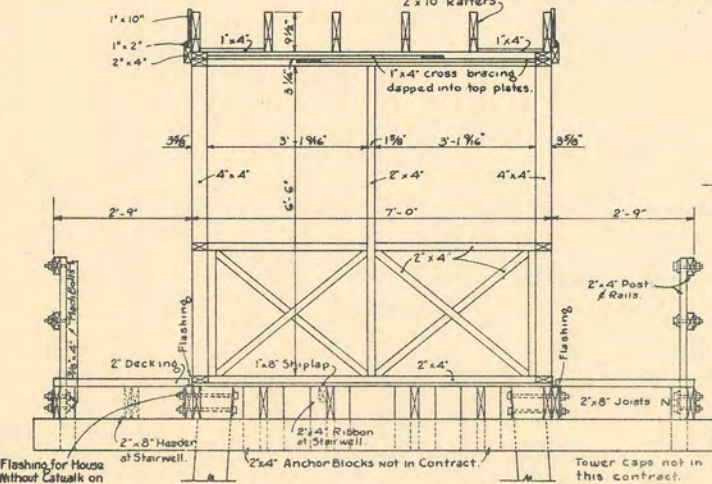


LATCH JAMB & HEAD SILL OF HINGED SASH FULL SIZE

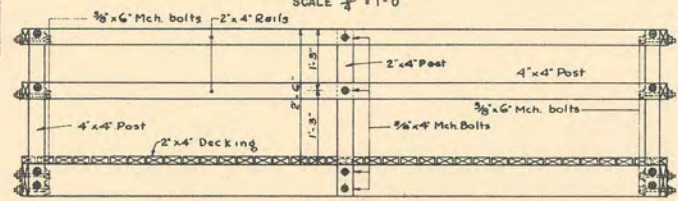
REVISED 5-20-40 C.F.R. U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE REGION SIX JAMES FRANKLAND ASST. REG. FORESTER

STANDARD - 1936 7'x7' LOOKOUT HOUSE

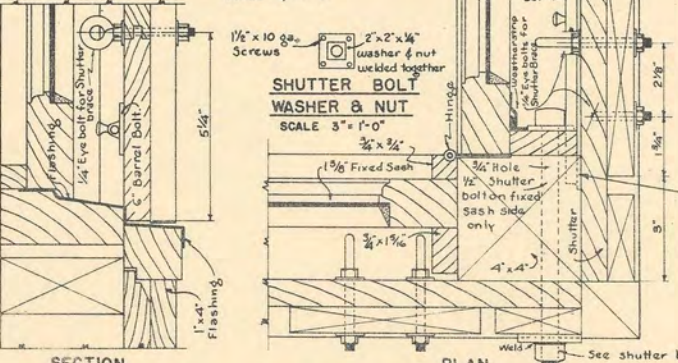
DESIGN REVISIONS: 4-28-38 C.F.R. DESIGNED H.L. DRAWN C.F.R. TRACED C.F.R. SCALE AS NOTED CHECKED DATE 4-28-38 APPROVED BY J. B. BONDY ACT. ASSISTANT REGIONAL FORESTER



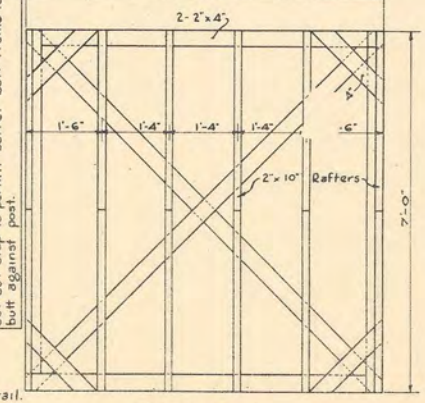
SECTION "L-L" INCLUDING CAB FRAMING



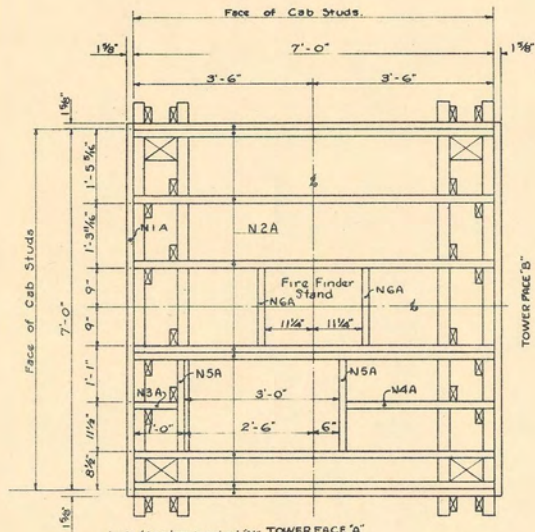
ELEVATION OF CATWALK & RAILS



SECTION (FIXED SASH) DETAIL OF SHUTTER FASTENINGS



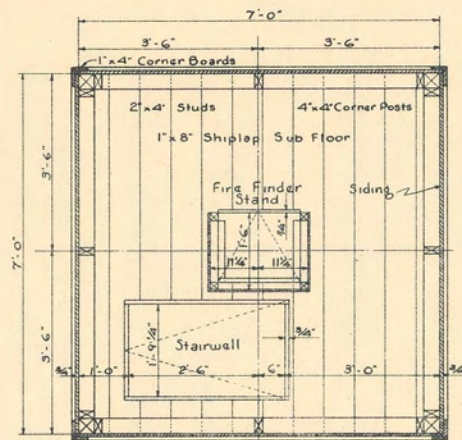
RAFTER PLAN



Joists & headers marked 'N'.
 Tower legs horizontal, 2x4.
 2x4 Anchor blocks not in this contract.

CT-1 TOWER JOIST LAYOUT

FOR HOUSE WITHOUT CATWALK AS SHOWN ON SHEET L-10001.
 CT-5 TOWER JOIST LAYOUT FOR HOUSE WITHOUT CATWALK SHOWN ON SHEET L-10002.



FRAMING PLAN BELOW SASH

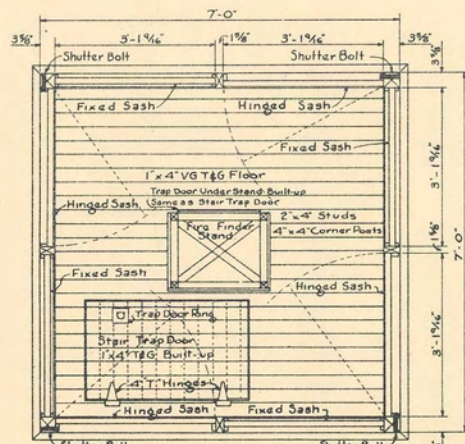
-GENERAL NOTE-
 Sheets B-4101 and B-4102 are to be used in combination with this sheet for "HOUSE WITHOUT CATWALK."

Shutters do not apply to this house.

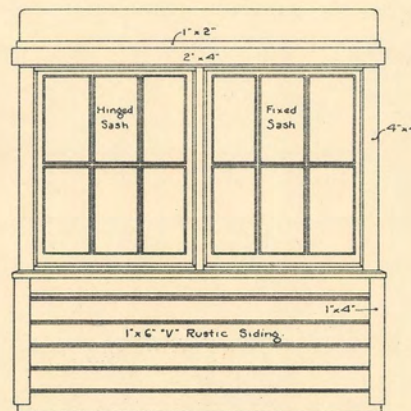
The following details on the above sheets shall apply:
 Sheet B-4101: DETAIL OF SHUTTER FASTENINGS (WITHOUT SHUTTER)
 FIXED SASH SECTION
 CORNER PLAN

SECTION "L-L" (WITHOUT CATWALK).
 RAFTER PLAN.
 DETAIL OF HINGED SASH.

Sheet B-4102: DETAIL OF FIRE FINDER STAND.
 STOOL.
 DETAIL SECTION "M-M" (WITHOUT DOOR SECTION, CATWALK AND SHUTTERS).



FLOOR PLAN



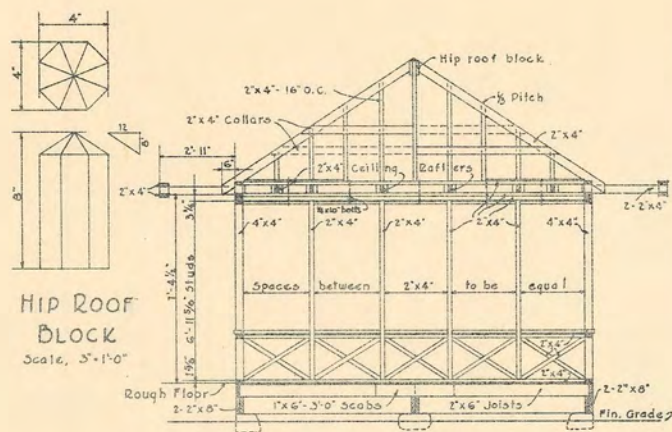
ELEVATION TOWER FACE 'B'

U. S. DEPARTMENT OF AGRICULTURE
 FOREST SERVICE

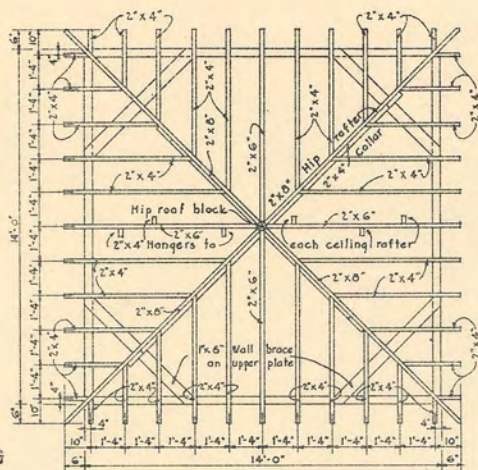
REGION SIX JAMES FRANKLAND ASST. REG. FORESTER

STANDARD - 1936
 7'x7' LOOKOUT HOUSE
 WITHOUT CATWALK

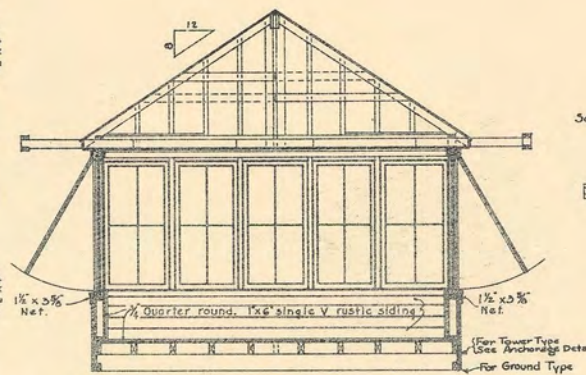
DESIGN REVISION 5-23-38 C.F.R.
 DESIGNED H.L. DRAWN G.E.R. TRACED C.F.R.
 SCALE 3/8" = 1'-0" CHECKED
 APPROVED *[Signature]* DATE 5-23-38
 ACT. ASSISTANT REGIONAL FORESTER



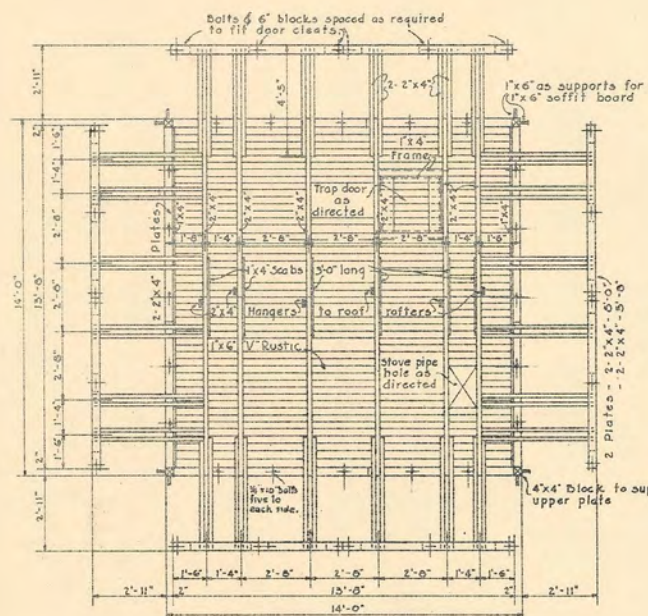
SECTION SHOWING SIDEWALL FRAMING
Scale, 3/8"-1'-0"



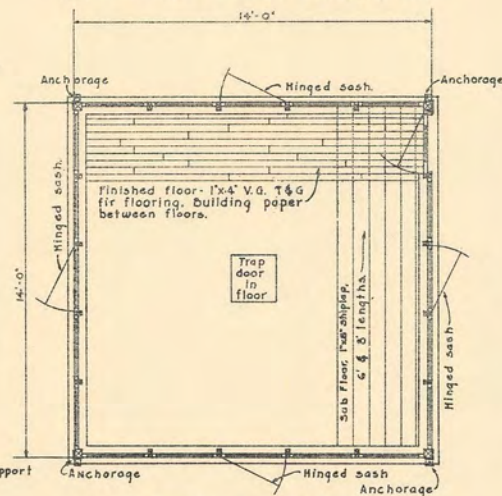
SECTION
Scale, 3/8"-1'-0"



