CLARA BARTON
INTERNATIONAL HUMANITARIAN LAW COMPETITION

Round 5

Side A Role: Forden
Side B Role: Hatchia
Side C Role: Laudest
Side D Role: Runyore

Prep Window:
7:35-8:35am

Test Window:
8:40-9:15am

Room Assignments:	17-G30	17-LL30	E-G08	17-LL20
Side A:	1	2	3	4
Side B:	5	7	6	8
Side C:	9	10	11	12
Side D:	15	16	14	13

Immediately after the round concludes, there will be a 20-minute window for judge feedback in the same room.

Hello all,

As you know, Operation Albatross, this combined force mission, was created by the governments of Forden, Hatchia, Laudest, and Runyore after the conflict with the Sea Lions in the Stodga Sea reached its current level of intensity. We are hoping that Albatross will be able to quickly and decisively end hostilities by displaying overwhelming force through a series of coordinated strikes, thereby motivating the Sea Lions to come to the negotiating table.

We have identified four separate targets that we'd like to strike in short order. Each military has contributed one unit to the operation; however, given the time-sensitive nature of the operation, each unit can only be used to strike one target. As each military is bound by their own rules of engagement for their respective units, it now falls to all of you to determine the legality of using your military's unit on our desired targets.

Initial Assignments:

Forden	Runyore	Hatchia	Laudest
St. Angel Hospital	Oyster Pearl Hotel	LaRochelle Dam	Kuster Bridge

To aid in your analysis, please see the following documents that discuss the targets and our available units in greater detail. Please come to our meeting today prepared to both brief operational leaders on your findings and then discuss mutually acceptable unit/target assignments with your counterparts.

Thanks,
Col. Brennan Aguefort

Targets

1. St. Angel Hospital

- There are conflicting reports that St. Angel's may host a Sea Lions command post that provides supplies and support to the group's nearby fortifications. It is believed that there are extensive caches of weapons, intel, and other health supplies in the basement of the hospital.
- It is confirmed that St. Angel is treating a high-priority Sea Lion deputy; this is the first time in years he has had a verified location. If you don't strike now, he will almost certainly go underground again.
- The hospital is clearly marked with the red cross on every outdoor wall and on the respective roofs. The hospital is a five story, tier 1 trauma center, and serves as the sole public health facility in a 40mi radius.
- Hospital is located 95m from a historic place of worship for the community. The place of worship is usually busy during morning (8-10am) and evening (6-8pm) prayers. It contains a large, active congregation that regularly lines up outside before being admitted one by one into the site.
  - Most doctors and staff are members of the church and will attend the services in the morning and evening leaving skeleton crews to attend to patients and other facilities.

Expected Casualty/Success Rate
Prayer time:

- **Special Forces (SF) Team: (8-20 deaths)** Attacking hospital directly yields lowest expected casualty rate of civilians due to attendance of staff at local worship facility
- **Guided Munition: (30-60 deaths)** Guided munition will allow for concentrated attack on NSAG occupied area and will drastically lower collateral harm to local worship facility.
- **Non Guided Munition: (75-150 deaths)** Larger munitions will create collateral issues of civilians participating in local worship services and harm more staff members due to size of payload.
- **Artificial Intelligence (AI) Byron Dynamic (BD) Strike Team:** (1-? Deaths) AI BD team will result in no armed forces deaths as the team are robots. However, difficulty in AI screening for distinction may result in civilian deaths during crossfire or may prevent zero deaths due to advanced targeting analysis software.
- **Important:** Attacking during non prayer time will ensure higher chance of killing deputy of NSAG and destroying or securing all NSAG caches in the basement of the Hospital

Non prayer time:

- **SF Team: (50-60 deaths)** Attacking directly increases death toll because the hospital is now fully staffed as members are not at the worship facility. This also increases risks of cross fire between NSAG members and state armed forces
- **Guided Munitions: (200-300 deaths)** Attacking with guided munitions increases death toll due to full staffing but still eliminates risk of collateral damage to worship facility.
- **Non Guided Munitions: (400-500 deaths)** Larger munitions will damage multiple floors of the hospital and will create collateral damage at the local worship facility. Increased death toll is due to presence of entire staff within the hospital.
- **AI Byron Dynamic (BD) Strike Team: (1-? Deaths)** AI BD team will result in no armed forces deaths as the team are robots. However, difficulty in AI screening for distinction may result in civilian deaths during crossfire or may prevent zero deaths due to advanced targeting analysis software. Further, there is a risk that this classified technology could be reverse engineered if they are destroyed/captured and then used by NSAG.
- **Important:** There is not a guarantee of death of the NSAG Deputy nor securing the caches of supplies and intel allegedly located in the basement.

2. Oyster Pearl Hotel

- The 7-floor hotel is located in a heavily civilian area with a busy road in front of it.
- Hotel is holding an international conference for coffee and the day of the attack would be the day of the opening ceremony. Risks include harming citizens of many different international states
- It is believed that the Sea Lions are operating out of 5th and 6th floors of the hotel. Additionally, it is alleged that the Sea Lions are using vendors at the conference to pass regional intel to different members of the international community

Expected Casualty Rate

- **SF Team: (20-40 deaths)** Attacking directly incurs the risk of collateral deaths from the conference attendees being panicked and getting involved in crossfire. However, a smaller team allows for quicker entry and searching and eliminating NSAG activity within the hotel. Additionally, civilian collateral damage can be minimized by the SF team entering away from main corridors.

