

NSS Vertical Section

Vertical Events

Gym Layout

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NSS Vertical Section

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Gym Layout Overview

- BACKGROUND: The Vertical Section (VS) Vertical Events are some of the most popular and exciting events at each annual NSS Convention, and they attract both National and International participation. They include the Vertical Techniques Orientation Workshop, the Rebelay Course, and the Vertical Climbing Contests, known as the “Rope Climbing Olympics!”
- ISSUES: The VS creates a simulated vertical cave environment, typically in the host facility gym, and employs caving ropes and rigging for these events. This includes the necessary requirements for multiple ropes, rigged at high (ceiling trusses) points, scaffolding for safe rebelay and rappelling, VS Staff tables, and accommodations for Staff, Participants, and Spectators. Operational areas also require reasonable Safety Zones.
- PURPOSE: This document presents the key safety and configuration elements necessary to craft a suitable gym layout. It also considers required Safety Zones, people and process flows, operational effectiveness and efficiency, and other issues. A suitable example is also presented for consideration.
- CONCLUSIONS: Vertical Events are major NSS Convention attractions, and they can be implemented safely and effectively, and with essentially zero impact to the host facility. VS rigging practices are temporary, passive, and leave no traces. Furthermore, the actual implementation in any specific facility will and must be uniquely crafted by qualified and experienced VS Technical Staff. (Details follow)

Gym Layout Criteria

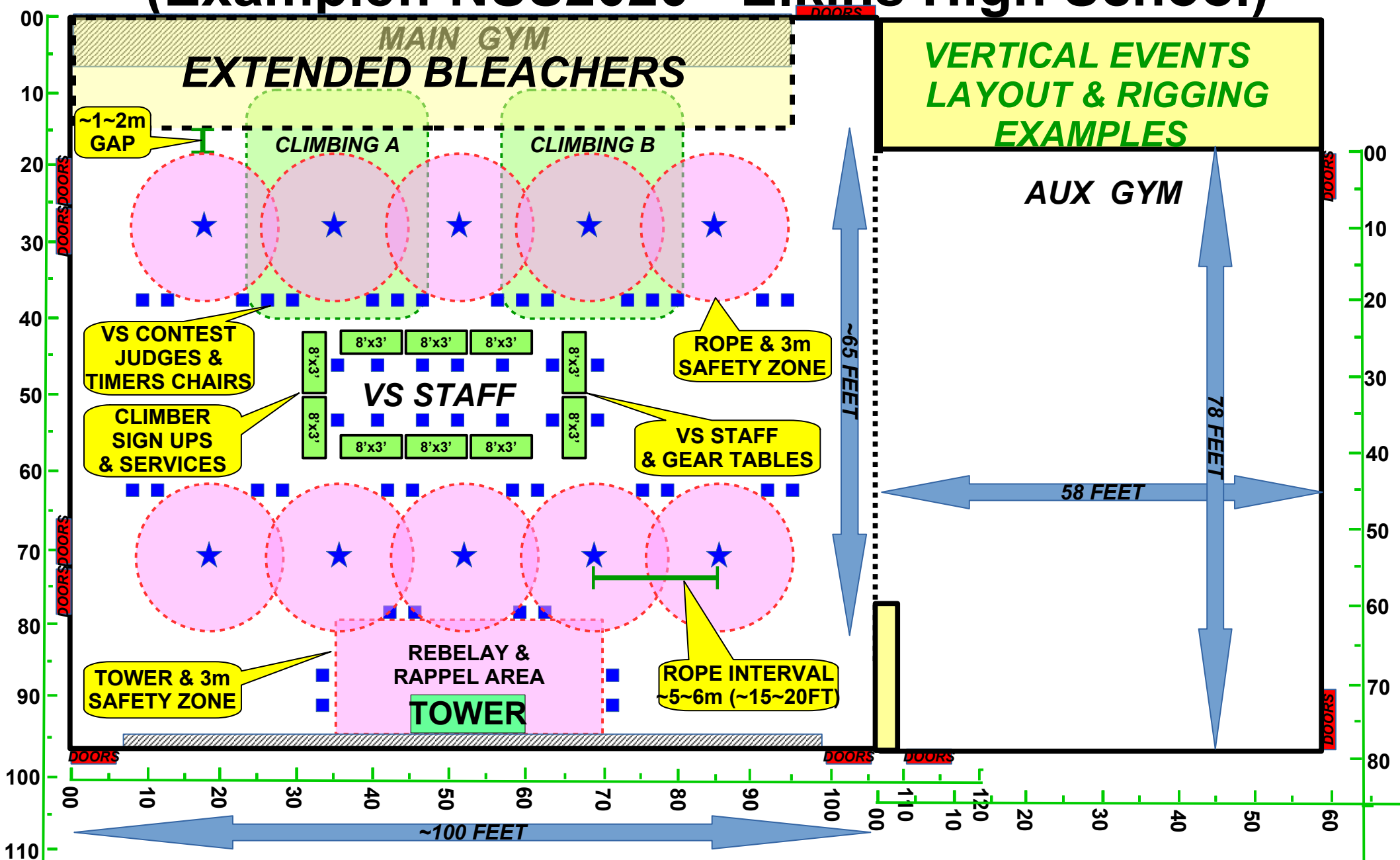
- CUSTOM DESIGNS: Every facility is different! Therefore, each year's Vertical Events Gym Layout must be uniquely crafted by qualified and experienced VS Technical Staff.
- ACTIVITIES: There are basically seven types of activities and services to be supported: (Please also see associated VS Planning Guides)
 - Vertical Section Staff Management and Participant Support & Services
 - The Vertical Climbing Contests (Mon & Tues)
 - The Rebelay Course (Tues)
 - The Vertical Techniques Orientation Workshop (Weds)
 - A Small Party Assisted Rescue Workshop (SPAR) (Thur – Optional)
 - The Junior Speleological Society (JSS) Orientation (Mon – Optional)
 - Other unscheduled activities, individual training, and other services, as needed.
- During each Annual NSS Convention, the Vertical Section is assigned the management of the Gym during most of the week.
- The VS also provides caving ropes, rigging and other gear necessary to create a simulated vertical cave environment.

