MOUNT SAINT JOSEPH ACADEMY
CREW TEAM

GENERAL INFORMATION
BOOKLET

The History of the Sport of Rowing

"Competitive rowing among organized crews is one of the oldest and most traditional sports. Races between oared galleys were held in ancient Egypt and Rome. The Thames River in England is the setting for the oldest rowing contest in the world, held annually since 1715; the annual boat race between the universities of Oxford and Cambridge; and the Henley Royal Regatta. The Henley annually attracts the foremost crews and scullers of the world, including several from U.S. universities and schools. In the U.S., rowing was an informal sport in the 18th century. The first formal public notice of a rowing contest appeared in 1811. In the following years, boat clubs began to be established in the Atlantic Coast states and in the Midwest; by the mid-19th century many kinds of clubs, competitions, and vessels existed. Women often competed in club
contests. Rowing regattas became popular spectator sporting events in cities adjacent to water. The idea of amateurism gained great support in the late 19th century. This idea found its most important expression in the growth of college and university rowing; the sport thereupon began to attract a different body of participants and spectators. From 1852, the date of the first Yale-Harvard race, to the 1870s intercollegiate competition flourished. Women began rowing in 1877 at Wellesley. On its revival in the 1890s, a
number of colleges joined together to found the Intercollegiate Rowing Association in 1895, and since that time collegiate rowing, for both women and men, has been firmly established. Rowing was adopted as an Olympic sport in 1900 and formally incorporated
in the Olympic Games in 1908. Women have competed in Olympic rowing events since 1976." (extracted from Microsoft Encarta 96 Encyclopedia).

Two good sources of information concerning rowing in general (summer rowing camps) and about the rowing season are:

the MSJA Crew Homepage (*http://homepage.mac.com/coxswain/msja/*) and
the Schuylkill Navy of Philadelphia internet site (*http://www.boathouserow.org*).

The Spring Rowing Season

One of the first harbingers of spring in the Delaware Valley is the annual ritual of the crew shells shoving off from their docks along the Schuylkill River. On-the-water training begins in late February or early March on the Schuylkill River. Practices are held Monday through Friday from 5:30 to 7:30 p.m. and on weekends at various times. Once the season starts,

Sunday is race day—except for major regattas such as the Stotesbury and the Nationals. Weather conditions will determine if practices are modified or cancelled.

Rowers should arrive at the boathouse fifteen (15) minutes before practice. All rowers will stretch prior to the on the water practice.

Each rower is expected to be at practice. Only a coach can excuse a rower from practice. If a rower can not attend practice, it is her responsibility to inform the coaches.

All injuries must be reported promptly to the coaches.

Seat assignments and the race day schedule will be briefed to the rowers not later than Friday.

Race Day—the Regattas (Go, Mount, Go!/Row, Mount, Row!)

Race Day is the reward for a dedicated, focused, and challenging practice week.

On the Schuylkill, the Regattas start in March. The usual start time for the regattas is 12:00 noon. Races run throughout the afternoon. Weather and course conditions will dictate later starts. Rowers must be at the boathouse for their race at least 45 minutes before their race time. Coxswains will shove off from the boathouse dock approximately 45 minutes before race time.

Following the Race

Coxswains will have their crews at the up river marshalling area 15 minutes before the race, and at the start line ten (10) minutes before the start time. Once all the shells in the race are aligned at the starting line (approximately 300 meters up river from the Strawberry Mansion Bridge), the judge raises a white flag. The starter then raises a white flag. When all crews are ready and aligned, the starter will give the command, “Attention, go.” Simultaneously, the starter drops a white flag. A false start occurs when a shell moves across the starting line before the white flag is dropped. The boats will be realigned. Then restarted. If there is an equipment problem up to 100 meters from the start line, the race may be stopped and re-started. Once the shells are off, officials in motorized launches follow the shells down the course.

The officials observe the race for safety and for fairness. They provide the official finish times, and the officials and scorers in the Tower provide the place and time for all the shells in the race. If a shell veers out of its assigned lane, the race official in the launch will hold up a white flag as a warning. If a red flag is raised, this indicates that the race is stopped.

The race is 1500 meters. Usually up to six boats can race at one time. Lane 1 is closest to the shore, and Lane 6 is farthest from the spectator viewing area. Depending on the event (number of rowers), weather, river current, wind, and experience/conditioning of the crew, races usually take four to seven minutes.

