

1 **National Transportation Safety Board**

2
3 Office of Marine Safety
4 Washington, D.C. 20594

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10 Group Chairman's Factual Report

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14 **Response Group**
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17 *Stretch Duck 7*

18 February 6, 2020
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1 **1. Accident information**

2 **Vessel:** *Stretch Duck 7*
3 **Accident Number:** DCA18MM028
4 **Date:** July 19, 2018
5 **Time:** 1908 Central Daylight Savings Time (GMT-5)
6 **Location:** Table Rock Lake, Stone County, Missouri
7 36° 35.236' N 93° 19.113' W
8 **Accident type:** Sinking with loss of life
9 **Complement:** 31 total (2 crew, 29 passengers)

10 **2. Response Group**

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12 **Chairman:** Marcel L. Muise, Office of Marine Safety
13 National Transportation Safety Board (NTSB)
14 **Members:** Lieutenant Commander [REDACTED], USCG
15 Trooper Robert Wilkins, MSHP
16 Brian Deckard, Ripley Entertainment Inc.

17 **3. Accident summary**

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19 About 1908 local time on July 19, 2018, the 33-foot-long amphibious passenger vessel
20 *Stretch Duck 7*, part of a fleet of vessels operated by Ride The Ducks Branson, sank during a storm,
21 with heavy winds that developed rapidly on Table Rock Lake near Branson, Missouri. Of the 31
22 persons aboard, 17 fatalities resulted. Prior to the accident, the National Weather Service had
23 issued a severe thunderstorm warning for the area advising of wind gusts of 60 mph. The manager-
24 on-duty advised the captain and driver before departing the shoreside boarding facility to complete
25 the lake portion of the tour before the land tour (which normally occurred first) due to the
26 approaching weather. About 5 minutes after the vessel entered the water, the leading edge of a

1 “derecho” passed through the area generating reported 3- to 5-foot waves and strong winds, with
2 the highest wind gust recorded at 73 mph. The captain changed course, shortening the usual tour
3 around an island, and attempted to exit the lake. However, during the effort to reach land, the
4 vessel took on water and foundered approximately 250 feet away from the exit ramp near the stern
5 of the *Showboat Branson Belle*, a moored paddle wheeler. Personnel from several fire, emergency
6 medical services, and law enforcement agencies, along with the paddle wheeler crew and
7 passengers, rescued and triaged 14 passengers, seven of whom were transported to local hospitals.
8 Loss of the vessel was estimated at \$184,000.

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10 **4. Investigation**

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12 The response group interviewed fifteen individuals over seven days. These included the
13 Incident Commander (IC) and other emergency responders from five agencies, the captain and
14 several crewmembers of the *Showboat Branson Belle*, two Coast Guard marine inspectors, and
15 one *Stretch Duck 7* passenger. The Western Taney County Fire District (WTCFD) provided dash
16 cam video of them responding to the scene. The group examined the Southern Stone County Fire
17 Protection District’s (SSCFPD) boat that was damaged while enroute to the accident site. The
18 Missouri State Highway Patrol provided area familiarization by water and shared interviews they
19 had conducted with survivors and the *Stretch Duck 7* captain immediately after the incident. The
20 *Showboat Branson Belle* provided access to their facility and vessel.

21 Investigators also examined the *Stretch Duck 7* after it was recovered from the lake bed.
22 This included, among other things, witnessing a drop test of the still intact starboard side curtain,
23 bilge pump tests, and stem to stern assessment of the *Stretch Duck 7* with party members.

