

5682

5682

Form 504  
Rev. Dec. 1933  
DEPARTMENT OF COMMERCE  
U.S. COAST AND GEODETIC SURVEY  
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. 9  
Hydrographic }

State California

LOCALITY

California Coast

Point Estero to White Rock

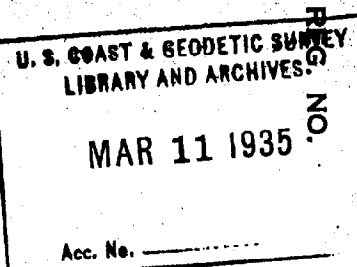
1934

CHIEF OF PARTY

F.H.Hardy

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET



The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 9

REGISTER NO. 5682

State California

General locality California Coast

Locality Point Estero to White Rock  
~~1/2 Mile South of Von Helm Rock to 1/2 Mile North of Point Estero~~

Scale 1-10,000 Date of survey Wire Drag Jan. 13, 1935  
Nov. 9 to Dec. 10, 1934

Vessel GUIDE

Chief of Party F.H. Hardy

Wire Dragging by G.C. Jones  
Surveyed by R.F.A. Studds, I.T. Sanders, W.J. Chovan, and I.R. Rubottom

Protracted by C.A. Kester

Soundings penciled by T.M. Means

Soundings in fathoms ~~###~~ Drag Depths in Feet

Plane of reference M.L.L.W.

Subdivision of wire dragged areas by \_\_\_\_\_

Wire Drag by T.M. Means

Inked by \_\_\_\_\_

Verified by G.H. Everett

Instructions dated April 4, 1932, May 31, 1934, 19

Remarks: Visual Fix Hydrography. Soundings by Fathometer, Wire, and Hand Lead. Wire Drag to Supplement Hydrography.

DESCRIPTIVE REPORT  
to accompany

HYDROGRAPHIC SHEET FIELD NO. 9  
PROJECT H.T. 184  
COAST OF CALIFORNIA  
U.S.C. & G.S.S. GUIDE  
1934

INSTRUCTIONS:

Instructions for the hydrography on this sheet are dated April 4, 1932. The work was performed in accordance with the season's instructions dated May 31, 1934. ✓

CHARACTER OF WORK:

The control for the hydrography on this sheet was by means of visual fixes. The soundings were obtained by the fathometer, by the wire, and by the hand lead. Six (6) wire soundings were taken by the ship for comparison with the fathometer. ✓

The depth range is from less than 1 fathom to 29 fathoms, the majority of the work being inside the 20 fathom curve. ✓

Sounding line spacing is approximately 100 meters inside the 20 fathom curve and 150 to 200 meters outside the 20 fathom curve. Added development was done in shoal areas. ✓

The position interval was usually two to three minutes, with supplemental positions at all radical changes of course and speed. ✓

The scale of the sheet is 1:10,000. ✓

LIMITS:

The hydrography on this sheet covers an area of approximately 7.8 square statute miles, extending from  $\frac{1}{2}$  mile south of Von Helm Rock (Latitude  $35^{\circ}32'4$ ) to approximately  $\frac{1}{2}$  mile north of Point Esteros. (Latitude  $35^{\circ}27'3$ ). ✓

The sheet is joined on the north by Launch Sheet Field No. 8 and on the south by Launch Sheet Field No. 10, completed during the 1934 season, and on the west by Ship Sheet Field No. 43, completed during the 1933-1934 seasons.

CONTROL:

Control for the hydrography on this sheet consisted of hydrographic signals over triangulation stations of the 1932-3 scheme executed by Lieutenant Charles Pierce, plotted on the 1927 North American Adjusted Datum, and topographic signals located by the topographic unit of the party of the Ship, GUIDE.

DATES OF SURVEY:

Work on the sheet began on November 9 and was completed on December 10, 1934.

A small area from Latitude  $35^{\circ}30'$  to Latitude  $35^{\circ}32.13'$  was dragged on January 13, 1935. Nine soundings were taken on this day, only two of which were plotted.

TIDAL REDUCERS:

Tidal reducers for this work were obtained from the San Simeon Portable Automatic Tide Gage.

For further information on the subject of tides the reader is referred to the Season's Tidal Report.

