General Dynamics Corporation, Convair Aerospace Division, San Diego Operations ¹ and National Engineers and Professionals Association, affiliated with International Union, United Automobile, Aerospace, and Agricultural Implement Workers of America (UAW), ² Petitioner. Case 21–RC–12723

October 4, 1974

DECISION AND DIRECTION OF ELECTIONS

BY CHAIRMAN MILLER AND MEMBERS FANNING AND JENKINS

Upon a petition duly filed under Section 9(c) of the National Labor Relations Act, as amended, a hearing was held before Hearing Officer Orville S. Johnson of the National Labor Relations Board. Following the close of the hearing, the Regional Director for Region 21 transferred this proceeding to the Board for decision.

Thereafter, the Employer and Petitioner filed briefs.

Pursuant to the provisions of Section 3(b) of the National Labor Relations Act, as amended, the National Labor Relations Board has delegated its authority in this proceeding to a three-member panel.

The Board has reviewed the Hearing Officer's rulings made at the hearing and finds that they are free from prejudicial error. They are hereby affirmed.³

Upon the entire record in this proceeding, the Board finds:

1. The parties stipulated that the Employer "General Dynamics Corporation is a corporation with its Convair Aerospace Division San Diego Operations engaged in the manufacture of aerospace systems and items for industry and the United States Government," and that during calendar year 1971 the Employer purchased and received in the State of California goods valued in excess of \$50,000 which

¹ The Employer's name appears as amended at the hearing

were shipped to it directly from points outside the State of California. We find that the Employer is engaged in commerce within the meaning of the Act, and that it will effectuate the purposes of the Act to assert jurisdiction herein.

2. The labor organization involved claims to represent certain employees of the Employer. The Employer, however, disputes this claim by questioning Petitioner's status and validity as a labor organization. It also contests the validity, adequacy, and sufficiency of the showing of interest filed herein.

This proceeding originated when the "National Engineers & Professionals Assoc., Affiliate unit of UAW, 887 International Union, UAW" filed a petition, later amended as to unit scope, for an election in a unit consisting of the Employer's professional and administrative employees located at the Employer's San Diego, California, division facilities, i.e., Convair Aerospace Division. This petition was supported by a showing of interest which designated UAW Local 887 as the collective-bargaining representative. Petitioner entered the proceeding at the hearing where it moved to amend the name on the petition to reflect its name. The Hearing Officer granted the motion over the Employer's objection and contention that a new showing of interest was required to support Petitioner, whereupon the Employer moved to dismiss the petition. The Hearing Officer referred the Employer's motion to dismiss to the Regional Director who did not pass thereon, or on the Hearing Officer's ruling permitting the petition to be amended, prior to the time this proceeding was transferred to the Board, thus leaving these issues unresolved.

The events underlying these issues began in mid-1971 when a "Survey Committee" of Convair's employees sought to ascertain employee interest in establishing a bargaining unit of professional employees at Convair. Despite apparently discouraging results, the Committee continued its efforts by seeking organizational aid from the Engineers and Architects Association (EEA), one of several unions representing certain of Convair's other employees. Following a survey funded by EEA to determine whether there was sufficient employee interest for EEA to attempt to organize the professional employees, the results of which are not disclosed, the Committee elected officers and an executive board from the Committee's members. Despite the absence of either formal structure or physical or monetary assets, it redesignated itself as an "organizing committee" dedicated to seeking bargaining rights for Convair's professional and administrative employees, renamed itself the "EEA Professional Division Organizing Committee," under which name it solicited authorization cards and, in Case 21–RC-12644, filed a petition for an election

² Petitioner's name appears as amended at the hearing

³ Inasmuch as the record and briefs adequately present the issues and positions of the parties, we hereby deny the Employer's request for oral argument. Its motion to correct the transcript of proceedings, however, in which Petitioner has acquiesced, is hereby granted. We also shall grant the Employer's motion to reopen the record in order to receive into evidence the March 15, 1973, letter from UAW International President Woodcock to Mr. B. D. Teague, the Employer's director of industrial relations, and Teague's reply letter dated March 29, 1973. Petitioner concedes the authenticity but not the relevancy of these documents, both of which came into being subsequent to the close of the hearing, and which we hereby accept into evidence as Emp. Exhs. 313 and 314, respectively, for the purpose of completing the record.

For the reasons discussed *infra*, we hereby affirm the Hearing Officer's ruling granting Petitioner's motion to amend the name on the petition, and deny the Employer's motion to dismiss the petition, as well as its request for an administrative determination of the adequacy of Petitioner's showing of interest

which was dismissed because of certain irregularities in the cards.

In March or April 1972, the Committee learned that the professional employees of nearby Rockwell International Corporation were being organized by the National Engineers and Professionals Association (NEPA), and that the moving force behind NEPA was UAW Local 887. The Committee then sought, and was denied, recognition by the Employer, who also informed it that counsel had been retained to oppose the petition in Case 21-RC-12644. Based on its awareness of the cost and time involved in such litigation, its knowledge that it was unable to function as an independent union, and its discussion with UAW Local 887 officials, the Committee then affiliated with Local 887 on the basis of an April 18, 1972, "Letter of Understanding" which was executed by these parties and which, in pertinent substance, provided that the Committee had dissolved itself, or, upon execution of the letter, would dissolve itself, and that its members and officers had joined "Local 887 as its Engineers and Professionals Association Unit" and as a "Unit Organizing Committee of Local 887"; that Local 887 would render to the Committee any and all assistance reasonably required to conduct a successful organizational drive and election campaign; that following an election victory, Local 887 and the Committee jointly would conduct bargaining negotiations and thereafter request the International Union UAW to charter the Committee as an autonomous local; that, should it so choose, the Committee was free to hold itself out as an affiliate unit of Local 887 "during the organizing and . . . bargaining activities . . . prior to the time you receive your own charter . . . ," but that it also was free "to designate the name and title of your Local Union in any manner you saw fit. . . .

As expressed by Committee President Koulaxes,⁴ the Committee viewed the letter as an invitation "to be chartered as an individual unit of NEPA-UAW," and further considered itself to be a local chapter, and a sister local of NEPA at Rockwell International Corp., of an as yet obscure parent National NEPA. Accordingly, the Committee again changed its name, this time to an "Organizing Committee of NEPA, an affiliate of the UAW," and began referring to itself as "NEPA, San Diego Chapter."

It then sought employee approval of its decision to affiliate with Local 887, and also commenced its organizational drive, by mailing to all employees who had signed "EEA Professional Division Organizing Committee" authorization cards a packet which contained,

inter alia, a copy of the "Letter of Understanding," a covering letter which reinforced the letter's salient points, a request for approval or disapproval of its decision to affiliate with Local 887 (the response showed a 90-percent approval rate), and a request to sign an authorization card captioned "National Engineers & Professionals Association, Affiliate unit of UAW Local 887, International Union, UAW." The Committee notified the remaining petitioned-for employees of both its actions and the salient portions of the "Letter of Understanding" through materials which were distributed at the Employer's plant gates and which included an "NEPA, Affiliate unit of UAW Local 887" authorization card.

The ensuing organizational drive, which still was continuing as of the time of the hearing, produced the showing of interest cards filed herein upon which Petitioner relies, all of which are "Affiliate unit of UAW Local 887" cards. Inasmuch as the Committee, now NEPA San Diego Chapter, had virtually no physical or monetary assets, it conducted its organizing drive with the assistance of the UAW International Union, which furnished it with an office and full-time staff, and paid its rent, stationery, and telephone bills, as well as its organizing salaries and expenses.

Meanwhile, during April 1972, the UAW International Union held its constitutional convention at which it passed a resolution authorizing and empowering its International Executive Board "to take whatever action is required . . . to bring professionals into the UAW, individually or in groups." During June 1972, NEPA San Diego Chapter disaffiliated itself from Local 887 without seeking or obtaining employee approval thereof. In early July 1972, it requested the International Union to charter it as an independent local. The request was granted on July 10, 1972, when the International Executive Board chartered it as "a Local Union at San Diego, California, to be known as Local Union No. 1794 of the UAW-Int'l Engineers Professional Association. . . . " Thereafter, the Committee referred to itself as "NEPA-UAW, Local 1794, San Diego."

No reference to the Committee's latest change in name and affiliation, however, was contained in any of the union literature which had been distributed during the organizational drive. All such literature, moreover, referred to the Committee as "NEPA-Affiliate unit of UAW Local 887." In addition, no specific approval was sought from, or given by, any of the subscribers to the UAW Local 887 showing of interest cards with regard to the Committee's disaffiliation from UAW Local 887, or Local 1794's later affiliation with the UAW International Union, or NEPA San Diego-Local 1794's still later convergence into Petitioner.

⁴ Koulaxes was laid off, apparently for economic reasons, in May 1972 and, as of the time of the hearing, was employed by the UAW International Union.

Following the close of the hearing, the Employer received a posthearing-dated letter from UAW International Union President Woodcock which, on International Union stationery,5 stated that "On behalf of [Petitioner] we wish to advise you that we represent . . . the majority of employees in the [petitioned-for] unit. . . . We request that you recognize us as the collective bargaining agent for and on behalf of the employees in the unit . . . and enter into . . . negotiations with us as soon as possible." The Employer's reply letter denied the request.6

The Employer contends that the foregoing facts not only preclude Petitioner from relying on the showing of interest filed herein, but also establish that the showing was obtained through material misrepresentation with regard to the true identity of Petitioner.⁷ It seems to buttress these positions through a series of interrelated arguments predicated on its basic charges that NEPA San Diego Chapter, Local 1794, and Petitioner are "paper organizations" under the direct domination and control of the UAW International Union, for which Petitioner is a front.

The full implication of these charges is not clear, for when we couple the Employer's characterization of those three entities as "paper" organizations with its concessions that those entities have enjoyed a continuity of identity and its steadfast refusal to acknowledge the existence of Petitioner as a labor organization, we are faced with an impreciseness with regard to the scope of the Employer's motion to dismiss the petition. Therefore, in order to resolve this ambiguity, we shall assume that its motion is directed in part to Petitioner's status as a labor organization within the meaning of the Act.

The record shows in this regard that all of the employees named in Local 1794's charter also constitute the entire membership of Local 1794, NEPA San Diego Chapter, and Petitioner; that there have been virtu-

ally no changes in the membership, officers, or directors in any of those entities since NEPA San Diego Chapter came into being; and that despite an absence of structural formality or assets, or their utilization of the International Union's constitution as their own, the consistent underlying purpose of these entities was, and is, to represent employees in collective bargaining. The Employer, moreover, has conceded directly that NEPA San Diego Chapter is the same entity as Local 1794 and, inferentially, that Petitioner is a progeny thereof. It is clear, therefore, and we find, that these entities are one and the same in which there has been no interruption in identity, continuity, or purpose, and that, even in its present emerging form, Petitioner is a labor organization within the meaning of the Act, regardless of whether it is fronting for the International Union—an issue which may go to misrepresentation of the true bargaining representative but has little to do with Petitioner's existence or status as a labor organization.