- **Guided Munitions: (75-100 deaths)** Attacking with guided munitions increases death toll due to the hotel containing guests, a conference and being near busy roads. However, guided munition allows for targeting solely the fifth and sixth floors and prevents conference from being harmed.
- **Non Guided Munitions: (400-500 deaths)** Larger munitions will damage multiple floors of the hotel and may not necessarily hit the fifth and sixth floors. This would harm the civilians lodging there for the time being. Additionally, there is risk that the conference could be directly hit resulting in many civilian deaths and drawing actions from the international community.
- **AI Byron Dynamic (BD) Strike Team: (1-? Deaths)** AI BD team will result in no armed forces deaths as the team are robots. However, difficulty in AI screening for distinction may result in civilian deaths during crossfire or may prevent zero deaths due to advanced targeting analysis software. Strike team is under strict protocol to avoid conference minimizing risk of engaging NSAG members there. Additionally, there is a risk that this classified technology could be reverse engineered if they are destroyed/captured and then used by NSAG. Exposure to international community may call into issue the use of autonomous weapons in conflicts.

3. LaRochelle Dam

- The Sea Lions are siphoning energy from this hydro-electric dam to provide energy to their command posts throughout the region. Striking the dam would negate power supplies; however the dam also provides energy to other locales including hospitals and local cities. Striking the dam could also create a flood which would harm the farming towns below it.

Expected Casualty Rate

- **SF Team: (1-10 deaths)** Small team allows for a focused entry and controlled charge coordination on the dam. This allows for internal systems to be terminated without harming the dam's structural integrity. Civilian deaths could occur from explosions from the team. No NSAG members are expected to be present at the dam. Damage can be repaired quickly and get power back to NSAG. Expect issue to be fixed within eight weeks.

- **Guided Munitions: (75-100 deaths)** Attacking with guided munitions increases death toll due to the harming infrastructure of the dam and causing damage downstream to local communities. Due to lower munition weight the damage to the dam will be lower resulting in less flooding down stream. However, it will harm the towns in the region below with flooding homes, causing vehicle accidents with downed traffic signals, and patients needing electricity to survive in hospitals. Power will return in 5-8 months as the dam will be fixed.
- **Non Guided Munitions: (1000-2000 deaths)** Larger munitions will cause massive structural issues to the dam and cause severe flooding to all towns downstream from the dam. Extensive power outage will cause hospitals to drastically lower capabilities and many civilians will perish. However, it will prevent NSAG from having power to command posts for 1-1.5 years.
- **AI Byron Dynamic (BD) Strike Team: (1-? Deaths)** AI BD team will result in no armed forces deaths as the team are robots. They will not target any staff, but are vulnerable to malfunctioning within the deep concrete due to concrete interfering with signal interface to maintain the human override protocol. Results will be similar to strike team; however, there is a risk that this classified technology could be reverse engineered if they are destroyed/captured and then used by NSAG.

4. Kuster Bridge

- Kuster Bridge is located in a remote part of the country where rural populations use it cross the wide river. It is the only crossing point for miles and is crucial for local trade and commuting. However, it is noted that NSAG have outposts in the local rural region and actively use the bridge to move weapons, troops, and other supplies across it. The bridge is composed of a mix of reinforced concrete and steel and destroying it would cause it to collapse into the river. There is no means to remove the rubble which would pollute the water and obstruct local river trade.

Expected Casualty Rate

- **SF Team: (0 deaths)** Small team allows for a focused deployment and tactical placing of charges. Team has capability to choose when to place charges and strike. Due to lack of NSAG and civilian presence, it is expected that there will be minimum deaths from completion of the mission. However, small team means smaller charges and it will pause use for only a short duration. Expect return of operations at two months. Waterway will still be available.

- **Guided Munitions: (15-30 deaths)** guided munitions will be able to strike bridge, but due to inability to delay it has to be used during day time when the bridge is being used. Civilian death toll may result during what is traveling across the bridge during the strike. It is recommended that the strike occur mid day when most individuals are resting and eating lunch and bridge use is at its slowest traffic. Any other time will see death toll to increase twice the expected rate. Expect bridge to return to use in 6 months and river use in three months as repairs are made.
- **Non Guided Munitions: (50-70 deaths)** Larger munitions will cause massive structural issues to the bridge and will greatly delay the bridge and water as transportation routes are blocked. Similar to guided munitions, this must be used during the day time. Similar advice is given for time frame to attack, and death is expected to be higher due to larger munition size. Use of this will put the bridge and waterway out of commission equally for 1-1.5 years. Lack of bridge for a sustained period of time will greatly harm civilian economy and access to basic needs.
- **AI Byron Dynamic (BD) Strike Team: (1-? Deaths)** AI BD team will result in minimal casualties but cannot carry large payload into the deployment. Additionally, it is recommended that the team be deployed quickly because they cannot sustain outside their cells for long periods of activity. Deployment should happen in the morning or around lunch time to prevent casualties. Runs risk of classified information being discovered or reverse engineered if captured. Bridge will return to use in two months and river will be opened in a month.

