On Saturday, May 13, 2006, Georgann and Mike Wachter, Cindy LaRosa, and Kevin Magee went diving in Lake Erie. Cindy and Kevin met Mike and Georg at their boat "Figment," which is docked in Vermilion, OH. They decided to head out to the "Morning Star" based on the excellent visibility the Wachters had encountered on the wreck the previous weekend while installing the MAST (Maritime Archaeological Survey Team) mooring on it. The "Morning Star" is a wooden side paddlewheel steamer that sank on June 20, 1868, after it collided with the barkentine "Cortland," resulting in a large loss of life to the steamer's passengers and crew. The ship was raised but sank again in about 60' of water while being moved towards shore, and it now lies 8 miles north of the Black River in Lorain, OH.

The morning was gray, overcast, and chilly at 58-60 deg F, but the lake was flat near shore. As they headed out, the waves built until they were 2'-3', but it wasn't too rough. After hooking to the mooring, Cindy and Kevin geared up and headed down. They discovered the water temperature to be 50-51 deg F from top to bottom with an excellent 10'-12' of visibility, rare for the notoriously low visibility on this wreck. Kevin had never seen more than 5' of viz on this wreck. There was also a slight current from the east encountered. The mooring is chained to the top of the engine at about a 40' depth. The engine towers above the wreck, and dropping down to the bottom at 55'-60', the bow can be seen to be pointing south towards Lorain. However, the bow is almost completely missing with only a few scraps of wooden debris on the starboard side that disappear guickly into the thick silt. A large metal frame supports the engine with various machinery and mechanisms aft. Some of the engine details are hard to discern because of a coating of zebra mussels, but most of the wreck is remarkably clear of mussels, especially the wood. A large wooden shaft of 2'-3' diameter runs across the wreck's width and is supported by several large brackets. Connected are various machinery parts, and at both ends are the remains of the ship's side paddlewheels. They consist of the hubs with spokes radiating outwards for a short distance before being broken off. The port paddlewheel is in the best shape and reveals there were two sets of paddles for each wheel.

Part of the hull's side is exposed aft of the starboard paddlewheel but quickly becomes buried in the silt as it heads towards the stern. More wooden debris lies off the starboard side of the ship. Some of it appears to contain open spaces underneath that have collapsed and filled with silt, leaving large holes in the lake bottom. Aft of the paddlewheel shaft across a roughly 15' gap lies two large boilers with their fireboxes facing forward. Large flues for the smokestacks are attached to the boilers above the fireboxes. The starboard one points straight up to a depth of approximately 35' and contains an opening large enough for a person to fit inside. The port boiler, however, has fallen at a 45-degree angle and rests against the starboard boiler. A large hand valve is obvious on the front of its flue. Circumnavigating the boilers to the stern, no more of the ship can be seen aft of the boilers. Because of the lack of zebra mussels on the sides of the

boiler, rivets and other details can easily be observed. More of the wreck was seen on this one dive than can normally be seen in dozens of dives on the wreck due to the great visibility.

Upon surfacing, it was discovered the seas had laid down to 1'-2', the sun had come partially out, and it had warmed up to 60-62 deg F. After eating lunch, it was decided to head to the "Admiral" and check the MAST mooring recently installed on this wreck. The "Admiral" was a steel tug that was towing the fuel barge "Cleveco" during World War II when it sank in a snowstorm on Dec. 2, 1942. The "Cleveco" also sank after drifting for a day or two in the storm, resulting in the total loss of both crews. Upon suiting up and descending, it was discovered the water temperature was slightly colder at 49-50 deg F but the visibility was slightly better at 10'-15'. The mooring is chained to the top of the wheelhouse at about 50' depth on the port running light bracket. Descending to the bottom at 65', the bow can be seen to stand high off the bottom by about 5' with its wooden gunwale easily seen due to the lack of zebra mussels. A large bitt occupies the center of the bow's deck with a circular manhole opening in the deck aft with a large silted space inside. The deckhouse's first level has two doors on each side that allow easy access to the fairly open interior rooms. Because of the great visibility, all rooms were penetrated and explored. There is a small room aft of the main rooms that contains collapsed ducting for the smokestack. There is no second level to the deckhouse above this section, and the roof contains a large circular hole where the smokestack would have been located. The smokestack itself lies partially buried on the bottom along the port side of the ship. Aft of the smokestack hole on the roof, a large air scoop stands. The engine room is aft of the smokestack hole with the long, large engine inside. Doors on each side allow access to the front part of the engine room, but the space along the sides of the engine is tight. However, the engine can easily be viewed from circular portholes along both sides of the deckhouse. Rectangular window openings also adorn the top of the engine deckhouse, and some glass remains in these windows.

Aft of the deckhouse, the stern is almost completely exposed. This is a change from previous years where the stern was almost completely buried. A large double bitt rests against the back of the deckhouse, and two metal poles stick up from the deckhouse. A towing arch rises across the width of the ship from gunwale to gunwale and was seen to be made of wood due to the lack of zebra mussels. At the rounded stern, a large metal wheel almost the size of the width of the ship lies embedded flat on the deck with chains running from it forward towards the bow. This feature was commonly buried in the past but is now completely exposed. It was also noticed the port gunwale is almost completely buried along the full length of the ship. This is another change in the characteristics of the silt around the wreck. Exploring the upper level of the deckhouse, the wheelhouse at the bow can be seen to have the remains of a railing in front of it. The windows of the wheelhouse consist of unusually small circular portholes along the front face only. Visibility from the bridge would have been limited due to the small size of these windows. There is a door on the port side that allows access to the bridge, which is missing all its equipment except the large base that would have held the wheel. There is a room aft of the wheelhouse with a door on each side that allows easy access. At the rear of the upper deckhouse is a standing metal pole that is bent backwards towards the stern.

While heading back to Vermilion at the end of the day, it got cooler and patchy rain showers were encountered, but the lake remained calm at about 1'. Overall, it was an excellent day, and the visibility made for two exciting dives. These were Cindy's and Kevin's first Lake Erie dives of the year, and it was a great start to the season! It is hoped the great conditions continue through the rest of the summer.

<u>Correction</u>: I later learned the "Morning Star's" bow is to the north and the stern is to the south. I got it wrong in my dive report.