



"Joy of Geodetics"



Part VIII

Author's Memorable Geodetic Marker Recoveries

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United States Power Squadrons / America's Boating Club
Sponsor: USPS Cooperative Charting Committee

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Part VIII - Topics Outline

1. First in Flight
2. George Washington
3. Atop the Beartooth (Highest Mark)
4. Seaboard Airline Railroad (1918 Mon)
5. Earl Smith – NC Surveyor
6. NC Meridian Boundary Pillars (1895 Mon)
7. Kayak to NC/SC Boundary Mark
8. Giant Sun Dial – UNC Chapel Hill
9. Rare Magnetic Mark – NCSU
10. No. 1 NC-VA Boundary Marker
11. Bodie Island North Base (Oldest Mark, 1848)
12. Benchmark in Boone
13. CORS Stations

100th Anniversary of First Flight

DK3522 (POND) – Kitty Hawk, NC (GDS)



Location: Town of
Kitty Hawk



GW2116 (GW 1750) at Natural Bridge, Virginia (GDS)





GDS



Ref. 7



GDS

Standing at the Mark's location,
looking across the creek you can
see George Washington's initials
carved in stone

Highest Mark Recovered – in Wyoming



Ref. 7

Beartooth Highway switchbacks to Summit in Wyoming

Beartooth–Absaroka Wilderness (Montana/Wyoming)



Beartooth Highway Summit
Elev. 10,947 ft

PX0413 (STOCKAID) Mark
Elev. 11062 ft



PX0413



Brothers Larry and Bob assisting with recovery of PX0413

Photographing the “Stockaid” Marker



PX0413 (STOCKAID) was Monumented 1947 - First Recovery GDS 2016-08-04



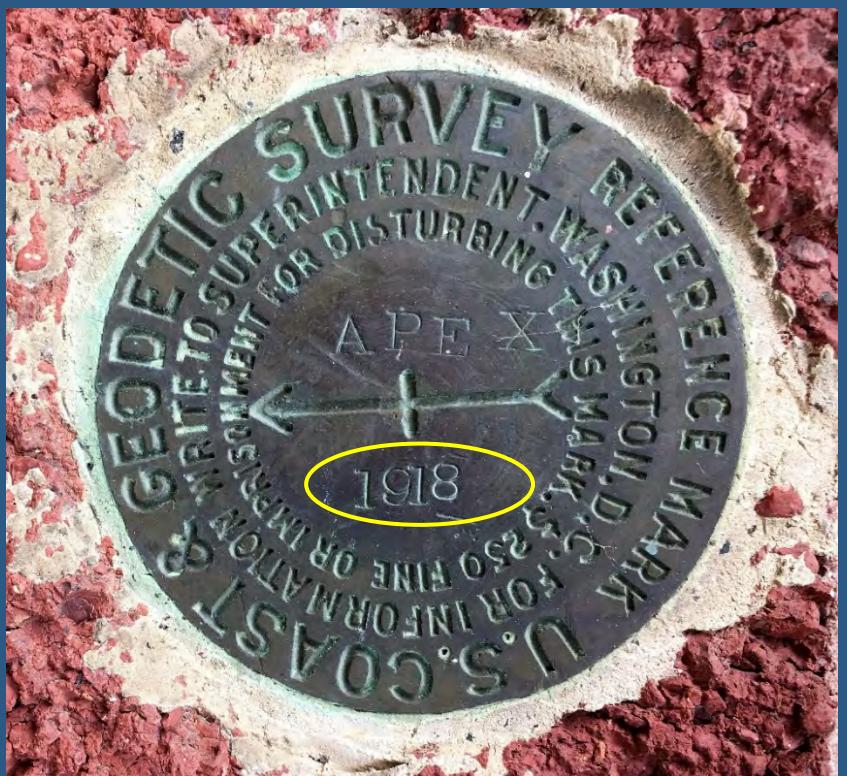
PX0413 (STOCKAID), near Bearooth Hyw Pass, WY (GS)
11,000+ ft Elevation

Old Railroad Triangulation Station Mark Recovered – 1918, near former Seaboard Airline Railroad, Youngsville, NC



FY0212 (YOUNGSVILLE=O 9), near Youngsville, NC (GS)

