

AAPG Imperial Barrel Award Program



Rules, Regulations and Operations

Issued: April 13, 2011



American Association of Petroleum Geologist





AAPG Imperial Barrel Award Program

NOTE: Rules, regulations, and operations of the AAPG Imperial Barrel Award (IBA) program and competition are at the oversight and direction of the AAPG IBA Committee.

INDEX:

| | |
|--|----|
| SECTION 1: ACADEMIC INSTITUTION PARTICIPATION | 3 |
| SECTION 2: FACULTY ADVISORS..... | 3 |
| SECTION 3: STUDENTS AND TEAMS..... | 4 |
| SECTION 4: CONSULTANTS AS MENTORS..... | 5 |
| SECTION 5: DATASETS | 5 |
| SECTION 6: PROJECT DATA ANALYSIS | 6 |
| SECTION 7: REGION AND SECTION COMPETITION VENUES | 7 |
| SECTION 8: REGION, SECTION AND FINALS COMPETITIONS | 7 |
| SECTION 9: JUDGES..... | 8 |
| SECTION 10: AWARDS..... | 9 |
| SECTION 11: SPONSORSHIP | 9 |
| SECTION 12: AAPG DECLARATION | 10 |

Forward: The Premise

“The Students of an IBA team are to act as a New Ventures Group of an operating oil and gas company. In a selected area, a business opportunity has arisen as the current Operator is prepared to offer an equity stake in the acreage to your company – a process referred to as a farm-out opportunity. In most instances the Operator opens up “a data room” where prospective farm-inees can view the data usually for a few days only.

Companies farm-out their acreage for a number of reasons. They may be prepared to dilute equity or even relinquish the acreage because they consider it has limited hydrocarbon potential. Other times, the Operator may genuinely need a partner to finance the drilling campaign. Either way, new business ventures like this can offer significant rewards to the farm-inee, who can identify additional upside potential especially in new plays and concepts not recognised by the company farming out.

The student team has been assigned the task of making a detailed assessment of the petroleum potential within the given area. They are expected to “think outside the box” and look at new exploration models based on the most recent published research and their given education.

The Student team will be able to consult their company’s Exploration Manager; (Faculty Advisor) plus a number of key personnel in its global New Business Development team – an internal consultancy providing expertise (Outside Consultants).”

Dr. Howard Johnson when giving instructions to his IBA students, Imperial College, 2006.

SECTION 1: ACADEMIC INSTITUTION PARTICIPATION

1. Any academic institution (school) with an advanced geoscience degree program may apply to participate in the AAPG IBA program.
2. Schools are selected to participate based on date of enrollment in the program.
3. Only an accredited faculty member of the school may register a school for participation in the AAPG IBA program. The enrollment must be approved by the department Dean or Chair.
4. Schools that enroll in the AAPG IBA program are encouraged to review all materials posted on the IBA website (www.aapg.org/iba/), including the timeline, before they register for the program.
5. A school may enroll for the program and upon further consideration, decide not to participate without penalty before receiving the IBA dataset. However, withdrawal from the program after receiving the dataset without the approval of the President of the Region or Section within which the school is located, will result in the school not receiving financial support from AAPG for Region, Section, and/or the Finals competitions the next time the school participates in the AAPG IBA program.
6. The school is responsible for ensuring that all students participating in the program, who are not residents of the USA, have a current passport. Region IBA Coordinators and Region Offices will assist schools in obtaining visas. AAPG Student Affairs Coordinator will assist with the visa application process for the Region teams that advance to the Finals.
7. A school that does not have enough students for an IBA team may, with IBA Committee approval, combine their students with those from another school within the Section or Region, to create a combined team. One school will serve as the host school and be the “office” for the exploration team. The host school must have a minimum of three students on the combined team. All technical interpretation and preparation of the dataset must be done at the host school using its facilities and supervision. The host school will supply the team advisor. Transportation to and from the Region, Section, or Finals competition will originate from and terminate at the host school. Team name and prize money will be divided between the participating schools. This division must be declared to the IBA Committee prior to the combined team participating in an IBA competition. Interested schools must complete the “Multi-School IBA” application instead of the regular team sign-up sheet. A combined team must follow all rules and regulations as for a single school entry.

SECTION 2: FACULTY ADVISORS

1. Faculty Advisors must commit to the program and be responsible for the team’s preparation and participation. They must be willing to ensure that the spirit and ethos of the program is honored and maintained.
2. The team results should be largely the result of independent student team analysis.
3. Faculty involvement should be at the advisory level.

