

The National Bridge Inventory contains data submitted by state transportation departments to the Federal Highway Administration in coded format.  
 Form Interface Design: www.historicbridges.org. Data Conversion Assistance By www.bridgehunter.com. None of the involved parties make any guarantee of accuracy.

**Basic Information**

Ohio	Jefferson County	Steubenville	1.47MI.N.OF MARKET ST BR	40.377778	-80.615
4101987	Highway agency district: 11	Owner State Highway Agency	Maintenance responsibility State Highway Agency		
Route 822	SR 822(FT.STEUBEN)	Toll On free road	Features intersected OVER SR7NB,RR,OHIO R.		
Design - main 3	Steel Suspension	Design - approach 4	Steel Girder and floorbeam system	Kilometerpoint 40.9	Year built 1928 Year reconstructed 1972
				Skew angle 0	Structure Flared
				Historical significance Bridge is not eligible for the NRHP.	
Total length 1585.1	Length of maximum span 689	Deck width, out-to-out 24	Bridge roadway width, curb-to-curb 20.3		
Inventory Route, Total Horizontal Clearance 20.3	Curb or sidewalk width - left 0.7	Curb or sidewalk width - right 4.3			
Deck structure type	Closed Grating				
Type of wearing surface	Bituminous				
Deck protection					
Type of membrane/wearing surface	Other				

**Weight Limits**

Bypass, detour length 0.1	Method to determine inventory rating	No rating analysis performed	Inventory rating	0
	Method to determine operating rating	No rating analysis performed	Operating rating	0
	Bridge posting		Design Load	M 13.5 / H 15

### Functional Details

Average Daily Traffic	1900	Average daily truck traffi	2	%	Year	2007	Future average daily traffic	2637	Year	2030
Road classification	Minor Arterial (Urban)	Lanes on structure	2		Approach roadway width	20				
Type of service on bridge	Highway	Direction of traffic	2 - way traffic		Bridge median					
Parallel structure designation	No parallel structure exists.									
Type of service under bridge	Highway-waterway-railroad	Lanes under structure	2		Navigation control	Navigation control on waterway (bridge permit required).				
Navigation vertical clearanc	86	Navigation horizontal clearance	500							
Minimum navigation vertical clearance, vertical lift bridge		Minimum vertical clearance over bridge roadway	195.9							
Minimum lateral underclearance reference feature	Railroad beneath structure									
Minimum lateral underclearance on right	7.9	Minimum lateral underclearance on left	7.9							
Minimum Vertical Underclearance	208.3	Minimum vertical underclearance reference feature	Railroad beneath structure							
Appraisal ratings - underclearances	Meets minimum tolerable limits to be left in place as is									

### Repair and Replacement Plans

Type of work to be performed	Work done by	Work to be done by contract								
Other structural work, including hydraulic replacements.	Bridge improvement cost	160	Roadway improvement cost	40						
	Length of structure improvement	1585.1	Total project cost	200						
	Year of improvement cost estimate	2004								
	Border bridge - state	Unknown	Border bridge - percent responsibility of other state							
	Border bridge - structure number	0								

## Inspection and Sufficiency

Structure status	<input type="text" value="Bridge closed to all traffic"/>	Appraisal ratings - structural	<input type="text"/>
Condition ratings - superstructure	<input type="text" value="Poor"/>	Appraisal ratings - roadway alignment	<input type="text" value="Meets minimum tolerable limits to be left in place as is"/>
Condition ratings - substructure	<input type="text" value="Fair"/>	Appraisal ratings - deck geometry	<input type="text"/>
Condition ratings - deck	<input type="text" value="Critical"/>		