Old Railroad Reference Mark Recovered – 1918 in wall of prior Apex NC Rail Station (now Apex Chamber of Commerce)



EZ6068 (APEX RM) – Apex, NC (GS)

“Not in NGSDE Database”

Train Caboose at the Apex Chamber of Commerce





“The Route of Courteous Service”

April 14, 2000 –
July 1, 1967

Merged with long
time rival *Atlantic
Coast Line Railroad*
to form *Seaboard
Coast Line Railroad*

Mark Commemorating a Former well known NC Surveyor



AB6821 (A EARL SMITH) – at
“Surveyors Station”, Apex, NC



Earl Smith Recovery on October, 2016



Surveyors Station, Apex NC

Earl Smith Recovery on January, 2017



Building razed and
Surveyors Station
Sign is gone!

Mark dug up and
gone – witness
post remains.



Old Granite Meridian Pillar Marks Recovered

– “North Meridian”



FY0295 (NORTH MERIDIAN) -
Louisburg, NC (GDS)

NCGS / USGS
Monumented 1895



“South Meridian” in steps of Halifax, NC County Court House



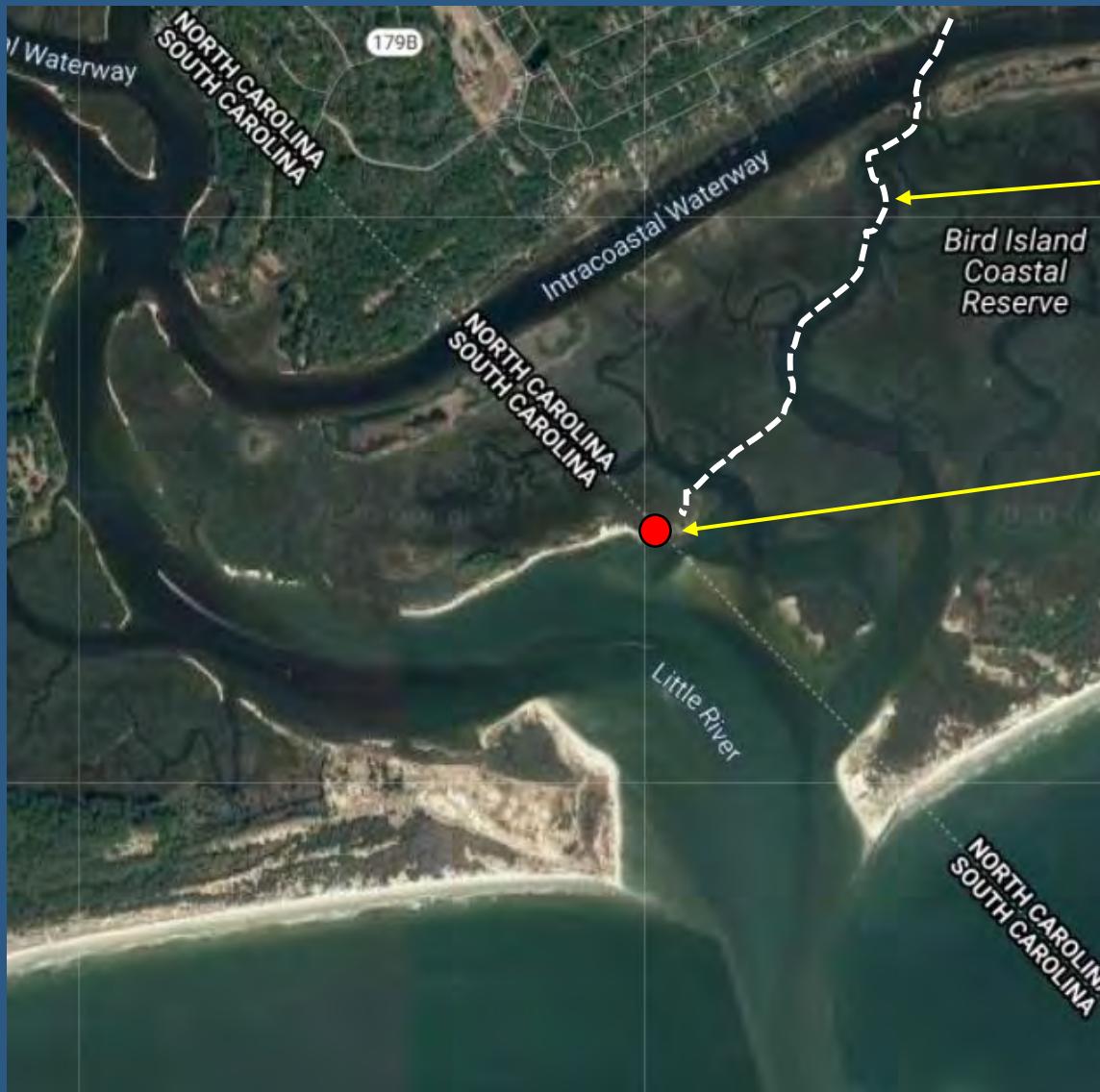
FX1380 (SOUTH MERIDIAN) -
Halifax, NC (GDS)
Monumented Date Unknown