4. Faculty Advisors are not allowed in the competition room prior to or during the presentation of their team's project. Third parties, who have also worked with or are associated with the team in preparing for their presentation, are not allowed in competition room prior to or during that team's presentation.
5. Experience indicates that supervision by the Faculty Advisor of approximately 30-60 minutes per team per week is appropriate.
6. Faculty Advisors are encouraged to have teams of no more than five students work the dataset within their school. When used in a class, the Faculty Advisor should create multiple five-person teams to work the dataset, rather than a single large group of students collectively working the dataset. Internal school competitions are encouraged when more than one team is created.
7. Faculty should advise, and insist on, presentation rehearsals to local industry representatives prior to the Region or Section competition.
8. Faculty Advisors are encouraged at all times to view the program as a learning experience and encourage team dynamics and participation.

SECTION 3: STUDENTS AND TEAMS

1. Students may participate on an AAPG IBA team once. There are no exceptions to this rule.
2. Students must have full-time enrollment status in the school participating in the AAPG IBA program.
3. Students should have no more than one year cumulative professional petroleum exploration experience. However, students with more than one year's cumulative petroleum exploration experience may petition the Region or Section coordinator for an exemption to be allowed to participate in the program. Recommendations for acceptance are forwarded to the IBA Committee. The IBA Committee has the final approval if the student can participate in the program. Any student with more than one year cumulative petroleum exploration experience who participates without IBA Committee approval shall be removed from the competition. Any award received with that student's participation shall be voided.
4. Teams should be composed of Master level students. No team may have more than two PhD students on their team. No team may have undergraduate students unless circumstances dictate that an exemption to this rule is warranted (example: student status in the Middle East Region). If such a situation does occur, the Region or Section Coordinator is to notify the IBA Committee Chair to secure IBA Committee permission for the undergraduate(s) to participate.
5. Substitution of a participating student on an IBA team once the competition begins at the Region or Section is not allowed except under extraordinary circumstances approved by the IBA Committee.
6. Students will at all times, adhere to a professional level of behavior in dress, conduct, language and decorum. Violation of this rule may result in the student being removed from the program.

SECTION 4: CONSULTANTS AS MENTORS

Teams may invite industry professionals as “consultants” to mentor them on analysis and presentations.

1. The consultants should be briefed by the Faculty Advisor as to the purpose and goal of the program.
2. Consultants may instruct students on how to perform a task, provide advice on presentation content, and encourage students to consider alternate ways to approach the tasks required by the program.
3. In no form, manner, or method may the consultant actually perform the work. Violation of this rule will result in the immediate dismissal of the team from the IBA for that or upcoming year, depending upon the date of the infraction.
4. Consultants cannot be IBA judges at any level in the year they consult or mentor student teams.

SECTION 5: DATASETS

1. Datasets are actual subsurface data and are not artificially created. However they may be altered by the IBA Technical Sub-Committee to better meet the purpose of the program.
2. Petroleum industry companies will normally have donated the IBA datasets for educational purposes. The AAPG does not own the datasets and must restrict their use to the program. **Therefore:** No use, presentation, publication, alteration, or representation of the dataset is allowed outside of the AAPG IBA program unless it is approved by the IBA Committee in written form.
3. Datasets ideally will comprise a regional-scale grid of 3D seismic data (approximately 100 sq km²), regional 2D seismic lines and selected well data. The latter should have approximately 4-8 wells from within the seismic grid with wire-line logs, core and core analysis data, well test results, fluid pressures, mud logs and final well reports as available. Incomplete or variable quality subsurface data is common and acceptable as a normal aspect of exploration; pristine datasets should not be expected. However, every dataset is different in content and scope and the IBA Technical Sub-Committee is charged with altering the datasets to ensure as fair a representation as possible. If a specific item from the above list is missing, it is either not available for this dataset or removed to ensure a comparable content to the other datasets.
4. Each school will be loaned a dataset from the AAPG for its use in the program. The IBA Committee encourages schools to solicit additional datasets through their oil industry contacts for use in future IBA programs. These contacts should be referred to the IBA Committee.
5. Institutions will be given access to the IBA datasets by the latest technical methods available to ensure quality deliverability of the dataset.
6. Datasets and software that are not used in competition, in the case of a school dropping from the program prior to the Region or Section competition, must be removed from the school’s computer systems. They may not be used

in any form or manner for instruction or research without the express consent of the AAPG IBA Committee Chair, the owner of the dataset and software provider. Violation of this rule will result in a school declared ineligible for the IBA program for two years.