24 **5. Emergency response**

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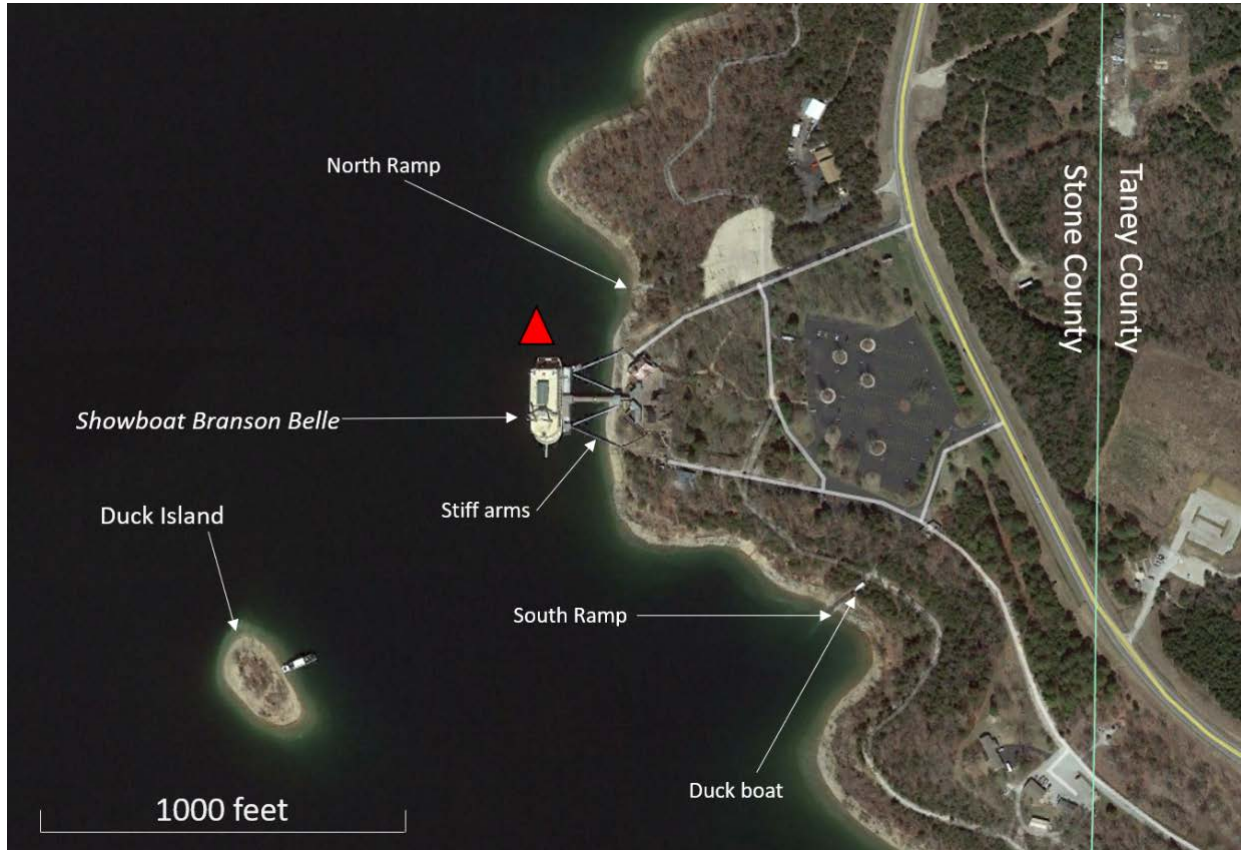
26 **5.1 General**

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28 *Stretch Duck 7* foundered just north and astern of the 196-foot long *Showboat Branson*
29 *Belle*, at its facility on Table Rock Lake. The showboat typically moored port side to a floating

1 wharf which was connected to shore by a floating walkway. The floating wharf was held in place
2 by stiff arms on either side of the walkway which also carried utilities to the vessel.

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5 **Showboat Branson Belle and facility.** The green line is the county line, Stone County to the west
6 and Taney County to the east. Duck Island, in the lower left, is 1000 feet from shore. The red triangle
7 marks the approximate location of the sinking. (Background by Google Earth Pro)

8 The showboat's facility was at the head of a peninsula in Stone County, over 1,300 feet
9 west of the county line with Taney County. The peninsula was created by the construction of Table
10 Rock Dam. All shore-side traffic must come from Taney County to the east.