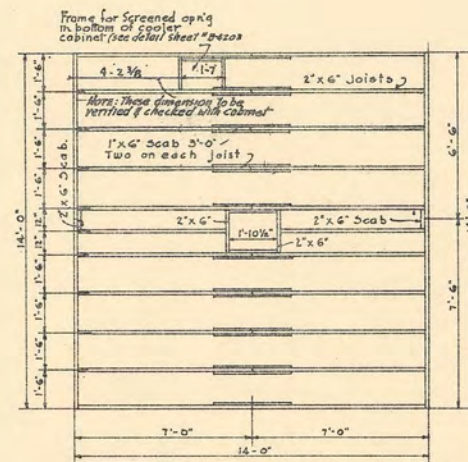
SECTION
Scale, 3/8"-1'-0"



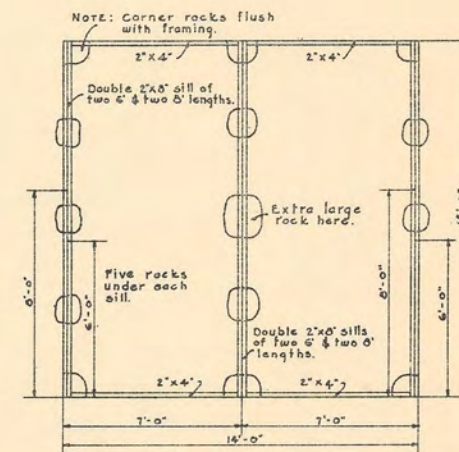
FLOOR PLAN
Scale, 3/8"-1'-0"



JOIST FRAMING PLAN
Scale, 3/8"-1'-0"



FOUNDATION & SILL PLAN
FOR TYPES G-TH & G-H.P.
Scale, 3/8"-1'-0"

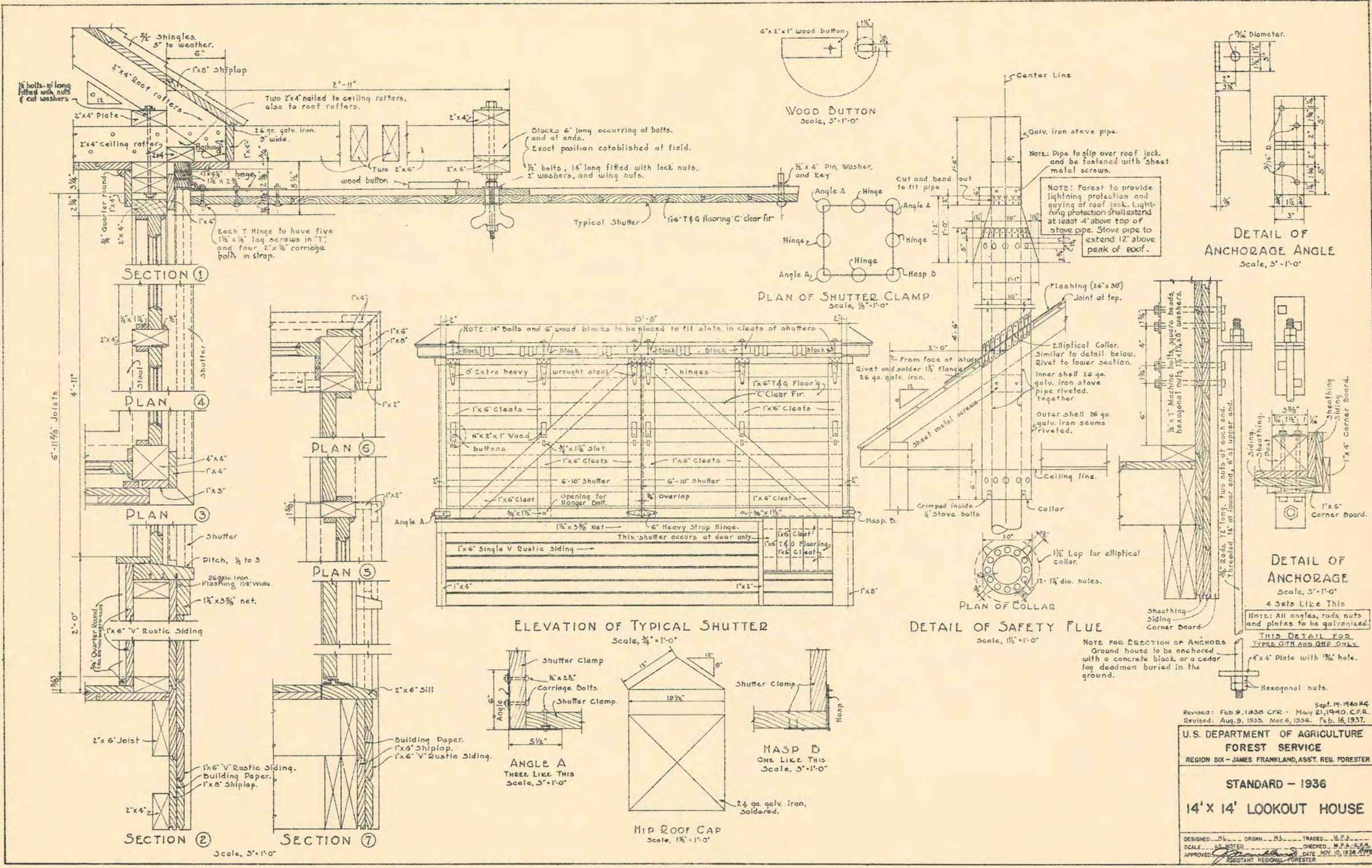


Revised: Mar. 6, 1936. Feb. 16, 1937. Feb. 9, 1938 CFR.

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
REGION SIX - JAMES FRANKLAND, ASST. REG. FORESTER

STANDARD - 1936
14' X 14' LOOKOUT HOUSE

DESIGNED... H.L. DRAWN... H.L. TRACED... M.P.A.
SCALE... AS NOTED CHECKED... M.P.A. G.F.B.
APPROVED... DATE NOV. 10, 1938
ASSISTANT REGIONAL FORESTER

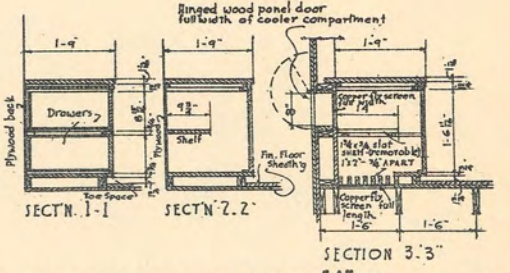
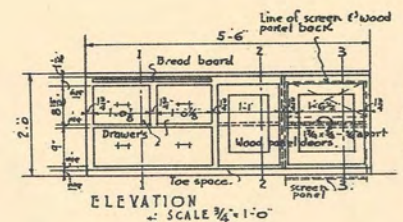
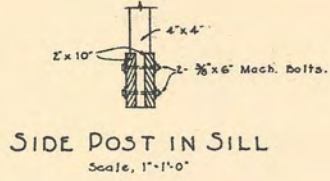


Revised: Feb. 9, 1938 C.F.R. May 21, 1940, C.F.R.
 Revised: Aug. 9, 1935. Mar. 6, 1936. Feb. 16, 1937.

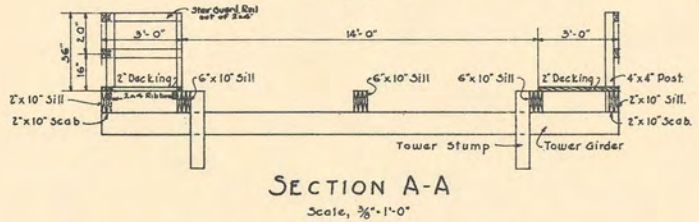
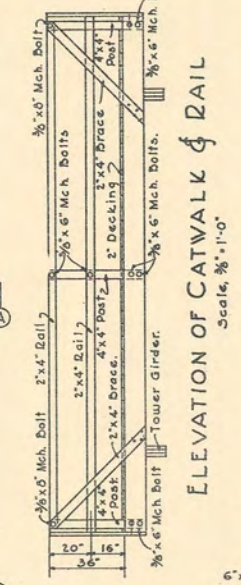
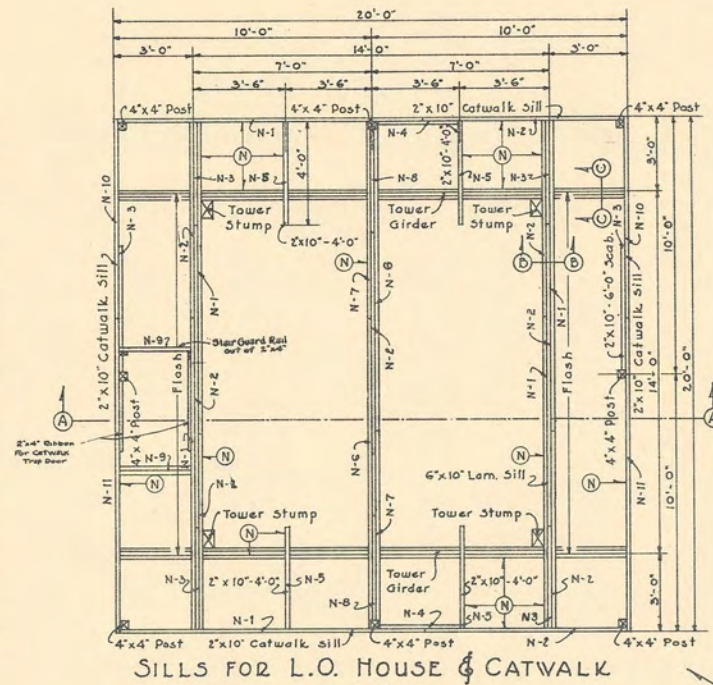
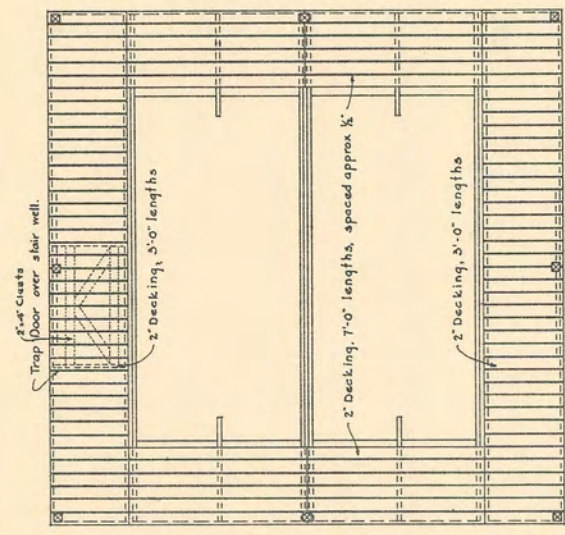
U.S. DEPARTMENT OF AGRICULTURE
 FOREST SERVICE
 REGION SIX - JAMES FRANKLAND, ASST. REG. FORESTER

STANDARD - 1936
 14' X 14' LOOKOUT HOUSE

DESIGNED BY M.L. DRAWN BY M.L. TRACED BY W.P.D.
 SCALE AS NOTED CHECKED M.P.A.C.W.
 APPROVED DATE NOV. 10, 1938
 ASSISTANT REGIONAL FORESTER



DETAILS OF COOLER CABINET 'A' (MAKE ONE (1) THIS)
SCALE 3/4"=1'-0"

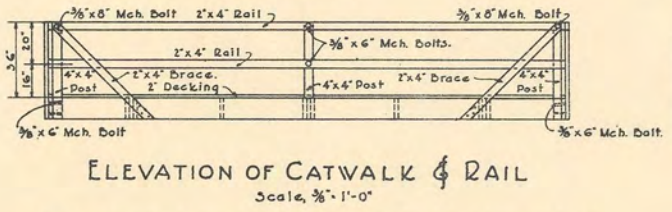


NOTE: All timbers marked (N) are not in this contract, but are indicated hereon for the information of the field.