APPARATUS CORRECTIONS:

The apparatus corrections on this sheet were applied only to fathometer soundings. These consisted of corrections for temperature, salinity, and comparative vertical casts.

The lead lines and wire sheaves were checked throughout the season and found to be correct.

A report on the corrections to fathometer soundings has been forwarded.

**BOTTOM CHARACTERISTICS:**

In general the bottom is rocky throughout the area of the sheet.

A heavy growth of Kelp extends to approximately the 10 fathom curve.

**DANGERS AND SHOALS:**

The bottom is rocky and irregular with a heavy growth of kelp to the 10 fathom curve.

From the 10 fathom curve offshore there appear to be no dangers except as follows:

In Latitude  $35^{\circ} 31'.5$ , Longitude  $121^{\circ} 05'.8$  a rocky pinnacle \* (WD) H. 5982 (1935) with a least depth of  $7\frac{1}{4}$  fathoms was found in approximately 20 fathoms of water. This is approximately  $\frac{3}{4}$  of a mile offshore, and is apparently part of the rocky ridge extending offshore from Triangulation Station "Large Rock Northwest of Thompson, 1933". Found  $5\frac{1}{2}$  faths.

In Latitude  $35^{\circ} 30'.6$ , Longitude  $121^{\circ} 04'.4$ , a rocky pinnacle with a least depth of  $8\frac{1}{4}$  fathoms was found in approximately 16 fathoms of water. This is approximately  $\frac{3}{5}$  of a mile offshore.

The above mentioned shoals were found by wire dragging. Little if any indications of such shoals were found by the system of lines run by the hydrographic party.

**ANCHORAGES:**

There are no suitable anchorages on this sheet.

**JUNCTIONS, DISCREPANCIES, AND COMPARISON WITH SHEET NO. H-2022:**

The junctions with Launch Sheet Field No. 8 on the north, and Launch Sheet Field No. 10 on the south, completed during the 1934 season, are uniformly good.

The junction with Ship Sheet Field No. 43, completed during the 1933-34 seasons, is good. In Latitude  $35^{\circ} 31'.3$  to  $31'.6$  there are differences of 3 to 4 fathoms in 21 fathoms of water. This survey shows the least depths. The bottom in this vicinity is irregular and it is felt that the soundings are correct.

The comparisons with Photostat H-2022 in general are good. Differences of from 1 to 2 fathoms for the most part are the greater discrepancies.

In Latitude  $35^{\circ} 31'.8$ , Longitude  $121^{\circ} 05'.4$ , H-2022 shows  $3 \frac{1}{2}$  fathoms, as does Chart 5302, however this survey found a least depth of  $2 \frac{1}{2}$  fathoms on this shoal.

Offshore 250 meters from the above, a shoal with a least depth of  $7 \frac{3}{4}$  fathoms was <sup>found</sup> developed. This was not shown on H-2022.

In Latitude  $35^{\circ} 31'.5$ , Longitude  $121^{\circ} 05'.8$ , the rocky pinnacle with a least depth of  $7 \frac{1}{2}$  fathoms was not shown on H-2022.

In Latitude  $35^{\circ} 30'.6$ , Longitude  $121^{\circ} 04'.4$ , the rocky pinnacle with a least depth of  $8 \frac{1}{2}$  fathoms was not shown on H-2022.

It should be noted that several rocks located by the hydrographic party are shown in pencil on the smooth sheet. *inked.*

#### BOATS AND EQUIPMENT:

The inshore work was done by I.T. Sanders in charge of the gig and motorsailer, and W.J. Chovan and I.R. Rubottom in charge of the motorsailer. In general lines beyond the 20 fathom curve were run by the ship, R.F.S. Studds in charge. The large oscillator and the port forward hydrophone bank were used for all fathometer soundings. The starboard sounding machine was used for all vertical casts for fathometer comparisons. Angles were taken on the bridge of the ship on the inshore side.

Respectfully submitted,

*L. W. Swanson*  
L.W. Swanson,

Jr. H. and G. E.,  
Coast and Geodetic Survey.

