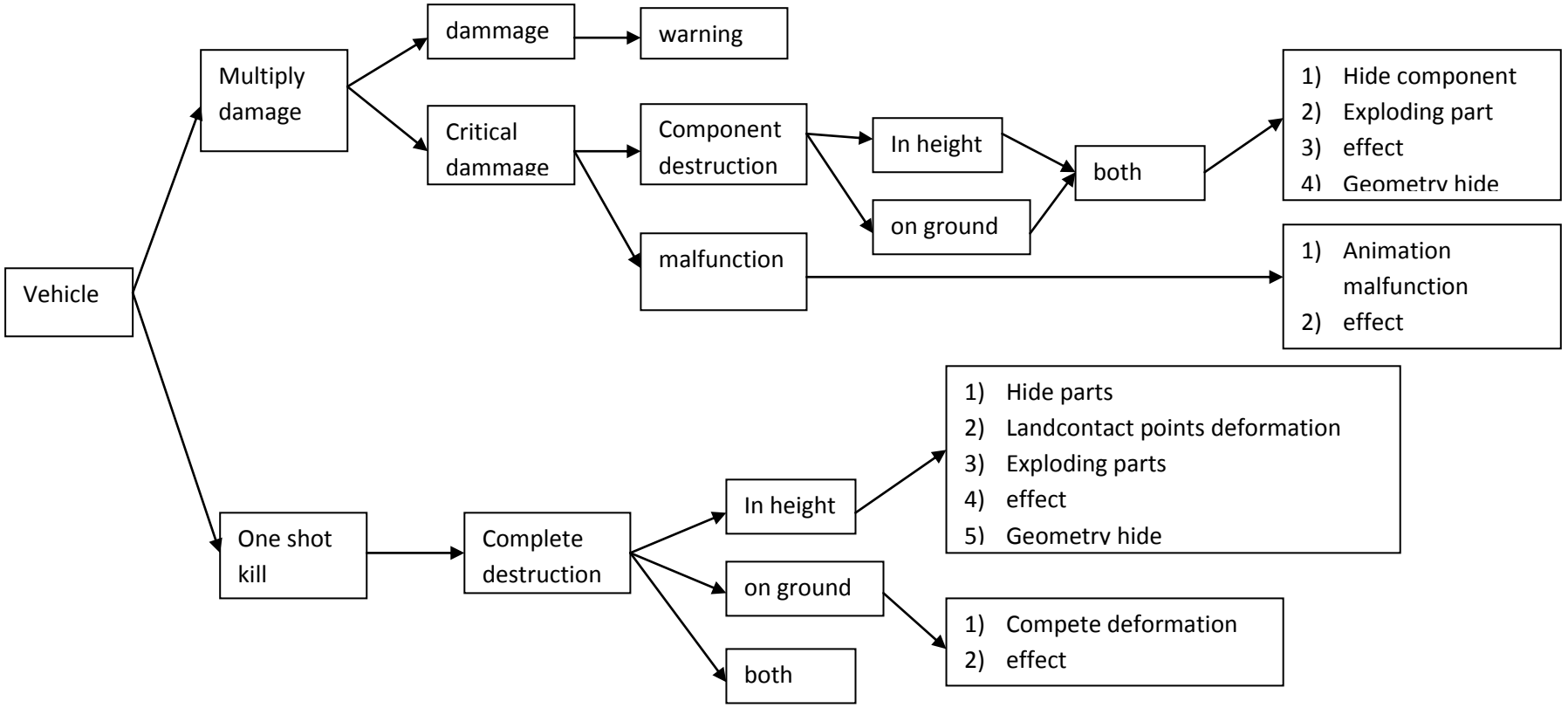
HWM Destruction System Version 2.0
Ah64 Implementation

Abstract

A destruction systemshould take in account the following factors (speed,height,type of vehicle,damage value)
Therefore the folloing scheme can give an idea for a helicopter type vehicle



HWM implemenation

Arma provides 2 EH that can serve for this system implementation (off course ArmA isn't perfect therefore we have to restrict the system under any ArmA limitation)

1) "damaged EH" serves the purpose of identifying the part that has dammage and the amount of it. Current components that can be identified by the engine are (tailrotor, mainrotor, engine, maingun, electroncs,elevator and the whole body). Based on that for each one of this component the effect can vary. The system executes 2 functionalities.
    1) A warning indicator for the cockpit lights on depending of the section that got dammage
    2) For an amount of dammage and above the system aplies a malfunction
    3) For a high amount of dammage almost destruction the system performs destruction on the component

    EXAMPLE

    Let's take a look of how the system will handle dammage on the tailrotor, hits on tailrotor that will trigger the "dammage EH" will cause warning indicators inside the cockpit together with a beep sound, more hits that raise the dammage will provide a probabilty of 66% of the rotor to change the spin rotation into a wrong rotation axis. More hits that will make the section critical for destruction will provide the destruction of the rotor

2) "killed EH" serves the purpose of the complete destruction of the vehicle. Since in tjis case there is a helicopter this EH has to tke in account speed,height. The "killed EH" triggered nce, therefore in order to ensure that the destruction effect will occure no matter what we need to trap the execution, a loop node serves that purpose. The script executes into 3 steps.
    1) 1st pass that occurs in any case provides an explosion effect, and parts dployment
    2) 2nd pass is to prepare the final, this step performs animation that aren't visible, like to hide geometry parts or to move the landconta points higher. Traps the execution till the height is < 10.
    3) The 3rd and final pass executes when the speed is <2 in this pass an effect completes the impact/destruction and the whole vehicle animates into a wreck position

Component	Damage		System
tailrotor	>0.55	☑	malfunction
tailrotor	>0.9		Effect, Exploding parts
tailrotor	any	☑	warning
mainrotor	any	☑	warning
mainrotor	>0.8		Effect,malfunction ☑
engine	any	☑	warning
engine	>0.8		effect
electronics	any	☑	warning
elevator	any	☑	warning
M230	any	☑	warning
body	any	☑	warning

Destrucion Position		System
Air>10 (Air)		effect
Air>10 (Air)		Exploding parts
Air<10 (Air to Ground)	☑	geometryhide
Air<10 (Air to Ground)	☑	Landocontact animation
Speed<=2 (Ground)	☑	Componenthide
Speed<=2 (Ground)	☑	Vehicle animation
Speed<=2 (Ground)		Effect
Speed<=2 (Ground)		Exploding parts