More directly, the Employer argues, in substance, that Petitioner, Local 1794, and NEPA are "paper" organizations not only because they lack structural formality, assets, and separate constitutions, but also because they are subservient to the International Union since that union furnished NEPA, later Local 1794, with monetary, personnel, and other organizational aid; because Petitioner and the other two entities have utilized the constitution of the International Union as their own basic policy instrument; and because Local 1794 and Petitioner affiliated directly with the International Union. The implications in this argument are baseless. We already have found that Petitioner and the other two entities are labor organizations within the meaning of the Act despite their organizational incompleteness. Inasmuch as the remaining cited factors evince nothing more than commonly accepted, rather routine, lawful organizational procedures and tactics, we cannot infer therefrom either that the International Union dominates and controls any of these entities or that Petitioner is fronting for the International Union.

The Employer claims, however, that the posthearing letter bearing the signature of UAW International President Woodcock supports its implications and further indicates that Petitioner is a "straw entity" fronting for the International. Again, we cannot draw such inferences. In our view, the letter is simply another organizational device which, on its face, merely exhibits an attempt to assist Petitioner to achieve that which Petitioner sought.

In sweeping charges based on the same theme, the Employer next contends that the International Union has used NEPA San Diego Chapter and Local 1794, and is using Petitioner, as camouflages to conceal its

⁵ Emp Exh 313 ⁶ Emp Exh 314.

⁷ The Employer further has attacked the adequacy of the showing of interest through its posthearing request for a Board-conducted administrative investigation of its allegation that the showing of interest was obtained through the participation of supervisory personnel. The Employer stated that its request is "Based upon evidence which emerged at the hearing has offered no explanation, however, as to why it failed to make such request during, or prior to the close of, the hearing when clearly it could have done so Instead, it chose not to take early action on a course which it considered beneficial to its cause and which, if its views prevailed, also might have modified the extent of this unusually lengthy proceeding which continued for almost 8 months and finally resulted in approximately 6,000 pages of testimony, 10,000 pages of exhibits, and 1,200 pages of briefs. For us now to engage in such a discretionary administrative action would not affect any rights of the parties and would needlessly dissipate the Board's time, effort, and funds In the final analysis, it is the election, not the Board's showing of interest requirements or its internal administrative procedures, which determines the substantive issue of whether or not Petitioner actually represents a majority of employees. Accordingly, we deny the Employer's untimely request for an administrative investigation.

direct interest in the petitioned-for employees through a scheme which "systematically covered up" the International Union's "total domination of the San Diego organizers." The Employer further avers that the employee-organizers were part of that scheme because former NEPA San Diego Chapter President Koulaxes now is employed by the International Union, and because the employee-organizers "well knew the importance of . . . full disclosure in changing their affiliation during the organizational process" in view of their experience with the defective EEA Organizing Committee authorization cards, and their having published their shift in affiliation from EEA to UAW Local 887.

Once again the Employer would have us pile inference upon inference and presume the existence of facts on the basis of innuendo and speculation, for, beyond this, the Employer has not pointed to any conclusive evidence to support its freewheeling accusations, and we can find none in the record. We certainly cannot infer from any of the grounds cited that the International Union played the role ascribed to it by the Employer, or that the employee-organizers schemed with, and entered into a clandestine, collusive, and fraudulent pact with, the International Union to conceal that union's alleged role, or that they intentionally and maliciously plotted to deceive their fellow employees. Nor can we presume the suggested nexus merely because Koulaxes presently is employed by the International Union. In our view, the record points to the contrary conclusion, for it clearly shows that the hoped-for paths toward the unionization goals sought, as well as the International Union's prospective role therein, were spelled out in the "Letter of Understanding" which, in due time, was forwarded to all card signers, and that the employees who testified in this regard understood and endorsed the thrust of the letter. Accordingly, we find that none of the Employer's foregoing contentions and arguments, whether considered singly or in their entirety, are meritorious.

In a somewhat different vein, the Employer argues that Petitioner is precluded from relying on the showing of interest because, it contends, that showing was obtained through the material misrepresentation that representation would be afforded by a local rather than by an international union, and Petitioner's direct affiliation with the International Union, therefore, has nullified "the substantive independence and local authority" which had been promised in the organizing campaign and by the showing of interest cards, with the result that "what [the employees] saw on the authorization cards is not what they'll get on the vote." It concludes that, inasmuch as the showing of interest designates UAW Local 887 as bargaining representa-

tive, and since Petitioner failed to obtain the approval of the card subscribers to act as their bargaining representative, Petitioner cannot rely on these cards, and a new showing of interest, therefore, is required to support Petitioner.

We already have noted that the prospective role which the International Union might or would play in the scheme of things is contained in both testimonial evidence and in the "Letter of Understanding." In addition, there is no probative evidence to show that that letter did not reach the subscribers of the showing of interest cards. Furthermore, despite all of the Employer's arguments, the record leaves little doubt that the showing of interest evinces an underlying substantial employee intent to acquire a bargaining representative or, at the very least, an employee desire of being placed in a position to cast a ballot. The mere existence of the showing of interest is prima facie evidence thereof. We cannot assume, therefore, that these employee intents and desires have been blunted by the wording on the cards. Moreover, since all of the unions involved herein are members of the same International Union, and since Petitioner is, in effect, a successor to Local 1794 and NEPA San Diego Chapter and seeks merely to substitute its name for that of its predecessors, it is doubtful that the card subscribers would be affected in their desire for representation simply by the substitution of Petitioner's name on the petition.8 In any event, the employees will have an opportunity to accept or reject Petitioner in an election. Accordingly, we find that a new showing of interest is not required herein.

- 3. A question affecting commerce exists concerning the representation of certain employees of the Employer within the meaning of Sections 9(c)(1) and 2(6) and (7) of the Act.
- 4. The appropriate unit: Petitioner initially sought to represent a unit consisting of all of the Employer's professional and administrative employees, approximately 2,700 in over 270 job classifications, employed at the Employer's San Diego, California, division facilities, i.e., Convair Aerospace Division. The unit scope was reduced substantially through the parties' agreement to amend the petition to exclude five classifications 9 and Petitioner's further agreement to exclude certain other classifications of employees, as well as certain specific jobs within certain classifications, as managerial, supervisorial, or confidential. Despite the Employer's continuing motion to dismiss the petition, it also has conceded by stipulation or otherwise that certain other classifications do not pos-

⁸ Cf. Atlantic Mills Servicing Corporation of Cleveland, Inc., et al., 118 NLRB 1023 (1957).

⁹Engineering librarian, facilities analyst, material liaison man, property auditor, and technical information specialist.

sess managerial, supervisorial, or confidential status, thereby inferentially agreeing that those classifications may constitute an acceptable unit. No agreement, however, has been reached with regard to the unit placement of over 1,600 employees in 85 classifications, 31 of which are populated by approximately 1,064 senior engineering and scientific employees who, the Employer claims, enjoy a managerial and/or supervisorial and/or confidential status; 10 13 of which contain approximately 233 administrative employees whose unit inclusion is protested on both the aforesaid grounds and the additional ground of professional status; and 41 of which encompass approximately 335 administrative employees whose professional status only is in issue.

Subsequent to the close of the hearing, Petitioner again modified its unit position and now seeks to represent such unit or units of the Employer's professional and administrative employees as the Board deems appropriate. The Employer, however, has declared that "no appropriate unit has been sought herein . . . Moreover, none can be pieced together by the Board."

The Employer argues that the petitioned-for employees cannot be incorporated in the unit sought, or in any unit or units fashioned, because of an absence of conformity to any meaningful community of interest, and it has presented a series of arguments favoring this position.¹¹ It has sought to augment its

¹⁰ The parties stipulated, and we find, that the employees in these 31 engineering and scientific classifications are professional employees within the meaning of Sec 2(12) of the Act

position through a lengthy exposition of the job responsibilities of its senior engineering and administrative employees vis-a-vis the nature of its operation and the relationship of those employees to that operation and in their performance as proposal managers, proposal team members, project leaders, project team members, and change analysis board members. It contends, basically, that these employees cannot be included in any unit, and that the formation of any unit or units which include them will destroy its organizational and functional structures.

A. The Employer's Operation

The Employer's Convair operation is based on the concept of systems engineering.¹² It is formulated as a matrix, one axis of which is functionally, or organizationally, oriented, and the other project-oriented. The functional axis consists of the Employer's departments and subdepartments in which, inter alia, the employees sought are located, and where they are subject to institutional, or functional, supervision by supervisory payroll employees. This axis is completely bisected by the project axis, which is the operational structure through which the Employer performs its various projects. The apex of this latter axis is composed of managerial-supervisorial people with overall project responsibility. Further down the project axis are the project leaders, the senior professional and administrative employees in dispute, who have been delegated the lesser responsibility of processing particular aspects of a project through project teams led by them, and over which, the Employer claims, they exercise managerial and/or supervisorial authority and not mere technical oversight.13 Inasmuch as hundreds of such projects are being conducted simultaneously, thereby requiring the utilization of various disciplines involving both contested and uncontested classifications, it is routine for project team members to work simultaneously on a variety of projects under the leadership of a variety of project leaders. It also is routine for project leaders to work as team members

infringe upon such exclusions. If it refers to the duties performed by the senior and nonsenior professional and administrative employees sought, then, as will be seen, *infra*, we have not excluded classifications, or employees, which we have found to possess and exercise job responsibilities substantially similar to those we have included, and vice versa

tially similar to those we have included, and vice versa ¹² Put simplistically, systems engineering is a process whereby all elements required to perform functions necessary to accomplish a program or project are integrated into operational systems and subsystems in a regulated and controlled manner pursuant to defined, logical, engineering progression designed to produce maximum efficiency and minimum error within parameters bounded only by the system elements.