Options to strike: 4 options

- **Forden: Special Forces Team:** small, concentrated team able to maneuver in tight settings. Weapons are designed for peer to peer conflict and will not cause overall structural damage. Team is better at delineating between civilians and targets; however, threats of being exposed from other civilians during operation leading to wider conflict than expected and possible issues of civilians being caught in crossfires.
- **Hatchia: Guided Bomb Unit (Explosive Free fall bombs):** large munitions of around 2000lbs that can be used to target buildings. Munitions has a high success rate in eliminating targeted structures. Issue is lack of controlled guidance potentially making the use of it indiscriminate if it doesn't hit designated target and fallout into surrounding buildings as a secondary effect.

- **Laudest: Precision Guided Munition – GBU 39 – small diameter bomb:** smaller precision munition with laser guidance with smaller payload size – around 100lbs. Intent is to strike smaller sites with greater munition to ensure that the attack minimizes civilian harm from both the explosion and the associated fragmentation. Generally for taking out smaller specific sites in an urban setting. Drawback is that lack of explosive payload may not eliminate targeted site completely allowing for re-use if not crippled in first strike.
- **Runyore: Byron Dynamic's Artificial Intelligence Strike Team:** Byron Dynamic developed fully functioning robotic Soldiers that can emulate the tactics of the most elite forces of any country. Robots have advanced AI that allows them to make real time decisions premised on IHL principles without need of human intervention. Human override is possible but needs strong signal to reach. Will take direct programming orders from a Chain of Command. The team has not been deployed to the field for actual combat. Strike team is capable of any advanced training as tactics and other skills needed are downloaded in advance. Teams are composed of 10-12 robots.

Forden: Special Forces Team: Rules of Engagement

1. Need two forms of positive identification before engaging armed individual(s)
2. All feasible precautions will be taken to minimize civilian harm
3. Treat all civilians and property with respect and dignity.
4. Use of deadly force is authorized to protect: yourself, your peers, designated civilians, and enemy prisoners of war.
5. You are not authorized to attack civilian infrastructures unless there is verifiable proof that the civilian infrastructure is being used by NSAG.
6. You cannot engage civilians unless you have proof that they are directly participating in hostilities
7. You cannot target individuals who have surrendered or who have become injured and can no longer participate in conflict.
8. You are to conduct yourself with honor and dignity.
9. You are to comply with the rules of war at all times, if you see a law of war violation you are required to report it.
10. Autonomous weapons can be used but needs three levels of approval. Further, autonomous weapons are to be deployed in low civilian areas to prevent classified items being exposed. IHL violations will be imputed on the highest level of command. If items discovered then it will be made public.
11. **If expected ratio of death of troops exceeds 25% of deployed force then they cannot be used**
12. **If strike can only occur in a short window, then only one form of positive ID needs to be taken and no precautions need to be taken to ensure successful strike without alerting NSAG members**

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3. LaRochelle Dam

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Expected Casualty Rate

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- **Guided Munitions: (15-30 deaths)** guided munitions will be able to strike bridge, but due to inability to delay it has to be used during day time when the bridge is being used. Civilian death toll may result during what is traveling across the bridge during the strike. It is recommended that the strike occur mid day when most individuals are resting and eating lunch and bridge use is at its slowest traffic. Any other time will see death toll to increase twice the expected rate. Expect bridge to return to use in 6 months and river use in three months as repairs are made.
- **Non Guided Munitions: (50-70 deaths)** Larger munitions will cause massive structural issues to the bridge and will greatly delay the bridge and water as transportation routes are blocked. Similar to guided munitions, this must be used during the day time. Similar advice is given for time frame to attack, and death is expected to be higher due to larger munition size. Use of this will put the bridge and waterway out of commission equally for 1-1.5 years. Lack of bridge for a sustained period of time will greatly harm civilian economy and access to basic needs.
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Options to strike: 4 options

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Hatchia: Guided Bomb Unit: Rules of Engagement

1. Need one form of positive identification before engaging armed individual(s)
   a. If calling in an air asset, then air asset needs to get a positive ID to confirm selected target is correct before engagement.
2. Feasible precautions will be taken to minimize civilian harm
   a. If engaging civilian area then at a minimum:
      i. Announcements 48hrs in advance will be made informing civilians to evacuate
         1. This must be done via at least one medium (list is non-exhaustive):
            a. Leaflets, local news, speakers, commonly used online platforms
            b. If strike is immediate,the only precaution necessary is warning local community within 2hrs prior to strike
3. Collateral damage must be calculated prior to any attack. Collateral damage is expected to be kept at the smallest ratio possible.
   a. If the ratio of expected civilian casualties exceeds twice the number of expected target deaths, then higher command approval is required for the strike
   b. If civilian death rate exceeds triple rate then we need four star command approval
   c. If civilian infrastructure is to be damaged beyond a year, then we need three star command approval
4. Treat all civilians and property with respect and dignity.
5. Use of deadly force is authorized to protect: yourself, your peers, designated civilians, enemy prisoners of war, and crucial civilian infrastructure sites like dams, power plants, etc.
6. You are not authorized to attack civilian infrastructures unless there is verifiable proof that the civilian infrastructure is being used by NSAG.
7. You cannot engage civilians unless you have proof that they are directly participating in hostilities
   a. Once an individual has directly assisted an NSAG via physical, financial, or other means of support they can be targeted for detention. They can only be fired upon if they are directly attacking you. Direct participation does not end when the support action ends.