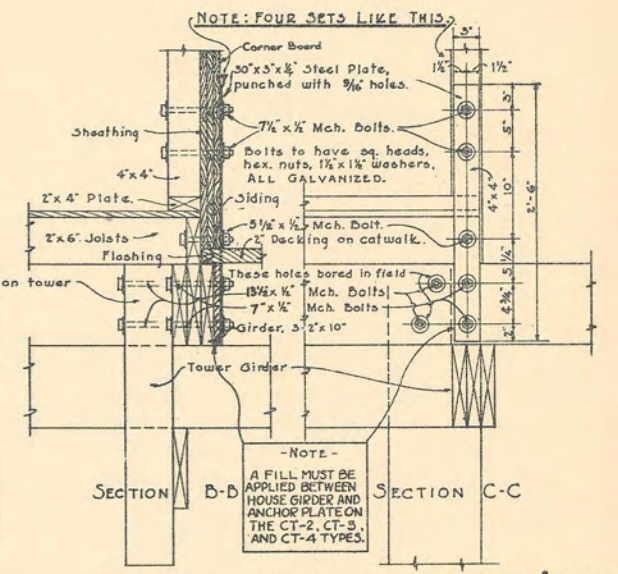
LEGEND

TYPE T-TH	- Tower Type, Truck Haul.
TYPE GTH	- Ground Type, Truck Haul.
TYPE T-HP	- Tower Type, Horse Pack.
TYPE GHP	- Ground Type, Horse Pack.

NOTE: Above plan indicates Tower Girders and Stumps for Type CT-3 Lookout Tower. See detailed drawing for this type or for Types CT-2, and CT-4.



NOTE: All bolts to be machine bolts with two 1/4" washers per bolt. ALL GALVANIZED



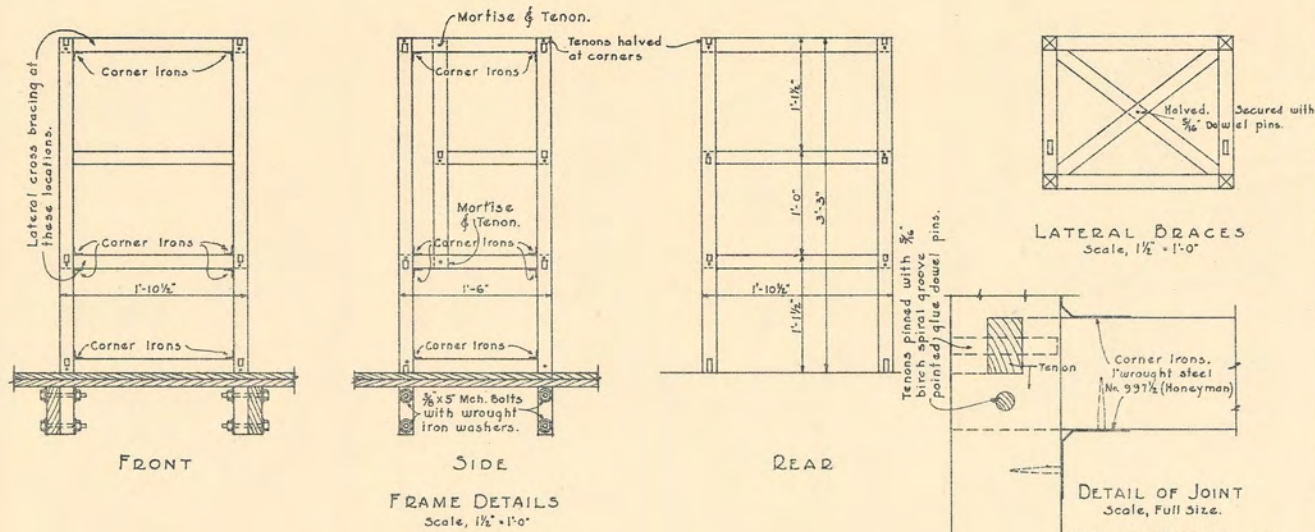
Revised May 21, 1940, C.F.R. Revised Sept 19, 1940, H.C.P.
Revised: Mar. 5, 1936. Feb. 16, 1937. Feb. 8, 1938, C.F.R.

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
REGION SIX - JAMES FRANKLAND, ASST. REG. FORESTER

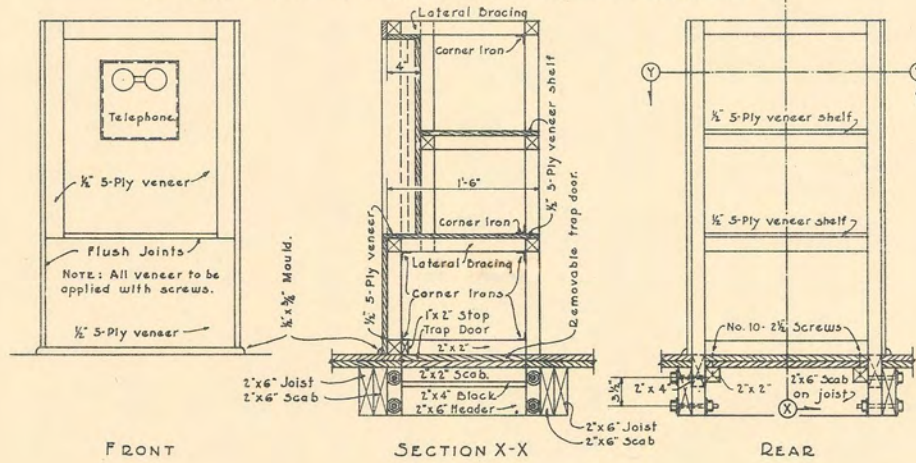
STANDARD - 1936
14' x 14' LOOKOUT HOUSE

DESIGNED... H.L. DRAWN... H.L. TRACED... M.P.A.
SCALE... AS NOTED CHECKED... H.P.A. C.F.R.
APPROVED... DATE NOV. 10, 1938 ASSISTANT REGIONAL FORESTER

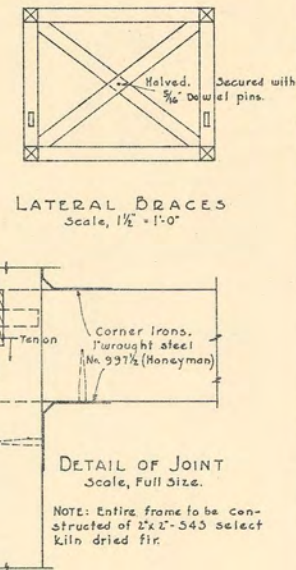
NOTE: THIS SHEET FOR USE ONLY WHEN L.O. HOUSE IS BUILT ON TOWER - TYPES T-TH & T-HP



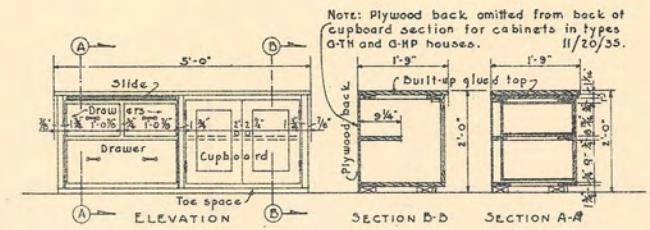
NOTE: Entire frame to be constructed of 2"x2", S4S, No.1, select, kiln dried fir.



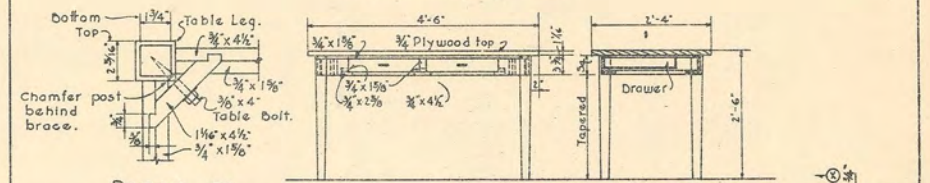
ELEVATIONS
Scale, 1/4" = 1'-0"
DETAILS OF FIRE FINDER STAND



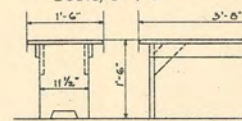
LATERAL BRACES
Scale, 1/4" = 1'-0"
DETAIL OF JOINT
Scale, Full Size
NOTE: Entire frame to be constructed of 2"x2"-S4S select kiln dried fir.



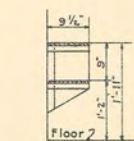
KITCHEN CABINET B
Scale, 3/4" = 1'-0"
NOTE: ONE CABINET LIKE THIS.



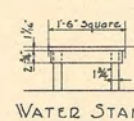
DETAIL OF TABLE LEG CONNECTION
LOOKING UP FROM FLOOR
Scale, 5/8" = 1'-0"



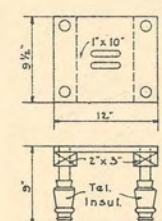
END FRONT
BENCH
Scale, 3/4" = 1'-0"



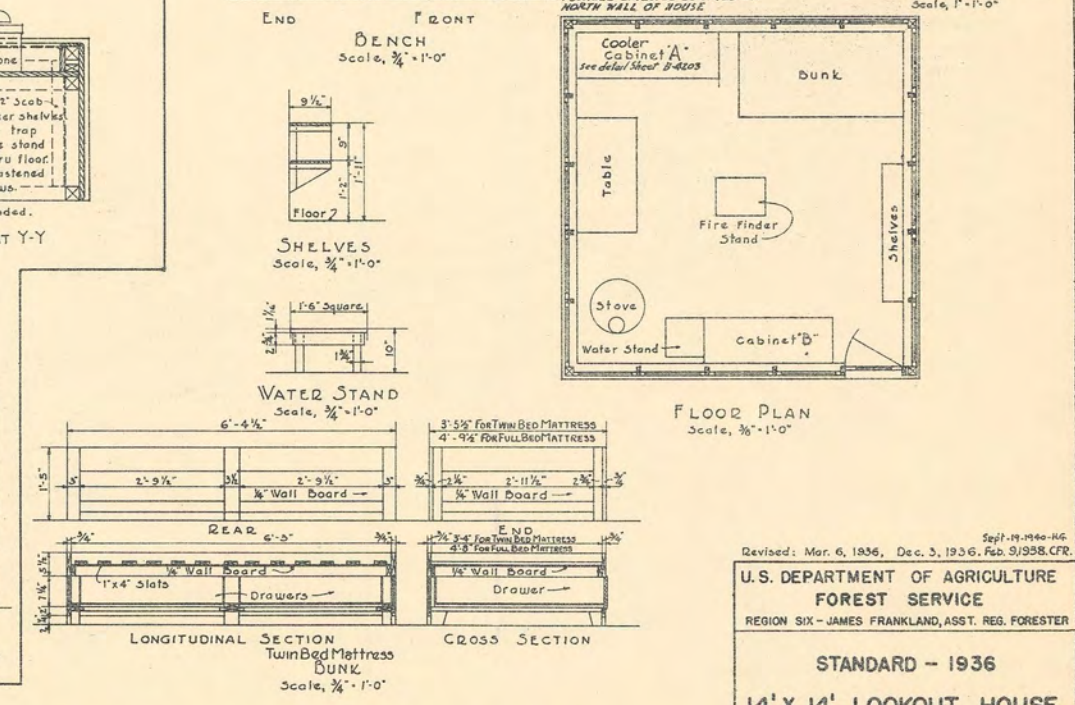
SHELVES
Scale, 3/4" = 1'-0"



WATER STAND
Scale, 3/4" = 1'-0"

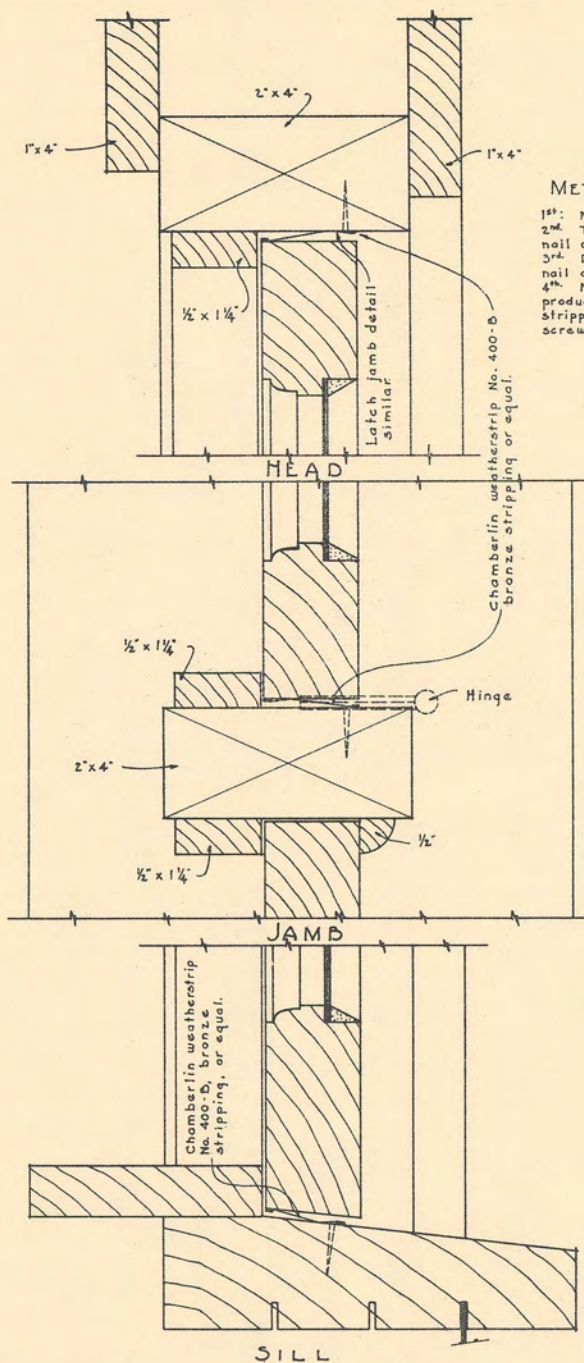


STOOL
Scale, 1/2" = 1'-0"



