President's Message

Once again, the Annual International Conference on Historic Canals was a great success. Some 70 canal buffs attended in spite of the fact that Nova Scotia is a faraway foreign land for most of us, the land of high tides, savage blueberries (the French Canadians call wild blueberries "Bouets Sauvages") and the Shubenacadie Canal. I can say for everyone that we all found the experience to be well worth the trip. Enthusiastic folk from the Shubenacadie Canal Commission attended previous conferences, passed out "Shubie" buttons, badges, post cards and brochures and begged us to come visit, and I'm glad that we finally did. So very many thanks to the efforts of Ben Fullerton, Bernie Hart (Dartmouth's 1991 Citizen of the Year), and the other Canal Commissioners who volunteered their time to run the canal park and ended up being bartenders, tour guides and troubleshooters for a bunch of international canal maniacs.

Looking down Lock 2, the first constructed on the canal in 1826. When the canal was redesigned in 1854 another construction method from the Morris Canal was used, making the lock an interesting mosaic of stonework types. This lock is at the canal's Fairbanks Centre where some of our festivities took place.

The Seal of the canal company is used as a letterhead by the Canal Commission. We didn't see any lock quite like this one!

Canadians certainly know how to do things with style. The meeting opened on October 13th with not only greetings from Her Worship the Mayor of Dartmouth, Gloria McCluskey; but with an inspiring talk on the history and future of the canal by none other than the Premier (governor) of Nova Scotia, Dr. John Savage, who lives beside the canal. Now, when have any of our state governors since DeWitt Clinton ever given a canal talk!

The other keynote speaker was Judith Grice, Head of British Waterways' Environmental Design and Planning, who presented the opening address on "A Future for the Past," with beautiful slides.

(Concluded on Page Three)
American Canals

BULLETIN OF THE AMERICAN CANAL SOCIETY

Publisher: William H. Shank, P.E., 809 Rathorn Road, York, PA 17403. 717 643 4035.
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AMERICAN CANALS is issued quarterly by the American Canal Society, Inc. Objectives of the society are to encourage the preservation, restoration, interpretation, and use of the historic navigational canals of the Americas, to save threatened canals, and to provide an exchange of canal information.

Annual subscription to AMERICAN CANALS is automatic with A.C.S. membership. Send dues payment ($14 minimum) to Sec-y/Treas. Charles W. Derr, 117 Main St., Freemansburg, PA 18017. Single copies may be purchased at $3.00 from the publisher.

Manuscripts on subjects consistent with the objectives of the A.C.S. are welcome. They should be sent to the editor.

Navigable Canals Committee Report

[The following reports were provided by committee member Addison W. Austin.]

1. This may be the last year season passes on Canadian canals will be sold to persons who are not Canadian citizens.

2. St. Lawrence Seaway locks nominally will not admit vessels of less than 20 feet, but in fact do so if they are rafted to other vessels.

3. Exact change is required for the St. Lawrence Seaway lockage fee of $10 per vessel per lock.

4. Boaters can now meet Canadian customs requirements by phone, but U.S. customs agents may not recognize undocumented Canadian customs clearance.

5. The St. Lawrence River between Montreal and Sorel has separate channels for large and small vessels. Wakes in the large-vehicle channel can be formidable.

6. The Erie Canal is still free but may not be much longer. Exceptionally friendly and helpful lockkeepers are encountered here.

7. Not all listed fuel docks on the Erie Canal are still open. Boaters should top off their tanks whenever they can.

8. Kentucky River locks are not always manned during their operating hours, unless arrangements have been made in advance.

9. There is a new marina in downtown Montreal. Tricky currents entering and leaving—also expensive, for refueling, you still need to visit the old marina.

10. You can still lie up in downtown Ottawa for no charge—convenient to chart and map store and most urban attractions.

11. It is hard to find good off-channel anchorages on the Richelleau River, but the channel is not very busy.

ACS Life Members

Some of our members have suggested that we publish a list of LIFE MEMBERS now that we have had 83 members in that category. The following are ACS Life Members, around the world, as of October, 1993:

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Navigable Canals, David F. Ross, chrmn., Rt. 1, Box 87T, Savannah, TN 38372.

Other publications: Best from American Canals, William H. Shank, editor and publisher.
The Canadian Parks Service gave us a tour inside the fortifications on Georges Island in Halifax Harbor. Here we are looking at some enormous cannon, with downtown Halifax and a huge cruise ship in the background.

The reason for thinking about England in 1996 is that Britain's national canal society, the Inland Waterways Association, will be celebrating its 50th anniversary then. Ron Oakley, Chairman of the IWA's International Committee, would very much like to have an American contingent over there, and he has sent us a questionnaire for interested canallers to fill out, about what they would like to do in the way of celebrating and touring for the occasion. If you are at all interested in going to England in 1996, please return Ron's questionnaire. If you need an extra copy, let me know.

Should the 1996 International Conference on Historic Canals be held in Britain that year, making it even more international? Let me know what you think.

Have a safe, happy and prosperous holiday and new year!

Bill Trout

RED SEA - DEAD SEA CANAL

Chicago Tribune, Oct. 31, 1993 BEIJING — Israel has proposed the spectacular construction of a canal to link the Red Sea with the Dead Sea as a partial solution to the age-old conflicts over water access that have knotted Middle East wars and hatred for centuries.

Its experts argue that the “Red-Dead Canal,” a man-made river across the desert, would generate enough electricity to desalinate sea water and provide the bulk of the 1 billion cubic meters of fresh water needed to solve the problems of one of the world’s most parched regions.