Scour	<input type="text" value="Bridge foundations determined to be stable for assessed or calculated scour condition."/>
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Channel and channel protection	<input type="text" value="Bank protection is in need of minor repairs. River control devices and embankment protection have a little minor damage. Banks and/or channel have minor amounts of drift."/>
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Appraisal ratings - water adequacy	<input type="text" value="Superior to present desirable criteria"/>	Status evaluation	<input type="text" value="Structurally deficient"/>
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Pier or abutment protection	<input type="text" value="None present but re-evaluation suggested"/>	Sufficiency rating	<input type="text" value="9.4"/>
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Culverts	<input type="text" value="Not applicable. Used if structure is not a culvert."/>
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Traffic safety features - railings	<input type="text"/>
Traffic safety features - transitions	<input type="text"/>
Traffic safety features - approach guardrail	<input type="text" value="Inspected feature meets currently acceptable standards."/>
Traffic safety features - approach guardrail ends	<input type="text"/>

Inspection date	<input type="text" value="Jan-09"/>	Designated inspection frequency	<input type="text" value="12"/>	Months
Underwater inspection	<input type="text" value="Unknown"/>	Underwater inspection date	<input type="text" value="Nov-07"/>	
Fracture critical inspection	<input type="text" value="Every two years"/>	Fracture critical inspection date	<input type="text" value="Dec-07"/>	
Other special inspection	<input type="text" value="Every year"/>	Other special inspection date	<input type="text" value="Jan-09"/>	

Unit of Measure: **English**  
Structure File Number **4101987**  
Sufficiency Rating: **09.4 SD**

**Bridge Inventory Information**  
Inventory Bridge Number: **JEF 00822 0041**  
**ON OVER SR7NB,RR,OHIO R.**

**Report Date 08/25/2010 BM-191 Page: 1 of 2**  
**BR. Type STEEL / SUSPENSION / THRU**  
**Date of Last Inventory Update: 01/28/2009**

District: **11** County **JEFFERSON** (101) Location: **1.47MI.N.OF MARKET ST BR** (102) Facility Carried: **SR 822(FT.STEUBEN)**  
(2) FIPS Code: **STEUBENVILLE** (103) Route On Bridge: **STATE (ODOT)** (104) Route Under Bridge: **STATE (ODOT)**  
(9) Direction of Traffic: **2-WAY TRAFFIC** (10) Temporary: **N** (11) Truck Network: **N** (12) Parallel: **N**  
(95) Insp: **OHIO TRAN DEPT** (96) Maint: **OHIO TRAN DEPT** (97) Routine: **OHIO TRA** (100) Type Serv: (On): **HIGHWAY** (Under): **HIGHWAY/WATERWAY/RAI**

**Inventory Route Data**

(3) Route On/Under: **ON** Hwy Sys: **STATE HIGHWAY**  
Route No.: **00822** Dir: Des: **MAINLINE** Pref:  
(4) Feature Intersected: **OVER SR7NB,RR,OHIO R.**  
(5) County: **JEF** Mileage: **0041** Special Desig:  
(6) Avg. Daily Traffic(ADT): **1,900** (7) ADT Year: **2007**  
(8) Truck Traf: **40** (14) NHS: **NO - X** (15) Corridor: **N**  
(16) Functional Class: **MINOR ARTERIAL-URBAN** (19) Strahnt: **Not Applicable**

(63) Main Spans Number: **3** Type: **STEEL / SUSPENSION / THRU**  
Approach Spans Number: **4** Type: **STEEL / GIRDER / DECK**  
Total Spans: **7** (65) Max Span: **689 Ft** (66) Overall Leng: **1585 Ft**

**Intersected Route Data**

(22) Route On/Under: **UNDER** Hwy Sys: **STATE HIGHWAY**  
Route No.: **00007** Dir: **1** Des: **1** Pref:  
(23) Feature Intersected: **SR822(FT.STEUBEN BR.)**  
(24) County: **JEF** Mileage: **1788** Special Desig:  
(25) Avg. Daily Traffic(ADT): **14,710** (26) ADT Year: **2007**  
(27) Truck Traf: **1,800** (28) NHS: **YES - N** (29) Corridor: **N**  
(30) Functional Class: **OTHER FREEWAY OR EXPRESSWAY-URBAN** (36) Strahnt: **Not Applicable**

