

Photographs of the barge GREAT LAKES taken December 22, 1998

LT Burt Lahn took these photographs of the barge GREAT LAKES on December 22, 1998. Images A, D, E, F, G, H, and I were printed on photographic paper from the original negatives and then scanned into digital format. Images B, C, J, K were developed from the videotape of the GREAT LAKES recorded by LT Burt Lahn on December 22, 1998. The digital images have been annotated for presentation. LCDR Bryan Emond witnessed the conversion and annotation for each image.

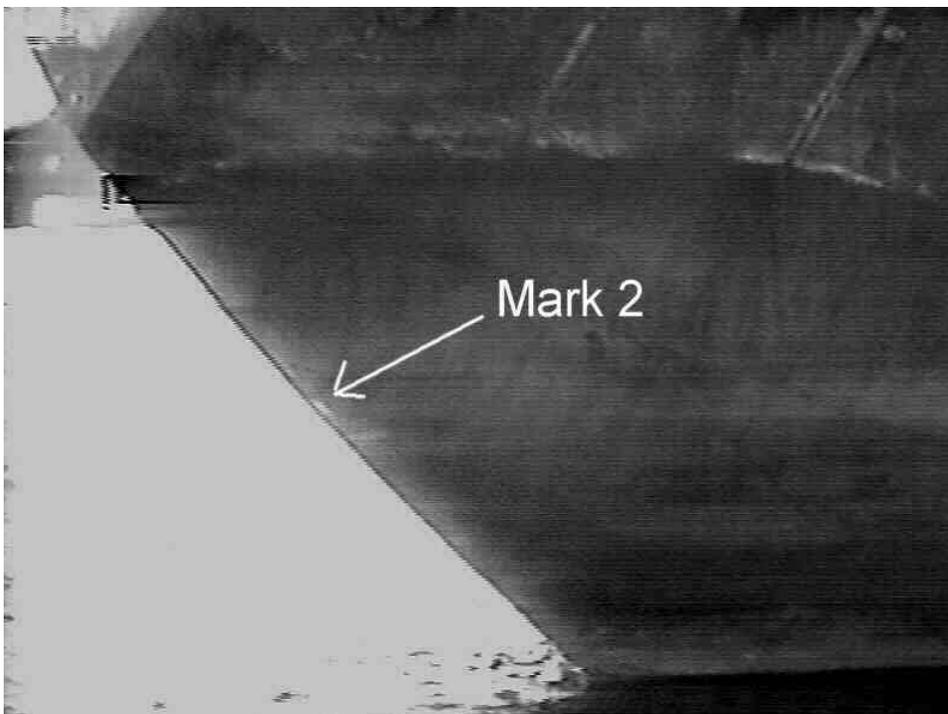


(A)
Starboard
bow of
GREAT
LAKES
showing
relative
location of
reference
point A

Taken from:
Forward &
starboard.

Direction:
Looking aft
and to port.

(From 35mm)