13 The Employer also contends that various of the disputed classifications contain confidential employees. We have found no evidence that employees in any of those classifications deal in any manner with matters pertaining to the labor policies of the Employer. We note further that the parties have stipulated to exclude employees with meaningful labor relation contacts and dittes.

the meaning of Sec 2(12) of the Act

11 The Employer argues, in pertinent part, that a unit consisting only of the professional and administrative employees sought is inappropriate because of an overlap in the communities of interest between those employees and employees on the supervisory payroll, in that employee interchange between these groups occurs as part of normal career development and in times of economic expansion or curtailment in order to keep a proper ratio of supervisors to the work force Moreover, the Employer claims, such interchange has little or no effect on the duties performed Similarly, it argues that many of the petitioned-for employees have job responsibilities substantially similar to those on the supervisory payroll The type of overlap described, however, in reality, is not employee interchange within the concept of unit cohesion Indeed, it indicates a diffusion rather than a commonality of interests. The record shows, for example, that employees who have transferred from the supervisory to the professional and administrative payroll do not thereafter exercise their former supervisory responsibilities. Moreover, even assuming that the petitioned-for employees who may have transferred to the supervisory payroll perform the same technical duties, the record does not establish that they also do not perform supervisory duties. If they do not, then a main purpose of such transfers, career development, is lost Furthermore, since the record shows that supervisory payroll personnel possess functional supervisory authorities concededly not possessed by the petitioned-for employees, it would appear that the job responsibilities of the latter employees are not substantially similar to those of the former employees. We find no shared communities of interest in these circumstances

In like vein, the Employer avers that any unit formed would interfere with the integrity of its functional and organizational structures because such unit would exclude classifications which share substantially similar responsibilities with those included. The reach of this argument is not clear. If it pertains to employees on the supervisory payroll, then we already have disposed of the matter. If it alludes to classifications which have been excluded with the consent and approval of both the Employer and Petitioner, then we shall not

for other project leaders upon completion of their own projects, and sometimes while still performing as a project leader. The record, however, has presented no formula to determine which of the senior disciplines will or might be selected to perform as project leaders, or the times or duration of time they will so perform, since these matters basically are dependent upon the Employer's business demands.

Translating the foregoing into practical application, and utilizing the engineering disciplines as a typical model, the Employer conducts its operation basically in the following manner:

The Employer generates business principally through IRAD's, CRAD's,14 and solicited and unsolicited proposals. A determination to explore a project through the proposal method is made by management which also establishes a budget and selects a program, or proposal, manager capable of managing the entire proposal effort for which he has total responsibility. Management of these ventures, which may be of great magnitude, monetarily and otherwise, has been delegated virtually to anyone in the corporate structure having the necessary capabilities, and have included department chiefs and supervisors and, assertedly, senior engineers.¹⁵ The program manager, in turn, selects a team of varied engineering and administrative disciplines from, inter alia, the classifications sought to assist him in laying out an operational plan and determining the proposal's technical and business feasibility, that is, to forecast the state of the art in order to accomplish a major team objective of developing a system which may not be operative for years and yet must then be functional, efficient, and competitive. The program manager "assigns" tasks to the team members whose work he "directs" and who report directly to him. Each team member, in turn, supports his own efforts by obtaining his own team of engineering and administrative disciplines from similar sources who report to him and to whom he also gives "work assignment and direction." These team members usually remain in their home departments, but are divorced from all other obligations. Proposal team progress is subject to an interim review by management, inter alia, to survey the use of available resources and unexplained problems that may have developed. Final decisions of the proposal team are submitted to, and reviewed by, higher authority for final disposition, notwithstanding that a team decision not to pursue the program proposed "will almost surely be final."

Regardless of how any project originates, however, it is processed essentially in the same manner. It is assigned to a project leader from a disputed senior engineering discipline 17 selected by management on the basis of that person's ability to accomplish the assignment perfectly, on time, and within an allocated budget, and his capability to run the entire assignment for which he has total responsibility. Once selected, the project leader lays out an operational plan with such input as may be necessary from other engineering and administrative disciplines. He then sets out the scheduling and the lead time required, and initially determines budget requirements which management reviews and sets. Unless he is working alone on the project, he determines the size and composition of the work force required. Such required disciplines as may be located in different departments are requested by the project leader, generally by name and generally through the project leader's functional supervisor, although the record shows, without explanation therefor, that a few project leaders have made such requests directly to the requested discipline's functional supervisor. Inasmuch as a viable business effort now is involved, the requested disciplines invariably are supplied, barring their participation in special or emergency projects. Because other ongoing projects also require their services, these disciplines may work on a variety of other projects simultaneously under the leadership of various project leaders who, while so acting, also may assist or aid other project leaders in a team member capacity.

The project leader processes the project by "assigning" tasks to the disciplines in his group to whom he also gives "work direction" as well as technical aid and direction, and by constantly overseeing and monitoring their work while working along with them. He effectively may remove from his group any disciplines who, in his opinion, are not performing adequately by notifying that discipline's functional supervisor of this fact. He has no authority, however, with regard to the functional, or personnel aspects of the disciplines in his group, that is, he cannot hire, discipline, discharge,

making of independent decisions affecting policy by the team itself.

17 A limited number of the disputed engineering disciplines seldom, if ever, perform as project leaders.

¹⁴ IRAD—independent research and development, and CRAD—contracted research and development, are, respectively, relatively small company- and customer-funded projects geared toward developing technological breakthroughs or new products. These activities, which occur before a decision is made to propose or bid on a major program, build the Employer's technological base to support customer acceptance of the Employer's capabilities. As in the case of proposals, the initial determination to proceed, or not to proceed, with IRAD's or CRAD's is a management decision which is beyond the scope and authority of any of the petitioned-for employees.

beyond the scope and authority of any of the petitioned-for employees.

15 The Employer's claim that the disputed senior disciplines have performed as proposal managers is based solely on a bald statement to this effect. The record fails to indicate the frequency or regularity of selection from the ranks of the disputed classifications, or that any discipline sought performed in such capacity with regard to the 10–16 proposal efforts being conducted during the time of the prolonged hearing.

¹⁶ Interim review involves corporate officers and departmental directors. At this review point, specialists may be called in if technical problems have developed. Although such interim review with management concededly "may occur on several occasions" with respect to a program, the Employer nevertheless contends that this review does not "supplant or undermine" the making of independent decisions affecting policy by the team itself.

promote, reward, or grant leave. 18 Such matters are handled by the employee's functional supervisor who is carried on the Employer's supervisory payroll. It is in this sense that the engineers in his group report "functionally" to their institutional supervisors, and "technically" to the project leaders.

The project leader also "participates" (the Employer's word), in performance evaluations of the disciplines in his group, presumably including senior engineers performing as team members, by discussing that matter with the discipline's functional supervisor. The record is unclear as to whether this is done routinely or only when requested by the supervisor, but it is done consistently. The efficacy of such evaluations may be measured by the testimony of various project leaders to the effect that, since they work directly with the disciplines in their groups for weeks, months, and sometimes years, they are more aware of the professional and/or technical aspects of the work performance of their team members than the members' functional supervisors and, therefore, the project leader's "opinion weighs quite heavily." Beyond this, there is no specific evidence that such evaluations are afforded effective consideration by the functional supervisor, or that they have impacted a career.

Project leaders have the further responsibility of correlating their projects to the functional analysis and functional and design requirements already formulated through other projects which have been conducted in the same manner as their own, thereby integrating their projects into the totality of the overall basic project. Upon completion of his project, the leader forwards the results thereof to his functional supervisor for approval. At this point, the project leader "loses" his project leadership responsibilities and becomes, in effect, a rank-and-file employee until such time as he may be reassigned as a project leader. As indicated, supra, because of the many projects being performed simultaneously, it is not uncommon for the project leader to assist other project leaders working on different projects as a team member while simultaneously performing as project leader.

Project leaders also have rather frequent customer contact during the preparatory stages of the project, primarily with regard to technical matters.

Customer-directed project modifications are handled by a change analysis board whose function is to determine how to effectuate the changes at the least cost impact to the Employer consistent with the Employer's equipment and capacities. It is composed of a permanent representative, and an alternate, from each of the Employer's various departments and sub-

departments who, apparently, have the authority to "commit" their respective departments in accordance with board decisions which appear to be final. Board membership, however, runs a broad range, for it appears to extend beyond the professional and administrative payroll, and its composition within that payroll diversely includes at least one superintendent along with disciplines from various of the categories sought as well as from classifications excluded by the parties because of managerial, supervisorial, or confidential status.

B. Conclusions

1. We are faced with the unusual claim that the work judgments, discretions, and decisions routinely made by competent professional and administrative employees in the ordinary course of their employment formulate or alter the Employer's business policy and, therefore, are tantamount to expressions of managerial authority. More succinctly, we are urged by the Employer to find that such managerial authority reposes in the senior engineering and administrative disciplines at all times by virtue of their intermittent, but routinely regular, performances as proposal managers, proposal team members, project leaders, or change analysis board members.¹⁹

The Board long has defined managerial employees as those who formulate and effectuate management policies by expressing and making operative the decisions of their employer, and those who have discretion in the performance of their jobs independent of their employer's established policy.²⁰

It is clear from the legislative history of the Taft-Hartley Act of 1947 and prior and subsequent Board and court decisions that managerial status is not conferred upon rank-and-file workers, or upon those who perform routinely, but rather is reserved for those in executive-type positions, those who are closely aligned with management as true representatives of management. Work which is based on professional competence necessarily involves a consistent exercise of discretion and judgment, else professionalism would not be involved. Nevertheless, professional employees plainly are not the same as management employees either by definition or in authority, and managerial authority is not vested in professional employees merely by virtue of their professional status, or because work performed in that status may have a

¹⁸ The record shows, contrary_to the clear general rule, that a few of the disputed senior engineering classifications possess these functional supervisory authorities

¹⁹ Inasmuch as change analysis board membership appears to be of a permanent nature and managerial in function, we shall exclude those serving in such capacity

²⁰ Palace Laundry Dry Cleaning Corporation, 75 NLRB 320 (1947), Eastern Camera and Photo Corp., 140 NLRB 569 (1963) For current judicial approval of the definition, see N L R B v Bell Aerospace Company, Division of Textron, Inc., 416 U S 267 (1974)

bearing on company direction. Likewise, technical expertise in administrative functions which may involve the exercise of judgment and discretion does not confer executive-type status upon the performer. A lawyer or a certified public accountant working for, or retained by, a company may well cause a change in company direction, or even policy, based on his professional advice alone, which, by itself, would not make him managerial.

Here, purely technical decisions which are not discretionary and which comply with limitations previously established during the systems engineering cycling process nevertheless may affect indirectly the Employer's business direction simply because the nature of the Employer's business is such that it is geared to directional changes based upon the technical performance of its employees.²¹ We do not view such directional changes as policy changes.

Similarly, discretionary and independent judgments routinely made on a project during the ordinary course of employment and within the systems engineering framework may affect company direction directly, but again only because of the manner in which the Employer's business is conducted. In every instance, management makes the policy decision, the effective decision whether to reject or pursue the results of those technical judgments, all of which have been routinely rendered on the basis of, and as a result of, professional and/or technical expertise and in accordance with the task assigned. Such judgments are dependent completely upon the technical discipline of the classifications involved and, in view of the Employer's operation, of necessity, have the potential of indirectly affecting or creating company policy. In no event, however, are the engineers or administrative employees specifically armed with true managerial authority, nor do they pursue their work in a managerial vein or in any vein other than routinely practicing their respective disciplines in a routinely and rigidly regulated format. The fact that the employees involved may handle the entire project assigned to them undoubtedly is a tribute to their organizational skills and abilities, but has little, if any, bearing on managerial authority. Their discretions and decisions are predicated solely on a technical base, and culminate in technical reports or recommendations to managerial superiors who, in turn, determine, establish, and carry out management direction, i.e., "policy," by approving or disapproving the recommendations presented.