Forwarded

Approved,

*F. H. Hardy*

F.H.Hardy,

H. and G. E.,

Coast and Geodetic Survey

STATISTICS  
to accompany  
HYDROGRAPHIC SHEET FIELD NO. 9

Date	Day	No. Sdgs.		No. Pos.		Stat. Mi. Sdgs		Stat. Mi.	Boat	V.C.
1934	Letter	Mach.	H.L.	Mach.	H.L.	Mach.	H.L.	To & From		
11-9	a		110		31		4.4	1.0	M.S.	
	a	235		113		10.8			GIG	
11-10	b		531		112		16.4	1.5	M.S.	
	b	96		50		4.5		6.0	GIG	
11-11	c		741		134		20.5	2.5	M.S.	
	c	358		181		16.4		3.0	GIG	
11-12	d		460		114		17.3	4.5	M.S.	
	d	315		160		14.1		6.0	GIG	
11-14	e		332		108		12.9	3.5	M.S.	
	e	138		78		6.3		6.0	GIG	
11-22	f		556		157		20.3	4.5	M.S.	
	f	270		150		12.1		1.7	GIG	
12-10	g	44	2	27	2	1.6	-	0	M.S.	
Total for Launches		1456	2732	759	658	65.8	91.8	40.2		
		RLD		RLD		RLD				
11-23	A	519		115		28.2			SHIP	6
12-10	B	136		27		5.0			SHIP	
Total for Ship		655		142		33.3				6
Total for sheet		Soundings		Positions		Miles				
		4843		1559		190.8				

Area of Sheet 7.8 Square Statute Miles



LIST OF SIGNALS  
to accompany  
HYDROGRAPHIC SHEET FIELD NO. 9

TRIANGULATION

Hydrographic Name	Location
Nor	Large Rock Northwest of Thompson, 1933
Thom	Thompson, 1932
Sull	Sullivan, 1932
Vill	Villa 2, 1932, 1933

TOPOGRAPHIC

Name	Topo Sheet	Name	Topo Sheet
Car	J	Ump	J
Don	J	Vase	J
Ell	J	Whi	J
Fat	J	Extra	J
Is	J	Yam	K
Hot	J	Zo	K
Jol	J	Are	K
Ken	J	Bul	K
Los	J	Der	K
Mor	J	Ed	K
Nun	J	Fran	K
Oat	J	Gul	K
Pin	J	Hol	K
Quit	J	In <sup>Lat</sup>	K <sup>k</sup>
Rum	J	Kip	K
Sine	J	Lat	K
Tall	J		

STATEMENT  
to accompany  
HYDROGRAPHIC SHEET FIELD NO: 9

The smooth plotting on this sheet was done by C.A.Kester,  
Draftsman, and the pencilling of the soundings by T.M. Meand, Draftsman,  
under the general supervision of Lieutenant (j.g.) L.W.Swanson.

Lieutenant Swanson has drawn the depth curves.

The completed smooth sheet has been inspected and is  
approved.

*F.H. Hardy*

F.H.Hardy,

Chief of Party,  
Coast and Geodetic Survey,  
Commanding Ship GUIDE.

SUPPLEMENTAL WIRE DRAG DATA

In Latitude  $35^{\circ} 30'.6$ , Longitude  $121^{\circ} 04'.4$ , Reference Chart

Letter #415 (1929):

"Branch Hydrographic Office,  
San Francisco, Calif.,  
19 July, 1929

NOTICE TO MARINERS

Lieut. Ross Wright, U.S.N.R., with Havaside Company reports to this office that at 12:30 P.M. July 13, 1929, the wire bridle by which the Tug FEARLESS was towing Havaside barge No. 4, fouled a submerged object for five minutes, showing great strain on wire, in a position about  $2\frac{1}{2}$  miles S.E. of Von Helm Rock and  $\frac{3}{4}$  mile off shore ( approximate position) Lat. N.  $35^{\circ} 30' 40''$  long. W.  $121^{\circ} 04' 45''$ ) Estimated depth of bridle at time of fouling from 15 to 20 feet. Two casts of lead showed no bottom at 15 fathoms.

J.T. McMillan, Nautical Expert,  
In Charge.

No. 6382

25 July 1929

HYDROGRAPHIC OFFICE  
WASHINGTON, D.C.