DETAILS OF FURNITURE AND KITCHEN CABINETS

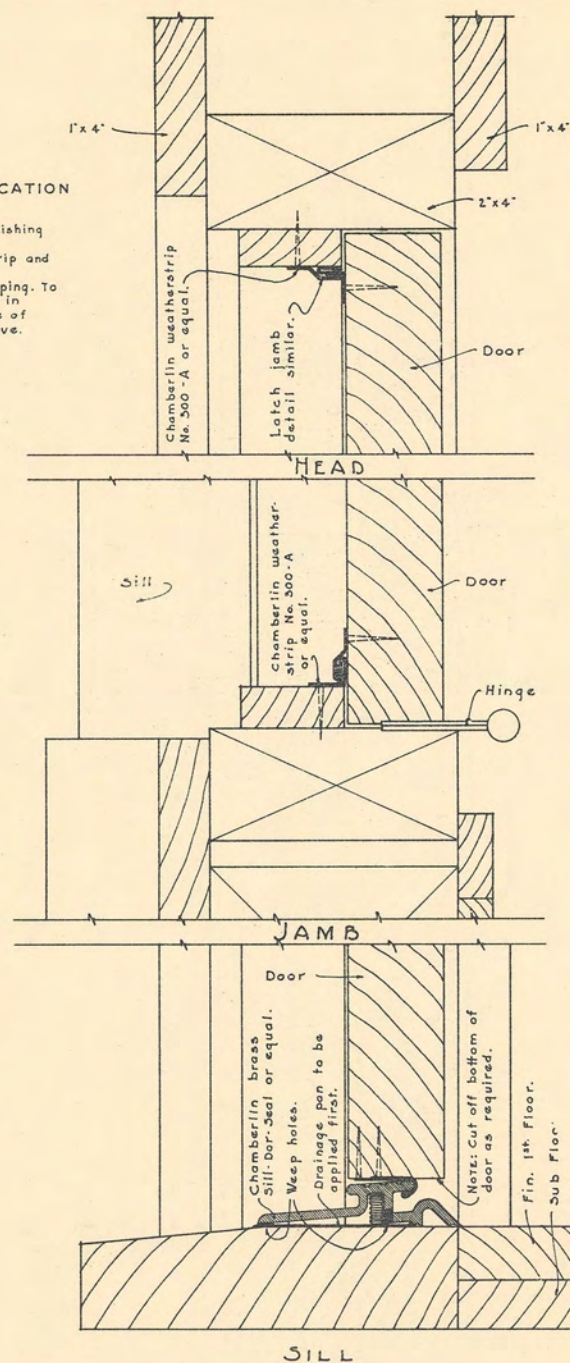
Revised: Mar. 6, 1936, Dec. 3, 1936, Feb. 9, 1938, C.F.R.
 U.S. DEPARTMENT OF AGRICULTURE
 FOREST SERVICE
 REGION SIX - JAMES FRANKLAND, ASST. REG. FORESTER
 STANDARD - 1936
 14' X 14' LOOKOUT HOUSE
 DESIGNED H.L. DRAWN H.L. TRACED M.P.A. - C.F.R.
 SCALE AS NOTED CHECKED M.P.A. - C.F.R.
 APPROVED DATE NOV. 10, 1936
 ASSISTANT REGIONAL FORESTER



F.S. WINDOW DETAIL

METHOD OF APPLICATION

- 1st: Nail strip at top.
- 2nd: Tack bottom with finishing nail and stretch tight.
- 3rd: Draw in center of strip and nail at center.
- 4th: Nail balance of stripping. To produce spring as desired in stripping, run sharp edge of screw driver along groove.



F.S. DOOR DETAIL

SHOWING METHOD OF APPLYING WEATHERSTRIPPING

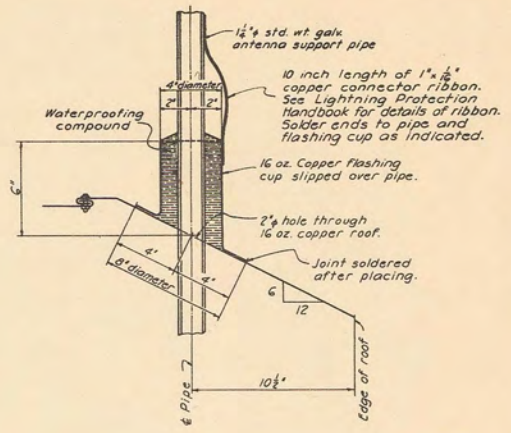
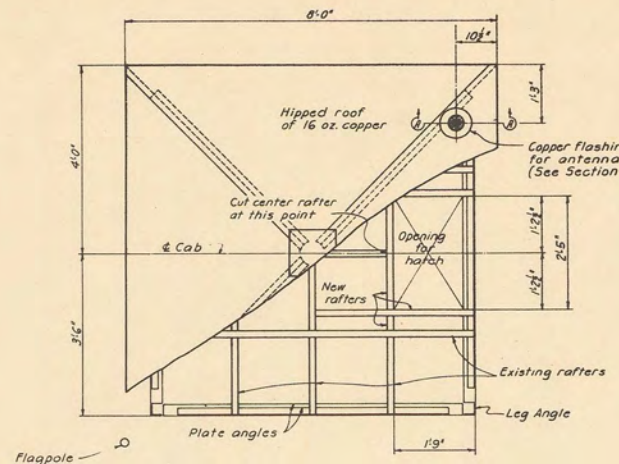
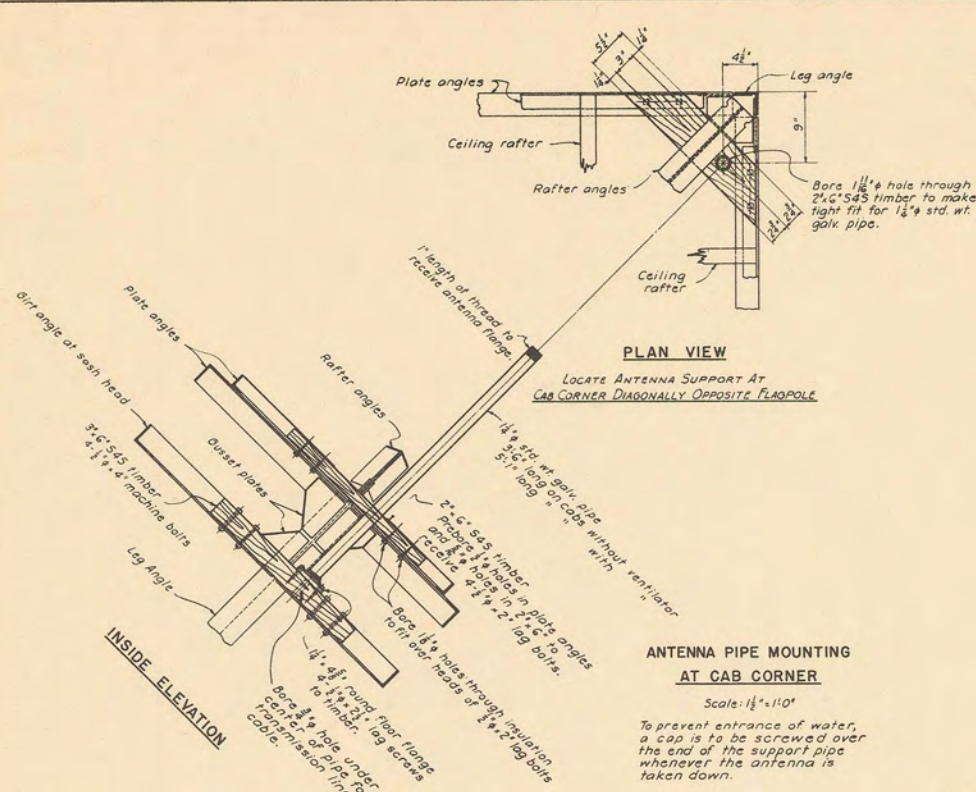
Revised Feb 9, 1938 CER.

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
REGION SIX - JAMES FRANKLAND, ASST. REG. FORESTER

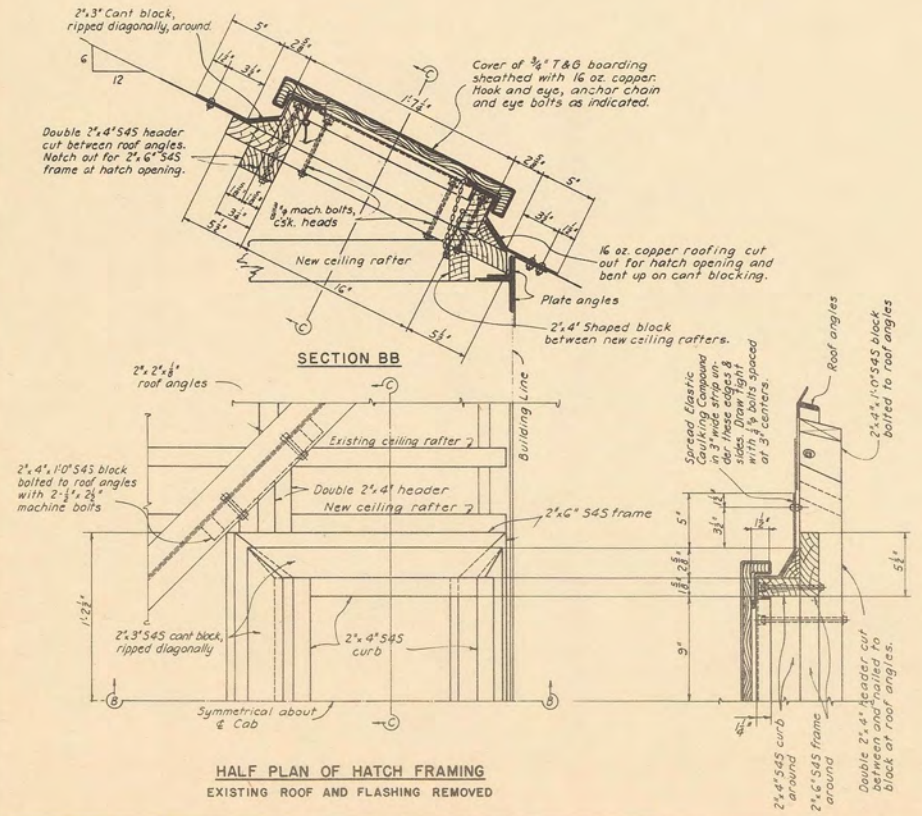
STANDARD - 1936

14' x 14' LOOKOUT HOUSE

DESIGNED - H.L. DRAWN - H.S. TRACED - M.P.A.
SCALE - AS NOTED CHECKED - M.P.A. - CER.
APPROVED - DATE NOV. 10, 1938 F.W.B.
ASSISTANT REGIONAL FORESTER



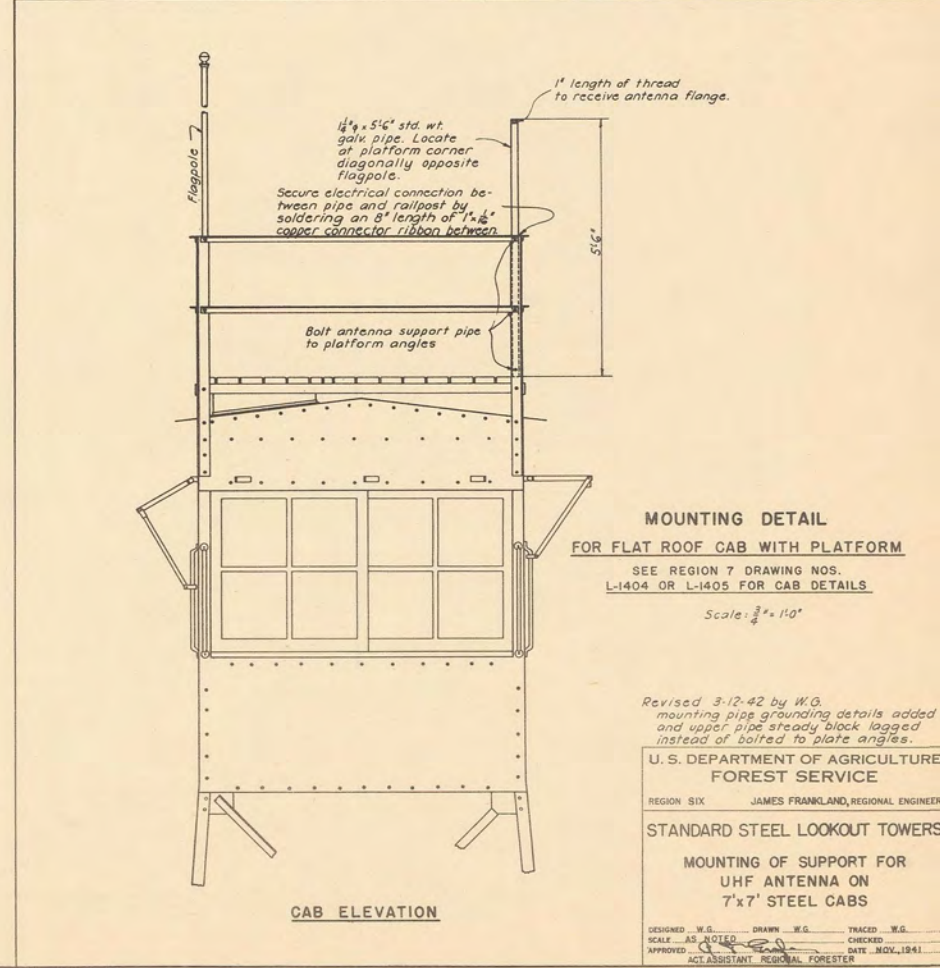
MOUNTING DETAILS FOR HIPPED ROOF CAB WITHOUT PLATFORM
SEE REGION 7 DRAWING NO. L-1403 FOR CAB DETAILS



HATCH DETAILS
Scale: 3/8" = 1'

16 oz. copper flashing around hatch and cover with its copper sheathing, are to be furnished completed and ready for installation on the job. Joints in flashing and cover sheathing are to be single locked and soldered tight.