The waterway proposal is hailed by many delegates of the 45 nations gathered in Beijing this week during the fourth meeting of the Water Working Group—a multilateral organization trying to resolve Arab-Israeli issues following the PLO-Israel peace accord—as a milestone in the bitter relations between once-deadly enemies.

The idea is not new. What's remarkable is Arabs and Israelis are sitting in the same room talking about it.
THE APALACHICOLA-CHATTAHOOCHEE-FLINT, "ORPHAN" WATERWAY

The lodge at Lakepoint State Park welcomes boaters for a drink, a meal, or a room.

By David F. Ross

The mid-continental region of the United States contains one great family of inland waterways. Almost without exception, the navigable rivers of this region, if they are of significant length and have been canalized with locks and dams, are connected to the Ohio and Mississippi systems and drain into the Gulf of Mexico. One significant exception in the past was the Black Warrior-Tombigbee-Alabama-Mobile river system, but that has now been grafted onto the family through the construction of the Tennessee-Tombigbee Waterway. Still remaining apart, in singular if not exactly splendid isolation, is the Apalachicola-Chattahoochee-Flint river system, known to its intimates as "the A.C.F. rivers."

The A.C.F. rivers are anomalous in more than one respect. The easternmost members of the Ohio-Mississippi family are found in the neighborhood of Pittsburgh, and the A.C.F. rivers are well to the west of Pittsburgh. They are even farther west than Cincinnati or Knoxville. Nevertheless, geologically speaking, they are actually eastern rivers, belonging to that much less closely-knit family that includes the Hudson, the Connecticut, the Potomac, the James, and the Savannah, all of which drain the eastern slopes of the Appalachian divide. Well-behaved and conventionally oriented members of this family, however, follow a course that leads to the Atlantic coast; the A.C.F. rivers prefer to emulate their western neighbors in flowing to the gulf. They thus don't really fit in with either family, and constitute a kind of orphan waterway.

292 Miles of Cruising

The Chattahoochee River flows southwesterly across Georgia until it reaches the Alabama border about 40 miles north of Columbus. At that point, it turns south and becomes the boundary line between the two states. Meanwhile, further down, the Flint River is also angling across Georgia, passing through Albany and Bainbridge, and finally meeting the Chattahoochee just at the southwestern corner of the state. Here the two rivers merge, and the product of their union is renamed Apalachicola. Under that designation, it continues south across the Florida Panhandle until it reaches the town of Apalachicola, where it loses its identity in the Gulf of Mexico.

The fall line of the Chattahoochee is at Columbus, making that point its head of navigation. The present dam at Columbus merely ratifies that historical reality. The limit of navigability on the Flint is less sharply defined. The Corps of Engineers maintains a channel, adequate for commercial barge traffic, as far as Bainbridge. Coast Guard channel markers and Corps-published navigation charts make it safe and easy for transient boaters up to there. How much farther you can go is a function of the size of your boat, the extent of your local knowledge, and your willingness to take risks. Local sources indicate that to go another ten miles is no great feat, but that only the most dedicated, or obsessed, boaters, lured by rumors of fabulous fish sightings, venture much beyond. If Bainbridge is arbitrarily taken as the limit, then the waterway offers 292 miles of cruising: 157 on the Chattahoochee, 29 on the Flint, and 106 on the Apalachicola.

The Steamboat Era

The A.C.F. waterway, like its neighbor the Alabama-Mobile rivers waterway (see American Canals no. 75, p. 2) was a thriving commercial artery before canalization and has languished since. This is not to suggest that canalization was responsible for a decline in commercial use — the decline began a century before the engineering works were undertaken. Obviously there was some hope, however, that canalization would bring about a revival of commercial traffic, and that hope has, in both cases, failed to achieve fulfillment. A few towns are seen occasionally on the lower stretches of both systems, scarcely any at the top. For the present, service is still maintained by the Corps of Engineers at all locks on both waterways, and the recreational boater is welcome to reap the benefits of facilities which were provided for a less frivolous purpose.

When it was a busy commercial waterway, the A.C.F. carried general merchandise of all sorts, as well as passengers, but the mainstay of its business was cotton. The outlet to the sea was not secured for American shipping interests until the acquisition of Florida in 1819 in the wake of the War of 1812. The waterway's development thus began in earnest just as the steamboat was becoming the mode of transport that defined the age. The first recorded shipment of cotton from Apalachicola harbor was in 1822. Presumably, it had been brought downriver by flatboat. The first steamboat known to have navigated the waterway was the Fanny, which reached Fort Gaines (now the site of the uppermost lock and dam) in July of 1827, and Columbus the following January. During her brief presence, Fanny also made it to Bainbridge, thus inaugurating service on all of the present officially navigable waterway. She was a vessel of 88 tons, drawing 6 feet 2 inches of water, somewhat deep for a riverboat. Shortly after leaving Columbus, she went aground and exploded at a sandbar.