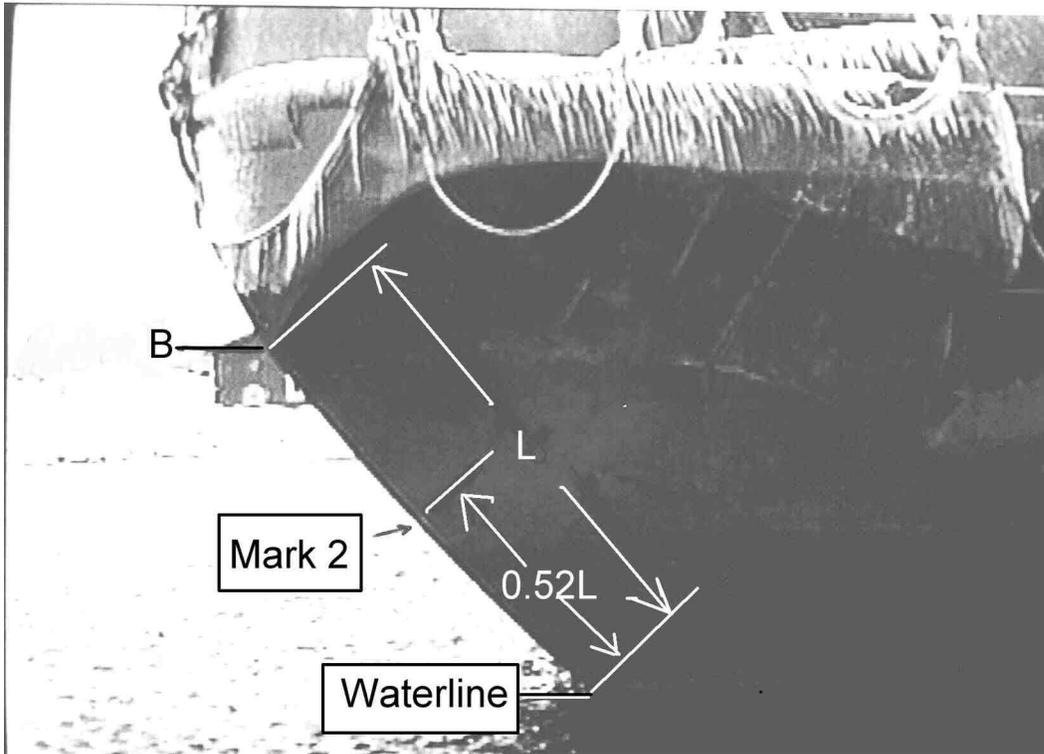
(B) Port
bow of
GREAT
LAKES
showing
location of
mark 2.

Taken from:
Port side

Direction:
Looking to
Starboard

(From Video)

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(C) Port bow of GREAT LAKES showing relative location of mark

Taken from: Port Side

Direction: Looking to Starboard

(From Video)

