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<b>Arctic Research Foundation – ARF-02-003</b>	<b>A3</b>	<b>25-AUG-21</b>

## R/V WILLIAM KENNEDY FUELING PROCEDURE

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Rev.	Date	Reason for issue	Made by	Checked by	Discipline Approval	Project Approval

## Arctic Research Foundation

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**REVISION TABLE**

<b>Rev.</b>	<b>Location of Change</b>	<b>Brief description of Change</b>
A0	IFR	Issue for review
A1	IFU	Issue for use. Implement Client requested changes
A2	IFU	Issue for use. Implement Client requested changes
A3	IFR	Revised document to personalize procedures to R/V William Kennedy and to include pertinent information

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## 1.0 Purpose and Scope

The purpose of this document is to provide the crew of the **R/V William Kennedy** with a comprehensive outline for the safe and effective fuelling procedure for the vessel.

## 2.0 Definitions and Abbreviations

Bravo Flag	Signal Flag Letter B (Bravo): I am taking in, discharging, or carrying dangerous cargo.
Fueling	Term describing loading Fuel on board a Vessel
Save-All	Term describing a fixed means of containment of spillage
Scupper	Term describing a hole in a ship's side to carry water overboard from the deck

## 3.0 General

The loading of fuel onboard a vessel is a critical ships operation. This procedural document applies to the loading of fuel on board the ship from either shore-based facility or at sea from ship/barge vessel. A fueling checklist is to be completed each time the vessel conducts a fueling operation. Signed copies of the check list shall be kept on board the vessel.

## 4.0 Responsibilities

The vessel crew are ultimately responsible to ensure safe and effective fuelling operations.

## 5.0 Conducting Fuelling Operations

### 5.1 Pre-Fuelling

1. Calculate the amount of fuel required.
2. Ensure vessel is properly secured to dock or another vessel. Moorings lines are to be tended so as to prevent damage to the fuel transfer hose
3. All transfer hoses being used are to be adequately supported to prevent strain/damage or accidental disconnection
4. “Bravo” Flag to be hoisted on the mast during daylight, red light illuminated by night.

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5. If fuel is being transferred at night, ensure that all fueling stations and adjacent areas are well lit.
6. Ensure proper communications are established between the barge/shore facility crew and vessel with respect to immediate shutdown of all fueling operations, slowing down, or increasing pumping rate.
7. Place a discharge bucket under air/overflow pipe and close scuppers in case of overflow.
8. Close all hatches and openings to prevent fumes from getting into the hull and the bilge
9. Scupper and Save-All plugs are put in place and the following items brought to the fueling station:
  - Fire extinguisher
  - Absorbent Pads
  - Absorbent Powder
  - Bucket
  - Rags
  - Sounding Tapes.
  - No Smoking Sign

## 5.2 During Fueling

1. Pumping rate may gradually increased to the agreed upon rate.
2. When fuelling, do not start the dispenser until the outlet nozzle is inserted in the tank. Hold the nozzle open by hand only-do not lock or jam the trigger of the dispenser to the open position.
3. Keep the hose touching the filler neck at all times during refueling to prevent spark.
4. Carefully monitor the filling rate to avoid spillage.
5. Use your hand where possible to check for air escaping from the vent. When the tank is nearly full, you will feel a distinct increase in airflow which is a signal to stop filling
6. Do not remove filler hose until the fuel flow has stopped
7. During fueling operations, all personnel involved will remain at their stations until fueling is completed.

## 5.3 Completion of Fueling

1. Lift the hose and drain all remaining fuel into the tank
2. Thoroughly clean up all surface spills with an absorbent cloth
3. If fuel has spilled into the bilges, pump bilges manually into sealed containers or pump ashore and leave all hatches and doors wide open for at least 30 minutes to vent.
4. Product received to be calculated and compared with barge/shore facility figures.

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5. Secure fueling station ensuring that all blanks/caps are fitted to filling lines and all safety equipment stowed. Scupper and Save-All plugs are to be removed and stowed.
6. If fuel is received by barge, Deck Crew to assist in letting go of the fuel barge
7. “Bravo” Flag to be lowered / red light extinguished.
8. Dispose of absorbent cloths, sawdust or other fuel-soaked items properly.
9. Record the fueling operation in the Oil Record Book.

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## 6.0 Pre-Fueling Checklist

<b>Pre-Fueling Checklist</b>			
Item #		Yes	No
<b>Pre-Fueling</b>			
1.	Calculate the amount of fuel required.		
2.	Ensure vessel is properly secured to dock or another vessel.		
3.	All transfer hoses being used are adequately supported.		
4.	Bravo Flag to be hoisted on the mast during daylight, red light illuminated by night.		
5.	If fuel is being taken at night, ensure that all fueling stations and adjacent areas are well lit.		
6.	Ensure proper communications are established between the barge/shore facility crew and vessel.		
7.	Place a discharge bucket under air/overflow pipe and close scuppers in case of overflow.		
8.	Close all hatches and openings to prevent fumes from getting into the hull and the bilge.		
9.	Scupper and Save-All plugs are put in place and the following items are brought to the Fueling Station <ul style="list-style-type: none"> <li>• Fire extinguisher</li> <li>• Absorbent Pads</li> <li>• Absorbent Powder</li> <li>• Bucket</li> <li>• Rags</li> <li>• Sounding Tapes</li> <li>• No Smoking Signs brought to the fueling station</li> </ul>		
<b>Signature</b>			
Crew Name:		Signature:	Date:
Master Name:		Signature:	