Rules of Engagement Cont.

      b. If detained, then must adhere to respective Geneva Conventions.

      c. If during a fight it seems they are directly participating or have just completed assistance then they can be targeted.

    8. You cannot target individuals who have surrendered or who have become injured and can no longer participate in conflict.

    9. You are to conduct yourself with honor and dignity at all times.

    10. You are to comply with the rules of war at all times, if you see a law of war violation you are required to report it.

    11. The use of autonomous weapons are prohibited by IHL and will not be used.

    12. Only risk of total elimination of team prevents deployment.

Lou Seacaster <lseacaster@jagops.for> Zac Thistlespring <zacthis@runyore.gov>　☆ ↰ ⋮
Emily Faeth <efa20@mod.hat> Siobhan Abernant <sabernant@mil.lau>
from Brennan Aguefort <brag@albatross.gov

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- **Guided Munitions: (200-300 deaths)** Attacking with guided munitions increases death toll due to full staffing but still eliminates risk of collateral damage to worship facility.
- **Non Guided Munitions: (400-500 deaths)** Larger munitions will damage multiple floors of the hospital and will create collateral damage at the local worship facility. Increased death toll is due to presence of entire staff within the hospital.
- **AI Byron Dynamic (BD) Strike Team: (1-? Deaths)** AI BD team will result in no armed forces deaths as the team are robots. However, difficulty in AI screening for distinction may result in civilian deaths during crossfire or may prevent zero deaths due to advanced targeting analysis software. Further, there is a risk that this classified technology could be reverse engineered if they are destroyed/captured and then used by NSAG.
- **Important:** There is not a guarantee of death of the NSAG Deputy nor securing the caches of supplies and intel allegedly located in the basement.

2. Oyster Pearl Hotel

- The 7-floor hotel is located in a heavily civilian area with a busy road in front of it.
- Hotel is holding an international conference for coffee and the day of the attack would be the day of the opening ceremony. Risks include harming citizens of many different international states
- It is believed that the Sea Lions are operating out of 5th and 6th floors of the hotel. Additionally, it is alleged that the Sea Lions are using vendors at the conference to pass regional intel to different members of the international community

Expected Casualty Rate

- **SF Team: (20-40 deaths)** Attacking directly incurs the risk of collateral deaths from the conference attendees being panicked and getting involved in crossfire. However, a smaller team allows for quicker entry and searching and eliminating NSAG activity within the hotel. Additionally, civilian collateral damage can be minimized by the SF team entering away from main corridors.

- **Guided Munitions: (75-100 deaths)** Attacking with guided munitions increases death toll due to the hotel containing guests, a conference and being near busy roads. However, guided munition allows for targeting solely the fifth and sixth floors and prevents conference from being harmed.
- **Non Guided Munitions: (400-500 deaths)** Larger munitions will damage multiple floors of the hotel and may not necessarily hit the fifth and sixth floors. This would harm the civilians lodging there for the time being. Additionally, there is risk that the conference could be directly hit resulting in many civilian deaths and drawing actions from the international community.
- **AI Byron Dynamic (BD) Strike Team: (1-? Deaths)** AI BD team will result in no armed forces deaths as the team are robots. However, difficulty in AI screening for distinction may result in civilian deaths during crossfire or may prevent zero deaths due to advanced targeting analysis software. Strike team is under strict protocol to avoid conference minimizing risk of engaging NSAG members there. Additionally, there is a risk that this classified technology could be reverse engineered if they are destroyed/captured and then used by NSAG. Exposure to international community may call into issue the use of autonomous weapons in conflicts.

3. LaRochelle Dam

- The Sea Lions are siphoning energy from this hydro-electric dam to provide energy to their command posts throughout the region. Striking the dam would negate power supplies; however the dam also provides energy to other locales including hospitals and local cities. Striking the dam could also create a flood which would harm the farming towns below it.

Expected Casualty Rate

- **SF Team: (1-10 deaths)** Small team allows for a focused entry and controlled charge coordination on the dam. This allows for internal systems to be terminated without harming the dam's structural integrity. Civilian deaths could occur from explosions from the team. No NSAG members are expected to be present at the dam. Damage can be repaired quickly and get power back to NSAG. Expect issue to be fixed within eight weeks.

- **Guided Munitions: (75-100 deaths)** Attacking with guided munitions increases death toll due to the harming infrastructure of the dam and causing damage downstream to local communities. Due to lower munition weight the damage to the dam will be lower resulting in less flooding down stream. However, it will harm the towns in the region below with flooding homes, causing vehicle accidents with downed traffic signals, and patients needing electricity to survive in hospitals. Power will return in 5-8 months as the dam will be fixed.
- **Non Guided Munitions: (1000-2000 deaths)** Larger munitions will cause massive structural issues to the dam and cause severe flooding to all towns downstream from the dam. Extensive power outage will cause hospitals to drastically lower capabilities and many civilians will perish. However, it will prevent NSAG from having power to command posts for 1-1.5 years.
- **AI Byron Dynamic (BD) Strike Team: (1-? Deaths)** AI BD team will result in no armed forces deaths as the team are robots. They will not target any staff, but are vulnerable to malfunctioning within the deep concrete due to concrete interfering with signal interface to maintain the human override protocol. Results will be similar to strike team; however, there is a risk that this classified technology could be reverse engineered if they are destroyed/captured and then used by NSAG.