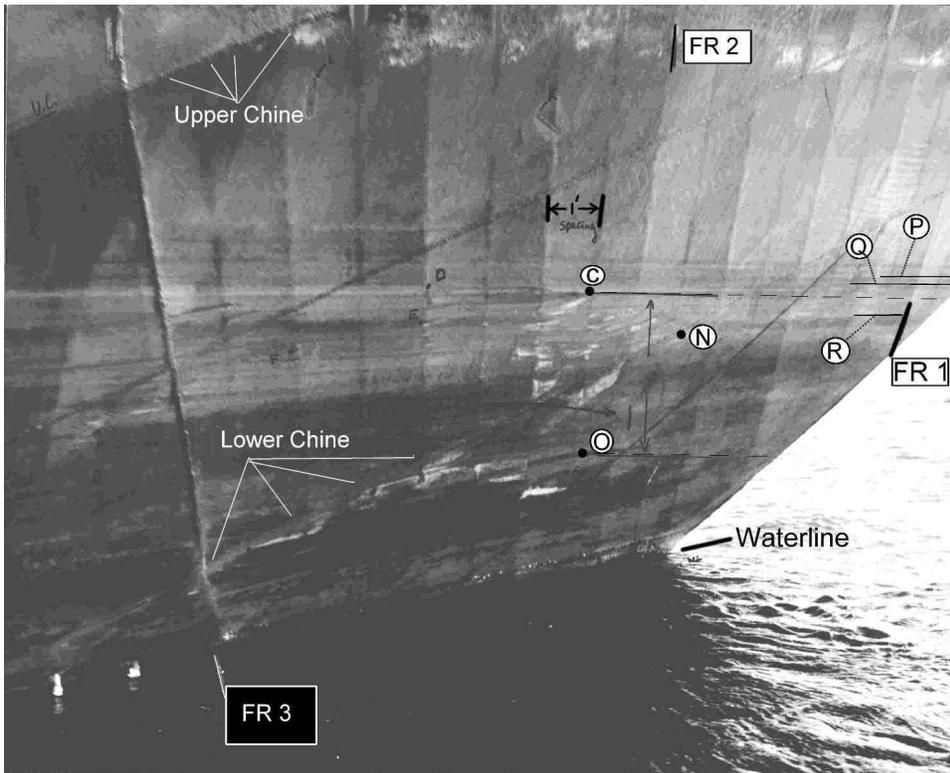


(D) Significant dimensions on Starboard Side. Reference points A, P, Q, & R were used to locate the height of the marks on the stem.

Reference point N indicates the initial scrape that leads to the curved white scrape marks near C and M. Heights indicated based upon December 11, 1998 drafts.

Taken from: Starboard side
Direction: Looking to port
(From 35mm)

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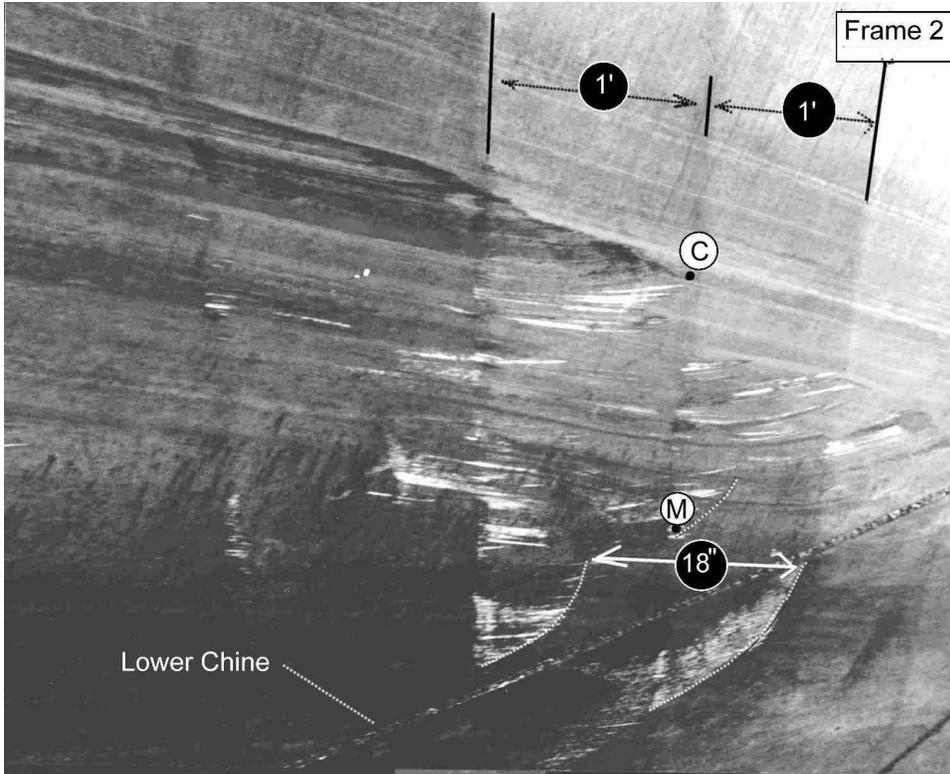


(E) Closer view of significant markings. Upper and lower chine highlighted for easier viewing.

