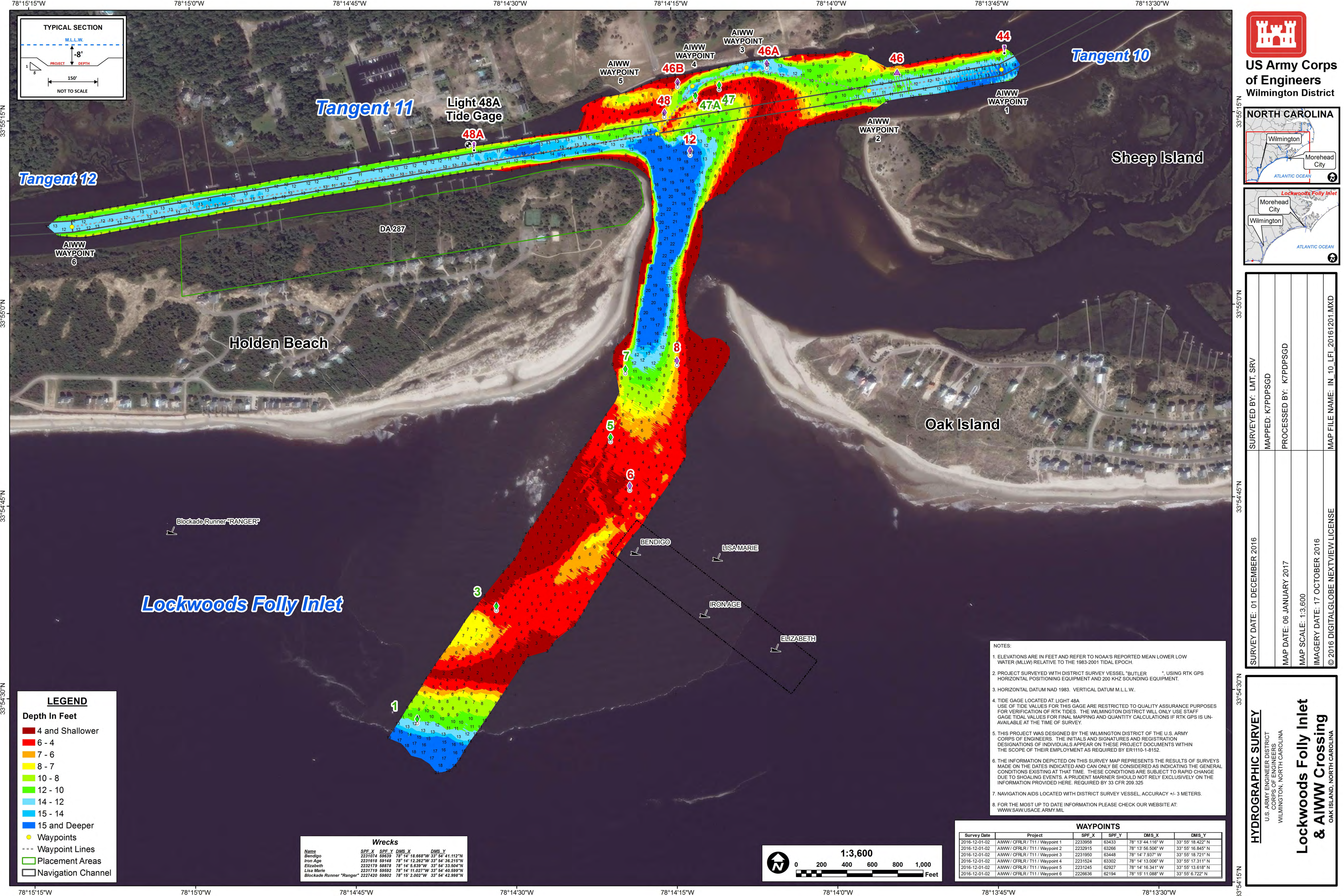
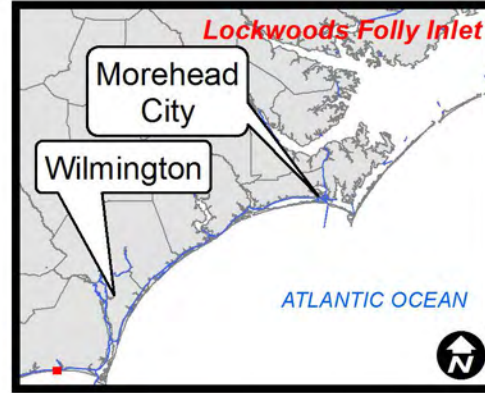




US Army Corps
of Engineers
Wilmington District



SURVEY DATE: 01 DECEMBER 2016	SURVEYED BY: LMT SRV
	MAPPED: K7PDPSGD
	PROCESSED BY: K7PDPSGD
MAP DATE: 06 JANUARY 2017	
MAP SCALE: 1:3,600	
IMAGERY DATE: 17 OCTOBER 2016	
© 2016 DIGITALGLOBE NEXTVIEW LICENSE	MAP FILE NAME: IN_10_LFI_20161201.MXD

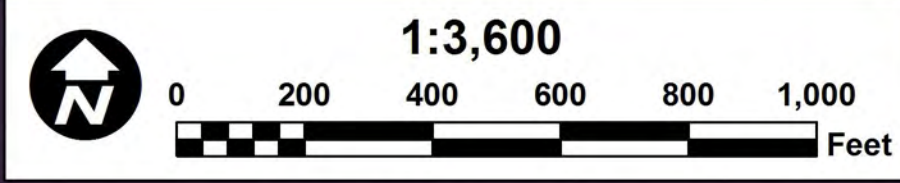
HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WILMINGTON, NORTH CAROLINA

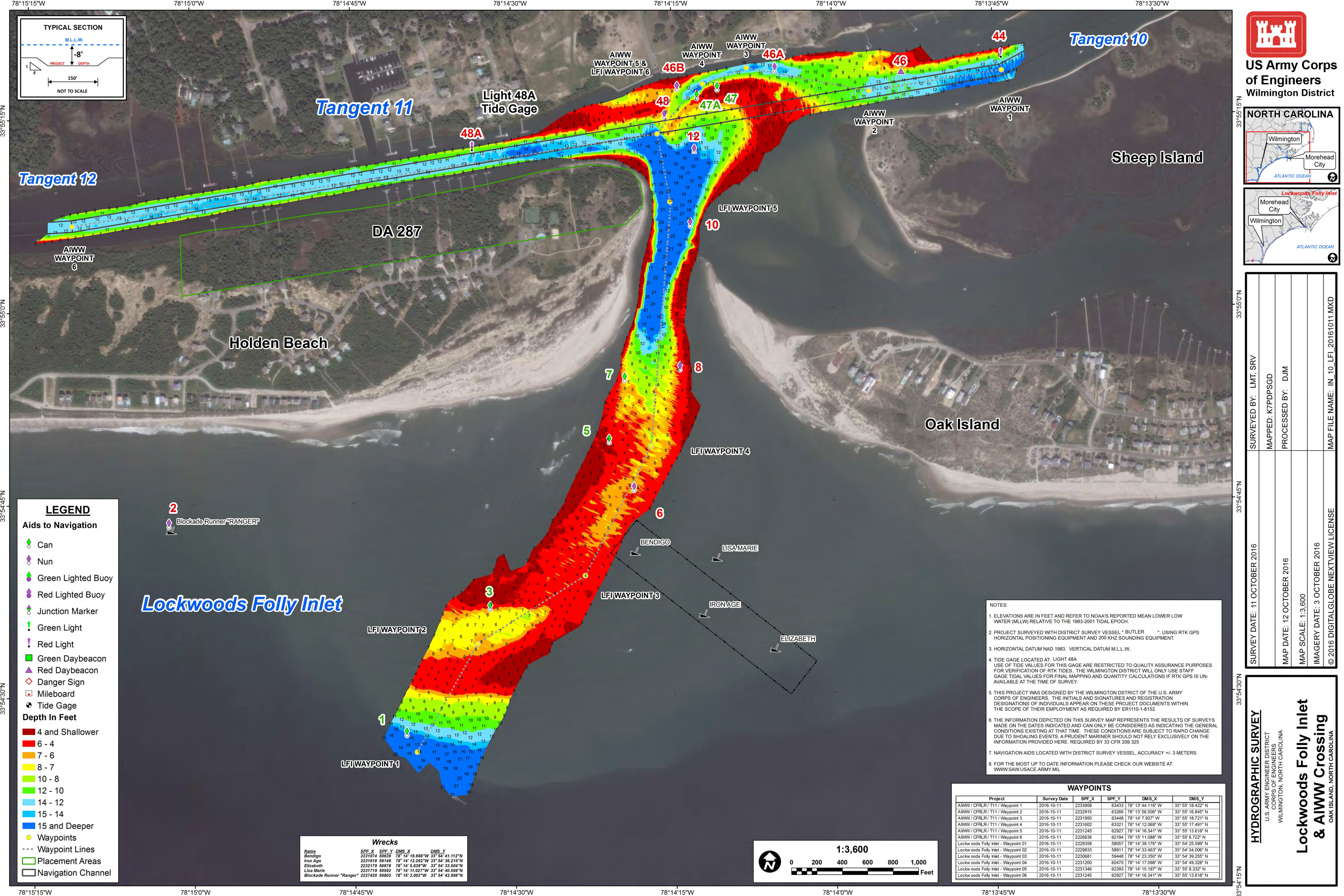
**Lockwoods Folly Inlet
& AIWW Crossing**
OAK ISLAND, NORTH CAROLINA