Widely fluctuating water levels, numerous hazards to navigation, and Fanny's sad fate, failed to discourage followers once the trail had been blazed. Cotton shipments from Apalachicola shot up from 500 bales in 1828 to 5,000 in 1830. By 1842, the figure had reached 97,330 bales, and it went on to 137,000 in 1852. This was the beginning of the end, however. Railroads had been nos-
ing about in the region for a few years without hav-
ing any discernable impact on river traffic, but in
1853 a direct rail link was completed between Col-
bumbus and the Atlantic port of Savannah. Since
most of the cotton shipped was destined for New
York or Europe, shipping via Savannah avoided
the long, expensive, and sometimes dangerous
cummmunavigations of the Florida Peninsula that was
required of ships which took on their cargo at Apalachehola. The Union blockade of Apalachehola
beginning in 1861 merely accelerated a decline in
the commercial use of the A.C.F. rivers which had
already become inevitable.

Modernizing the A.C.F.
A small amount of steamboat traffic lingered on
into the 1930s, with a few excursion boats even
continuing to operate during the 1940s. For a
while, too, there was significant shipment of
cypress logs on the rivers. No longer, however,
were the rivers the economic base for the com-

Only the automobiles remind you that this is
the 1990s in downtown Apalachicola.

The sense that the river estuary is crucial to the
seafood industry which now sustains Apalachicola.
Steamboats, meanwhile, had become obsolete in
the rapidly evolving transportation industry. To
compete with railroads and highway carriers, the
waterways now depended upon the economies of
scale that could be achieved by massing flotillas
of barges in front of powerful towboats. Nonperishable bulk commodities could be carried
efficiently aboard such cumbersome agglomerations
of vessels, but not over rapid s and sandbars. Com-
mercial navigation now required dependable
8-foot channels, the modern standard of Corps of
Engineers canalization projects.

The first of three locks and dams needed to
bring the A.C.F. waterway up to date opened for
business in 1957; the third was completed in 1963.
The Jim Woodruff Lock and Dam is located just
below the confluence of the Chattahoochee and
Flint rivers and hence at the head of the
Apalachicola River. The broad expanse of water
created by the impoundment on the Chatta-
ahoochee and Flint is known as Lake Seminole.
Forty-seven miles up the Chattahoochee, just
below Columbus, Georgia, is the George W. An-
rews Lock and Dam. Most of what little barge
traffic there is seems to terminate at Columbus. The
Corps refers to the stretch of river above this dam
as the George W. Andrews Lake, but the im-
pounded water remains closely confined within
the river's original banks. Then, twenty-eight miles
further up, The Walter F. George Lock and Dam
completes the string and creates the most exten-
sive reservoir. This is known to the Corps and other
federal agencies, and to the State of Georgia, as
Lake Walter F. George, or, more familiarly, Lake
George. All maps, highway signs, tourist
brochures, and other material published in or for
the State of Alabama, however, refer to it as Lake
Eufala. A bill was introduced in the U.S. House
of Representatives in 1965 to make "Lake Eufala"
the official federal designation, but it failed to
win enactment. Perhaps as an assertion of state
sovereignty, Alabamians thereupon decided to go
it alone.

Boaters' Access
Although the A.C.F. waterway has no fresh-
water connection with the rest of the inland water-
way system, it can be reached by salt water, either
through the Gulf Intracoastal Waterway or from the
Gulf of Mexico itself. Strictly fresh-water boaters
must resort to trailering. I was discouraged from
using ramps in the Columbus area on the grounds
that a car and trailer left unattended there for
several days would be unlikely to remain intact.
A convenient and highly satisfactory alternative
was the Lakepoint State Park, just 7 miles above
the town of Eufala, Alabama. On the Georgia side,
(Continued on Page Six)

Secure building sites are scarce on the banks
of the Apalachicola.
use of a car for grocery shopping. One motel in Eufala provides dockage for its guests, and there is also an in-town marina, both establishments are quite a brisk walk from downtown, but the downtown Holiday Inn will send a car to the marina for boaters wishing to use its facilities. If you have parked your own car at Lakepoint State Park, as I have done, you can use it for Eufala shopping, sight-seeing, etc. The least accessible is Columbus. There is a downtown ramp, where you could berth a small boat or the dinghy from a large boat, but no dock for mooring. Apalachicola, Bainbridge, and Eufala all feature well-preserved antebellum homes and public buildings among their attractions; Columbus, if you can reach it, is the site of a notable Confederate Naval Museum.

Visitors to Apalachicola can pay homage to Dr. John Gorrie by visiting the various monuments that have been erected and relics that have been preserved in his memory. Gorrie is honored as the inventor of artificial ice and air conditioning, achievements which resulted from his efforts to bring comfort to his yellow fever patients. The disease ravaged Apalachicola in 1835 and again in 1841. Another monument to human tragedy is not only boaters appreciate the convenience of floating bollards when looking through.

Fort Gadisden, 20 miles above the mouth of the Apalachicola. Although it was manned at various times by British, Native American, United States, and Confederate forces, it saw actual combat only during a brief period when it was known as "The Negro Fort," held by free blacks and runaway slaves. Although it was in Spanish territory and the United States was at peace with Spain, General Andrew Jackson ordered its capture in 1816. Just as hostilities were getting under way, a "hot shot" (pre-heated cannonball) from a U.S. gunboat, a precursor of the smart missiles of the war against Iraq, entered the door of the powder magazine and blew up the entire compound. Two hundred seventy men, women, and children are believed to have been killed, leaving only 30 survivors. Fort Gadisden is now a State Historic Site and maintains a dock for visitors arriving by water.

The flora and fauna visible along the waterway testify to its deep-south location. Spanish moss and water hyacinths, egrets and alligators are common sights. The alligator is the most fearsome in appearance, and certainly alligators are not pugnacious. Unprovoked alligator attacks on Apalachicola's most famous citizen Dr. John Gorrie was the inventor of artificial ice. The plaque reads: "This monument was erected by the Southern Ice Exchange - 1899."