Taken from:
Starboard Side

Direction:
Looking to port and slightly forward

(From 35mm)



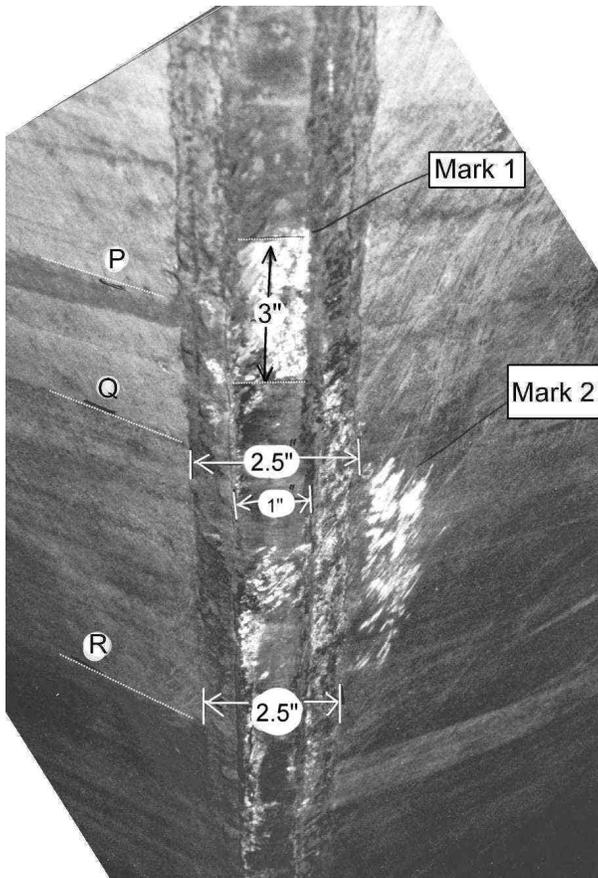
(F) Close-up view of curved white scrape marks. Estimate of distance between starting points of mark are based upon 1' stiffener spacing.

Taken from:
Starboard side

Direction:
Looking forward and to port

(From 35mm)

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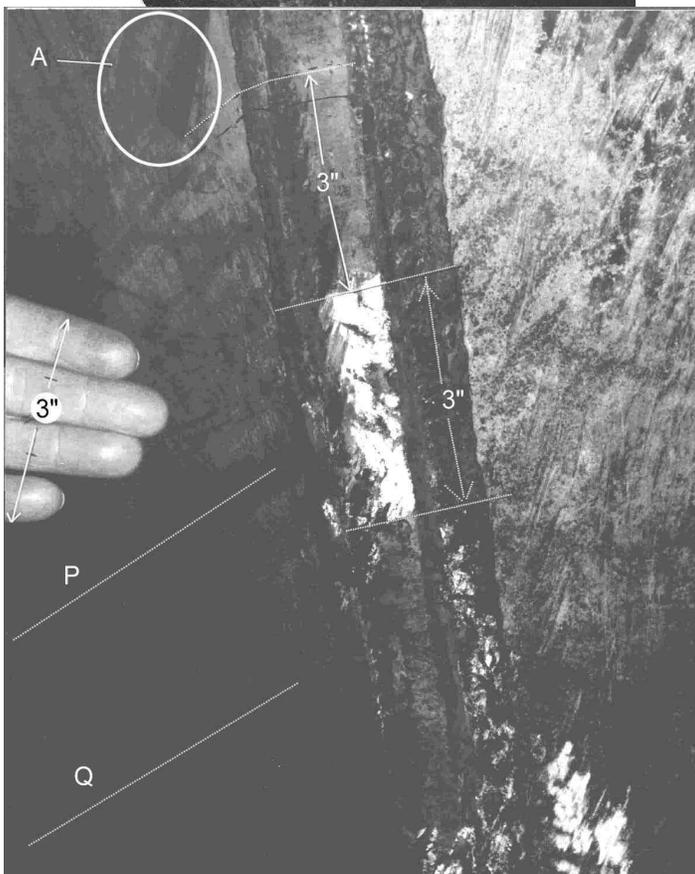


(G) Close up view of marks on stem of GREAT LAKES. Reference marks A (off camera) P, Q, and R were used to establish the height and location of these marks.