DAILY MEMORANDUM

CALIFORNIA, VON HELM ROCK, OBSTRUCTION REPORTED SOUTHEASTWARD.-  
Information has been received through the Branch Hydrographic Office, San Francisco that on July 13, 1929, the wire bridle by which the tug Fearless was towing Havaside Barge No. 4, fouled a submerged obstruction for 5 minutes, showing great strain on the wire, at a point about 2.5 miles southeastward of Von Helm Rock and  $\frac{3}{4}$  mile offshore. The estimated depth of the bridle at the time of fouling was 15 to 20 feet. Two casts of the lead showed no bottom at 15 fathoms.

Approximate position: Lat.  $35^{\circ} 30' 40''$  N., lon.  $121^{\circ} 04' 45''$  W. "

Reference Page 81, Line 38, Fifth Edition, 1934, Coast Pilot,  
California, Oregon and Washington:

"An obstruction has been reported  $2\frac{1}{2}$  miles south east of the rock (Von Helm Rock) and  $\frac{3}{4}$  mile off the shore".

This is shown on Chart 5302 as an obstruction.

Considerable time was spent developing the above locality and 14 fathoms was the least depth found by the hydrographic party. Because of the importance of this shoal it was deemed necessary to drag this area

in order to verify its existence.

On January 13, 1935, the area was dragged. The drag used was made up of six five hundred foot sections, set at an effective depth at the beginning of the day of ~~50~~<sup>51</sup> feet to buoy No. 3 and ~~51~~<sup>50</sup> feet to the far buoy. The drag grounded between buoys 3 and 4, in Latitude  $35^{\circ} 31'.5$ , Longitude  $121^{\circ} 05'.8$ , after one hour of dragging. Soundings taken at the point of grounding showed a least depth of  $7\frac{1}{2}$  fathoms. Only one of the several soundings taken has been plotted.

After the soundings had been taken the drag was reversed and the hookup changed to the following effective depths:

N	to	1	54 feet
1	to	2	46 "
2	to	5	38 "
5	to	F	46 "

The above shoal was cleared with an effective depth of 38 feet. The hookup was changed upon clearing the pinnacle to the following effective depths:

N	to	1	54 Feet
1	to	F	48 "

The drag grounded again in Latitude  $35^{\circ} 30'.6$ , Longitude  $121^{\circ} 04'.4$ . Soundings taken here showed a least depth of  $8\frac{1}{2}$  fathoms. As before, only one sounding has been plotted.

The drag was reversed and the hookup changed, then clearing this pinnacle with an effective depth of 44 feet. There was no grounding with this hookup.

It is felt that the obstruction referred to in the above mentioned Chart Letter and the Coast Pilot, and as shown on Chart 5302 is developed and that its least depth was found.

LIST OF SIGNALS  
to accompany  
WIRE DRAG WORK ON  
HYDROGRAPHIC SHEET FIELD NO. 9

TRIANGULATION

Hydrographic Name	Location
Nor	Large Rock Northwest of Thompson, 1932
Thom	Thompson, 1932

TOPOGRAPHIC

Signals located on Topographic Sheet Field  
Letter J

Car	Oat
Ell	Pin
Fat	Quit
Hot	Rum
Ken	Sine
Los	Tall
Mor	Whi
Nun	Extra

STATISTICS

Day	Miles of Drag	Positions
Vol. 1 A Jan. 13, 1935	3.8	84
Tender Vol. "	Soundings 9	Positions 9
		Total Pos. 93

Drag Length 3000 Ft.

*J. S. Searcy*  
Chief of Party.

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5682

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	.1559.
Number of positions checked	..185..
Number of positions revised	..3...
Number of soundings recorded	.4843.
Number of soundings revised	..64..
Number of signals erroneously plotted or transferred	.....

Date: May 2, 1935

Verification by G. H. Everett

Time: 67 hrs

Review by

*Alamy T. Kelch*

Time: 14 hrs

March 29, 1935.

F. E.

Division of Hydrography and Topography:

✓ Division of Charts: Attention Mr. E. P. Ellis

Tide Reducers are approved in  
8 volumes of sounding ~~records~~ and wire drag records for

HYDROGRAPHIC SHEET 5682

Locality Point Esteros to White Rock, California Coast

Chief of Party: F. H. Hardy in 1934-1935  
Plane of reference is mean lower low water, reading  
1.3 ft. on tide staff at San Simeon  
20.0 ft. below B.M. 1

Height of mean higher high water above plane of reference is 5.2 feet.