(Continued from Page Five)

there are a couple of state parks, George T. Bagby at Fort Gaines and Florence at Florence, where similar arrangements could presumably be made.

Fuel is available at several places in Apalachicola, and not again until you reach Lake Seminole, slightly over 100 miles further north. There is generally a strong current on the Apalachicola River, so you will need significantly more fuel going up this stretch than going down. After you have refueled on Lake Seminole just above Woodruff Lock and Dam, there is another dry stretch until you reach the marina at Bagby State Park on Lake George/Eufala, just above the George Lock and Dam. There are quite a few gas docks on Lake George/Eufala, the farthest north being at Florence State Park—from here to Columbus and back is a 90-mile round trip without refueling opportunities, much of it passing through the Fort Benning military reservation.

Attractions
Some of the state parks and other marinas have associated or nearby establishments offering meals, lodging, and groceries. The principal urban centers along the waterway are variously accessible to boaters. Bainbridge has ample, free public dockage within easy walking distance of the downtown area—supermarkets are a taxi ride away. The principal marinas in Apalachicola are in the downtown area, and one of them offers the...
ABRAHAM LINCOLN AND THE I&M CANAL

A recent book [1] details Abraham Lincoln’s connections with the Illinois and Michigan Canal. When Lincoln began to campaign for election to the Illinois General Assembly in 1832, he platform included the statement that “Time and experience have verified, to a demonstration, the public utility of internal improvements.” In the election of 1834, Lincoln won the seat and was appointed to the Committee on Public Accounts and Expenditures. That committee would handle funds for construction of a canal to connect Lake Michigan with the Illinois River.

In 1827, the Congress of the United States granted to Illinois a strip of public land for a canal that would connect Lake Michigan with the Illinois River. In 1829, the Illinois General Assembly drafted a bill that called for construction of a canal in Illinois and Michigan Canal. When the canal bill came before the Assembly, in February of 1835, and was then tabled for amendments. Lincoln voted to reduce the number of commissioners from five to three, the motion passed, but later was reversed. The amended bill was finally passed, 40-12, with Lincoln voting Yea. When the bill was reconsidered in December, Lincoln offered the following amendment: “The Governor, during the recess of the General Assembly, for any good cause, shall have power to remove any or all of the said commissioners from his office, and to supply vacancies occasioned by such removals, which appointments shall continue until other appointments are made by the General Assembly.” The House did not support Lincoln’s motion.

On Christmas Eve, the canal bill survived a crucial vote, 29-26, with Lincoln voting Yea. The bill became law in January of 1836, but the bill signed by Governor Doorscun authorized the governor to appoint only three, not five, “practical and skillful citizens of this state to constitute a board” and, further, allowed the governor to remove a canal commissioner “for good cause.” Those stipulations, originally proposed by Lincoln, had been defeated as amendments but had nevertheless been worked into the compromise bill that became law.

The canal commissioners — General William Thornton, Colonel Gurdon Hubbard, and Colonel William Amory Goodin, from the Erie Canal, as chief engineer [2]. Lincoln won reelection to the Assembly, in 1836, while revealing that “I go for distributing the proceeds of the sales of the public lands to the several states, to enable our state, in common with others, to dig canals and construct railroads, without borrowing money and paying interest on it.” In February, 1837, the I&M Canal Act was amended, 78-2, Lincoln again voting Yea. The new act transferred authority to appoint commissioners from the governor to the General Assembly. Lincoln voted for General Thornton, who was elected president of the board of canal commissioners.

Lincoln did more than vote support for the I&M Canal. He added his name, to fifty others, supporting the $50,000 bond of Charles Oakley, the Fund Commissioner for internal improvements. The financial depression of 1837 prompted Governor Doorscun to convene a special session of the Assembly and there appeal for repeal of the internal improvements law and so save Illinois from economic disaster. The governor’s appeal was in vain; Lincoln voted NAY and so helped to defeat the repeal motion, 53-34, so canal construction continued. The treasury at this time contained at least $150,000 per month. Lincoln also signed a petition requesting Edward Smith to remain as engineer, to complete the surveys needed for the “General System of Internal Improvements”. Although Lincoln proclaimed that he would support internal improvements “for all time to come”, he was not blind to the shortage of money needed for canal construction, but he also admitted that “we are now so far advanced in a general system of internal improvements that, if we would, we cannot retreat from it, without disgrace and great loss.” As a spokesman for the Committee on Finance, he suggested that the State try to purchase, from the Federal Government, unused public lands for 25 cents per acre and then sell the land for $1.25 an acre. The federal subsidy he thus asked for was not granted.

In 1840, Lincoln was appointed to the Committee on Canals and Canal Lands. In that role, he managed “An Act for the early completion of the Illinois and Michigan Canal”. Lincoln got the bill through the House (37-33), but the Senate did not pass the measure. The Assembly did agree to pay interest on the debt by a tax of “ten cents on each one hundred dollars worth of all property”, and improvement bonds. Lincoln proposed that the State issue $3,000,000 in additional bonds so that the canal could be completed, but the bill was defeated.

Lincoln did not seek reelection in 1842, but in 1843 the Assembly finally passed the bill he had introduced in 1841, “An Act to provide for the completion of the Illinois and Michigan Canal, and for payment of the Canal debt.” In 1846, after he had been elected to Congress, Lincoln built a model of a steam boat to demonstrate a scheme that he had invented for refloating boats grounded on shoals.