Taken from: Forward of Barge

Direction: Looking Aft

(From 35mm)



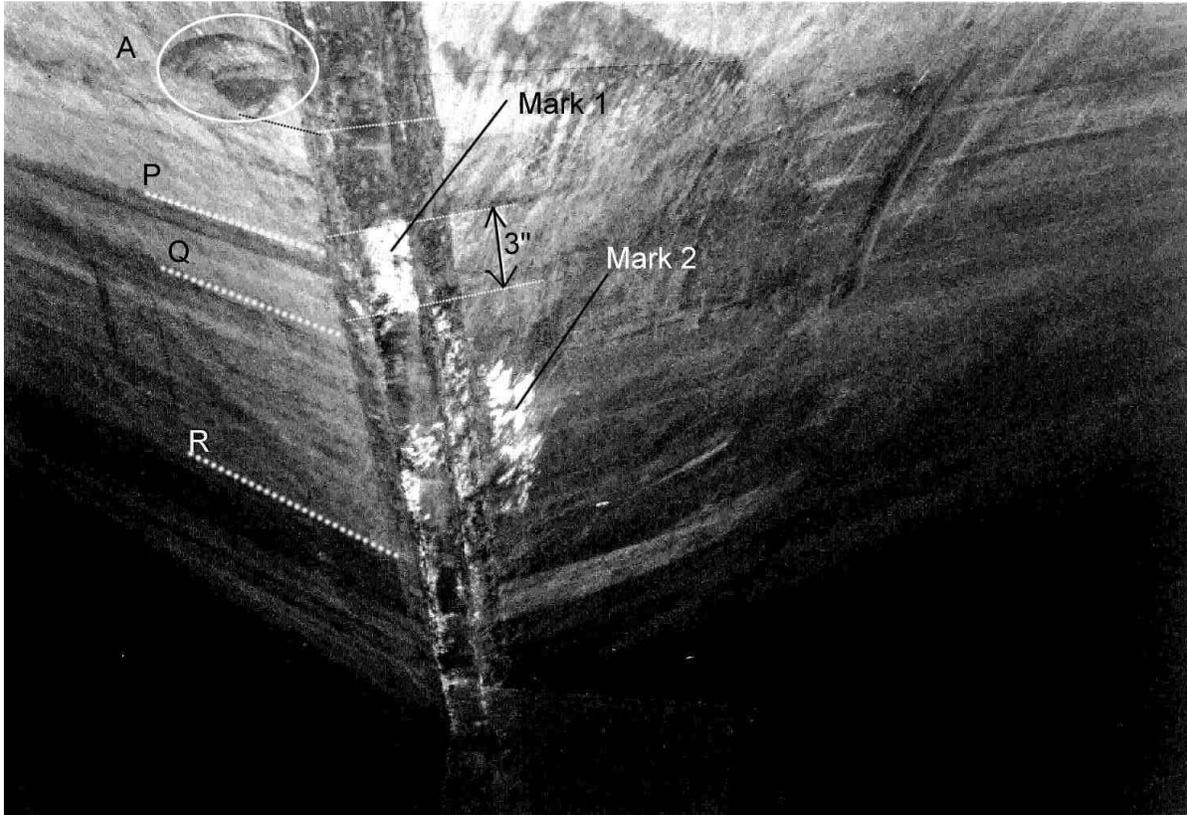
(H) Extreme Close up view of marks on stem of GREAT LAKES. Reference marks A, P, Q, and R (off camera) were used to establish the height and location of these marks.

Taken from: Forward of Barge

Direction: Looking Aft

(From 35mm)