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2 **The *Showboat Branson Belle*'s stern and paddle wheels from the vicinity of *Stretch Duck 7*'s**
3 **sinking. The tug is moored to the stiff arm where passengers were recovered from the water.**

4 After the vessel sank, *Stretch Duck 7* occupants surfaced north of the *Showboat Branson*
5 *Belle* and drifted south, towards the stern paddles, along the north stiff arm, or downwind along
6 the showboat's outboard side. The crew of the *Showboat Branson Belle* immediately stopped the
7 paddle wheels which had been engaged to keep the vessel in position in weather. The paddle
8 wheeler's crew and passengers in storm-force winds and heavy rain assisted victims from the water
9 at the stiff arm and alongside a nearby tug which had a low freeboard. Four survivors either
10 climbed the paddle wheels or were assisted by the paddle wheeler's crew who climbed down to
11 assist. The crew of the *Showboat Branson Belle* attempted to launch their rescue boat but it was
12 immediately swamped by heavy seas over the transom.¹

¹ *Showboat Branson Belle* was equipped with one 4-person, 12-foot long, 15 hp rescue boat. Rescue boats are typically rigged to be launched with the vessel underway and bow into the sea. The wind and seas at the time of the accident were from the paddle wheeler's stern. The crew of the *Showboat Branson Belle* was able to later launch the boat when weather subsided, searched for survivors, and retrieved debris.

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At least four *Showboat Branson Belle* crew, a passenger, and a sheriff’s deputy entered the water with PFDs to assist victims. Two of these were swept out into the lake with one *Stretch Duck 7* victim. Good Samaritan boats were the first waterborne resources on scene. One of these rescued the two *Showboat Branson Belle* crew and retrieved two *Stretch Duck 7* victims. Onboard the showboat, crewmembers assisted *Stretch Duck 7* survivors with first aid and dry clothing. One survivor received CPR and had an airway established before Emergency Medical Services (EMS) arrived. At least three other victims received CPR.

10 **5.2 Agencies**
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12 At the time of the accident, SSCFPD provided emergency services to a large part of Table
13 Rock Lake including the location of the showboat’s facility which was in Stone County. All road
14 traffic to the location came from Taney County as the county border was a straight line, nearly
15 north-south, dating from before Table Rock Lake’s creation. The closest fire station to the accident
16 location was WTCFD’s Station 12, one mile away. Both departments maintained waterborne fire
17 and rescue assets. WTCFD also had a dive team.

18 EMS in Taney County was provided by Taney County Ambulance District (TCAD).
19 Mercy Emergency Medical Services provided coverage for 14 other counties in Missouri and
20 Arkansas, including Stone County.

21 The Missouri State Highway Patrol had units on the water prior to the accident. They had
22 been warning boaters during that afternoon of the impending weather. They responded to a number
23 of weather-related reports after the storm’s passage, including a jet-ski incident by the dam and a
24 pontoon boat on the rocks. MSHP also had a dive team.²

25 The Public Safety Answering Point (PSAP) in Stone County directly dispatched for
26 SSCFPD. Calls for EMS were then transferred to Mercy EMS. In Taney County, the Sheriff’s
27 Department was the PSAP, also dispatching for fire, then transferring EMS calls to TCAD.

² The Stone County PSAP received reports of a jet-ski operator that had been jettisoned in the storm and was clinging to a buoy. They relayed the information to Taney County PSAP and the MSHP, and later logged the boater was safe.

1 *Showboat Branson Belle*'s captain stated although their facility was located in Stone County, they
2 routinely used TCAD's pre-911 dispatch number because they had the closest EMS units. By
3 calling directly, they also avoided being transferred from the PSAP in Stone County or even from
4 Arkansas.

5 On the day of the accident, local agencies reported a heightened level of alertness due to
6 expected weather. EMTs stated that weather often contributed to motor vehicle accidents in the
7 area due to high volume of tourists and winding roads. The State Emergency Operations Center in
8 Jefferson City stayed open past its normal business hours on July 19, due to the incoming weather.
9 Stone County relayed a weather advisory to all fire and law enforcement at 1808 and the first report
10 of trees down was logged at 1846. They paged all agencies in their area "envoking [sic] emergency
11 status" at 1907.³

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13 **5.3 Dispatch and incident command**