Due to the terrain along the Schuylkill River, a spectator (running or on a bike) can literally follow a race down the course. If you are located up at the Canoe Club area, you will see the start of the race. If you are located at the Grandstand area, you will have an excellent view of the last 500 meters and the finish of the race. See the enclosed map of the race course.

Parking Passes

To drive and park on Kelly Drive, the race spectators need a parking pass. The pass allows you to park on Kelly Drive along the racecourse on race day. There is a pass for the Flick Series races (including the Catholic and City Championship races and the White Regatta). There are separate parking passes for the Stotesbury and Nationals.

The Racing Season

Both the MSJA Crew Homepage (*http://homepage.mac.com/coxswain/msja/*) and the Schuylkill Navy of Philadelphia internet site (*http://www.boathouserow.org*) list the racing schedule for the 2002 season.

The Mount will have the opportunity to compete in as many as five Manny Flick Series Regattas (March through April). Sometimes a school takes a "bye" during one of the five Sunday Flick Regattas. See the the Schuylkill Navy of Philadelphia internet site—*www.boathouserow.org* for the history of the Flick Regattas. The Mount will compete with private and public schools from both the Delaware Valley, New Jersey, and New York.

The first "medal race" is the New Jersey State Championship on the Cooper River in Camden, NJ. The next medal race is the City Championship on the Schuylkill River. This

race concludes the Manny Flick Regatta Series. The Dr. Robert White Regatta on the Schuylkill River (usually on Mother's Day) is a medal race held for only high school freshman and novices. The Stotesbury Cup Regatta, the oldest high school regatta, is held on the Schuylkill River. Almost 100 high schools with 3000+ rowers from the eastern seaboard attend this two day (Friday and Saturday) regatta. Then there is the Scholastic Rowing Association National Championship Regatta. It is also a two day (Friday and Saturday) Regatta. The location rotates each year. It is, for example, held on the Occoquan River (Woodbridge, VA), the Cooper River (Camden, NJ), and at St. Andrews, DE.

Crew Terminology

There are various divisions or classifications in crew. All races have separate divisions for men (M) and women (W). There are Varsity, Junior Varsity, and Novice/Freshmen races.

There are two weight classes: Open Weight and Lightweight (LWT).

See the diagram "How to Watch a Rowing Race" for the types of shells, the technical specifications of the shells and oars, and what to watch for.

The Coxswain (pronounced cox'n) commands the shell. Depending on the type of shell, the cox'n is either in the bow or stern of the shell. The cox'n faces forward toward the finish line. It is the responsibility of the cox'n to plan the race strategy; steer the shell; and motivate the rowers, via commands and encouragement, to pull hard and in unison. The cox'n is in complete command of the shell both in and out of the water.

The rowers sit in a line down the center of the shell, with their backs to the direction the shell is moving. Power is generated using a blended sequence of the rowers' legs, back, and arms. Each rower sits on a sliding seat with wheels on a track, called the "slide." Each oar is held in a "U-shaped" swivel, called an oarlock, mounted on a metal pin at the end of the rigger. The rowers' feet are secured in adjustable brackets, called "foot stretchers."

Timing must be perfect for a good crew. All the rowers must hit their "catches" simultaneously—that is, the blades of all the oars must enter the water at the same time. Similarly, the "pull through" (the portion of the stroke while the blades are in the water) and the finish of the "stroke" must be performed in unison.

To the spectator, the achievement of perfect synchronization appears easy. However, these movements must be done with such seamless rhythm and control that the rowers never check the forward momentum of the shell. Rowing should be a continuous, fluid motion.

The whole body is involved in moving the shell through the water. Although rowing looks like an upper body sport, strong legs are the prime boat movers. The rower begins "at rest" with legs fully extended and the oar blades immersed in the water, almost perpendicular to the surface. The rower must slide forward to the front end of the slide; reach out with the oar and make the "catch;" apply pressure, first with
the legs, driving the seat backwards on the slide, squeezing the arm then swinging the back to the finish, and draw the arms into the body; flip the wrists and push the oar handle from the body in a single motion to bring the blade into the water; and slide forward to begin a new stroke.

