

GENERAL DATA		TENDER	
1. CYLINDERS, DIA. X STROKE	25" x 20"	28. HEATING SURFACES, SUPERHEATER	794 SQ. FT.
2. VALVE GEAR	BAKER	29. HEATING SURFACES, EQUIVALENT TOTAL	430 SQ. FT.
3. VALVES, SIZE & KIND	1 1/4" PISTON	30. GRATES, LENGTH X WIDTH	114 1/2" X 64 1/2" X 2"
4. VALVES, MAXIMUM TRAVEL	6 1/2"	31. GRATES, AREA	66.7 SQ. FT.
5. VALVES, STEAM LAP	1 1/8"	32. ARCH TUBES, O.D., GA., FIN LOH. OVER BD.	4-3" ~ NO. 7 W.G.
6. VALVES, EXHAUST CLEARANCE	1/4"	33. STOKER	HANNA OR HT
7. VALVES, LEAD IN FULL GEAR	1/4"	AIR BRAKE	
8. VALVES, CUT-OFF IN FULL GEAR	85%	34. SCHEDULE	WEST'G. A.B. & ET.
9. RATED TRACTIVE POWER	40,750 LBS.	35. BRAKE POWER	WEST'G. 8 1/2" CROSS COMPOUND
10. RATIO OF ADHESION (WT ON DRIVERS - TRACTIVE POWER)	4/12	TENDER	
11. SHARPEST CURVE	19 DEGREES	37. FRAME	COMMONWEALTH CAST STEEL
WEIGHT		38. DRAFT GEAR	MINER
12. LEADING TRUCK	FRONT HOLE 48,035 LBS. BACK HOLE PIN IN MIDDLE HOLE 59,050 LBS.	39. DRAKE SCHEDULE	WEST'G. NO. 6-ET
13. TOTAL DRIVERS	164,500 LBS.	40. BRAKE POWER	EQUALIZER OR ANDREWS
14. TRAILER TRUCK	50,200 LBS.	41. TRUCK, TYPE	M I S C E L L A N E O U S
15. TOTAL ENGINE (WITH STOKER)	60,200 LBS.	42. INJECTOR	HANCOCK NO. 11 OR NATHAN 1918
16. TOTAL TENDER	282,735 LBS.	43. LUBRICATOR	NATHAN MECH DV-2
17. TOTAL ENGINE & TENDER	197,300 LBS.	44. POWER REVERSE	RAGONNET OR ALCO
18. LIGHT WEIGHT OF ENGINE	460,035 LBS.	45. DRIVING BOX LUBRICATOR	FRANKLIN
19. LIGHT WEIGHT OF TENDER	246,300 LBS.	46. FIRE DOOR	FRANKLIN BUTTERFLY NO. 8 OR 8-A
BOILER		47. SUPERHEATER	I.S.H. Co. "A" or "E"
20. WORKING PRESSURE, MAX	200 LBS.	48. HEADLIGHT	GOLDEN GLOW
21. FIREBOX LENGTH X WIDTH	114 1/2" x 64 1/2"	49. GENERATOR	PLYE OR MOON
22. TUBES, NO., O.D. & GA.	176 ~ 2 1/4" ~ NO. 11 W.G.	50. TRAIN CONTROL	NO. 1516 - 1544
23. FIRE TUBES, NO., O.D. & GA.	36 ~ 5 1/2" ~ NO. 9 W.G.	51. AIR PUMP LUBRICATOR	NATHAN
24. TUBES, LENGTH (OUT TO OUT OF TUBE SHEETS)	22 6 1/2"	52. FEED WATER HEATER	1516, 1519, 1520, 1521, 1522, 1523, 1524, 1525, 1526, 1527, 1528, 1529, 1530, 1531, 1532, 1533, 1534, 1535, 1536, 1537, 1538, 1539, 1540, 1541, 1542, 1543, 1544, 1545, 1546, 1547, 1548, 1549, 1550, 1551, 1552, 1553, 1554, 1555, 1556, 1557, 1558, 1559, 1560, 1561, 1562, 1563, 1564, 1565, 1566, 1567, 1568, 1569, 1570, 1571, 1572, 1573, 1574, 1575, 1576, 1577, 1578, 1579, 1580, 1581, 1582, 1583, 1584, 1585, 1586, 1587, 1588, 1589, 1590, 1591, 1592, 1593, 1594, 1595, 1596, 1597, 1598, 1599, 1600
25. TUBES & FLUES	2,922 SQ. FT.	53. DISC DRIVING WHEELS	
26. TUBES, COMB. CHAMO.	269 SQ. FT.		
27. TUBES, COMB. CHAMO.	3,191 SQ. FT.		



