

CAS Exam Committee Presents:

# CAS EXAMINATION COMMITTEE & PROCESS

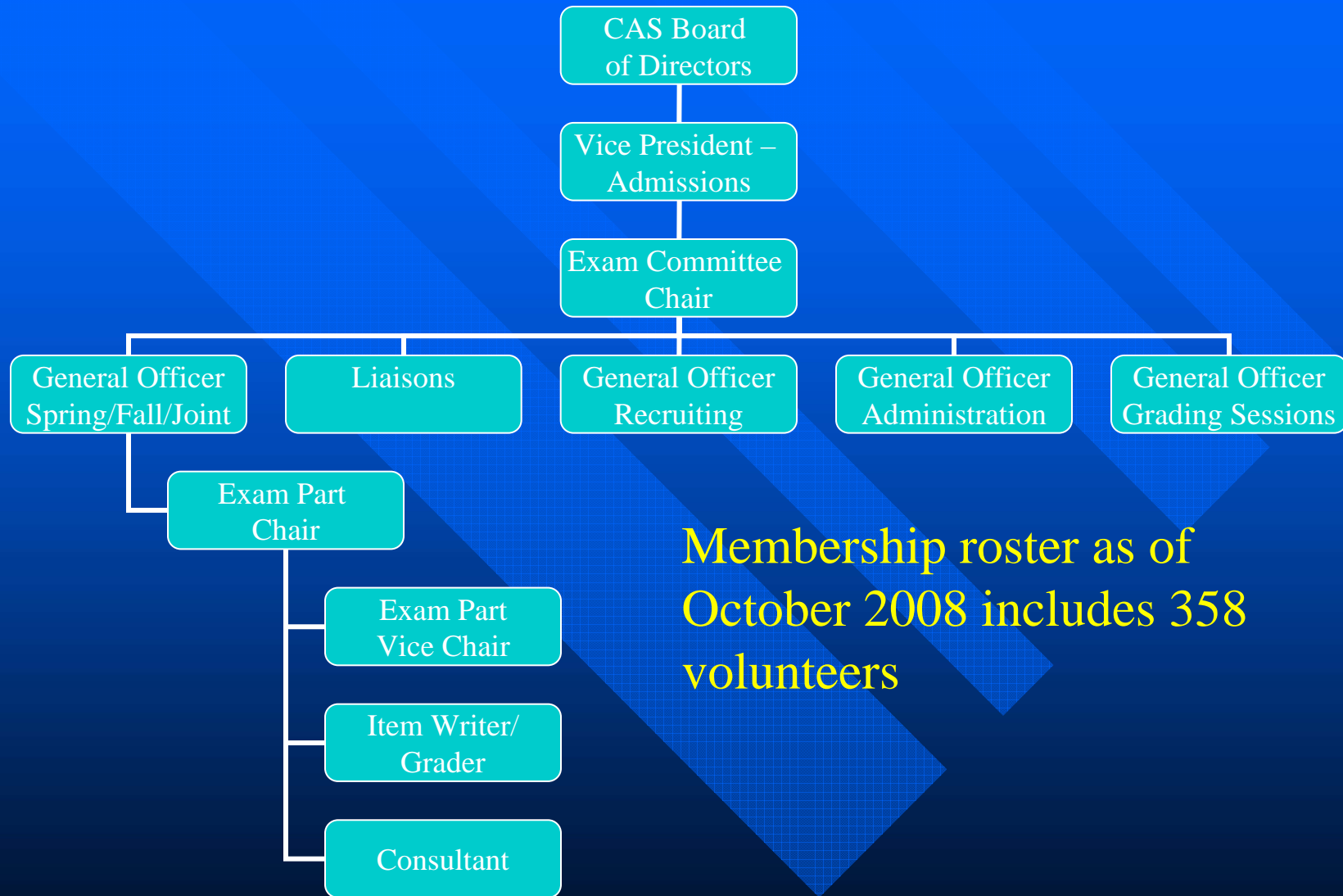
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2008 CAS Annual Meeting  
Seattle

# Agenda

- Committee Structure – Who are we?
- Committee Functions – What do we do?
- Committee Status – Where are we today?
- Committee Future – Where are we going tomorrow (and how do I participate)?