Condition of records satisfactory except as noted below:



Acting Chief, Division of Tides and Currents.





REPORT ON H-5682

SURVEYED IN 1934

CHIEF OF PARTY - F.H. HARDY

SURVEYED BY - R.F.A. STODDS, I.T. SANDERS,

W.J. CHOVAN, I.R. RUBOTTOM

PROTRACTED BY - C.A. KESTER

S'DG's PLOTTED BY - T.M. MEANS.

VERIFIED AND INKED BY - G.H. EVERETT.

The protracting of positions on this sheet was very good. But the day letter was not always used at end of lines or on turns in line.

The revised soundings were practically all due to the dropping of fractions on soundings between 10 and 11 fathoms.

The records do not include the beginning and ending of lines, the lack of which necessitated extra protracting to find positions.

The 5-fathom curve is very irregular. The 3-fathom, 2-fathom and 1-fathom curves cannot be completed.

Junction with H-5681 is very good. Junction with H-5708 has not yet been made.

#### NOTES ON ROCKS.

(1) Lat. 35-32.0, Long. 121-05.3 This rock is not mentioned in the records. See 98 b (red) Located by tops.

(2) Lat. 35-30.6, Long. 121-03.7 . 64 c (red) Rock is noted in records as "25 m. to starboard." No statement of the state of awash. 6 ft. of tide (but doesn't say awash)

(3) Lat. 35-31.3, Long. 121-04.4. 84 c (red) The sunken rocks are not mentioned in the records, but are marked "Breaker" on boat sheet. They are located by tops.

(4) Lat. 35-30.3, Long. 121-03.2 89 c (red) Sunken rocks are not mentioned in the records. They carry the legend "breaker" on Boat Sheet and have been located by tops.

(5) Lat. 35-28.1, Long. 121-00.7 115 c (red) Note in record states "Rock 40 m to starboard." It was assumed to be the rock located by tops.

(6) Lat. 35-29.9, Long. 121-02.8 130 c (red). The record gives a shallow sounding and bottom characteristic "rocky". The shallow sounding and legend "Rk" was used in place of the symbol.

(7) Lat. 35-30.3, Long. 121-03.2 133 C (red) Line passes  
10 m off rock with a sounding 2 3/4 fathoms opposite the  
rock. The sounding was not plotted but the sunken rock  
symbol was used instead. ✓

(8) Report on wire drag work.  
Field party has located two shoals with  
the drag. minimum depth on the first one  
was obtained at position 7a (blue). Drag had  
an effective depth of 51 feet when it grounded  
on this shoal. A depth of 44 feet was obtained.  
Drag was raised and passed over this shoal  
with an effective depth of 38 feet. Shoal  
adequately covered in opinion of verifier. ✓ This  
was an uncharted and unreported shoal.  
The second shoal was found when the  
drag grounded with an effective depth which  
plots as 48 feet but which was near the  
dividing line between the effective depths of  
48 and 54 feet. ✓ Least depth of 50 feet was  
obtained at position 9a (blue). This shoal  
is 500 meters east by south of the reported  
obstruction position of the obstruction. Drag  
was reversed and shoal was covered with  
an effective depth of 44 feet. There is some  
doubt in the verifier's mind as to the value  
of the drag strip (34A-41A) in view of the  
shape of the bright when the strip began.  
Verifier has not attempted to correct  
minor errors in field plotting. Proper  
red color scheme not rigidly observed.  
~~Report as was~~ were drag report by  
J. A. Mc Cormick.

O.K.  
HT:6

George Stewart

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5682 (1934)

Point Estero to White Rock, Coast of California  
Surveyed in Nov.-Dec. 1934  
Instructions dated April 4, 1932-May 31, 1934 (Guide)

Hand Lead, Machine, Fathometer Soundings - 3 Point Fixes on Shore Signals.