- NOTES:
- ELEVATIONS ARE IN FEET AND REFER TO NOAA'S REPORTED MEAN LOWER LOW WATER (MLLW) RELATIVE TO THE 1983-2001 TIDAL EPOCH.
 - PROJECT SURVEYED WITH DISTRICT SURVEY VESSEL "BUTLER", USING RTK GPS HORIZONTAL POSITIONING EQUIPMENT AND 200 KHZ SOUNDING EQUIPMENT.
 - HORIZONTAL DATUM NAD 1983. VERTICAL DATUM M.L.L.W.
 - TIDE GAGE LOCATED AT LIGHT 48A. USE OF TIDE VALUES FOR THIS SURVEY ARE RESTRICTED TO QUALITY ASSURANCE PURPOSES FOR VERIFICATION OF RTK TIDES. THE WILMINGTON DISTRICT WILL ONLY USE STAFF GAGE TIDE VALUES FOR FINAL MAPPING AND QUANTITY CALCULATIONS IF RTK GPS IS UNAVAILABLE AT THE TIME OF SURVEY.
 - THIS PROJECT WAS DESIGNED BY THE WILMINGTON DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS AND SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER1110-1-8152.
 - THE INFORMATION DEPICTED ON THIS SURVEY MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325
 - NAVIGATION AIDS LOCATED WITH DISTRICT SURVEY VESSEL, ACCURACY +/- 3 METERS.
 - FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: WWW.SAW.USACE.ARMY.MIL

WAYPOINTS					
Survey Date	Project	SPF_X	SPF_Y	DMS_X	DMS_Y
2016-12-01-02	AIWW / CFRLR / T11 / Waypoint 1	2233958	63433	78° 13' 44.116" W	33° 55' 16.422" N
2016-12-01-02	AIWW / CFRLR / T11 / Waypoint 2	2233915	63386	78° 13' 56.506" W	33° 55' 16.845" N
2016-12-01-02	AIWW / CFRLR / T11 / Waypoint 3	2231950	63448	78° 14' 7.937" W	33° 55' 18.721" N
2016-12-01-02	AIWW / CFRLR / T11 / Waypoint 4	2231524	63302	78° 14' 13.006" W	33° 55' 17.311" N
2016-12-01-02	AIWW / CFRLR / T11 / Waypoint 5	2231245	62927	78° 14' 16.341" W	33° 55' 13.616" N
2016-12-01-02	AIWW / CFRLR / T11 / Waypoint 6	2226636	62194	78° 15' 11.088" W	33° 55' 6.722" N

Wrecks					
Name	SPF_X	SPF_Y	DMS_X	DMS_Y	
Bendigo	2231074	59639	78° 14' 18.888" W	33° 54' 41.112" N	
Iron Age	2231618	59148	78° 14' 12.282" W	33° 54' 36.215" N	
Elizabeth	2232179	58878	78° 14' 5.639" W	33° 54' 33.604" N	
Lisa Marie	2231719	59592	78° 14' 11.027" W	33° 54' 40.599" N	
Blockade Runner "Ranger"	2231420	59802	78° 14' 2.002" W	33° 54' 42.898" N	





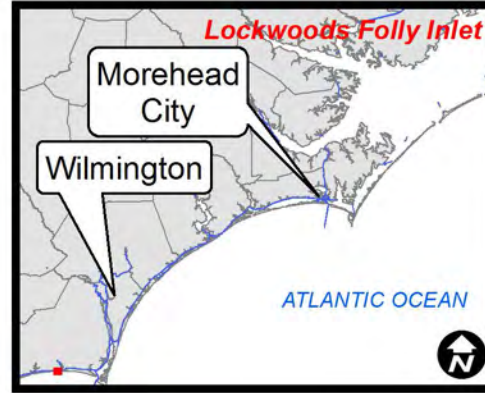


**US Army Corps
of Engineers**
Wilmington District

NORTH CAROLINA



Wilmington
Morehead City
ATLANTIC OCEAN



Lockwoods Folly Inlet
Morehead City
Wilmington
ATLANTIC OCEAN

SURVEY DATE: 11 OCTOBER 2016	SURVEYED BY: LMT, SRV
MAP DATE: 12 OCTOBER 2016	MAPPED: K7PDFSGD
MAP SCALE: 1:3,600	PROCESSED BY: DJM
IMAGERY DATE: 3 OCTOBER 2016	
© 2016 DIGITALGLOBE NEXTVIEW LICENSE	MAP FILE NAME: IN_10_LFI_20161011.MXD