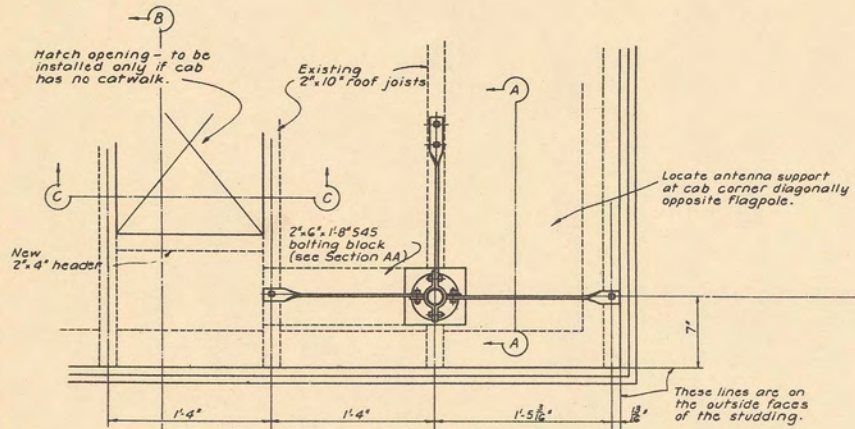
Hatch required if cab has no catwalk or other means of access for adjustment of antenna.



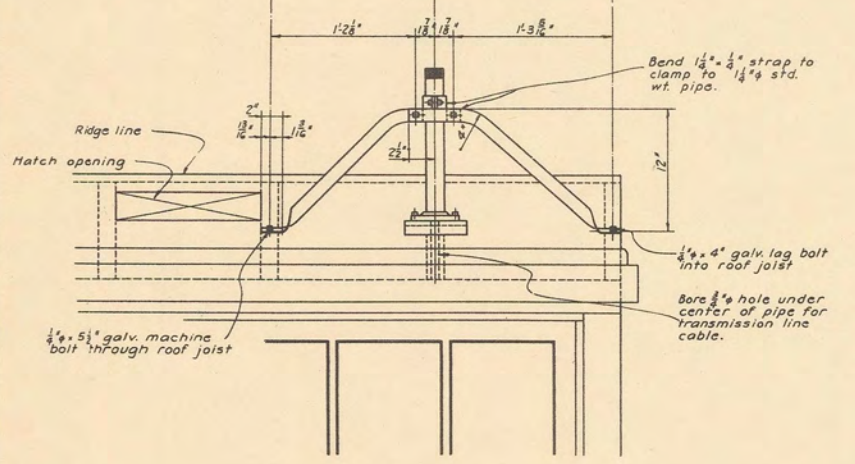
Revised 3-12-42 by W.G. mounting pipe grounding details added and upper pipe steady block lagged instead of bolted to plate angles.

U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
REGION SIX JAMES FRANKLAND, REGIONAL ENGINEER
STANDARD STEEL LOOKOUT TOWERS
MOUNTING OF SUPPORT FOR UHF ANTENNA ON 7'x7' STEEL CABS

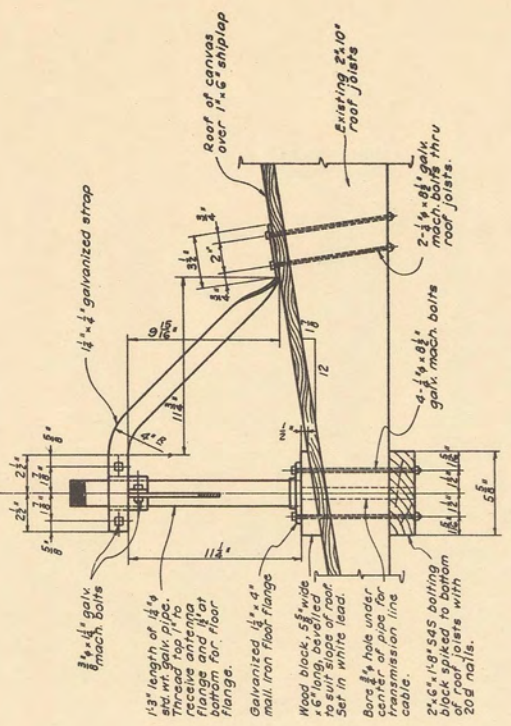
DESIGNED W.G. DRAWN W.G. CHECKED W.G.
SCALE AS NOTED DATE NOV., 1941
APPROVED [Signature] ACT. ASSISTANT REGIONAL FORESTER



PLAN VIEW
Scale: 2" = 1'-0"



SIDE ELEVATION
Scale: 2" = 1'-0"



ANTENNA PIPE MOUNTING DETAILS AT CAB CORNER

To prevent entrance of water, a cap is to be screwed over the end of the support pipe whenever the antenna is taken down.

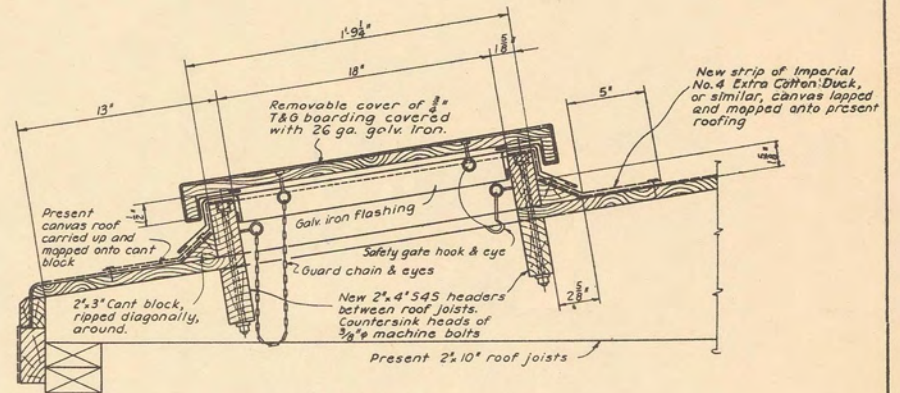
SECTION AA
Scale: 3" = 1'-0"

Bore machine bolt holes in white lead. Set bolts in white lead.

HATCH DETAILS

Scale: 3" = 1'-0"

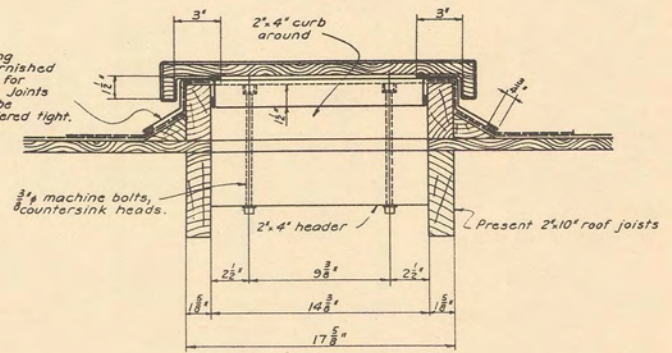
Hatch required if cab has no catwalk or other means of access for installation and adjustment of antenna.



SECTION BB

(See Plan View of Mounting Details)

26 ga. galv. iron flashing as indicated. To be furnished completed and ready for installation on the job. Joints in the flashing are to be single locked and soldered tight.



SECTION CC

(See Plan View of Mounting Details)

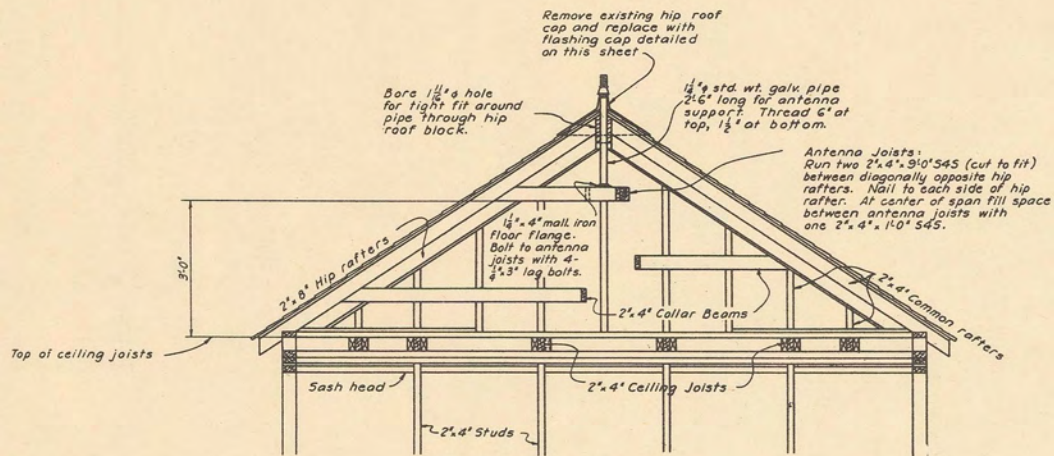
U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

REGION SIX JAMES FRANKLAND, REGIONAL ENGINEER

STANDARD WOOD LOOKOUT TOWERS

MOUNTING OF SUPPORT FOR
UHF ANTENNA ON
7' x 7' WOOD CABS

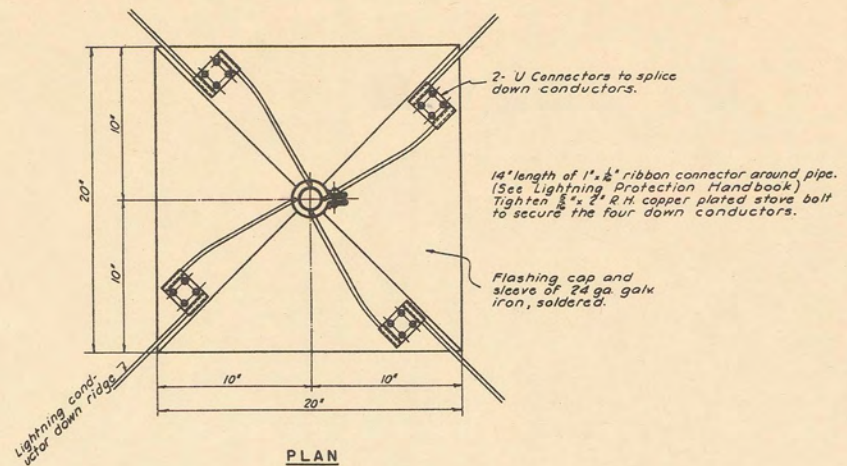
DESIGNED W.G. DRAWN W.G. TRACED W.G.
SCALE AS NOTED CHECKED DATE JAN., 1942
APPROVED ACT. ASSISTANT REGIONAL FORESTER



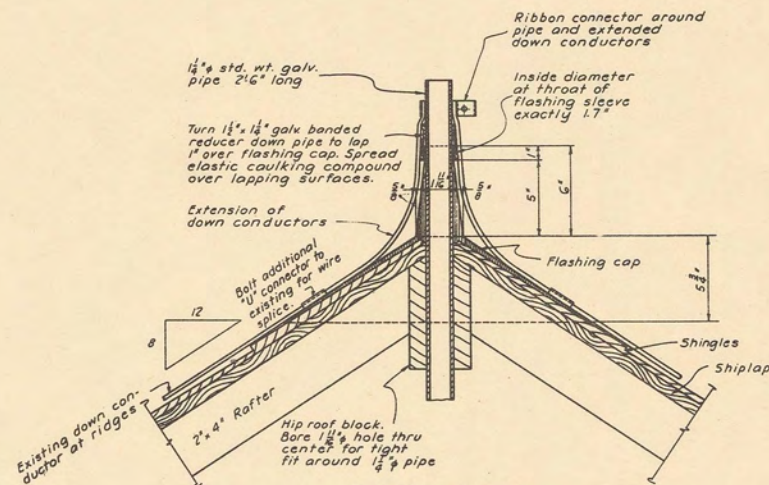
INTERIOR SECTION
SHOWING ROOF FRAMING AND
ANTENNA PIPE MOUNTING

Scale: $\frac{3}{8}'' = 1'-0''$

To prevent entrance of water, a cap is to be screwed over the end of the support pipe whenever the antenna is taken down.