In 1852, upon his return from his term in Congress, Lincoln was appointed to a 3-man board of canal commissioners assigned “to collect proofs and testimony, hear and investigate all such claims as shall be presented against the state arising out of transactions by and between the agents of the state authorized to negotiate loans, and by and between the state and all persons who have hereafter presented claims for damages for right of way and injury done to property in the construction of the Illinois and Michigan canal and its feeders, and by and between the state and the contractors on the said canals and feeders.” After holding hearings in Ottawa, Springfield and Chicago, the commissioners submitted a report to the House of Representatives. At the end of the report, they attached their expense accounts. Commissioner Johnston submitted a bill for $278.50 for 44 days of work, a claim that must have included Sundays — during which the commission was not at work. Commissioner Goodell submitted a claim for $161 for 32 days of work and for 650 miles of traveling although as commission clerk, he was allowed only $3 per day “actually employed under this act and no other compensation whatever shall be allowed” — he was not entitled to travel expenses. Commissioner Lin- coln, on the other hand, vouched that he had worked only 21 days and had traveled 650 miles to and from Chicago, so his expenses amounted to $149. Once again, “Honest Abe” displayed the character trait associated with his name.

As President of the United States, Abraham Lin- coln did not forget the cause of the I&M Canal. In his annual message to Congress, in 1861, he said “I also ... ask the attention of Congress to our great lakes and rivers.” He pleaded for “harbor and navigation improvements ... thinking that such measures were the "national defense and preservation." In his message of 1862, he called attention to “The military and com- mercial importance of enlarging the Illinois and Michigan Canal, and improving the Illinois River is presented in a report... now transmitted to Congress.” In 1863, he again called for “enlarging the water communication between the Mississippi River and the northeastern seaboard” via the Illinois River and the Illinois and Michigan Canal. Abraham Lincoln had done what he could to bring internal improvements to Illinois.


Eufala takes pride in its stately historic homes.

(Concluded from Page Six)

humans, however, are extremely rare. The boater has much more to fear from the amiable-appearing hyacinths and their numerous aquatic-plant cousins, which seem particularly numerous on Lake Seminole. They can climb very quickly both your propeller and your cooling system inoperable, and are likely to do so if you stray too far off the main channels. For the recreational boater, probably the main locational advantage of A.C.F. rivers is that they are available for comfortable cruising at times of the year when more northerly rivers are out of season.

Current Information

An unwieldy book of navigation charts, based on aerial photographs, can be purchased from the Corps of Engineers, P.O. Box 2238, Mobile, Alabama 36628. For an up-to-date price quotation, you can reach the Mobile office at 205-690-2511. It would also be prudent to write the local phone before making a visit to be sure of launch availability and operating hours. At last report, Woodruff and Andrews locks were being operated around the clock, but George was available only for one eight-hour shift daily. The stated hours were 8:00 a.m. to 4:00 p.m., but boaters approaching the waterway from the west need to be aware that the lockkeepers set their clocks on the Georgia side; on Alabama time, the hours were 7:00 to 3:00.

Page Seven
The above map illustrates the CANAL du Midi which runs for about 200 miles through Southern France from Agde to Toulouse. On our trip we went from Agde to Carcassonne and also covered the branch to Narbonne. The Carcassonne to Toulouse section was not included on this trip.

By Bruce J. Russell - Contributing Editor

Between June 24 and July 15, 1993 the CANAL SOCIETY OF NEW JERSEY sponsored a three-week trip to Europe, which included two weeks cruising along the 300 year old CANAL du MIDI. The CS of NJ has run successful trips to England and Ireland and France seemed like the next best place to visit. It contains a network of canals and companies which rent boats.

Following past practice, CAPT. BILL MCKELVEY handled most of the trip details. A prepayment scheme involving four equal remittances was established about 18 months prior to the actual departure, making it easier for some CS of NJ members to afford the trip. It also permitted a fund to be established to be used for making deposits and other payments during the planning phase. About half of the travelers were veterans of previous CS of NJ foreign expeditions. Many were in their post retirement years. Nevertheless no shortage of younger people existed which was fortunate since physical fitness and some degree of strength are prerequisites to doing ACTIVE canaling.

The 42 member group, the largest ever for a CS of NJ foreign trip, assembled at Newark Airport prior to take off on CONTINENTAL AIRLINES. The travel agency - CONN TRAVEL of Morristown, N.J. - provided a room within the terminal's departure area. Take off was on schedule and we arrived at Paris' ORLY AIRPORT on time. Collecting our luggage we then went by suburban electric train and subway to our Paris hotel where we stayed one day prior to heading to the Mediterranean coast by train to pick up our vessels. Although “jet lagged” we were able to use this free day in Paris to maximum advantage. Many visited the Eiffel Tower, Notre Dame cathedral, and various other landmark attractions. BRUCE RUSSELL and BILL MCKELVEY explored the canals of Paris which were used until the last century to bring fuel and food to the French capital.