HYDROGRAPHIC SURVEY

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WILMINGTON, NORTH CAROLINA

**Lockwoods Folly Inlet
& AIWW Crossing**

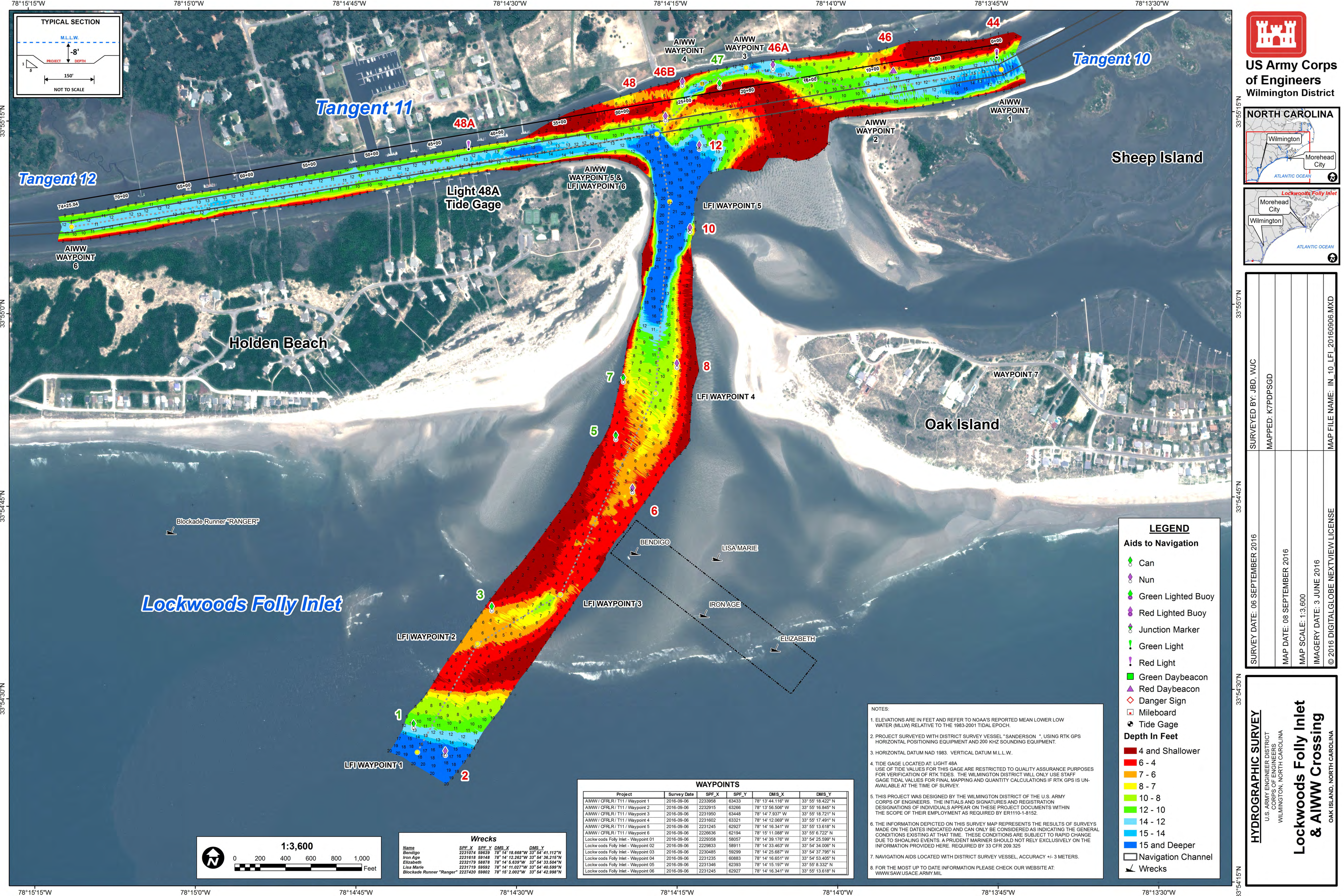
OAK ISLAND, NORTH CAROLINA

NOTES:

- ELEVATIONS ARE IN FEET AND REFER TO NOAA'S REPORTED MEAN LOWER LOW WATER (MLLW) RELATIVE TO THE 1983-2001 TIDAL EPOCH.
- PROJECT SURVEYED WITH DISTRICT SURVEY VESSEL "BUTLER", USING RTK GPS HORIZONTAL POSITIONING EQUIPMENT AND 200 KHZ SOUNDING EQUIPMENT.
- HORIZONTAL DATUM NAD 1983. VERTICAL DATUM M.L.L.W..
- TIDE GAGE LOCATED AT: LIGHT 48A
USE OF TIDE VALUES FOR THIS GAGE ARE RESTRICTED TO QUALITY ASSURANCE PURPOSES FOR VERIFICATION OF RTK TIDES. THE WILMINGTON DISTRICT WILL ONLY USE STAFF GAGE TIDAL VALUES FOR FINAL MAPPING AND QUANTITY CALCULATIONS IF RTK GPS IS UNAVAILABLE AT THE TIME OF SURVEY.
- THIS PROJECT WAS DESIGNED BY THE WILMINGTON DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS AND SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER1110-1-8152.
- THE INFORMATION DEPICTED ON THIS SURVEY MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325
- NAVIGATION AIDS LOCATED WITH DISTRICT SURVEY VESSEL. ACCURACY +/- 3 METERS.
- FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: WWW.SAW.USACE.ARMY.MIL

WAYPOINTS					
Project	Survey Date	SPF_X	SPF_Y	DMS_X	DMS_Y
AIWW / CFRLR / T11 / Waypoint 1	2016-10-11	2233958	63433	78° 13' 44.116" W	33° 55' 18.422" N
AIWW / CFRLR / T11 / Waypoint 2	2016-10-11	2232915	63266	78° 13' 56.506" W	33° 55' 16.845" N
AIWW / CFRLR / T11 / Waypoint 3	2016-10-11	2231950	63448	78° 14' 7.937" W	33° 55' 18.721" N
AIWW / CFRLR / T11 / Waypoint 4	2016-10-11	2231602	63321	78° 14' 12.069" W	33° 55' 17.491" N
AIWW / CFRLR / T11 / Waypoint 5	2016-10-11	2231245	62927	78° 14' 16.341" W	33° 55' 13.618" N
AIWW / CFRLR / T11 / Waypoint 6	2016-10-11	2226636	62194	78° 15' 11.088" W	33° 55' 6.722" N
Lockw oods Folly Inlet - Waypoint 01	2016-10-11	2229358	58057	78° 14' 39.176" W	33° 54' 25.599" N
Lockw oods Folly Inlet - Waypoint 02	2016-10-11	2229833	58911	78° 14' 33.463" W	33° 54' 34.006" N
Lockw oods Folly Inlet - Waypoint 03	2016-10-11	2230681	59448	78° 14' 23.350" W	33° 54' 39.255" N
Lockw oods Folly Inlet - Waypoint 04	2016-10-11	2231200	60470	78° 14' 17.088" W	33° 54' 48.328" N
Lockw oods Folly Inlet - Waypoint 05	2016-10-11	2231346	62393	78° 14' 15.197" W	33° 55' 8.332" N
Lockw oods Folly Inlet - Waypoint 06	2016-10-11	2231245	62927	78° 14' 16.341" W	33° 55' 13.618" N

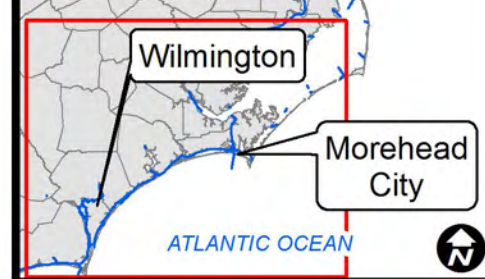
Wrecks					
Name	SPF_X	SPF_Y	DMS_X	DMS_Y	
Bendigo	2231074	59535	78° 14' 18.868" W	33° 54' 41.112" N	
Iron Age	2231618	59148	78° 14' 12.282" W	33° 54' 36.215" N	
Elizabeth	2232179	58878	78° 14' 5.635" W	33° 54' 33.504" N	
Lisa Marie	2231719	59592	78° 14' 11.027" W	33° 54' 40.599" N	
Blockade Runner "Ranger"	2232420	58802	78° 15' 2.002" W	33° 54' 42.898" N	



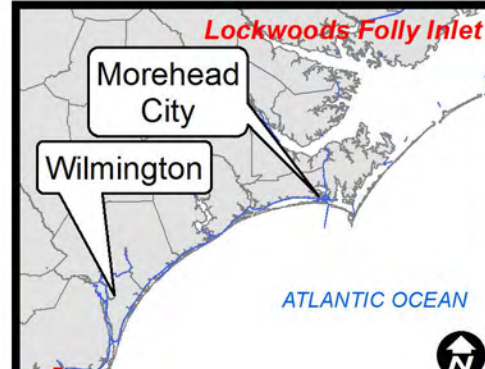


**US Army Corps
of Engineers**
Wilmington District

NORTH CAROLINA



Wilmington
Morehead City



Lockwoods Folly Inlet
Morehead City
Wilmington

SURVEY DATE: 06 SEPTEMBER 2016	SURVEYED BY: JBD, WJC
MAP DATE: 08 SEPTEMBER 2016	MAPPED: KTPDFSGD
MAP SCALE: 1:3,600	
IMAGERY DATE: 3 JUNE 2016	
© 2016 DIGITALGLOBE NEXTVIEW LICENSE	MAP FILE NAME: IN_10_LFI_20160906.MXD

HYDROGRAPHIC SURVEY

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WILMINGTON, NORTH CAROLINA

**Lockwoods Folly Inlet
& AIWW Crossing**

OAK ISLAND, NORTH CAROLINA

LEGEND

Aids to Navigation

- Can
- Nun
- Green Lighted Buoy
- Red Lighted Buoy
- Junction Marker
- Green Light
- Red Light
- Green Daybeacon
- Red Daybeacon
- Danger Sign
- Mileboard
- Tide Gage

Depth In Feet

- 4 and Shallower
- 6 - 4
- 7 - 6
- 8 - 7
- 10 - 8
- 12 - 10
- 14 - 12
- 15 - 14
- 15 and Deeper

Navigation Channel

Wrecks

NOTES:

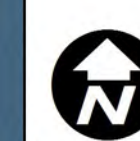
- ELEVATIONS ARE IN FEET AND REFER TO NOAA'S REPORTED MEAN LOWER LOW WATER (MLLW) RELATIVE TO THE 1983-2001 TIDAL EPOCH.
- PROJECT SURVEYED WITH DISTRICT SURVEY VESSEL "SANDERSON", USING RTK GPS HORIZONTAL POSITIONING EQUIPMENT AND 200 KHZ SOUNDING EQUIPMENT.
- HORIZONTAL DATUM NAD 1983. VERTICAL DATUM MLLW.
- TIDE GAGE LOCATED AT LIGHT 48A. USE OF TIDE VALUES FOR THIS GAGE ARE RESTRICTED TO QUALITY ASSURANCE PURPOSES FOR VERIFICATION OF RTK TIDES. THE WILMINGTON DISTRICT WILL ONLY USE STAFF GAGE TIDAL VALUES FOR FINAL MAPPING AND QUANTITY CALCULATIONS IF RTK GPS IS UNAVAILABLE AT THE TIME OF SURVEY.
- THIS PROJECT WAS DESIGNED BY THE WILMINGTON DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS AND SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER1110-1-8152.
- THE INFORMATION DEPICTED ON THIS SURVEY MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325.
- NAVIGATION AIDS LOCATED WITH DISTRICT SURVEY VESSEL, ACCURACY +/- 3 METERS.
- FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: WWW.SAW.USACE.ARMY.MIL

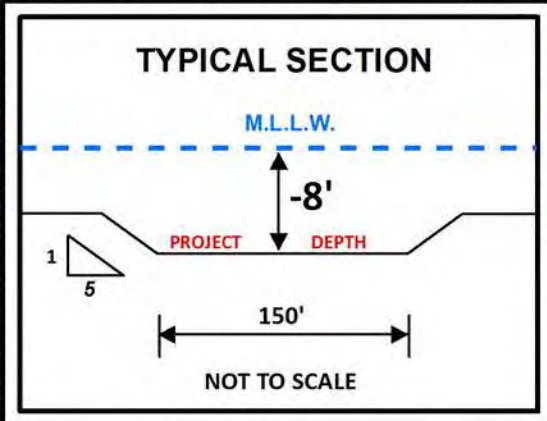
WAYPOINTS					
Project	Survey Date	SPF_X	SPF_Y	DMS_X	DMS_Y
AIWW / CFRLR / T11 / Waypoint 1	2016-09-06	2233958	63433	78° 13' 44.116" W	33° 55' 18.422" N
AIWW / CFRLR / T11 / Waypoint 2	2016-09-06	2232915	63266	78° 13' 56.506" W	33° 55' 18.845" N
AIWW / CFRLR / T11 / Waypoint 3	2016-09-06	2231950	63448	78° 14' 7.937" W	33° 55' 18.721" N
AIWW / CFRLR / T11 / Waypoint 4	2016-09-06	2231602	63321	78° 14' 12.069" W	33° 55' 17.491" N
AIWW / CFRLR / T11 / Waypoint 5	2016-09-06	2231245	62927	78° 14' 16.341" W	33° 55' 13.618" N
AIWW / CFRLR / T11 / Waypoint 6	2016-09-06	2226636	62194	78° 15' 11.088" W	33° 55' 6.722" N
Lockw oods Folly Inlet - Waypoint 01	2016-09-06	2229358	58057	78° 14' 39.176" W	33° 54' 25.599" N
Lockw oods Folly Inlet - Waypoint 02	2016-09-06	2229833	58911	78° 14' 33.463" W	33° 54' 34.006" N
Lockw oods Folly Inlet - Waypoint 03	2016-09-06	2230485	59299	78° 14' 25.687" W	33° 54' 37.795" N
Lockw oods Folly Inlet - Waypoint 04	2016-09-06	2231235	60883	78° 14' 16.651" W	33° 54' 53.405" N
Lockw oods Folly Inlet - Waypoint 05	2016-09-06	2231346	62393	78° 14' 15.197" W	33° 55' 8.332" N
Lockw oods Folly Inlet - Waypoint 06	2016-09-06	2231245	62927	78° 14' 16.341" W	33° 55' 13.618" N

Wrecks			
Name	SPF_X	SPF_Y	DMS_X
Bendigo	2231074	59639	78° 14' 18.668" W
Iron Age	2231618	59148	78° 14' 12.262" W
Elizabeth	2232179	58818	78° 14' 5.639" W
Lisa Marie	2231719	59592	78° 14' 11.027" W
Blockade Runner "Ranger"	2227420	58802	78° 15' 2.002" W

1:3,600

0 200 400 600 800 1,000 Feet





Tangent 12

Tangent 11

Surveyed: 9-10 August 2016

Light 48A
Tide Gage

48A

Tangent 10

Sheep Island

Holden Beach

Lockwoods Folly Inlet

Surveyed: 24 & 29 August 2016

Oak Island

Blockade Runner "RANGER"

BENDIGO

LISA MARIE

IRON AGE

ELIZABETH

LFI WAYPOINT 02

LFI WAYPOINT 03

LFI WAYPOINT 04

AIWW WAYPOINT 02

AIWW WAYPOINT 01

AIWW WAYPOINT 05
LFI WAYPOINT 06

AIWW WAYPOINT 04

AIWW WAYPOINT 03

AIWW WAYPOINT 06

LFI WAYPOINT 01

LEGEND

Aids to Navigation

- Can
- Nun
- Green Lighted Buoy
- Red Lighted Buoy
- Junction Marker
- Green Light
- Red Light
- Green Daybeacon
- Red Daybeacon
- Danger Sign
- Mileboard
- Tide Gage

Depth In Feet

- 4 and Shallower
- 6 - 4
- 7 - 6
- 8 - 7
- 10 - 8
- 12 - 10
- 14 - 12
- 15 - 14
- 15 and Deeper

Navigation Channel

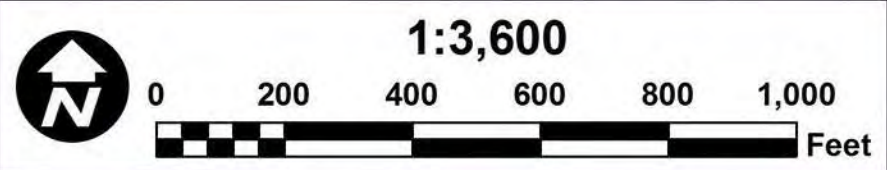
- Waypoints
- Waypoint Lines

Wrecks

Name	SPE_X	SPE_Y	DMS_X	DMS_Y
Bendigo	2231074	59639	78° 14' 18.668" W	33° 54' 41.112" N
Iron Age	2231618	59148	78° 14' 12.262" W	33° 54' 36.215" N
Elizabeth	2232179	58878	78° 14' 5.839" W	33° 54' 33.504" N
Lisa Marie	2231719	59592	78° 14' 11.027" W	33° 54' 40.590" N
Blockade Runner "Ranger"	2227420	59802	78° 15' 2.002" W	33° 54' 42.998" N

WAYPOINTS

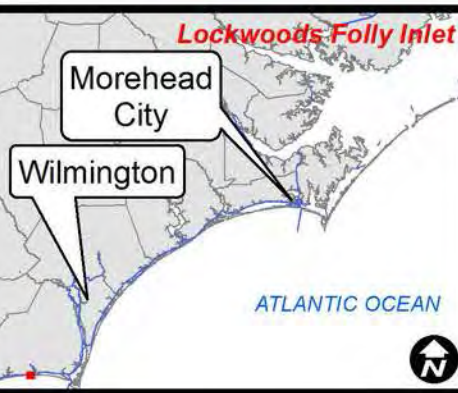
Project	Survey Date	SPE_X	SPE_Y	DMS_X	DMS_Y
AIWW CFRLR Tangent 11 - Waypoint 01	2016-08-09	2233958	63433	78° 13' 44.116" W	33° 55' 18.422" N
AIWW CFRLR Tangent 11 - Waypoint 02	2016-08-09	2232915	63266	78° 13' 56.508" W	33° 55' 16.845" N
AIWW CFRLR Tangent 11 - Waypoint 03	2016-08-09	2231950	63448	78° 14' 7.937" W	33° 55' 18.721" N
AIWW CFRLR Tangent 11 - Waypoint 04	2016-08-09	2231602	63321	78° 14' 12.069" W	33° 55' 17.491" N
AIWW CFRLR Tangent 11 - Waypoint 05	2016-08-09	2231200	62922	78° 14' 16.885" W	33° 55' 13.575" N
AIWW CFRLR Tangent 11 - Waypoint 06	2016-08-09	2226636	62196	78° 15' 11.088" W	33° 55' 6.737" N
Lockwoods Folly Inlet - Waypoint 01	2016-08-24	2229020	58332	78° 14' 43.156" W	33° 54' 28.338" N
Lockwoods Folly Inlet - Waypoint 02	2016-08-24	2229471	58991	78° 14' 37.750" W	33° 54' 34.824" N
Lockwoods Folly Inlet - Waypoint 03	2016-08-24	2230485	59299	78° 14' 25.687" W	33° 54' 37.795" N
Lockwoods Folly Inlet - Waypoint 04	2016-08-24	2231235	60883	78° 14' 16.651" W	33° 54' 53.405" N
Lockwoods Folly Inlet - Waypoint 05	2016-08-24	2231346	62393	78° 14' 15.197" W	33° 55' 8.332" N
Lockwoods Folly Inlet - Waypoint 06	2016-08-09	2231200	62922	78° 14' 16.885" W	33° 55' 13.575" N