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15 The first call to 911 was from a *Showboat Branson Belle* crewmember and answered by
16 Stone County at 19:08:32. Both Taney and Stone Counties received calls for weather-related
17 incidents including downed electrical lines, a natural cover fire started by lightening, trees on
18 roads, and at least two boaters in distress. The Stone County PSAP dispatched SSCFPD crews and
19 at 1912 Stone County issued an "All Call"⁴ for the department. SSCFPD requested mutual aid
20 from WTCFD and all available EMS at 1915. TCAD alerted their first units at 1918 and were on
21 scene at 1929. The SSCFPD fire marshal was the first responder to arrive and established Incident
22 Command. A SSCFPD boat arrived shortly after followed by WTCFD, TCAD, Mercy EMS,
23 Missouri State Highway Patrol, and Branson Fire Department. A TCAD ambulance (TCA 11) was
24 the first EMS unit to arrive and started triage.

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26 A TCAD supervisor (MEDIC 7) arriving shortly after the IC stood up was assigned to
27 "EMS Operations" Group (treatment and triage) on the *Showboat Branson Belle*. A Deputy Chief

³ "Emergency Status" is a request for first responders to minimize radio traffic when the PSAP becomes inundated with calls.

⁴ An "All Call" is a recall of all available fire resources in the County's jurisdiction.

1 was assigned to Rescue on the *Showboat Branson Belle*, a SSCFPD captain to Water Rescue, and
2 a TCAD Lieutenant (MEDIC 10) as Staging Area Manager.

3 4 **5.4 Communications**

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6 TCAD responders described the area as a “communications black hole” as there’s a large
7 hill between the accident area and their repeater antennae. They were unable to talk to their
8 dispatch on a normal repeater frequency. *Showboat Branson Belle’s* captain stated he heard the
9 SSCFPD boat hailing him on Marine VHF Ch. 16 while they were en route but were unable to
10 reach them in reply. He instead called directly into SSCFPD’s business line to relay information
11 from the scene. Incident Command assigned SSCFPD’s “Fire Ground 1” as an on scene tactical
12 frequency. This channel was available to all responding fire and EMS units as they normally
13 worked together in mutual aid incidents, except for TCAD, which operated solely in Taney
14 County. EMS was eventually moved to VTAC 11, a State Mutual Aid frequency which worked
15 on scene and was available to all.

