Airworthiness Smart Contract

```
Airworthiness.constructor(address)._regulatoryAuthority (contracts/Airworthiness.sol#27) lacks a zero-check on :
                - regulatoryAuthority = _regulatoryAuthority (contracts/Airworthiness.sol#28)
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#missing-zero-address-validation

Pragma version^0.8.0 (contracts/Airworthiness.sol#2) allows old versions
solc-0.8.26 is not recommended for deployment
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#incorrect-versions-of-solidity
contracts/Airworthiness.sol analyzed (2 contracts with 81 detectors), 3 result(s) found
```

```
Compiled with solc
Number of lines: 67 (+ 0 in dependencies, + 0 in tests)
Number of assembly lines: 0
Number of contracts: 2 (+ 0 in dependencies, + 0 tests)

Number of optimization issues: 0
Number of informational issues: 2
Number of low issues: 1
Number of medium issues: 0
Number of high issues: 0
```

Name	# functions	ERCS	ERC20 info	Complex code	Features
UAVPassportNFTInterface	1			No	
Airworthiness	5			No	Tokens interaction

contracts/Airworthiness.sol analyzed (2 contracts)

[After fixing the zero-check issue]

```
Compiled with solc
Number of lines: 68 (+ 0 in dependencies, + 0 in tests)
Number of assembly lines: 0
Number of contracts: 2 (+ 0 in dependencies, + 0 tests)

Number of optimization issues: 0
Number of informational issues: 2
Number of low issues: 0
Number of medium issues: 0
Number of high issues: 0
```

Name	# functions	ERCS	ERC20 info	Complex code	Features
UAVPassportNFTInterface	1			No	
Airworthiness	5			No	Tokens interaction

contracts/Airworthiness.sol analyzed (2 contracts)

TypeCertificate Smart Contract

```
Pragma version^0.8.0 (contracts/TypeCertificate.sol#2) allows old versions
solc-0.8.26 is not recommended for deployment
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#incorrect-versions-of-solidity
contracts/TypeCertificate.sol analyzed (1 contracts with 81 detectors), 2 result(s) found
```

```
Compiled with solc
Number of lines: 159 (+ 0 in dependencies, + 0 in tests)
Number of assembly lines: 0
Number of contracts: 1 (+ 0 in dependencies, + 0 tests)

Number of optimization issues: 0
Number of informational issues: 2
Number of low issues: 0
Number of medium issues: 0
Number of high issues: 0
```

Name	# functions	ERCS	ERC20 info	Complex code	Features
TypeCertificate	11			No	

contracts/TypeCertificate.sol analyzed (1 contracts)

CertificateNFT Smart Contract

```
Pragma version^0.8.20 (contracts/CertificateNFT.sol#2) necessitates a version too recent to be trusted. Consider deploying with 0.6.12/0.7.6/0.8.16
Pragma version^0.8.20 (contracts/CertificateTypes.sol#2) necessitates a version too recent to be trusted. Consider deploying with 0.6.12/0.7.6/0.8.16
solc-0.8.26 is not recommended for deployment
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#incorrect-versions-of-solidity
contracts/CertificateNFT.sol analyzed (23 contracts with 81 detectors), 3 result(s) found

Compiled with solc
Number of lines: 3893 (+ 0 in dependencies, + 0 in tests)
Number of assembly lines: 0
Number of contracts: 23 (+ 0 in dependencies, + 0 tests)

Number of optimization issues: 0
Number of informational issues: 3
Number of low issues: 0
Number of medium issues: 0
Number of high issues: 0

ERCs: ERC165, ERC721

+-------------------------+-------------+---------------+------------+--------------+----------+
|          Name           | # functions |      ERCS     | ERC20 info | Complex code | Features |
+-------------------------+-------------+---------------+------------+--------------+----------+
|      IERC20Errors       |      0      |               |            |      No      |          |
|     IERC1155Errors      |      0      |               |            |      No      |          |
|    IERC721Receiver      |      1      |               |            |      No      |          |
|      ERC721Utils        |      1      |               |            |      No      | Assembly |
|          Panic          |      2      |               |            |      No      | Assembly |
|         Strings         |      29     |               |            |     Yes      | Assembly |
|          Math           |      28     |               |            |     Yes      | Assembly |
|         SafeCast        |      65     |               |            |      No      | Assembly |
|       SignedMath        |      5      |               |            |      No      |          |
| AirworthinessInterface  |      2      |               |            |      No      |          |
|     CertificateNFT      |      78     | ERC165,ERC721 |            |      No      |          |
|    CertificateTypes     |      0      |               |            |      No      |          |
+-------------------------+-------------+---------------+------------+--------------+----------+
contracts/CertificateNFT.sol analyzed (23 contracts)
```