- NOTES:
- ELEVATIONS ARE IN FEET AND REFER TO NOAA'S REPORTED MEAN LOWER LOW WATER (MLLW) RELATIVE TO THE 1983-2001 TIDAL EPOCH.
 - PROJECT SURVEYED WITH DISTRICT SURVEY VESSEL "J. BUTLER", USING RTK GPS HORIZONTAL POSITIONING EQUIPMENT AND 200 KHZ SOUNDING EQUIPMENT.
 - HORIZONTAL DATUM NAD 1983. VERTICAL DATUM M.L.L.W.
 - TIDE GAGE LOCATED AT LIGHT 48A. USE OF TIDE VALUES FOR THIS GAGE ARE RESTRICTED TO QUALITY ASSURANCE PURPOSES FOR VERIFICATION OF RTK TIDES. THE WILMINGTON DISTRICT WILL ONLY USE STAFF GAGE TIDAL VALUES FOR FINAL MAPPING AND QUANTITY CALCULATIONS IF RTK GPS IS UNAVAILABLE AT THE TIME OF SURVEY.
 - THIS PROJECT WAS DESIGNED BY THE WILMINGTON DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS AND SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER1110-1-8152.
 - THE INFORMATION DEPICTED ON THIS SURVEY MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325.
 - NAVIGATION AIDS LOCATED WITH DISTRICT SURVEY VESSEL. ACCURACY +/- 3 METERS.
 - FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: WWW.SAW.USACE.ARMY.MIL



US Army Corps
of Engineers
Wilmington District



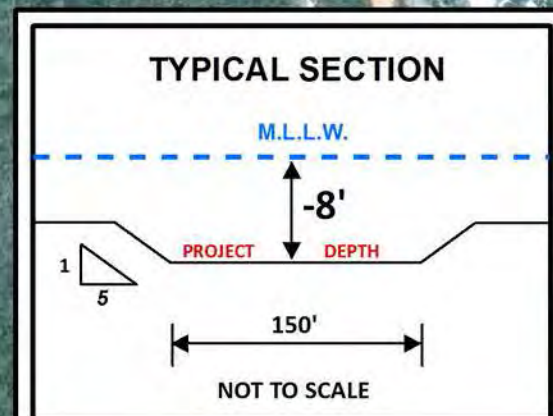
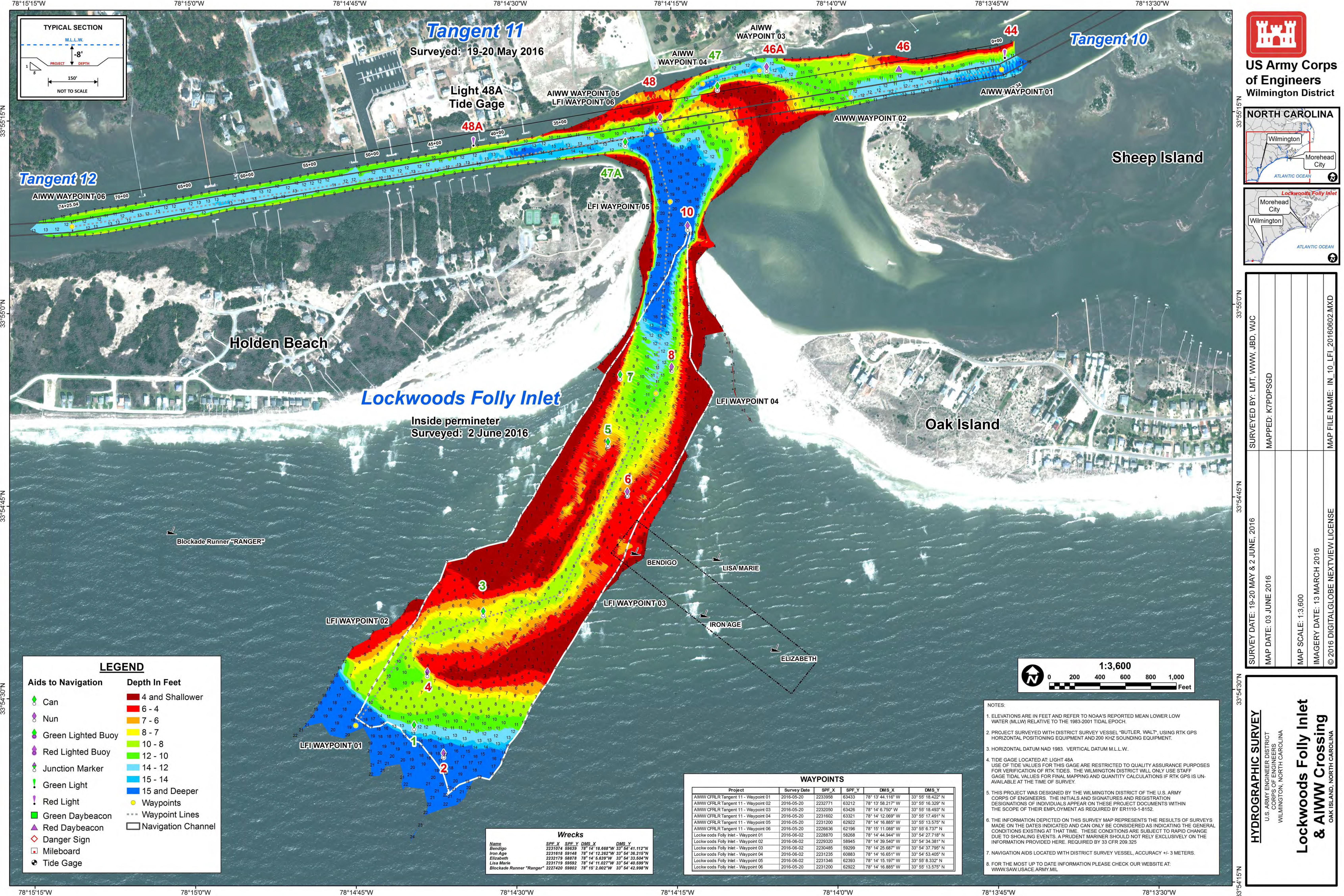
SURVEY DATE: 9-10, 24 & 29 AUGUST 2016	SURVEYED BY: LMT, SRV
MAP DATE: 30 AUGUST 2016	MAPPED: KTOPNSMG
MAP SCALE: 1:3,600	
IMAGERY DATE: 3 JUNE 2016	
© 2016 DIGITAL GLOBE NEXTVIEW LICENSE	MAP FILE NAME: IN_10_LFI_20160824.MXD

HYDROGRAPHIC SURVEY

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WILMINGTON, NORTH CAROLINA

**Lockwoods Folly Inlet
& AIWW Crossing**

OAK ISLAND, NORTH CAROLINA



LEGEND

Aids to Navigation

- Can
- Nun
- Green Lighted Buoy
- Red Lighted Buoy
- Junction Marker
- Green Light
- Red Light
- Green Daybeacon
- Red Daybeacon
- Danger Sign
- Mileboard
- Tide Gage

Depth In Feet

- 4 and Shallower
- 6 - 4
- 7 - 6
- 8 - 7
- 10 - 8
- 12 - 10
- 14 - 12
- 15 - 14
- 15 and Deeper
- Waypoints
- Waypoint Lines
- Navigation Channel