PLAN



SECTION SHOWING
DETAILS OF FLASHING CAP
AND ALTERATION TO LIGHTNING PROTECTION

Scale: $\frac{1}{4}'' = 1'$

Remove existing lightning protection terminal and supports. Replace according to details shown above. Additional lightning protection materials needed are as follows:
 4 - 1/4" U Connectors
 16 - 5/16" x 1" R.H. copper plated stove bolts
 7 ft. #2 B & S ga. S.D. bare solid copper wire
 14 in. 1/8" dead soft flat ribbon connector
 1 - 5/16" x 2" R.H. copper plated stove bolt
 See Lightning Protection Handbook for details of above materials.

U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

REGION SIX JAMES FRANKLAND, REGIONAL ENGINEER

STANDARD WOOD LOOKOUT TOWERS

MOUNTING OF SUPPORT FOR
UHF ANTENNA ON
14' x 14' WOOD CABS

DESIGNED W.G. DRAWN W.G. TRACED W.G.
SCALE AS NOTED CHECKED
APPROVED DATE FEB. 1942
ACT. ASSISTANT REGIONAL FORESTER

L-12301

SECTION IV

GUY CABLE SAG CURVES FOR TIMBER TOWERS

All timber towers included in this handbook have been designed to resist the overturning effect of wind by means of guy cables. As well as allowing economies in tower design and details, the use of guy cables decreases considerably the amount of sway resulting from wind as compared to a tower designed to resist wind without guys.

However, to be the most effective, guys must be tightened to the sags given by the curves on pages 21a to 21g. Field inspection shows that on very few towers are the guys sufficiently tight to do their work. The towers are designed to withstand these pulls and there need be no fear of harming the tower by tightening the guys to the sags given by the curves.

In erecting a tower the guys should be put in place and tightened as soon as the tower is erected to the panel point where the guys are attached. The guys should be tightened simultaneously or in small increments in rotation, keeping the sags as nearly equal as practicable in order to prevent unbalanced loads. After the proper sags are obtained the tower should be checked for plumb and the guys adjusted to plumb the tower. As new wire rope is subject to considerable permanent stretch, guys should be periodically tightened to the proper sag until there is no more stretch.

The sags shown by the curves on pages 21a to 21g have been computed on the assumption that the average temperature at the tower is 60° F. The guys are first to be adjusted to the sags given by the curves regardless of temperature, and then corrected for the difference between the temperature of the air at the time of adjustment and 60° F.

The amount of the adjustment will vary with the difference in temperature and the length of the guy. It will amount to one full turn of the adjusting nut for each 100 foot length of guy and each 20° difference in temperature. If the temperature at the time of adjustment is greater than 60° the guy shall be loosened, and if less than 60° the guy shall be tightened.

The following is an illustrative example:

Assumed conditions.

1. CT-1 type of tower.
2. 99' height.
3. 80' difference in elevation between anchorage and attachment of guy to tower.
4. 85° temperature at time of adjustment.

Procedure.

1. For above conditions Drawing L-20002 shows proper sag is 2-3/4". Adjust guys to this sag.
2. Figure number of turns on adjusting nuts to loosen guy the proper amount, as follows:

Length of guy 140 feet.

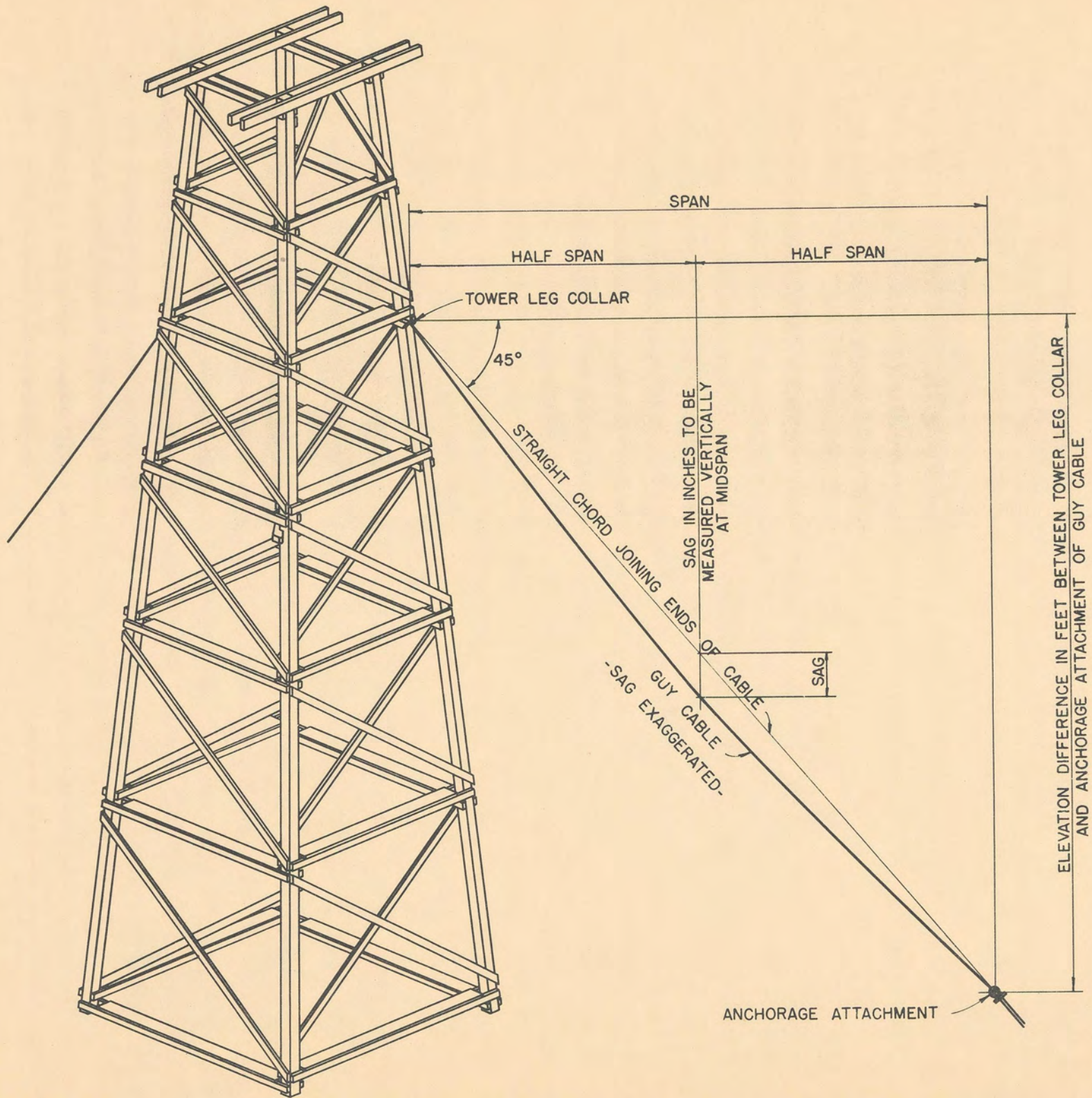
Difference between 85° and 60° = 25°.

Then number of turns necessary will be $\frac{140}{100} \times \frac{25}{20} = 1.75$ or 1-3/4 turns.

3. Readjust guys by loosening 1-3/4 turns on adjusting nuts.

In order to check the amount of sag in a particular guy by other than visual means, the following suggestion is offered. Stretch a chalk line or fine wire line tightly enough between the tower leg collar and the anchorage attachment, to eliminate as much as possible any sag in the line. Keeping it parallel to the straight chord joining the ends of the guy cable as shown in the Illustrative Diagram, drawing No. L-20001, move the chalk line or fine wire line down until it becomes tangent to the guy cable at its greatest sag point. The vertical sag from the guy cable to the chalk or fine wire line may then be easily measured at either the tower leg collar end or the anchorage attachment end. Another method is to use two carpenter's rules, one at each end of the guy. Hold each rule so that the ends are below the guy an amount equal to the desired sag. Tighten up guy until the point of greatest sag is in line with the ends of the rule. This can be done by eye.

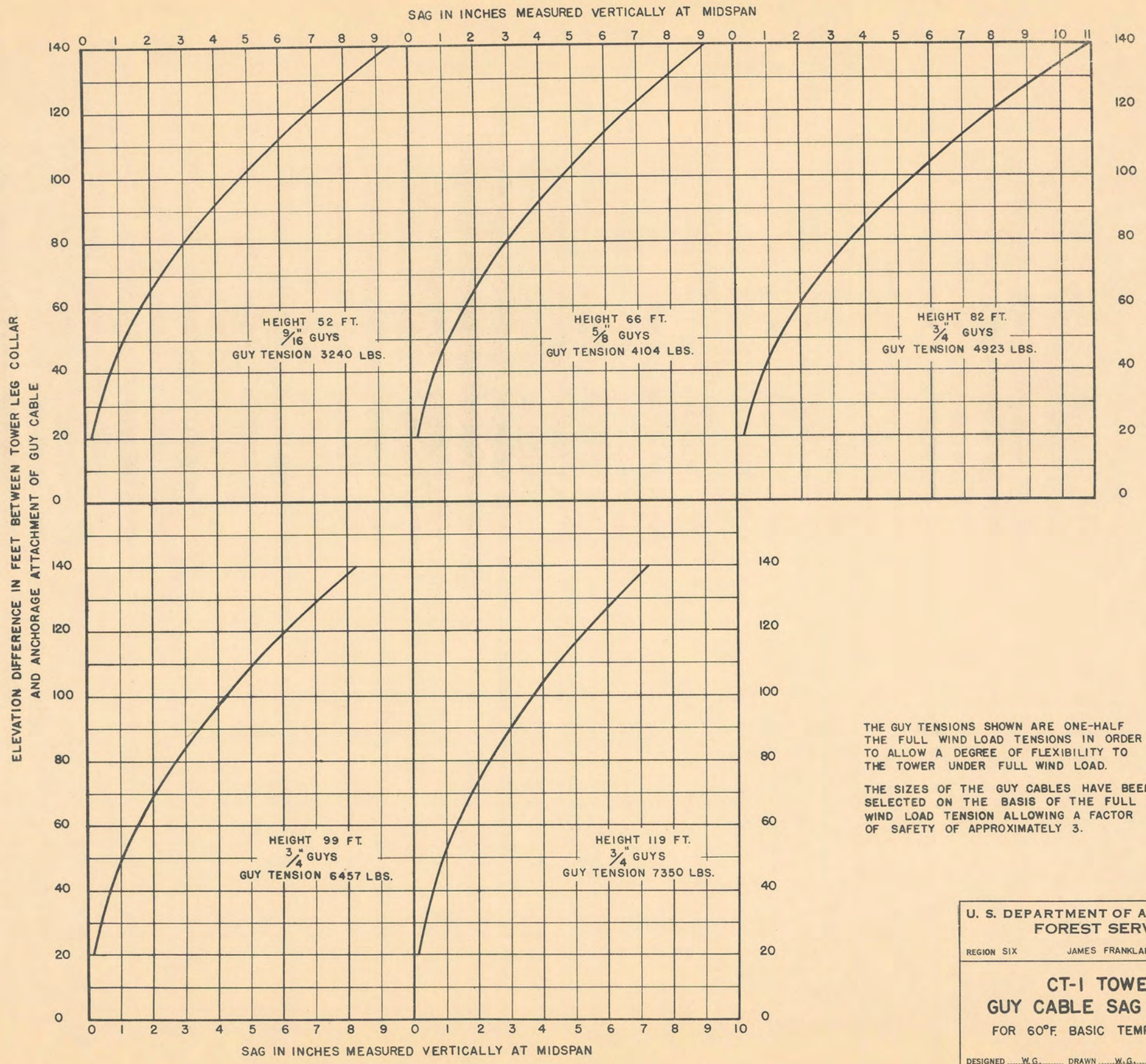
When the tower is not occupied during the winter, the lookout should, on leaving the tower, loosen the guys by four full turns of the adjusting nuts. When occupying the tower the next season, he shall adjust the guys as previously outlined.