We cannot find, in these circumstances, that the employees sought, who perform as proposal managers (wherever they fit in the Employer's organizational structure, see fn. 15, supra), proposal team members, or project leaders, formulate or effectuate management policies, or that they have the type of discretion indicative of managerial status, or, indeed, that they have discretion in their job performance independent of their Employer's established policy, since their job discretions in fact are exercised in conformity with the Employer's established policy, which is based on directional change rather than on status quo. We do not believe that the employees who exercise these job responsibilities are true representatives of management in the traditional sense, or that Congress intended that managerial status be conferred upon, or extend to, such employees. Conferring such status upon them would eviscerate the traditional distinction between labor and management.

It is basically for these reasons that we find that the aforesaid job responsibilities do not embrace the type of supervisorial authority essential for unit exclusion. Supervisors are management people. Their job functions are aligned with managerial authority rather than with work performance of a routine, technical, or consultative nature. While it is true that the authorities contained in Section 2(11) of the Act are indicative of supervisorial authority, it does not necessarily follow that the exercise of one or more of those authorities ipso facto confers supervisorial authority unless it is exercised in the genuine managerial sense. This also is clear from the legislative history of the Taft-Hartley Act of 1947 wherein the Conference Committee adopted the Senate version of the bill, S. 1126,²² which excluded supervisors, but with a narrower definition thereof than the House version, H.R. 3020, by distinguishing between "leadmen, setup men and other minor supervisory employees . . . and the supervisor vested with genuine management prerogatives as the right to hire or fire, discipline, or make effective recommendations with regard to such action." 23

Here, while, proposal managers, proposal team members, and project leaders exercise a certain amount of discretion in assigning work, that discretion primarily is made by the only people technically competent to make it and within the parameters set by the utilization of systems engineering. Such discretions as the professional engineers may have in work assignment and direction, moreover, are exercised in a professional sense and are directly related to a professional responsibility for the quality of work per-

²¹ This result would occur where a technical determination made by an engineer conducting an IRAD or CRAD shows sufficient promise to engender a company decision to formulate a project team to prepare a bid on the component developed through an IRAD, or seek a customer for a component developed through a CRAD

H Conf Rept 510, 80th Cong., 1st sess (1947) at 35
 S Rept. 105, 80th Cong., 1st sess (1947) at 4

formed on the projects to which they are assigned.²⁴ They merely are providing professional direction and coordination primarily for other professional employees.²⁵ Similarly, the like discretions exercised by the administrative employees are exercised in accordance with their technical abilities and bottomed on responsibility for proper project work performance. Those instances in which they assign and direct the work of hourly technicians in their groups appear to be so limited as to have no bearing on the issues involved.

As to efficacy of the project leaders' performance evaluations of the disciplines in their groups, there is no conclusive evidence that those reports are given effective consideration by the disciplines' functional supervisors. It is speculative, therefore, to conclude that such reports have substantial and immediate impact on the jobs of those disciplines.

In our view, true supervisorial authority is not vested in the senior engineering and administrative employees vis-a-vis the nonsenior employees in their work groups, nor is it vested in themselves as equals, who, for indeterminate periods of time, "supervise" coequals who, in turn, later "supervise" their equals while simultaneously being "supervised" by their coequals.²⁶

By contrast, there are classifications of employees, as well as employees in various of the classifications sought, whose job responsibilities, whether as project leaders or otherwise, exceed the above-described routine-type performances and include managerial and/ or functional supervisory authorities, thus mandating their unit exclusion. Among such classifications are advance system project engineer; development project engineer; senior flight test engineer; preliminary design engineer; project engineer; project engineer, senior; and senior quality engineer.²⁷ Among such employees are those who regularly have rotated as departmental supervisor during the absences of the departmental supervisor and thus have administrative and technical control over the departmental employees, such as Senior Design Engineers Anding, Vasquez, and Krumweide; Design Specialists Jackson and Su who regularly perform as alternate departmental supervisor; Design Specialists French and Leonadis and Senior Aerodynamics Engineer Lowe, who apparently function as departmental supervisors; those who concededly have the authority to discharge or otherwise effectuate changes in the employment status of the employees in their groups and, therefore, perform duties atypical of those performed by project leaders, such as Design Specialists Tatro, Wentwick, and Campbell and Quality Engineer Earl Covington; and Senior Engineering Metallurgist Adsit, who may effectively establish his project or work budgets through his work estimates, and who also has the authority to commit work performance by the Employer to customers.

There may be others whose unit exclusion also is required for similar reasons, but whose identity has not been resolved by the record. If so, their unit placement will be safeguarded by appropriate challenges to their ballots.

In view of the foregoing, and subject to the specific or possible employee exclusions, *supra*, we find with regard to the following disputed senior engineering and scientific classifications that while all such classifications are composed of professional employees, none exhibits the managerial and/or supervisorial indicia required for unit exclusion, and we shall include them in the unit of professional employees:

Senior aeroballistics engineer, senior aerodynamics engineer, senior design engineer, design specialist, senior dynamics engineer, senior electronics engineer, senior engineering chemist, senior engineering metallurgist, engineering staff specialist, engineering test pilot, senior flight test control engineer, senior guidance analyst engineer, senior instrumentation engineer, senior metallurgist, senior physicist, senior research engineer, senior staff scientist, staff scientist, senior standards laboratory engineer, senior systems engineer, systems engineering specialist, senior test laboratory engineer, senior thermodynamics engineer, test engineer A.

We also shall include in the professional unit the following engineering and scientific classifications which, the parties stipulated, do not enjoy managerial, or supervisorial, or confidential status:

Aeroballistics engineer, aerodynamics engineer, associate engineer, design engineer, dynamics engineer, electronics engineer, engineering chemist, engineering metallurgist, flight test engineer, quality engineer, reliability engineer, senior reliability engineer, research engineer, standards lab-

²⁴ Cf Wurster, Bernardi & Emmons, Inc., 192 NLRB 1049 (1971)

²⁵ Cf Skidmore, Owings & Merrill, 192 NLRB 920 (1971)

²⁶ Cf Post-Newsweek Stations, Capital Area, Inc., 203 NLRB 522 (1973), where the Board viewed news editors as having no supervisory authority over newscasters, the two being "equals involved in separate but sequential functions"

Our long familiarity with the realities of working conditions has taught us that since supervisors are entrusted to assure the workability of company operations, an overabundance of supervisors would be counterproductive. Were we to credit the Employer's contentions regarding the supervisory status of the employees in issue, the ratio of supervisors to work force would be approximately two to one

²⁷ Member Fanning would include the senior flight test engineer classification but excluded Pace as managerial. He also would include the senior quality engineer classification, though excluding as supervisory or managerial Periera, Wade, Gross, Suggs, Arnott, Cohen, and Quality Engineer E Covington Chairman Miller and Member Jenkins, however, join in excluding the senior flight test engineer and senior quality engineer classifications

oratory engineer, structures engineer, senior structures engineer, test laboratory engineer, thermodynamics engineer, weight engineer, senior weight engineer.

2. The parties are in dispute with regard to the managerial, supervisorial, confidential, and professional status of the employees in the following administrative classifications:

Administrative Accountant

The employees in this classification are in the Employer's industrial accounting section where, working "closely" with, and apparently doing some of the same work as, cost analysts,28 they: collect cost data on all contracts and end products produced; accumulate costs to overhead burden centers, such as manufacturing, administration, engineering, and fringe benefits; and allocate segments of cost relative to telecommunications, rivet manufacture, cutting tools, etc., by evaluating and deciding the most equitable method of allocation, thereby enabling management to determine probable project profitability. Each has the responsibility of up to 25 contracts to either stop the input of improper costs to a contract, or make appropriate readjustments to dispose of costs if errors are discovered after recording, thereby exercising judgment in contingencies which are either potential or likely to occur. They also prepare financial statements; ascertain whether or not proposals for new business or the purchase of major capital equipment would provide a "workable" return on investment; evaluate whether it is appropriate to purchase or lease equipment; compile all state and Federal income and franchise taxes, property taxes, and sales taxes; provide summary profit forecasts and future sales backlog positions, which requires them to be privy to proposed plans and entails knowledge of future manpower levels. Together with property auditors, whom the parties excluded by stipulation and whom some administrative accountants supervise, they review contract requirements for commercial, NASA, and Department of Defense work and property accountability, and certify at contract completion the Government equipment accountable to the contract which has either been returned to the Government or else is justified for retention. In situations where Government equipment is retained and where forgiveness of rental costs in whole or in part may be applicable, they must be acquainted with the pertinent Government regulations so that they may evaluate whether the equipment rented is cost effective.

They, or at least some of them, prepare financial analyses and evaluation of proposed capital acquisitions in the form of an operating plan or budget, with timespans ranging from 3 to 10 years, and then make recommendations thereon to superiors. They evaluate the reasonableness of proposed capital expenditures, for hardware, and, if they determine the proposed expenditures to be reasonable, they prepare a return on investment, which requires reference to information on Convair's long-range plans on business volume and anticipated levels of activity to which they "have access. . . . " Final decision as to whether a capital expenditure will be made, however, is determined by higher authority. Their recommendations involve the exercise of judgment with regard to the recovery and timing of investments, and, in arriving at a judgment, they must determine whether the proposed acquisition is consistent with the projected probabilities of the economic use of the acquisition with regard to savings in manpower, business volume, and investment recovery. We find that the administrative accountants are managerial employees and we shall exclude them.29

Budget Analyst and Budget Analyst, Senior

The chief difference between these classifications is that the senior analysts generally have greater work experience with Convair and may lead a work group. Apart from this, both classifications perform similar functions. They neither initiate budgets nor have budgetary decisional authority. Utilizing recognized cost accounting theories and practices, they "set budget levels directly with Directors, Managers and Chiefs of Departments" and monitor performance vis-a-vis those budgets. With regard to task budgets proposed by department chiefs or project leaders, they establish the validity of the proposed budget through interrogation of the proposer in order to ascertain whether the project in issue conforms to Convair's policies, contains proper financial controls, and whether the proposal costs reflect the true magnitude of the project. They will not accept the proposed budget if the expenditures sought are not justified to them, presumably in accordance with the foregoing factors, thus requiring further negotiations between the proposer and the analyst.

When negotiations with a customer have occurred, the accounting department accumulates data relative to the project involved, overtime, and other budgetary

²⁸ The parties have stipulated that the cost analyst classification is supervisory, managerial, or confidential

²⁹ Contrary to Chairman Miller and Member Jenkins, who agree to exclude this classification, Member Fanning would include administrative accountants in Unit B, but would exclude D Young inasmuch as he supervises an administrative accountant, two general accountants, and two hourly employees.

information desired for the negotiations, and transmits that data to the analyst who uses it in developing budgetary data which is then forwarded to higher authority for financial evaluation.