Wrecks

Name	SPE_X	SPE_Y	DMS_X	DMS_Y
Bendigo	2231074	59539	78° 14' 18.688" W	33° 54' 41.112" N
Iron Age	2231618	59148	78° 14' 12.262" W	33° 54' 36.215" N
Elizabeth	2232179	58878	78° 14' 5.639" W	33° 54' 33.504" N
Lisa Marie	2231719	59592	78° 14' 11.027" W	33° 54' 40.599" N
Blockade Runner "Ranger"	2237420	59802	78° 16' 2.002" W	33° 54' 42.988" N

WAYPOINTS

Project	Survey Date	SPE_X	SPE_Y	DMS_X	DMS_Y
AIWW CFRLR Tangent 11 - Waypoint 01	2016-05-20	2233958	63433	78° 13' 44.116" W	33° 55' 18.422" N
AIWW CFRLR Tangent 11 - Waypoint 02	2016-05-20	2232771	63212	78° 13' 58.217" W	33° 55' 16.329" N
AIWW CFRLR Tangent 11 - Waypoint 03	2016-05-20	2232050	63426	78° 14' 6.750" W	33° 55' 18.493" N
AIWW CFRLR Tangent 11 - Waypoint 04	2016-05-20	2231602	63321	78° 14' 12.069" W	33° 55' 17.491" N
AIWW CFRLR Tangent 11 - Waypoint 05	2016-05-20	2231200	62922	78° 14' 16.885" W	33° 55' 13.575" N
AIWW CFRLR Tangent 11 - Waypoint 06	2016-05-20	2226636	62196	78° 15' 11.088" W	33° 55' 6.737" N
Lockwoods Folly Inlet - Waypoint 01	2016-06-02	2228870	58268	78° 14' 44.944" W	33° 54' 27.718" N
Lockwoods Folly Inlet - Waypoint 02	2016-06-02	2229320	58945	78° 14' 39.540" W	33° 54' 34.381" N
Lockwoods Folly Inlet - Waypoint 03	2016-06-02	2230485	59299	78° 14' 25.687" W	33° 54' 37.795" N
Lockwoods Folly Inlet - Waypoint 04	2016-06-02	2231235	60883	78° 14' 16.851" W	33° 54' 53.405" N
Lockwoods Folly Inlet - Waypoint 05	2016-06-02	2231346	62393	78° 14' 15.197" W	33° 55' 8.332" N
Lockwoods Folly Inlet - Waypoint 06	2016-05-20	2231200	62922	78° 14' 16.885" W	33° 55' 13.575" N

- NOTES:**
- ELEVATIONS ARE IN FEET AND REFER TO NOAA'S REPORTED MEAN LOWER LOW WATER (MLLW) RELATIVE TO THE 1983-2001 TIDAL EPOCH.
 - PROJECT SURVEYED WITH DISTRICT SURVEY VESSEL "BUTLER, WALT", USING RTK GPS HORIZONTAL POSITIONING EQUIPMENT AND 200 KHZ SOUNDING EQUIPMENT.
 - HORIZONTAL DATUM NAD 1983. VERTICAL DATUM M.L.L.W.
 - TIDE GAGE LOCATED AT LIGHT 48A. USE OF TIDE VALUES FOR THIS GAGE ARE RESTRICTED TO QUALITY ASSURANCE PURPOSES FOR VERIFICATION OF RTK TIDES. THE WILMINGTON DISTRICT WILL ONLY USE STAFF GAGE TIDE VALUES FOR FINAL MAPPING AND QUANTITY CALCULATIONS IF RTK GPS IS UNAVAILABLE AT THE TIME OF SURVEY.
 - THIS PROJECT WAS DESIGNED BY THE WILMINGTON DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS AND SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER1110-1-8152.
 - THE INFORMATION DEPICTED ON THIS SURVEY MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325
 - NAVIGATION AIDS LOCATED WITH DISTRICT SURVEY VESSEL, ACCURACY +/- 3 METERS.
 - FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: WWW.SAW.USACE.ARMY.MIL

US Army Corps of Engineers
Wilmington District

NORTH CAROLINA

Lockwoods Folly Inlet
AIWW Crossing

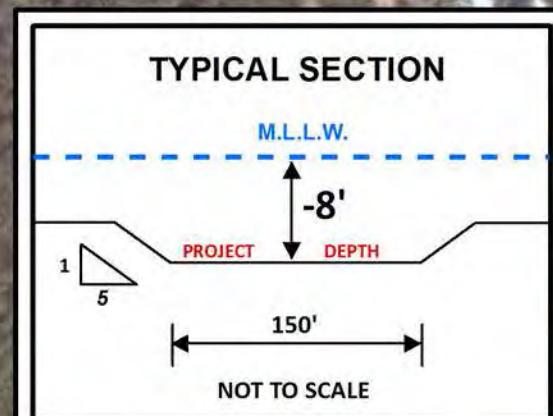
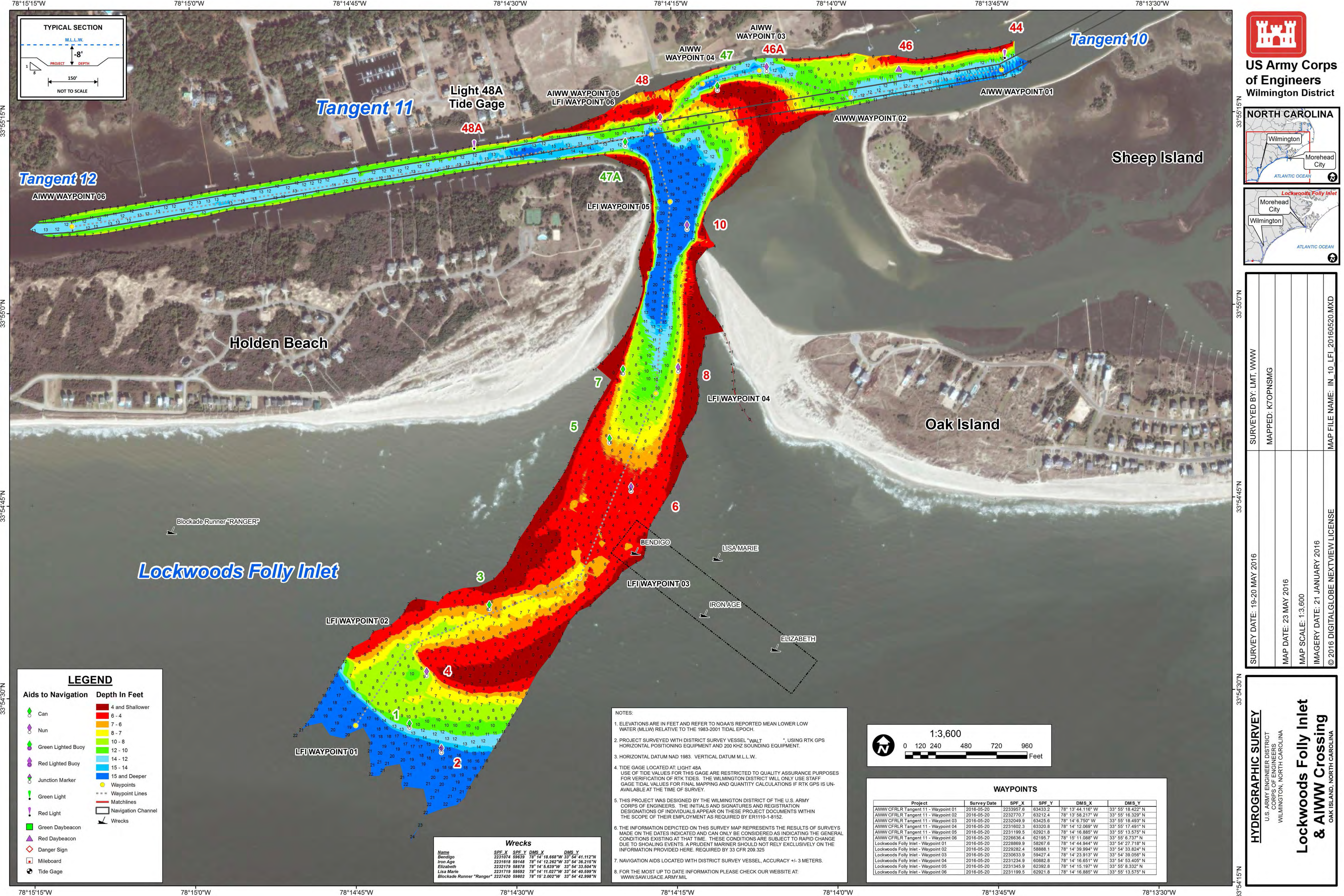
LOCKWOODS FOLLY INLET & AIWW CROSSING