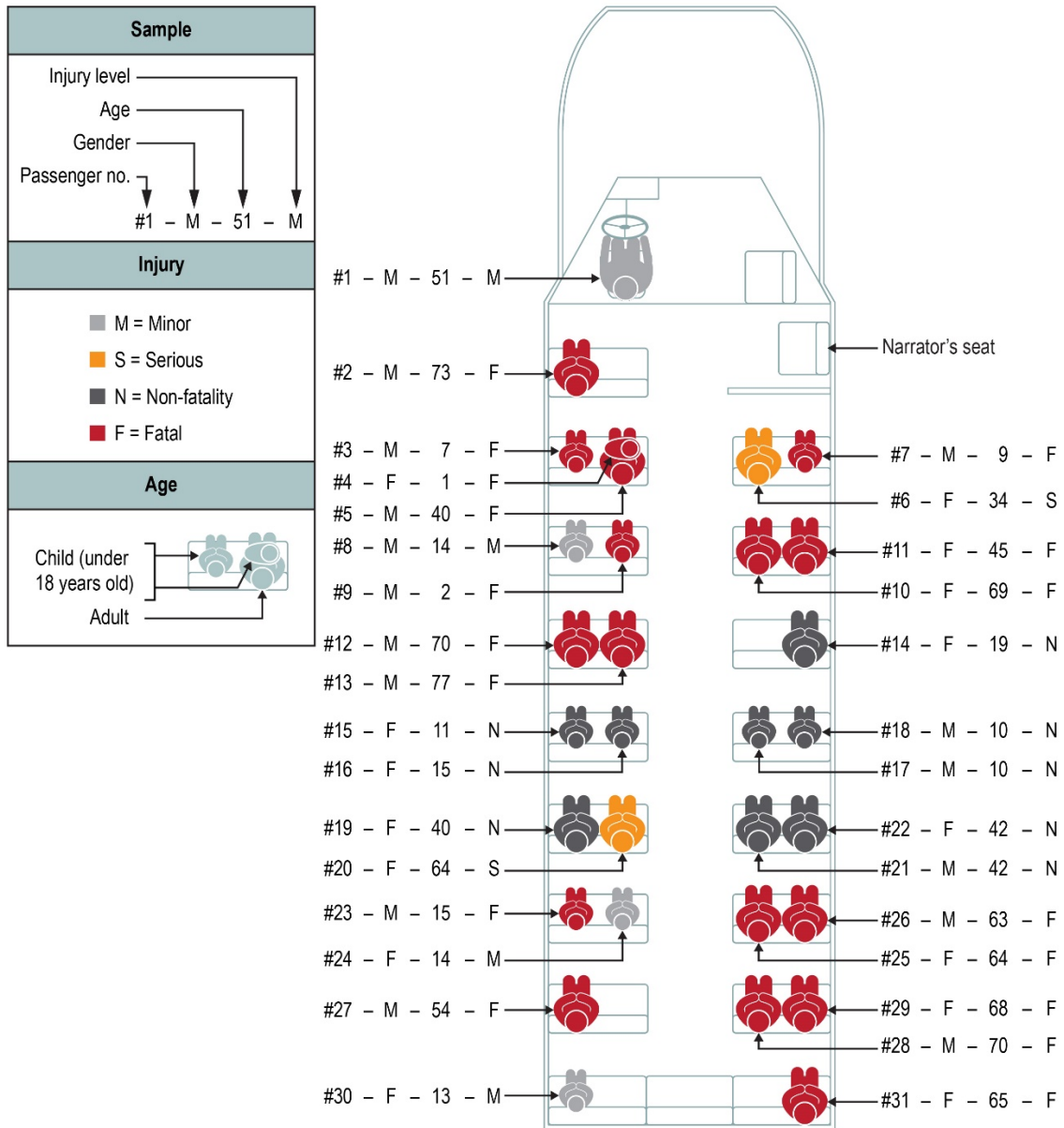
16
17 *Showboat Branson Belle’s* captain also stated he made distress calls on Ch. 16. No one
18 answered. It’s unknown whether the good Samaritan boats that responded heard the calls. The
19 closest USCG Sector Command Center was in St. Louis, beyond VHF range, and no VHF
20 recording was available. A local U.S. Coast Guard Auxiliary Flotilla monitored Ch. 16 only when
21 their own resources were on the water.

22 23 **5.5 Additional information**

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25 The *Showboat Branson Belle* was moored at a Coast Guard regulated MTSA-facility
26 allowing the scene to be secured. Responders had to sort *Stretch Duck 7* survivors from a large
27 number of *Showboat Branson Belle* passengers, all of whom were wet from rain and/or
28 swimming.⁵ As the response progressed the *Showboat Branson Belle* crew and passengers were

⁵ The Maritime Transportation Security Act (MTSA) of 2004 and Title 33 CFR Subpart H include security requirements for maritime facilities receiving vessels that carry more than 150 passengers, such as the *Showboat Branson Belle*.

- 1 evacuated and Taney County Sheriffs eventually received a request to help clear the area. MSHP
- 2 secured the scene on the water.
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Stretch Duck 7 occupant seating chart with demographic and injury information.

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1 The first reports to 911 from the scene were of 20 people onboard with 10 on the surface.
2 At 1925 TCAD alerted all units of a Level II Mass Casualty Incident which called for all available
3 ambulances, in this case five, and alerted hospitals to prepare for 20 patients.⁶ Cox Medical
4 confirmed they were ready at 2005. A TCAD paramedic learned the exact number on board *Stretch*
5 *Duck 7* (31), from the captain before he was transported at 1957. Passenger # 6 who was also
6 transported, stated later she was aware of the head count as well, as she had been sitting up front
7 in the duck boat. The Stone County PSAP logged that all were accounted for at 1945. The sheriff's
8 department learned the number after several attempts to contact the vessel operator at their Branson
9 facility. The IC stated until then, he had assumed 20 people onboard with 10 missing as was
10 originally dispatched and did not have a confirmed number until 90 minutes into the response
11 effort.