Budgetary changes are handled in accordance with established procedure. The analysts cannot generate a budget. "We can only move it around. . . . We can only shuffle the budget among the departments."

The analysts also ascertain whether project or other budgetary limits are met and, if they are not, "determine why and to do something about it, to recommend that something be done about it." Some analysts prepare periodic reports which analyze the effectiveness of manpower utilization; others have access to, and deal with, data pertaining to salary and fringe benefits, direct labor hours, and labor and overhead rates; and still others ascertain, and thereby "determine," funding requirements based on forecast data from work departments, or "establish" budgets and budgetary targets for operating departments, presumably on the basis of supplied forecast data, or "initially propose" the rates at which the profits of programs will be recorded in program financial statements.

The Employer claims that Senior Budget Analyst J. F. White "directs" the activity of four hourly employees in the statistical pool and "evaluates" their performance, and that Budget Analyst M. R. Holmberg "directs the work activities of an hourly statistical technician." Inasmuch as there are 20 senior analysts and 10 analysts, it would appear that the job functions of White and Holmberg are atypical of the duties of the employees in these classifications. Moreover, in the absence of specific evidence of the type of work direction involved, or that White and Holmberg responsibly direct work, we have grave doubts as to their claimed supervisorial status. However, to preserve their rights to the fullest extent possible, we shall permit them to vote subject to challenge.

Subject to the foregoing, we find that management and/or supervisorial status is not invested in the employees in these classifications. Moreover, no showing has been made that these classifications prepare material concerning, or have access to information about, the Employer's basic labor relations policy. We find, therefore, they are not confidential employees.

Although a minority of the analysts and a majority of the senior analysts are degreed in business administration or accounting, and many of the remaining analysts have taken either college level and/or technical courses generally relative to those fields, the character of their work does not clearly require knowledge of an advanced type as does that ordinarily required and ordinarily performed by employees with professional standing under Section 2(12) of the Act. We

find that the employees in these two classifications are not professional employees, and we shall include them in the nonprofessional unit.³⁰

Plant Construction Engineer A

The employees in this classification, together with the excluded classifications of senior equipment engineer and departmental assistant, are responsible for all maintenance engineering activities at Convair, including preparation and execution of designs and specifications for buildings, grounds, and equipment; engineering services to maintain machinery, buildings, and equipment; planning, estimating, and scheduling facility construction; negotiations with subcontractors for facility construction, and surveillance of subcontract work, including changes and decisions to accept or reject the work performed; rearranging and modifying installations after securing approval therefor; negotiating with environmental agencies; preparation of procurement specifications and vendor selection for machinery and equipment; and direction of Convair's construction crew. They also have signature authority to purchase equipment for the tasks on which they are working.

We find that the employees in this classification are managerial and supervisorial employees and we shall exclude them.

Senior Equipment Engineer

The record shows, and Petitioner agrees, that the employees in this classification and those in the classification of plant construction engineer A, immediately *supra*, perform similar functions and have similar responsibilities, except the plant construction engineer A focuses on buildings and machinery while the senior equipment engineer concentrates on machine tools—their specification, acquisition, installation, acceptance, and alteration. We find these employees to be management employees and shall exclude them.

Senior Manufacturing and Development Engineer

Unlike most of the administrative classifications, this classification is comparable to the engineering classifications in function and performance in that the employees therein are concerned with research and development activities connected with the manufacturing process, and they serve as project leaders. Half of them are degreed in fields ranging from art to chemistry, physics, and mechanical industrial engi-

³⁰ White and Holmberg, of course, will vote in the nonprofessional unit.

neering. All have taken college and/or technical courses, and most have been certified in areas such as air mechanics, metallurgy, and mechanical engineering. All but two are members of at least one technical society, several have authored technical publications, and one is the holder of three patents dealing with the manufacturing process. In addition, their job functions and work performance is comparable to that of the professional engineers, albeit in different processing areas. We find that the employees in this classification are professional employees within the meaning of the Act.

We previously have concluded that project leaders are neither managerial nor supervisorial employees, and that conclusion is fully applicable to the employees in this or any classification. Accordingly, and subject to the below-stated modifications, we shall include the employees in this classification in the professional unit.

We have found that "project leaders" in certain classifications exhibit, or appear to exhibit, managerial and/or supervisorial indicia in addition to their roles as project leaders, and have excluded them specifically. So it is here with regard to Senior Manufacturing and Development Engineer Kolbricht, who regularly substitutes as departmental supervisor during the absences of that supervisor. The same situation may prevail with regard to Senior Manufacturing and Development Engineers Roden, Malik, and Lundquist. Roden "directs the establishment of weld manufacturing policies and procedures for Convair's San Diego Operation"; Malik "provides direction and guidance to four hourly manufacturing technicians, production people and to persons on the supervisory payroll in . . . tooling . . . who come to work under his supervision"; Lundquist also direct hourly employees, as well as manufacturing engineers, and further "establishes procedures for fusion welding. . . . He establishes weld schedules. . . . "

In view of the broad language describing the job responsibilities of Roden, Malık, and Lundquist, we are not certain that these responsibilities are managerial and/or supervisorial in nature. To overcome our uncertainty, we shall permit these three employees to vote in the professional unit subject to challenge. Kolbricht, however, we find is a supervisorial and/or managerial employee, and we shall exclude him.

Price Estimator and Senior Price Estimator

The record shows that, except for project leadership functions performed by the senior price estimators, both classifications do much the same work. They make determinations as to probable project costs which are presented to both functional and project management for approval; they utilize and have access to present and projected overhead rates, including taxes, maintenance costs, employee benefit costs, and direct labor and overhead rates by department, but they are not involved in rate development, nor do they have access to rates for individual employees or classifications. The hourly rates they utilize are obtained from an estimating manual which quotes an average departmental rate. Inter alia, they also are responsible for determining and interpreting a potential customer's needs with respect to proposals, describing in detail the specific tasks involved, getting technical information and estimates from various departments, and evaluating and developing estimated costs which will be profitable, yet competitive, by paring or redefining tasks or allocating fewer man-hours thereto, thereby monitoring and policing the Employer's fiscal resources. They are responsible for encoding and assembling all of the information with a proposal package for presentation to the contracts division for ultimate negotiations with a customer, and they also participate in precontract negotiations with the customer. While the Employer's "contracts man" only has the authority to accept or reject a contract, they nevertheless enter into the give and take of the negotiations and may stand firm with regard to a customer request to lower costs or manpower, etc., or may concede that modifications can be made. In any event, their decision is effectively binding on the contracts man since, unlike the estimator, he has neither the technical nor functional knowledge of the work involved in the proposal.

We find that the employees in the price estimator and senior price estimator classifications are managerial employees, and we shall exclude them.³¹

Quality Assurance Project Administrator

There are 11 employees in this classification, 6 of whom Petitioner would exclude as managerial or supervisorial employees, a position with which we agree. Brotherton has technical and administrative control and direction over all concerned with quality assurance on the F-111 airplane, which includes the authorization to hire, discharge, promote, schedule overtime, and disperse manpower between groups on a project. Cook's duties and responsibilities are identical to Brotherton's, except that they are performed in connection with the DC-10 airplane.

The duties of Boekamp, Swiggart, and Garcia include the responsibilities of establishing budget re-

³¹ Chairman Miller and Member Jenkins agree to exclude these two classifications Member Fanning, however, would include the price estimator and senior price estimator classifications since he is not persuaded that they perform a managerial function

quirements, negotiating budget adjustments, coordinating quality and reliability efforts with various departments, dispersing technically oriented manpower among the task groups working on their projects, scheduling overtime, and coordinating vacation schedules.

Magnuson is responsible for Convair's craftsmanship program, chairs the Employer's corporatewide employee motivation panel, represents Convair in all of its customer relations with respect to the aforesaid programs, and conducts employee and organizational award programs. Accordingly, we shall exclude Brotherton, Cook, Baekamp, Swiggart, and Garcia as managerial and/or supervisorial employees, which we find them to be, and we also shall exclude Magnuson because his unit inclusion would, or might, create a conflict of interest.

While the remaining employees in this classification have lesser managerial or supervisorial responsibilities, they nevertheless function similarly to department heads with regard to quality assurance on various programs and projects. We find these employees to be managerial and/or supervisorial employees and we shall exclude them also.

Senior Quality Assurance Specialist

The responsibility of the employees in this classification is to review all new contract proposals, new contracts, and revised contracts to assure that the engineering specifications and design, manufacturing methods, materials, and processes will result in a completed product which is mutually acceptable to Convair and the customer in areas of appearance, function, maintainability, reliability, and cost. In order to attain these results, they, inter alia, review current manpower skills required to attain the desired quality levels and, if these skills are not available, they will order the requisitioning or training required. They implement control procedures to assure conformance to approved manufacturing methods, and order increased personnel manning in areas where excessive discrepancies exist, and conversely, may decide certain functions are superfluous and should be discontinued.

It would appear that the employees in this classification exhibit sufficient managerial authority to warrant their exclusion.³²

-Senior Service Engineer

The Employer does not consider the service engineer classification to be a "truly engineering classification," and we agree. The employees in issue are primarily concerned with writing publications to assist the Employer's customers, particularly in the use of its aircraft products. They also maintain and continuously review basic historical data concerning delivered aircraft, conduct examinations of all accidents and incidents concerning Convair equipment, and assist in product liability legal actions. We find that these employees are neither managerial nor supervisorial employees, and that, collectively, they fail to meet the professional standards imposed by Section 2(12) of the Act. Accordingly, we shall include them in the nonprofessional unit.

Tool and Manufacturing Engineer-Senior, and Tool and Manufacturing Engineer

The record shows that these two classifications essentially perform the same type of work, but that the seniors have greater scope and responsibilities. Basically, they analyze, develop, establish, and coordinate the tooling aspects of a project, and relate with personnel from management, design engineering, production department, and quality assurance to insure compliance with their phase of the project and that the most economical methods of tool and product manufacture are utilized, and, in this sense, they set tool policy. They also assign, direct, and evaluate the work of employees in their groups, groups up to 15 in number, including hourly employees, and they act as project leaders, performing all functions thereof. In addition, senior tool and manufacturing engineers can establish priorities and shift personnel to various tasks, either by their own orders or, if need be, by directing a supervisor to do so. We find that the employees in these classifications are managerial and/or supervisorial employees, and we shall exclude them.

3. The parties have stipulated that the job responsibilities of the employees in the 41 classifications set forth below are not managerial, and/or supervisorial, and/or confidential in nature. A dispute exists, however, with regard to professional status.