(70) Substructure (71) Foundation and Scour Information  
Abut-Rear Matl: **CONCRETE** Type: **GRAVITY** Fnd: **ROCK**  
Abut-Fwd Matl: **CONCRETE** Type: **GRAVITY** Fnd: **ROCK**  
Pier-Pred Matl: **CONCRETE** Type: **SOLID WALL** Fnd: **ROCK**  
Pier-Other Matl: **NONE** Type: **NONE** Fnd: **NONE/NOT APPLICABLE (SUCH AS CULVERTS)**  
Pier-Other Matl: **NONE** Type: **NONE** Fnd: **NONE/NOT APPLICABLE (SUCH AS CULVERTS)**  
No of Piers Predominate: **06** Other: **NN** Other: **NN**  
(86) Stream Velocity: **UUU** (74) Scour: **STABLE: SCOUR WITHIN LIMITS OF FOOT/PILE**  
(189) Dive: **Y Freq: 60** Probe: **N Freq: 0** (75) Chan Prot: **NONE**  
(189) Date of last Dive Insp: **11/14/2007** (152) Drainage Area: **9999 Sq Mi**

**Clearance Under the Bridge**

(154) Min Hriz on Bridge: NC: **0.0 Ft** Card: **20.2 Ft**  
(155) Prac Max Vert On Brg: **19.6 Ft**  
(67) Min Vrt Clr On Brg: NC: **0.0 Ft** Card: **19.6 Ft**  
(80) Min Latl Clr: NC: **0.0 / 0.0 Ft** Card: **0.0 / 0.0 Ft**  
(81) Vrt Clr Lft: **0.0 Ft**

(156) Min. Horiz Under Clear: NC: **0.0 Ft** Card: **35.5 Ft**  
(157) Prac Max Vrt Under Clear: **20.9 Ft**  
(77) Min Vert Under Clear: NC: **0.0 Ft** Card: **20.8 Ft**  
(78) Min Lat Under Clear: NC: **0.0 / 0.0 Ft** Card: **8.0 / 8.0 Ft**

**Clearance On the Bridge**

**Load Rating Information**

**(88-89) Appraisal**

(38) Bypass Length: **01 Miles**  
(39) Latitude: **40 Deg 22.7 Min** Longitude: **80 Deg 36.9 Min**  
(40) Toll: **ON FREE ROAD**  
(41) Date Built: **07/01/1928** (42) Major Rehabilitation: **01/01/1972**  
(43) No. Lanes On: **2** No. Lanes Under: **2**  
(44) Horiz Curve: **Deg. Min.** (45) Skew: **0 Deg**  
(49) App. Rdw Width: **20 Ft** (50) Brg. Rdw Width: **20.2 Ft**  
(51) Deck Width: **24.0 Ft** Deck Area: **38040 Sq. Ft**

(48) Design Load: **H/15** (Including calculated items)  
(83) Operating: **0 Ton**  
Inventory: **0 Ton**  
Ohio Percent of Legal Load **0** (88) Waterway Adequacy **9**  
Year of Rating: **2009** (89) Approach Alignment **4**  
(84) Analysis: **ENGINEERING JUDGEMENT [DEFAULT]** Calc Gen Appraisal: **0**  
(85) Rate Soft: **COMBINATION** Analyzed by: **121** Calc Deck Geometry: **0**  
Analysis on Bars: **NOT ON BARS [DEFAULT]** Calc Underclearance: **4**

**Structure Information**

**Approach Information**

(52) Median Type: **NONE / NON BARRIE / NO JOINT**  
(53) Bridge Median: **NO MEDIAN**  
(54) Sidewalks: (left) **0 Ft** (right) **4 Ft**  
(55) Type Curb or Sidewalks:  
(Left) Matl: **STEEL** Type: **SAFETY CURB(<=2')**  
(Right) Matl: **STEEL** Type: **SIDEWALK(>2')**  
(56) Flared: **N** (57) Composite: **non-composite**  
(58) Railing: **STEEL POST & STEEL PANEL (DECORATIVE)**  
(59) Deck Drainage: **SCUPPERS & DWNSPTS**  
(60) Deck Type: **STEEL GRID - FILLED**  
(61) Deck Protection: External: **OTHER**  
Internal: **NONE**  
(62) Wearing Surface: **BITUM (ASPHLT CONCRT)**  
Thickness: **1.3 in** (119) Date of Wearing Surface: **07/16/2000**  
Slope Protection: **STONE (NO.1 AGGREGATE)**