12
13 All responders interviewed, regardless of agency, described triage procedures similar to
14 Simple Triage and Rapid Treatment (START).⁷ Seven of the fourteen survivors were transported
15 by EMS to Cox Medical. While the first arriving ambulance (TCA 11) carried out triage, the
16 second arriving ambulance (TCA 1) transported the only "immediate" patient, Passenger # 20,
17 along with an uninjured family member, Passenger # 22.⁸ This one critical patient was rescued by
18 *Showboat Branson Belle* crew who climbed down the paddle wheel to assist her. She was moved
19 from the *Showboat Branson Belle* to an awaiting ambulance in the staging area using the SSCFPD
20 boat's stokes litter. Passenger # 6 and the *Stretch Duck 7* captain were classed as "delayed" and
21 transported next (by TCA 8 and Mercy 7623 respectively). One "minor", Passenger # 8,
22 accompanied the second of these. The last to be transported, were two minors, Passenger # 24 and
23 # 30, each of whom had no surviving family aboard the *Stretch Duck 7* (TCA 2). Of the seven
24 transported, the injuries of two were considered serious by NTSB, four as minor, and one had no
25 injuries.⁹

⁶ One other TCAD ambulance was on another call and unavailable.

⁷ Simple Triage and Rapid Treatment (START) provides for categorizing patients into one of four color codes, red for immediate, yellow for delayed transport, green for minor injuries, and black for expectant or deceased. The system is widely used in the United States. See also <https://chemm.nlm.nih.gov/startadult.htm>.

⁸ Passenger #22 was hit in the head by a life ring thrown to her. Her injury was classified by MSHP as a minor injury. She was listed as no injury by NTSB due to not being treated or admitted at Cox Medical.

⁹ Title 49 CFR 830.2 defines a serious injury as "any injury which: (1) Requires hospitalization for more than 48 hours, commencing within 7 days from the date of the injury was received; (2) results in a fracture of any bone (except simple fractures of fingers, toes, or nose); (3) causes severe hemorrhages, nerve, muscle, or tendon damage;

	START Immediate	START Delayed	START Minor	Not transported	Sum of survivors
NTSB Serious	1	1	0	0	2
NTSB Minor	0	1	3	0	4
NTSB None	0	0	1	7	8
Sum of survivors	1	2	4	7	14

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TCAD arranged for a Branson Gray Line bus to transport the remaining seven survivors, (all from one family group), to a Family Assistance Center in Branson. Additional victims were recovered at the *Showboat Branson Belle's* stage on the bow, by good Samaritan boats on the lake, or by first responders astern of the *Showboat Branson Belle*. Four passengers had drifted south and outboard of the *Showboat Branson Belle*, none of whom survived. Two showboat crew entered the water in an attempt to rescue one of these. A good Samaritan vessel recovered another one and took him to the Table Rock State Park Marina, one mile south, where WTCFD were launching their boat. The EMS Staging Area Manager dispatched one ambulance to the marina though resuscitation efforts there were unsuccessful.

A WTCFD team was the first to dive at the scene. They recovered three additional victims from the lake bed between 2150 and 2220, but did not locate the wreck. They cleared the scene at 2343 after a handover with the MSHP dive team. MSHP later recovered the remaining six victims. Three of these were located in depths of 44 feet. The last two were recovered in 85 feet of water near or inside the *Stretch Duck 7* where it came to rest after rolling downhill. All *Stretch Duck 7* occupants were accounted for by 1033 on July 20th.

No first responders were injured in the search and recovery effort. SSCFPD's fire boat, the first on scene, was damaged beyond repair by heavy seas while en route to the scene at a replacement cost of \$60,000.¹⁰

(4) involves any internal organ; or (5) involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.”

¹⁰ This dollar amount excludes grant funds used for a new lift needed for the newer bigger boat.



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2 **SSCFPD's boat after the incident with damaged bow ramp, indicated by red circle, and with stress**
3 **fractures throughout the hull.**