Rowing Cycle Terminology

Release ‘	A sharp downward and away motion of the hand, which serves to remove the oar blade from the water. As the blades are brought out of the water, they should move horizontally at the same height, just above the water.
Feathering	The turning of the oar blade from a position perpendicular to the surface of the water to a position parallel to the water, in conjunction with the release.
Recovery	The part of the rowing cycle from the release up to and including where the blade enters the water.
Squaring	A rolling of the oar blade from a position parallel to the water's surface to a position almost perpendicular to the surface, in conjunction with the recovery.
Catch	The point of the recovery at which the blade is dropped into the water. The catch should occur at the very end of the recovery, when the hands are as far ahead of the rower as possible. The blade must be fully square for the catch.

Drive — The rower applies power to the oar, with a leg drive, then the back, and finally the arms.

Finish — The last part of the drive where the power comes from the rower's back and arms.

Layback — The amount of backward lean of the rower's body at the end of the finsih.

Rating (Stroke) — The number of strokes per minute. Stroke rates vary from boat to boat, depending on the number of rowers and the conditioning of the athletes.

Ratio — The ratio of recovery time to drive time.

Set the Boat — The stability or balance of the boat is established by the rowers.

Seat Positions

Coxswain — The Coxswain (pronounced cox'n) commands the shell. It is the responsibility of the cox'n to plan the race strategy; steer the shell; and motivate the rowers, via commands and encouragement, to pull hard and in unison. The cox'n is in complete command of the shell both in and out of the water.

Seat #8 — The rower with the smoothest stroke and the best rhythm leads the boat and sets the stroke length and cadence. The "stroke" sits nearest the "stern" (rear of the boat or "shell") and the coxswain.

Seat #7 — The rowers on the opposite side of the "stroke" look to the "7-seat's" oar to get their timing in the boat. The "7-seat" must mimic the movement of the "stroke's" body. It is essential that the "stroke" and "7-seat" put their oars in the water at the same time and take their oars out of the water simueously.

Seat #6 The "6-seat" is usually one of the two most powerful rowers in the boat. The "6-seat," "5-seat," "4-seat," and "3-seat" of an eight, called the "middle four or engine room," typically provide most of the power for the boat. The center of the boat is most stable, so small movements of the hands or body will have less effect on the setup of the boat. The "engine room" four must swing together as a group, using much power from their legs as possible.

Seat #5 The "5-seat" is usually the most powerful rower on the starboard side of the boat. This is the most stable seat.

Seat #4 This seat is filled by the next most powerful rower on the port side.

Seat #3 This rower adds strength and support to the task of rowing the boat through the water.

Seat #2 This rower adds strength and support to the task of rowing the boat through the water.

Seat #1 The rower with the second smoothest stroke sits in the "bow" (front of the boat) and finishes the race first.

Equipment Terminology

Blades The wide, flat section of the oar at the head of the shaft. The Mount's blades are black, purple, and gold.

Bow The front of the boat or shell. The first part of the boat to cross the finish line in a race.

Button (Collar) A plastic or metal fitting tightened on the oar to keep it from slipping through the oarlock.

Ergometer A rowing exercise machine that simulates the physical demands of rowing.

Foot Stretchers The adjustable brackets in a shell in which the rower's feet are secured in shoes.

Gunwales The top section of the sides of a shell onto which the riggers are connected with bolts.

Hatchets A relatively new design of oar blades with a larger surface area under the water than the older, standard blades.

Keel The center line of the shell.

Oarlock A "U-shaped" swivel mounted on a metal pin at the end of a rigger. It holds the oar in its place.

Pitch The angle between a line perpendicular to the water's surface and the blade on the "drive" when the blade is "squared."

Port The left side of the shell when facing the bow.

Rigger A device, bolted to the body of the shell. It connects the oarlock to the shell.

Rigging The adjustments of accessories (riggers, foot stretchers, and oars) in and on the shell. Examples of rigging adjustments are the height of the rigger, location of the foot stretchers, location and height of the oarlocks, location of the button, and the pitch of the blade.

Rudder The steering device at the stern, connected to cables (called tiller ropes), that are used by the coxswain to steer the shell.

Scull An oar used in a sculling shell, the shell itself, or the act of rowing a

sculling shell.

Shell	The special racing boat made of lightweight wood or fiberglass used in the sport of crew.
Skeg	A small fin located along the stern of the hull to stabilize the shell.
Slide	The track on which the seat moves.
Slings	The collapsible, portable frames with straps onto which a shell can be placed temporarily.
Starboard	The right side of the shell when facing the bow.
Stern	The rear end of the shell. The last part of the shell to cross the finish line.