7. Schools that complete the competition on the Region and Section level may keep their dataset for instructional purposes.
8. Experience indicates that the datasets themselves rarely influence selection of the winning team and hence individual schools are given their datasets by random selection and historical use.
9. The ethos of the Imperial Barrel Award is to focus on exploration, rather than on appraisal/development, and datasets will be selected with this in mind. No school will receive a dataset that is local to their geographic location unless an alternative dataset is unavailable. If that should happen, the IBA Committee will notify teams in that Section or Region of that situation.
10. Datasets will be delivered to teams as close to eight weeks as possible prior to their Section or Region competition. Section and Region IBA Coordinators should select a date for their competitions that is between two and six weeks prior to the Finals competition.

SECTION 6: PROJECT DATA ANALYSIS

1. Seismic and well datasets will normally be interpreted using industry standard hardware and software systems. Schools must inform the IBA Technical Sub-Committee which interpretation software they will use prior to dataset distribution.
2. Seismic and well data interpretation systems may be either PC- or Unix-based.
3. Regional understanding of each basin is a priority and will require extensive review and synthesis of public domain data.
4. Basins should be placed in their plate tectonic context.
5. Computer modelling should be used but students will also be expected to demonstrate sound understanding of the underlying scientific concepts, software limitations and key uncertainties.
6. The analysis should reflect modern petroleum exploration workflows, including a quantitative analysis of resource assessment at both play and prospect levels.
7. Topics to be covered in the data analysis include:
 - a. Geodynamics, plate tectonic setting & tectonic evolution
 - b. Sedimentary basins: classification & tectonic setting
 - c. Regional paleogeography
 - d. Seismic interpretation
 - e. Well log interpretation & correlation
 - f. Regional stratigraphy/depositional environments/Sequence Stratigraphic framework.
 - g. Source presence and quality evaluation

- h. Subsidence history & source rock maturation/migration (including 1D basin modelling)
- i. Seal presence and quality evaluation
- j. Trap (Structural and Stratigraphic) analysis
- k. Formation evaluation
- l. Reservoir presence and quality evaluation
- m. Subsurface fluids & pressure regimes
- n. Prospect evaluation
- o. Risk Assessment and volumetric analysis
- p. Final recommendation for business action

An economic analysis should not be conducted.

8. No school shall obtain additional data (well, seismic, log, and published reports) within the dataset study area, with the exception of geological publications in the public domain that deal with the regional setting of the area of the dataset. For example: schools may not include a well or seismic line that is inside the dataset area in their interpretation of the dataset given to them if it was not in the original dataset. Inside the geographic area of the dataset (maps of which will be provided with the dataset), teams must deal with the data given to them and in the form it is given. Violation of this rule will result in point deductions from the judges at the Region, Section, and Finals competitions.
9. The analysis should be based on the data provided and not on geologic evaluations that may be available as a result of an operating field that was developed in the basin.
10. Any uncertainties in data analysis should be referred to the AAPG IBA Coordinator in the AAPG Region or Section in which the school is located.
11. All participants are to obey and abide by the ethics principals of the AAPG. For a definition and complete ethics statement please see: <http://www.aapg.org/business/codethic.cfm>. Failure to comply will result in a dismissal of the individual from the competition by the IBA Committee.

SECTION 7: REGION AND SECTION COMPETITION VENUES

1. Region and Section competitions shall be at neutral locations. Holding the competition at participating schools shall not be allowed unless either the Region or Section governing committee and the IBA Committee grant an exception.
2. Venues must be able to accommodate a five-member team PowerPoint presentation to a seated panel of judges, in a professional atmosphere and setting.

SECTION 8: REGION, SECTION AND FINALS COMPETITIONS

1. Students shall participate equally in a 25 minute PowerPoint presentation on their exploration project. Students may prepare a one-page handout (two-sided allowed) to give to each judge. Students may augment their presentation in any form, so long as they are within the 25 minute time allotment.