Systems Analyst

The four people in this classification are located in the data systems and management planning and procedures groups of the Employer's management systems, which services all major functions and interfaces with all departments as required. Three of them have bachelor of science degrees in, respectively,

³² Member Fanning agrees, noting that the Employer's contention that the senior quality assurance specialists may require purchase or construction of a building to assure noncontamination of a product during manufacture is not contested

business administration, business management, and industrial distribution; the fourth, has a bachelor of arts degree in math and a master's degree in statistics. They prepare and publish organizational charts, functional statements, and policy directives to establish the San Diego operation management manual; review management directives for compliance with established policies and responsibilities; participate in new business proposal development and provide support in preparation of proposal management plans; participate in special studies related to San Diego operations management practices and procedures; and participate in decisions made by supervision at all levels of management. They also develop management systems and procedures and publish standard practices and programs management manual instructions. Stated otherwise, a basic function of this classification appears to consist of the analysis, development, and improvement of work procedures and functional and cost effective management control systems in order to achieve the ultimate in efficiency and effectiveness of the systems. Part of those functions is dedicated to work in support of specific projects or programs or in the preparation of proposals to customers. We find that the systems analysts are professional employees.33 and we shall include them in the professional unit.

Manufacturing Development Engineer

These employees are concerned with research and development activities connected with the manufacturing process. Their job functions are comparable to those performed by the professional engineering classifications and, basically, identical to those performed by senior manufacturing development engineers who, earlier herein, we found to be professional employees. We find the employees in this classification to be professional employees, and we also shall include them in the professional unit.

As to the remaining 39 classifications, the record shows that although the employees therein exercise considerable technical skill in assisting the Employer to operate efficiently, the character of the work required of them as a group within their respective classifications falls short of that required of professional employees. Their work clearly does not require knowledge of an advanced type as does that ordinarily required and ordinarily performed by groups of

employees with professional standing under Section 2(12) of the Act. Therefore, we find that the employees in the following classifications are not professional employees, and we shall include them in the nonprofessional unit.

Data Processing Specialist

The employees in this classification are part of the Employer's data processing operation group which provides all digital computer and related data processing operation services in support of business and engineering requirements for Convair and other General Dynamics divisions in the San Diego area. Their functions are to "manage the budget,34 scheduling and documentation functions for Management Systems.... They train new employees and teach old employees new systems.... [They] develop and establish schedules for all sections of Data Processing Operations...." Basically, however, they are involved in the analysis and development of punched-card and digital computer systems.

Data Processing Analyst

These employees also are part of the data processing group. They develop and implement new control systems and changes to control systems and procedures for monitoring the flow and location of incoming data; handle the hourly and salaried payroll and employee status data; work directly with persons in user departments to insure that incoming data for processing is complete; train personnel; and handle personnel, estimating, contract status, and cost data for the Convair Division.

Senior Electronics Data Programmer

People in this classification are involved in such tasks as redesigning data sytems and retrieval techniques, implementing major modifications in programming techniques, and designing new payroll systems. While they have little contact with engineering personnel, they have considerable contact with administrative personnel.

Electronic Data Processing Programmer

These people perform pure programming activities for the computer.

³³ Cf. Loral Electronics Systems, a division of Loral Corporation, 200 NLRB 1019 (1972)

³⁴ The record shows that the word "manage," as used here and elsewhere by the Employer, incorrectly categorizes the function involved A more appropriate word would be "process"

Engineering Documentation Analyst, Engineering Documentation Representative, and Engineering Documentation Specialist

These three classifications are concerned with determining the contractual documentation requirements the Employer imposes on its vendors "to support whatever they sell us. . . ." They subsequently monitor the contract to assure that the required documentation is adequately provided for, and discuss with customers Employer-originated contractual changes.

Engineering Drawings Checker

The people in this classification review engineering documents that are about the be released. They check the documents against a design for technical accuracy and completeness; verify that all Convair's internal and contractual requirements have been met insofar as they relate to the preparation of the documents; audit the work of subcontractors hired to prepare drawings for use in manufacturing; review the supplier's engineering data regarding the supplier's product to ascertain that such data conforms to Convair's standards via its purchase order; and release the documents for purchase or manufacture. Although the job classification description states that they can recommend changes and/or improvements in design from an engineering and manufacturing point of view, the record shows that their recommendations are restricted to matters involving manual conformity, i.e., that a particular engineering pattern is insufficient and does not comply with the manual.

Engineer Illustrator

The people in this classification are artistically oriented and work primarily with design engineers and design draftsmen in the operations function. They prepare technical illustrations on subjects such as tooling, production, hardware, manpower, and organization charts.

Senior Engineering Loft Coordinator

The incumbents in this classification use detailed design drawings to prepare similar drawings on dimensionally stable material with accuracies to within thousandths of an inch, but which represent parts in their full size and shape, and develop flat patterns from which the parts will be bent or otherwise formed.

Linesmen and Senior Linesmen

These two classifications deal with the description of the outside surface of vehicles which are irregularly shaped. They translate "designers statements," in mathematical form, of the surfaces of wings, tails, fuselages, etc., to a series of graphical representations in full scale within very close tolerances or to a digitized form stored in a computer file. They also develop shapes that cannot be expressed mathematically but are stated as being a smooth transition between two or more mathematically or geographically defined shapes.

Equipment Engineer

The Employer designates this classification as "specialists on equipment required for all tasks at Convair." All are located in the operations function where they severally perform duties involving facility requirements and maintenance and machine maintenance. The record shows that one equipment engineer wrote the paper required to obtain approval of a facility investment by the corporate office and picked locations for equipment, made layouts, and monitored the procurement and installation of the equipment; two others determine equipment requirements in engineering laboratories and "evaluate facilities effecting transfer of work between divisions of General Dynamics as well as cost reduction facilities"; another is directly and almost entirely associated with the maintenance of all numerically controlled and electronically controlled machinery and also investigate trouble calls; still another devotes the major portion of his time to special studies involving maintenance management, work standards, estimates, and manpower distribution. As lubrication engineer, he also determines lubricant application for all plant service applications and acts as a consultant to other departments on lubrication problems.

General Accountant

Basically, these employees maintain the general books of accounts and all overhead expense ledgers and issue final balance sheets and profit and loss statements. Although the Employer has equated the functions of these employees with those of administrative accountants, the record is too vague and inconclusive to support this position.

Manufacturing Analyst

This classification performs plant service functions. They handle a variety of tasks involving layout, rearrangement planning, production flow, material handling, and task research, and including the analyzation and evaluation of present operational methods to determine if changes are necessary or desirable. In the event production gets behind schedule, they develop a recovery plan "to make a recovery to the master schedule."

Manufacturing Engineer

The basic responsibility of the employees in this classification is to determine what facilities will be required to produce a new product, which entails having knowledge of Convair's present facilities and how they are being used. These determinations are then passed on to management for approval or disapproval.

Master Scheduler and Master Schedules Analyst

The record does not distinguish these two classifications beyond the Employer's testimony that "This is normally a two-level operation, the master scheduler being the highest of the two." These people prepare data based on engineering changes of a product suggested by configuration management. Once a change is suggested, they secure data from whomever necessary, including engineers, in order to "identify possible adverse impact which might be caused [to] various departments should a specific change be instituted in one department. . . . " After evaluating and analyzing this data, they, or a programmer, feed their results into a computer. If the computer identifies anomalies or errors, they investigate those errors and apparently reanalyze the problem and attempt to solve it, or "pass [it] on to others," or bring it before a change board. They also record the status of the data they have collected.

Senior Materials and Process Engineer

These employees are assigned to the material specification group within production engineering where they create specifications for manufacturing which provide detailed information and instructions relative to a given operation. The specifications describe in great detail how to install, assemble, and disassemble a component, and how to execute manufacturing processes. They write work directions which determine the required efforts of other employees; train professional, administrative, supervisor, and hourly employees to accomplish the objectives which are set out in the specifications that they prepare; conduct training programs in methods of applying substances, such as adhesives, pottings and potting compounds; are re-

sponsible for developing and coordinating all production engineering computer systems; and may be called upon to attend problem-solving meetings.

Operations Performance Control Analyst

These people primarily are concerned with forecasting manpower requirements for the quality assurance people. The testimonial evidence does not define their duties clearly, but apparently they must familiarize themselves with particular operations, or projects, for which objective, budget, and manpower previously have been established by others; analyze the flow rate of work with regard to the manpower needed to accomplish the objective within the established budget; and advise various levels of management "that if they [apparently the quality assurance people] wish to meet their manning requirements and the objectives of a particular responsibility... they are going to have to make certain changes in order to do so. . . . [The analyst] tells them what their alternatives are."

Packaging Specialist

These people are concerned with establishing and preparing drawings and specifications for boxing and packaging and handling materials received and/or sent by customers and the Employer. They design shipping containers and related equipment, develop packaging estimates, and furnish transportation cost estimates with respect to commercial and military current and new business proposals.

Parts Catalogue Editor

We are uncertain as to the existence of this classification which Petitioner lists among those sought, but which is not among any of the classifications listed by the Employer. If it is unpopulated or nonexistent, we shall exclude it; otherwise, we include it in the non-professional unit. Its function is to administer the preparation of assigned parts catalogues in accordance with customer specifications and company requirements.

Plant Engineering Cost Analyst and Preventive Maintenance Analyst

These classifications are two of five in a program planning and material group which conducts support functions, maintains controls for the economical conduct of plant services responsibilities, and coordinates Convair's San Diego responsibilities for compliance with the Occupational Safety and Health Act. The

plant engineering cost analyst primarily is concerned with planned increases and decreases in the force level and, in this capacity, participates in budget planning for both direct and indirect budgets. The preventive maintenance analysts primarily are concerned with devising, as opposed to performing, programs to assure that preventive maintenance techniques are applied. They determine whether to issue a work order or hold it in backlog; prepare maintenance plans, schedules, and estimates for preventive maintenance of buildings, grounds, and equipment; prepare parts provisioning plans for equipment, which involves weight investment in parts against equipment downtime; and develop special techniques for maintenance programs, such as machine lubrication, roof repairs, and water treatment.

Procurement Quality Assurance Representative

Petitioner seeks only those in this classification stationed in San Diego. The evidence concerning the functions of this classification, however, is sketchy. They apparently are concerned with the quality of both a vendor and his product. They are stationed at various areas of the country, including San Diego, and work with "outside inspection representatives" who visit a vendor's place of business for the purpose of ascertaining the vendor's performance capability and product. In addition, whenever a buyer is faced with either or both a problem vendor or problem parts, they, or someone from procurement quality assurance, together with a technical buyer and an engineering representative who is responsible for product design, form a "procurement review team" which reviews Convair's requirements, the specifications involved, and the levels of quality involved. The team collectively "determines" the vendors with whom it will, or will not, do business.

Production Change Analyst

The evidence also is sparse with regard to these employees who are located in the production engineering department, in which a dozen different classifications are concerned with aerospace tool design and the analysis of tools required to make particular kinds of articles, and which run the gamut from manufacturing planning to the design and manufacture of tools for highly sophisticated equipment. The specific evidence as to this classification is the broad Employer statement that they are concerned with "evaluation and assessment of changes that affect production."

