Here is the instantiated assurance case for the BlueROV2 system, based on the given assurance case pattern and domain-specific information.

```

Goal (G1, Hazards for BlueROV2 system addressed in accordance with ALARP principle)

-

Strategy (S1, Argument by risk reduction/elimination of each hazard)

-

Goal (G2, No intolerable risks present in the system)

-

Context (C1, Definition of "intolerable")

-

Strategy (S2, Argument that risk posed by any remaining hazards is negligible) [Undeveloped]

-

Strategy (S3, Argument that no other risks have been identified) [Undeveloped]

-

Goal (G3, Risk from obstacle encounter has been reduced as low as reasonably practicable)

-

Context (C2, Assigned severity class is Major)

-

Strategy (S4, Apply ReSonAte to estimate level of risk from hazard condition obstacle encounter)

-

Assumption (A1, Function avoidance logic required by BTD is available)

-

Goal (G4, Model obstacle encounter BTD accurately describes possible propagation of hazard obstacle encounter)

-

Goal (G6, Possible hazard propagation paths correctly captured in BTD) [Undeveloped]

-

Goal (G7, Barriers in the BTD correctly describe their respective control action including any required system functions) [Undeveloped]

-

Goal (G8, All non-negligible threats have been identified) [Undeveloped]

-

Goal (G5, Quantitative risk estimates are accurate and below acceptable threshold)

-

Goal (G9, State probability distribution used for risk estimation is an accurate representation of expected system states) [Undeveloped]

-

Goal (G10, Estimated probability of collision is below allowable threshold for severity class)

-

Solution (Sn1, Estimated risk level 10^-3 per hour)

```

This hierarchical tree format outlines the assurance case for BlueROV2 system, following the given pattern and domain-specific details. It includes instantiated information for hazards, severity levels, and risk estimates specific to the BlueROV2 system, aligning with the ALARP principle for safety assurance.