Gym Safety Criteria

- The gym environment and equipment are only employed under the supervision of, or in coordination with, the Vertical Section Staff.
- In operation, all environment Users, and all Persons in the gym, must comply with the approved VS Safety Policies. This includes use of standard safety practices and equipment, such as helmets, safe knots, and other gear, when required.
 - JSS, SPAR, NCRC and Others may have their own Safety Policies and requirements, but in addition to, and not release from, VS Safety Policies.
- Furthermore, a Safety Zone, with a radius of at least 3m (10ft), shall be defined around each rope rig, and the tower, and respected when in action with an active Climber, or with Persons at height.
- PLACEMENTS: Based on experience, traditional placements are:
 - VS Staff Area: Tables & chairs, in central area, away from climbing Safety Zones, and considering efficient people and process flows
 - Rope Spots: Beneath ceiling anchors, attached to trusses etc, with at least ~5-6m (~15~20ft) intervals between ropes, and >> 3m (10ft) from extended bleachers.
 - Rope Spot & Tower Chairs: About 2-6 per rope, just outside the Safety Zones.
 - Staging & Gear Areas: Reasonable accommodations for VS Staff, Climbers, Users, and other Persons, preferably away from people and process flows, with no blocking or trip hazards, and especially away from Safety Zones and activity areas.

Vertical Events in Gyms

(Example:: NSS2020 - Elkins High School)



References

NSS Vertical Section Documents

- VS Safety Procedures
- VS Climbing Contest Rules
- VS Climbing Contest Planning Guide
- VS Vertical Techniques Workshop Planning Guide
- VS Reelay Course Planning Guide

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