U. S. DEPARTMENT OF AGRICULTURE
 FOREST SERVICE
 REGION 6 J. FRANKLAND REGIONAL ENGINEER

**ILLUSTRATIVE DIAGRAM
 GUY CABLE SAGS**

DESIGNED W.G. DRAWN W.G. TRACED W.G.
 SCALE'..... CHECKED.....
 APPROVED..... DATE 12-28-37.....
 ASST. REGIONAL FORESTER



THE GUY TENSIONS SHOWN ARE ONE-HALF THE FULL WIND LOAD TENSIONS IN ORDER TO ALLOW A DEGREE OF FLEXIBILITY TO THE TOWER UNDER FULL WIND LOAD.

THE SIZES OF THE GUY CABLES HAVE BEEN SELECTED ON THE BASIS OF THE FULL WIND LOAD TENSION ALLOWING A FACTOR OF SAFETY OF APPROXIMATELY 3.

**U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE**

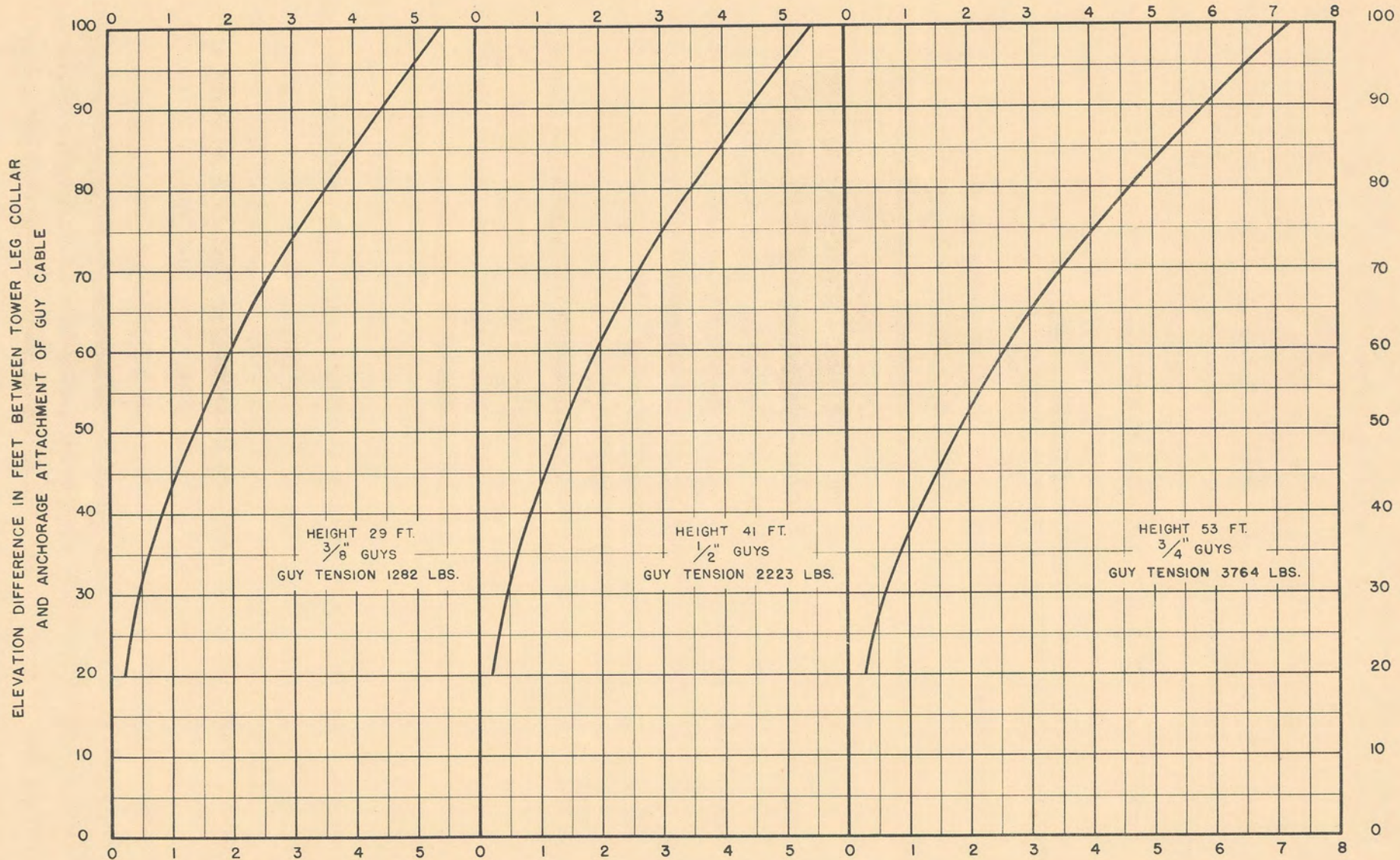
REGION SIX JAMES FRANKLAND, REGIONAL ENGINEER

**CT-1 TOWER
GUY CABLE SAG CURVES**
FOR 60°F. BASIC TEMPERATURE

DESIGNED ... W.G. ... DRAWN ... W.G. ... TRACED ... R.G.S. ...
SCALE CHECKED
APPROVED DATE 2-7-39
ACT. ASST. REGIONAL FORESTER

L-20002

SAG IN INCHES MEASURED VERTICALLY AT MIDSPAN



THE GUY TENSIONS SHOWN ARE ONE-HALF THE FULL WIND LOAD TENSIONS IN ORDER TO ALLOW A DEGREE OF FLEXIBILITY TO THE TOWER UNDER FULL WIND LOAD.

THE SIZES OF THE GUY CABLES HAVE BEEN SELECTED ON THE BASIS OF THE FULL WIND LOAD TENSION ALLOWING A FACTOR OF SAFETY OF APPROXIMATELY 3.

U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

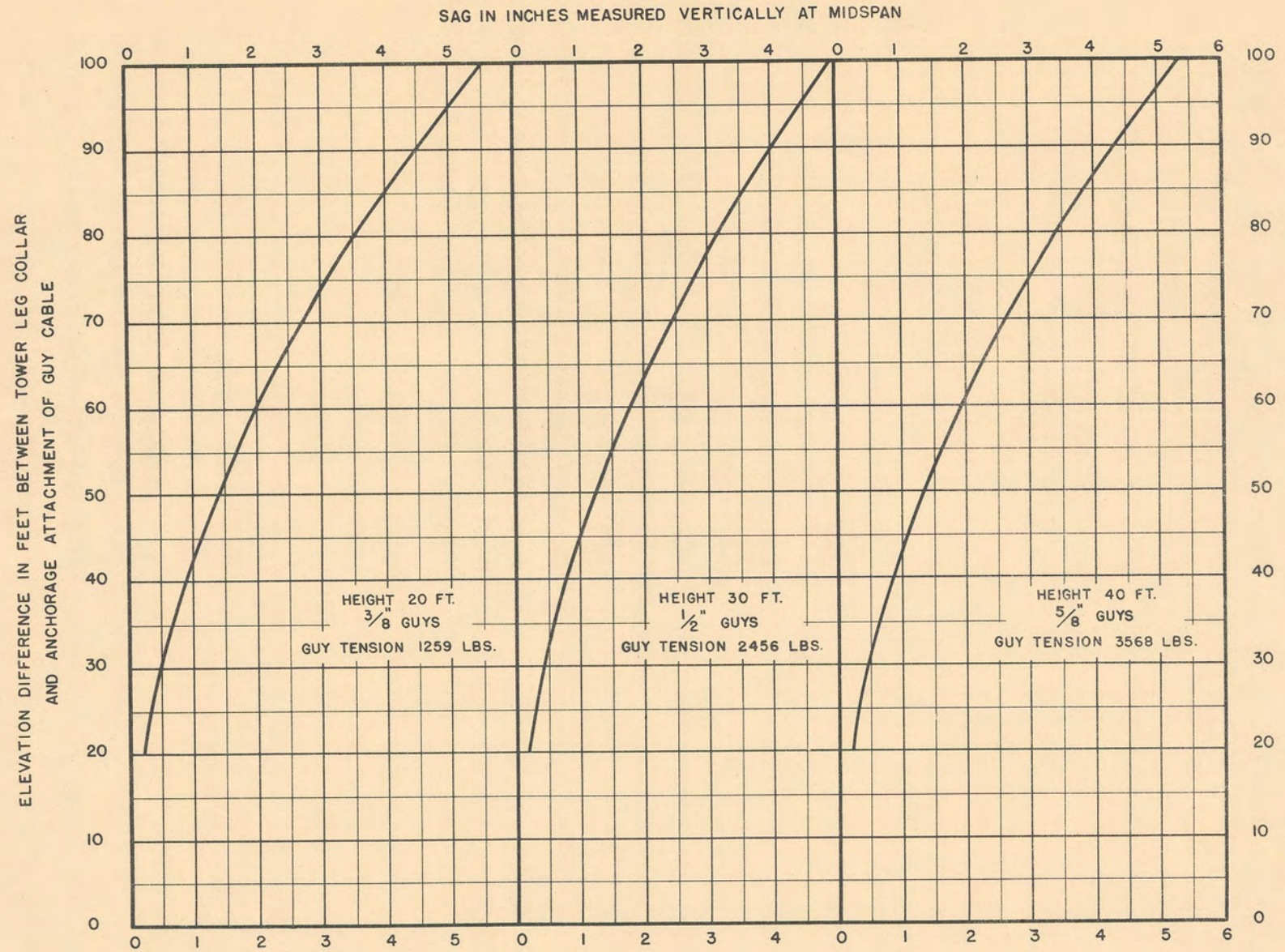
REGION SIX JAMES FRANKLAND REGIONAL ENGINEER

CT-2 TOWER
GUY CABLE SAG CURVES

FOR 60°F. BASIC TEMPERATURE

DESIGNED...W.G. DRAWN...W.G. TRACED...R.G.S.
SCALE..... CHECKED.....
APPROVED..... DATE 2-8-39
ACT. ASST. REGIONAL FORESTIER

L-20003



THE GUY TENSIONS SHOWN ARE ONE-HALF THE FULL WIND LOAD TENSIONS IN ORDER TO ALLOW A DEGREE OF FLEXIBILITY TO THE TOWER UNDER FULL WIND LOAD.

THE SIZES OF THE GUY CABLES HAVE BEEN SELECTED ON THE BASIS OF THE FULL WIND LOAD TENSION ALLOWING A FACTOR OF SAFETY OF APPROXIMATELY 3.

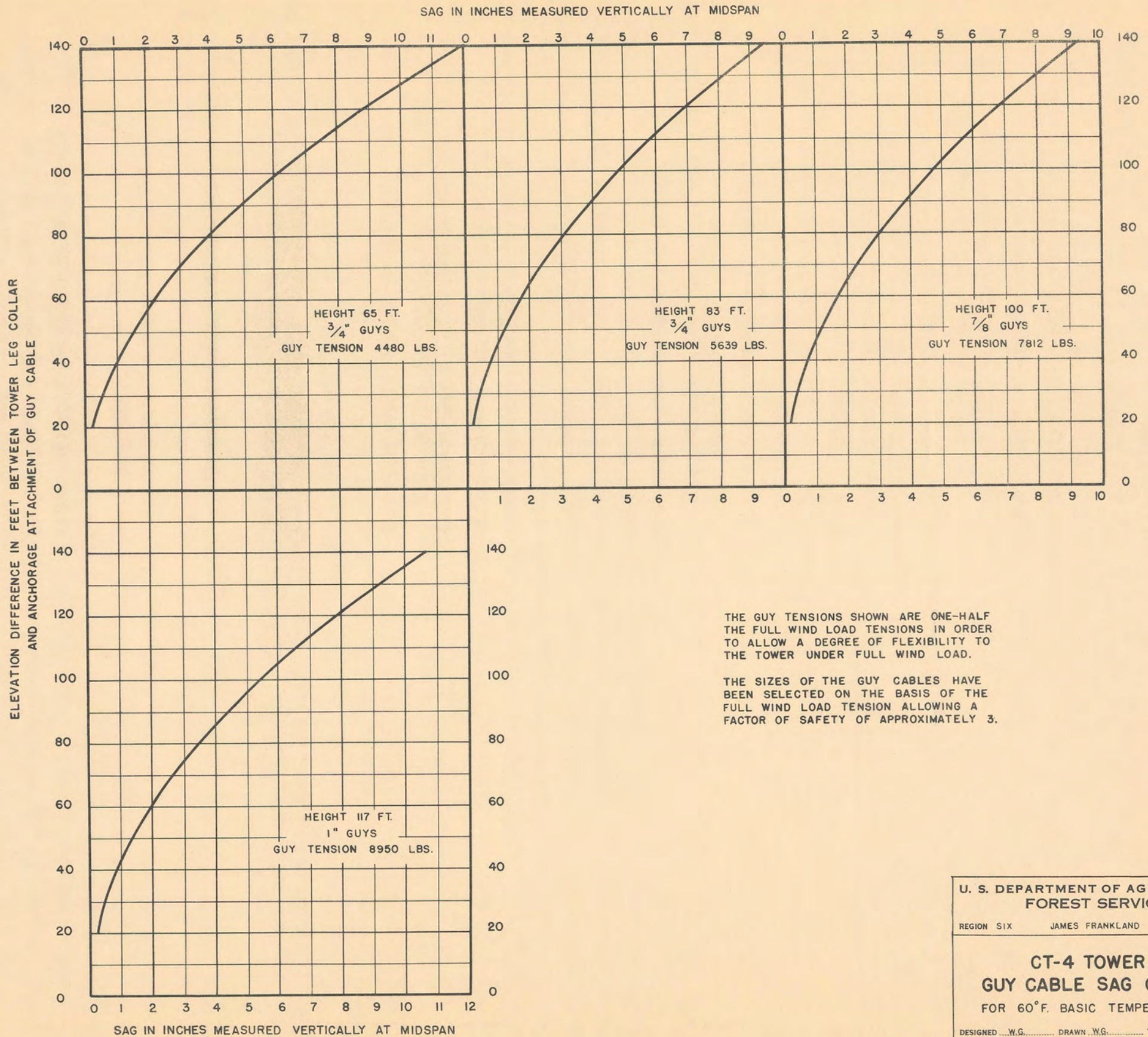
U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