On the following morning the group traveled by train to Montpellier where we transferred to another run which brought us to NARBONNE. On the first train, which was a TGV or high speed express capable of 160 mph, we paralleled the Rhone River, which has been canalized. We saw both self propelled barges plus Mississippi River style “push tug”. Upon arrival at NARBONNE we were met by a representative of IIOCABOAT PLAISANCE who directed us at a waiting bus. IIOCABOAT PLAISANCE is one of two major firms providing hire boats to groups and individuals desiring to cruise the MIDI CANAL. It's competitor is the British-owned CROWN CRUISE LINE. The bus first brought us to an American style supermarket where we purchased supplies for the 2-week journey. The general plan was for breakfast and lunch to be taken aboard the boats and dinner at a canal side restaurant. One member of each vessel was designated the “shopper”. Furthermore on each boat one person, always an experienced canalier and veteran of previous CS of NJ overseas trips, was appointed as “captain,” in charge of the vessel. With these preliminaries disposed of the bus took the 42 canaleurs to the hire base where our 7-boat flotilla was waiting.

At the base, a new facility located in the small medieval town of Argens, arrangements were made to take possession of the boats. Various papers were signed. Curiously the majority of hirers on the MIDI CANAL are not French but Swiss and German. Among the renters are also Scandinavians and British. We were the only Americans the firm had rented to this year. A representative of IIOCABOAT PLAISANCE gave each captain and second in command instructions on how to start and stop the engines, how to start...
and maneuver the vessel, and how to remove weeds from the propeller (which needs to be done daily). He then allowed the captain to do practice running within the large basin which adjoins the canal.

The boats used on the MIDI CANAL differed from the narrow types found on the British canals which must be able to squeeze through extremely tight locks - barely 7 feet. Since the French inland waterways are built to more generous dimensions the typical vessel is roomier and hence more comfortable. The design is called a PENICHE and is based on that of the commercial barges used in France and the low countries. It consists of a long hull with an enclosed bridge and passenger cabin in the rear. Sleeping quarters are situated below the deck, which is designed for sunbathing and storage of bicycles. Our seven vessels differed in size and passenger carrying capacity. The largest could handle 10 people and the smallest six. All were of recent construction and were made of fiberglass and had flat bottoms. Propulsion was by means of a Volvo marine diesel. Each vessel had a large tank holding enough diesel fuel for the entire journey. There was also a water tank containing water for showers and toilets plus the sink. Several times it had to be replenished. And finally each boat was given a number of stakes to be used for mooring purposes, hammers to drive them into the ground, and two long poles with hooks. An extra option available at added cost were bicycles, to be used for excursions away from the boats or to ride with them on the towpath. Most captains signed for two bikes. With the provisioning and embarkation completed, CAPT. MCKELVEY gave the order to shove off and our seven boat fleet slowly moved out of the Argens basin and onto the CANAL du MIDI.

The CANAL du MIDI is France's oldest major canal and extends from the Mediterranean Sea near the port of SETE about 200 miles west to TOULOUSE. It was constructed during the reign of King LOUIS XIV between 1677 and 1681 as a civic improvement which would also permit water-borne commerce to go from the Mediterranean to the Atlantic Ocean at Bordeaux without the need to circumnavigate the Iberian Peninsula. The designer and chief engineer was PIERRE PAUL RICQUET, a member of the nobility and a visionary who saw enormous potential in canals. Using his own funds he built models of locks and miniatures of the planned waterway on the grounds of his estate to enlist support for his scheme. Eventually the King and his ministers bought the idea and bankrolled the project, which at its peak employed thousands of men. It's construction preceded by

a century the great era of canal building in England. It also was a much larger canal than its British counterparts, which featured very narrow locks. The MIDI CANAL boasted generous size locks and a wide channel with a 7 foot depth. Its purpose was general commerce. Skilled stone masons from Italy built magnificent aqueducts and round lock chambers 25 by 101 feet in size. RICQUET believed round chambers were stronger than rectangular ones. Curiously no other canal designers shared this view and the MIDI is the only waterway featuring them. However they add to its appeal and uniqueness. The original plan was for barges to use the new artificial waterway to reach Toulouse, and then continue another 250 miles in the GARONNE RIVER, a semi-navigable stream. Almost two centuries later another canal called the CANAL DE GARONNE was built which paralleled the river to Bordeaux. At this point a complete canal route was in place across the southern portion of France. Unfortunately this was the time railroads were building and within two decades canals were considered obsolete.

The CANAL du MIDI opened in 1681. A flotilla of 25 boats made a trip from Toulouse to the Mediterranean, passing through 100 locks and crossing several aqueducts. It was considered an enormous engineering feat for its time and people came for miles to view it. The new canal offered both passenger and freight boats, the latter carrying mostly wine in great wooden casks. The MIDI REGION of France, also referred to as the LANGUEDOC, is a wine producing area due to its warm climate and adequate rainfall. The term MIDI refers in French to the high meridian the sun reaches during the summer. The new canal was a commercial success and money was generated through tolls. A trip by passenger packet boat took 4 days. Each night travelers disembarked and slept in hotels. Originally teams of men pulled the

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The 7-lock staircase at FONSERRANES near Beziers. It took our boats about one hour to climb all seven chambers. Alongside is the 1983 vintage water slope designed to replace the staircase for commercial barges. It is now inactive.

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vessels. These people may have been prisoners of war or criminals. In later years horses were utilized and stables erected at various points. After World War I use of steam and diesel power became universal and the horses were retired. Railroad competition eliminated passenger packet boats by 1870 but the canal remained an important artery for movement of wine. Most boats traveled the full length of the combined GARONE and MIDI CANALS from Bordeaux near the Atlantic Ocean to Sete on the Mediterranean Sea.