4. Kuster Bridge

- Kuster Bridge is located in a remote part of the country where rural populations use it cross the wide river. It is the only crossing point for miles and is crucial for local trade and commuting. However, it is noted that NSAG have outposts in the local rural region and actively use the bridge to move weapons, troops, and other supplies across it. The bridge is composed of a mix of reinforced concrete and steel and destroying it would cause it to collapse into the river. There is no means to remove the rubble which would pollute the water and obstruct local river trade.

Expected Casualty Rate

- **SF Team: (0 deaths)** Small team allows for a focused deployment and tactical placing of charges. Team has capability to choose when to place charges and strike. Due to lack of NSAG and civilian presence, it is expected that there will be minimum deaths from completion of the mission. However, small team means smaller charges and it will pause use for only a short duration. Expect return of operations at two months. Waterway will still be available.

- **Guided Munitions: (15-30 deaths)** guided munitions will be able to strike bridge, but due to inability to delay it has to be used during day time when the bridge is being used. Civilian death toll may result during what is traveling across the bridge during the strike. It is recommended that the strike occur mid day when most individuals are resting and eating lunch and bridge use is at its slowest traffic. Any other time will see death toll to increase twice the expected rate. Expect bridge to return to use in 6 months and river use in three months as repairs are made.
- **Non Guided Munitions: (50-70 deaths)** Larger munitions will cause massive structural issues to the bridge and will greatly delay the bridge and water as transportation routes are blocked. Similar to guided munitions, this must be used during the day time. Similar advice is given for time frame to attack, and death is expected to be higher due to larger munition size. Use of this will put the bridge and waterway out of commission equally for 1-1.5 years. Lack of bridge for a sustained period of time will greatly harm civilian economy and access to basic needs.
- **AI Byron Dynamic (BD) Strike Team: (1-? Deaths)** AI BD team will result in minimal casualties but cannot carry large payload into the deployment. Additionally, it is recommended that the team be deployed quickly because they cannot sustain outside their cells for long periods of activity. Deployment should happen in the morning or around lunch time to prevent casualties. Runs risk of classified information being discovered or reverse engineered if captured. Bridge will return to use in two months and river will be opened in a month.

Options to strike: 4 options

- **Forden: Special Forces Team:** small, concentrated team able to maneuver in tight settings. Weapons are designed for peer to peer conflict and will not cause overall structural damage. Team is better at delineating between civilians and targets; however, threats of being exposed from other civilians during operation leading to wider conflict than expected and possible issues of civilians being caught in crossfires.
- **Hatchia: Guided Bomb Unit (Explosive Free fall bombs):** large munitions of around 2000lbs that can be used to target buildings. Munitions has a high success rate in eliminating targeted structures. Issue is lack of controlled guidance potentially making the use of it indiscriminate if it doesn't hit designated target and fallout into surrounding buildings as a secondary effect.

- **Laudest: Precision Guided Munition – GBU 39 – small diameter bomb:** smaller precision munition with laser guidance with smaller payload size – around 100lbs. Intent is to strike smaller sites with greater munition to ensure that the attack minimizes civilian harm from both the explosion and the associated fragmentation. Generally for taking out smaller specific sites in an urban setting. Drawback is that lack of explosive payload may not eliminate targeted site completely allowing for re-use if not crippled in first strike.
- **Runyore: Byron Dynamic's Artificial Intelligence Strike Team:** Byron Dynamic developed fully functioning robotic Soldiers that can emulate the tactics of the most elite forces of any country. Robots have advanced AI that allows them to make real time decisions premised on IHL principles without need of human intervention. Human override is possible but needs strong signal to reach. Will take direct programming orders from a Chain of Command. The team has not been deployed to the field for actual combat. Strike team is capable of any advanced training as tactics and other skills needed are downloaded in advance. Teams are composed of 10-12 robots.

Laudest: precision Guided Munitions: Rules of Engagement

1. Need two form of positive identification before engaging armed individual(s)
   a. If calling in an air asset, then air asset needs to get a positive ID to confirm selected target is correct before engagement.
2. Feasible precautions will be taken to minimize civilian harm
   a. If engaging civilian area then at a minimum:
      i. Announcements 48hrs in advance will be made informing civilians to evacuate
         1. This must be done via at least one medium (list is non-exhaustive):
            a. Leaflets, local news, speakers, commonly used online platforms
3. Collateral damage must be calculated prior to any attack. Collateral damage is expected to be kept at the smallest ratio possible.
   a. If the ratio of expected civilian casualties exceeds three times the number of expected target deaths, then higher command approval is required for the strike (next General in chain of command)
   b. Debris calculation must also be done prior to attack to see if any surrounding civilian infrastructure may be impacted.
      i. The radius of damage will be included and if the damage exceeds more than 100 yards then higher command approval will be needed. (O-6 approval)
4. Treat all civilians and property with respect and dignity.
5. Use of deadly force is authorized to protect: yourself, your peers, designated civilians, enemy prisoners of war, and crucial civilian infrastructure sites like dams, power plants, etc.
6. You are not authorized to attack civilian infrastructures unless there is verifiable proof that the civilian infrastructure is being used by NSAG.
   a. All forms of weapons can be used if verified that NSAG is present.
7. You are not authorized to attack civilian infrastructures (list not exhaustive) such as: dams, power plants, etc. regardless if they may provide support to NSAG. It is imperative to ensure that threats to civilians livelihoods are minimized.