(109) Approach Guardrail: **STEEL BEAM**  
(110) Approach Pavement: **BITUMINOUS** (111) Grade: **GOOD**

**Culvert Information**

(131) Culvert Type: **NONE/NOT APPLICBLE** (127) Length: **0.0 Ft**  
(129) Depth of Fill: **0.0 Ft** (130) Headwalls: **NONE**

**General Information**

(121) Main Member **RIVETED BUILT-UP STEEL** (122) Moment Plate: **NONE**  
(169) Expansion Joint: **STEEL REINFORCED ELASTOMERIC**  
(124) Bearing Devices: **FIXED/ROCKERS**  
(126) Navigation: **Control- Y** Vert Clr: **86.0 Ft** Horiz Clear: **500.0 Ft**  
(193) Spec Insp: **Y** Freq: **12** Date: **2009-01-09**  
(188) Fracture Critical Insp: **Y** Freq: **24** Date: **2007-12-17**  
(138) Long Member: **NOT APPLICABLE** (135) Hinges: **PINS, PIN PLATES**  
(141) Structural Steel Memb: **OTHER** (139) Framing: **STRAIGHT**  
Railing: **UNKNOWN**  
Paint: **OTHER**  
Pay Wt: **4,332,599 pounds** Prime Loc: **FIELD**  
Bridge Dedicated Name: **FT. STEUBEN**

Unit of Measure: **English**  
 Structure File Number **4101987**  
 Sufficiency Rating: **09.4 SD**

**Bridge Inventory Information**  
 Inventory Bridge Number: **JEF 00822 0041**  
**ON OVER SR7NB,RR,OHIO R.**

Report Date **08/25/2010** **BM-191** Page: 2 of 2  
**BR. Type STEEL/SUSPENSION/THRU**  
 Date of Last Inventory Update: **01/28/2009**