2. Teams will be interviewed by the judges immediately after their presentation for a time period of up to 15 minutes. Students should be prepared to answer the questions of the judges. Questions shall be limited to the scope of the preparation and presentation of the project.
3. Students are allowed, during the judges' question and answer period to confer briefly with each other to answer the judges' questions. They cannot consult any outside source.
4. Students will be judged on all aspects of the presentation, including but not limited to factual information, organization, coordination, timing, creativity, and presentation
5. Students may respond to questions in their native language provided that an interpreter is in attendance. The de-facto language of the presentations in the Region, Section, and Finals competition shall be English. A Region may allow translation services in the Region competition. AAPG is not responsible for supplying or paying for an interpreter for any competition.
6. When Sections and Regions hold a competition in a venue, the Section or Region will provide transportation to and from the competition from the school and housing for the 4-5 student team members and the team advisor. Each AAPG Region and Section is responsible for the operation and costs associated with its program.
7. Teams are required, if placing first at their Region or Section competition, to submit a final copy of their presentation for the Finals competition to the AAPG Student Office at the AAPG headquarters in Tulsa, no later than one week after the Section or Region competition. If the team presentation is not received at the Tulsa office on or before midnight CST at the end of this one week period, (and pending any extraordinary circumstance as determined by the IBA Committee), the team will be penalized ten points from their Finals score each day the presentation is late in arriving at the AAPG headquarters in Tulsa.
8. AAPG will provide transportation to and from the Finals Competition from the school and housing for the 4-5 student team members and the team advisor.

SECTION 9: JUDGES

1. Judges may participate in the program at Region, Section or Finals competitions. However, Judges may only participate once within a contiguous three-year period. Judges at a Region/Section competition are ineligible to serve as a judge at the Finals during that three-year period. Likewise, judges at the Finals may not serve as a judge at a Region/Section competition during that three-year period.
2. Judges will be given a maximum of 15 minutes after each team presentation to ask questions of the team. Questions shall be limited to the scope of the preparation and presentation of the project.
3. Judges will follow instructions provided by the Region, Section, and Finals judging coordinators for their specific competition.

4. Judges at the Region, Section, and Finals competitions must meet or exceed the minimum standards for judges as maintained by the IBA Judges Committee.
5. Judging panels shall comprise a minimum of three judges.
6. Only one judging panel shall be used throughout the Finals competition.
7. IBA judges, at any level, cannot consult or mentor student teams in the year they judge.

SECTION 10: AWARDS

1. Regions and Sections may provide their own prizes and awards for their Region/Section competition.
2. Region and Section awards must not, in currency value, be more than 50% of the awards given at the Finals competition.
3. The winning team from each Region and Section Competition will be invited to compete in the Finals held immediately prior to the Annual Convention of the AAPG against the other Region and Section winners. The top three teams will be selected by an independent panel of industry experts serving as judges.
4. The Awards at the Finals competition shall be:
 - A. Each participating team who does not place in the top three teams shall be awarded a \$1,000 scholarship donation to their school.
 - B. The schools of the top three teams will receive the following prizes:
 - 1st: The Imperial Barrel Award (plus \$20,000)
 - 2nd: The Selley Cup (plus \$10,000)*
 - 3rd: The Stoneley Medal (plus \$5,000) **

* Professor Richard C. Selley, Professor of Applied Sedimentology at Imperial College was the founder of the Barrel Award in 1976

** Professor Robert Stoneley, past Professor of Petroleum Geology at Imperial College was the MSc Petroleum Geology Course Director from 1978 to 1995.

SECTION 11: SPONSORSHIP

1. Sections and Regions are expected to raise the funds needed to cover all expenses associated with their local competition, including student transportation.
2. Sections and Regions may decide what recognition they will offer their program sponsors distinct from the recognition conducted by the IBA Committee at the Finals
3. All committee members raising funds for any Section, Region, or the Finals programs must use the official IBA Sponsorship form (available from the webpage at www.aapg.org/iba/).

4. All sponsors for the Region, Section, and Finals programs will be recognized at the Finals competition.
5. The IBA Committee is expected to raise the funds necessary to cover the expenses and costs associated with the Finals program at the AAPG Annual Convention each year. The IBA Committee will use any funds, in excess of the costs of the Finals for a specific year, to aid the Region and Section programs.

SECTION 12: AAPG DECLARATION

Committee Name: The Imperial Barrel Award Committee (IBA)

Purpose: To organize, operate, and regulate the annual Imperial Barrel Award program at the annual AAPG National Convention. To work with the specific governing committee and councils to organize, operate, and regulate the competition on a Sectional and Regional basis. To raise and coordinate the sponsorship necessary to operate all planned programs.

Rules, Regulations and Operations have been approved by the AAPG Executive Committee.