UAVPassportNFT Smart Contract

```
Reentrancy in UAVPassportNFT.linkCertificate(uint256,address,uint256) (contracts/UAVPassportNFT.sol#92-114):
        External calls:
        - certificate.safeTransferFrom(msg.sender,address(this),certificateTokenId) (contracts/UAVPassportNFT.sol#104)
        State variables written after the call(s):
        - linkedCertificates[uavTokenId].push(LinkedCertificate(certificateContractAddress,certificateTokenId,ctype)) (contracts/UAVPassportNFT.sol#107-111)
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#reentrancy-vulnerabilities-2

Reentrancy in UAVPassportNFT.linkCertificate(uint256,address,uint256) (contracts/UAVPassportNFT.sol#92-114):
        External calls:
        - certificate.safeTransferFrom(msg.sender,address(this),certificateTokenId) (contracts/UAVPassportNFT.sol#104)
        Event emitted after the call(s):
        - CertificateLinked(uavTokenId,ctype,certificateContractAddress,certificateTokenId) (contracts/UAVPassportNFT.sol#113)
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#reentrancy-vulnerabilities-3

Pragma version^0.8.20 (contracts/CertificateNFT.sol#2) necessitates a version too recent to be trusted. Consider deploying with 0.6.12/0.7.6/0.8.16
Pragma version^0.8.20 (contracts/CertificateTypes.sol#2) necessitates a version too recent to be trusted. Consider deploying with 0.6.12/0.7.6/0.8.16
Pragma version^0.8.20 (contracts/UAVPassportNFT.sol#2) necessitates a version too recent to be trusted. Consider deploying with 0.6.12/0.7.6/0.8.16
solc-0.8.26 is not recommended for deployment
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#incorrect-versions-of-solidity
contracts/UAVPassportNFT.sol analyzed (24 contracts with 81 detectors), 6 result(s) found
```

```
Compiled with solc
Number of lines: 4056 (+ 0 in dependencies, + 0 in tests)
Number of assembly lines: 0
Number of contracts: 24 (+ 0 in dependencies, + 0 tests)

Number of optimization issues: 0
Number of informational issues: 4
Number of low issues: 2
Number of medium issues: 0
Number of high issues: 0

ERCs: ERC721, ERC165
```

Name	# functions	ERCS	ERC20 info	Complex code	Features
IERC20Errors	0			No	
IERC1155Errors	0			No	
ERC721Utils	1			No	Assembly
Panic	2			No	Assembly
Strings	29			Yes	Assembly
Math	28			Yes	Assembly
SafeCast	65			No	Assembly
SignedMath	5			No	
AirworthinessInterface	2			No	
CertificateNFT	78	ERC165,ERC721		No	
CertificateTypes	0			No	
UAVPassportNFT	82	ERC165,ERC721		No	Tokens interaction

```
contracts/UAVPassportNFT.sol analyzed (24 contracts)
```

[After fixing reentrancy issues]

```
Compiled with solc
Number of lines: 4057 (+ 0 in dependencies, + 0 in tests)
Number of assembly lines: 0
Number of contracts: 24 (+ 0 in dependencies, + 0 tests)

Number of optimization issues: 0
Number of informational issues: 4
Number of low issues: 0
Number of medium issues: 0
Number of high issues: 0

ERCs: ERC721, ERC165
```

Name	# functions	ERCS	ERC20 info	Complex code	Features
IERC20Errors	0			No	
IERC1155Errors	0			No	
ERC721Utils	1			No	Assembly
Panic	2			No	Assembly
Strings	29			Yes	Assembly
Math	28			Yes	Assembly
SafeCast	65			No	Assembly
SignedMath	5			No	
AirworthinessInterface	2			No	
CertificateNFT	78	ERC165,ERC721		No	
CertificateTypes	0			No	
UAVPassportNFT	82	ERC165,ERC721		No	Tokens interaction

```
contracts/UAVPassportNFT.sol analyzed (24 contracts)
```