General Information (Continued)		Original Plans Information	
(---) Hist Significance: <b>NOT HISTORIC</b> (69) NBIS: Y		(142) Fabricator: <b>DRAVO CONTR.CO</b>	
(---) Hist Builder: <b>STUEBENVILLE-WEIRTON BRIDGE</b> Hist Build Year: <b>1928</b>		(143) Contractor: <b>DRAVO CONTR.CO</b>	
<b>CO DRAVO COR</b>		(144) Ohio Original Construction Project No.: <b>NA.PVT</b>	
(69) Hist Type: <b>SUSPENSION</b>		(---) Microfilm Reel:	
(161) Special Features (see below):		(151) Standard Drawing:	
(105) Border Bridge State: <b>543</b> Resp % (106) SFN: <b>0000000000000000</b>		Aperture Cards: Orig: Y Repair: Y Fabr: Y	
Proposed Improvements		Programming Info	
(90) Type Work: <b>38 - OTHER STRUCTURAL WORK</b>		Plan Information Available: <b>1PLAN INFORMATION AVAILABLE</b>	
(90) Length: Ft		(153) Repair Projects	
(90) Bridge Cost (\$1000s): <b>0</b>		1. / <b>MMM</b> 2. <b>770276 / 044</b> 3. <b>780847 / UUU</b>	
(90) Roadway Cost (\$1000s): <b>0</b>		4. / <b>020</b> 5. <b>840541 / 044</b> 6. <b>850903 / 099</b>	
(90) Total Project Cost (\$1000s): <b>0</b>		7. / <b>020</b> 8. <b>890017 / UUU</b> 9. <b>900916 / 048</b>	
(91) Future ADT (On Bridge): <b>0</b>		10. <b>920730 / 041</b>	
(90) Year:		Utilities	
(92) Year of Future ADT: <b>2030</b>		Special Features	
Inspection Summary		(I-69) Survey Items	
(I-8) Deck: <b>2</b>	Railings: <b>0 DOES NOT MEET CURRENT STANDARDS</b>	(46) Electric: <b>Y</b>	(161) Lighting: <b>Y</b>
(I-32) Superstructure: <b>4</b>	Transitions: <b>0 DOES NOT MEET CURRENT STANDARDS</b>	Gas: <b>N</b>	Fencing: <b>Y</b>
(I-42) Substructure: <b>5</b>	Guardrail: <b>1 MEETS CURRENT STANDARDS</b>	Sanitary Sewer: <b>N</b>	Glare-Screen: <b>N</b>
(I-50) Culvert: <b>7</b>	Rail Ends: <b>0 DOES NOT MEET CURRENT STANDARDS</b>	Telephone: <b>N</b>	Splash-Guard: <b>N</b>
(I-54) Channel: <b>7</b>	Pavement Mark: <b>1 MEETS CURRENT STANDARDS</b>	TV Cable: <b>N</b>	Catwalks: <b>N</b>
(I-60) Approaches: <b>6</b>	Restrict Sign: <b>0 DOES NOT MEET CURRENT STANDARDS</b>	Water: <b>N</b>	Other-Feat: <b>N</b>
(I-66) General Appraisal: <b>2</b>	Warning Sign: <b>0 DOES NOT MEET CURRENT STANDARDS</b>	Other: <b>N</b>	(184) Signs-on: <b>N</b>
(I-66) Operational Status: <b>K</b>	End Markers: <b>0 DOES NOT MEET CURRENT STANDARDS</b>		Signs-Under: <b>N</b>
Inspection Date: <b>01/09/2009</b>	Insp. Update Date: <b>01/28/2009</b>		(162) Fence-Ht: <b>3.0 Ft</b>
(94) Desig Insp Freq: <b>12 Months</b>			(163) Noise Barr: <b>N</b>
SFNs Replacing this retired bridge: -		INV Field Bridge Marker: <b>JEF-00822-0041 -</b>	
SFNs That where replaced by this bridge: -		INT Field Bridge Marker: <b>JEF-00007-1788 -</b>	
This bridge was retired and copied to:			
The bridge was copied from:			

**PONTIS CoRe elements and Condition States**

Elem No.	CoRe Element Description	Total Quantity	Unit Meas.	Condition State Percents(*)				
				1	2	3	4	5
29	STEEL DECK - CONCRETE FILLED GRID	1	EA	0	0	0	0	0
215	REINFORCED CONC ABUTMENT	48	LF	0	0	0	0	0
303	ASSEMBLY JOINT/SEAL	48	LF	0	0	0	0	0
321	REINFORCED CONCRETE APPROACH SLAB	2	EA	0	0	0	0	0
330	METAL BRIDGE RAILING	3170	LF	0	0	0	0	0

(\*) Percentages Should add to 100%

STATE OF OHIO DEPARTMENT OF TRANSPORTATION  
BRIDGE INSPECTION REPORT

BR-86 REV 02-95

4	1	0	1	9	8	7
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Bridge Number **JEF 00822 0041**  
CO ROUTE UNIT