Rules of Engagement Cont.

8. You cannot target religious or culturally important places.
   a. If in radius of projected debris then first General in chain of command must approve of action. Minimal form of damage is prime consideration.
9. You normally cannot target environmentally critical sites.
   a. Environmentally critical sites as collateral is acceptable if the damage done is not irreparable. You will need higher level approval before engaging.
10. You cannot engage civilians unless you have proof that they are directly participating in hostilities
    a. Once an individual has directly assisted an NSAG via physical, financial, or other means of support they can be targeted for detention. Direct participation ends once their action of alleged support is done in that specific instance. You cannot target the individual after the action occurs or if before support occurs based on prior observations.
11. You cannot target individuals who have surrendered or who have become injured and can no longer participate in conflict.
    a. If there are no clear signs of surrender then you are able to continue engaging opponents
12. You are to conduct yourself with honor and dignity at all times.
13. You are to comply with the rules of war at all times.
    a. You are not required to report IHL violations unless you have verifiable proof that one occurred.
14. Autonomous weapons are permitted, but there needs to be multiple levels of human override if it fails to follow IHL. Failure to follow IHL will be imputed onto to the lowest to highest commander who ultimately chose to use them. If made public, will accept use.

Lou Seacaster <lseacaster@jagops.for> Zac Thistlespring <zacthis@runyore.gov>
Emily Faeth <efa20@mod.hat> Siobhan Abernant <sabernant@mil.lau>
from Brennan Aguefort <brag@albatross.gov

Hello all,

As you know, Operation Albatross, this combined force mission, was created by the governments of Forden, Hatchia, Laudest, and Runyore after the conflict with the Sea Lions in the Stodga Sea reached its current level of intensity. We are hoping that Albatross will be able to quickly and decisively end hostilities by displaying overwhelming force through a series of coordinated strikes, thereby motivating the Sea Lions to come to the negotiating table.

We have identified four separate targets that we'd like to strike in short order. Each military has contributed one unit to the operation; however, given the time-sensitive nature of the operation, each unit can only be used to strike one target. As each military is bound by their own rules of engagement for their respective units, it now falls to all of you to determine the legality of using your military's unit on our desired targets.

Initial Assignments:

Forden	Runyore	Hatchia	Laudest
St. Angel Hospital	Oyster Pearl Hotel	LaRochelle Dam	Kuster Bridge

To aid in your analysis, please see the following documents that discuss the targets and our available units in greater detail. Please come to our meeting today prepared to both brief operational leaders on your findings and then discuss mutually acceptable unit/target assignments with your counterparts.

Thanks,
Col. Brennan Aguefort

Targets

1. St. Angel Hospital

- There are conflicting reports that St. Angel's may host a Sea Lions command post that provides supplies and support to the group's nearby fortifications. It is believed that there are extensive caches of weapons, intel, and other health supplies in the basement of the hospital.
- It is confirmed that St. Angel is treating a high-priority Sea Lion deputy; this is the first time in years he has had a verified location. If you don't strike now, he will almost certainly go underground again.
- The hospital is clearly marked with the red cross on every outdoor wall and on the respective roofs. The hospital is a five story, tier 1 trauma center, and serves as the sole public health facility in a 40mi radius.
- Hospital is located 95m from a historic place of worship for the community. The place of worship is usually busy during morning (8-10am) and evening (6-8pm) prayers. It contains a large, active congregation that regularly lines up outside before being admitted one by one into the site.
  - Most doctors and staff are members of the church and will attend the services in the morning and evening leaving skeleton crews to attend to patients and other facilities.

Expected Casualty/Success Rate
Prayer time:

- **Special Forces (SF) Team: (8-20 deaths)** Attacking hospital directly yields lowest expected casualty rate of civilians due to attendance of staff at local worship facility
- **Guided Munition: (30-60 deaths)** Guided munition will allow for concentrated attack on NSAG occupied area and will drastically lower collateral harm to local worship facility.
- **Non Guided Munition: (75-150 deaths)** Larger munitions will create collateral issues of civilians participating in local worship services and harm more staff members due to size of payload.
- **Artificial Intelligence (AI) Byron Dynamic (BD) Strike Team:** (1-? Deaths) AI BD team will result in no armed forces deaths as the team are robots. However, difficulty in AI screening for distinction may result in civilian deaths during crossfire or may prevent zero deaths due to advanced targeting analysis software.
- **Important:** Attacking during non prayer time will ensure higher chance of killing deputy of NSAG and destroying or securing all NSAG caches in the basement of the Hospital

Non prayer time:

- **SF Team: (50-60 deaths)** Attacking directly increases death toll because the hospital is now fully staffed as members are not at the worship facility. This also increases risks of cross fire between NSAG members and state armed forces
- **Guided Munitions: (200-300 deaths)** Attacking with guided munitions increases death toll due to full staffing but still eliminates risk of collateral damage to worship facility.
- **Non Guided Munitions: (400-500 deaths)** Larger munitions will damage multiple floors of the hospital and will create collateral damage at the local worship facility. Increased death toll is due to presence of entire staff within the hospital.
- **AI Byron Dynamic (BD) Strike Team: (1-? Deaths)** AI BD team will result in no armed forces deaths as the team are robots. However, difficulty in AI screening for distinction may result in civilian deaths during crossfire or may prevent zero deaths due to advanced targeting analysis software. Further, there is a risk that this classified technology could be reverse engineered if they are destroyed/captured and then used by NSAG.
- **Important:** There is not a guarantee of death of the NSAG Deputy nor securing the caches of supplies and intel allegedly located in the basement.