# Committee Structure



Membership roster as of  
October 2008 includes 358  
volunteers

# Committee Structure – Roles

(rather abbreviated)

- CAS Board of Directors  
Provides guidance, direction, policy
- VP – Admissions  
Budget management, pass mark approval,  
final arbiter of disputes
- Exam Committee Chair  
Manages day-to-day activities of  
committee, communications, appeals

# Committee Structure – Roles

(rather abbreviated)

- General Officer  
Senior member responsible for group of exams or committee process
- Exam Part Chair  
Senior member responsible for construction and grading of one exam part
- Exam Part Vice Chair  
Senior member responsible for assisting the Part Chair, generally manages grading program

# Committee Structure – Roles

(rather abbreviated)

- Consultant  
Seasoned member responsible for final review of exam draft
- Item Writer  
Member responsible for constructing individual questions
- Grader  
Member responsible for scoring individual test papers

# Committee Functions

## Item writing

- Mandatory training for all item writers
- Assignment of Learning Objectives and Point Targets
- Construction of questions by Item Writers
- Evaluation of questions by Part Chair and Vice Chair and selection of potential questions

# Committee Functions

## Item Writing – Today’s Questions

- Very few multiple choice, eliminated from most exams
- No more “List” and “According to” unless there is no other way to phrase the question without ambiguity
- More open ended questions that call for the candidate to synthesize (note, these are harder to grade, but we think they do a superior job of testing the material)



# Committee Functions

## Exam Construction

- Small group of Part Chair, Vice Chair, and 1 or 2 senior members
- Selects and edits questions according to quality and Learning Objective weights
- Evaluates preliminary answer key
- Fills in gaps in the Learning Objective weights with new or recycled questions

# Committee Functions

Exam Review – two rounds

- General Officer, Part Chair, Part Vice Chair, Consultant make first review
- Exam Committee Chair and Proofreader added to second round
- Purpose is to add fresh look at the exam to spot ambiguous questions and to finalize answer key

# Committee Functions

## Pass Mark Panel

- Made up of 4-6 very senior Exam Committee members with significant grading experience
- Maintains profile of “Minimally Qualified Candidate” (MQC – see next slide)
- Reviews each question and assigns it an expected score based on MQC profile
- Result of this process is an a-priori pass mark for the exam

# Committee Functions

## The Minimally Qualified Candidate

- Theoretical construct – the candidate who is just barely qualified to pass based on demonstrated knowledge
- Set of statements derived from the Learning Objectives stating what the MQC will be able to demonstrate under exam conditions

# Committee Functions

## Grading – Preliminary Work

- Each question assigned to a pair of graders
- Graders individually score papers, maintain the grading key by adding acceptable responses not on the original key
- Must reconcile all candidates to within tight tolerance
- Graders provide their opinion on the MQC score for their question(s)

# Committee Functions

## Grading – In Las Vegas

- All scores checked against papers
- Candidates close to pass score reconciled exactly
- Pass mark chosen based on panel and grader opinions of MQC score
- All papers within specified number of points above and below pass mark completely regraded
- Final pass mark selected with consideration of actual scores (i.e. “sanity check” based on the statistics and adjustments to prevent failing large number of candidates by  $\frac{1}{4}$  point)

# Committee Functions

## Appeals

- Each appeal evaluated first by CAS office staff to weed out invalid appeals (i.e. requests for regrading)
- Valid appeals considered by Part Chair and Vice Chair
- Graders consulted where necessary
- Final responses written by Exam Committee Chair and delivered by CAS Office



# Committee Status -- Current

- Facing record numbers of candidates with some exam parts now seeing over 1,000 applicants per sitting
- Making better use of technology (i.e. electronic grading via pdf), but we can do more
- Putting more emphasis on outbound communications with both candidates and with the membership



# Committee Future

- New materials for ratemaking and reserving exams
- 2011 system redesign
- Increased use of computers in testing
- Exams twice each year?
- Number of candidates likely to continue increasing
- Size of Committee will increase

# Committee Future and You

- More volunteers WILL be needed over the next few years, especially item writers
  - The average item writer takes 2-3 years to become adept at writing high quality questions
  - Experienced item writers needed
- Exam Committee work counts toward your Continuing Education quota<sup>1</sup> and most travel costs are reimbursable by the CAS
- Volunteer through the annual survey, by contacting the Exam Committee Chair, or by contacting the CAS office (Tom Downey or Bob Craver)

<sup>1</sup>Applicability of material to category of CE and common sense guidelines apply to the recording of CE credits. See AAA publication for additional information.

# The End

Thank you for your attention. We should have some time left for questions and discussion.