Here is the hierarchical tree format for the assurance case for the BlueROV2 system based on the given assurance case pattern:

```

G1: Hazards for BlueROV2 system addressed in accordance with ALARP principle.

- S1: Argument by risk reduction/elimination of each hazard

- G2: No intolerable risks present in the system.

- C1: Definition of "intolerable"

- Choice

- S2: Argument that risk posed by any remaining hazards is negligible (undeveloped)

- S3: Argument that no other risks have been identified (undeveloped)

- G3: Risk from "Deviation from the operating area" has been reduced as low as reasonably practicable

- C2: Assigned severity class is "Minor"

- S4: Apply ReSonAte to estimate level of risk from hazard condition "Deviation from the operating area"

- A1: Function {avoidance logic, obstacle detection, command authority} required by "Avoidance Maneuver BTD" is available

- G4: Model "Avoidance Maneuver BTD" accurately describes possible propagation of hazard "Deviation from the operating area" (uninstantiated)

- G6: Possible hazard propagation paths correctly captured in BTD (undeveloped)

- G7: Barriers in the BTD correctly describe their respective control action including any required system functions (undeveloped)

- G8: All non-negligible threats have been identified (undeveloped)

- G5: Quantitative risk estimates are accurate and below acceptable threshold

- G9: State probability distribution used for risk estimation is an accurate representation of expected system states (undeveloped)

- G10: Estimated probability of "collision" is below allowable threshold for severity class "Major" (uninstantiated)

- Sn1: Estimated risk level "10^-3 per hour"

- G3: Risk from "Obstacle encounter" has been reduced as low as reasonably practicable

- C2: Assigned severity class is "Major"

- S4: Apply ReSonAte to estimate level of risk from hazard condition "Obstacle encounter"

- A1: Function {avoidance logic, obstacle detection, command authority} required by "Avoidance Maneuver BTD" is available

- G4: Model "Avoidance Maneuver BTD" accurately describes possible propagation of hazard "Obstacle encounter" (uninstantiated)

- G6: Possible hazard propagation paths correctly captured in BTD (undeveloped)

- G7: Barriers in the BTD correctly describe their respective control action including any required system functions (undeveloped)

- G8: All non-negligible threats have been identified (undeveloped)

- G5: Quantitative risk estimates are accurate and below acceptable threshold

- G9: State probability distribution used for risk estimation is an accurate representation of expected system states (undeveloped)

- G10: Estimated probability of "collision" is below allowable threshold for severity class "Major" (uninstantiated)

- Sn1: Estimated risk level "10^-3 per hour"

- G3: Risk from "Loss of pipeline" has been reduced as low as reasonably practicable

- C2: Assigned severity class is "Minor"

- S4: Apply ReSonAte to estimate level of risk from hazard condition "Loss of pipeline"

- A1: Function {avoidance logic, obstacle detection, command authority} required by "Avoidance Maneuver BTD" is available

- G4: Model "Avoidance Maneuver BTD" accurately describes possible propagation of hazard "Loss of pipeline" (uninstantiated)

- G6: Possible hazard propagation paths correctly captured in BTD (undeveloped)

- G7: Barriers in the BTD correctly describe their respective control action including any required system functions (undeveloped)

- G8: All non-negligible threats have been identified (undeveloped)

- G5: Quantitative risk estimates are accurate and below acceptable threshold

- G9: State probability distribution used for risk estimation is an accurate representation of expected system states (undeveloped)

- G10: Estimated probability of "collision" is below allowable threshold for severity class "Minor" (uninstantiated)

- Sn1: Estimated risk level "10^-3 per hour"

```

This tree structure represents the instantiated assurance case for the BlueROV2 system following the given assurance case pattern. The undeveloped and uninstantiated parts need further elaboration to complete the assurance case.