Publications Editor, Publications Editor—Illustration, and Publications Editor—Writing

These three classifications prepare publications for external use. According to one of the Employer's wage and salary administrators, they are located in the research and engineering department, but he does "not know the exact cut of their assignments," but "for all practical purposes, the three classifications are identical and could be one," and these people frequently have English major or journalism backgrounds. To the extent that the job descriptions reflect "accurate generalizations" of duties, they show that these classifications prepare publications for external use.

Engineering Writer

These people analyze Convair products and customer maintenance and operation facilities, plans, and personnel to determine the technical support data requirements for satisfactory and economic utilization of Convair products by its customers, and prepare all technical data required for training and logistic support of all Convair products, utilizing the most appropriate media, i.e., printed material, microfilm, audio, visual, computer tapes, etc. Essentially they prepare the necessary operational, maintenance, overhaul, and repair instructions for Convair's customers.

Publications Technical Specialist

The record does not clearly show the duties of this classification but indicates that these employees are concerned primarily with the in-house dissemination of technical data. Apparently, they are located in the technical report section, which is staffed with engineering editors and technical illustrators responsible for editing and production of engineering technical reports and related documentation required by the various research and development programs undertaken within the Employer's research and development department.

Quality Assurance Specialist

The Employer has stated that the employees in this classification "perform the same tasks generally as to small programs and parts of programs" (emphasis supplied) as senior quality assurance specialists, whom we have found to be, and excluded as, managerial employees. In our view, this ambiguous statement does not establish that the employees in issue perform

the managerial functions performed by the senior specialists. Moreover, the Employer has stipulated that the employees in this classification are not managerial, or supervisorial, or confidential employees. We find no basis for excluding this classification.

Shop Plans and Schedules Analyst

These employees develop, determine, forecast, and maintain accurate load charts for the major fabricating areas, primarily with regard to the loading of machines for particular projects in order to have an organized plan of utilization of all of the machinery and equipment. This data is presented in the form of forecasts used to reflect manpower needs and availability or inadequacy of facilities and equipment for required tasks. If data shows unavailability or inadequacy, these employees have the responsibility of recommending other means of performing the task.

Specifications Analyst

This classification is located in the research and engineering department and in launch vehicle programs where their primary tasks are developing specifications in a written form which make sense compatible with customer requirements and contracts, and interpreting specifications established by Government agencies or customers to determine whether they affect any of the Employer's design requirements. The evidence also suggests that they are skilled in the preparation of specifications and in defining, in that form, the Employer's requirements for end products, materials, or processes.

Test Data Analyst

These employees are primarily found in areas of programming, be it in a programming or scientific programming department or in one of the Employer's wind tunnels. They also are frequently found in areas where they reduce test data either in a manual form or in a computerized format.

Test Engineer B

The evidence as to this classification was given by one of the Employer's wage and salary administrators who stated that this classification is "frequently occupied by an employee who has an extremely unique or unusual ability, and I cannot speak with specifics about individuals right now, but...historically,... such unique tasks as designing, developing, performing subsequently such things as blowing glass beakers or designing and fabricating extremely exotic mirrors

and other optical devices. It is a strange no-man's land, in my own opinion, of a highly competent, highly technical class of people, but they do not normally possess the type of educational background that is normally associated with a profession."

Tool Design Analyst

These employees are concerned with tooling problems relating to manufacture of specific hardware programs. They are responsible for the design of tools and for fabricating aircraft parts and assemblies, and have a thorough knowledge of aircraft engineering and production techniques.

Tool Engineer

These employees are concerned with the design and fabrication of tools. They are involved in tool design concept and in the analyzation, definition, and processes required to develop jigs, fixtures, and tools.

Tool Planning Analyst

This employee analyzes the method of producing previously designed parts, and defines the tools and special processes that may be required to produce the part or the tool. In the event of blueprint changes or modifications in the fabrication process, the analyst must take whatever corrective action is necessary. He makes certain that the related operation planning is written to assure that the product will be built to all applicable specifications.

4. In accordance with our findings herein, we shall direct separate elections in the units of professional and nonprofessional employees set forth below, each of which, we find, constitutes a separate unit appropriate for the purposes of collective bargaining within the meaning of Section 9(b) of the Act.³⁵

Unit A

All professional employees on the Employer's professional and administrative payroll, payroll grades 1 through 9, and including "random rate," employed at the Employer's San Diego operations facilities, and

³⁵ We shall exclude the following classifications which were unpopulated as of the time of the hearing because there is no evidence indicating if, or when, they will be repopulated.

Aerospace medical specialist, chemist, senior chemist, commerical marketing research engineer, senior commerical marketing research engineer, engineering loft coordinator, flight test control engineer, guidance analyst engineer, instrumentation engineer, manufacturing development specialist, materials and process engineer, metallurgist, operations engineer, senior operations engineer, physicist, plant construction engineer B, research staff specialist, service engineer, standards engineer

within the classifications listed on Schedule A attached hereto, but excluding: all represented employees; Senior Design Engineers Fred Anding, Anthony Vasques, Gary Krumweide, and such other senior design engineers who regularly have rotated as department supervisor during the absences of that supervisor; Senior Aerodynamics Engineer Lowe; Design Specialists Tatro, Wentwick, Campbell, Jackson, Su, French, and Leonadis; Senior Engineering Metallurgist Adsit; Quality Engineer E. Covington; the classifications of engineering librarian, facilities analyst, property auditor, technical informational specialist, material liaison man, advance systems project engineer, development project engineer, senior flight test engineer, preliminary design engineer, project engineer, senior project engineer, and senior quality engineer; those employees in the Employer's data systems group "who are in job classifications where other employees having the same job classifications may or may not be excludable on some basis. The functions of these employees are: (1) persons directly involved in rate development for labor and direct utilization of labor rate data which has been specifically developed to forecast intended or anticipated rates which may be granted by the company in the future in collective-bargaining negotiations involving personnel who may be represented by labor organizations regardless of payroll designation; (2) personnel directly assigned to data systems functions involving the industrial relations data bank"; all clerical, supervisorial, and management employees and guards as defined by the National Labor Relations Act; all other classifications; all other employees; and all employees employed at any facility other than the San Diego facility, such as Vandenberg Air Force Base and Cape Kennedy.

Unit B

All nonprofessional employees on the Employer's professional and administrative payroll, payroll grades 1 through 9, and including "random rate," employed at the Employer's San Diego operations facilities, and within the classifications listed on Schedule B attached hereto, but excluding all those excluded in Unit A, supra; Senior Manufacturing and Development Engineer Kolbricht, and the classifications of administrative accountant, plant constructive engineer A, senior equipment engineer, price estimator, senior price estimator, quality assurance project administrator, senior quality assurance specialist, tool and manufacturing engineer, and senior tool and manufacturing engineer.

[Direction of Elections and Excelsior footnote omitted from publication.]

CHAIRMAN MILLER, concurring in part and dissenting in part:

This is a case in which the parties, instead of coming to a mutually acceptable agreement on a unit in which an election might be conducted, have instead chosen to litigate the unit issue to an extent which we rarely experience. The Region transferred the case to this Board for decision—which, while understandable, has further contributed to the by now regrettably lengthy delay in these proceedings.

We have been inundated by a sea of words. The transcript and exhibits constitute a formidable array of testimony and documents, and the briefs alone run to well over 1,000 pages in toto. Brevity appears to have been an art lost to these parties. We have been told, as Mark Twain would have it, a helluva lot more about penguins than we wanted to know.

The Union originally sought a unit comprised of virtually all the personnel on the Employer's professional and administrative payroll, then later conceded that certain positions on that payroll ought to be excluded, and ultimately, in effect, has left it to the Board to determine what kind of unit or units might be appropriate, indicating that it would go to election in whatever unit the Board determines. The Employer seemed at times to be arguing that no unit at all was appropriate, and ultimately concedes that perhaps some unit of lower level engineering personnel might be acceptable, but continues to urge that we dismiss the petition. Thus neither party has been particularly helpful in providing us with clear-cut alternatives as to possible appropriate units, although each vaguely suggests that there may be some such alternatives available.

Out of all this virtually utter chaos, I freely concede that the majority has done a conscientious job in attempting to shape an appropriate unit. It has not been an easy task. In some respects I am sorely tempted to join them, if for no other reason than to commend their valiant effort to dispose of this matter in some reasonably sensible way. Yet I find myself unable to do so, essentially because I am persuaded that lying somewhere beneath the obfuscation created by the seemingly endless flow of words of both parties there is a central issue upon which I find myself in disagreement with my distinguished colleagues.

That issue, I think, can be rather simply stated. It is whether the Employer's permanent line, or functional, organization should be the sole key to our determination about inclusions and exclusions from the unit or whether the Employer's ever changing program or project-oriented organization ought also to be regarded as relevant and, indeed, determinative in many of the classifications in issue. My colleagues have opted for the former. I would opt for the latter.

I do so not without some hesitancy, simply because the record demonstrates that the program or project teams appear and disappear from time to time. Thus an employee who one day finds himself with substantial supervisory and managerial responsibilities in connection with a particular project may on other occasions, or even simultaneously, be engaged in functions having no supervisory or managerial indicia. While I have no doubt that this flexible and evermoving organizational format is useful and perhaps even indispensable to the Employer in the carrying out of its varied missions, it makes any unit determination extraordinarily difficult. And the application of our customary criteria, I admit, may lead to exclusions from the bargaining unit which are not altogether equitable insofar as the employees are concerned. I say inequitable, because it is at least possible that an employee who would be excluded under these criteria might, for some uncertain and unpredictable lengths of time in the future, be performing no supervisory or managerial tasks, during which times he would normally be entitled to collective representation if he so desired it. Yet, at other times, on the basis of the history contained in the record, he would be performing the kinds of functions which would clearly, under the law, require his exclusion. Theoretically it might be possible to include the job classification in the unit with the proviso that when an employee's project assignment requires him to perform managerial or supervisory work he would be excluded. But it seems to me that would present a totally unworkable situation for both parties from an administrative standpoint, and would inevitably create conflicts of interest for the employee, leaving him torn as to whether his real allegiance ought to be to the management or to his work group on the other side of the bargaining table.

The basic thrust of my dissent, then, is that, with respect to classifications whose occupants have been shown to my satisfaction to have been, with some regularity, assigned functions of a supervisory or managerial character in the carrying out of various team projects, I find myself compelled by the statute to apply a rule of exclusion.

I am not persuaded by Petitioner's argument that all such project assignments require only the use of higher techincal skills. The record in a great many instances demonstrates that the supervisory and managerial functions performed go well beyond that, and extend to the responsible, discretionary selection of employees to work on the project, the use of independent judgment and discretion in assigning the work, the making of effective evaluations and recommendations with respect to the work of persons serving under their direction, and direct involvement both in commitment of company finances and in negotiations

with customers. The performance of these kinds of duties creates, of course, supervisory and/or managerial duties as this Board has traditionally defined them and, in the case of the supervisory indicia, as the statute itself specifically defines them.