NC-SC Boundary Mark Recovered by Kayak



AJ5026
(BOUNDARY
MON 1 GRANITE
NC SC) on Goat
Island near
Sunset Beach,
NC (GS)

NC-SC Boundary Mark recovered by kayak at high tide



Kayak route
to Mark

Boundary Nail Mark
AJ5026

33 51 37.1 (N)
078 33 05.2 (W)
Elevation 5.9 ft

Former 12" SUN DIAL Mark missing from the giant Sundial on UNC, Chapel Hill, NC Campus.



Per article by the late CDR George E. Leigh, NOAA Ret'd, the mark previously was PID = EZ1375 set in 1956 near center of the Sundial. This mark has been missing for some time and is no longer in NGSDE Database.

Ref 7



EZ1375 (SUN DIAL) – UNC Chapel Hill, NC

Rare “Magnetic Mark” Recovered on NC State Campus

Magnetic Marks -“6 Point Star” in Center



EZ0710 (K_192_MAGNETIC) –
NCSU Campus, Raleigh, NC (GDS)

Placed where a magnetic measurement was
made typically for a Nautical Chart

No. 1 NC-VA Boundary Monument

Monumented 1887 in resurvey
of NC-VA border
Original survey 1728

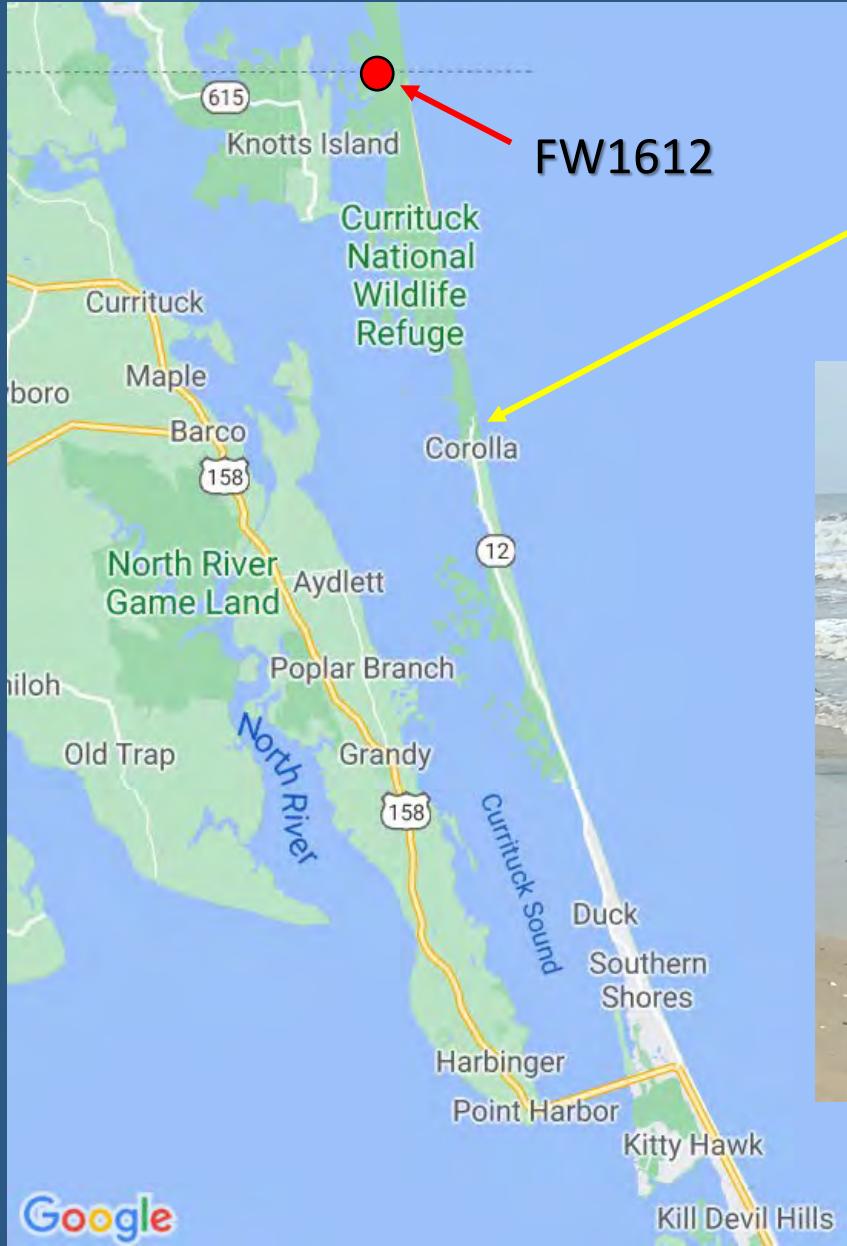
36 33 01.4 (N) 075 52 44.9 (W)
Elevation 8 ft