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WILMINGTON, NORTH CAROLINA

HYDROGRAPHIC SURVEY

SURVEY DATE: 19-20 MAY & 2 JUNE, 2016
MAP DATE: 03 JUNE 2016
MAP SCALE: 1:3,600
IMAGERY DATE: 13 MARCH 2016
© 2016 DIGITALGLOBE NEXTVIEW LICENSE

SURVEYED BY: LMT, WWW, JBD, WJC
MAPPED: K7PDPSPGD
MAP FILE NAME: IN_10_LFI_20160802.MXD



LEGEND

Aids to Navigation

- Can
- Nun
- Green Lighted Buoy
- Red Lighted Buoy
- Junction Marker
- Green Light
- Red Light
- Green Daybeacon
- Red Daybeacon
- Danger Sign
- Mileboard
- Tide Gage

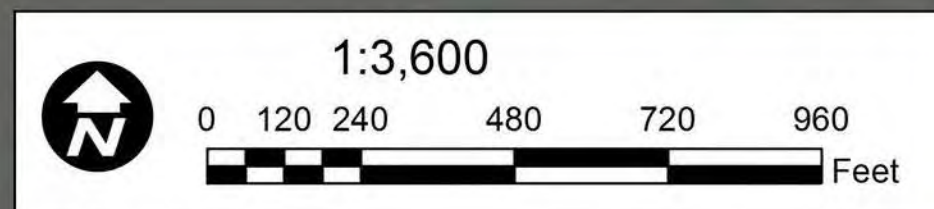
Depth In Feet

- 4 and Shallower
- 6 - 4
- 7 - 6
- 8 - 7
- 10 - 8
- 12 - 10
- 14 - 12
- 15 - 14
- 15 and Deeper
- Waypoints
- Waypoint Lines
- Matchlines
- Navigation Channel
- Wrecks

Wrecks

Name	SPF_X	SPF_Y	DMS_X	DMS_Y
Bendigo	2231074	69639	78° 14' 18.668" W	33° 54' 41.112" N
Iron Age	2231618	69148	78° 14' 12.292" W	33° 54' 36.216" N
Elizabeth	2231779	68678	78° 14' 5.639" W	33° 54' 33.504" N
Lisa Marie	2231719	69592	78° 14' 11.027" W	33° 54' 40.599" N
Blockade Runner "Ranger"	2227420	69802	78° 15' 2.002" W	33° 54' 42.998" N

- NOTES:**
- ELEVATIONS ARE IN FEET AND REFER TO NOAA'S REPORTED MEAN LOWER LOW WATER (MLLW) RELATIVE TO THE 1983-2001 TIDAL EPOCH.
 - PROJECT SURVEYED WITH DISTRICT SURVEY VESSEL "WALT" USING RTK GPS HORIZONTAL POSITIONING EQUIPMENT AND 200 KHZ SOUNDING EQUIPMENT.
 - HORIZONTAL DATUM NAD 1983. VERTICAL DATUM M.L.L.W.
 - TIDE GAGE LOCATED AT: LIGHT 48A
USE OF TIDE VALUES FOR THIS GAGE ARE RESTRICTED TO QUALITY ASSURANCE PURPOSES FOR VERIFICATION OF RTK TIDES. THE WILMINGTON DISTRICT WILL ONLY USE STAFF GAGE TIDAL VALUES FOR FINAL MAPPING AND QUANTITY CALCULATIONS IF RTK GPS IS UNAVAILABLE AT THE TIME OF SURVEY.
 - THIS PROJECT WAS DESIGNED BY THE WILMINGTON DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS AND SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER1110-1-8152.
 - THE INFORMATION DEPICTED ON THIS SURVEY MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325
 - NAVIGATION AIDS LOCATED WITH DISTRICT SURVEY VESSEL, ACCURACY +/- 3 METERS.
 - FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: WWW.SAW.USACE.ARMY.MIL



WAYPOINTS

Project	Survey Date	SPF_X	SPF_Y	DMS_X	DMS_Y
AIWW CFRLR Tangent 11 - Waypoint 01	2016-05-20	2233957.6	63433.2	78° 13' 44.116" W	33° 55' 18.422" N
AIWW CFRLR Tangent 11 - Waypoint 02	2016-05-20	2232770.7	63212.4	78° 13' 58.217" W	33° 55' 16.329" N
AIWW CFRLR Tangent 11 - Waypoint 03	2016-05-20	2232049.9	63425.6	78° 14' 6.750" W	33° 55' 18.493" N
AIWW CFRLR Tangent 11 - Waypoint 04	2016-05-20	2231602.3	63320.8	78° 14' 12.069" W	33° 55' 17.491" N
AIWW CFRLR Tangent 11 - Waypoint 05	2016-05-20	2231199.5	62921.8	78° 14' 16.885" W	33° 55' 13.575" N
AIWW CFRLR Tangent 11 - Waypoint 06	2016-05-20	2226636.4	62195.7	78° 15' 11.088" W	33° 55' 6.737" N
Lockwoods Folly Inlet - Waypoint 01	2016-05-20	2228869.9	58267.6	78° 14' 44.944" W	33° 54' 27.718" N
Lockwoods Folly Inlet - Waypoint 02	2016-05-20	2228282.4	58888.1	78° 14' 39.984" W	33° 54' 33.824" N
Lockwoods Folly Inlet - Waypoint 03	2016-05-20	2230633.9	59427.4	78° 14' 23.913" W	33° 54' 39.056" N
Lockwoods Folly Inlet - Waypoint 04	2016-05-20	2231234.9	60882.8	78° 14' 16.651" W	33° 54' 53.405" N
Lockwoods Folly Inlet - Waypoint 05	2016-05-20	2231345.9	62392.8	78° 14' 15.197" W	33° 55' 8.332" N
Lockwoods Folly Inlet - Waypoint 06	2016-05-20	2231199.5	62921.8	78° 14' 16.885" W	33° 55' 13.575" N