Beginning in the 1970s commercial traffic began to decline as more and more wine was shipped by truck and railroad, and in 1989 the last of the commercial boats ran. Today all vessels moving on the canal are pleasure types. Many of the larger ones are converted freight carriers which have been extensively remodeled and accommodate up to 12 people in luxurious suites. These vessels come equipped with a crew for navigating and preparing meals.

In the 1870s ROBERT LOUIS STEVENSON wrote a fascinating book called INLAND JOURNEY in which he described a trip on the MIDI CANAL. One of the things that impressed him most were the tall sycamore trees on each bank. Not only did they afford shade from the hot sun, thereby preventing evaporation of water, but their roots anchored the banks and stopped erosion from the wake of passing boats. In the 1970s a book called BARGING THROUGH EUROPE was written which described the many trips which one could take on Europe's network of canals and navigable rivers. An entire chapter is devoted to the tree lined CANAL DU MIDI, referring to it as Europe's most beautiful canal. This book and the creation of a company with the same name did much to promote recreational travel on European canals. During the 1980s along the MIDI alone several hire boat companies have come into existence including IOCOBOAT PLAISANCE from which our group rented. PIERRE PAUL RICUET who died in 1860 one year before his canal opened would be pleased to see the amount of usage it presently receives.

Because the MIDI CANAL is 200 or so miles long the decision was we decided to navigate only about 50% of it. The portion chosen was between Carcassonne and Agde on the Mediterranean plus the branch canal to PORT NOUVELLE. Over this section we would travel $8 miles from the junction at Port La Robine to Narbonne. This waterway was constructed in the 1760s and is considered an integral part of the MIDI system. Thus upon leaving the Argens base we proceeded west toward Carcassonne, gradually working our way through the many round chambered locks. On this trip there was an attempt to spread the work evenly which meant that each crew member would do some lock work, some steering, some cleaning, and some of all chores. Lock work involves making certain the boat is properly fastened to the bollards before raising or dropping water levels. Once water enters or leaves a chamber turbulence begins which can toss a vessel about, damaging its sides. During the heavy summer season the usual practice was to place up to four vessels inside the chamber before operating the lock. Hence an unfastened boat has the potential of hitting other ones. On the MIDI CANAL some of the lock gates are mechanized, using hydraulic cylinders. Others retain the ancient cranking mechanism. In all cases lock tenders were given the customary tip of 5 francs. Each tender's house was painted in a different color and individually decorated. Frequently flowers were planted around the premises which added a nice touch. Furthermore sometimes the tender's wife sold fruits, vegetables, and other provisions. The women normally attended to shopping and meal preparation. Sometimes when we stopped at canalside villages they would shop in local markets and obtain the ingredients for lunches and sometimes dinners. On my boat (the TREBOUL) our two cooks - BARBARA SMITH and BETTY COWLES - displayed extraordinary culinary skills. Each boat was equipped with a small refrigerator of limited capacity so frequent shopping was required. Our crew of 10 must also have been heavy drinkers because over 70 wine bottles were turned into the recycling center at the journey's end with not a drop remaining.

The 40-mile long feeder canal passed beneath a small mountain through this tunnel. Feeder work was completed in the late 1600s. (Russell photo)

Waterslope at FONSERRANES, designed in 1888 to replace the flight of seven locks at this point. So many mechanical difficulties have developed, that the waterslope is currently not in use.
After three days of navigating through a picturesque area we reached CARCASSONNE, a restored medieval city surrounded by steep walls and lofty ramparts. It was here that the epic movie EL CID was filmed. CARCASSONNE is the high point of any journey to the LANGUEDOC or MIDI region of France and the third most popular tourist attraction in the country. Our crew spent a day and a half exploring it. Our boats were moored in the basin adjacent to the railway station and close to shops where refueling was done. We also filled our water tank. With ten people taking daily showers even a large tank is quickly depleted. At Carcassonne we had a chance to talk to other people traveling on the MIDI CANAL, since the big basin accommodated many vessels. There were Swedes, British, Dutch, Spaniards, and people from Belgium moored at the basin. All had chosen the MIDI CANAL because of its beauty. Several were doing what we did, turning back at CARCASSONNE. Others were proceeding to TOULOUSE and then going via the GARONNE CANAL all the way to the Atlantic OCEAN. Some of these people had sailboats and by removing the masts were able to fit under all canal bridges.

On the two days prior to arrival at CARCASSONNE our group was given an opportunity to see the fascinating water supply system designed by RICUET to keep the summit level of the canal always filled. When the MIDI CANAL was being planned it was realized that the locks

A typical lock tender's house on the MIDI CANAL. Most were built in the 1870s and are well preserved. (Russell photo)

were opened and closed so that water would constantly drain downwards on either side of the highest point at NAUROUZE. By having a source of water to feed the canal at its summit the losses from normal locking operations could be replaced. However during the long, hot summers the mountain streams which RICUET intended to use to feed water to the summit ran dry. Therefore he designed an enormous reservoir at a place called ST. FERREOL. A 105 foot high, 2560 ft. stone dam was erected which collected water from a number of streams in the MONTAGNE NOIRE or BLACK MOUNTAINS, a region situated north of the plane where the canal runs. The dam caused water to back up, creating a vast lake. From this point a 40 mile long water channel or narrow channel, not intended for use by boats, ran to NAUROUZE where it joined the main navigation canal. During the dry summer, gates are opened at ST. FERREOL and water is permitted to flow through this channel to supply the canal. At the time this was considered an ingenious solution to a vexing problem of inland waterway engineering.