To Get There!

11 mile drive north on
sand beach with 4x4 in
Currituck National Wildlife
Refuge. False Cape State
Park is on VA side of line –
no motorized vehicles.



FW1612 (BOUNDARY MONUMENT 1 NC VA)
– N end of Carova Beach, NC (GDS)



Start beach
drive north to
NC-VA Border



Wild Horses on Corova Beach

A.D. 1728

N.CA & VA

BOUNDARY

R_E 1887 RUN

W.D. PRUDEN NC.

C. R. HOWARD VA

COMMRS.

H.T. GREENLEAF

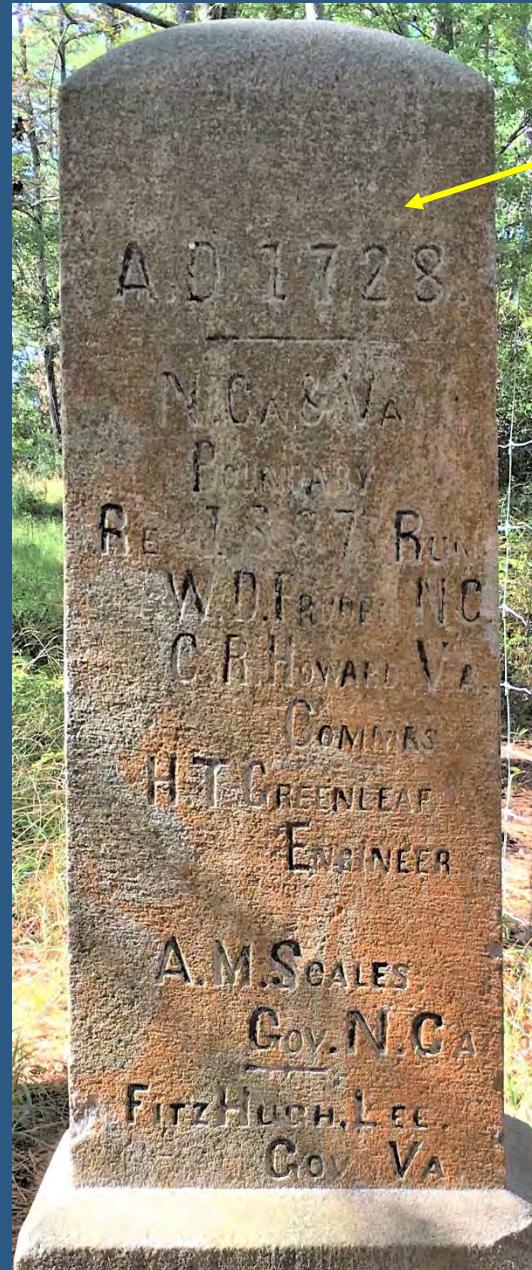
ENGINEER

A.M. Scales.