STEBENVILLE

Date Built **07/01/1928 - 1972**

District **11** Bridge Type **STEEL/SUSPENSION/THRU**

Type Service **1 18 OVER SR7NB,RR,OHIO R.**

**JEF**

<b>DECK</b>		Out/Out 24.0	4	THCK = 1.3		2
1. Floor	4-STEEL GRID - FILLED	8	4	2. Wearing Surface	6-BITUM (ASPHLT CONCRT)	41
		2-STEEL	3	W.S. Date = 07/16/2000		
3. Curbs, Sidewalks, Walkways	2-STEEL	9	3	4. Median		42
5. Railing	6-STEEL POST & STEEL PAN	10	3	6. Drainage	3-SCUPPERS & DWNSPTS	43
7. Expansion Joints	7-STEEL REINFORCED ELAST	11	3	<b>8. Summary</b>		44
<b>SUPERSTRUCTURE</b>		MAX.SPAN=689	1			2
9. Alignment		12	1	10. Beams/Girders/Slab	2-RIVETED BUILT-UP STEEL	45
		TOT.LGTH=1585	2			3
11. Diaphragms or Crossframes		13	2	12. Joists/Stringers		46
13. Floor Beams		14	2	14. Floor Beam Connections		47
15. Verticals		15	3	16. Diagonals		48
17. End Posts		16	3	18. Top Chord		49
19. Lower Chord		17	3	20. Lower Lateral Bracing		50
21. Top Lateral Bracing		18		22. Sway Bracing		51
23. Portals		19		24. Bearing Devices	B-FIXED 2-ROCKERS	52
25. Arch		20		26. Arch Columns or Hangers		53
27. Spandrel Walls		21		28. Protective Coating System	TYPE = 0-OTHER DATE = 01/01/1986	54
29. Pins/Hangers/Hinges		22	2	30. Fatigue Prone Connections		55
31. Live Load Response		23	E	<b>32. Summary</b>		56
<b>SUBSTRUCTURE</b>		2-CONCRETE	2	PIERS=6 SPANS = 3		2
33. Abutments	2-CONCRETE	24	2	34. Abutment Seats		57
35. Piers	TYPE = 2-CONCRETE	25	2	36. Pier Seats		58
37. Backwalls		26	2	38. Wingwalls	ABUTMENT:=ROCK / ROCK	59
39. Fenders and Dolphins		27		40. Scour	5-STABLE: SCOUR WITHIN L	60
41. Slope Protection	2-STONE (NO.1 AGGREGATE)	28	2	<b>42. Summary</b>		62
				DIVE DT=11/14/2007		5
<b>CULVERTS</b>						
43. General		29		44. Alignment		63
45. Shape		30		46. Seams		64
47. Headwalls or Endwalls		31		48. Scour		65
49.		32		50. Summary		66
<b>CHANNEL</b>				N-NONE		1
51. Alignment		33	1	52. Protection		67
53. Waterway Adequacy		34	1	<b>54. Summary</b>		68
<b>APPROACHES</b>						
55. Pavement	2-BITUMINOUS	35	2	56. Approach Slabs		69
57. Guardrail	1-STEEL BEAM	36	2	58. Relief Joints		70
59. Embankment	BRDG.WIDTH=20.2	37	2	<b>60. Summary</b>		71
				PCT.LEGAL=0		6
<b>GENERAL</b>				ROUTINE.RESP: 1-OHIO TRAN DEPT		4
61. Navigation Lights		38	4	62. Warning Signs	MAINT.RESP: 1-OHIO TRAN DEPT	72
63. Sign Supports	MVC ON=19.6 UND=0000	39		ELEC/		1
64. Utilities		40				73
65. Vertical Clearance		40	1	<b>66. General Appraisal &amp; Operational Status</b>		74
						COND STAT 2 K

67. INSPECTED BY

68. REVIEWED BY

SIGNED

7	2	3	3	6
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76 PE

M	W	B
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78 INITIALS

SIGNED

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81 PE

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83 INITIALS

DOT 2852

DECK AREA 38,040

Date

0	1	0	9	0	9
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86

91

Date

0	0	1	0	1	0	0	0
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92

69 Survey

99

Date

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100

105

STATE OF OHIO DEPARTMENT OF TRANSPORTATION  
**BRIDGE INSPECTION REPORT**

BR-86 REV 02-95

4	1	0	1	9	8	7
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1 Structure File Number 7

Bridge Number **JEF** **00822** **0041**  
CO ROUTE UNIT

**Date Built 07/01/1928 - 1972**

District **11** Bridge Type **STEEL/SUSPENSION/THRU**

Type Service **1 18**

**OVER SR7NB,RR,OHIO R.**

General JANUARY 9, 2009 A SPECIAL INSPECTION WAS PERFORMED. ONLY  
General ITEMS: 1. FLOOR, 8. DECK SUMMARY, 66.GENERAL APPRAISAL AND O  
General PERATIONAL STATUS WERE CHANGED. ALL OTHER ITEMS REMAINED FR  
General OM THE WILBER SMITH INSPECTION 12.1  
General 7.07 YRY, PE 65468)

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