FFUR '85 *(2008 Edition)*

FEATURES:

SLX AI features and Enhancements:

➢ AI routines roughly follow Sun Tzu's "The Art of War." Calculations measuring strength: Morale (strength, skill of leaders, backup, etc), Weather(bad weather affects things, like aircraft and munitions), Terrain (higher altitude versus enemy = tactical advantage) and Skill (of leaders, units).

➢ Higher AI rates of fire at longer ranges, higher man class armor for more wounding while still being easily killed, smaller grenades for more capacity, many changes to missiles to make them work with manual control smoke, vehicles don't deform when they are destroyed, spent casings stay around, less accurate aiming precision, no radar on tanks or APCs, ammo counter removed (only number of magazines or last bullets shown), and many more all listed in the config.cpp.

➢ Squads scan through all other squads to collect information about known friendly and enemy forces and they pass information about enemy squads to each other.

➢ Groups shout out relevant commands while performing most actions and maneuvers.

➢ The strength of a squad is based on the number of armed units, type of vehicles, skill of units, skill of leader, and strength of nearby squads.

➢ Infantry squads rush weaker enemies using bounding over- watch. Squads split up into teams and try to stay in a small group when they are rushing while the other teams are laying down. By rushing in a team it's more likely that one of them will get a shot off when they run into an enemy, where as if they were alone they could be picked off one by one.

➢ Squads take cover when over- matched.

➢ Squad radios for communications. Default radio is SINCGARS (Single Channel Ground and Air Radio System), each side can be set up to have their own type of radio but only the SINCGARS is included as default for all sides, some modern Russian man- pack radios may look similar to the SINCGARS though.

➢ Suppressive fire on squads. Rate of fire is determined from any known enemy, so two rifle squads could suppress if they are all firing.

Visual Effects:

➤ Working smoke concealment. Smoke can not be seen through by AI's but can be walked and shot through.

➤ Ammunition effects. Firing munitions creates effects such as smoke around the barrel, muzzle, and ejection port, a faint vapour trail along the ammunition's trajectory, tracers, munitions are affected by wind, hit effects with debris and dust, and ricochets. Smoke grenades create actual concealment, it takes a few seconds for the AI' s to lose track of you if you're already in their sights, and don't shoot while depending on concealment or the AI's will fire at you. If the AI' s are not targeting you then they will never see you if you stay behind the smoke. The smoke screen is affected by the wind, so if the wind changes the screen will move with it. Smoke is hazardous to breathe in for too long, and being in a confined space with smoke can be deadly. Firing a lot of tracers or explosives can set things on fire. Grass can be set on fire with machine gun tracers. Fire flows downwind, so you can plan for where it might go, but beware a change in wind direction sending the fire somewhere else. Uncontroled fires can cause widespread destruction. Launched grenades are not armed until they reach a safe distance of 14 to 27 meters, but unarmed grenades can still ricochet and hurt things that they hit. If you are using a weapon with good optics and the conditions are right you can see the "trace," or vapor trail, of the shot even if it's not a tracer round. You can use the trace to make corrections to your aim.

➤ Vehicle damage. When a vehicle is damaged an effect will happen relevant to the amount and position of the damage. Vehicle damage effects include munitions malfunctions, fuel leaks, fire, tire blowouts, broken glass, main rotor damage, tail rotor failure, and temporary engine failure. For example, if a helicopter gets hit in the tail rotor causing too much damage it will fail and start to go down. If a vehicle is hit in the engine, fuel tank, or body, it has a chance of starting a fuel leak. If a vehicle is leaking fuel it is vulnerable to catching on fire if it gets damaged again. The extent of the fire is based on the amount of damage the vehicle has, starting out as a small fire and eventually consuming the entire vehicle, then burning back down before extinguishing. The fire does damage to the vehicle and nearby things, ammunition cooks off while burning, and sometimes nearby things get set on fire. Fire can be put out by repairing the vehicle, submerging it in water, going over 400 KPH, or if the fire is small enough you can try using the "put out fire" action (which has a somewhat random chance of working) until the fire goes out. People disembarking from a burning vehicle have a chance of catching fire proportional to the damage of the vehicle. They can put the fire out by getting healed or by keeping moving. People on fire will automatically crawl forward prone to keep moving, you can also try rolling on the ground to put the fire out if you are using a rolling mod such as DMA' s. Helicopters with main rotor damage become more unstable the more damaged they are, eventually tearing themselves apart and crashing if they are too damaged. When a helicopter with main rotor damage crashes it

throws up lots of dirt and dust as the blades are smashed apart on the ground.

➢ AI' s do not eject from damaged helicopters while in the air to increase AI survivability.

➢ Realistic blood effect that appears every time you shoot at a human, even if the body is dead.

➢ The explosion effects follow the basic descriptions of an explosion written in "U.S. Army Field Manual 3- 50 Smoke Operations | Appendix G : Munition-Produced Dust"(http://www.globalsecurity.org/military/library/policy/army/fm/3-50/Appg.htm), the dust/fire ball, the dust skirt, the rising column of smoke, and some small lingering smoke. They are also based on videos of explosions of laser guided bombs, explosive ordinance disposal, hand grenades, aerial rockets and missiles, and improvised explosive devices. The fireball is usually very brief being usually a bright flash then mostly dust, but sometimes has a lot of fire. The dust skirt comes quickly after the dust/fire ball, it lingers for a while after the explosion before disipating. For larger explosions it spreads out over a large area but for smaller explosions it is just a single cloud and looks fairly good for the low fast appearing smoke from hand grenades. The smoke column rises after the explosion and dust skirt and drifts away in the wind, it is usually light grey and sometimes darker. Then a thin low smoke lingers near the crater.

➢ The unguided rocket smoke is based on a videos of helicopters firing rockets, it starts off dark black and then thins out turning grey.

➢ The guided missile smoke is based on pictures and videos of TOW missiles firing, a thin grey smoke that can be seen through, especially since some missiles are gunner controlled.

➢ The water hit effect is based on videos and pictures of bullets hitting water, a thin plume of water.

SLX Disabled effects and features:

➢ Disabled APCs and Tanks deploying smoke walls feature in order to considerably increase the frame-rate level during huge firefights.

➢ Disabled the Main Commander's MG feature because when changing the ammunition type you are using, this feature tend to block the gunner's cannon during a couple of seconds, which might cause some annoying issues, plus the commander's MG uses the gunner's Muzzle Flashes.

Excluding SLX Effects, AI Modifications and Enhancements, FFUR included a couple of nice and realistic Features as well, they are aimed at increasing the immersion level and the realism.

- Realistic Ammunition names and number of shells.
- Realistic Sounds Effects (Weapons, Shells, Engine…), a great combination between Dynamic Range Sounds and CHAMMY's Sound Pack.
- Realistic Blood Effect.
- Realistic Ironsights.
- Realistic Animations, a large selection of the best animations ever carried out (By Sanctuary).
- Immersive Radio Chatter (Russian and US voices).
- Material Effects (Attempt to make them look close to ArmA values).
- Artillery Feature: With the ability to carry out only 1 strike in order to make missions more challenging.
- Ability to establish an MG position: Only if you have a shovel, otherwise you can't.
- Realistic tracers for SAM cannons (ZSU-4-23 and M163).
- Environment SFX. (Trees, Birds, See...).

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