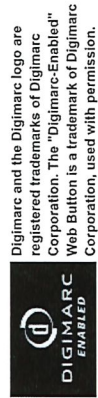
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Captured on a bright winter afternoon, Atlantic Coast Line P-5-A Class #1504 is on display at the Prime F. Osborn III Convention Center, 1000 Water Street in Jacksonville, FL.

This splendid looking locomotive was built for the USRA by Alco in 1919, and was one of eighty-one Light Pacific type (4-6-2) locomotives ordered by the administration and classified as 4-6-2A. It was built to haul troops during WWI, but the war had ended by the time it was outshopped. Originally numbered #497, it became #1504 when it joined the ACL roster in 1920, along with sixty-nine other USRA 4-6-2As built by Alco and Baldwin (#1500-#1569)

The P-5-As were very fast for their time, clocking speeds in the 70-80 mph range, and they immediately became standard haulers of ACL "varnish" passenger runs. #1504 spent twenty years pulling 10-12 car prestige passenger trains for the railroad, including the *Miamian*, the *Florida Special*, *Palmetto Limited*, the *Southland*, the *South Wind* and the *Dixie Flyer*. After dieselisation of ACL passenger services in the late 1940s, all the P-5-As, including #1504, transferred to fast freight, and the locomotive spent its last years working in the Tampa, FL, area before retiring in 1952 and being placed in storage.