Gov. N.CA

FitzHugh. Lee.

Gov. VA



East Face

West Face

LATITUDE

36 32 51

No 1

North Face

VA

South Face

N.CA.

Datasheet & Ref. 28

Oldest Marks Recovered – “Bodie Island North Base” Monument at Outer Banks - 1848



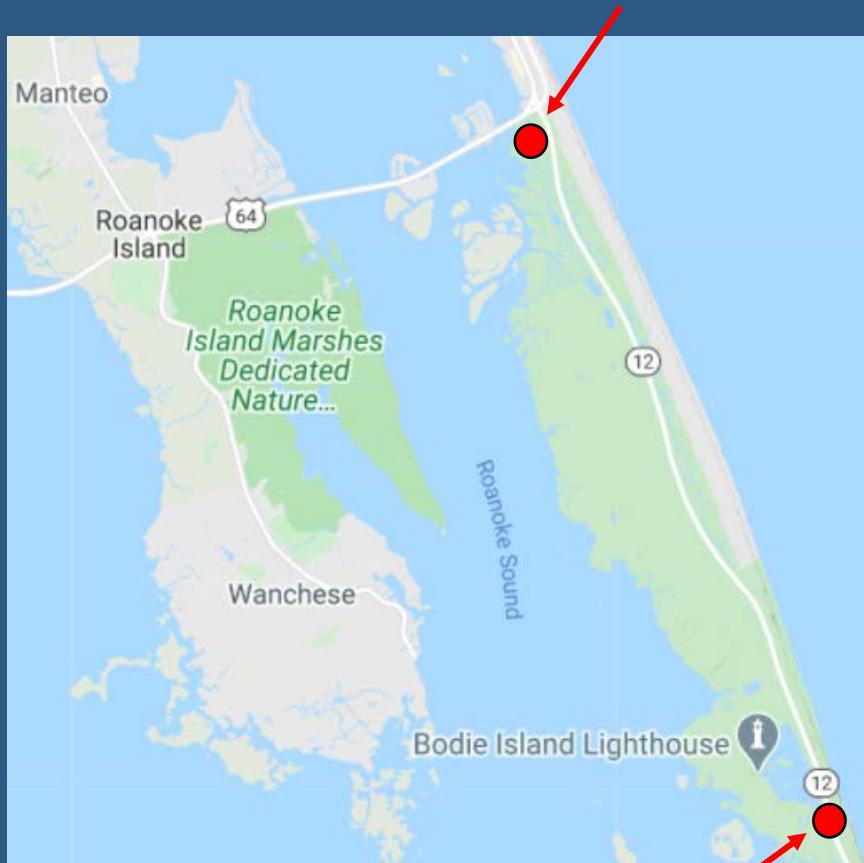
Commemorative Plaque Nearby



EX0456 (BODIE ISLAND NORTH BASE) –
Bodie Island, NC (GDS)

Bodie Island North Base

BODIE ISLAND NORTH BASE
Monument



BODIE ISLAND SOUTH BASE
Disk



Bodie Island Lighthouse

Chisel lines in
monument base
point to the
three reference
marks and to the
SOUTH BASE

Ref. Mark
... RM W ←
EX0725

35 53 57.3 (N)
075 35 51.2 (W)
Elevation 2.6 ft

Ref. Mark
... RM N
EX0724



**Bodie Island
North Base
EX0456**

Ref. Mark
... RM E →
EX07243

**BODIE ISLAND SOUTH BASE
EX0476**

Separate Capstone:
N Face = U.S. COAST SURVEY
E Face = 1848
S Face = BASE NO. 4
W Face = A. D. BACHE SUPT.

Bodie Island North Base Reference Marks (RM W & RM N) Recovered

Also Monumented 1849



EX0725 (BODIE ISLAND NORTH BASE
RM W) – Bodie Island, NC (GDS)



EX0724 (BODIE ISLAND NORTH BASE
RM N) – Bodie Island, NC (GDS)

Benchmark Disk at Benchmark Provisions, Boone NC



FZ0089 (B-48) –
Boone, NC (GDS)

CORS Unit at NCDOT near Wilsons Mills, NC



DX6525 (SMITHFIELD_CORS_ARP)
– near Wilsons Mills, NC (GDS)