2. Oyster Pearl Hotel

- The 7-floor hotel is located in a heavily civilian area with a busy road in front of it.
- Hotel is holding an international conference for coffee and the day of the attack would be the day of the opening ceremony. Risks include harming citizens of many different international states
- It is believed that the Sea Lions are operating out of 5th and 6th floors of the hotel. Additionally, it is alleged that the Sea Lions are using vendors at the conference to pass regional intel to different members of the international community

Expected Casualty Rate

- **SF Team: (20-40 deaths)** Attacking directly incurs the risk of collateral deaths from the conference attendees being panicked and getting involved in crossfire. However, a smaller team allows for quicker entry and searching and eliminating NSAG activity within the hotel. Additionally, civilian collateral damage can be minimized by the SF team entering away from main corridors.

- **Guided Munitions: (75-100 deaths)** Attacking with guided munitions increases death toll due to the hotel containing guests, a conference and being near busy roads. However, guided munition allows for targeting solely the fifth and sixth floors and prevents conference from being harmed.
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- **AI Byron Dynamic (BD) Strike Team: (1-? Deaths)** AI BD team will result in no armed forces deaths as the team are robots. However, difficulty in AI screening for distinction may result in civilian deaths during crossfire or may prevent zero deaths due to advanced targeting analysis software. Strike team is under strict protocol to avoid conference minimizing risk of engaging NSAG members there. Additionally, there is a risk that this classified technology could be reverse engineered if they are destroyed/captured and then used by NSAG. Exposure to international community may call into issue the use of autonomous weapons in conflicts.

3. LaRochelle Dam

- The Sea Lions are siphoning energy from this hydro-electric dam to provide energy to their command posts throughout the region. Striking the dam would negate power supplies; however the dam also provides energy to other locales including hospitals and local cities. Striking the dam could also create a flood which would harm the farming towns below it.

Expected Casualty Rate

- **SF Team: (1-10 deaths)** Small team allows for a focused entry and controlled charge coordination on the dam. This allows for internal systems to be terminated without harming the dam's structural integrity. Civilian deaths could occur from explosions from the team. No NSAG members are expected to be present at the dam. Damage can be repaired quickly and get power back to NSAG. Expect issue to be fixed within eight weeks.

- **Guided Munitions: (75-100 deaths)** Attacking with guided munitions increases death toll due to the harming infrastructure of the dam and causing damage downstream to local communities. Due to lower munition weight the damage to the dam will be lower resulting in less flooding down stream. However, it will harm the towns in the region below with flooding homes, causing vehicle accidents with downed traffic signals, and patients needing electricity to survive in hospitals. Power will return in 5-8 months as the dam will be fixed.
- **Non Guided Munitions: (1000-2000 deaths)** Larger munitions will cause massive structural issues to the dam and cause severe flooding to all towns downstream from the dam. Extensive power outage will cause hospitals to drastically lower capabilities and many civilians will perish. However, it will prevent NSAG from having power to command posts for 1-1.5 years.
- **AI Byron Dynamic (BD) Strike Team: (1-? Deaths)** AI BD team will result in no armed forces deaths as the team are robots. They will not target any staff, but are vulnerable to malfunctioning within the deep concrete due to concrete interfering with signal interface to maintain the human override protocol. Results will be similar to strike team; however, there is a risk that this classified technology could be reverse engineered if they are destroyed/captured and then used by NSAG.

4. Kuster Bridge

- Kuster Bridge is located in a remote part of the country where rural populations use it cross the wide river. It is the only crossing point for miles and is crucial for local trade and commuting. However, it is noted that NSAG have outposts in the local rural region and actively use the bridge to move weapons, troops, and other supplies across it. The bridge is composed of a mix of reinforced concrete and steel and destroying it would cause it to collapse into the river. There is no means to remove the rubble which would pollute the water and obstruct local river trade.

Expected Casualty Rate

- **SF Team: (0 deaths)** Small team allows for a focused deployment and tactical placing of charges. Team has capability to choose when to place charges and strike. Due to lack of NSAG and civilian presence, it is expected that there will be minimum deaths from completion of the mission. However, small team means smaller charges and it will pause use for only a short duration. Expect return of operations at two months. Waterway will still be available.