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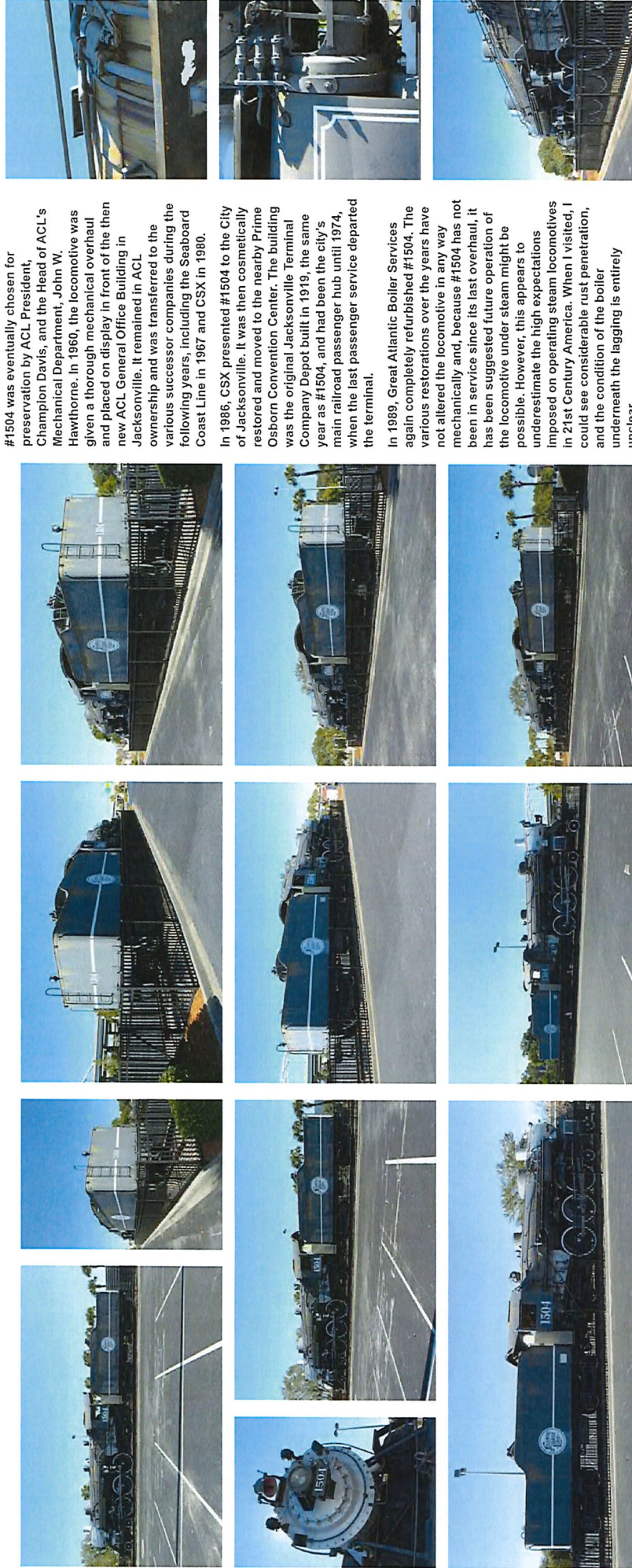
During WWI, US railroads were placed under the control of the United States Railroad Administration, a Federal body established to oversee and co-ordinate the nation's railroad operations. All new steam locomotives ordered during this period were also built to one of twelve standard designs developed by a committee composed of USRA, railroad company and locomotive builder representatives.

The resulting locomotives, ranging from 0-6-0 to 2-8-8-2 in size, incorporated the best proven features of the day and represented the first successful standardisation of American motive power. Although the USRA lasted only three years, locomotives continued to be built around these basic designs for years to come.

#1504 is actually one of the very few USRA locomotives to have survived (you can see BO #4500, the first USRA locomotive constructed, on the B&O Museum Yard & Car Shop page of this website) and is the only one still largely in as-built condition. The tender and cab, most of its piping, the domes, driving wheels, coal pusher, non-lifting injectors, trailing truck, running boards and pilot are as-built or as-designed. The only major changes are to the headlight, tender trucks and pilot truck wheels.

#1504 weighs 278,000 lbs, has 73" drivers and 25" x 28" cylinders. A coal burner with a 242 sq ft firebox and 66.7 sq ft grate area, it operated at 200 psi delivering 40,750 lbs tractive effort.

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Page published 1st April 2011.



#1504 was eventually chosen for preservation by ACL President, Champion Davis, and the Head of ACL's Mechanical Department, John W. Hawthorne. In 1960, the locomotive was given a thorough mechanical overhaul and placed on display in front of the then new ACL General Office Building in Jacksonville. It remained in ACL ownership and was transferred to the various successor companies during the following years, including the Seaboard Coast Line in 1967 and CSX in 1980.

In 1986, CSX presented #1504 to the City of Jacksonville. It was then cosmetically restored and moved to the nearby Prime Osborn Convention Center. The building was the original Jacksonville Terminal Company Depot built in 1919, the same year as #1504, and had been the city's main railroad passenger hub until 1974, when the last passenger service departed the terminal.

In 1989, Great Atlantic Boiler Services again completely refurbished #1504. The various restorations over the years have not altered the locomotive in any way mechanically and, because #1504 has not been in service since its last overhaul, it has been suggested future operation of the locomotive under steam might be possible. However, this appears to underestimate the high expectations imposed on operating steam locomotives in 21st Century America. When I visited, I could see considerable rust penetration, and the condition of the boiler underneath the lagging is entirely unclear.

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