Chief of Party - F. H. Hardy.  
Surveyed by - Party of Steamer Guide.  
Wire Drag by - G. C. Jones.  
Protracted and plotted by - C. A. Kester and T. M. Means.  
Verified and inked by - G. H. Everett.

1. Condition of Records.

The records are neat, legible, and conform to the requirements of Hydrographic Manual, with the exception that no copy of Landmarks for charts on form 567 accompanied this particular sheet. Landmarks for area submitted.

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project except that no cross lines were run.

3. Sounding Line Crossings.

Such crossings as occur in the work, and adjacent lines, are in excellent agreement.

4. Depth Curves.

Within the limits of the survey the usual depth curves can be satisfactorily drawn, including portions of the two and most of the three fathom curve, which is all that can be normally obtained on this type of open coast line.

5. Junctions with Contemporary Surveys.

The junction with H-5681 (1934) on the north is excellent.

The junction with H-5708 (1934-35) on the south will be considered in the review of that sheet.

The junction with the offshore sheet H-5566 (1933) will be considered in the review of that sheet.

6. Comparison with Prior Surveys.

a. H. 290 (1851)

This survey on a 1:375,000 scale was a reconnaissance of 1 line only along the coast and the scale is too small for comparison to be of value.

b. H. 2022 (1890)

This survey on a 1:20,000 scale covers with a fair development the entire area of the present survey.

Depth agreement with the present work is excellent.

Additional shoals were located on the present survey through greater development, and by wire drag, the most important being the following:

7-1/4 <sup>x</sup>	fathoms	at	Lat. 35°31.5'	Long. 121°05.8'	)	by	wire		* 5 1/2 fathms. found
8-1/4	"	"	"	35°30.6'	Long. 121°04.4'	(	drag		on W.D. H-5782
2-1/2	"	"	"	35°31.8	"	121°05.4	where	3 1/2 fathoms was	(1935)
								least depth obtained in H-2022.	
7-3/4	fathoms	250 meters	S.W. of	2 1/2	fathom	spot.			

The small bare rock in Lat. 35°29.0', Long. 121°02.6', originating with T-1753 (1886) falls about 80 m. outside the rock shown on the present survey in an area of breakers. Inasmuch as the rock was not disproved by the present hydrographic or topographic survey it has been carried forward as a rock awash. Other rocks that fall outside the hydrographic limits of the present survey and originating with T-1753 will be disposed of in the review of T-4912.

7. Comparison with Chart No. 5302.

Within the area of the present survey the chart is based on surveys discussed in the foregoing paragraphs with the exception of the obstruction shown in Lat. 35°30.7', Long. 121°04.75'. This obstruction originates with Chart Letter No. 415, 1929 which gives the approximate position of the fouling of the wire bridle of the tug "Fearless".

The drag work accomplished in conjunction with the present hydrographic survey located a rock with a least depth of 8 1/4 fathoms surrounded by depths of 15 fathoms about 500 meters eastward of the reported position of the obstruction. Inasmuch as the reported position of the obstruction was dragged to a depth of 48 feet, it is believed the rock located is the one on which the towline fouled. The obstruction should therefore be removed from the charts.

8. Field Plotting.

Field protracting and plotting was excellent, and conforms to the requirements of the Hydrographic Manual.

9. Additional Field Work Recommended.

This survey is complete and no additional hydrographic examination is required. The two rock shoals found by the wire drag in comparatively flat bottom, with no indications on closely spaced lines, proves the desirability of wire dragging this entire coast line from the kelp limits to at least the 20 fathom curve.

10. Superseding Old Surveys.

Within the area covered the present survey supersedes the following surveys for charting purposes:

- H - 290 (1851) in part.
- H - 2022 (1890) in part.

11. Reviewed by - H. T. Kelsh, May 1935.

Inspected by - A. L. Shalowitz.

Examined and Approved:

C. K. Green, *C. K. Green*  
Chief, Section of Field Records.

*Faulstich*  
Chief, Section of Field Work

*L. O. Pollock*  
Chief, Division of Charts.

*G. H. Rude*  
Chief, Division of H. & T.

*Applied to drawing of Chart 5302 - Mar. 3, 1936 - J.F.W.*  
*" " " " " 5387 Dec. 30, 1936 J.S.L.*

25 Jan 6, 1936

*COA*