- **Guided Munitions: (15-30 deaths)** guided munitions will be able to strike bridge, but due to inability to delay it has to be used during day time when the bridge is being used. Civilian death toll may result during what is traveling across the bridge during the strike. It is recommended that the strike occur mid day when most individuals are resting and eating lunch and bridge use is at its slowest traffic. Any other time will see death toll to increase twice the expected rate. Expect bridge to return to use in 6 months and river use in three months as repairs are made.
- **Non Guided Munitions: (50-70 deaths)** Larger munitions will cause massive structural issues to the bridge and will greatly delay the bridge and water as transportation routes are blocked. Similar to guided munitions, this must be used during the day time. Similar advice is given for time frame to attack, and death is expected to be higher due to larger munition size. Use of this will put the bridge and waterway out of commission equally for 1-1.5 years. Lack of bridge for a sustained period of time will greatly harm civilian economy and access to basic needs.
- **AI Byron Dynamic (BD) Strike Team: (1-? Deaths)** AI BD team will result in minimal casualties but cannot carry large payload into the deployment. Additionally, it is recommended that the team be deployed quickly because they cannot sustain outside their cells for long periods of activity. Deployment should happen in the morning or around lunch time to prevent casualties. Runs risk of classified information being discovered or reverse engineered if captured. Bridge will return to use in two months and river will be opened in a month.

Options to strike: 4 options

- **Forden: Special Forces Team:** small, concentrated team able to maneuver in tight settings. Weapons are designed for peer to peer conflict and will not cause overall structural damage. Team is better at delineating between civilians and targets; however, threats of being exposed from other civilians during operation leading to wider conflict than expected and possible issues of civilians being caught in crossfires.
- **Hatchia: Guided Bomb Unit (Explosive Free fall bombs):** large munitions of around 2000lbs that can be used to target buildings. Munitions has a high success rate in eliminating targeted structures. Issue is lack of controlled guidance potentially making the use of it indiscriminate if it doesn't hit designated target and fallout into surrounding buildings as a secondary effect.

- **Laudest: Precision Guided Munition – GBU 39 – small diameter bomb:** smaller precision munition with laser guidance with smaller payload size – around 100lbs. Intent is to strike smaller sites with greater munition to ensure that the attack minimizes civilian harm from both the explosion and the associated fragmentation. Generally for taking out smaller specific sites in an urban setting. Drawback is that lack of explosive payload may not eliminate targeted site completely allowing for re-use if not crippled in first strike.
- **Runyore: Byron Dynamic's Artificial Intelligence Strike Team:** Byron Dynamic developed fully functioning robotic Soldiers that can emulate the tactics of the most elite forces of any country. Robots have advanced AI that allows them to make real time decisions premised on IHL principles without need of human intervention. Human override is possible but needs strong signal to reach. Will take direct programming orders from a Chain of Command. The team has not been deployed to the field for actual combat. Strike team is capable of any advanced training as tactics and other skills needed are downloaded in advance. Teams are composed of 10-12 robots.

Runyore: Byron Dynamic's Artifical Intelligence Strike Team: Rules of Engagement

1. Need two form of positive identification before engaging armed individual(s)
   a. If calling in an air asset, air asset doesn't need separate positive ID.
2. Feasible precautions will be taken to minimize civilian harm
   a. If engaging civilian area then Commands should consider an announcement but it is not a requirement. This is to be considered if the announcement may cause the targets to become aware and leave. Element of surprise is a crucial factor.
3. Collateral damage must be calculated prior to any attack. Collateral damage is expected to be kept at the smallest ratio possible.
   a. If the ratio of expected civilian casualties exceeds four times the number of expected target deaths, then higher command approval is required for the strike (next General in chain of command)
      i. No debris calculation is required. It is a part of war.
4. Treat all civilians and property with respect and dignity.
5. Use of deadly force is authorized to protect: yourself, your peers, designated civilians, enemy prisoners of war, and crucial civilian infrastructure sites like dams, power plants, etc.
6. You are not authorized to attack civilian infrastructures unless there is verifiable proof that the civilian infrastructure is being used by NSAG.
7. You are authorized to attack civilian infrastructures (list not exhaustive) such as: dams, power plants, etc. regardless if they may provide support to NSAG. It is imperative to ensure that threats to civilians livelihoods are minimized.
   a. Attacking these needs to be approved by first General in chain of command. Need to ensure that destruction of this infrastructure will cause more harm to NSAG than civilians.
8. You cannot target religious or culturally important places.
   a. If in radius of projected debris then first General in chain of command must approve of action.
      i. No concern of harm to religious or culturally important areas in terms of collateral damage. They can be rebuilt. Primary focus is loss of life.

9. You can target environmental sites so long as it doesn't harm any protected species.

    a. You cannot engage civilians unless you have proof that they are directly participating in hostilities. Proof does not have to be established in real time, but can be established from observing recent videos, images, or from information from credible human assets.

        i. If an individual has directly assisted an NSAG or enemy military in any capacity they can be targeted and selected for detention. Direct participation ends once their action of alleged support is done in that specific instance. You cannot target the individual after the action occurs.

    b. You cannot target individuals who have surrendered or who have become injured and can no longer participate in conflict.

    c. You are to conduct yourself with honor and dignity at all times.

    d. You are to comply with the rules of war at all times, if you see a law of war violation you are required to report it.

    e. You will not commit perfidy nor use items reflecting the red crescent in disguising yourself from being targeted.

    f. Need to minimize risk of classified information being exposed to public. If there is a high chance of exposure to civilian community, then approval must be first General in chain of command.

10. Autonomous weapons are actively encouraged and will immediately be disclosed to public if captured and exposed. No need for multiple levels of human override. If IHL violation occurs, then it is imputed on lowest level commander.