About 70 percent of the lock gates on the MIDI CANAL are operated by hydraulic power and the rest by old style hand cranking mechanisms. This photo shows the hydraulic cylinders mounted atop the gates. (Russell photo)

An English group called the INLAND WATERWAYS ASSOCIATION arranged for a bus to transport our group into the BLACK MOUNTAINS to view the complete feeder network, which after 310 years is still intact and functioning as RICUET intended it should. LAKE FERREOL (as the reservoir is now known) is used for recreational swimming and boating and sits in a beautiful mountainous region with much shade and cool temperatures. The British guides aboard our bus explained the entire feeder system and then took us to various places for picture taking. While our group was in the bus most of the English canal enthusiasts were aboard our vessels traveling over the MIDI CANAL. This interesting exchange of personnel was arranged by CAPT. MCKELVEY and benefited everyone. The Brits were on a four day trip to visit the MIDI CANAL and were thus able to actually travel over it. Meanwhile we had use of their bus for a day to obtain an escorted tour of the feeder network.

After CARCASSONNE we proceeded eastwards towards the Mediterranean, retracing our earlier steps and passing the hire base at Argens. Beyond Argens we entered a 35-mile level section without locks. In the United States during the great age of canals the boatmen looked forward to these "long levels" because it meant they could just sit on the decks and relax, not having to worry about locks. We felt the same way and several of us used the bicycles to obtain exercise riding along the superbly maintained towpath.

(To be concluded in the next issue.)

MULES

The Kentucky mule was noted for its courage. No mule was more avidly sought by farmers and, even as late as the 1880's a live stock dealer has no difficulty in selling a Kentucky mule for five thousand dollars. One of the best known was the well proportioned, stylish draft mule bred in Missouri.

Mule breeders refer to draft, farm, sugar, cotton, dapple and pack and mine mules. A pack mule with good feet and a strong back could cover twenty to twenty-five miles a day while carrying a 350 pound load. While carrying heavy loads, pack mules could be led or driven and they are easily controlled by voice because all mules have excellent hearing.

There were many combinations of mule positions used to pull canal boats. When pulling heavy cargo, three mules per boat hitched in tandem were used with the driver riding the last mule. Three mules abreast were used in general but many combinations could be used.

A mule had many advantages over the use of horses, but an additional one is that a mule is less apt to be panicked by sudden noise.

By the late 1850's stage lines were making regular trips between towns and cities in the west. Many coaches used by the Butterfield Stage Lines during this era were drawn by teams of four mules each. Kentucky mules were used and these animals covered 125 miles every twenty-four hours.

Many people found that a mule is as affectionate and loving as a dog and some were kept as pets.

Dave Beebe
Camillus Erie
Canal Park
WINSTON CHURCHILL CANAL FELLOWSHIP

By Tom Brock

One of the ideals most firmly expressed by Sir Winston Churchill was that men and women from all walks of life should be able to travel overseas and learn about the life, work and people of other countries. As a result of personal experience gained during their travels, they would be able to make a more effective and valuable contribution to their own country and community.

When Sir Winston died in 1965, Trust was formed to perpetuate his memory and to provide travelling fellowships. Funds were raised from a public appeal with donations being received from thousands of people.

I was fortunate enough to win a 1992 Churchill Fellowship to look at the canals of the US and Canada. In addition, I had the honour of winning the first Viscount de L’Isle Award. This new award is in memory of the “father” of the Churchill Fellowship who died over a year ago. The Viscount de L’Isle VC served in high office in Sir Winston Churchill’s government and became the first chairman of the Council of the Churchill Memorial Trust.

The Churchill Fellowship is often described as “the chance of a lifetime” — and so it proved to be. I set off for Canada in August of 1992, returning to the UK in November. During that time I toured extensively — visiting the Rideau, Trent Severn, Champlain, Lachine and Welland Canals in Canada and the Erie, Chesapeake & Ohio, Chesapeake & Delaware, Delaware & Raritan, Delaware & Hudson, Union & Middlesex Canals in the USA.

During my travels, I was met with nothing but the warmest friendliness and hospitality. It would be a pity to thank all those who made my visit so rewarding and enjoyable. Apologies to those whose canal I did not have time to visit — maybe one day!

The International Canal Conference at Harpers Ferry last fall was certainly one of the highlights of my fellowship. A gathering of so many committed and enthusiastic volunteers and professionals can only make one optimistic about the future of American Canals.

At present in British Waterways, we are extremely busy with “Canals 200”. 1993 is the bicentenary of “Canal Mania” in Britain. 1793 was the peak year for the construction of new canals. There was a great deal of publicity and a huge number of canal-related events in 1993.

I am sure that the importance of American Canals will become more widely recognised and their use for leisure & tourism will continue to grow.

I found that canals, in whatever country, have similar problems and opportunities — the similarities outweigh the differences. There is no point in us all re-inventing the wheel. So much more can be achieved by having closer links and sharing ideas, I am sure that the visit of Britain’s Inland Waterways Association to the USA last year and the 1993 International Canal Conference in Nova Scotia proved useful in achieving this.

I hope, for the benefit of all our canals, that we can build on the international links that currently exist. I wish the American Canal Society every success (which I am sure will be forthcoming) in the regeneration and rebirth of American Canals.

If anyone would like information about British Canals please contact me at: Tom Brock, British Waterways, Peels Wharf, Lichfield Street, Fazeley, STAFFS, England B78 3Q2.