US Army Corps of Engineers
Wilmington District

NORTH CAROLINA

Wilmington
Morehead City

Lockwoods Folly Inlet

Morehead City
Wilmington

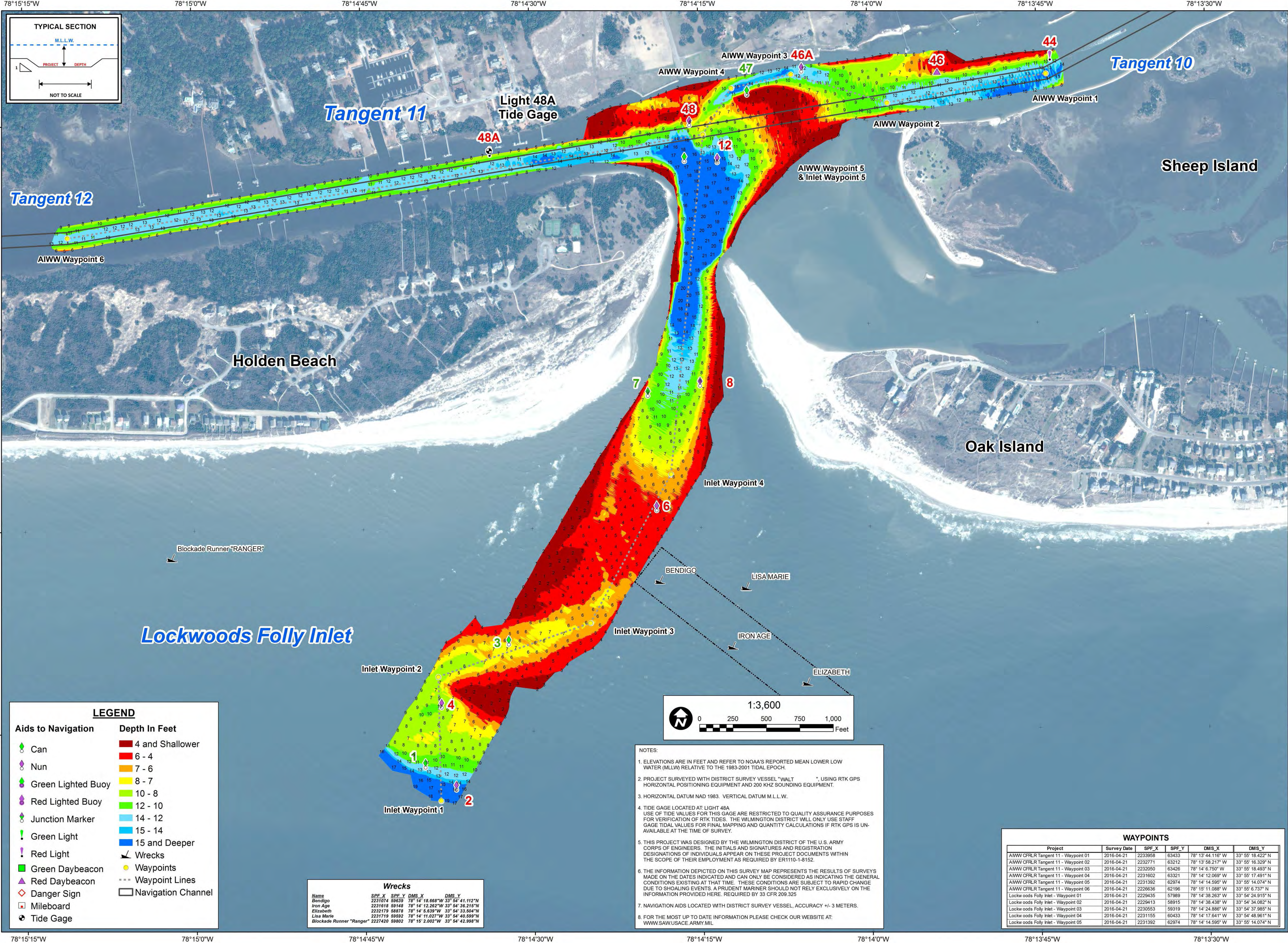
SURVEY DATE: 19-20 MAY 2016	SURVEYED BY: LMT, WWW
MAP DATE: 23 MAY 2016	MAPPED: K7OPNSMG
MAP SCALE: 1:3,600	
IMAGERY DATE: 21 JANUARY 2016	
© 2016 DIGITALGLOBE NEXTVIEW LICENSE	MAP FILE NAME: IN_10_LFI_20160520.MXD

HYDROGRAPHIC SURVEY

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WILMINGTON, NORTH CAROLINA

Lockwoods Folly Inlet & AIWW Crossing

OAK ISLAND, NORTH CAROLINA



**US Army Corps
of Engineers
Wilmington District**

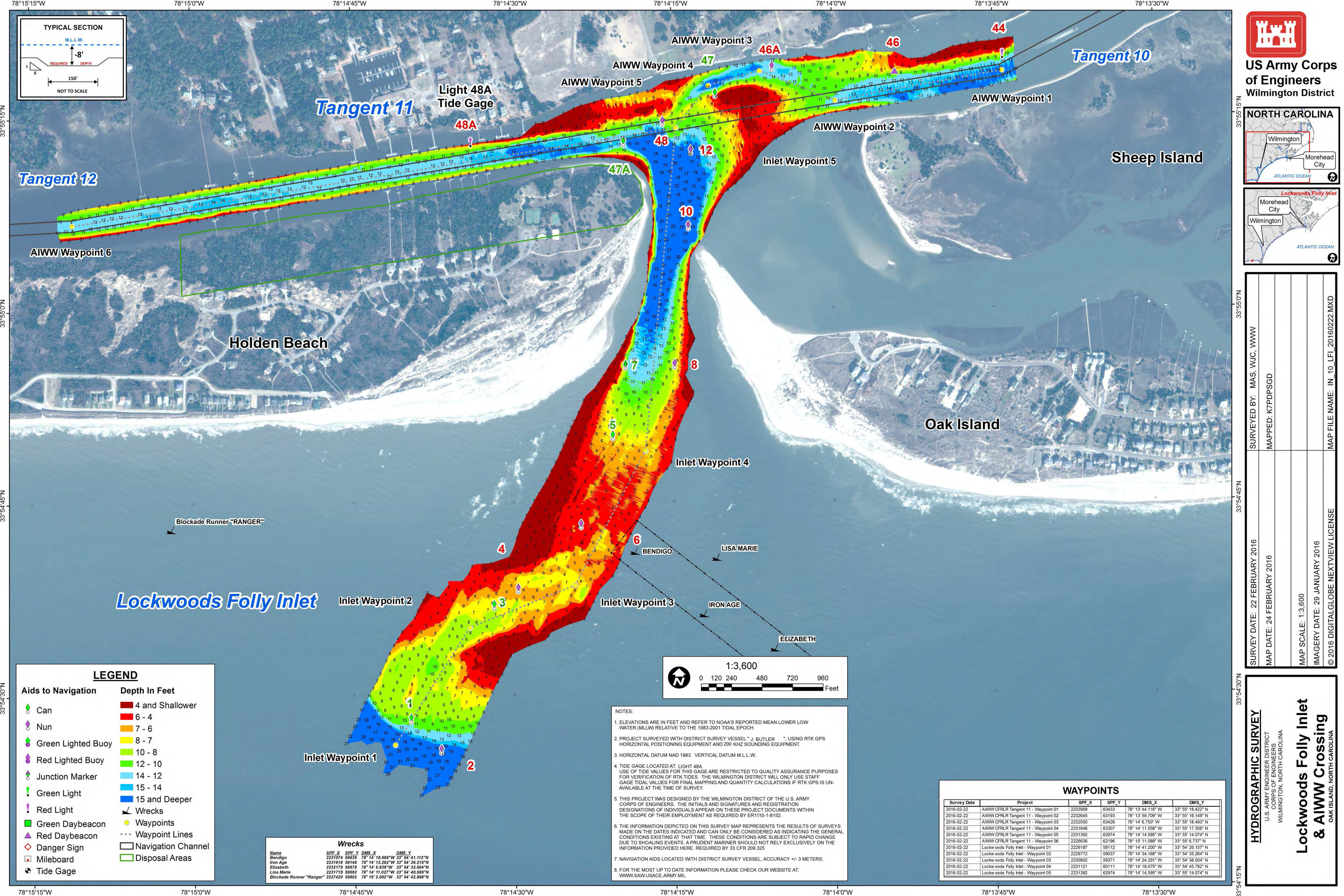


SURVEY DATE: 21 APRIL 2016	SURVEYED BY: LMT, SRV
MAP DATE: 29 APRIL 2016	MAPPED: K7PDPGSD
MAP SCALE: 1:3,600	
IMAGERY DATE: 29 JANUARY 2016	
© 2016 DIGITAL GLOBE NEXTVIEW LICENSE	MAP FILE NAME: IN_10_LFI_20160421.MXD

HYDROGRAPHIC SURVEY

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WILMINGTON, NORTH CAROLINA

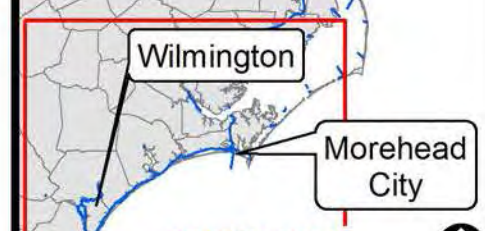
Lockwoods Folly Inlet & AIWW Crossing





**US Army Corps
of Engineers**
Wilmington District

NORTH CAROLINA



Wilmington
Morehead City
ATLANTIC OCEAN



Lockwoods Folly Inlet
Morehead City
Wilmington
ATLANTIC OCEAN

SURVEY DATE: 22 FEBRUARY 2016	SURVEYED BY: MAS, WJC, WWW
MAP DATE: 24 FEBRUARY 2016	MAPPED: K7PDPSGD
MAP SCALE: 1:3,600	
IMAGERY DATE: 29 JANUARY 2016	
© 2016 DIGITALGLOBE NEXTVIEW LICENSE	MAP FILE NAME: IN_10_LFI_20160222.MXD

HYDROGRAPHIC SURVEY

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WILMINGTON, NORTH CAROLINA

**Lockwoods Folly Inlet
& AIWW Crossing**

OAK ISLAND, NORTH CAROLINA