In an effort to keep this dissent within reasonable bounds, I shall not attempt to recite in detail all of the evidence underlying my determinations, but rather will set forth only a brief summary of my grounds for exclusion. In each case I have examined the record with care and believe that the evidence supports what will be a briefly stated reason for exclusion in each instance.

I would exclude from the unit, contrary to my colleagues, all employees in the following classifications:

- 1. Senior Aerodynamics Engineer: Like virtually all senior engineers, the record establishes that employees in this classification serve as project engineers and project leaders and, in that capacity, are in charge of such projects in a manner in which they exercise supervisory authority, and also have managerial responsibility. I see no substantial difference in these factors with respect to this senior engineering category and other senior engineering categories which the majority has excluded (see, e.g., senior project engineer and senior quality engineer).³⁶
- 2. Senior Design Engineer: Virtually all employees in this category have been or are project leaders and as such have supervisory duties and managerial responsibilities with respect to customer contact. Employees in this classification testified that they prepare performance evaluations and that these evaluations weigh heavily in the future of those whom they evaluate—clearly effective recommendation, in my view, within the meaning of Section 2(11) of the Act.
- 3. Design Specialist: The consensus of the testimony of the 14 engineers in this category who testified is that virtually all have served as lead or project engineers and that, when they do so, they assign work to, direct, monitor, and review the work disciplines in their groups.
- 4. Senior Dynamics Engineer: The senior engineers in this category frequently serve as program leaders and as such responsibly direct the work of others, including making discretionary work assignments and monitoring and supervising the work of others on the team. They also make effective evaluations of those in the groups which they lead. In my view, therefore, they must be excluded as supervisors.

³⁶ Because of the similarity of functions of virtually all senior engineers, I have doubts about joining my colleagues in including senior aeroballistics engineers. Yet the record as to their duties is scant and appears to contain an admission by a wage and salary administrator of the Employer that there is little difference, in that category, between the duties of aeroballistics engineers and senior aeroballistics engineers. I have therefore not dissented from their inclusion

- 5. Senior Electronics Engineer: Like other senior engineers, persons in this classification, with some frequency, function as project supervisors. The testimony of the one employee in this classification called makes clear that the program or project supervisor effectively, and in the exercise of substantial discretionary and independent judgment, assigns the work within the program's structure. That, in my view, establishes that the employees in this classification function regularly in a supervisory capacity. This accords with the more general testimony in the record to the effect that all senior engineers function in this manner, which I do not find refuted on the record.
- 6. Senior Engineering Chemist: As to this category we have only the general testimony submitted by the Employer that the classification is similar to all senior engineer classifications and that all persons in senior engineer classifications serve with some frequency in a supervisory and managerial capacity with respect to specific projects. No contrary testimony having been offered by Petitioner, I would exclude the position as supervisory and managerial.
- 7. Senior Engineering Mettalurgist: I would exclude for the same reasons indicated above with respect to senior engineering chemists, the state of the record being the same with respect to this classification. There is also supporting specific evidence that such a metallurgist assigns work, prepares performance appraisals, and has the authority to commit the Company with respect to purchases and the performance of work for customers. There is no evidence that there are senior engineering metallurgists who do not serve with frequency in the same manner.
- 8. Engineering Staff Specialist: The testimony clearly indicates that employees in this category assign work, including even the assignment of work to the chief test pilot, stipulated to be a supervisor. Evidence also indicates that in serving as leaders in specific projects employees in this classification have authority to responsibly direct others and also make effective performance evaluations of such employees. I would exclude as supervisory.
- 9. Engineering Test Pilot: I would exclude as supervisory because, although the evidence is scant here, employees in the classification are required to command aircraft, which clearly implies supervisory duties in flight.
- 10. Senior Flight Test Control Engineer: Evidence submitted shows, generally, that like other senior engineers, employees in this category have supervisory and managerial responsibilities with respect to specific projects. The job description also includes duties which I regard as clearly supervisory. No contrary evidence was presented by Petitioner. I would exclude as supervisory.

- 11. Senior Guidance Analyst Engineer: Evidence shows that, like other senior engineers, employees in this classification regularly serve as project leaders and that the project leader is the effective supervisor on a day-to-day basis in terms of assigning work, evaluating employees, and the like. I would exclude as supervisory.
- 12. Senior Instrumentation Engineer: Like other senior engineers, the evidence shows that employees in this category serve as project leaders or have other responsibilities in connection with specific projects wherein they exercise substantial supervisory authority with respect to the assignment of work, the direction of the work, and the evaluation of employees. Although the only employee who testified in this classification is not currently serving in such a supervisory or managerial capacity, I do not think that refutes the fact, established by the record, that all senior engineers frequently and regularly do serve in such capacity.
- 13. Senor Metallurgist: I would allow the single employee in this classification to vote subject to challenge. His testimony fails to indicate that he has performed supervisory duties. The evidence shows that his predecessor did, but does not indicate with what frequency. I would require additional evidence, which could be obtained in our challenge procedures, before making a final determination.
- 14. Senior Research Engineer: The generalized testimony with respect to senior engineers was corroborated, in the case of this classification, by the specific testimony of two employees in the classification. Both are currently serving as project leaders in the course of which they have selected employees from other disciplines to work on the project, with no prior approval from anyone; they have responsibly directed the work of those working under them on the projects; and they effectively evaluate such personnel. I would exclude as supervisory.
- 15. Staff Scientist: The employee in this classification who testified stated that he was a program manager, that he assigns work tasks to various engineering disciplines and technicians, and that he has the final decisions on all "technical engineering and scientific decisions and financial decisions." He also testified that he alone decides who works on the program and how much they should work at it. There was also testimony that people in this classification frequently engage in just such direction of activities on a particular project or laboratory. I would exclude as managerial and supervisory. It may seem odd for me to exclude this classification and yet join with my colleagues in including the senior staff scientist, but the testimony offered with respect to the senior staff scientist establishes that persons in this classification do

not regularly serve in a supervisory capacity on specific projects. The senior staff scientist who testified said that he has no supervisory or managerial duties and indicated that the last time he had supervised anyone was 8 or 9 years ago. In this state of the record, I do not disagree with my colleagues as to the inclusion of senior staff scientists.

16. Senior Standards Laboratory Engineer: In the absence of any record evidence to the contrary, I would exclude on the grounds of the general testimony concerning the duties of all senior engineers with respect to project leadership and management. Furthermore, the job description indicates supervisory responsibility. I would exclude as supervisory.

17. Senior Systems Engineer: Generalized testimony indicates that senior engineers in this category have the same general characteristics as other senior engineers. A parallel was also drawn between this classification and that of systems engineering specialist which, as indicated below, I have found excludable. No contrary testimony was offered. I would exclude as supervisory.

18. Systems Engineering Specialist: Like other senior engineers, employees in this category serve as leaders with respect to projects in the course of which they obtain, on their own authority, engineering assistants from other departments, whom they assign and schedule. There is also direct testimony that persons in this classification have authority to and do authorize overtime and perform other supervisory duties. I would exclude as supervisory.

19. Senior Test Laboratory Engineer: The testimony of two of the incumbents in this classification bears out the Employer's generalized testimony with respect to the program assignments of senior engineers in the course of which they responsibly assign and direct work, evaluate the performance of others, and, in general, assume supervisory functions. I would exclude as supervisory.

20. Senior Thermodynamics Engineer: The testimony of 3 of the 35 engineers in this classification bears out the Employer's generalized testimony with respect to assignment of senior engineers to project leader functions in the course of which they responsibly assign and direct the work of others, evaluate performance of others, and the like. There is also testimony that senior engineers in this group have substantial financial authority of a type which I would regard as managerial in nature. I would exclude as supervisory and managerial.

21. Budget Analyst and Senior Budget Analyst: Both of these classifications have essentially the same functions. In my judgment each of them has sufficient authority with respect to controlling budgets and making internal financial decisions on behalf of the Employer to qualify them as managerial and thus excludable.

22. Senior Manufacturing and Development Engineer: This category is comparable to other senior engineers in that they direct teams or groups concerned with the invention of new manufacturing technologies and allocate tasks to, and responsibly direct, the work of those on the team. This was borne out by the testimony of certain employees in the classification whose testimony clearly indicates that they are supervising other engineers and, in some cases, also hourly employees. I would exclude as supervisory. There is, in my view, no ground for separating out certain employees in this classification and excluding them. There is no evidence that the duties performed by these employees whom my colleagues find to be excludable are atypical of the duties of an employee in the classification. Rather, the record supports the belief that they are, instead, typical.

Except for the above classifications, which I would exclude (whereas my colleagues would include them), I concur fully in the decision of the majority.³⁷

Schedule A

Professional Unit

Aeroballistics engineer, aeroballistics engineer, senior, aerodynamics engineer, aerodynamics engineer, senior, associate engineer, design engineer, design engineer, senior, design specialist, dynamics engineer, dynamics engineer, senior, electronics engineer, electronics engineer, senior, engineering chemist, engineering chemist, senior, engineering metallurgist, engineering metallurgist, senior, engineering staff specialist, engineering test pilot, flight test control engineer, senior, flight test engineer, guidance analyst engineer, senior, instrumentation engineer, senior, manufacturing development engineer, manufacturing development engineer, senior, metallurgist, senior, physicist, senior, quality engineer, reliability engineer, reliability engineer, senior, research engineer, research engineer, senior, staff scientist, staff scientist, senior, standards laboratory engineer, standards laboratory engineer, senior, structures engineer, structures engineer, senior, systems analyst, systems engineer, senior, systems engineering specialist, test engineer A, test laboratory engineer, test laboratory engineer, senior, thermodynamics engineer, thermodynamics engineer, senior, weight engineer, weight engineer, senior.

³⁷ As noted in fns. 27, 29, and 31, I agree with Member Jenkins that the classifications of senior flight test engineer, senior quality engineer, administrative accountant, price estimator, and senior price estimator should be excluded.

Schedule B

Nonprofessional Unit

Budget analyst, budget analyst, senior, data processing analyst, data processing specialist, electronic data processing programmer, electronic data processing programmer, senior, engineering documentation analyst, engineering documentation representative, engineering documentation specialist, engineering drawings checker, engineering illustrator, engineering loft coordinator, senior, engineering writer, equipment engineer, general accountant, linesman, linesman, senior, manufacturing analyst, manufac-

turing engineer, master scheduler, master schedules analyst, materials and process engineer, senior, operation performance control analyst, packaging specialist, parts catalogue editor, plant engineering cost analyst, preventive maintenance analyst, procurement quality assurance representative (San Diego residents), production change analyst, publications editor, publications editor-illustration, publications editor-writing, publications technical specialist, quality assurance specialist, service engineer, senior, shop plans and schedules analyst, specifications analyst, test data analyst, test engineer B, tool design analyst, tool engineer, tool planning analyst.

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