REGION SIX JAMES FRANKLAND REGIONAL ENGINEER

CT-3 TOWER
GUY CABLE SAG CURVES
FOR 60° F. BASIC TEMPERATURE

DESIGNED W.G. DRAWN W.G. TRACED R.G.S.
SCALE 1" = 10' CHECKED
APPROVED DATE 2-8-39
ACT. ASST. REGIONAL FORESTER

L-20004



THE GUY TENSIONS SHOWN ARE ONE-HALF THE FULL WIND LOAD TENSIONS IN ORDER TO ALLOW A DEGREE OF FLEXIBILITY TO THE TOWER UNDER FULL WIND LOAD.

THE SIZES OF THE GUY CABLES HAVE BEEN SELECTED ON THE BASIS OF THE FULL WIND LOAD TENSION ALLOWING A FACTOR OF SAFETY OF APPROXIMATELY 3.

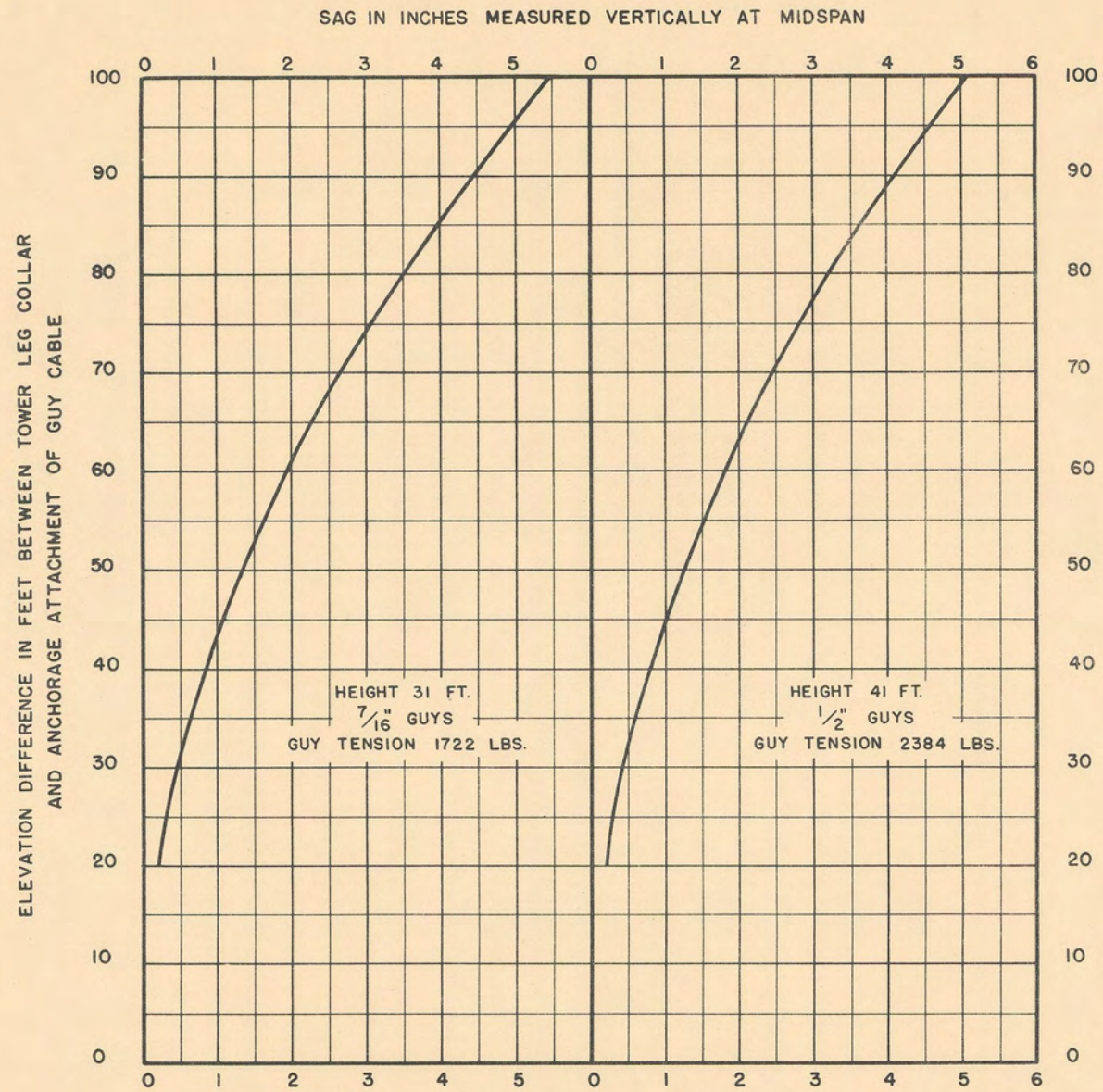
U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

REGION SIX JAMES FRANKLAND REGIONAL ENGINEER

**CT-4 TOWER
GUY CABLE SAG CURVES**
FOR 60°F. BASIC TEMPERATURE

DESIGNED W.G. DRAWN W.G. TRACED R.G.S.
SCALE CHECKED
APPROVED DATE 2-9-39
ACT. ASST. REGIONAL FORESTER

L-20005



HEIGHT 31 FT.
 $\frac{7}{16}$ " GUYS
 GUY TENSION 1722 LBS.

HEIGHT 41 FT.
 $\frac{1}{2}$ " GUYS
 GUY TENSION 2384 LBS.

THE GUY TENSIONS SHOWN ARE ONE-HALF THE FULL WIND LOAD TENSIONS IN ORDER TO ALLOW A DEGREE OF FLEXIBILITY TO THE TOWER UNDER FULL WIND LOAD.

THE SIZES OF THE GUY CABLES HAVE BEEN SELECTED ON THE BASIS OF THE FULL WIND LOAD TENSION ALLOWING A FACTOR OF SAFETY OF APPROXIMATELY 3.

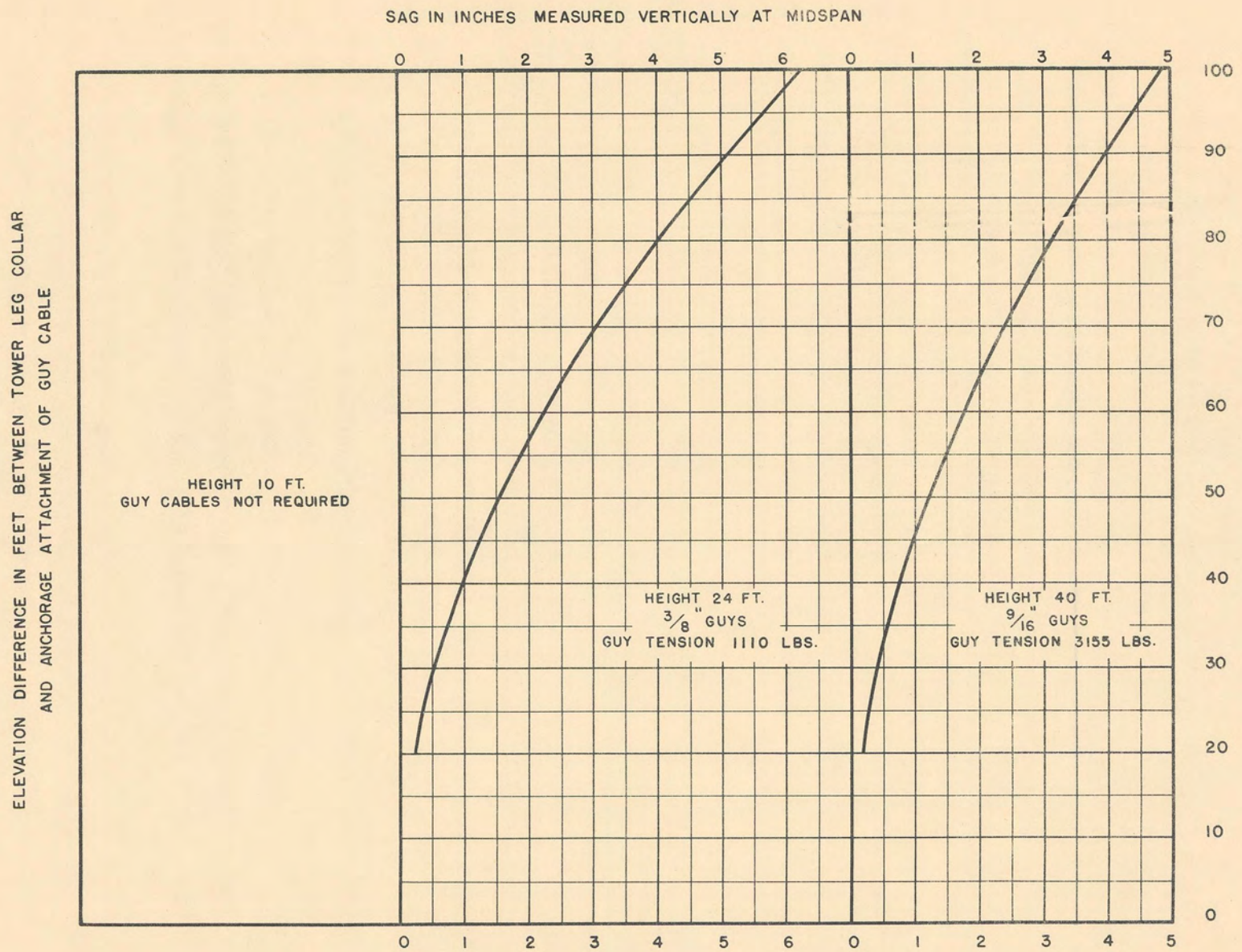
U. S. DEPARTMENT OF AGRICULTURE
 FOREST SERVICE

REGION SIX JAMES FRANKLAND, REGIONAL ENGINEER

CT-5 TOWER
GUY CABLE SAG CURVES
 FOR 60°F. BASIC TEMPERATURE

DESIGNED . . . W.G. DRAWN . . . W.G. TRACED . . . R.G.S.
 SCALE CHECKED
 APPROVED DATE 2-10-39
 ACT. ASST. REGIONAL FORESTER

L-20006



THE GUY TENSIONS SHOWN ARE ONE-HALF THE FULL WIND LOAD TENSIONS IN ORDER TO ALLOW A DEGREE OF FLEXIBILITY TO THE TOWER UNDER FULL WIND LOAD.

THE SIZES OF THE GUY CABLES HAVE BEEN SELECTED ON THE BASIS OF THE FULL WIND LOAD TENSION ALLOWING A FACTOR OF SAFETY OF APPROXIMATELY 3.

U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

REGION SIX JAMES FRANKLAND REGIONAL ENGINEER

RT-1 TOWER
GUY CABLE SAG CURVES
FOR 60°F. BASIC TEMPERATURE

DESIGNED W.G. DRAWN W.G. TRACED R.G.S.
SCALE _____ CHECKED _____
APPROVED _____ DATE 2-9-39
ACT. ASST. REGIONAL FORESTER

SECTION V

LIGHTNING PROTECTION

For detailed information on the standard type of lightning protection with which all lookout structures and other Forest Service buildings on exposed high points or ridges should be provided, the 1940 edition of the Lightning Protection Handbook should be consulted.

This handbook supersedes the 1932 publication of the United States Department of Agriculture, Forest Service, and embodies such information contained in that publication as is believed necessary for Forest Service purposes. Rules which are pertinent in all cases are listed and standard protective systems for several types of structures are illustrated.

Copies of this handbook are on file in each Regional Office.