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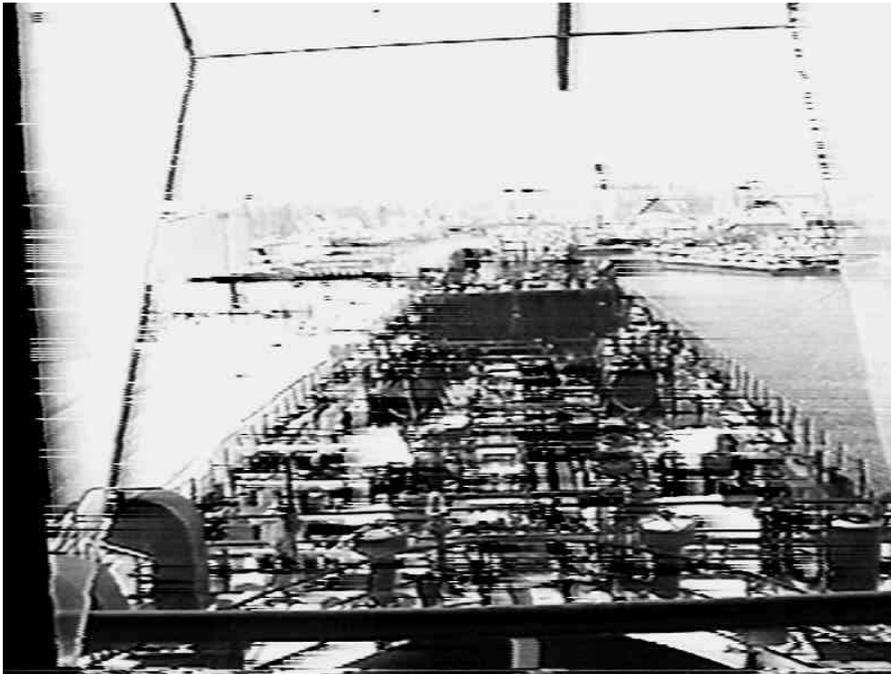
(I) White marks on the stem of the tank barge GREAT LAKES with reference points.

Taken from: Forward of Barge

Direction: Looking Aft

(From 35mm)

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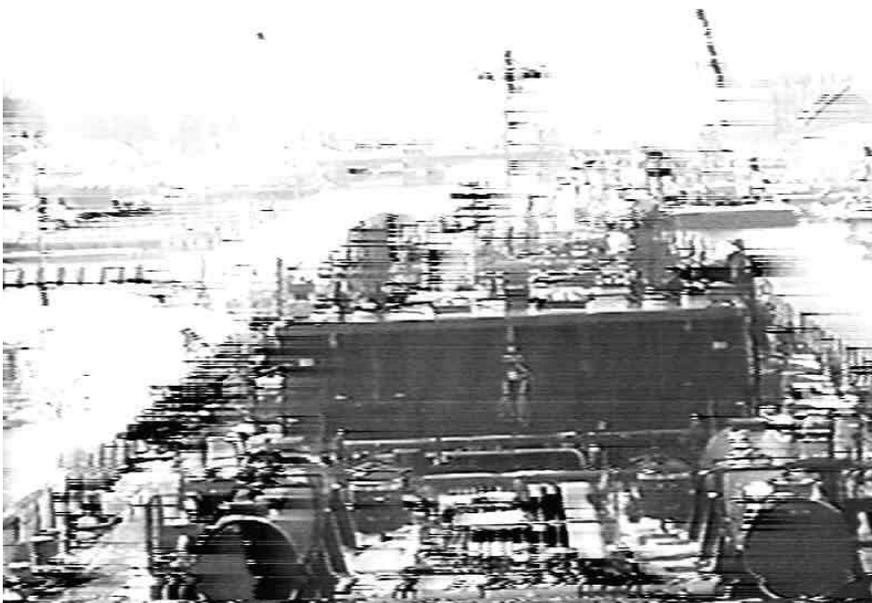


(J) View from upper pilothouse of tug MICHIGAN looking forward over the tank barge GREAT LAKES while at a ballasted condition.

Taken from:
Pilothouse

Direction: Looking forward

(From Video)



(K) Closer view from upper pilothouse of tug MICHIGAN looking forward over the tank barge GREAT LAKES while at a ballasted condition.

Taken from:
Pilothouse

Direction: Looking forward

(From Video)